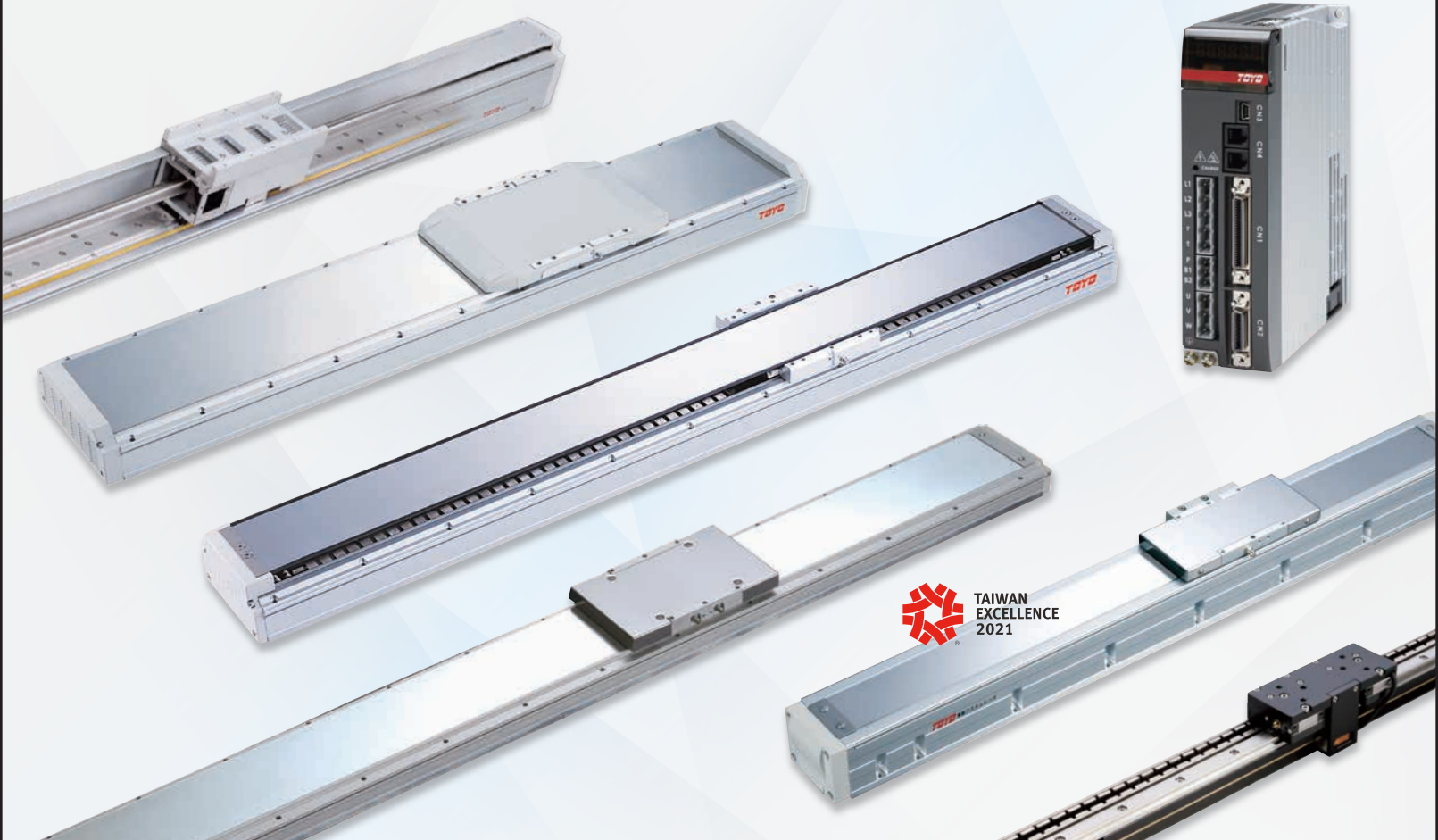


LINEAR MOTOR ROBOT Series

TOYO 2021  
LINEAR MOTOR ROBOT LGW / LGF / LTF2 / LNF2 / LCF2 / LA(S)F / LAU / LMR Series

The realization of the next generation of revolutionary transmission with low cost and high accuracy

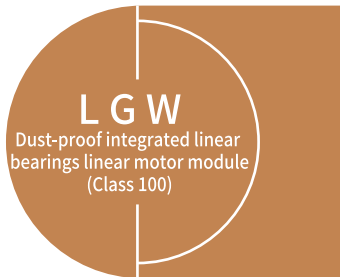


# Catalog Index



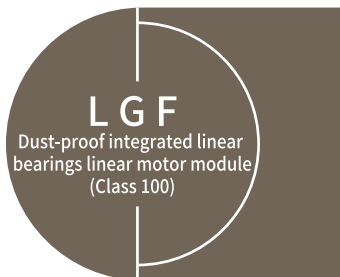
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Ordering Method	-----	027
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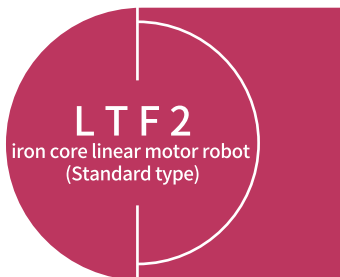
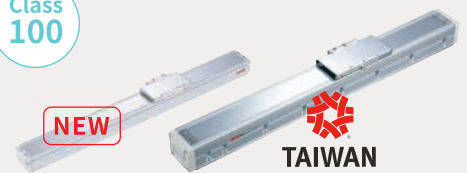
LGF Spec Index	-----	045
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Class 100

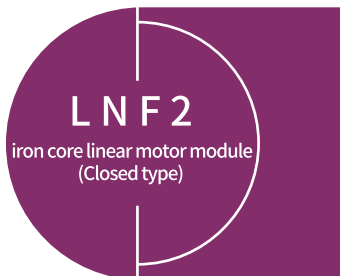
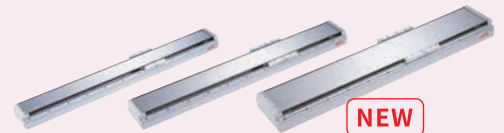


LGF Spec Index	-----	055
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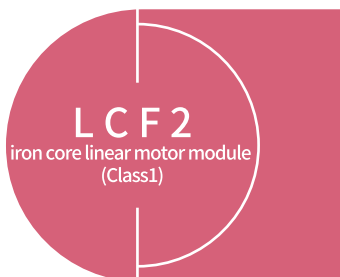
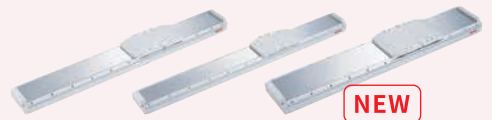
Class 100



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LTF2-20	-----	081
LTF2-30	-----	091
LTF2-45	-----	101
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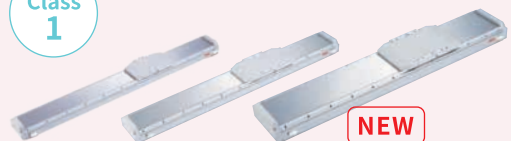


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LNF2-15	-----	125
LNF2-20	-----	135
LNF2-30	-----	145
LNF2-45	-----	155
LNF2-75	-----	165



LCF2 Spec Index	-----	177
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LCF2-20	-----	189
LCF2-30	-----	199
LCF2-45	-----	209
LCF2-75	-----	219

Class 1





**LAF**  
iron core linear motor robot  
(Aluminum type)

LAF Spec Index ----- 231  
LAF7 ----- 233  
LAF15 ----- 239  
LAF20 ----- 245  
LAF30 ----- 251



**LSF**  
iron core linear motor robot  
(Steel type)

LSF Spec Index ----- 231  
LSF7 ----- 233  
LSF15 ----- 239  
LSF20 ----- 245  
LSF30 ----- 251



**LAU**  
linear motor robot without  
iron core  
(Standard type)

LAU Spec Index ----- 259  
LAU3 ----- 261  
LAU5 ----- 265



**LMR**  
shaft bar linear motor robot  
(Standard type)

LMR Spec Index ----- 271  
LMR20 ----- 273  
LMR25 ----- 279  
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**LC100  
Controller**

Controller Feature ----- 291  
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System Structure ----- 293  
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Wiring diagram ( Power / IO / EMS ) ----- 295  
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## About TOYO



TOYO Automation Co., Ltd. was founded on the principles of integrity, technology, and service, to exceed our customers' needs and maximize value for our customers and society.

Since TOYO group has been set up at 2000 in Taiwan, with the support by partners in different business fields, TOYO has become the premium and preferred shining brand in industrial robot market of Taiwan and China. Recently, TOYO create a innovative situation by the combination of controller and transmission module to develop high CP value industrial single/multiaxis and SCARA robot. No matter which industry you are in or what kind of difficulty you are facing, TOYO's high CP value industrial robot will fulfill your demand.

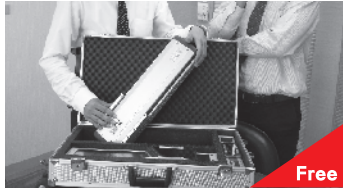
## 6 Major Products of Linear Drive



⊕ High price-performance ratio ⊕ Flexible customization ⊕ Short delivery time ⊕ Stable quality ⊕ Versatile product line

# Srevice System

## Free demo machine



TOYO prepare standard unit for customer' s demonstration and test. They are free rental for our customers. (15 days advanced notice / The longest rental period 30 days.) Please contact our sales and local agents.

## 24 hours online service



0800-800893 (Taiwan , toll-free)400-875-0009 (China , toll-free)24hr on call service, please contact us for any questions or enquiries.

 Taiwan 0800-800-893  
 China 400-875-0009

## Technical conference



New product seminars and technical conferences are hold regularly to share our latest technology with free demo machine customers.

## Exhibitions



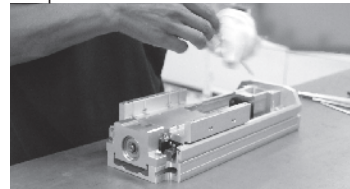
We participate in exhibitions frequently. Please contact us for more information.

## Puncar Action



For the purpose of leting the clients all over the island to have a chance to experience and be more familiar with the demonstrated product personally, we therefore build a mobile puncar cruising around the Taiwan island enable the clients to test it. For more details, please do not hesitate to contact us.

## Inspection and Maintenance



If the product has problem or out of order, you can send it back for inspection and maintenance. If the product is out of warranty, we still can repair it for certain charge.

## Quality Assurance Certification



Passed ISO9001, ISO14001 and OHSAS18001 international certification.

## Patented Technologies



 Patent applications certified by the Intellectual Property Office of Ministry of Economic Affairs.

## Awards



Got 9th Taiwan Business Startup Award

Got 19th Taiwan Business Rising Star Award



CGTH/CGTY Series  
Got 2018 Taiwan Excellence Awards

LGF Series  
Got 2021 Taiwan Excellence Awards

CHY Series  
Got 2021 Taiwan Excellence Awards

## New Launch

# Revolution! The smallest linear motor module in the world

High Performance

Smallest Volume

Shortest Lead Time

Best Price





# Lineup of Linear Motor Robot

## Iron core linear motor

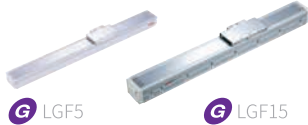
Long stroke, Suit for large pushing force

- Integrated linear bearings
- Max. speed : 2500mm/s
- Max. stroke : 2520mm
- Horizontal payload : 3~20kg
- Accuracy :  $\pm 1\sim 2\mu$

### LGF Series

Clean room type

Class 100



G LGF5

G LGF15

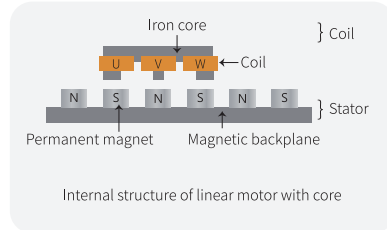
### LGW Series

Clean room type

Class 100



NEW



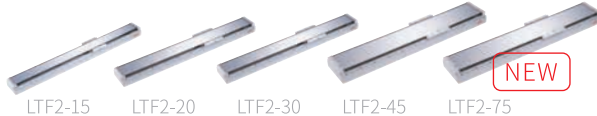
## Standard Guideway

- Max. speed : 3500mm/s
- Max. stroke : 8000mm
- Horizontal payload : 20~120kg
- Accuracy :  $\pm 1\sim 2\mu$

\*Please contact your local sales if payload above 120kg.

### LTF2 Series

Standard type



LTF2-15

LTF2-20

LTF2-30

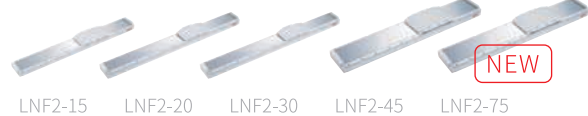
LTF2-45

LTF2-75

NEW

### LNF2 Series

Sealed type



LNF2-15

LNF2-20

LNF2-30

LNF2-45

LNF2-75

NEW

### LA(S)F Series

Standard type Aluminum Steel



LA(S)F7

LA(S)F15

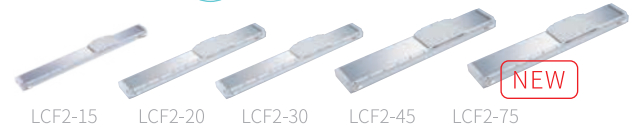
LA(S)F20

LA(S)F30

### LCF2 Series

Clean room type

Class 1



LCF2-15

LCF2-20

LCF2-30

LCF2-45

LCF2-75

NEW

## U type linear motor without iron core

Long stroke, high stable of speed, High response

### LAU Series

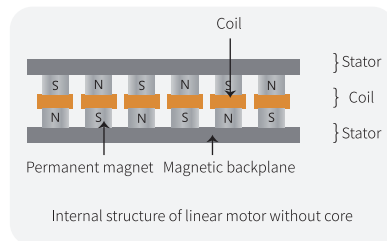
Standard type

- Max. speed : 2500mm/s
- Max. stroke : 1290mm
- Horizontal payload : 4~15kg
- Accuracy :  $\pm 1\sim 2\mu$



LAU3

LAU5



## Shaft bar linear motor robot

Small cubage, Small fluctuation of speed

### LMR Series

Standard type 標準環境

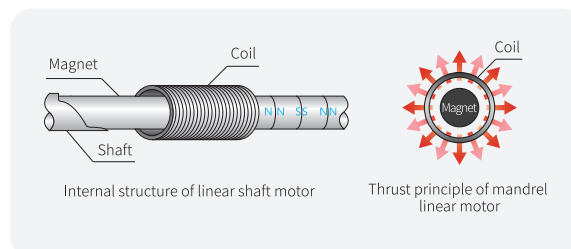
- Max. speed : 2500mm/s
- Max. stroke : 1940mm
- Horizontal payload : 15~51kg
- Accuracy :  $\pm 1\sim 2\mu$



LMR20

LMR25

LMR32



# Feature

In response to the evolution of large-scale production equipment and high-speed handling, we have developed linear motor modules to meet the requirements of long stroke, high speed, and high precision. And by carrying a variety of fixtures, it can be widely used in various work stations such as assembly, grade transportation, screw locking, dispensing, or soldering.

## 1 High payload


Using a high-density coil design, If dual-axis synchronous drive is selected, the total thrust can be up to 2 times. Suitable for high-speed transportation of large-volume objects.

► Recommended specs :  
LTF2/LNF2/LCF2 Series

**Max. payload**  
**120kg**

## 2 High accuracy

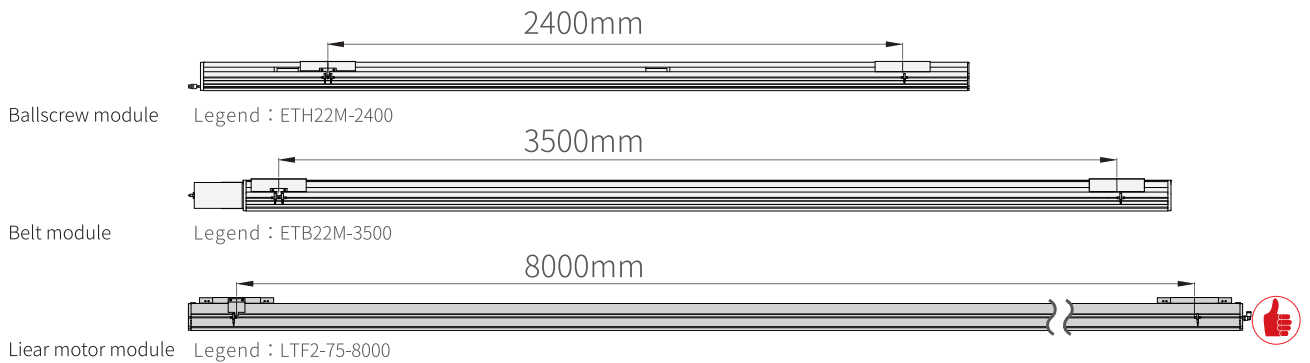
- Due to the direct drive, the backlash caused by many additional converter devices and accumulated errors is eliminated.
- Suitable for precise assembly of IT equipment and transmission positioning of test equipment.

Comparison of actuators accuracy	Linearmotor module	BallscREW module	
		C7 ballscrew	C5 ground ballscrew
Control method	Resolution 1u optical encoder	±5μ	±3μ
Repeatability	±2μ 	±5μ	±3μ

	Standard	Optional	
Optical encoder resolution	1μ	0.5μ	0.1μ
Repeatability accuracy	±2μ	±1.5μ	±1μ

## 3 Long stroke

Linear motors stroke can reach 8000mm and can be increased according to customer needs.

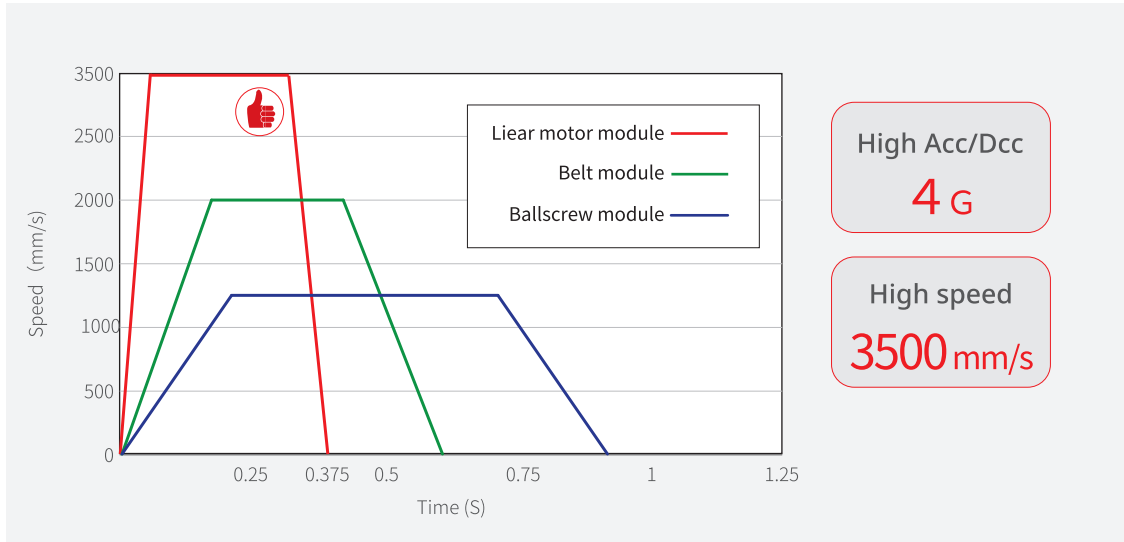


► Recommended specs :

LTF2 Series	LGW Series	LGF Series	LMR Series
<b>Max. stroke</b> <b>8000mm</b>	<b>Max. stroke</b> <b>2520mm</b>	<b>Max. stroke</b> <b>2520mm</b>	<b>Max. stroke</b> <b>1940mm</b>

# 4 High acceleration, deceleration, and high

The linear motor can achieve maximum acceleration and deceleration of 4 G and a maximum speed of 3500mm/s, which greatly shortens the reciprocating movement time and increases the production efficiency of the equipment.



# 5 Multiple choices and flexible customization

► Optional single-axle multi-power carriage and synchronized dual-drive axle

It can be used in conjunction with a single shaft and multiple carriages. can be combined into a right-angle structure, a gantry structure, and achieve the same function through the controller

► Optional multiple carriage stages

As shown in the figure below, the same assembly line using ball-screw modules requires two sliding tables to match, and the structure is complicated.

If the linear motor module is used for special injection of multiple slides, only a single slide can be used to complete the assembly line, which saves space and is low in price.

It can exert higher production efficiency. minimum assembly required and assembly time can be shortened.

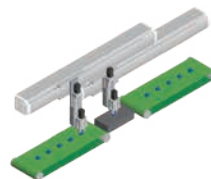


Synchronized carriage movement only

Ballscrew module

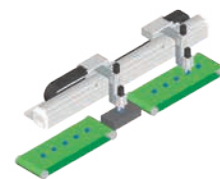
Independent carriage movement

Llear motor module



Use 2 ballscrew module for operation

Ballscrew module



Use of dual carriage linear motor module can save the space

Llear motor module

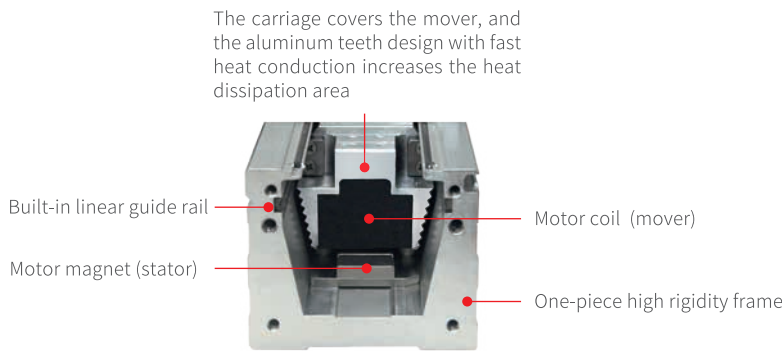


## Feature

### 6 The special cooling mechanism, good motor heat dissipation efficiency

The self-developed special heat dissipation mechanism is wrapped on the outside of the coil so that the motor can quickly dissipate heat during operation and increase the efficiency of the motor.

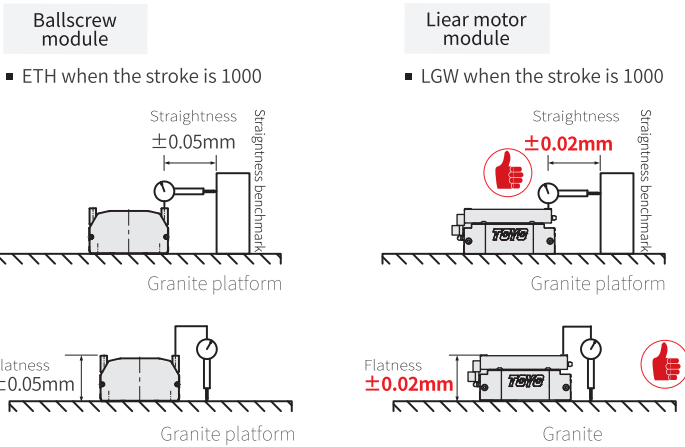
► Internal structure diagram of the heat dissipation mechanism:  
(Legend : LGF)



### 7 Structure wear is small, and accuracy can be maintained for a long time

Generally, the actuator is driven by the ball-screw and belt, and the ball-screw will be damaged after long-term use. The belt type actuator needs to be tightened at a fixed time each year to maintain accuracy. The linear horse sliding table has no drive components to wear and can maintain the system accuracy of the whole machine for a long time.

### 8 Straightness and flatness



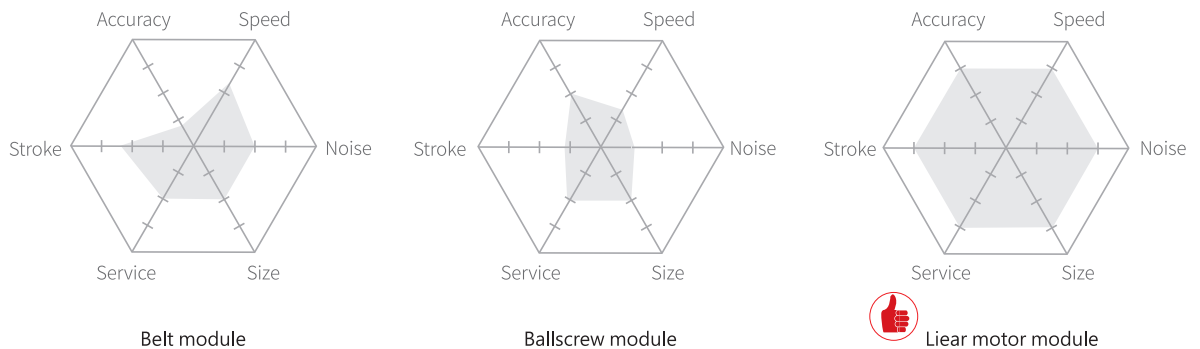
Straightness  
**±0.02mm/m**

Flatness  
**±0.02mm/m**

Can customize flatness straightness  
**<±0.01 mm/300mm**

### 9 Long-stroke/high precision/high speed/low noise can be achieved at the same time

Long-stroke can ensure repeatability within ±0.002mm, maximum speed 3500mm/s, and low noise.





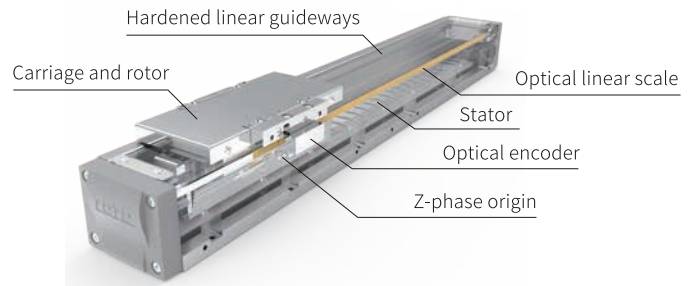
# 10 Good speed stability

- When moving at a speed of 500mm/s, the speed fluctuation of LGF can be controlled below 0.8%, LAU can be controlled below 0.4%,

► Recommended specification:

- LMR Series** **LAU Series** (Without iron core)
- LGF Series** (With iron core)

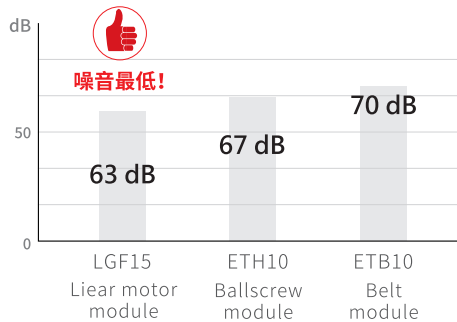
► Inner Structure (Legend : LGF)



# 11 Long life, low noise, simple maintenance

The linear motor module doesn't have driving elements such as coupling etc. So the service life is about 2 times longer than that of the traditional ballscrew module. When moving at high speed, it has low noise and easy maintenance.

► Noise comparison between linear motor module, ballscrew module, and belt module (The test condition is 500mm/s)



# 12 Low price, short delivery time

More than 80% of the components are self-made in the factory, so it can effectively shorten the delivery time and control the cost so that customers can directly buy linear motor modules with the cost close to the screw drive module.

Customization

Low cost

Over 80% components are self-made

14 working days delivery time for standard products

# 13 The new standard controller

The standard controller also provides PULSE, communication, and other two control interfaces and can be equipped with CAN Open and EtherCAT networks.

Controller interface

LC100 drive controller

Optional multiple drives

# 14 Linear motor exhibition car in service



Reservation



## Spec Index

### LGW Dust-proof integrated linear bearings linear motor module(Class 100)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Clean room	Linear Motor Robot	125	LGW17	Single motor	3A	±0.002	LMW17	79	20	2500
				Double motor	3A*2	±0.002	LMW17	79	20	2500

※ LGW17 type, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.

※ Please consult with our sales department for customized stroke.

### LGF Dust-proof integrated linear bearings linear motor module(Class 100)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Clean room	Linear Motor Robot	56	LGF5	Single motor	3A	±0.002	LMF5	14	3	2500
				Double motor	3A*2	±0.002	LMF5	14	3	2500
		75	LGF15	Single motor	3A	±0.002	LMF15	59	15	2500
				Double motor	3A*2	±0.002	LMF15	59	15	2500

※ LGF5, LGF15 type, the data of continuous payload can be speed 1m/s and maximum acceleration 10m/s<sup>2</sup>.

※ Please consult with our sales department for customized stroke.

Max. Linear Speed (mm/s)											Page
Stroke	125	250	500	750	1250	1500	1750	2000	2250	2500	
		2500									047
		2500									

Max. Linear Speed (mm/s)												Page	
Stroke	25	150	200	450	700	950	1200	1450	1700	1950	2200		2450
			2500									057	
		2500											
			2500									061	
		2500											

# Spec Index

## LTF2 iron core linear motor robot (Standard type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)		
											Stroke 200	250
Standard	Linear Motor Robot	133	LTF2-15	Single motor	3A	±0.002	LMF15	59	20	3500		
				Double motor	3A*2	±0.002	LMF15					
		155	LTF2-20	Single motor	3A	±0.002	LMF20	113	40	3500		
				Single motor	3A*2	±0.002	LMF20					
		155	LTF2-30	Single motor	3A	±0.002	LMF30	158	54	3500		
				Single motor	3A*2	±0.002	LMF30					
		215	LTF2-45	Single motor	6A	±0.002	LMF45	251	90	3500		
				Single motor	6A*2	±0.002	LMF45					
		215	LTF2-75	Single motor	6A	±0.002	LMF75	340	120	3500		
				Single motor	6A*2	±0.002	LMF75					

※ LTF2-15, LTF2-20, LTF2-30, LTF2-45, LTF2-75 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.



Max. Linear Speed (mm/s)													Page
300	550	800	1050	1300	1550	1800	2050	2300	2550	2800	3050	Speed	
												3500	071
												3500	
												3500	081
												3500	
												3500	091
												3500	
												3500	101
												3500	
												3500	111
												3500	

## Spec Index

### LNF2 iron core linear motor module (Closed type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard	Linear Motor Robot	133	LNF2-15	Single motor	3A	±0.002	LMF15	59	20	3500
				Double motor	3A*2	±0.002	LMF15			
		155	LNF2-20	Single motor	3A	±0.002	LMF20	113	40	3500
				Single motor	3A*2	±0.002	LMF20			
		155	LNF2-30	Single motor	3A	±0.002	LMF30	158	54	3500
				Single motor	3A*2	±0.002	LMF30			
		215	LNF2-45	Single motor	6A	±0.002	LMF45	251	90	3500
				Single motor	6A*2	±0.002	LMF45			
		215	LNF2-75	Single motor	6A	±0.002	LMF75	340	120	3500
				Single motor	6A*2	±0.002	LMF75			

※ LNF2-15, LNF2-20, LNF2-30, LNF2-45, LNF2-75 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.

### LCF2 iron core linear motor module (Class1)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Clean Room	Linear Motor Robot	133	LCF2-15	Single motor	3A	±0.002	LMF15	59	20	3500
				Double motor	3A*2	±0.002	LMF15			
		155	LCF2-20	Single motor	3A	±0.002	LMF20	113	40	3500
				Single motor	3A*2	±0.002	LMF20			
		155	LCF2-30	Single motor	3A	±0.002	LMF30	158	54	3500
				Single motor	3A*2	±0.002	LMF30			
		215	LCF2-45	Single motor	6A	±0.002	LMF45	251	90	3500
				Single motor	6A*2	±0.002	LMF45			
		215	LCF2-75	Single motor	6A	±0.002	LMF75	340	120	3500
				Single motor	6A*2	±0.002	LMF75			

※ LCF2-15, LCF2-20, LCF2-30, LCF2-45, LCF2-75 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.  
 ※ Customizable high-speed models; up to 3000 mm/s.  
 ※ 1500 mm/s maximum linear speed for all cleanroom-rated models.

Max. Linear Speed (mm/s)														Page		
Stroke	200	300	325	425	450	2650	2750	2800	2850	2900	2950	3000	3024		3053	
																125
																135
																145
																155
																165

Max. Linear Speed (mm/s)														Page		
Stroke	200	300	325	425	450	2650	2750	2800	2850	2900	2950	3000	3024		3053	
																179
																189
																199
																209
																219

## Spec Index

### LAF iron core linear motor robot (Aluminum type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard(Aluminum)	Linear Motor Robot	82	LAF7	Single motor	3A	±0.002	LMF15	40	10	3500
		124	LAF15			±0.002	LMF20	60	20	3500
		146	LAF20			±0.002	LMF20	115	40	3500
		146	LAF30			±0.002	LMF30	160	50	3500

※ LAF7 type, the data of continuous payload can be speed 1m/s and maximum acceleration 4m/s<sup>2</sup>.

※ LAF15, LAF20, LAF30 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 3m/s<sup>2</sup>.

※ Please consult with our sales department for customized stroke.

### LSF iron core linear motor robot (Steel type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard(Aluminum)	Linear Motor Robot	82	LSF7	Single motor	3A	±0.002	LMF15	40	10	3500
		124	LSF15			±0.002	LMF20	60	20	3500
		146	LSF20			±0.002	LMF20	115	40	3500
		146	LSF30			±0.002	LMF30	160	50	3500

※ LSF7 type, the data of continuous payload can be speed 1m/s and maximum acceleration 4m/s<sup>2</sup>.

※ LSF15, LSF20, LSF30 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 3m/s<sup>2</sup>.

※ Please consult with our sales department for customized stroke.



Max. Linear Speed (mm/s)																		Page
Stroke	125	0	100	200	300	400	500	600	700	800	900	1000	1200	1300	1400	1500	1600	
																		233
																		239
																		245
																		251

Max. Linear Speed (mm/s)																		Page
Stroke	125	0	100	200	300	400	500	600	700	800	900	1000	1200	1300	1400	1500	1600	
																		233
																		239
																		245
																		251

## Spec Index

### LAU linear motor robot without iron core (Standard type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard(Aluminum)	Linear Motor Robot	85	LAU3	Single motor	3A	±0.002	AUM3-S1	28	4	2500
		85	LAU5			±0.002	AUM3-S2	57	15	2500

※ LAU3 type, the data of continuous payload can be speed 1m/s and maximum acceleration 7m/s<sup>2</sup>.  
 ※ LAU5 type, the data of continuous payload can be speed 1m/s and maximum acceleration 4m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.

### LMR shaft bar linear motor robot (Standard type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard	Shaft bar linear motor robot	95	LMR20-04	Single motor	3A	±0.002	20	44	12	2500
			LMR20-04	Double motor				44	12	2500
			LMR20-05	Single motor				55	15	2500
			LMR20-05	Double motor				55	15	2500
		112	LMR25-04	Single motor			25	64	16	2500
			LMR25-04	Double motor				64	16	2500
			LMR25-06	Single motor				96	24	2500
			LMR25-06	Double motor				96	24	2500
		120	LMR32-06	Single motor			32	140	35	2500
			LMR32-06	Double motor				140	35	2500
			LMR32-08	Single motor				187	51	2500
			LMR32-08	Double motor				187	51	2500

※ The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.

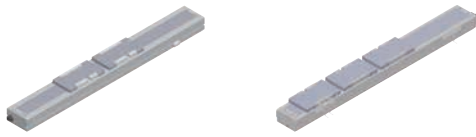
Max. Linear Speed (mm/s)																	Page
Stroke	0	100	200	300	400	500	600	700	800	900	1000	1200	1300	1400	1500	1600	
																	261
																	265

Max. Linear Speed (mm/s)																				Page		
Stroke	50	75	100	150	200	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700		1800	1900
																					273	
																					279	
																					285	

# Inner Structure of LGW

**Carriage**

**Multiple carriage**

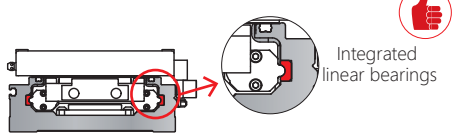


Dual carriage dual motor type      Multi-carriage multi-motor type

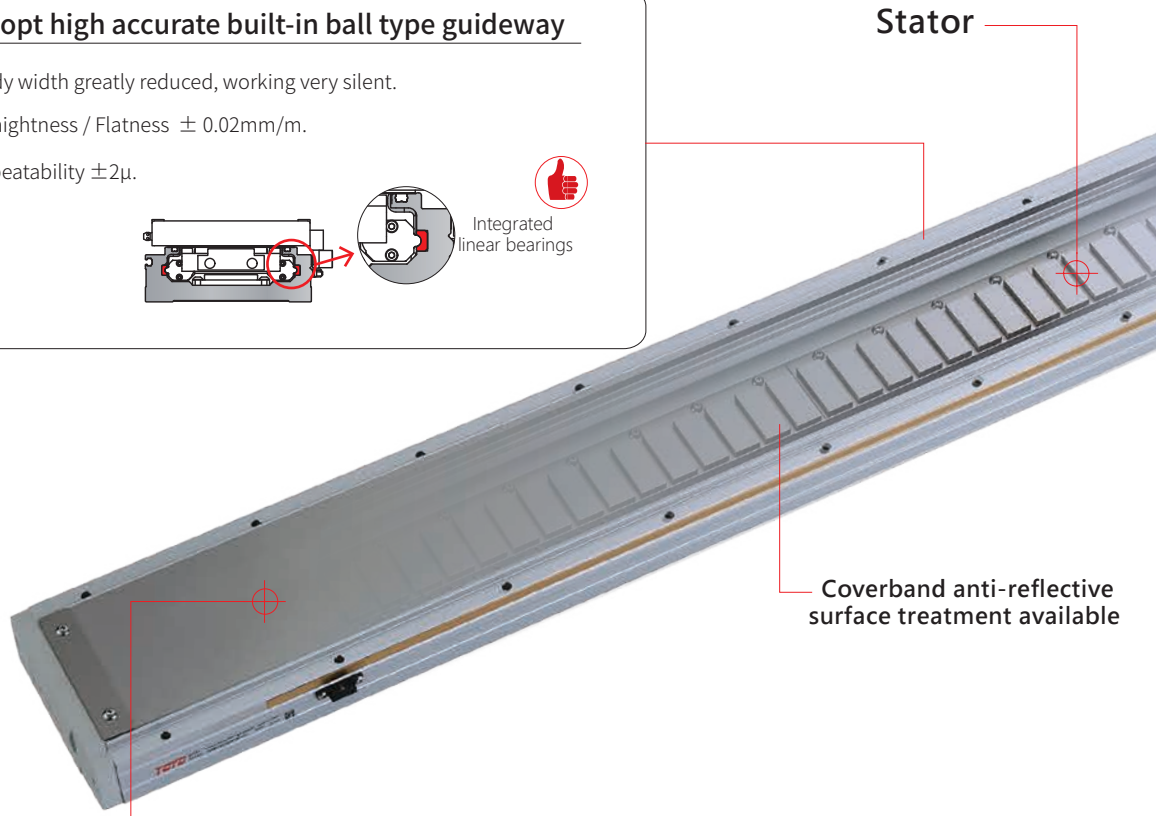
**Linear guide**

**Adopt high accurate built-in ball type guideway**

- ▲ Body width greatly reduced, working very silent.
- ▲ Straightness / Flatness  $\pm 0.02\text{mm/m}$ .
- ▲ Repeatability  $\pm 2\mu$ .

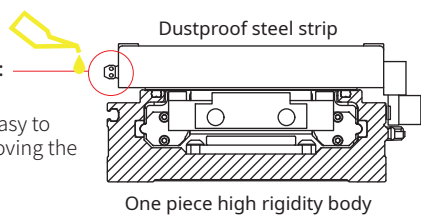


Integrated linear bearings



**Frame body**

**External greasing nipple / High rigidity body & cover / dust-proof steel strip**



External greasing design :

External greasing design, easy to maintenance without removing the cover.

Dustproof steel strip

One piece high rigidity body

**High rigidity frame:**  
The profile is extruded to one-piece aluminum structure.  
Can get the best ratio of rigidity and weight of the structure by way of elemental analysis.

**Dustproof steel strip:**  
Whole LGF Series products are with dustproof steel strip attached.

**Applications :**



High-speed Pick-and-Place



Laser Beam Machining



Industrial Automation Equipment

External grease fitting for quick, easy maintenance

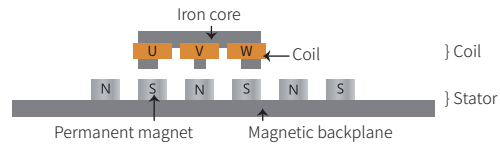
**Smallest Linear Motor Module in the Market**

(compared to other similar load-rated models)

**Class 100**

**Features :**

- Long stroke
- High payload
- High Thrust
- High Rigidity
- No Resonance



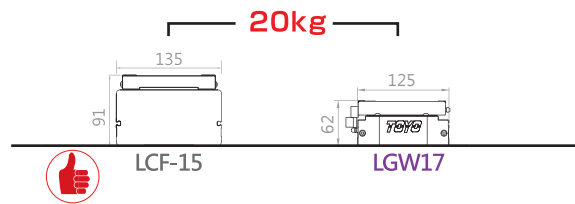
Coil

**Width greatly reduced.**

Width greatly reduced.  
Reduced installation space requirements



Volume



**37% smaller than similar models**

**Encoder options**

Optical encoder or magnetic encoder is optional.

- ▲ Due to the requirement of different environments, optical encoder or magnetic encoder is optional. The highest resolution of magnetic encoder can up to 0.001mm.

Repeatability  $\pm 0.002\text{mm}$

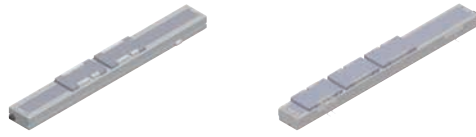
- ▲ Exceed the accuracy of ball screw.

Encoder

## Inner Structure of LNF2

**Carraige**

**Multiple carraige**




Dual carraige dual motor type      Multi-carraige multi-motor type

**Linear guide**

**THK guiding system**

**Quiet operation:**  
Effectively reduces noise (during operation), improves smoothness, (improves) nominal life and lubrication efficacy. perfect for high-speed, quiet, low-dust high technology industrial applications.

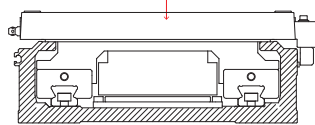



**Frame body**

**High rigidity body**

**High rigidity body:**  
The profile is extruded to one-piece aluminum structure. Can get the best ratio of rigidity and weight of the structure by way of elemental analysis.

**Dust-proof cover strip:**  
All LNF series models feature dust-proof cover strips



Dust-proof cover strip

**Applications :**



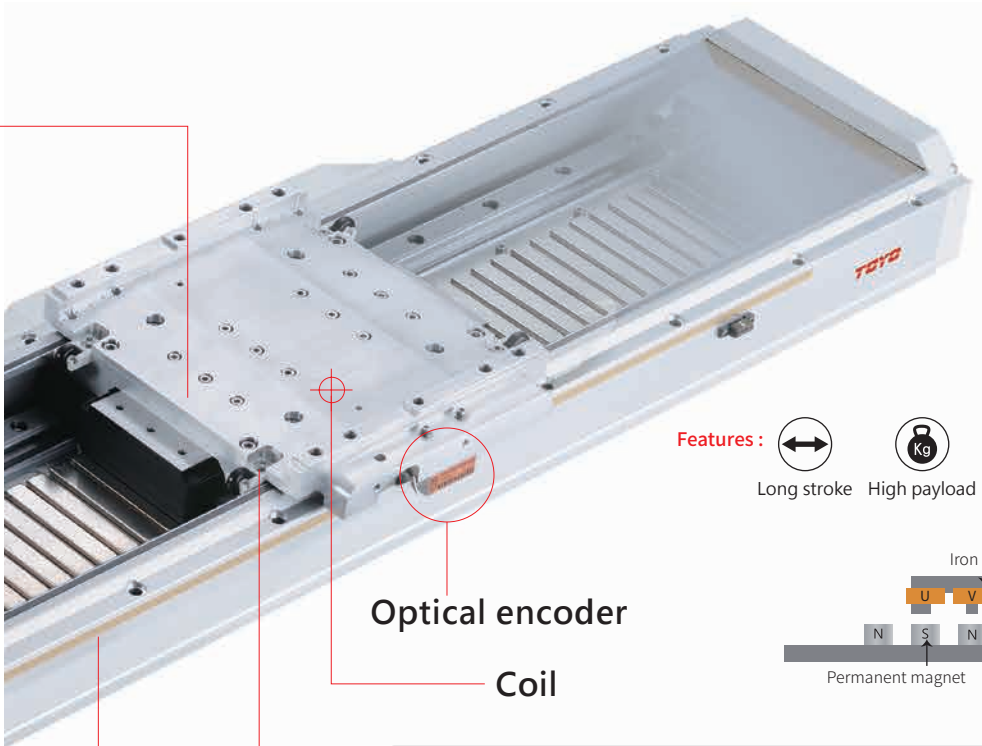
High-speed Pick-and-Place



Laser Beam Machining



Industrial Automation Equipment



**Features:**



Long stroke



High payload



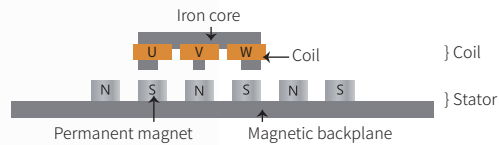
High Thrust



High Rigidity



No Resonance



**Linear motor**

**High efficiency radiating module**

**Built-in temperature sensor function**

▲ By Installed the motor thermistor type temperature sensor, the actual temperature inside motor can be measured by driver or resistance meter immediately in order to avoid the damage caused by temperature rise and motor overheating.

**Encoder**

**Encoder options**

Optical encoder or magnetic encoder is optional.

▲ Due to the requirement of different environments, optical encoder or magnetic encoder is optional.  
The highest resolution of magnetic encoder can up to 0.001mm.


**Repeatability ±0.002mm**

▲ Exceed the accuracy of ball screw.

# Inner Structure of LAU

**Slider**

**Multiple carriage**




Dual slide dual motor type      Long slide single motor type      Multi-slide multi-motor type

**Linear guide**

**THK guiding system**

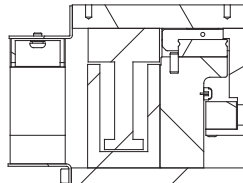
**Quiet operation:**  
Lower noise during operation can effectively enhance the smoothness life and lubrication efficiency. It is broader in different industrial application and more suitable for high speed, Quiet and low dust requirement of high-tech industries.




**Frame body**

**Small install space**

Linear motor rotor directly install on the aluminum plane, shrinking the cubage and saving the installation space.



**Application :**



Semiconductor machine



Optical detection

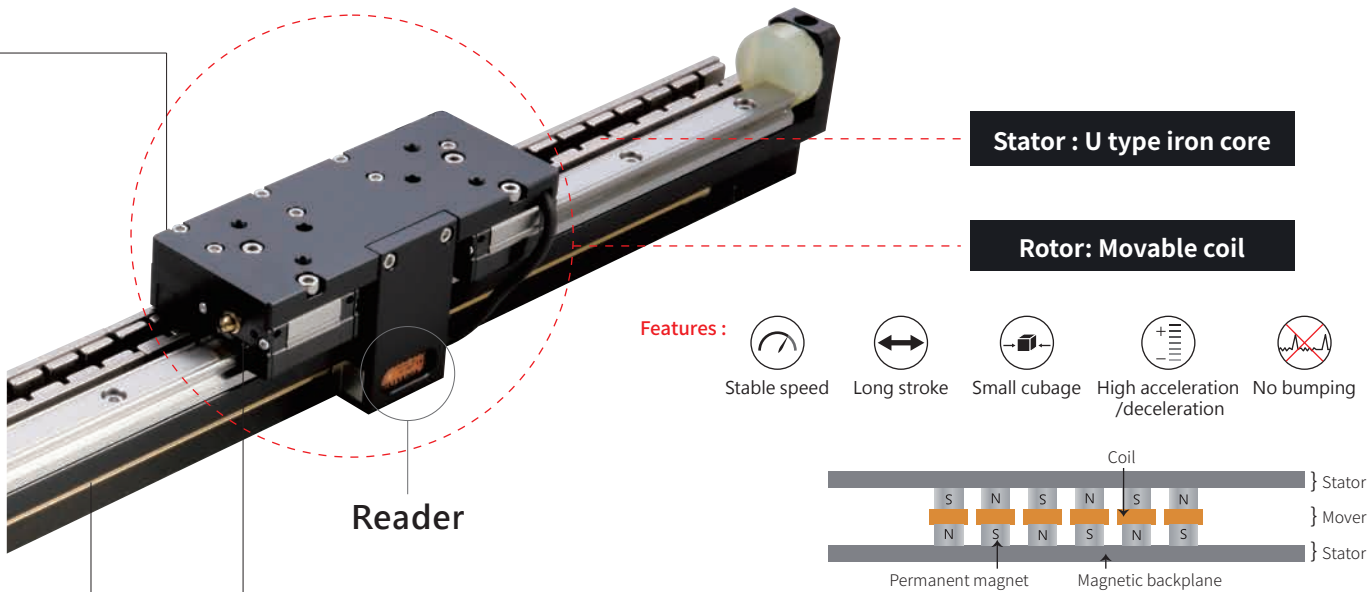


Electro optical engineering



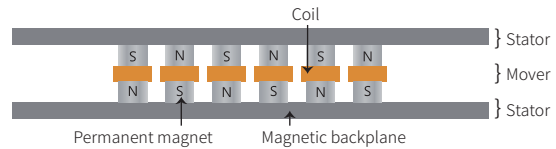
Accurate location





**Features :**

-   
 Stable speed
-   
 Long stroke
-   
 Small cubage
-   
 High acceleration /deceleration
-   
 No bumping



**Linear motor**

**High efficiency radiating module**

**Built-in digital Hall sensors (Digital Hall Sensor) function**

▲ Motor power is on again (Servo On), the phase angle can be found without any movement.

**Built-in temperature sensor function**

▲ By Installed the motor thermistor type temperature sensor, the actual temperature inside motor can be measured by driver or resistance meter immediately in order to avoid the damage caused by temperature rise and motor overheating.

**Encoder**

**Encoder options**

Optical encoder or magnetic encoder is optional.

▲ Due to the requirement of different environments, optical encoder or magnetic encoder is optional. The highest resolution of magnetic encoder can up to 0.001mm.

**Repeatability accuracy ±0.002mm**

▲ Exceed the accuracy of ball screw.

## Ordering Method

LGW - RHS2 - N - 2520 - LS10

--	--	--	--	--

Model	Cable carrier entry location	No. of motor	Stroke	Encoder
-------	------------------------------	--------------	--------	---------

LGW17
-------

RHS2	Small cable chain	Horizontally, right
RWS2		Wall mount, right
LHS2		Horizontally, Left
LWS2		Wall mount, Left
DHS2		Horizontally, Double Slider
DWS2		Wall mount, right
RHL2	Large cable chain	Horizontally, right
RWL2		Wall mount, right
LHL2		Horizontally, Left
LWL2		Wall mount, Left
DHL2		Horizontally, Double Slider
DWL2		Wall mount, right
N	No cable chain	No cable chain

N	Single motor
D	Double motor

Model	Motor	Standard stroke
LGW17	Single motor	240~2520mm Pitch 60mm
	Double motor	130~2290mm Pitch 60mm

※Pitch : 60mm.

Encoder	Encoder
LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	1μm magnetic encoder
TS10	1μm magnetic encoder

LGW Integrated linear bearings linear motor module (Clean room type) list



▲ LGW17

- R - N - 05 H - LC100 - A001

Position of origin

R	Right
L	Left

Sensor

N	None
XX	Quantity

Cable length

N	None
05	5m
08	8m
12	12m
XX	Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Hall Cable

-	None
H	Hall

Controller type

LC100	TOYO (Pulse)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Customization coding

# Ordering Method

## Ordering Method

LGF - RHS2 - N - 2520 - LS10

Model	Cable carrier entry location		No. of motor		Stroke			Encoder		
LGF5	RHS2	Small cable chain	Horizontally, right	N	Single motor	LGF5	Standard stroke	LS10	1μm optical encoder	
LGF15	LHS2	Large cable chain	Horizontally, Left	D	Double motor		Single motor	160~1540mm	LS05	0.5μm optical encoder
	DHS2		Horizontally, Double Slider			Double motor	30~1410mm	LS01	0.1μm optical encoder	
	RHL2		Horizontally, right			LGF15	Single motor	200~2520mm	MS10	1μm magnetic encoder
	LHL2		Horizontally, Left				Pitch 130mm	Double motor	TS10	1μm magnetic encoder
	DHL2		Horizontally, Double Slider				145~2335mm		Pitch 130mm	
	N		No cable chain	No cable chain						

LGF Integrated linear bearings linear motor module (Clean room type) list



- R - N - 05 H - LC100 - A001

Position of origin

R	Right
L	Left

Sensor

N	None
XX	Quantity

Cable length

N	None
05	5m
08	8m
12	12m
XX	Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Hall Cable

-	None
H	Hall

Controller type

LC100	TOYO (Pulse)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Customization coding

# Ordering Method

## Ordering Method

LTF2 - RHS2 - N - 4688 - LS10

--	--	--	--	--

Model	Cable carrier entry location	No. of motor	Stroke	Encoder
-------	------------------------------	--------------	--------	---------

LTF2-15
LTF2-20
LTF2-30
LTF2-45
LTF2-75

Small cable chain	RHS2	Horizontally, right
	RWS2	Wall mount, right
	LHS2	Horizontally, Left
	LWS2	Wall mount, Left
	DHS2	Horizontally, Double Slider
	DWS2	Wall mount, right
Large cable chain	RHL2	Horizontally, right
	RWL2	Wall mount, right
	LHL2	Horizontally, Left
	LWL2	Wall mount, Left
	DHL2	Horizontally, Double Slider
	DWL2	Wall mount, right
N	No cable chain	No cable chain

N	Single motor
D	Double motor

Model	Motor	Standard stroke
LTF2-15	Single motor	208~4688mm Pitch 64mm
	Double motor	204~4428mm Pitch 64mm
LTF2-20	Single motor	202~4682mm Pitch 64mm
	Double motor	260~4420mm Pitch 64mm
LTF2-30	Single motor	202~4682mm Pitch 64mm
	Double motor	260~4420mm Pitch 64mm
LTF2-45	Single motor	203~4235mm Pitch 64mm
	Double motor	301~3885mm Pitch 64mm
LTF2-75	Single motor	203~4235mm Pitch 64mm
	Double motor	301~3885mm Pitch 64mm

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	1μm magnetic encoder
TS10	1μm magnetic encoder

※Pitch : 60mm.

LTF2 iron core linear motor robot (standard type) list



- R - N - 05 H - LC100 - A001

Position of origin      Sensor      Cable length      Hall Cable      Controller type      Customization coding

Position of origin

R	Right
L	Left

Sensor

N	None
XX	Quantity

Cable length

N	None
05	5m
08	8m
12	12m
XX	Customized length

Hall Cable

-	None
H	Hall

Controller type

LC100	TOYO (Pulse)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Customization coding

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

# Ordering Method

## Ordering Method

LNF2 - RHS2 - N - 3024 - LS10

--	--	--	--	--

Model	Cable carrier entry location	No. of motor	Stroke	Encoder
-------	------------------------------	--------------	--------	---------

LNF2-15
LNF2-20
LNF2-30
LNF2-45
LNF2-75

Small cable chain	RHS2	Horizontally, right
	RWS2	Wall mount, right
	LHS2	Horizontally, Left
	LWS2	Wall mount, Left
	DHS2	Horizontally, Double Slider
	DWS2	Wall mount, right
Large cable chain	RHL2	Horizontally, right
	RWL2	Wall mount, right
	LHL2	Horizontally, Left
	LWL2	Wall mount, Left
	DHL2	Horizontally, Double Slider
	DWL2	Wall mount, right
N	No cable chain	No cable chain

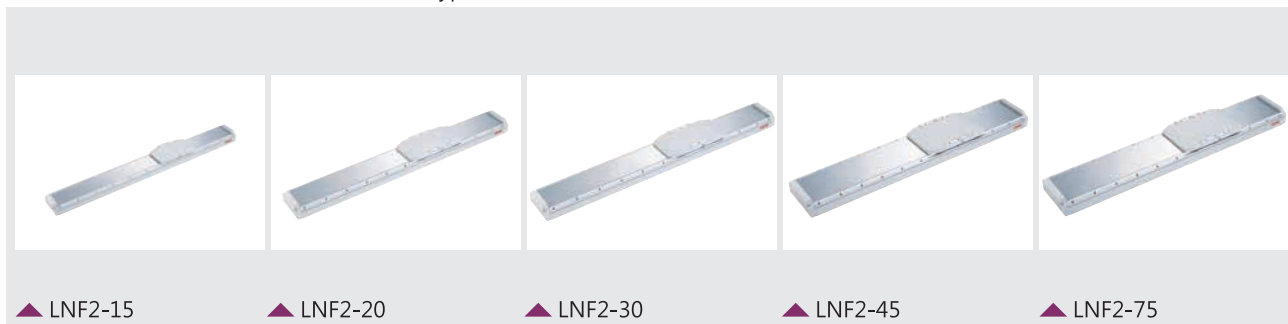
N	Single motor
D	Double motor

Model	Motor	Standard stroke
LNF2-15	Single motor	208~3024mm Pitch 64mm
	Double motor	332~3020mm Pitch 64mm
LNF2-20	Single motor	202~3018mm Pitch 64mm
	Double motor	320~3008mm Pitch 64mm
LNF2-30	Single motor	202~3018mm Pitch 64mm
	Double motor	320~3008mm Pitch 64mm
LNF2-45	Single motor	203~3019mm Pitch 64mm
	Double motor	429~3053mm Pitch 64mm
LNF2-75	Single motor	203~3019mm Pitch 64mm
	Double motor	429~3053mm Pitch 64mm

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	1μm magnetic encoder
TS10	1μm magnetic encoder

※Pitch : 60mm.

LNF2 iron core linear motor robot (Closed type) list



▲ LNF2-15

▲ LNF2-20

▲ LNF2-30

▲ LNF2-45

▲ LNF2-75



- R - N - 05 H - LC100 - A001

Position of origin

R	Right
L	Left

Sensor

N	None
XX	Quantity

Cable length

N	None
05	5m
08	8m
12	12m
XX	Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Hall Cable

-	None
H	Hall

Controller type

LC100	TOYO (Pulse)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Customization coding

# Ordering Method

## Ordering Method

LCF2 - RHS2 - N - 3024 - LS10

--	--	--	--	--

Model	Cable carrier entry location	No. of motor	Stroke	Encoder
-------	------------------------------	--------------	--------	---------

LCF2-15
LCF2-20
LCF2-30
LCF2-45
LCF2-75

Small cable chain	RHS2	Horizontally, right
	RWS2	Wall mount, right
	LHS2	Horizontally, Left
	LWS2	Wall mount, Left
	DHS2	Horizontally, Double Slider
	DWS2	Wall mount, right
Large cable chain	RHL2	Horizontally, right
	RWL2	Wall mount, right
	LHL2	Horizontally, Left
	LWL2	Wall mount, Left
	DHL2	Horizontally, Double Slider
	DWL2	Wall mount, right
N	No cable chain	No cable chain

N	Single motor
D	Double motor

Model	Motor	Standard stroke
LCF2-15	Single motor	208~3024mm Pitch 64mm
	Double motor	332~3020mm Pitch 64mm
LCF2-20	Single motor	202~3018mm Pitch 64mm
	Double motor	320~3008mm Pitch 64mm
LCF2-30	Single motor	202~3018mm Pitch 64mm
	Double motor	320~3008mm Pitch 64mm
LCF2-45	Single motor	203~3019mm Pitch 64mm
	Double motor	429~3053mm Pitch 64mm
LCF2-75	Single motor	203~3019mm Pitch 64mm
	Double motor	429~3053mm Pitch 64mm

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	1μm magnetic encoder
TS10	1μm magnetic encoder

※Pitch : 60mm.

LCF2 iron core linear motor robot (clean room type) list



- R - N - 05 H - LC100 - A001

Position of origin      Sensor      Cable length      Hall Cable      Controller type      Customization coding

Position of origin

R	Right
L	Left

Sensor

N	None
XX	Quantity

Cable length

N	None
05	5m
08	8m
12	12m
XX	Customized length

Hall Cable

-	None
H	Hall

Controller type

LC100	TOYO (Pulse)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Customization coding

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

## Ordering Method

### Ordering Method

LAF15-                    RHS2                    -                    N                    -                    1600                    -                    LS10

Model	Cable carrier entry location		No. of motor	Stroke	Encoder
LAF7	RHS	Small cable chain	N Single motor	Model	LS10 1μm optical encoder
LAF15	LHS			Standard stroke	
LAF20	RWS			LAF7 160~1590 mm	
LAF30	LWS			LAF15 170~1600 mm	
	RHL	Large cable chain		LAF20 170~1600 mm	LS01 0.1μm optical encoder
	LHL		LAF30 110~1540 mm	MS10 1μm magnetic encoder	
	RWL		※Pitch : 130mm.	TS10 1μm magnetic encoder	
	LWL				

※No cable chain, no description.

LSF15-                    RHS2                    -                    N                    -                    1600                    -                    LS10

Model	Cable carrier entry location		No. of motor	Stroke	Encoder
LAF7	RHS	Small cable chain	N Single motor	Model	LS10 1μm optical encoder
LAF15	LHS			Standard stroke	
LAF20	RWS			LSF7 160~1590 mm	
LAF30	LWS			LSF15 170~1600 mm	
	RHL	Large cable chain		LSF20 170~1600 mm	LS01 0.1μm optical encoder
	LHL		LSF30 110~1540 mm	MS10 1μm magnetic encoder	
	RWL		※Pitch : 130mm.	TS10 1μm magnetic encoder	
	LWL				

※No cable chain, no description.

LAF iron core linear motor robot (aluminum type) list



▲ LAF7

▲ LAF15

▲ LAF20

▲ LAF30

- R - N - 05 H - LC100 - A001

--	--	--	--	--	--

Position of origin      Sensor      Cable length      Hall Cable      Controller type      Customization coding

R	Right
L	Left

N	None
XX	Quantity

N	None
05	5m
08	8m
12	12m
XX	Customized length

-	None
H	Hall

LC100	TOYO (Pulse)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

- R - N - 05 H - LC100 - A001

--	--	--	--	--	--

Position of origin      Sensor      Cable length      Hall Cable      Controller type      Customization coding

R	Right
L	Left

N	None
XX	Quantity

N	None
05	5m
08	8m
12	12m
XX	Customized length

-	None
H	Hall

LC100	TOYO (Pulse)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

LSF iron core linear motor robot (steel type) list



▲ LSF7

▲ LSF15

▲ LSF20

▲ LSF30

## Ordering Method

### Ordering Method

LAU3 - N - 1290 - LS10

Model		No. of motor		Stroke		Encoder	
LAU3	LAU5	N	Single motor	Model	Standard stroke	LS10	1μm optical encoder
				LAU3	90~1290 mm	LS05	0.5μm optical encoder
				LAU5	90~1290 mm	LS01	0.1μm optical encoder
						MS10	1μm magnetic encoder
						TS10	1μm magnetic encoder

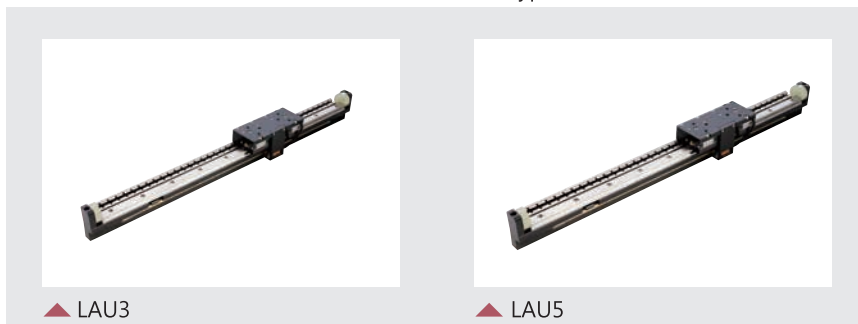
※Pitch : 120mm.

LMR20- 04 - RH - N - 990 - LS10

Model		Spec of motor		Main body fixed method		No. of motor		Stroke		Encoder		
LMR20	LMR25	LMR32	Model	Spec of motor	RH	Horizontally fixed	N	Single motor	Model	Standard stroke	LS10	1μm optical encoder
			LMR20	04 / 05	LW	Wall mounting	D	Double motor	LMR20	80~990 mm	LS05	0.5μm optical encoder
			LMR25	04 / 06					LMR25	50~1300 mm	LS01	0.1μm optical encoder
			LMR32	06 / 08					LMR32	75~1940 mm	MS10	1μm magnetic encoder
											TS10	1μm magnetic encoder

※Pitch : 60mm.  
 ※Stroke range is different according to the pushing force and the number of the motor.

LAU linear motor robot without iron core (standard type) list



- R - N - 05 H - LC100 - A001

Position of origin	Sensor	Cable length	Hall Cable	Controller type	Customization coding
R Right L Left	N None XX Quantity	N None 05 5m 08 8m 12 12m XX Customized length	- None H Hall	LC100 TOYO (Pulse) S Servotronic M Mitsubishi P Panasonic D Delta L Shihlin Z Other N None	

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

- R - N - 05 H - LC100 - A001

Position of origin	Sensor	Cable length	Hall Cable	Controller type	Customization coding
R Right L Left	N None XX Quantity	N None 05 5m 08 8m 12 12m XX Customized length	- None H Hall	LC100 TOYO (Pulse) S Servotronic M Mitsubishi P Panasonic D Delta L Shihlin Z Other N None	

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

LMR shaft bar linear motor robot (standard type) list



▲ LMR20

▲ LMR25

▲ LMR32

# Applications

## Spray-Printing device for PCB substrate boards

- Fix the substrate board onto the electric cylinder. Use the character of equal-speed sliding to execute the spray printing.

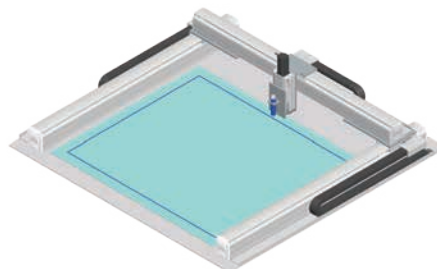


- Recommended spec  
LTF2-20

→ P081

## Surface cleaning device for circuit boards

- Fix the PLASMA onto the electric cylinder and move back and forth on the conveyor to do the surface cleaning for the circuit boards.

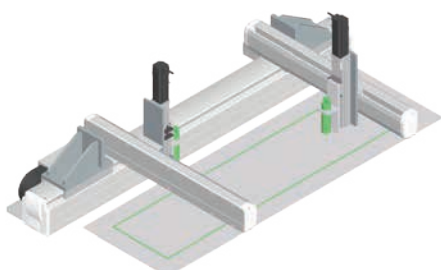


- Recommended spec  
LMR25 / LMR32

→ P279

## Cutting device for PCB circuit boards

- Place the PCB board on the electric cylinder and do the cutting by using external cutting devices.

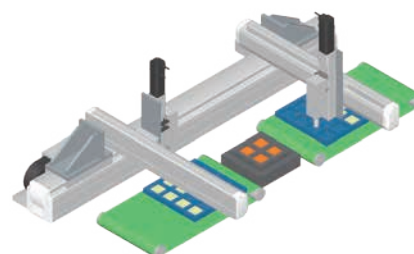


- Recommended spec  
LCF2-75 / CGTH5 / CGTH4

→ P219

## Compact disc receiving device

- Use the feature "multi-positioning" of electric cylinder to do loading and unloading of the disc box.



- Recommended spec  
LGF15 / CGTH5 / CGTH4

→ P061

## C.C.D inspection machine

- Mount the C.C.D on the electric cylinder. Use the character of equal-speed sliding to check the defects on the tire surface and report to the on-site worker immediately.

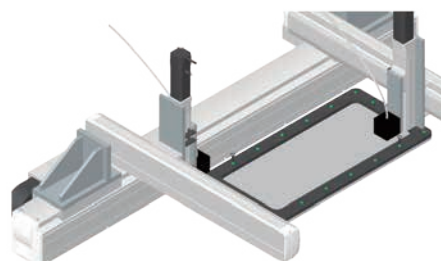


- Recommended spec  
LNF2-30

→ P145

## Mobile device for surface processing

- Mount the working piece on the electric cylinder and dip it into the solvents. Use the character of moving up and down, left and right at high speed to do the surface treatment processing.



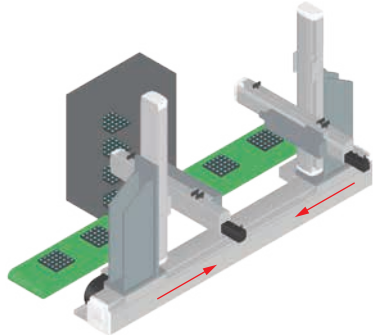
- Recommended spec  
LTF2-45 / CGTH5 / CGTH4

→ P101



IC printer device

- Place the IC device on the electric cylinder. Use the character of equal-speed sliding and capable to adapt servo motor and stepping motor to execute the laser printing.

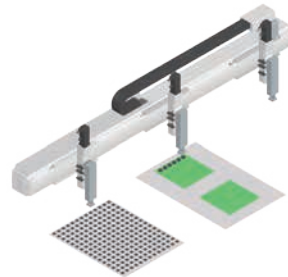


- Recommended spec  
LMR32 / CGTH5 / GTH8

→ P285

Aligning device for pick-and-place of IC boards

- Install two single electric cylinder to combine a simple IC pick-and-place system.

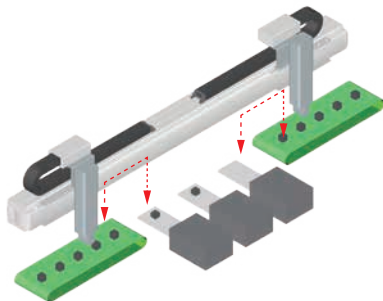


- Recommended spec  
LTF2-30 / CGTH5

→ P091

Barcode scanning device

- Install the X-Y multi-axis system to automated warehouse to execute the scanning of barcode.

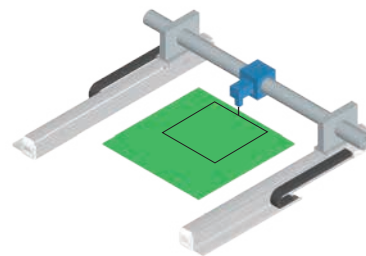


- Recommended spec  
LTF2-20

→ P081

Fillings device

- In order to adapt to filling of different products, we can execute the filling at different height of position by programmable feature.

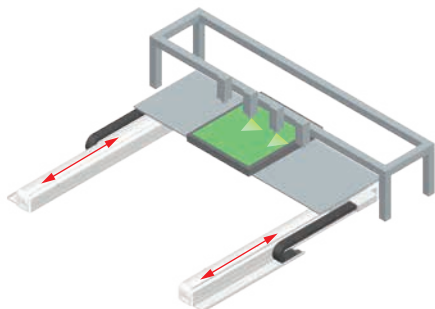


- Recommended spec  
LMR20

→ P273

Assembling device on disc machine

- Install two single electric cylinders to combine an X-Y system. Then mount it onto the disc machine to do the components assembly.

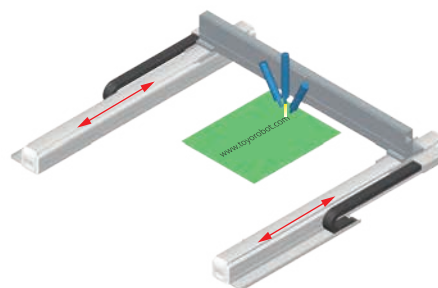


- Recommended spec  
LTF2-20

→ P081

Laser Engraving Machine

- Use the feature multi-positioning of the electric cylinder to drive the sucker and cylinders to do the assembly of small components.



- Recommended spec  
LMR20

→ P273

Features

LGW Series

LGF Series

LTF2 Series

LNFP2 Series

LCPF2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

## Memo

# LGW (Clean room type)

Integrated linear bearings linear motor module

Class  
**100**

## Contents

MEDIUM

LGW17



Width 125mm

Max. stroke 2520mm..... 047

Continuous payload 20kg

## Spec Index

### LGW Dust-proof integrated linear bearings linear motor module

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Clean room	Linear Motor Robot	125	LGW17	Single motor	3A	±0.002	LMW17	79	20	2500
				Double motor	3A*2	±0.002	LMW17	79	20	2500

※ LGW17 type, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.

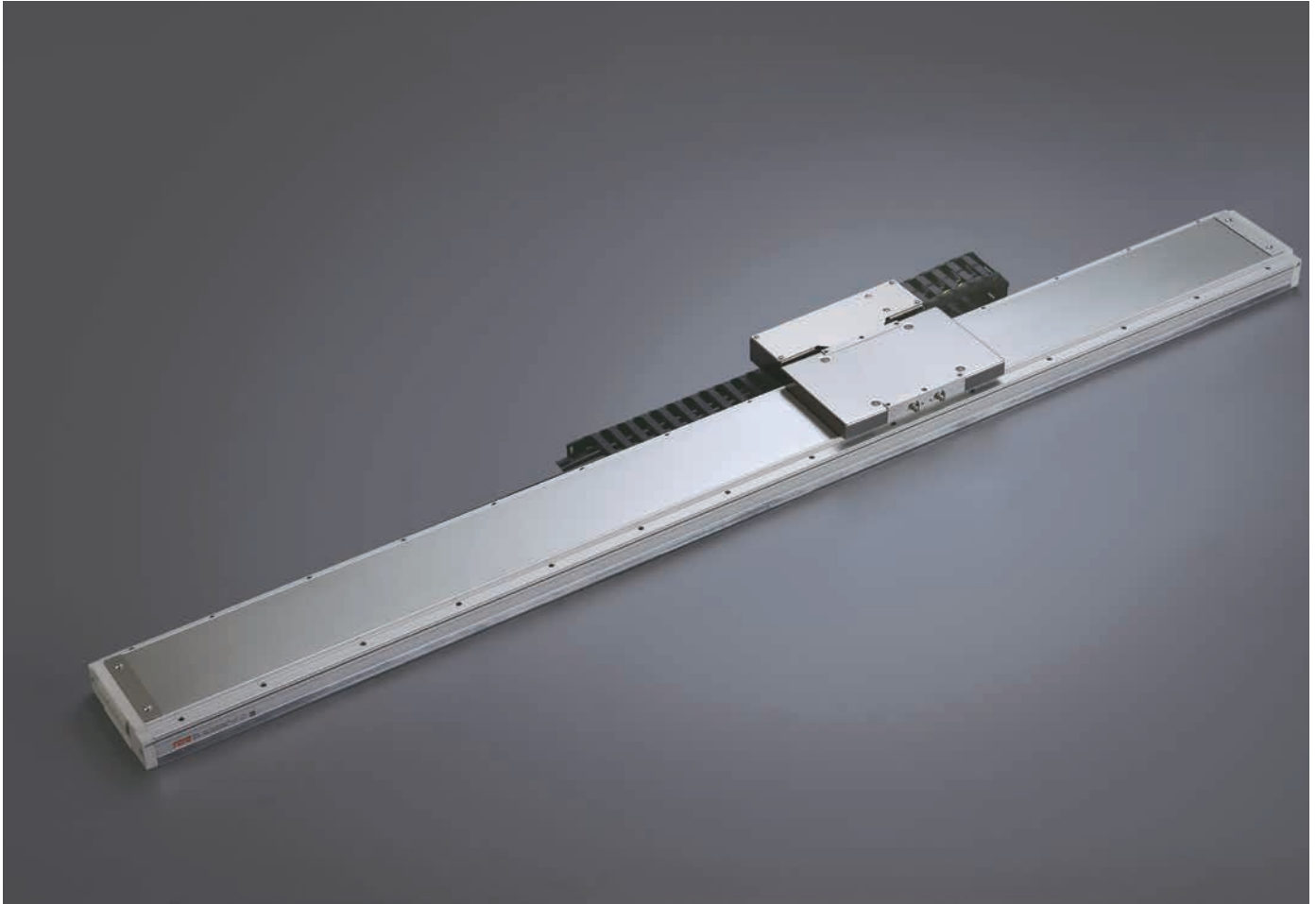
※ Please consult with our sales department for customized stroke.

Max. Linear Speed (mm/s)											Page
Stroke	125	250	500	750	1250	1500	1750	2000	2250	2500	
		2500									047
		2500									

# LGW17

Clean room type

With Iron Core



Maximum Stroke 2520m

Maximum Speed 2500mm/s

Continuous Thrust 80N

Continuous Payload 20kg

### Ordering Method

## LGW17 - RHS2 - N - 2520 - LS10 - R - N - 05H - LC100 - A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	240-2520mm Pitch 60mm
Double motor	130-2290mm Pitch 60mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

#### Hall Cable

-	None
H	Hall

#### Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronic
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

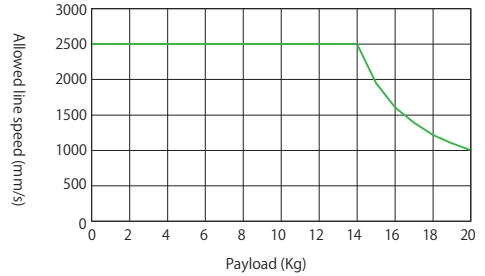
※ It is compulsory to select N for the controller while choosing cable length N.

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

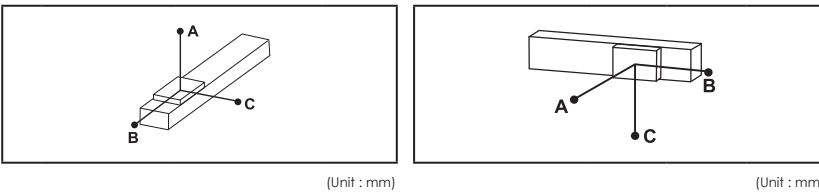
Specification			
Spec	Model	LGW17	
	Repeatability (mm)	±0.002	
	Max. Force (N)	356	
	Rated Force (N)	79	
	Max. Payload (kg) <sup>※1</sup>	20	
	Stroke (mm)	Single motor	240-2520 /60 pitch
		Double motor	130-2290 /60 pitch
Maximum Speed (mm/s)	2500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 3m/s<sup>2</sup>. Different application will have different result.

**Payload & Acceleration**



**Allowable Overhang**



Horizontal Installation <sup>※2</sup>					Wall Installation <sup>※2</sup>				
LGW17	Load	A	B	C	LGW17	Load	A	B	C
	5 kg	4000	2970	4000		5 kg	4000	2970	4000
	10 kg	4000	1400	2410		10 kg	2410	1400	4000
	15 kg	3780	870	1530		15 kg	1530	870	3780
	20 kg	2730	610	1070		20 kg	1070	610	2730

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above charts are based on acceleration time of 0.2 sec.

**Static Loading Moment**

	MY	MP	MR
LGW17	794	794	1864

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features  
 LGW Series  
 LGF Series  
 LTF2 Series  
 LNF2 Series  
 LCP2 Series  
 LAF / LSF Series  
 LAU Series  
 LMR Series  
 Controller

LGW  
LGW17

# LGW17

Clean room type

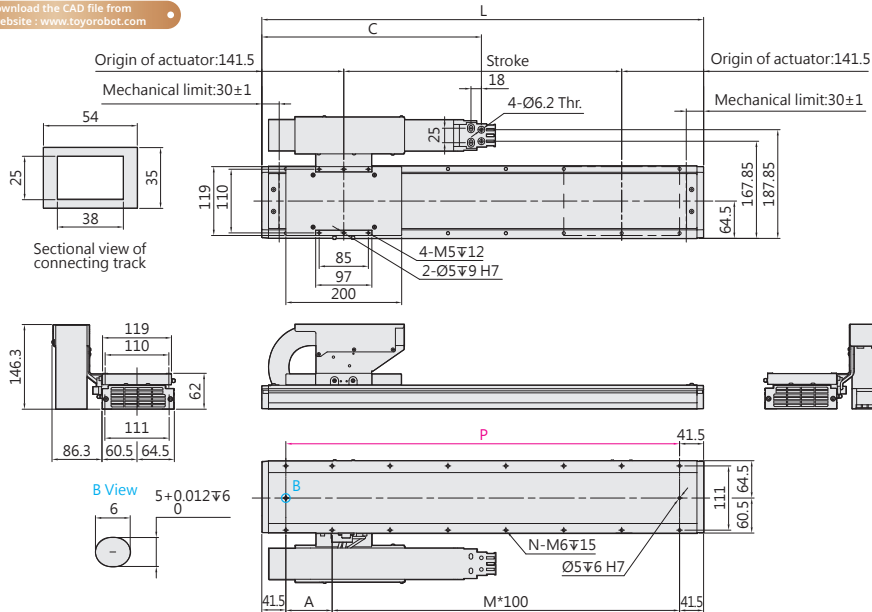
With Iron Core

## LGW17-RHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



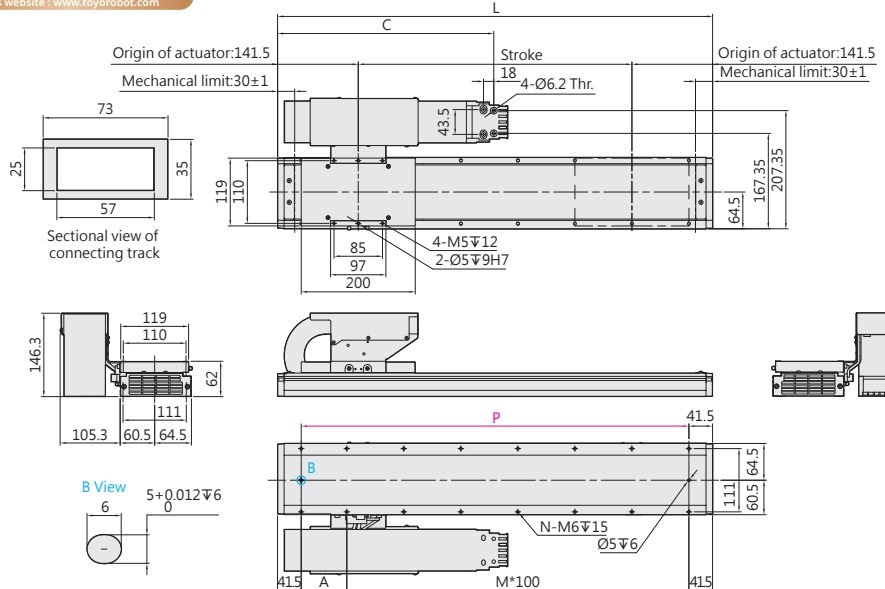
Stroke	240	360	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520
L	523	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	259	319	379	439	499	559	619	679	739	799	859	919	979	1039	1099	1159	1219	1279	1339	1399
M	4	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
N	12	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
P	440	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
KG	8.7	9.8	10.9	12.0	13.1	14.2	15.3	16.4	17.5	18.6	19.7	20.8	21.9	23.0	24.1	25.2	26.3	27.4	28.5	29.6

## LGW17-RHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	240	360	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520
L	523	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	259	319	379	439	499	559	619	679	739	799	859	919	979	1039	1099	1159	1219	1279	1339	1399
M	4	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
N	12	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
P	440	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
KG	8.9	10.0	11.1	12.2	13.3	14.4	15.5	16.6	17.7	18.8	19.9	21.0	22.1	23.2	24.3	25.4	26.5	27.6	28.7	29.8



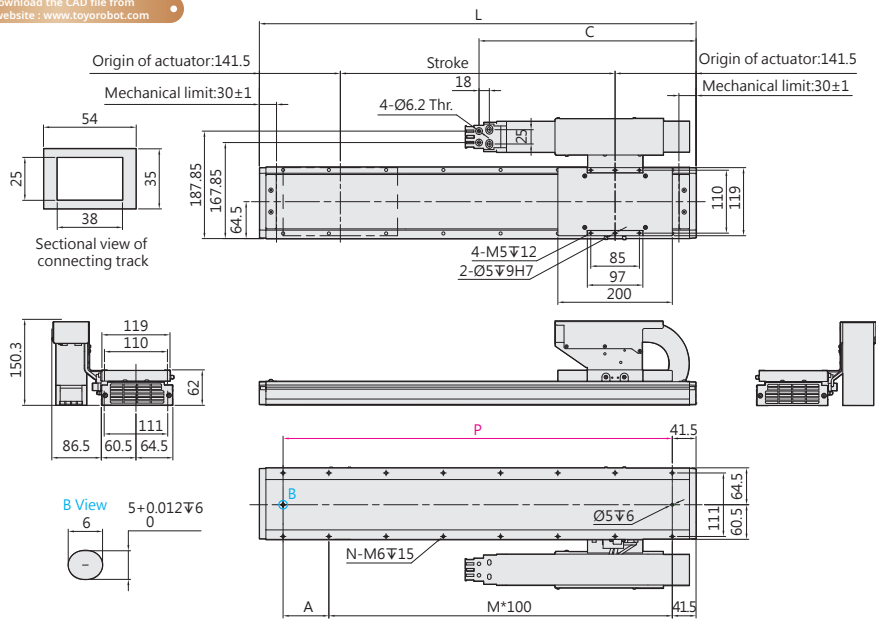
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LGW17-LHS2-N



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)

Unit : mm



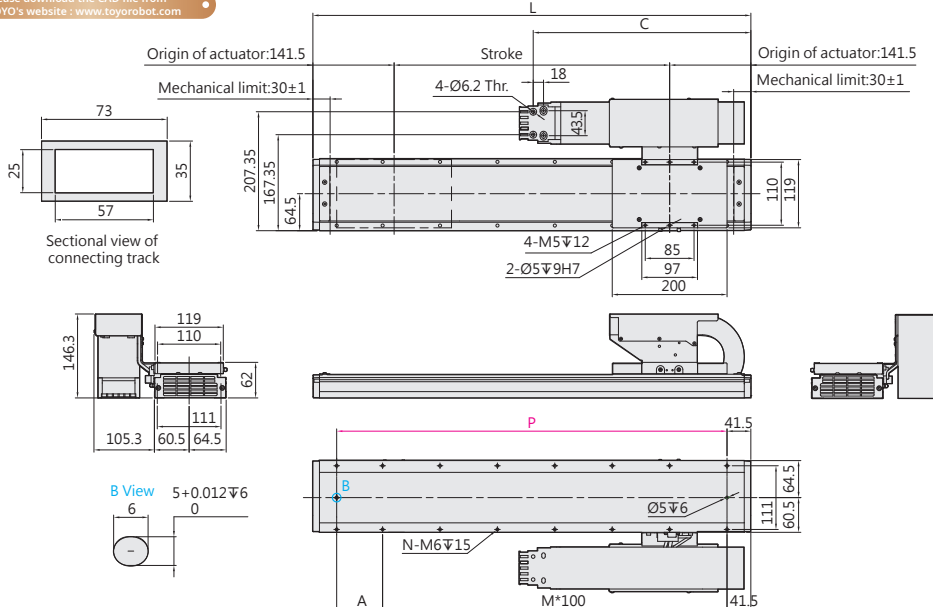
Stroke	240	360	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520
L	523	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	259	319	379	439	499	559	619	679	739	799	859	919	979	1039	1099	1159	1219	1279	1339	1399
M	4	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
N	12	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
P	440	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
KG	8.7	9.8	10.9	12.0	13.1	14.2	15.3	16.4	17.5	18.6	19.7	20.8	21.9	23.0	24.1	25.2	26.3	27.4	28.5	29.6

### LGW17-LHL2-N



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)

Unit : mm



Stroke	240	360	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520
L	523	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	259	319	379	439	499	559	619	679	739	799	859	919	979	1039	1099	1159	1219	1279	1339	1399
M	4	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
N	12	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
P	440	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
KG	8.9	10.0	11.1	12.2	13.3	14.4	15.5	16.6	17.7	18.8	19.9	21.0	22.1	23.2	24.3	25.4	26.5	27.6	28.7	29.8

# LGW17

Clean room type

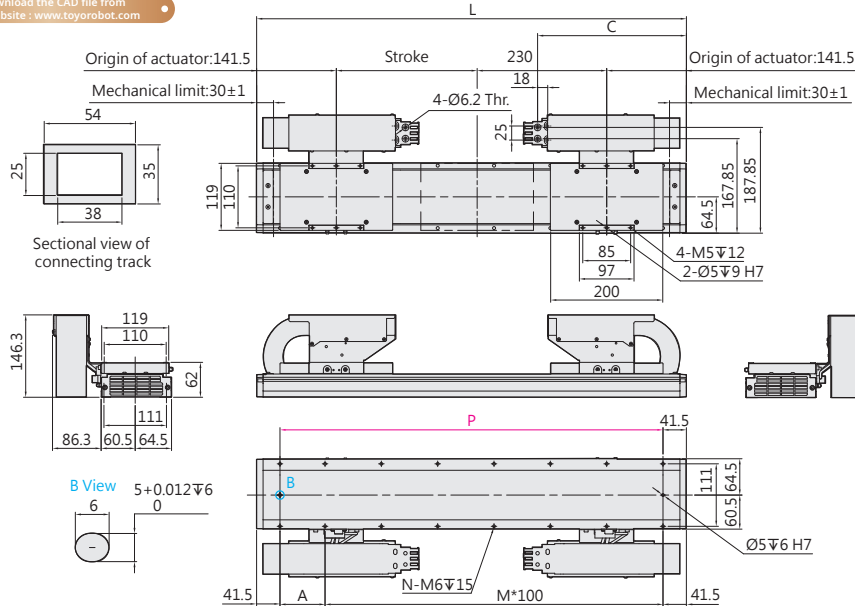
With Iron Core

## LGW17-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



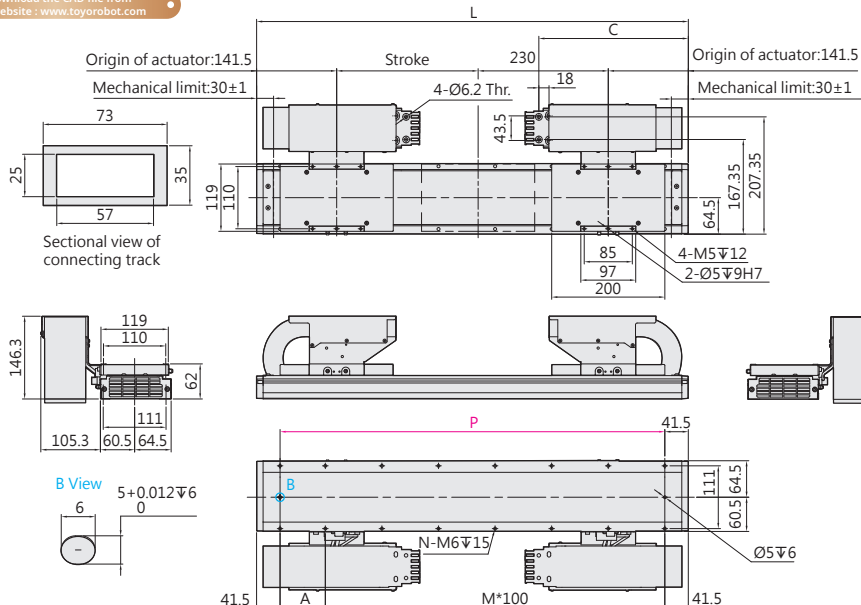
Stroke	130	250	370	490	610	730	850	970	1090	1210	1330	1450	1570	1690	1810	1930	2050	2170	2290
L	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	204	264	324	384	444	504	564	624	684	744	804	864	924	984	1044	1104	1164	1224	1284
M	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
N	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
P	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
KG	13.9	15.0	16.1	17.2	18.3	19.4	20.5	21.6	22.7	23.8	24.9	26.0	27.1	28.2	29.3	30.4	31.5	32.6	33.7

## LGW17-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



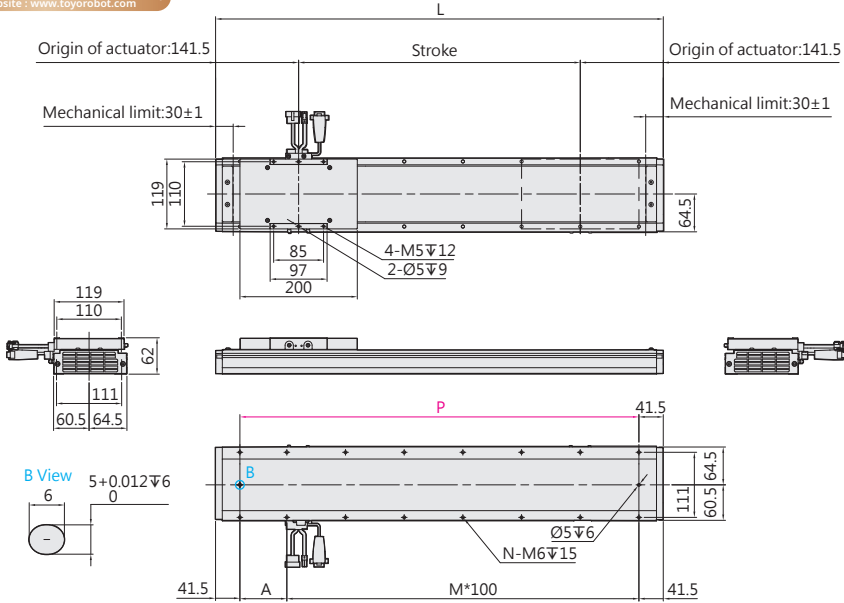
Stroke	130	250	370	490	610	730	850	970	1090	1210	1330	1450	1570	1690	1810	1930	2050	2170	2290
L	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	204	264	324	384	444	504	564	624	684	744	804	864	924	984	1044	1104	1164	1224	1284
M	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
N	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
P	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
KG	14.2	15.3	16.4	17.5	18.6	19.7	20.8	21.9	23.0	24.1	25.2	26.3	27.4	28.5	29.6	30.7	31.8	32.9	34.0

### LGW17-N-N

Unit : mm



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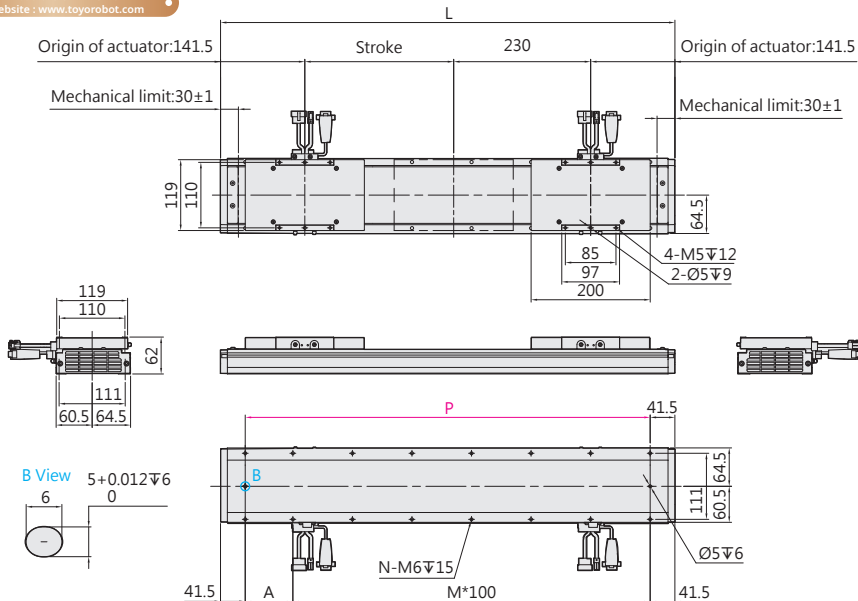
Stroke	240	360	480	600	720	840	960	1080	1200	1320	1440	1560	1680	1800	1920	2040	2160	2280	2400	2520
L	523	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	4	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
M	12	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
N	440	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
P	6.5	7.6	8.7	9.8	10.9	12.0	13.1	14.2	15.3	16.4	17.5	18.6	19.7	20.8	21.9	23.0	24.1	25.2	26.3	27.4
KG	8.7	9.8	10.9	12.0	13.1	14.2	15.3	16.4	17.5	18.6	19.7	20.8	21.9	23.0	24.1	25.2	26.3	27.4	28.5	29.6

### LGW17-N-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	130	250	370	490	610	730	850	970	1090	1210	1330	1450	1570	1690	1810	1930	2050	2170	2290
L	643	763	883	1003	1123	1243	1363	1483	1603	1723	1843	1963	2083	2203	2323	2443	2563	2683	2803
A	60	80	100	20	40	60	80	100	20	40	60	80	100	20	40	60	80	100	20
C	5	6	7	9	10	11	12	13	15	16	17	18	19	21	22	23	24	25	27
M	14	16	18	22	24	26	28	30	34	36	38	40	42	46	48	50	52	54	58
N	560	680	800	920	1040	1160	1280	1400	1520	1640	1760	1880	2000	2120	2240	2360	2480	2600	2720
P	9.3	10.4	11.5	12.6	13.7	14.8	15.9	17.0	18.1	19.2	20.3	21.4	22.5	23.6	24.7	25.8	26.9	28.0	29.1
KG	8.9	10.0	11.1	12.2	13.3	14.4	15.5	16.6	17.7	18.8	19.9	21.0	22.1	23.2	24.3	25.4	26.5	27.6	28.7

Features

LGW Series

LGF Series

LTP2 Series

LNFP2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LNR Series

Controller

## Memo

# LGF

(Clean room type)

Class  
100

## Built-in linear motion guide iron core linear motor robot

### Contents

SMALL

LGF5



Width 56mm  
Max. stroke 1540mm..... 057  
Continuous payload 3kg

MEDIUM

LGF15



Width 75mm  
Max. stroke 2520mm..... 061  
Continuous payload 15kg

## Spec Index

### LGF Dust-proof integrated linear bearings linear motor module

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Clean room	Linear Motor Robot	56	LGF5	Single motor	3A	±0.002	LMF5	14	3	2500
				Double motor	3A*2	±0.002	LMF5	14	3	2500
		75	LGF15	Single motor	3A	±0.002	LMF15	59	15	2500
				Double motor	3A*2	±0.002	LMF15	59	15	2500

\* LGF5, LGF15 type, the data of continuous payload can be speed 1m/s and maximum acceleration 10m/s<sup>2</sup>.

\* Please consult with our sales department for customized stroke.

Max. Linear Speed (mm/s) <span style="float: right;">■ Speed</span>													Page
Stroke	25	150	200	450	700	950	1200	1450	1700	1950	2200	2450	
			2500										057
		2500											
			2500										061
		2500											

# LGF5

Clean room type

With Iron Core



Maximum Stroke 2520m

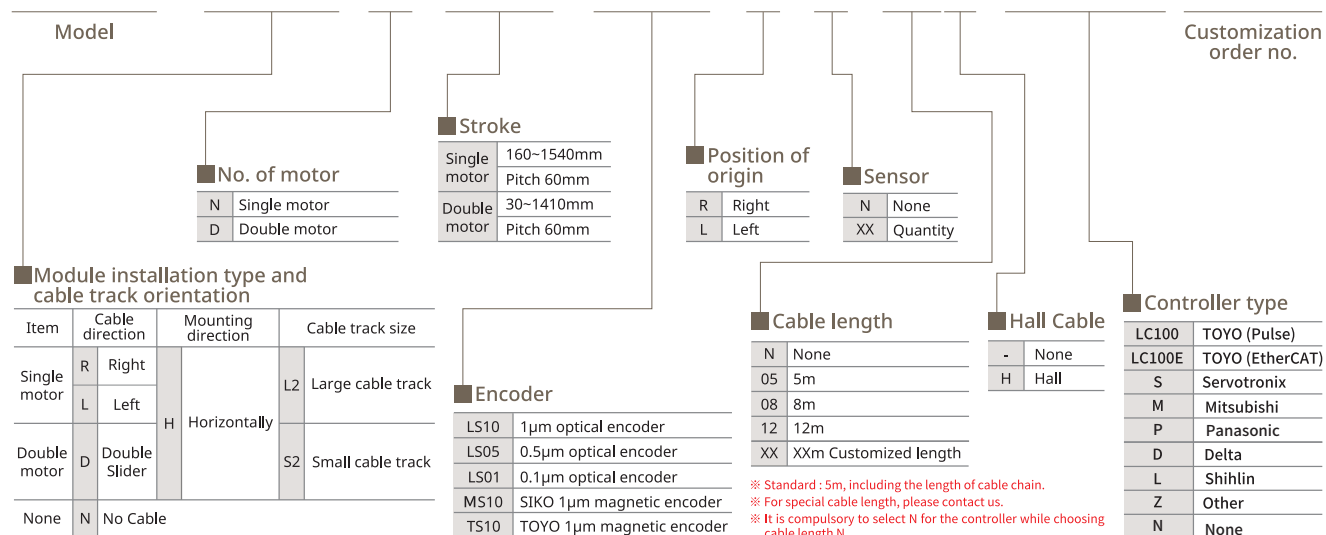
Maximum Speed 2500mm/s

Continuous Thrust 80N

Continuous Payload 20kg

## Ordering Method

# LGF5 - RHS2 - N - 1000 - LS10 - R - N - 05H - LC100 - A001

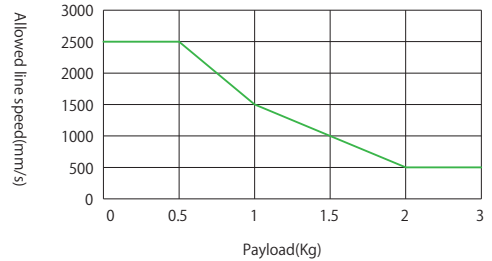




Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

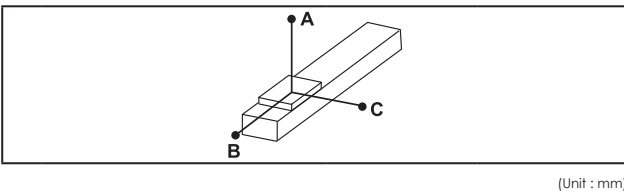
Specification			
Spec	Model	LGF5	
	Repeatability (mm)	±0.002	
	Max. Force (N)	25	
	Rated Force (N)	14	
	Max. Payload (kg) <sup>※1</sup>	3	
	Stroke (mm)	Single motor	160-1540 /60 pitch
		Double motor	30-1410 /60 pitch
Maximum Speed (mm/s)	2500		

**Payload & Acceleration**



※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 3m/s<sup>2</sup>. Different application will have different result.

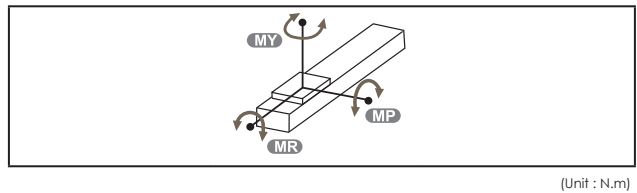
**Allowable Overhang**



Horizontal Installation <sup>※2</sup>				
LGF5	Load	A	B	C
	0.5kg	1000	650	500
	1kg	750	500	375
	2kg	500	350	250
	3kg	250	150	125

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



LGF5	MY	95
	MP	95
	MR	195

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features  
 LGW Series  
 LGF Series  
 LTF2 Series  
 LNF2 Series  
 LCP2 Series  
 LAF / LSF Series  
 LAU Series  
 LMR Series  
 Controller  
 LGF  
 LGF5  
 LGF15

# LGF5

Clean room type

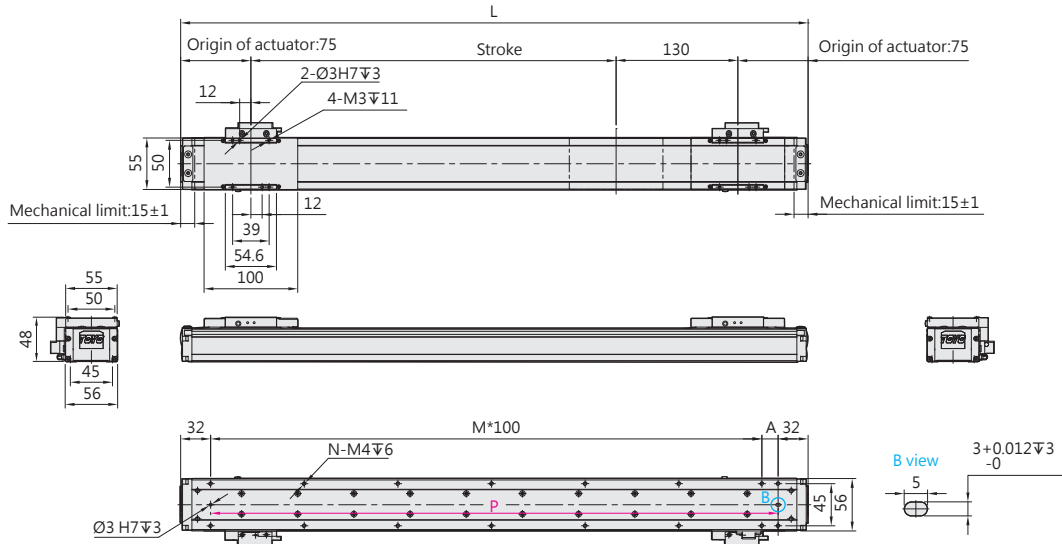
With Iron Core

## LGF5-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



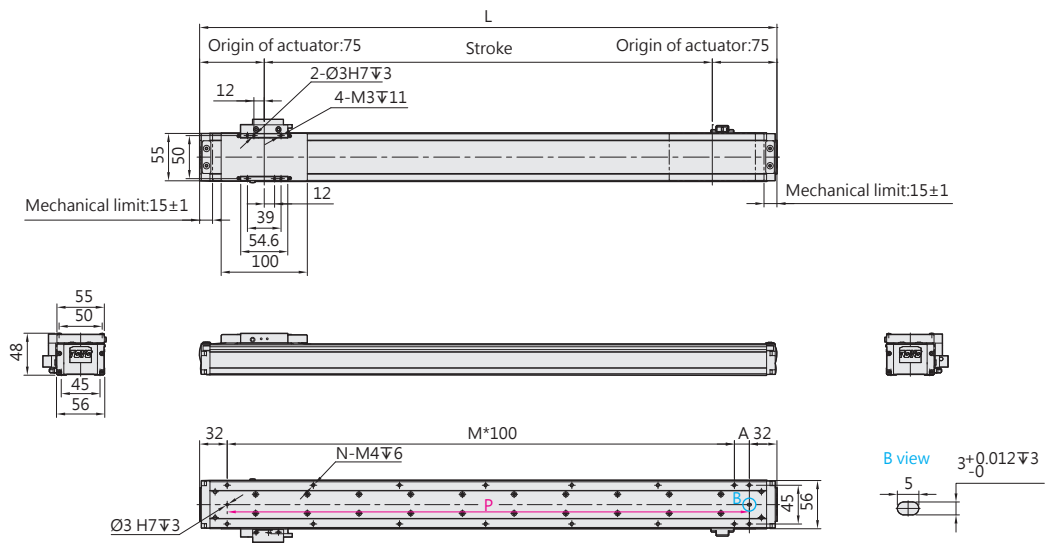
Stroke	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1000	1060	1120	1180	1240	1300	1360	1420	1480	1540
L	310	370	430	490	550	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330	1390	1450	1510	1570	1630	1690
A	46	6	66	26	86	46	6	66	26	86	46	6	66	26	86	46	6	66	26	86	46	6	66	26
M	2	3	3	4	4	5	6	6	7	7	8	9	9	10	10	11	12	12	13	13	14	15	15	16
N	8	10	10	12	12	14	16	16	18	18	20	22	22	24	24	26	28	28	30	30	32	34	34	36
P	246	306	366	426	486	546	606	666	726	786	846	906	966	1026	1086	1146	1206	1266	1326	1386	1446	1506	1566	1626
KG	1.2	1.3	1.5	1.7	1.8	2.0	2.2	2.4	2.5	2.7	2.9	3.0	3.2	3.4	3.5	3.7	3.9	4.0	4.2	4.4	4.5	4.7	4.9	5.1

## LGF5-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	30	90	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990	1050	1110	1170	1230	1290	1350	1410
L	310	370	430	490	550	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330	1390	1450	1510	1570	1630	1690
A	46	6	66	26	86	46	6	66	26	86	46	6	66	26	86	46	6	66	26	86	46	6	66	26
M	2	3	3	4	5	6	6	6	7	8	8	9	9	10	11	11	12	12	13	14	14	15	15	16
N	8	10	10	12	12	14	16	16	18	18	20	22	22	24	24	26	28	28	30	30	32	34	34	36
P	246	306	366	426	486	546	606	666	726	786	846	906	966	1026	1086	1146	1206	1266	1326	1386	1446	1506	1566	1626
KG	1.5	1.7	1.9	2.0	2.2	2.4	2.6	2.7	2.9	3.1	3.2	3.4	3.6	3.7	3.9	4.1	4.2	4.4	4.6	4.7	4.9	5.1	5.2	5.4

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

LNFP Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LGF

LGF5

LGF15

# LGF15

Clean room type

With Iron Core



Maximum Stroke 2520m

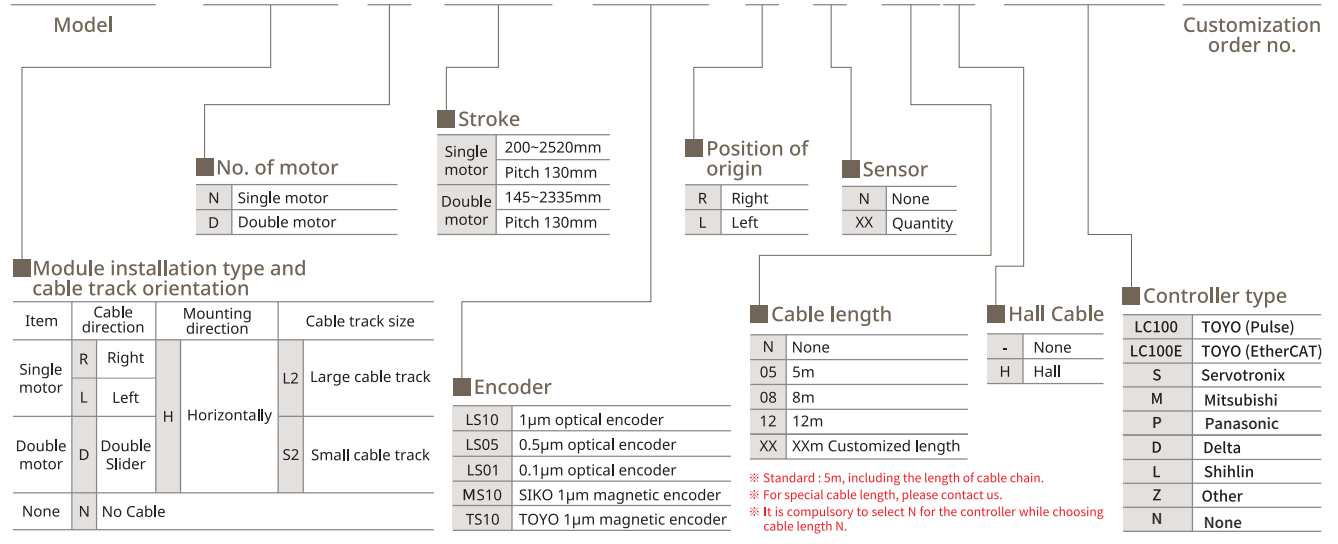
Maximum Speed 2500mm/s

Continuous Thrust 59N

Continuous Payload 15kg

## Ordering Method

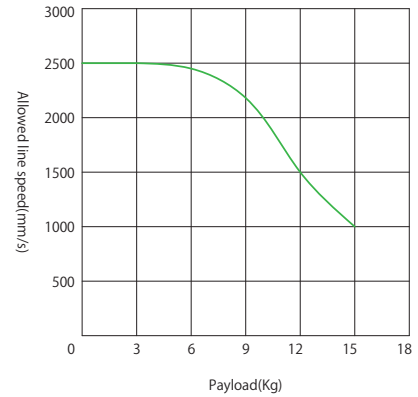
# LGF15 - RHS2 - N - 1100 - LS10 - R - N - 05H - LC100 - A001



Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

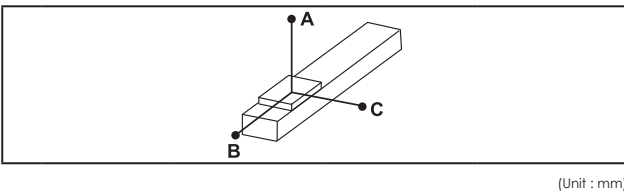
Specification			
Spec	Model	LGF15	
	Repeatability (mm)	±0.002	
	Max. Force (N)	266	
	Rated Force (N)	59	
	Max. Payload (kg) <sup>※1</sup>	15	
	Stroke (mm)	Single motor	200-2520 /130 pitch
		Double motor	145-2335 /130 pitch
Maximum Speed (mm/s)	2500		

**Payload & Acceleration**



※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 3m/s<sup>2</sup>. Different application will have different result.

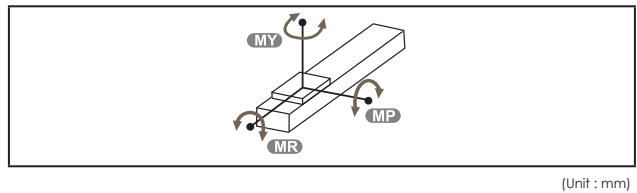
**Allowable Overhang**



Horizontal Installation <sup>※2</sup>				
LGF15	Load	A	B	C
	5kg	1850	520	710
	10kg	1150	310	430
	15kg	800	210	285

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



LGF15	MY	247
	MP	247
	MR	465

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features  
 LGW Series  
 LGF Series  
 LTP2 Series  
 LNP2 Series  
 LCP2 Series  
 LAF / LSF Series  
 LAU Series  
 LMR Series  
 Controller  
 LGF  
 LGF5  
 LGF15

# LGF15

Clean room type

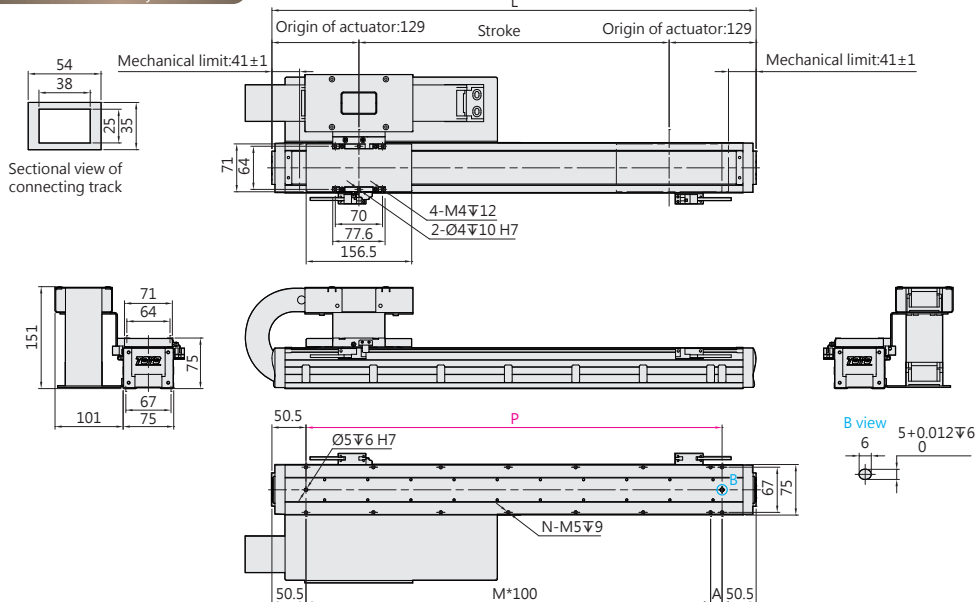
With Iron Core

## LGF15-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



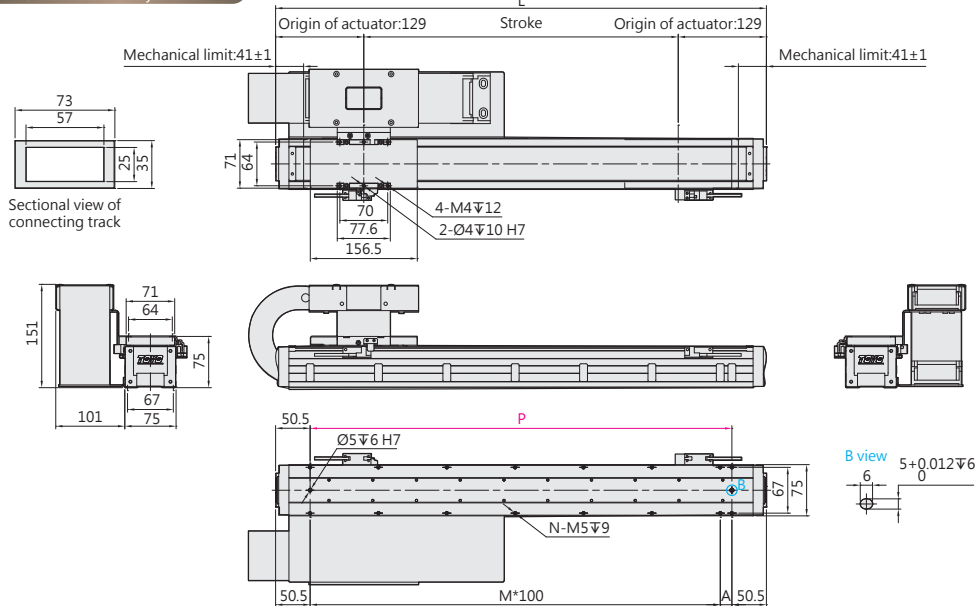
Stroke	200	330	460	590	720	850	980	1110	1240	1370	1480	1610	1740	1870	2000	2130	2260	2390	2520
L	458	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	57	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	3	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	10	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	357	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	6.4	7.3	8.4	9.3	10.2	11.3	12.2	13.2	14.3	15.2	16.3	17.4	18.2	19.4	20.4	21.4	22.4	23.4	24.4

## LGF15-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	200	330	460	590	720	850	980	1110	1240	1370	1480	1610	1740	1870	2000	2130	2260	2390	2520
L	458	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	57	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	3	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	10	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	357	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	6.4	7.3	8.4	9.3	10.2	11.3	12.2	13.2	14.3	15.2	16.3	17.4	18.2	19.4	20.4	21.4	22.4	23.4	24.4

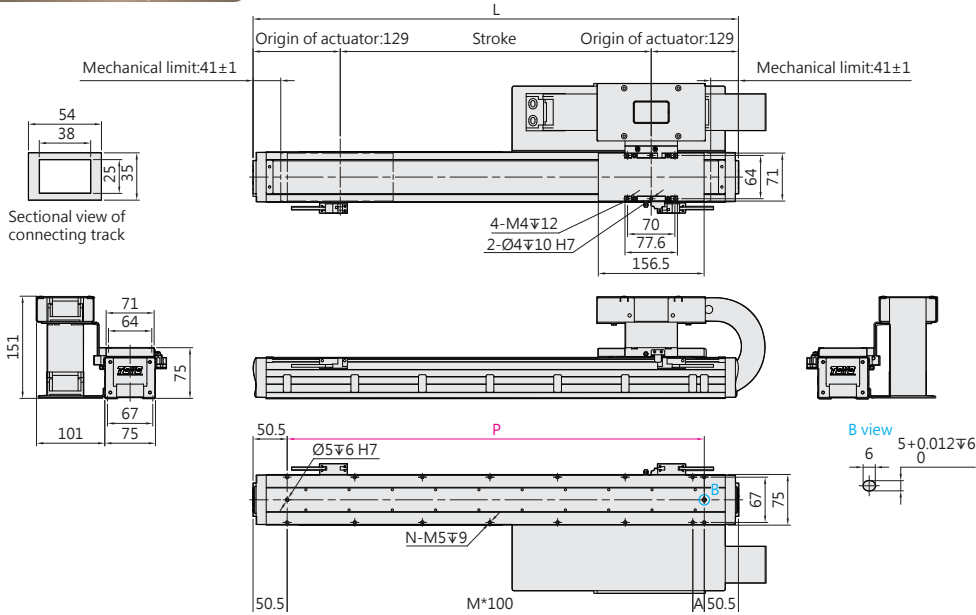
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LGF15-LHS2-N



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)

Unit : mm



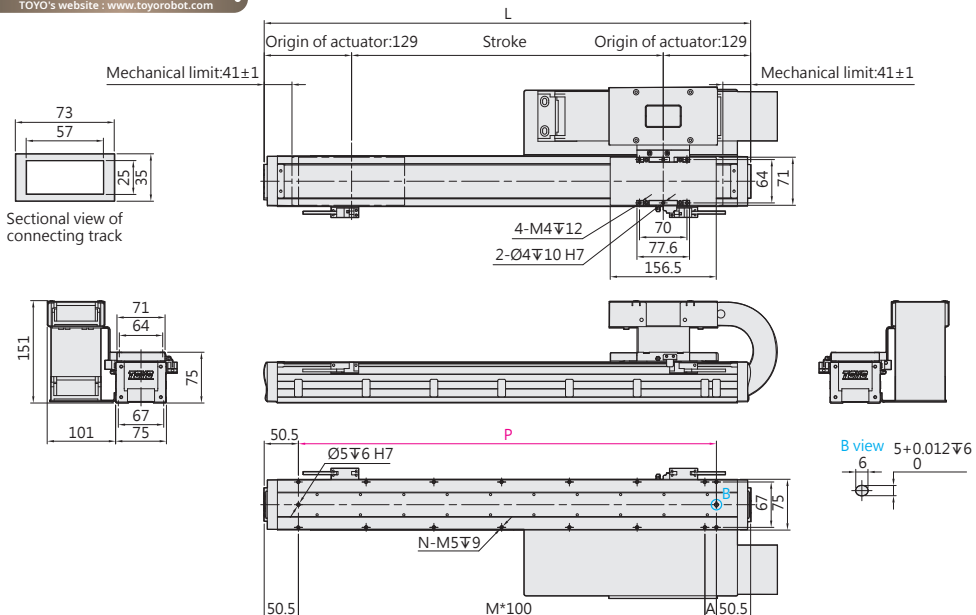
Stroke	200	330	460	590	720	850	980	1110	1240	1370	1480	1610	1740	1870	2000	2130	2260	2390	2520
L	458	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	57	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	3	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	10	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	357	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	6.4	7.3	8.4	9.3	10.2	11.3	12.2	13.2	14.3	15.2	16.3	17.4	18.2	19.4	20.4	21.4	22.4	23.4	24.4

LGF15-LHL2-N



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)

Unit : mm



Stroke	200	330	460	590	720	850	980	1110	1240	1370	1480	1610	1740	1870	2000	2130	2260	2390	2520
L	458	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	57	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	3	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	10	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	357	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	6.4	7.3	8.4	9.3	10.2	11.3	12.2	13.2	14.3	15.2	16.3	17.4	18.2	19.4	20.4	21.4	22.4	23.4	24.4

Features  
LGM Series  
LGF Series  
LTP2 Series  
LNP2 Series  
LCP2 Series  
LAF / LSF Series  
LAU Series  
LMB Series  
Controller  
LGF  
LGF5  
LGF15

# LGF15

Clean room type

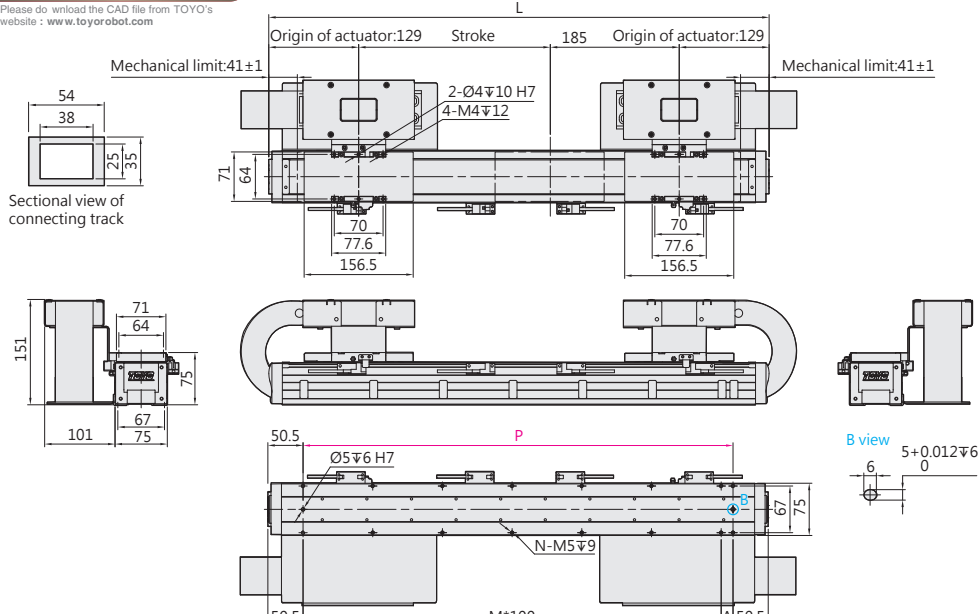
With Iron Core

## LGF15-DHS2-D



CAD圖面可至www.toyorobot.com下載  
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



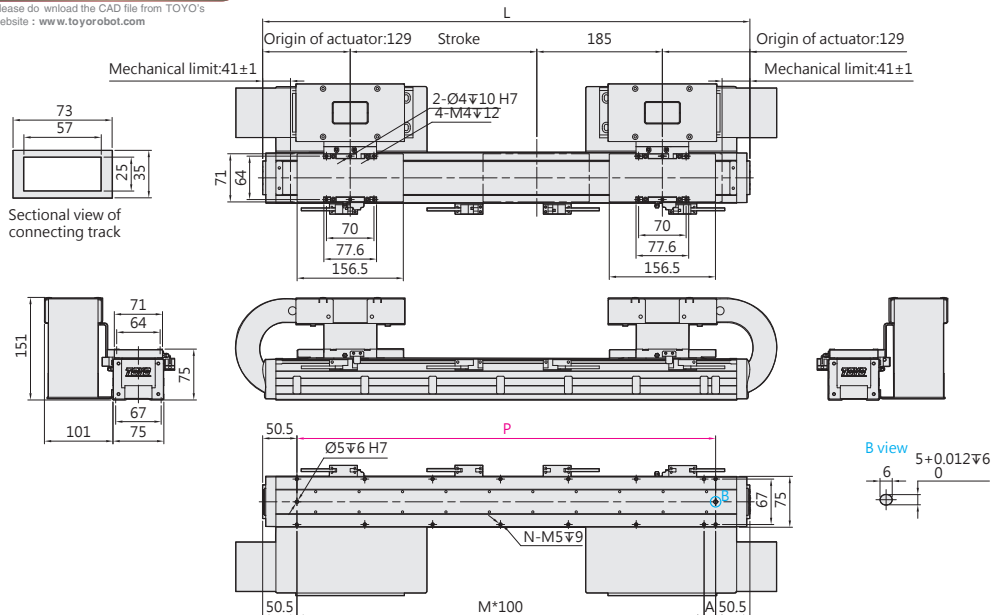
Stroke	145	275	405	535	665	795	925	1055	1185	1295	1425	1555	1685	1815	1945	2075	2205	2335
L	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	10.2	11.3	12.2	13.1	14.2	15.1	16.1	17.2	18.1	19.2	20.3	21.1	22.3	23.3	24.3	25.3	26.3	27.3

## LGF15-DHL2-D



CAD圖面可至www.toyorobot.com下載  
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



Stroke	145	275	405	535	665	795	925	1055	1185	1295	1425	1555	1685	1815	1945	2075	2205	2335
L	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	10.2	11.3	12.2	13.1	14.2	15.1	16.1	17.2	18.1	19.2	20.3	21.1	22.3	23.3	24.3	25.3	26.3	27.3



Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

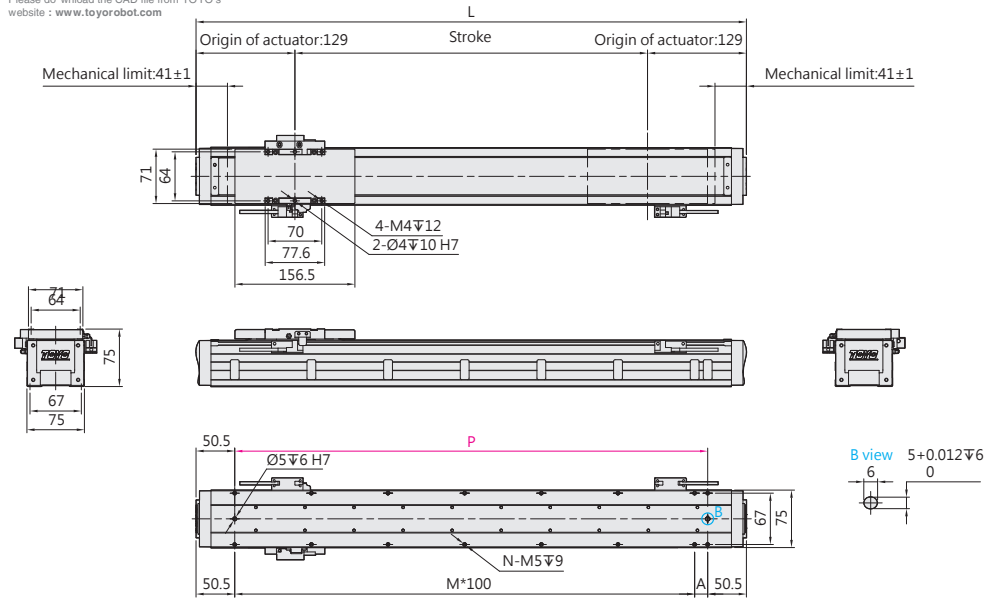
### LGF15-N-N



● CAD圖面可至www.toyorobot.com下載 ●

Please do not download the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



Stroke	200	330	460	590	720	850	980	1110	1240	1370	1480	1610	1740	1870	2000	2130	2260	2390	2520
L	458	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	57	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	3	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	10	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	357	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	6.4	7.3	8.4	9.3	10.2	11.3	12.2	13.2	14.3	15.2	16.3	17.4	18.2	19.4	20.4	21.4	22.4	23.4	24.4

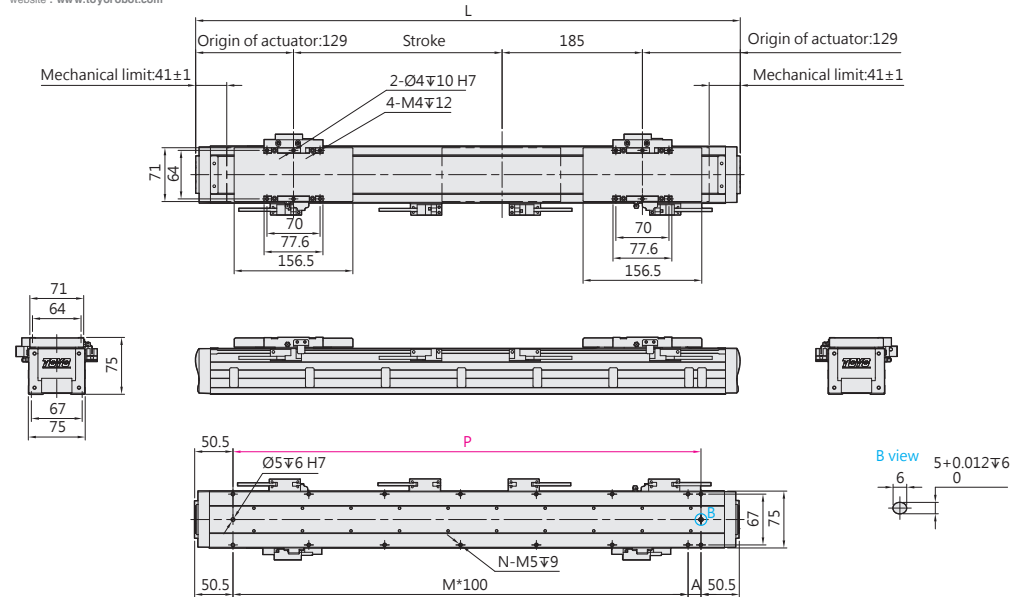
### LGF15-N-D



● CAD圖面可至www.toyorobot.com下載 ●

Please do not download the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



Stroke	145	275	405	535	665	795	925	1055	1185	1295	1425	1555	1685	1815	1945	2075	2205	2335
L	588	718	848	978	1108	1238	1368	1498	1628	1738	1868	1998	2128	2258	2388	2518	2648	2778
A	87	17	47	77	107	37	67	97	27	37	67	97	27	57	87	17	47	77
M	4	6	7	8	9	11	12	13	15	16	17	18	20	21	22	24	25	26
N	12	16	18	20	22	26	28	30	34	36	38	40	44	46	48	52	54	56
P	487	617	747	877	1007	1137	1267	1397	1527	1637	1767	1897	2027	2157	2287	2417	2547	2677
KG	10.2	11.3	12.2	13.1	14.2	15.1	16.1	17.2	18.1	19.2	20.3	21.1	22.3	23.3	24.3	25.3	26.3	27.3

Features  
LGM Series  
LGF Series  
LTF Series  
LNF Series  
LCP Series  
LAF / LSF Series  
LAU Series  
LMB Series  
Controller  
LGF  
LGF5  
LGF15

Features

LGW Series

LGF Series

LTF2 Series

LNFP2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

## Memo

# LTF2

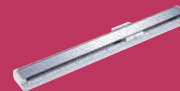
(Standard type)

## Iron Core Linear Motor Robot

### Contents

MEDIUM

LTF2-15



Width 133mm

Max. stroke 4688mm..... 071

Continuous payload 20kg

MEDIUM

LTF2-20



Width 155mm

Max. stroke 4682mm..... 081

Continuous payload 40kg

MEDIUM

LTF2-30



Width 155mm

Max. stroke 4682mm..... 091

Continuous payload 54kg

LARGE

LTF2-45



Width 215mm

Max. stroke 4235mm..... 101

Continuous payload 90kg

LARGE

LTF2-75



Width 215mm

Max. stroke 4235mm..... 111

Continuous payload 120kg

# Spec Index

## Spec Index

### LTF2 iron core linear motor robot (Standard type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)	Stroke	
											200	250
Standard	Linear Motor Robot	133	LTF2-15	Single motor	3A	±0.002	LMF15	59	20	3500		
				Double motor	3A*2	±0.002	LMF15					
		155	LTF2-20	Single motor	3A	±0.002	LMF20	113	40	3500		
				Single motor	3A*2	±0.002	LMF20					
		155	LTF2-30	Single motor	3A	±0.002	LMF30	158	54	3500		
				Single motor	3A*2	±0.002	LMF30					
		215	LTF2-45	Single motor	6A	±0.002	LMF45	251	90	3500		
				Single motor	6A*2	±0.002	LMF45					
		215	LTF2-75	Single motor	6A	±0.002	LMF75	340	120	3500		
				Single motor	6A*2	±0.002	LMF75					

※ LTF2-15, LTF2-20, LTF2-30, LTF2-45, LTF2-75 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.

Max. Linear Speed (mm/s)													Page	
300	550	800	1050	1300	1550	1800	2050	2300	2550	2800	3050	Speed		
													3500	071
													3500	
													3500	081
													3500	
													3500	091
													3500	
													3500	101
													3500	
													3500	111
													3500	

# LTF2-15

Standard type

With Iron Core



Maximum Stroke 2520m

Maximum Speed 2500mm/s

Continuous Thrust 80N

Continuous Payload 20kg

### Ordering Method

## LTF2-15-RHS2-N-4688-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	208-4688mm Pitch 64mm
Double motor	204-4428mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

#### Hall Cable

-	None
H	Hall

#### Controller type

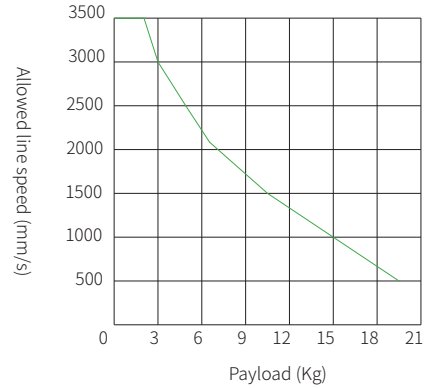
LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

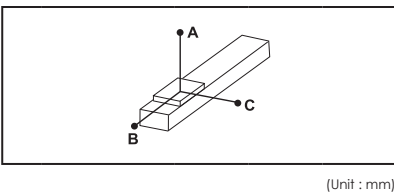
Specification			
Spec	Model	LTF2-15	
	Repeatability (mm)	±0.002	
	Max. Force (N)	266	
	Rated Force (N)	59	
	Max. Payload (kg) <sup>※1</sup>	20	
	Stroke (mm)	Single motor	208-4688 / 64 pitch
		Double motor	204-4428 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

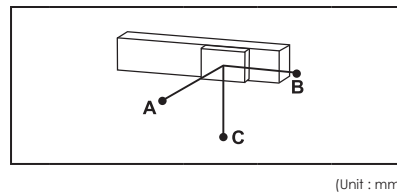
**Payload & Acceleration**



**Allowable Overhang**



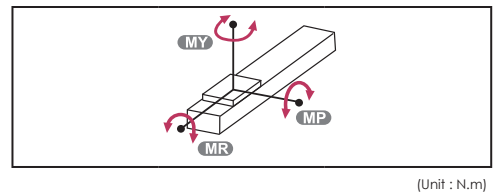
Horizontal Installation <sup>※2</sup>				
LTF2-15	Load	A	B	C
	5 kg	3500	700	600
	10 kg	1750	350	300
	15 kg	1150	230	200
	20 kg	850	170	140



Wall Installation <sup>※2</sup>				
LTF2-15	Load	A	B	C
	5 kg	600	700	3500
	10 kg	300	350	1750
	15 kg	200	230	1150
	20 kg	140	170	850

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



LTF2-15	MY	1667
	MP	1667
	MR	1469

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTF2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LTF2

LTF2-15

LTF2-20

LTF2-30

LTF2-45

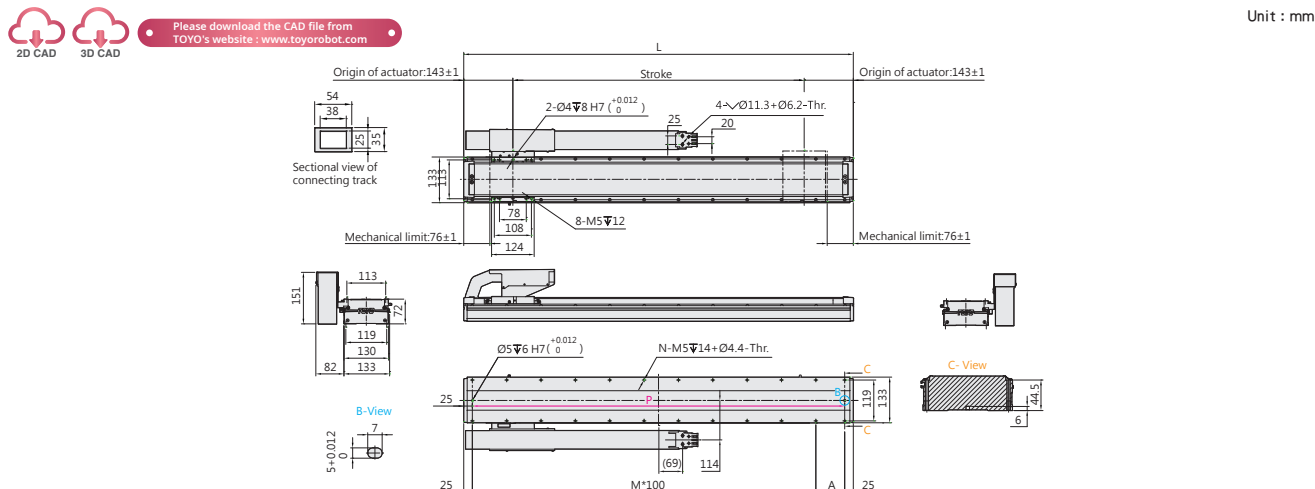
LTF2-75

# LTF2-15

Standard type

With Iron Core

LTF2-15-RHS2-N

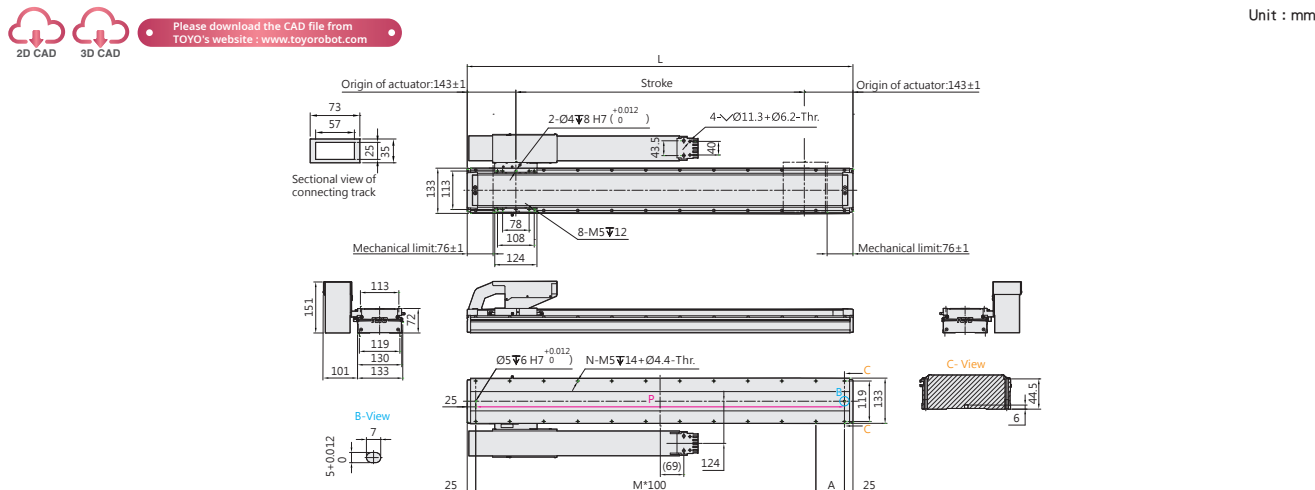


Unit : mm

Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18.0	18.5	19.0	19.4	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5

Stroke	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024	3088	3152	3216	3280	3344	3408	3472	3536	3600	3664	3728	3792	3856	3920	3984	4048	4112	4176	4240	4304	4368	4432	4496	4560	4624	4688
L	2734	2798	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	26	27	27	28	29	29	30	31	31	32	33	33	34	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	56	58	58	60	62	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	90	92	94	94	96	98	98	100	102
P	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	27.0	27.4	27.9	28.4	28.8	29.3	29.8	30.3	30.7	31.2	31.7	32.1	32.6	33.1	33.5	34.0	34.5	35.0	35.4	35.9	36.4	36.9	37.3	37.8	38.3	38.7	39.2	39.7	40.1	40.6	41.1	41.6	42.0	42.5	43.0	43.4

LTF2-15-RHL2-N



Unit : mm

Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18.0	18.5	19.0	19.4	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5

Stroke	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024	3088	3152	3216	3280	3344	3408	3472	3536	3600	3664	3728	3792	3856	3920	3984	4048	4112	4176	4240	4304	4368	4432	4496	4560	4624	4688
L	2734	2798	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	26	27	27	28	29	29	30	31	31	32	33	33	34	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	56	58	58	60	62	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	90	92	94	94	96	98	98	100	102
P	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	27.0	27.4	27.9	28.4	28.8	29.3	29.8	30.3	30.7	31.2	31.7	32.1	32.6	33.1	33.5	34.0	34.5	35.0	35.4	35.9	36.4	36.9	37.3	37.8	38.3	38.7	39.2	39.7	40.1	40.6	41.1	41.6	42.0	42.5	43.0	43.4



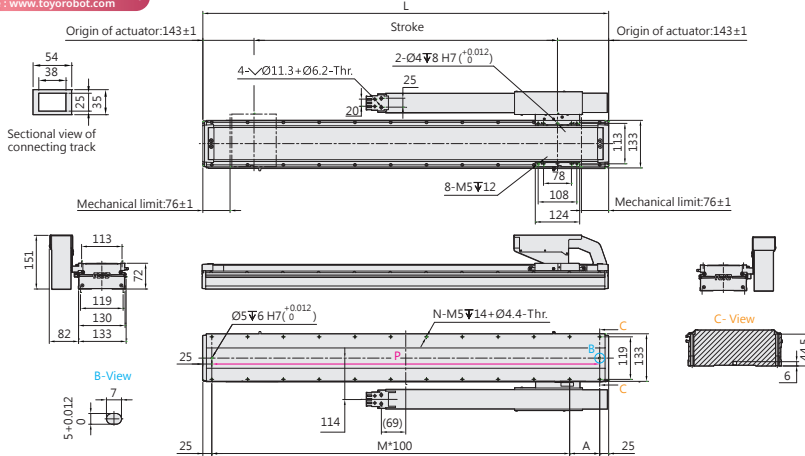
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-15-LHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18.0	18.5	19.0	19.4	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5

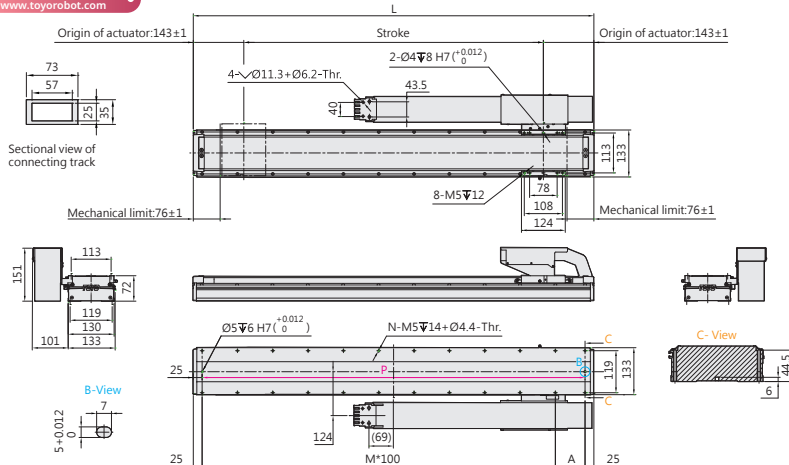
Stroke	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024	3088	3152	3216	3280	3344	3408	3472	3536	3600	3664	3728	3792	3856	3920	3984	4048	4112	4176	4240	4304	4368	4432	4496	4560	4624	4688
L	2734	2798	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	26	27	27	28	29	29	30	31	31	32	33	33	34	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	56	58	58	60	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	92	94	94	96	98	98	100	102		
P	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	27.0	27.4	27.9	28.4	28.8	29.3	29.8	30.3	30.7	31.2	31.7	32.1	32.6	33.1	33.5	34.0	34.5	35.0	35.4	35.9	36.4	36.9	37.3	37.8	38.3	38.7	39.2	39.7	40.1	40.6	41.1	41.6	42.0	42.5	43.0	43.4

LTF2-15-LHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18.0	18.5	19.0	19.4	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5

Stroke	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024	3088	3152	3216	3280	3344	3408	3472	3536	3600	3664	3728	3792	3856	3920	3984	4048	4112	4176	4240	4304	4368	4432	4496	4560	4624	4688
L	2734	2798	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	26	27	27	28	29	29	30	31	31	32	33	33	34	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	56	58	58	60	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	92	94	94	96	98	98	100	102		
P	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	27.0	27.4	27.9	28.4	28.8	29.3	29.8	30.3	30.7	31.2	31.7	32.1	32.6	33.1	33.5	34.0	34.5	35.0	35.4	35.9	36.4	36.9	37.3	37.8	38.3	38.7	39.2	39.7	40.1	40.6	41.1	41.6	42.0	42.5	43.0	43.4

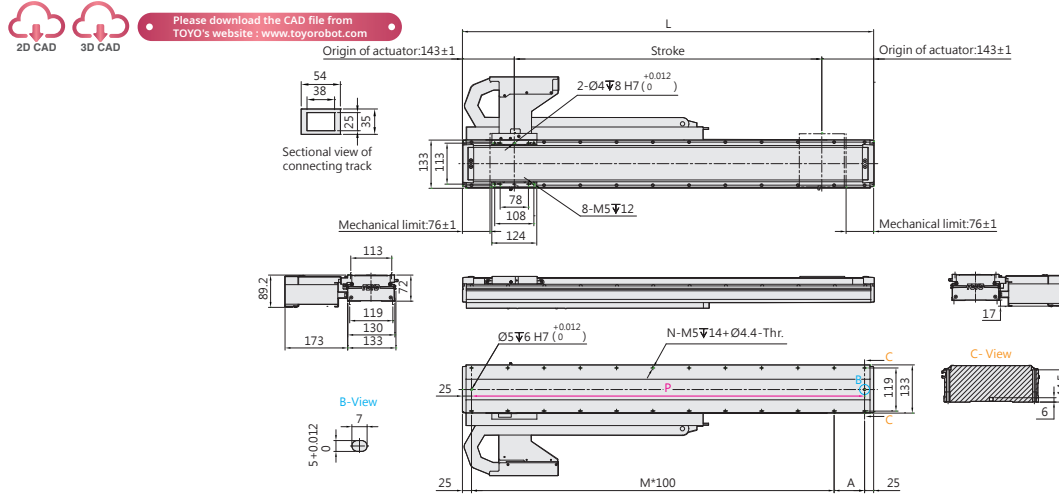
# LTF2-15

Standard type

With Iron Core

## LTF2-15-RWS2-N

Unit : mm



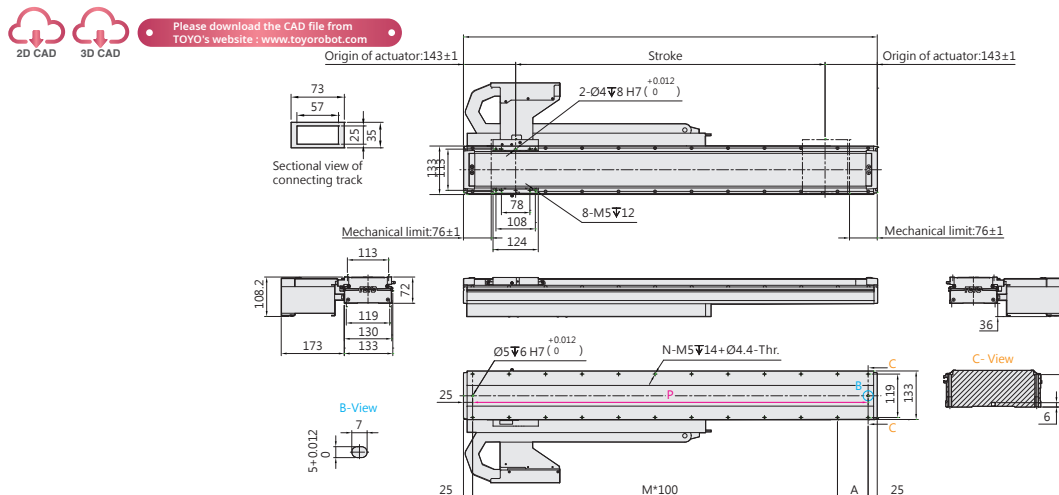
Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18	18.5	19	19.4

Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798	2862	2926	2990
A	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40
M	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27	27	28	29
N	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5	27.0	27.4	27.9	28.4	28.8

## LTF2-15-RWL2-N

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18	18.5	19	19.4

Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798	2862	2926	2990
A	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40
M	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27	27	28	29
N	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5	27.0	27.4	27.9	28.4	28.8

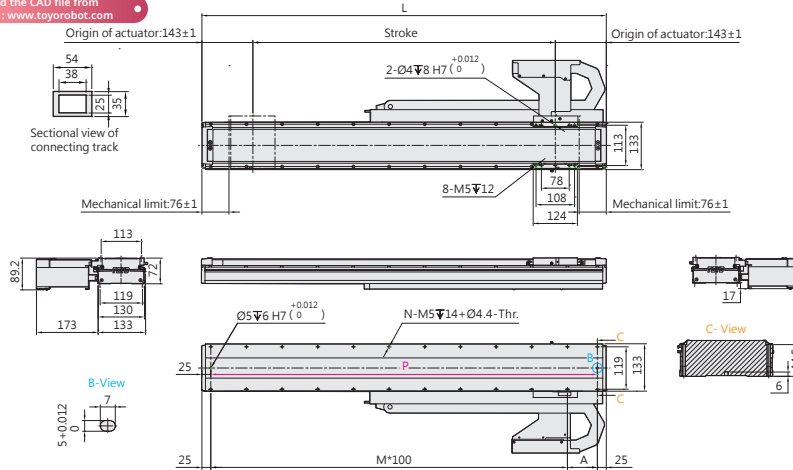
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-15-LWS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



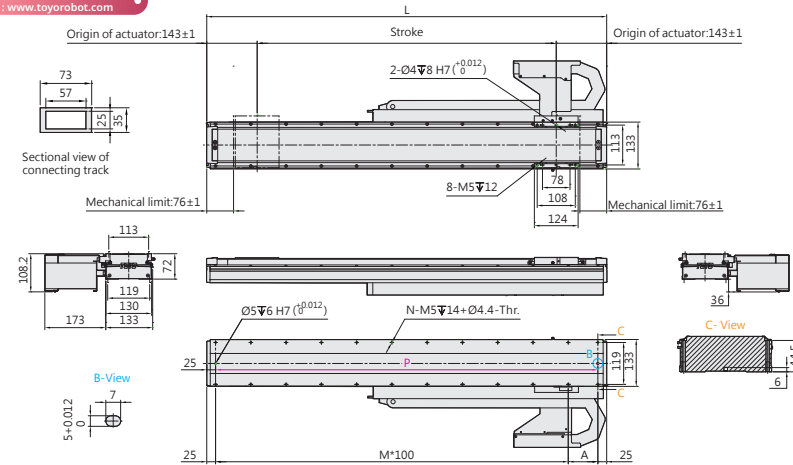
Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18	18.5	19	19.4
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798	2862	2926	2990
A	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40
M	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27	27	28	29
N	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5	27.0	27.4	27.9	28.4	28.8

LTF2-15-LWL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18	18.5	19	19.4
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798	2862	2926	2990
A	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40
M	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27	27	28	29
N	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5	27.0	27.4	27.9	28.4	28.8

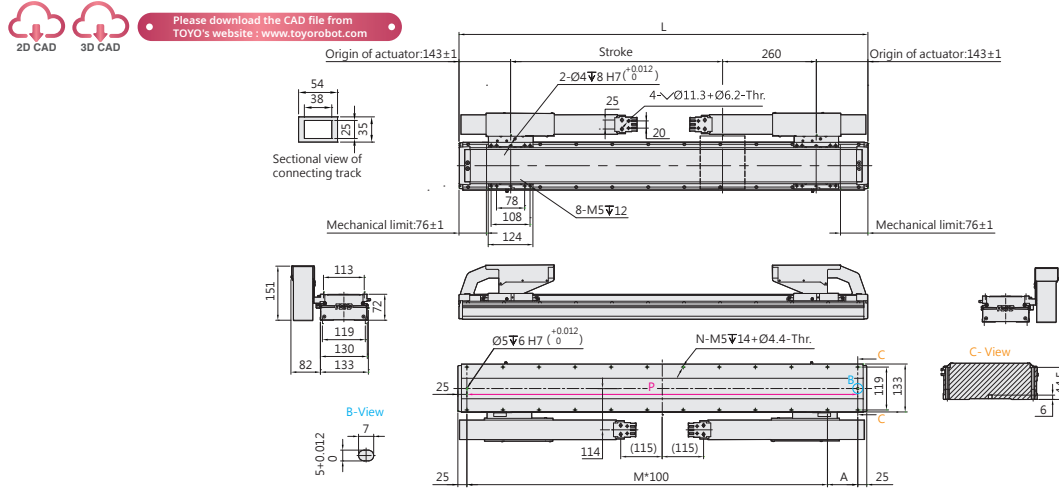
# LTF2-15

Standard type

With Iron Core

## LTF2-15-DHS2-D

Unit : mm

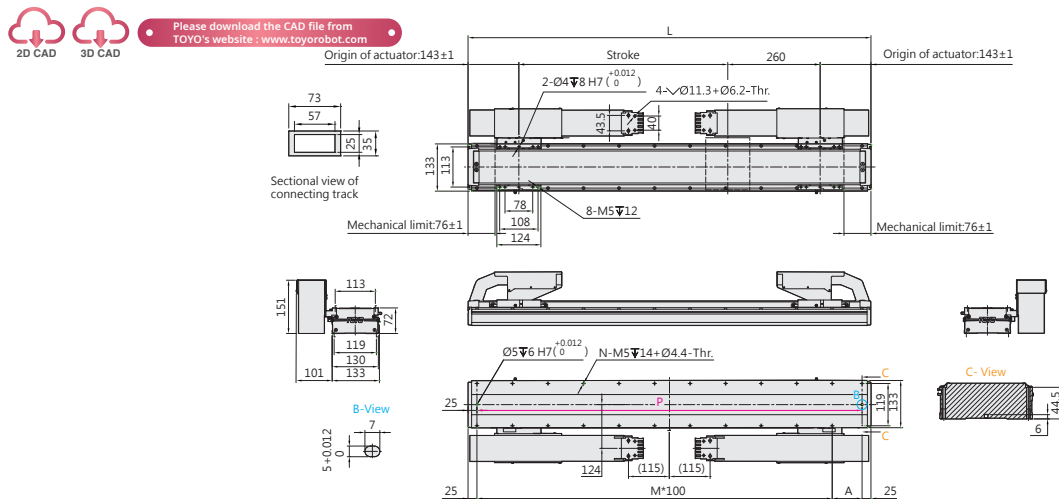


Stroke	204	268	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252
L	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798
A	100	64	28	92	56	20	54	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48
M	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27
N	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58
P	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748
KG	14.4	14.9	15.4	15.8	16.3	16.8	17.3	17.7	18.2	18.7	19.2	19.6	20.1	20.6	21	21.5	22	22.4	22.9	23.4	23.9	24.3	24.8	25.3	25.8	26.2	26.7	27.2	27.6	28.1	28.6	29	29.5

Stroke	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020	3084	3148	3212	3276	3340	3404	3468	3532	3596	3660	3724	3788	3852	3916	3980	4044	4108	4172	4236	4300	4364	4428
L	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	27	28	29	29	30	31	31	32	33	33	4	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	58	60	62	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	90	92	94	94	96	98	98	100	102
P	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	30	30.5	30.9	31.4	31.9	32.3	32.8	33.3	33.7	34.2	34.7	35.2	35.6	36.1	36.6	37.1	37.5	38	38.5	38.9	39.4	39.9	40.3	40.8	41.3	41.8	42.2	42.7	43.2	43.6	44.1	44.6	45	45.5

## LTF2-15-DHL2-D

Unit : mm



Stroke	204	268	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252
L	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798
A	100	64	28	92	56	20	54	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48
M	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27
N	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58
P	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748
KG	14.4	14.9	15.4	15.8	16.3	16.8	17.3	17.7	18.2	18.7	19.2	19.6	20.1	20.6	21	21.5	22	22.4	22.9	23.4	23.9	24.3	24.8	25.3	25.8	26.2	26.7	27.2	27.6	28.1	28.6	29	29.5

Stroke	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020	3084	3148	3212	3276	3340	3404	3468	3532	3596	3660	3724	3788	3852	3916	3980	4044	4108	4172	4236	4300	4364	4428
L	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	27	28	29	29	30	31	31	32	33	33	4	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	58	60	62	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	90	92	94	94	96	98	98	100	102
P	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	30	30.5	30.9	31.4	31.9	32.3	32.8	33.3	33.7	34.2	34.7	35.2	35.6	36.1	36.6	37.1	37.5	38	38.5	38.9	39.4	39.9	40.3	40.8	41.3	41.8	42.2	42.7	43.2	43.6	44.1	44.6	45	45.5

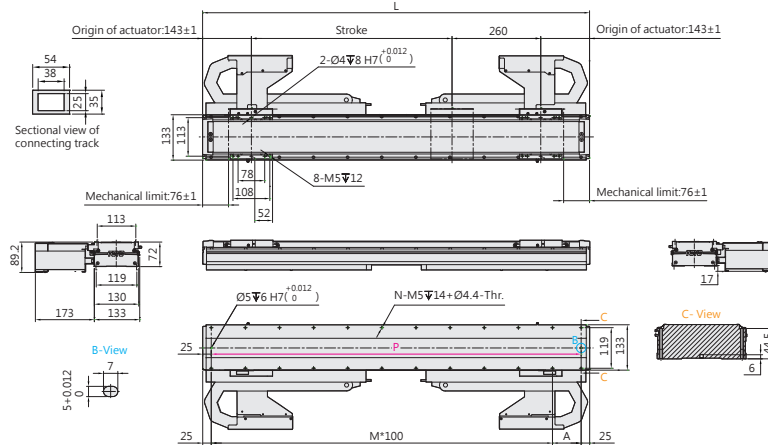
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-15-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



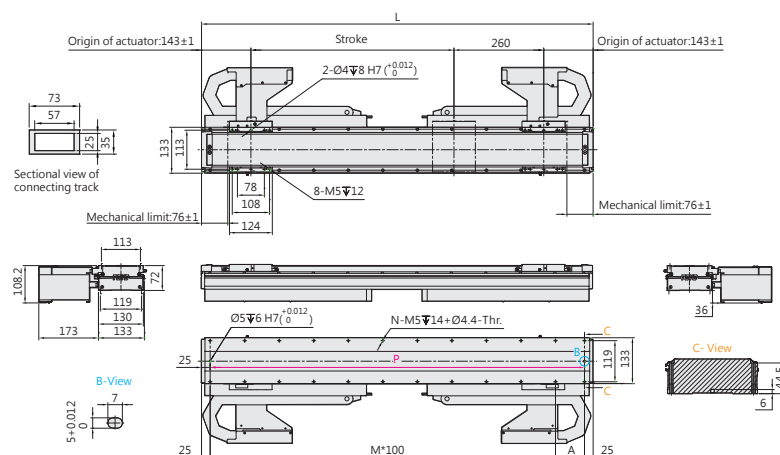
Stroke	204	268	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2320	2384	2316	2380	2444
L	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798	2606	2670	2862	2926	2990
A	100	64	28	92	56	20	54	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	56	20	112	76	40
M	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27	25	26	27	28	29
N	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58	54	56	58	60	62
P	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2556	2620	2812	2876	2940
KG	14.4	14.9	15.4	15.8	16.3	16.8	17.3	17.7	18.2	18.7	19.2	19.6	20.1	20.6	21	21.5	22	22.4	22.9	23.4	23.9	24.3	24.8	25.3	25.8	26.2	26.7	27.2	27.6	28.1	28.6	29	29.5	26.0	26.5	30	30.5	30.9

LTF2-15-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	204	268	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2320	2384	2316	2380	2444
L	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798	2606	2670	2862	2926	2990
A	100	64	28	92	56	20	54	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	56	20	112	76	40
M	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27	25	26	27	28	29
N	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58	54	56	58	60	62
P	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2556	2620	2812	2876	2940
KG	14.4	14.9	15.4	15.8	16.3	16.8	17.3	17.7	18.2	18.7	19.2	19.6	20.1	20.6	21	21.5	22	22.4	22.9	23.4	23.9	24.3	24.8	25.3	25.8	26.2	26.7	27.2	27.6	28.1	28.6	29	29.5	26.0	26.5	30	30.5	30.9

Features

LGW Series

LGF Series

LTF2 Series

LNFP2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LTF2

LTF2-15

LTF2-20

LTF2-30

LTF2-45

LTF2-75

Features  
LGF Series  
LTF2 Series  
LNF2 Series  
LGF Series  
LAF / LSF Series  
LAU Series  
LNR Series  
Controller

# LTF2-15

Standard type

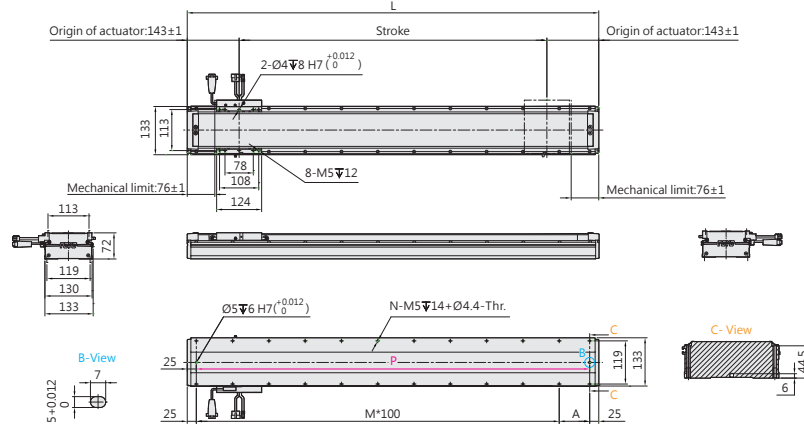
With Iron Core

## LTF2-15-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384
L	494	558	622	686	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670
A	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20
M	4	4	5	6	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26
N	12	12	14	16	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620
KG	10.5	10.9	11.4	11.9	12.3	12.8	13.3	13.7	14.2	14.7	15.2	15.7	16.1	16.6	17.1	17.5	18.0	18.5	19.0	19.4	19.9	20.4	20.8	21.3	21.8	22.2	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.0	26.5

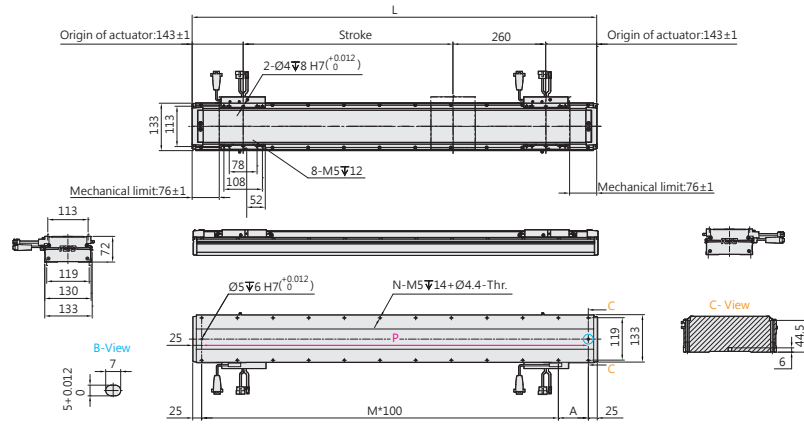
Stroke	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024	3088	3152	3216	3280	3344	3408	3472	3536	3600	3664	3728	3792	3856	3920	3984	4048	4112	4176	4240	4304	4368	4432	4496	4560	4624	4688
L	2734	2798	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	84	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	26	27	27	28	29	29	30	31	31	32	33	33	34	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	56	58	58	60	62	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	90	92	94	94	96	98	98	100	102
P	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	27.0	27.4	27.9	28.4	28.8	29.3	29.8	30.3	30.7	31.2	31.7	32.2	32.6	33.1	33.5	34.0	34.5	35.0	35.4	35.9	36.4	36.9	37.3	37.8	38.3	38.7	39.2	39.7	40.1	40.6	41.1	41.6	42.0	42.5	43.0	43.4

## LTF2-15-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	204	268	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252
L	750	814	878	942	1006	1070	1134	1198	1262	1326	1390	1454	1518	1582	1646	1710	1774	1838	1902	1966	2030	2094	2158	2222	2286	2350	2414	2478	2542	2606	2670	2734	2798
A	100	64	28	92	56	20	54	48	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48
M	6	7	8	8	9	10	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	20	21	22	22	23	24	24	25	26	26	27
N	16	18	20	20	22	24	24	26	26	28	30	30	32	34	34	36	38	38	40	42	42	44	44	46	48	48	50	52	52	54	56	56	58
P	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748
KG	14.4	14.9	15.4	15.8	16.3	16.8	17.3	17.7	18.2	18.7	19.2	19.6	20.1	20.6	21.1	21.5	22	22.4	22.9	23.4	23.9	24.3	24.8	25.3	25.8	26.2	26.7	27.2	27.7	28.1	28.6	29	29.5

Stroke	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020	3084	3148	3212	3276	3340	3404	3468	3532	3596	3660	3724	3788	3852	3916	3980	4044	4108	4172	4236	4300	4364	4428
L	2862	2926	2990	3054	3118	3182	3246	3310	3374	3438	3502	3566	3630	3694	3758	3822	3886	3950	4014	4078	4142	4206	4270	4334	4398	4462	4526	4590	4654	4718	4782	4846	4910	4974
A	112	76	40	104	68	32	96	60	24	88	52	16	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24
M	27	28	29	29	30	31	31	32	33	33	34	35	35	36	36	37	38	38	39	40	40	41	42	42	43	43	44	45	45	46	47	47	48	49
N	58	60	62	62	64	66	66	68	70	70	72	74	74	76	76	78	80	80	82	84	84	86	88	88	90	90	92	94	94	96	98	98	100	102
P	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516	3580	3644	3708	3772	3836	3900	3964	4028	4092	4156	4220	4284	4348	4412	4476	4540	4604	4668	4732	4796	4860	4924
KG	30	30.5	30.9	31.4	31.9	32.3	32.8	33.3	33.7	34.2	34.7	35.2	35.6	36.1	36.6	37.1	37.5	38	38.5	38.9	39.4	39.9	40.3	40.8	41.3	41.8	42.2	42.7	43.2	43.6	44.1	44.6	45	45.5

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

**LTF2 Series**

LNFP Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

**LTF2**  
LTF2-15  
LTF2-20  
LTF2-30  
LTF2-45  
LTF2-75

# LTF2-20

Standard type

With Iron Core



Maximum Stroke 4682m

Maximum Speed 3500mm/s

Continuous Thrust 113N

Continuous Payload 40kg

### Ordering Method

## LTF2-20-RHS2-N-4682-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	202~4682mm Pitch 64mm
Double motor	260~4420mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

#### Hall Cable

-	None
H	Hall

#### Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

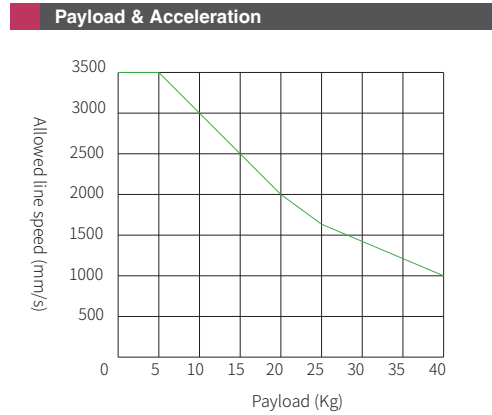
※ It is compulsory to select N for the controller while choosing cable length N.



Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

Specification			
Spec	Model	LTF2-20	
	Repeatability (mm)	±0.002	
	Max. Force (N)	510	
	Rated Force (N)	113	
	Max. Payload (kg) <sup>※1</sup>	40	
	Stroke (mm)	Single motor	208-4682 / 64 pitch
		Double motor	260-4420 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.



Allowable Overhang				
<p style="text-align: right;">(Unit : mm)</p>				
<b>Horizontal Installation</b> <sup>※2</sup>				
LTF2-20	Load	A	B	C
	10 kg	2200	450	320
	20 kg	1100	220	160
	30 kg	720	140	100
	40 kg	540	100	75
<p style="text-align: right;">(Unit : mm)</p>				
<b>Wall Installation</b> <sup>※2</sup>				
LTF2-20	Load	A	B	C
	10 kg	320	450	2200
	20 kg	160	220	1100
	30 kg	100	140	720
	40 kg	75	100	540

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

Static Loading Moment		
<p style="text-align: right;">(Unit : N.m)</p>		
LTF2-20	MY	2461
	MP	2461
	MR	1865

Corresponding Controller Chart			
Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGF Series

LTF2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LTF2  
LTF2-15  
LTF2-20  
LTF2-30  
LTF2-45  
LTF2-75





# LTF2-20

Standard type

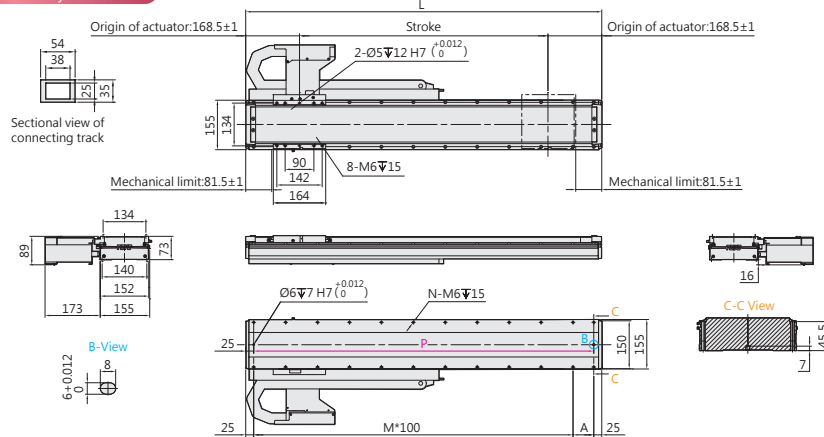
With Iron Core

## LTF2-20-RWS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

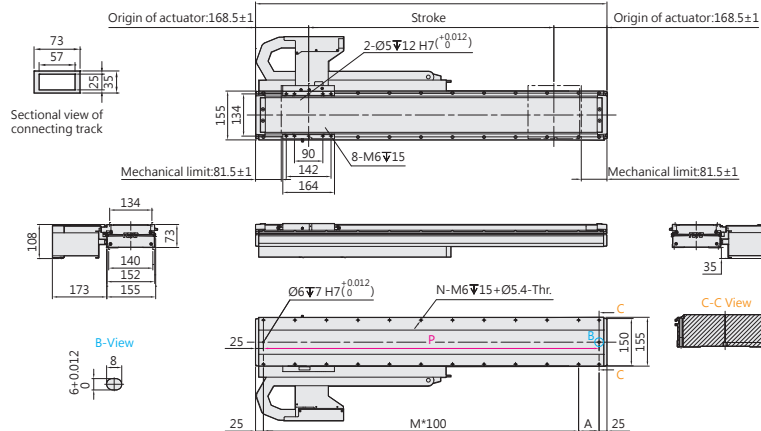
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28	28.6	29.2	29.8	30.4	31	31.6	32.2	32.8	33.4	34	34.6	35.2	35.8	36.4

## LTF2-20-RWL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28	28.6	29.2	29.8	30.4	31	31.6	32.2	32.8	33.4	34	34.6	35.2	35.8	36.4

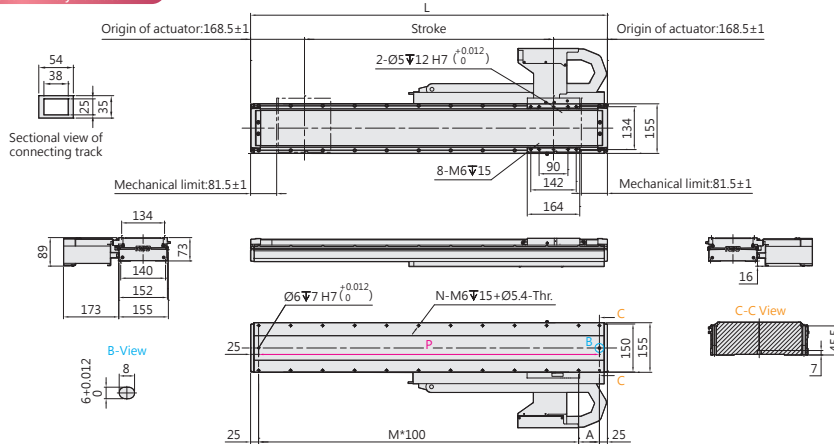
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-20-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

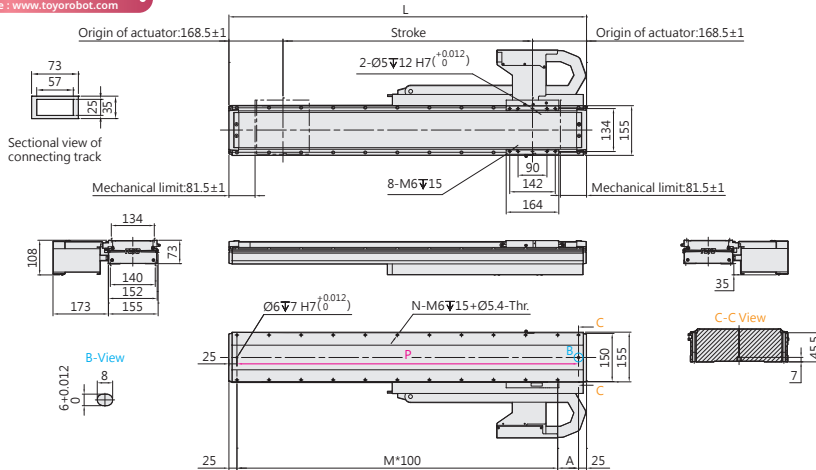
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28	28.6	29.2	29.8	30.4	31	31.6	32.2	32.8	33.4	34	34.6	35.2	35.8	36.4

LTF2-20-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28	28.6	29.2	29.8	30.4	31	31.6	32.2	32.8	33.4	34	34.6	35.2	35.8	36.4

Features  
 LGW Series  
 LGF Series  
 LTF2 Series  
 LNPF2 Series  
 LCF2 Series  
 LAF / LSF Series  
 LAU Series  
 LMR Series  
 Controller

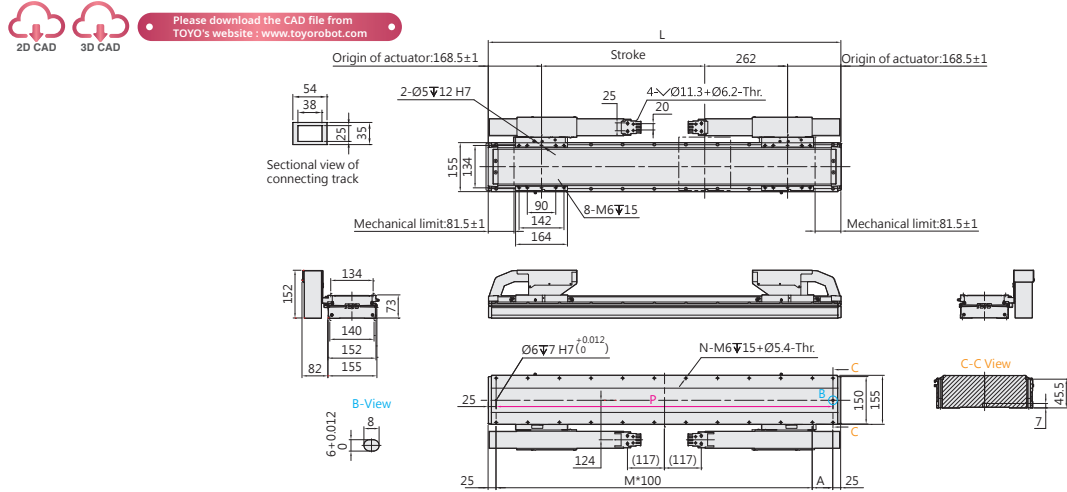
# LTF2-20

Standard type

With Iron Core

## LTF2-20-DHS2-D

Unit : mm

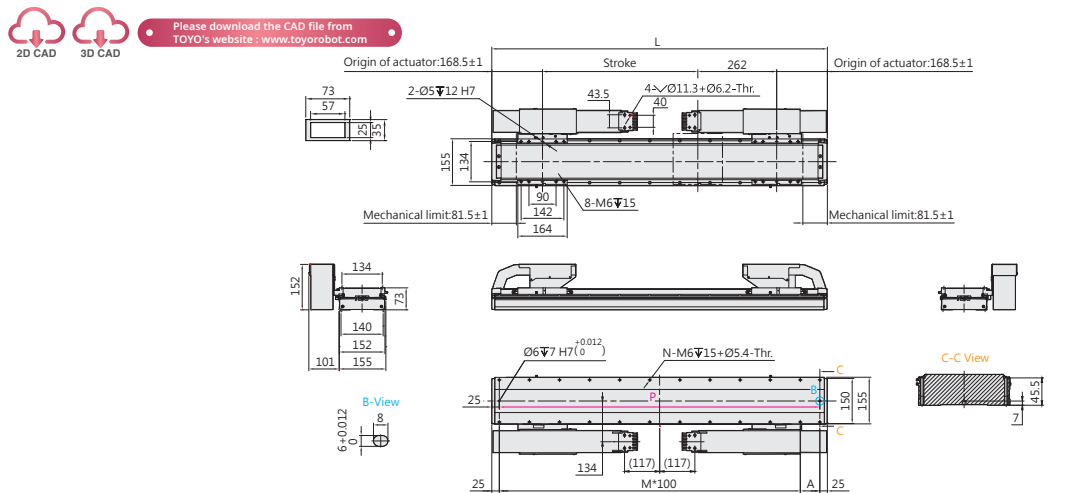


Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57
M	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37	37.6	38.2	38.8	39.4	40

Stroke	2372	2436	2500	2564	2628	2692	2756	2820	2884	2948	3012	3076	3140	3204	3268	3332	3396	3460	3524	3588	3652	3716	3780	3844	3908	3972	4036	4100	4164	4228	4292	4356	4420	
L	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019	
A	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69	
M	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49	
N	62	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	88	90	90	92	94	94	96	96	98	100	100	102
P	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969	
KG	40.6	41.2	41.8	42.4	43	43.6	44.2	44.8	45.4	46	46.6	47.2	47.8	48.4	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.1	53.7	54.3	54.9	55.5	56.1	56.7	57.3	57.9	58.5	59.1	59.7	

## LTF2-20-DHL2-D

Unit : mm



Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57
M	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37	37.6	38.2	38.8	39.4	40

Stroke	2372	2436	2500	2564	2628	2692	2756	2820	2884	2948	3012	3076	3140	3204	3268	3332	3396	3460	3524	3588	3652	3716	3780	3844	3908	3972	4036	4100	4164	4228	4292	4356	4420	
L	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019	
A	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69	
M	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49	
N	62	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	88	90	90	92	94	94	96	96	98	100	100	102
P	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969	
KG	40.6	41.2	41.8	42.4	43	43.6	44.2	44.8	45.4	46	46.6	47.2	47.8	48.4	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.1	53.7	54.3	54.9	55.5	56.1	56.7	57.3	57.9	58.5	59.1	59.7	

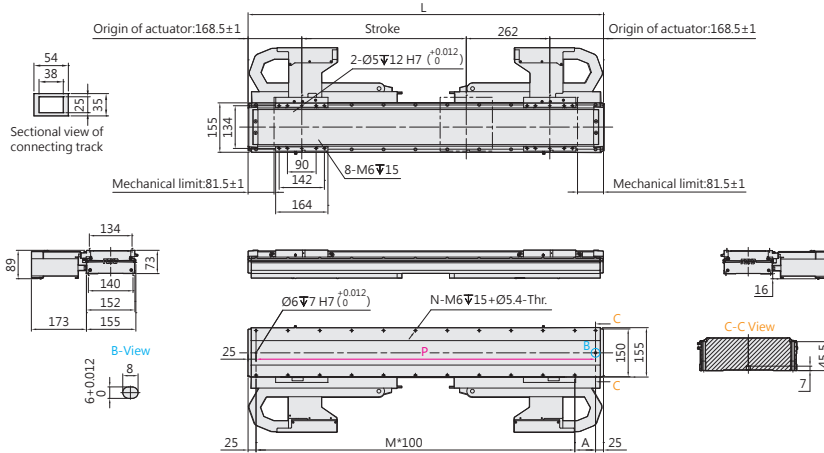
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-20-DWS2-D

Unit : mm



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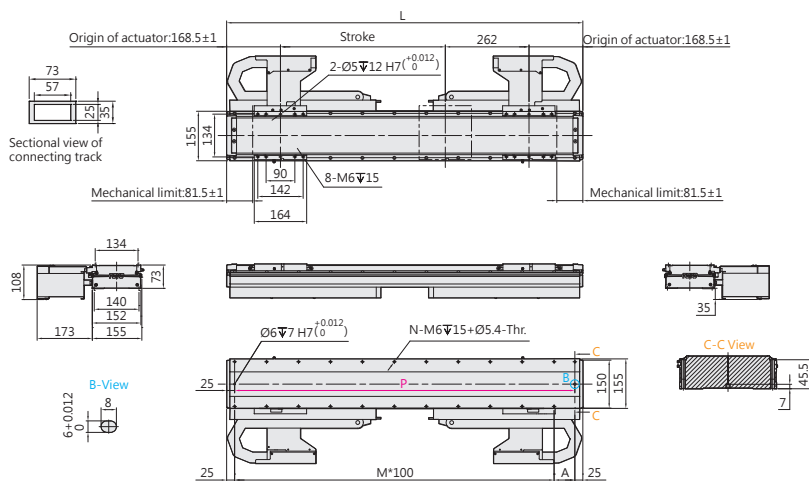
Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308	2372
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37	37.6	38.2	38.8	39.4	40	40.6

LTF2-20-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



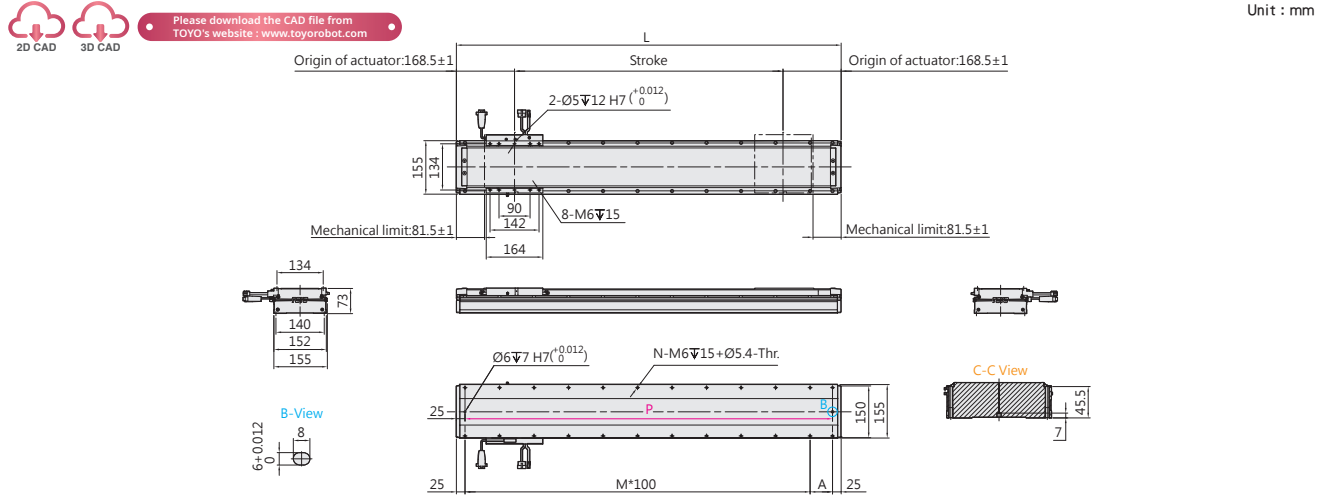
Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308	2372
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37	37.6	38.2	38.8	39.4	40	40.6

# LTF2-20

Standard type

With Iron Core

## LGF2-20-N-N

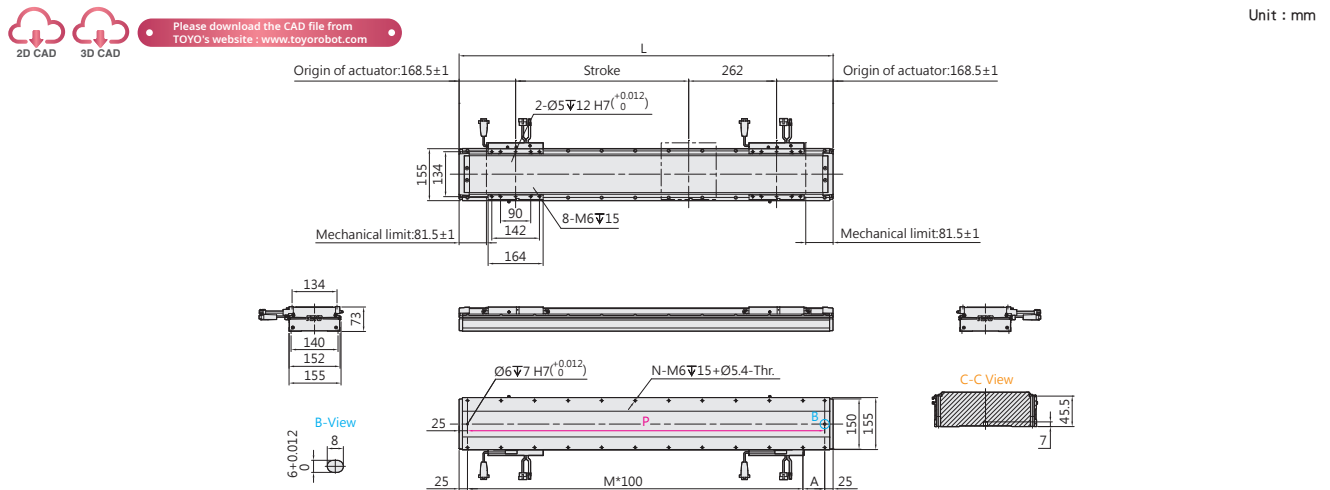


Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0

Stroke	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018	3082	3146	3210	3274	3338	3402	3466	3530	3594	3658	3722	3786	3850	3914	3978	4042	4106	4170	4234	4298	4362	4426	4490	4554	4618	4682
L	2779	2843	2907	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	29	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49
N	58	58	60	62	64	64	66	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102		
P	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.3	39.9	40.6	41.2	41.8	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.1	47.7	48.3	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.1	53.6	54.2	54.8	55.4

## LTF2-20-N-D



Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57
M	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37	37.6	38.2	38.8	39.4	40

Stroke	2372	2436	2500	2564	2628	2692	2756	2820	2884	2948	3012	3076	3140	3204	3268	3332	3396	3460	3524	3588	3652	3716	3780	3844	3908	3972	4036	4100	4164	4228	4292	4356	4420
L	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	29	29	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49	
N	62	62	64	64	66	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102	
P	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	40.6	41.2	41.8	42.4	43	43.6	44.2	44.8	45.4	46	46.6	47.2	47.8	48.4	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.1	53.7	54.3	54.9	55.5	56.1	56.7	57.3	57.9	58.5	59.1	59.7



Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

**LTF2 Series**

LNFP Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LTF2

LTF2-15

**LTF2-20**

LTF2-30

LTF2-45

LTF2-75

# LTF2-30

Standard type

With Iron Core



Maximum Stroke 4682m

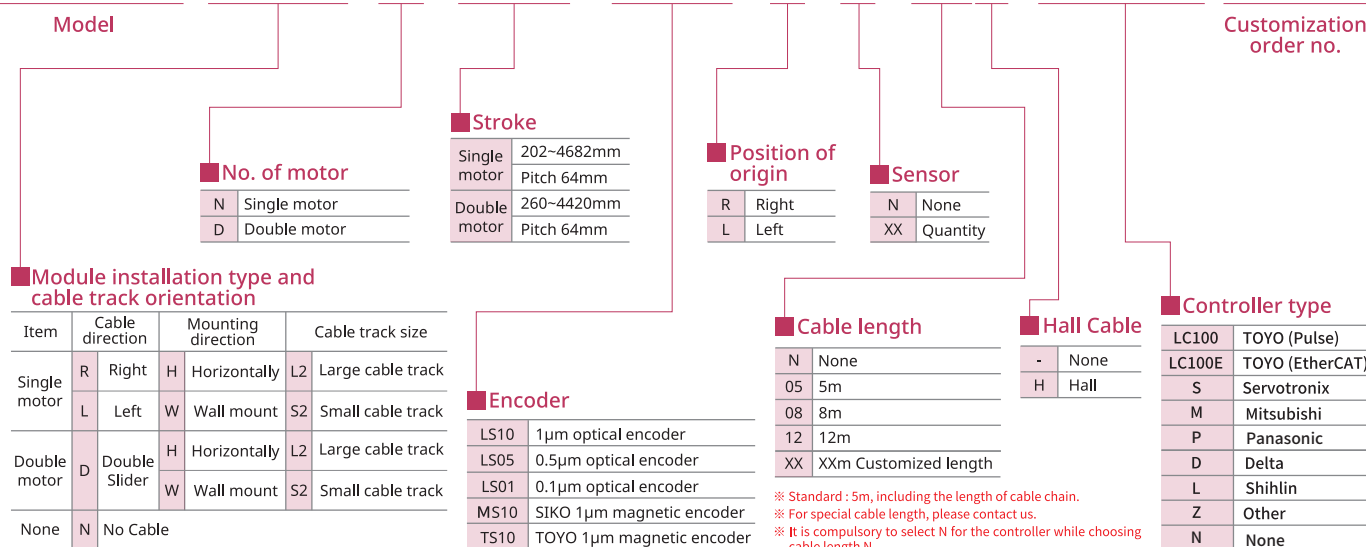
Maximum Speed 3500mm/s

Continuous Thrust 158N

Continuous Payload 54kg

### Ordering Method

## LTF2-30-RHS2-N-4682-LS10-R-N-05H-LC100-A001



Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

Features

LGM Series

LGF Series

**LTF2 Series**

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

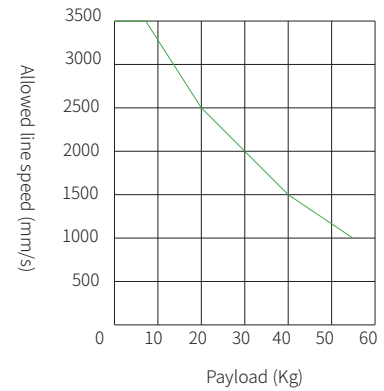
Controller

LTF2  
LTF2-15  
LTF2-20  
**LTF2-30**  
LTF2-45  
LTF2-75

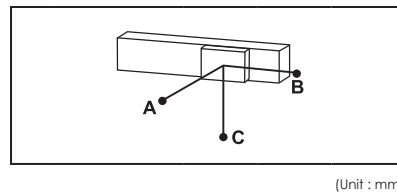
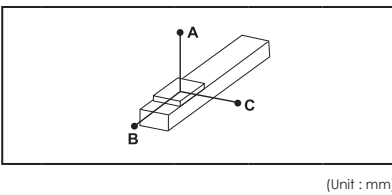
Specification			
<b>Spec</b>	Model	LTF2-30	
	Repeatability (mm)	±0.002	
	Max. Force (N)	713	
	Rated Force (N)	158	
	Max. Payload (kg) <sup>※1</sup>	54	
	Stroke (mm)	Single motor	202-4682 / 64 pitch
		Double motor	260-4420 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

**Payload & Acceleration**



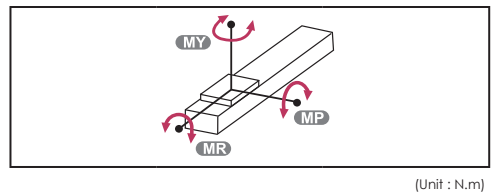
**Allowable Overhang**



Horizontal Installation <sup>※2</sup>				
LTF2-30	Load	A	B	C
	25 kg	830	150	110
	35 kg	580	105	75
	45 kg	450	75	55
	54 kg	360	60	45

Wall Installation <sup>※2</sup>				
LTF2-30	Load	A	B	C
	25 kg	110	150	830
	35 kg	75	105	580
	45 kg	55	75	450
	54 kg	45	60	360

**Static Loading Moment**



LTF2-30	MY	2461
	MP	2461
	MR	1865

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

# LTF2-30

Standard type

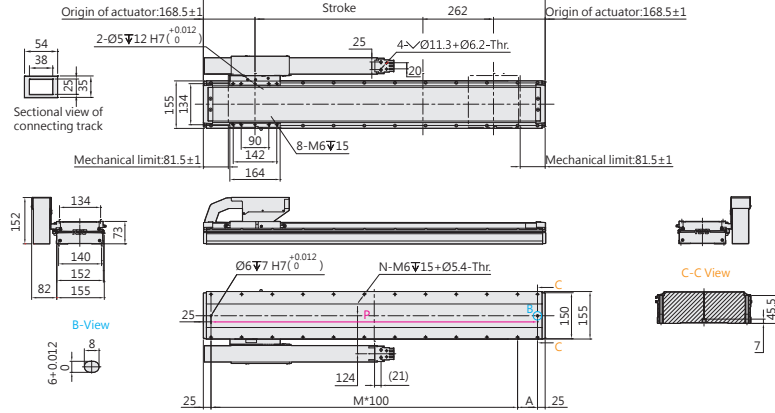
With Iron Core

## LTF2-30-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0

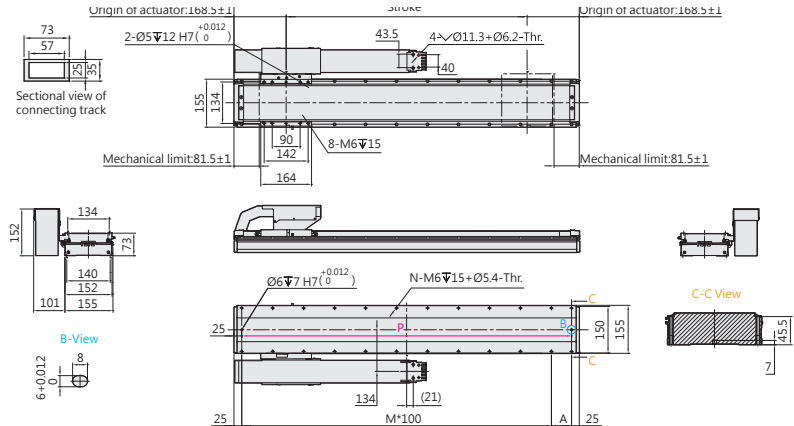
Stroke	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018	3082	3146	3210	3274	3338	3402	3466	3530	3594	3658	3722	3786	3850	3914	3978	4042	4106	4170	4234	4298	4362	4426	4490	4554	4618	4682
L	2779	2843	2907	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	29	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49
N	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102
P	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.3	39.9	40.6	41.2	41.8	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.1	47.7	48.3	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.3	53.6	54.2	54.8	55.4

## LTF2-30-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0

Stroke	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018	3082	3146	3210	3274	3338	3402	3466	3530	3594	3658	3722	3786	3850	3914	3978	4042	4106	4170	4234	4298	4362	4426	4490	4554	4618	4682
L	2779	2843	2907	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	29	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49
N	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102
P	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.3	39.9	40.6	41.2	41.8	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.1	47.7	48.3	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.3	53.6	54.2	54.8	55.4

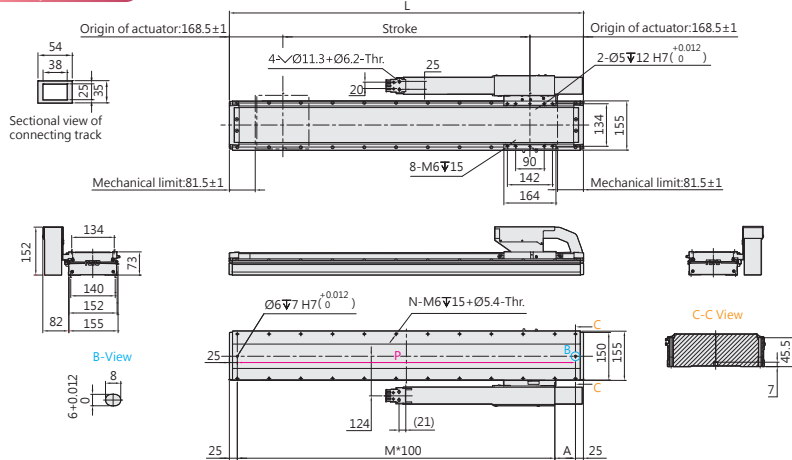
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LTF2-30-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0

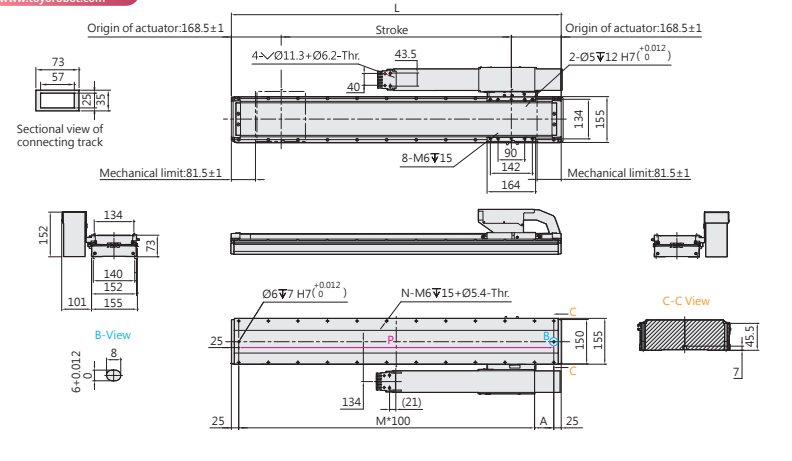
Stroke	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018	3082	3146	3210	3274	3338	3402	3466	3530	3594	3658	3722	3786	3850	3914	3978	4042	4106	4170	4234	4298	4362	4426	4490	4554	4618	4682
L	2779	2843	2907	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	29	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49
N	58	58	60	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102	
P	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.3	39.9	40.6	41.2	41.8	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.1	47.7	48.3	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.3	53.6	54.2	54.8	55.4

### LTF2-30-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0

Stroke	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018	3082	3146	3210	3274	3338	3402	3466	3530	3594	3658	3722	3786	3850	3914	3978	4042	4106	4170	4234	4298	4362	4426	4490	4554	4618	4682
L	2779	2843	2907	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	29	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49
N	58	58	60	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102	
P	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.3	39.9	40.6	41.2	41.8	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.1	47.7	48.3	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.3	53.6	54.2	54.8	55.4

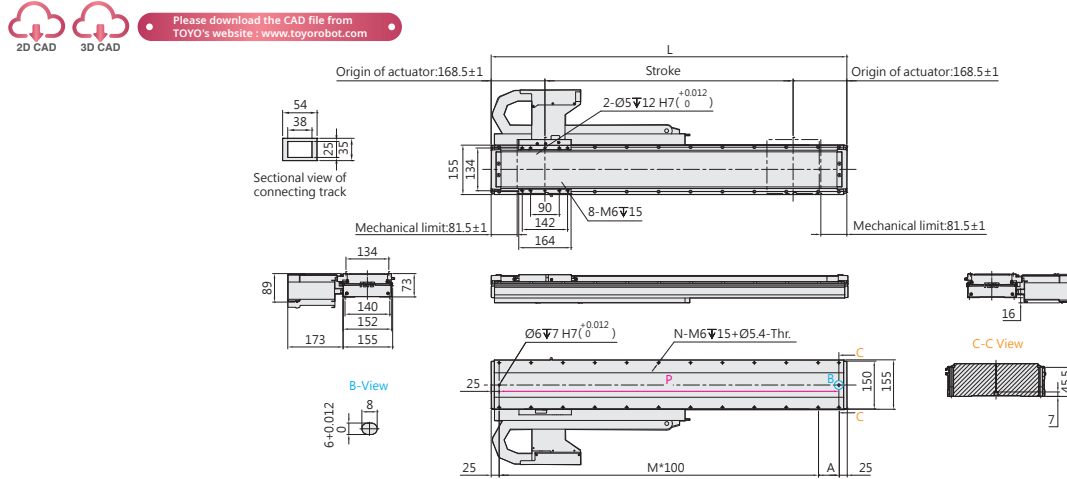
# LTF2-30

Standard type

With Iron Core

## LTF2-30-RWS2-N

Unit : mm



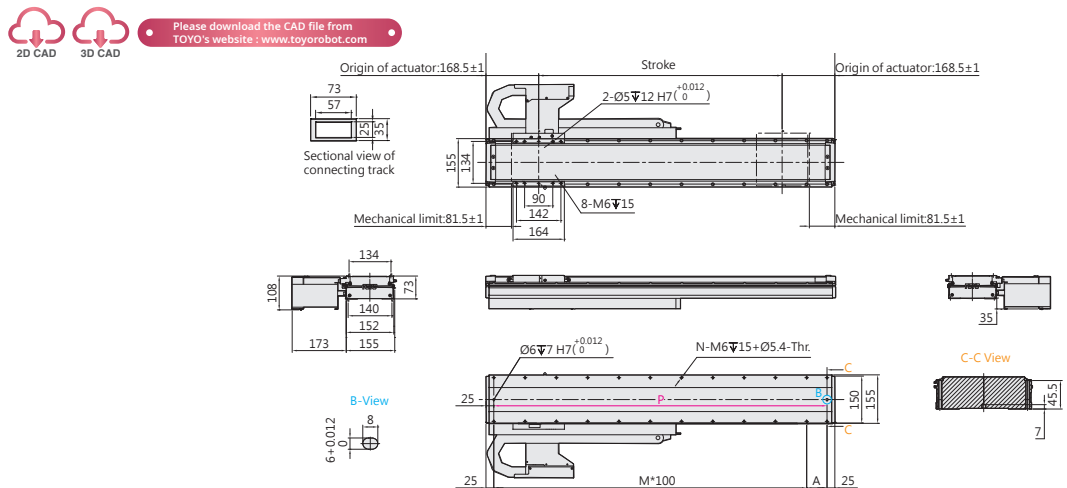
Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

## LTF2-30-RWL2-N

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

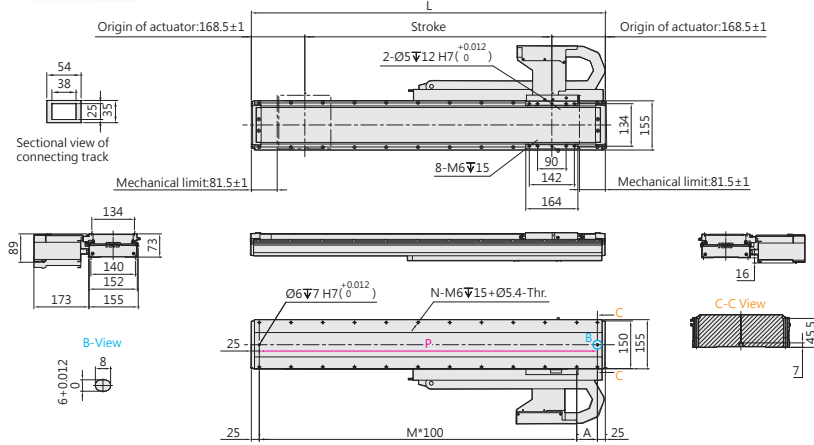
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-30-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

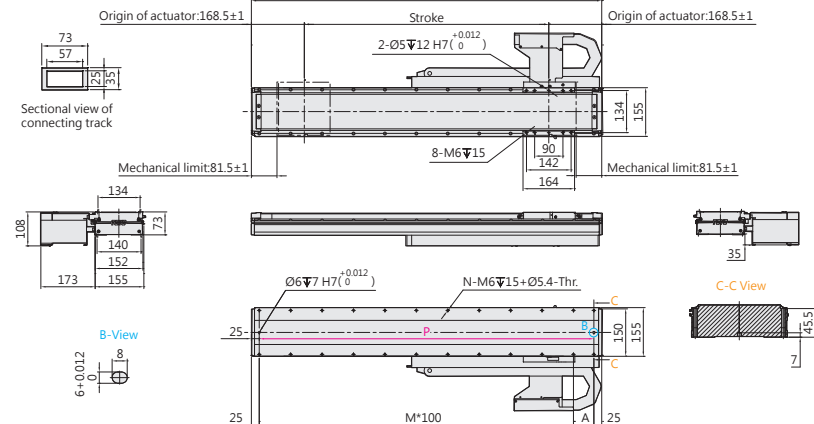
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	24	25	25	26	27	27	28	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

LTF2-30-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	539	603	667	731	795	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691
A	89	53	17	81	45	109	73	37	101	65	129	93	57	21	85	49	113	77	41
M	4	5	6	6	7	7	8	9	9	10	10	11	12	13	13	14	14	15	16
N	12	14	16	16	18	18	20	22	22	24	24	26	28	30	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.1	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	16	17	18	18	19	20	20	21	22	22	23	24	25	25	26	27	27	28	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

# LTF2-30

Standard type

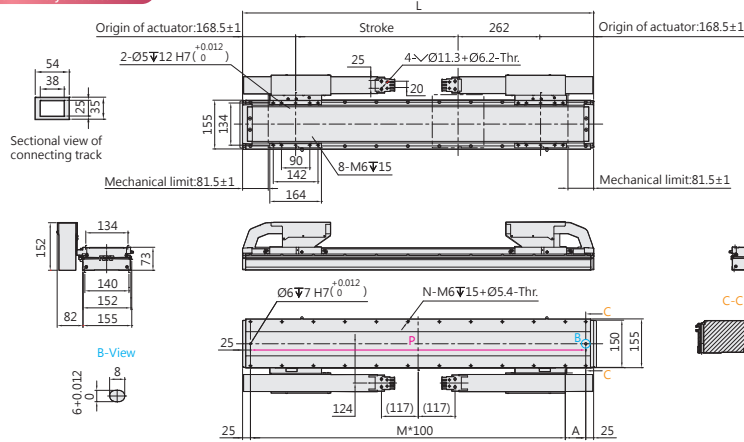
With Iron Core

## LTF2-30-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57
M	7	8	9	9	10	10	11	12	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

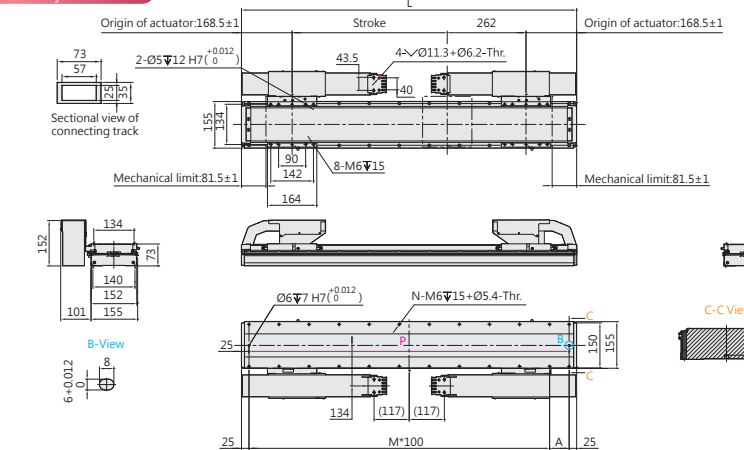
Stroke	2372	2436	2500	2564	2628	2692	2756	2820	2884	2948	3012	3076	3140	3204	3268	3332	3396	3460	3524	3588	3652	3716	3780	3844	3908	3972	4036	4100	4164	4228	4292	4356	4420
L	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49
N	62	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102
P	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	40.6	41.2	41.8	42.4	43.0	43.6	44.2	44.8	45.4	46.0	46.6	47.2	47.8	48.4	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.1	53.7	54.3	54.9	55.5	56.1	56.7	57.3	57.9	58.5	59.1	59.7

## LTF2-30-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57
M	7	8	9	9	10	10	11	12	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

Stroke	2372	2436	2500	2564	2628	2692	2756	2820	2884	2948	3012	3076	3140	3204	3268	3332	3396	3460	3524	3588	3652	3716	3780	3844	3908	3972	4036	4100	4164	4228	4292	4356	4420
L	2971	3035	3099	3163	3227	3291	3355	3419	3483	3547	3611	3675	3739	3803	3867	3931	3995	4059	4123	4187	4251	4315	4379	4443	4507	4571	4635	4699	4763	4827	4891	4955	5019
A	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21	85	49	113	77	41	105	69
M	29	29	30	30	31	32	32	33	34	34	35	36	36	37	38	38	39	39	40	41	41	42	43	43	44	45	45	46	46	47	48	48	49
N	62	62	64	64	66	68	68	70	72	72	74	76	76	78	80	80	82	82	84	86	86	88	90	90	92	94	94	96	96	98	100	100	102
P	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625	3689	3753	3817	3881	3945	4009	4073	4137	4201	4265	4329	4393	4457	4521	4585	4649	4713	4777	4841	4905	4969
KG	40.6	41.2	41.8	42.4	43.0	43.6	44.2	44.8	45.4	46.0	46.6	47.2	47.8	48.4	48.9	49.5	50.1	50.7	51.3	51.9	52.5	53.1	53.7	54.3	54.9	55.5	56.1	56.7	57.3	57.9	58.5	59.1	59.7



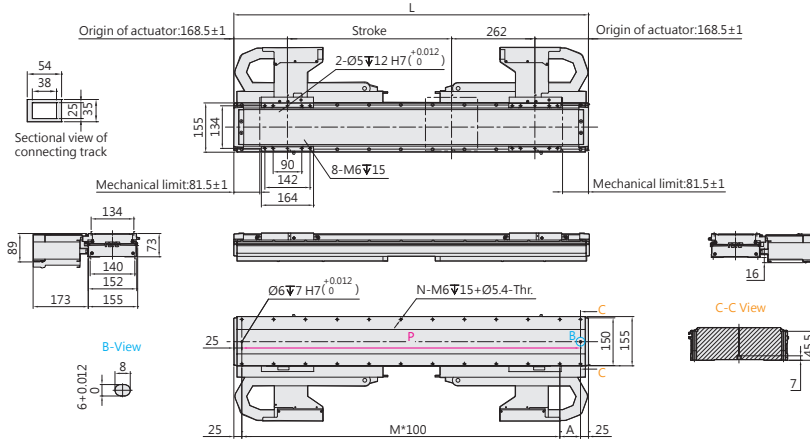
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-30-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



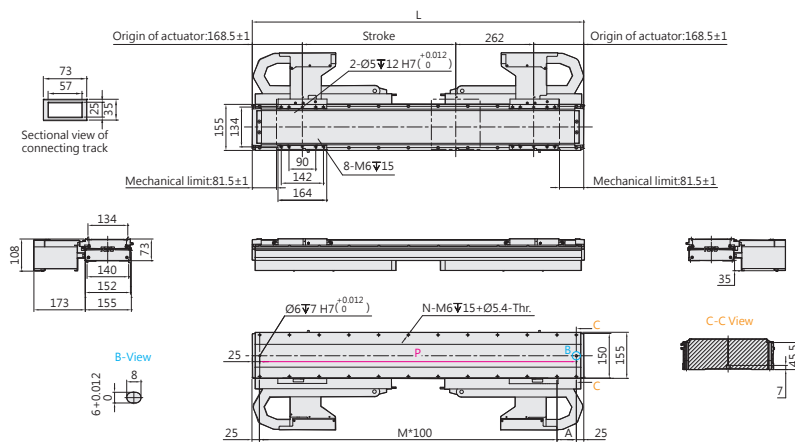
Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308	2372
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0	40.6

LTF2-30-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	260	324	388	452	516	580	644	708	772	836	900	964	1028	1092	1156	1220	1284	1348	1412	1476	1540	1604	1668	1732	1796	1860	1924	1988	2052	2116	2180	2244	2308	2372
L	859	923	987	1051	1115	1179	1243	1307	1371	1435	1499	1563	1627	1691	1755	1819	1883	1947	2011	2075	2139	2203	2267	2331	2395	2459	2523	2587	2651	2715	2779	2843	2907	2971
A	109	73	37	101	65	129	93	57	21	85	49	113	77	41	105	69	33	97	61	25	89	53	17	81	45	109	73	37	101	65	29	93	57	21
M	7	8	9	9	10	10	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	24	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.1	31.7	32.3	32.9	33.5	34.1	34.7	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0	40.6

Features  
LGF Series  
LGF Series  
LTF2 Series  
LNf2 Series  
LGF2 Series  
LAF / Lsf Series  
LAU Series  
LNR Series  
Controller

# LTF2-30 Standard type With Iron Core

**LTF2-30-N-N** Unit : mm

Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Stroke: 202, 266, 330, 394, 458, 522, 586, 650, 714, 778, 842, 906, 970, 1034, 1098, 1162, 1226, 1290, 1354, 1418, 1482, 1546, 1610, 1674, 1738, 1802, 1866, 1930, 1994, 2058, 2122, 2186, 2250, 2314, 2378  
 L: 539, 603, 667, 731, 795, 859, 923, 987, 1051, 1115, 1179, 1243, 1307, 1371, 1435, 1499, 1563, 1627, 1691, 1755, 1819, 1883, 1947, 2011, 2075, 2139, 2203, 2267, 2331, 2395, 2459, 2523, 2587, 2651, 2715  
 A: 89, 53, 17, 81, 45, 109, 73, 37, 101, 65, 129, 93, 57, 21, 85, 49, 113, 77, 41, 105, 69, 33, 97, 61, 25, 89, 53, 17, 81, 45, 109, 73, 37, 101, 65  
 M: 4, 5, 6, 6, 7, 7, 8, 9, 9, 10, 10, 11, 12, 13, 13, 14, 14, 15, 16, 16, 17, 18, 18, 19, 20, 20, 21, 22, 22, 23, 23, 24, 25, 25, 26  
 N: 12, 14, 16, 16, 18, 18, 20, 22, 22, 24, 24, 26, 28, 30, 30, 32, 32, 34, 36, 36, 38, 40, 40, 42, 44, 44, 46, 48, 48, 50, 50, 52, 54, 54, 56  
 P: 489, 553, 617, 681, 745, 809, 873, 937, 1001, 1065, 1129, 1193, 1257, 1321, 1385, 1449, 1513, 1577, 1641, 1705, 1769, 1833, 1897, 1961, 2025, 2089, 2153, 2217, 2281, 2345, 2409, 2473, 2537, 2601, 2665  
 KG: 13.7, 14.3, 14.9, 15.5, 16.1, 16.7, 17.3, 17.9, 18.5, 19.1, 19.7, 20.3, 20.9, 21.5, 22.1, 22.7, 23.3, 23.9, 24.5, 25.1, 25.7, 26.3, 26.9, 27.5, 28.0, 28.6, 29.2, 29.8, 30.4, 31.0, 31.6, 32.2, 32.8, 33.4, 34.0

Stroke: 2442, 2506, 2570, 2634, 2698, 2762, 2826, 2890, 2954, 3018, 3082, 3146, 3210, 3274, 3338, 3402, 3466, 3530, 3594, 3658, 3722, 3786, 3850, 3914, 3978, 4042, 4106, 4170, 4234, 4298, 4362, 4426, 4490, 4554, 4618, 4682  
 L: 2779, 2843, 2907, 2971, 3035, 3099, 3163, 3227, 3291, 3355, 3419, 3483, 3547, 3611, 3675, 3739, 3803, 3867, 3931, 3995, 4059, 4123, 4187, 4251, 4315, 4379, 4443, 4507, 4571, 4635, 4699, 4763, 4827, 4891, 4955, 5019  
 A: 29, 93, 57, 21, 85, 49, 113, 77, 41, 105, 69, 33, 97, 61, 25, 89, 53, 17, 81, 45, 109, 73, 37, 101, 65, 29, 93, 57, 21, 85, 49, 113, 77, 41, 105, 69  
 M: 27, 27, 28, 29, 29, 30, 30, 31, 32, 32, 33, 34, 34, 35, 36, 36, 37, 38, 38, 39, 39, 40, 41, 41, 42, 43, 43, 44, 45, 45, 46, 46, 47, 48, 48, 49  
 N: 58, 58, 60, 62, 62, 64, 64, 66, 68, 70, 72, 72, 74, 76, 76, 78, 80, 80, 82, 82, 84, 86, 86, 88, 90, 90, 92, 94, 94, 96, 96, 98, 100, 100, 102  
 P: 2729, 2793, 2857, 2921, 2985, 3049, 3113, 3177, 3241, 3305, 3369, 3433, 3497, 3561, 3625, 3689, 3753, 3817, 3881, 3945, 4009, 4073, 4137, 4201, 4265, 4329, 4393, 4457, 4521, 4585, 4649, 4713, 4777, 4841, 4905, 4969  
 KG: 34.6, 35.2, 35.8, 36.4, 37.0, 37.6, 38.2, 38.8, 39.3, 39.9, 40.6, 41.2, 41.8, 42.3, 42.9, 43.5, 44.1, 44.7, 45.3, 45.9, 46.5, 47.1, 47.7, 48.3, 48.9, 49.5, 50.1, 50.7, 51.3, 51.9, 52.5, 53.1, 53.6, 54.2, 54.8, 55.4

**LTF2-30-N-D** Unit : mm

Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Stroke: 260, 324, 388, 452, 516, 580, 644, 708, 772, 836, 900, 964, 1028, 1092, 1156, 1220, 1284, 1348, 1412, 1476, 1540, 1604, 1668, 1732, 1796, 1860, 1924, 1988, 2052, 2116, 2180, 2244, 2308  
 L: 859, 923, 987, 1051, 1115, 1179, 1243, 1307, 1371, 1435, 1499, 1563, 1627, 1691, 1755, 1819, 1883, 1947, 2011, 2075, 2139, 2203, 2267, 2331, 2395, 2459, 2523, 2587, 2651, 2715, 2779, 2843, 2907  
 A: 109, 73, 37, 101, 65, 129, 93, 57, 21, 85, 49, 113, 77, 41, 105, 69, 33, 97, 61, 25, 89, 53, 17, 81, 45, 109, 73, 37, 101, 65, 29, 93, 57  
 M: 7, 8, 9, 9, 10, 10, 11, 12, 13, 13, 14, 14, 15, 16, 16, 17, 18, 18, 19, 20, 20, 21, 22, 22, 23, 23, 24, 25, 25, 26, 27, 27, 28  
 N: 18, 20, 22, 22, 24, 24, 26, 28, 30, 30, 32, 32, 34, 36, 36, 38, 40, 40, 42, 44, 44, 46, 48, 48, 50, 50, 52, 54, 54, 56, 58, 58, 60  
 P: 809, 873, 937, 1001, 1065, 1129, 1193, 1257, 1321, 1385, 1449, 1513, 1577, 1641, 1705, 1769, 1833, 1897, 1961, 2025, 2089, 2153, 2217, 2281, 2345, 2409, 2473, 2537, 2601, 2665, 2729, 2793, 2857  
 KG: 20.9, 21.5, 22.1, 22.7, 23.3, 23.9, 24.5, 25.1, 25.7, 26.3, 26.9, 27.5, 28.1, 28.7, 29.3, 29.9, 30.5, 31.1, 31.7, 32.3, 32.9, 33.5, 34.1, 34.7, 35.2, 35.8, 36.4, 37.0, 37.6, 38.2, 38.8, 39.4, 40.0

Stroke: 2372, 2436, 2500, 2564, 2628, 2692, 2756, 2820, 2884, 2948, 3012, 3076, 3140, 3204, 3268, 3332, 3396, 3460, 3524, 3588, 3652, 3716, 3780, 3844, 3908, 3972, 4036, 4100, 4164, 4228, 4292, 4356, 4420  
 L: 2971, 3035, 3099, 3163, 3227, 3291, 3355, 3419, 3483, 3547, 3611, 3675, 3739, 3803, 3867, 3931, 3995, 4059, 4123, 4187, 4251, 4315, 4379, 4443, 4507, 4571, 4635, 4699, 4763, 4827, 4891, 4955, 5019  
 A: 21, 85, 49, 113, 77, 41, 105, 69, 33, 97, 61, 25, 89, 53, 17, 81, 45, 109, 73, 37, 101, 65, 29, 93, 57, 21, 85, 49, 113, 77, 41, 105, 69  
 M: 29, 29, 30, 30, 31, 32, 32, 33, 34, 34, 35, 36, 36, 37, 38, 38, 39, 39, 40, 41, 41, 42, 43, 43, 44, 45, 45, 46, 46, 47, 48, 48, 49  
 N: 62, 62, 64, 64, 66, 68, 70, 72, 72, 74, 76, 76, 78, 80, 80, 82, 82, 84, 86, 86, 88, 90, 90, 92, 94, 94, 96, 96, 98, 100, 100, 102  
 P: 2921, 2985, 3049, 3113, 3177, 3241, 3305, 3369, 3433, 3497, 3561, 3625, 3689, 3753, 3817, 3881, 3945, 4009, 4073, 4137, 4201, 4265, 4329, 4393, 4457, 4521, 4585, 4649, 4713, 4777, 4841, 4905, 4969  
 KG: 40.6, 41.2, 41.8, 42.4, 43.0, 43.6, 44.2, 44.8, 45.4, 46.0, 46.6, 47.2, 47.8, 48.4, 48.9, 49.5, 50.1, 50.7, 51.3, 51.9, 52.5, 53.1, 53.7, 54.3, 54.9, 55.5, 56.1, 56.7, 57.3, 57.9, 58.5, 59.1, 59.7

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

**LTF2 Series**

LNFP Series

LCFP Series

LAF / LSF Series

LAU Series

LMR Series

Controller

**LTF2**

LTF2-15

LTF2-20

**LTF2-30**

LTF2-45

LTF2-75

# LTF2-45

Standard type

With Iron Core



Maximum Stroke 4235mm

Maximum Speed 3500mm/s

Continuous Thrust 251N

Continuous Payload 90kg

### Ordering Method

## LTF2-45-RHS2-N-4235-LS10-R-N-05H-LC100-A001

**Model** Customization order no.

<b>No. of motor</b>		<b>Stroke</b>		<b>Position of origin</b>		<b>Sensor</b>	
N	Single motor	Single motor	203~4235mm Pitch 64mm	R	Right	N	None
D	Double motor	Double motor	301~3885mm Pitch 64mm	L	Left	XX	Quantity

<b>Module installation type and cable track orientation</b>				<b>Encoder</b>		<b>Cable length</b>		<b>Hall Cable</b>		<b>Controller type</b>			
Item	Cable direction	Mounting direction	Cable track size	LS10	LS05	N	-	H	LC100	LC100E	S		
Single motor	R	Right	H	Horizontally	L2	Large cable track	1µm optical encoder	05	5m	-	None	M	Mitsubishi
	L	Left	W	Wall mount	S2	Small cable track	0.5µm optical encoder	08	8m	H	Hall	P	Panasonic
Double motor	D	Double Slider	H	Horizontally	L2	Large cable track	LS01	0.1µm optical encoder	12	12m		D	Delta
			W	Wall mount	S2	Small cable track	MS10	SIKO 1µm magnetic encoder	XX	XXm Customized length		L	Shihlin
None	N	No Cable		TS10	TOYO 1µm magnetic encoder						Z	Other	
											N	None	

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

Features

LGM Series

LGF Series

**LTF2 Series**

LNF2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

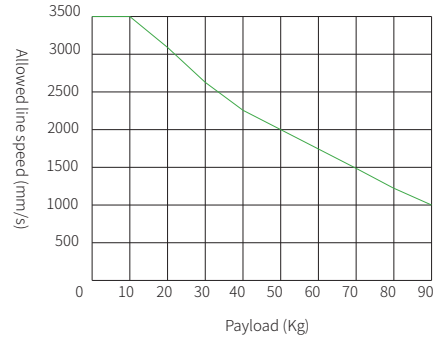
LTF2  
LTF2-15  
LTF2-20  
LTF2-30  
**LTF2-45**  
LTF2-75

**Specification**

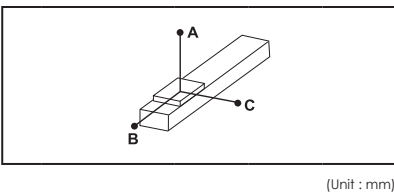
<b>Spec</b>	Model		LTF2-45
	Repeatability (mm)		±0.002
	Max. Force (N)		1128
	Rated Force (N)		251
	Max. Payload (kg) <sup>※1</sup>		90
	Stroke (mm)	Single motor	203-4235 / 64 pitch
		Double motor	301-3885 / 64 pitch
Maximum Speed (mm/s)		3500	

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

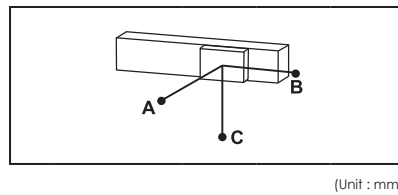
**Payload & Acceleration**



**Allowable Overhang**



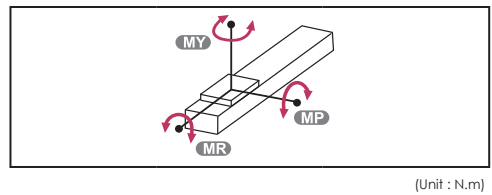
Horizontal Installation <sup>※2</sup>				
	Load	A	B	C
LTF2-45	45 kg	700	125	120
	60 kg	520	90	90
	75 kg	410	70	65
	90 kg	330	55	55



Wall Installation <sup>※2</sup>				
	Load	A	B	C
LTF2-45	45 kg	120	125	700
	60 kg	90	90	520
	75 kg	65	70	410
	90 kg	55	55	330

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



LTF2-45	MY	3625
	MP	3625
	MR	3757

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features  
LGM Series  
LGF Series  
LTF2 Series  
LNF2 Series  
LCP2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LTF2-45

Standard type

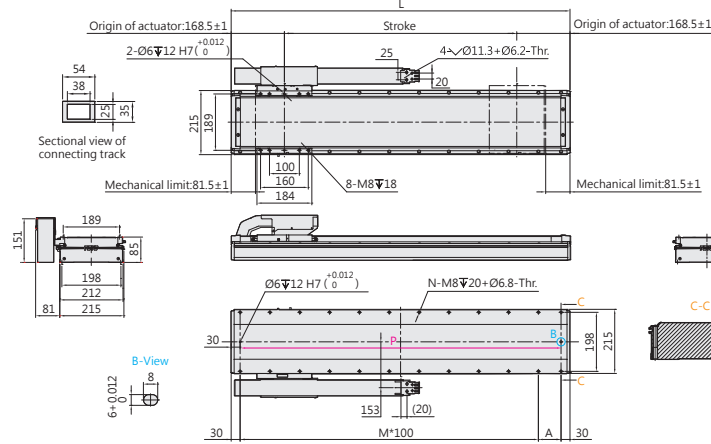
With Iron Core

## LTF2-45-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

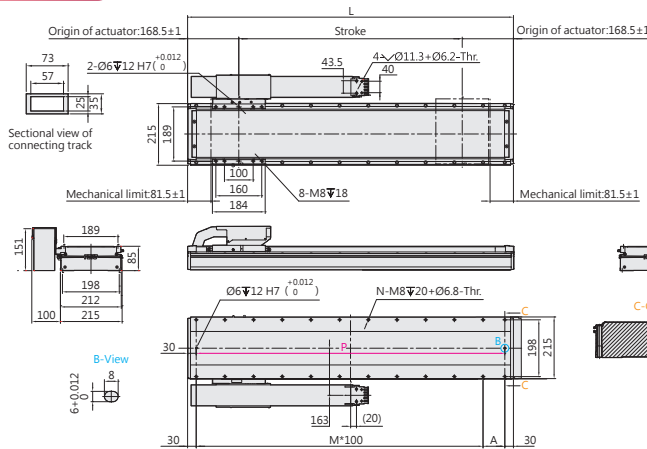
Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

## LTF2-45-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

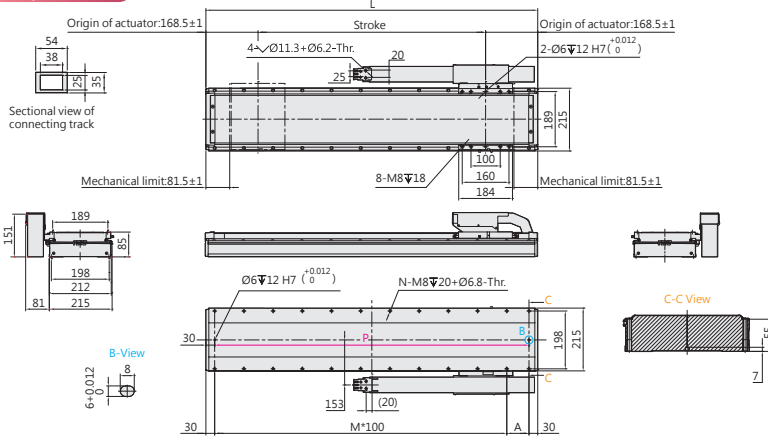
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-45-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

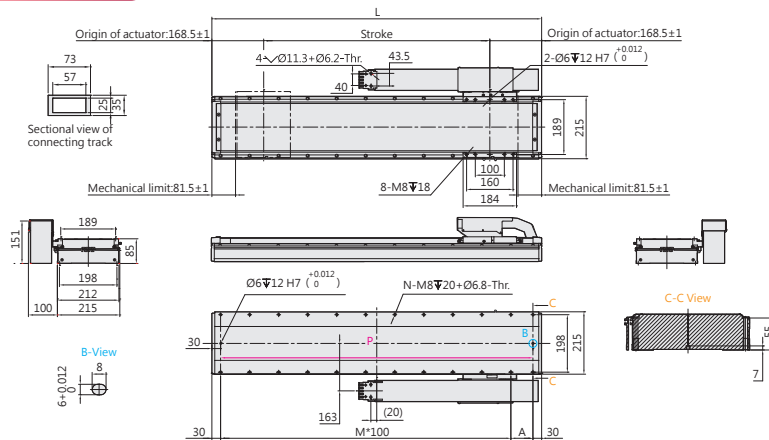
Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

LTF2-45-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

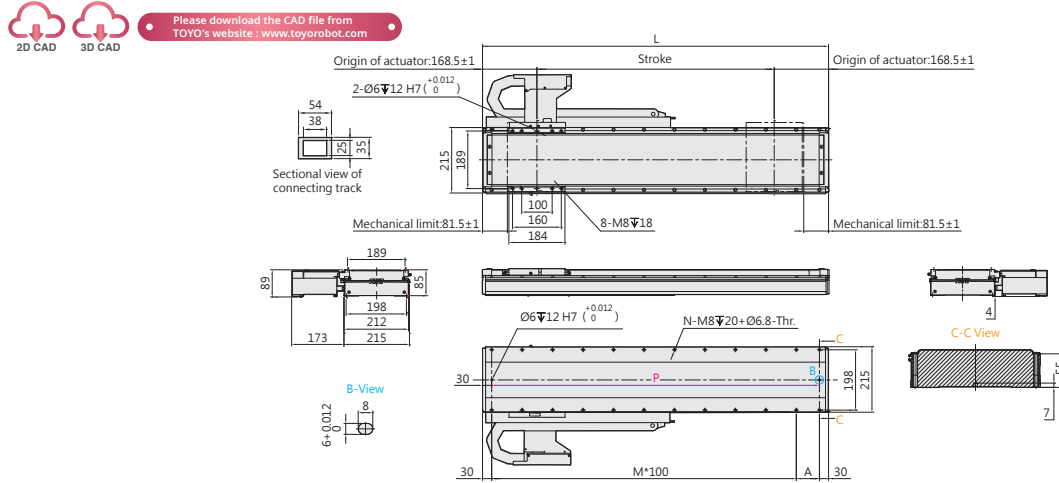
# LTF2-45

Standard type

With Iron Core

## LTF2-45-RWS2-N

Unit : mm



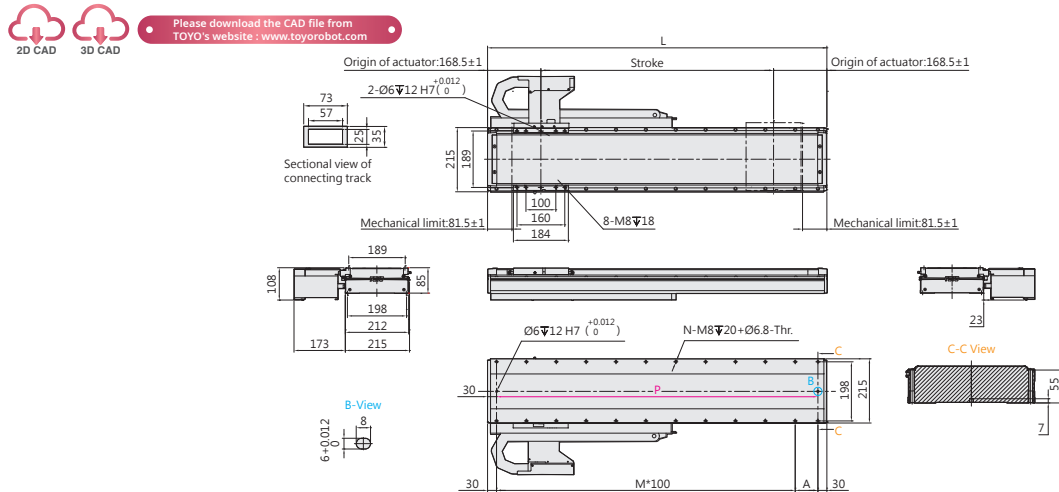
Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58	59	60.1	61.1	62.1

## LTF2-45-RWL2-N

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58	59	60.1	61.1	62.1



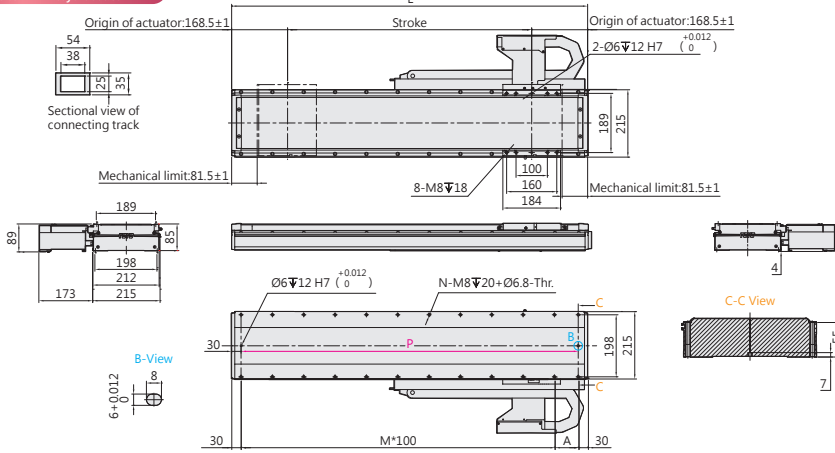
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-45-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

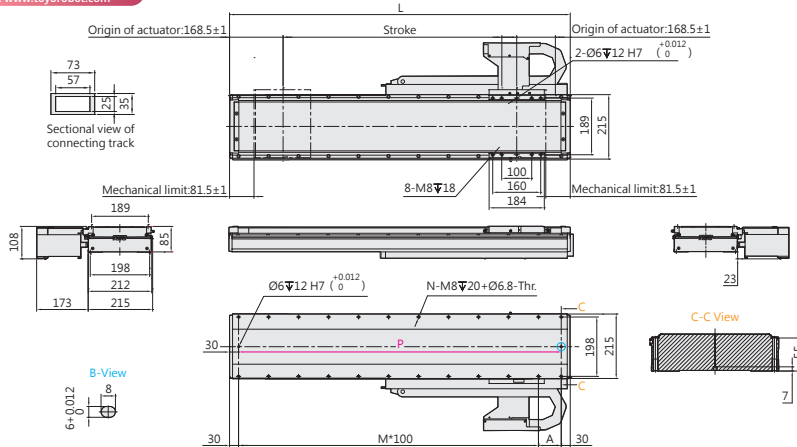
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58	59	60.1	61.1	62.1

LTF2-45-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58	59	60.1	61.1	62.1

# LTF2-45

Standard type

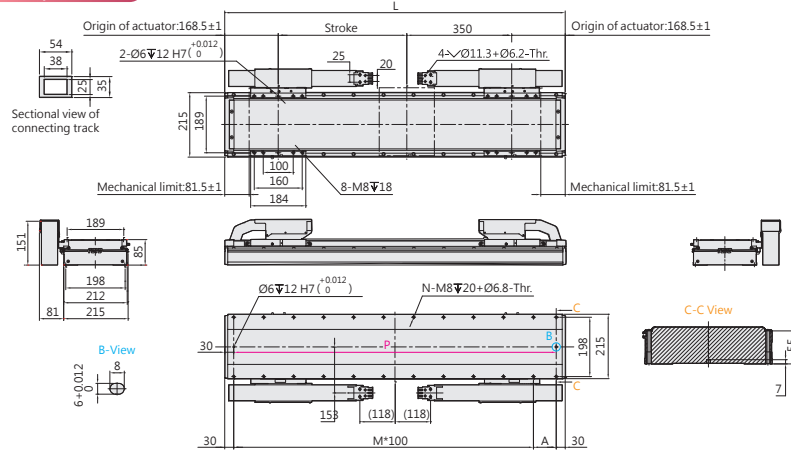
With Iron Core

## LTF2-45-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7

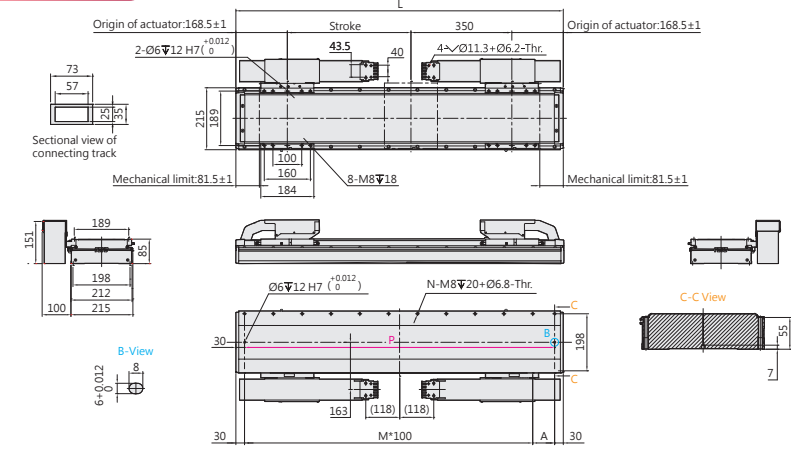
Stroke	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	3117	3181	3245	3309	3373	3437	3501	3565	3629	3693	3757	3821	3885
L	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	66.7	67.8	68.8	69.8	70.9	71.9	73	74	75	76.1	77.1	78.2	79.2	80.2	81.3	82.3	83.4	84.4	85.4	86.5	87.5	88.6	89.6	90.6	91.7	92.7	93.8	94.8	95.9

## LTF2-45-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7

Stroke	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	3117	3181	3245	3309	3373	3437	3501	3565	3629	3693	3757	3821	3885
L	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	66.7	67.8	68.8	69.8	70.9	71.9	73	74	75	76.1	77.1	78.2	79.2	80.2	81.3	82.3	83.4	84.4	85.4	86.5	87.5	88.6	89.6	90.6	91.7	92.7	93.8	94.8	95.9

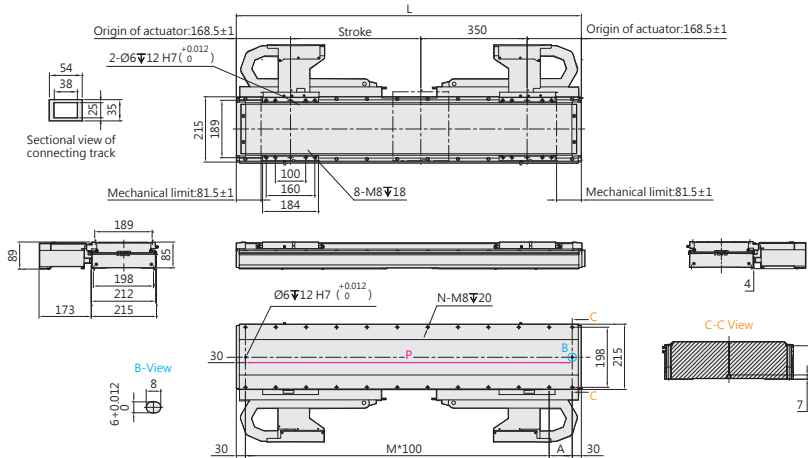
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-45-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



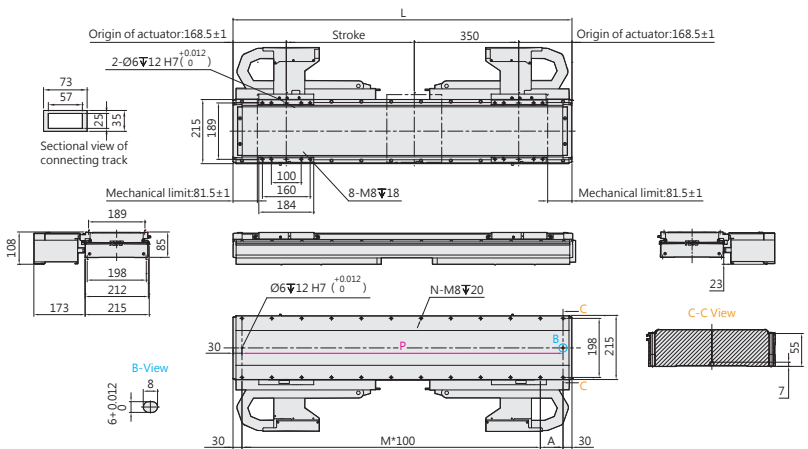
Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7	66.7	67.8	68.8	69.8

LTF2-45-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7	66.7	67.8	68.8	69.8

Features

LGM Series

LGF Series

LTF2 Series

LNFP2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LTF2

LTF2-15

LTF2-20

LTF2-30

LTF2-45

LTF2-75

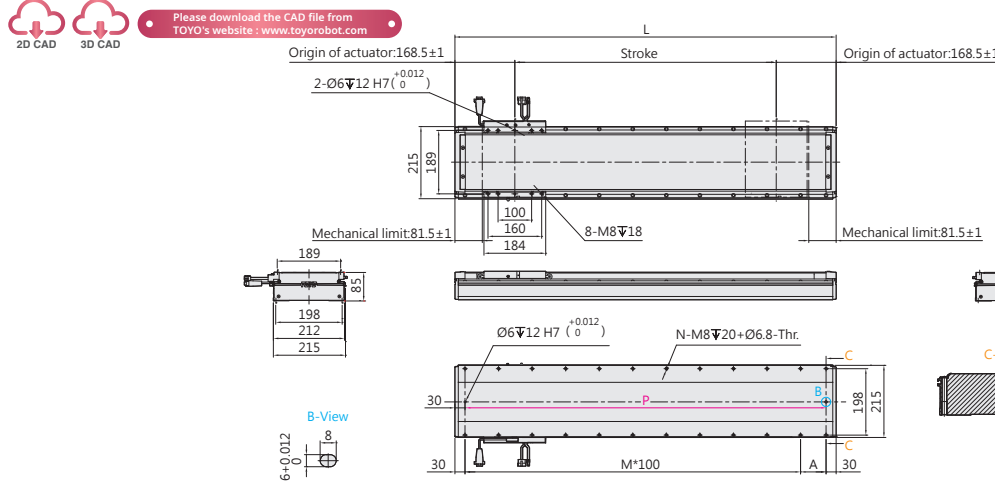
# LTF2-45

Standard type

With Iron Core

## LTF2-45-N-N

Unit : mm

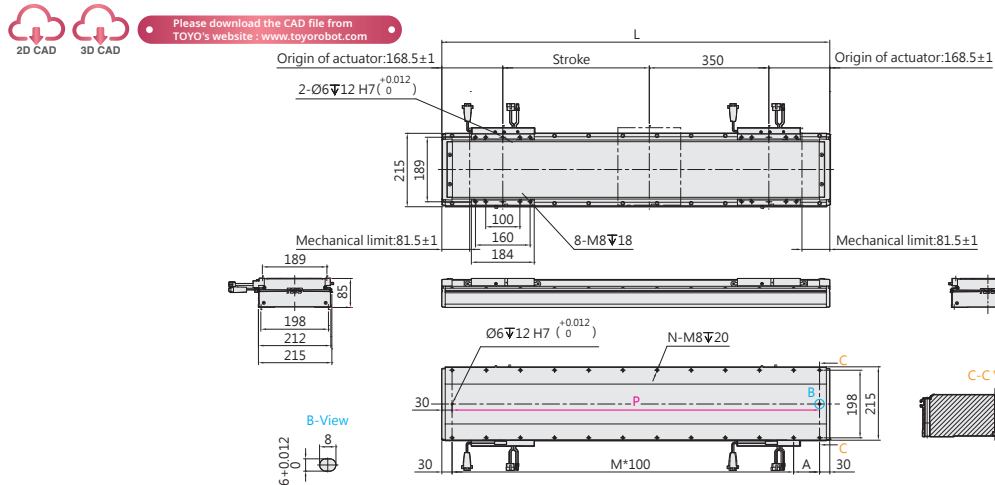


Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94	
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

## LTF2-45-N-D

Unit : mm



Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76
M	9	9	10	11	11	12	13	13	14	15	15	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	26
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7

Stroke	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	3117	3181	3245	3309	3373	3437	3501	3565	3629	3693	3757	3821	3885
L	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	66.7	67.8	68.8	69.8	70.9	71.9	73	74	75	76.1	77.1	78.2	79.2	80.2	81.3	82.3	83.4	84.4	85.4	86.5	87.5	88.6	89.6	90.6	91.7	92.7	93.8	94.8	95.9

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

**LTF2 Series**

LNFP Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

**LTF2**  
LTF2-15  
LTF2-20  
LTF2-30  
**LTF2-45**  
LTF2-75

# LTF2-75

Standard type

With Iron Core



Maximum Stroke 4235m

Maximum Speed 3500mm/s

Continuous Thrust 340N

Continuous Payload 120kg

### Ordering Method

## LTF2-75-RHS2-N-4235-LS10-R-N-05H-LC100-A001

**Model** **Customization order no.**

<b>No. of motor</b>		<b>Stroke</b>		<b>Position of origin</b>		<b>Sensor</b>	
N	Single motor	Single motor	203-4235mm Pitch 64mm	R	Right	N	None
D	Double motor	Double motor	301-3885mm Pitch 64mm	L	Left	XX	Quantity

<b>Module installation type and cable track orientation</b>					<b>Encoder</b>		<b>Cable length</b>		<b>Hall Cable</b>		<b>Controller type</b>			
Item	Cable direction	Mounting direction	Cable track size		Encoder		Cable length		Hall Cable		Controller type			
Single motor	R	Right	H	Horizontally	L2	Large cable track	LS10	1μm optical encoder	N	None	-	None	LC100	TOYO (Pulse)
	L	Left	W	Wall mount	S2	Small cable track	LS05	0.5μm optical encoder	05	5m	H	Hall	LC100E	TOYO (EtherCAT)
Double motor	D	Double Slider	H	Horizontally	L2	Large cable track	LS01	0.1μm optical encoder	08	8m			S	Servotronix
			W	Wall mount	S2	Small cable track	MS10	SIKO 1μm magnetic encoder	12	12m			M	Mitsubishi
None	N	No Cable			TS10	TOYO 1μm magnetic encoder	XX	XXm Customized length			P	Panasonic		

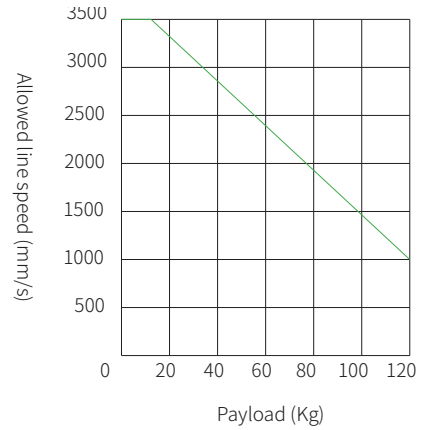
※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

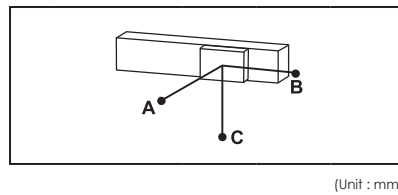
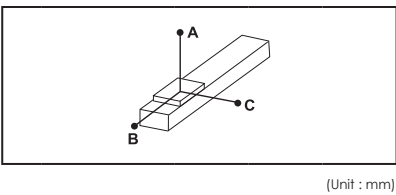
Specification			
<b>Spec</b>	Model	LTF2-75	
	Repeatability (mm)	±0.002	
	Max. Force (N)	1523	
	Rated Force (N)	340	
	Max. Payload (kg) <sup>※1</sup>	120	
	Stroke (mm)	Single motor	203-4235 / 64 pitch
		Double motor	301-3885 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

**Payload & Acceleration**



**Allowable Overhang**

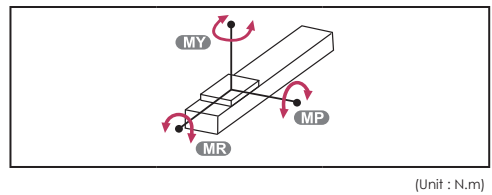


Horizontal Installation <sup>※2</sup>				
LTF2-75	Load	A	B	C
	60 kg	450	70	70
	80 kg	340	50	45
	100 kg	260	35	35
	120 kg	200	25	25

Wall Installation <sup>※2</sup>				
LTF2-75	Load	A	B	C
	60 kg	70	70	450
	80 kg	45	50	340
	100 kg	35	35	260
	120 kg	25	25	200

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



LTF2-15	MY	3625
	MP	3625
	MR	3757

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTF2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LTF2

LTF2-15

LTF2-20

LTF2-30

LTF2-45

LTF2-75

# LTF2-75

Standard type

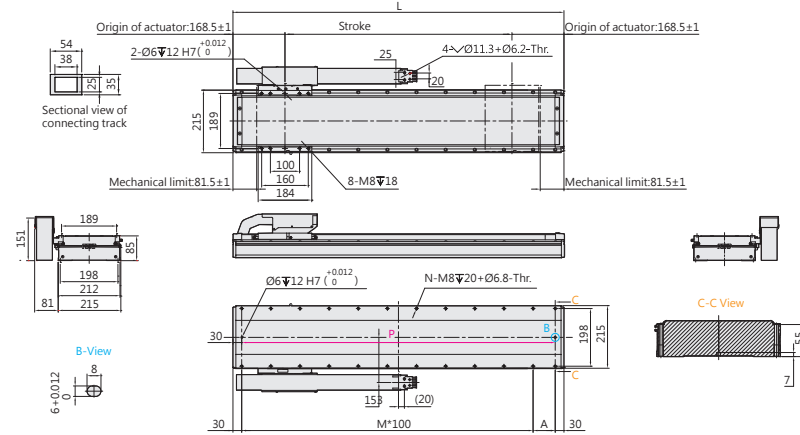
With Iron Core

## LTF2-75-RHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

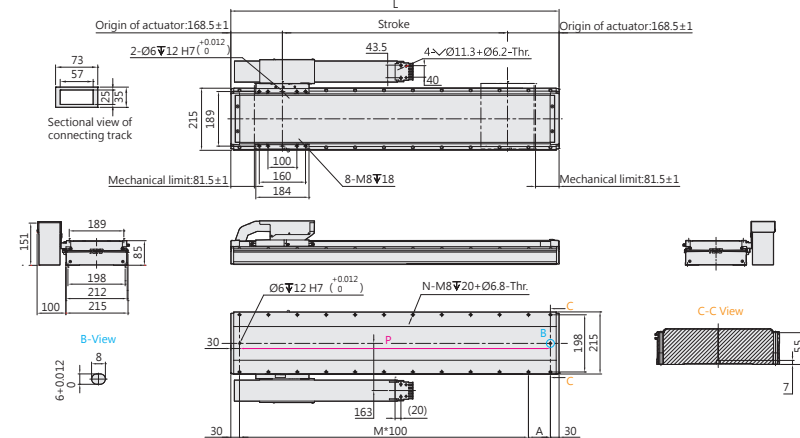
Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	62	64	66	66	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

## LTF2-75-RHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	62	64	66	66	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1



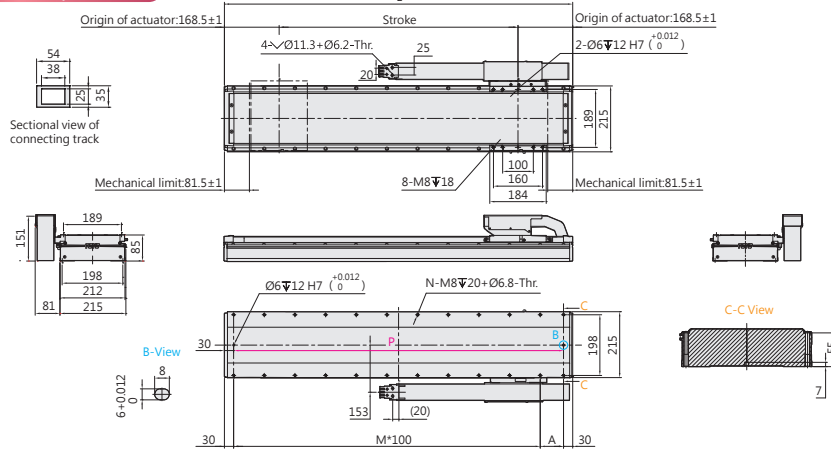
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LTF2-75-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	10	11	12	13	13	14	15	15	16	17	18	18	19	20	20	21	22	22	23	24	24	24	24	24
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

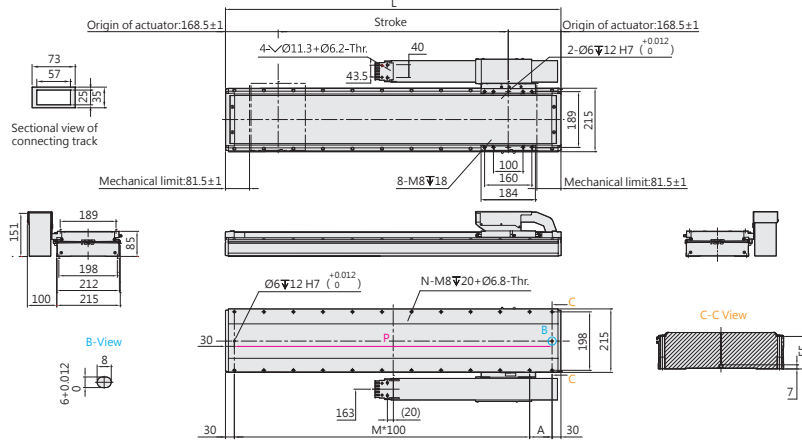
Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45	
N	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

### LTF2-75-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	10	11	11	12	13	13	14	15	15	16	17	18	18	19	20	20	21	22	22	23	24	24	24	
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45	
N	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

Features

LGW Series

LGF Series

LTF2 Series

LNFP Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LTF2

LTF2-15

LTF2-20

LTF2-30

LTF2-45

LTF2-75

# LTF2-75

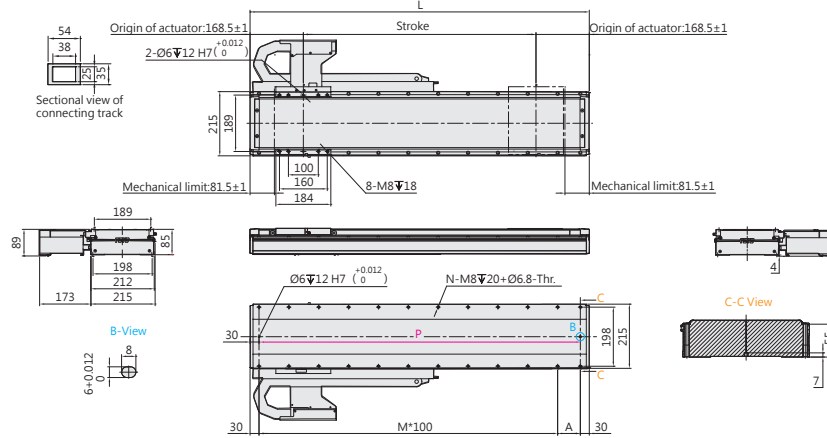
Standard type

With Iron Core

## LTF2-75-RWS2-N

Unit : mm

2D CAD 3D CAD Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

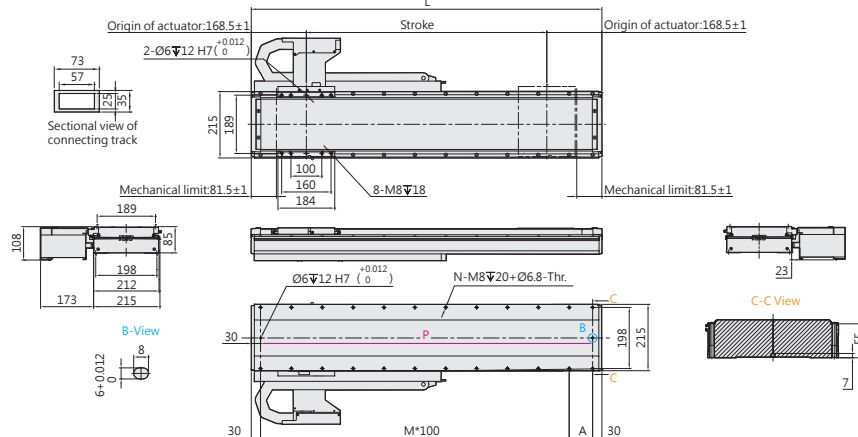
  

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58.0	59.0	60.1	61.1	62.1

## LTF2-75-RWL2-N

Unit : mm

2D CAD 3D CAD Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58.0	59.0	60.1	61.1	62.1

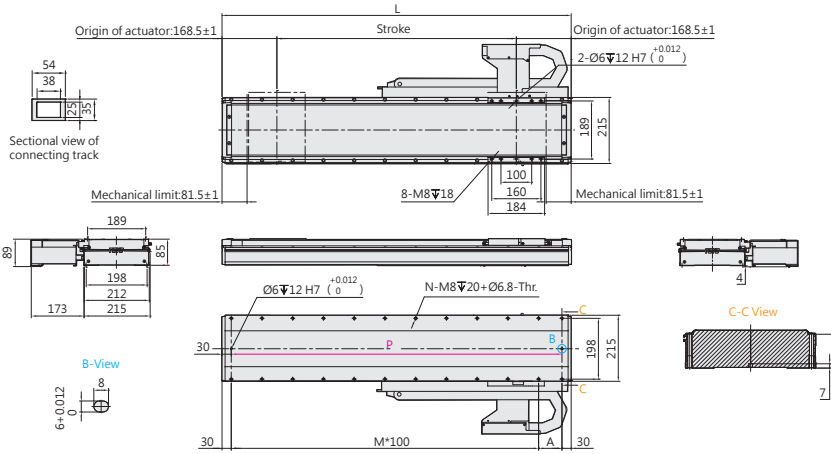
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LTF2-75-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

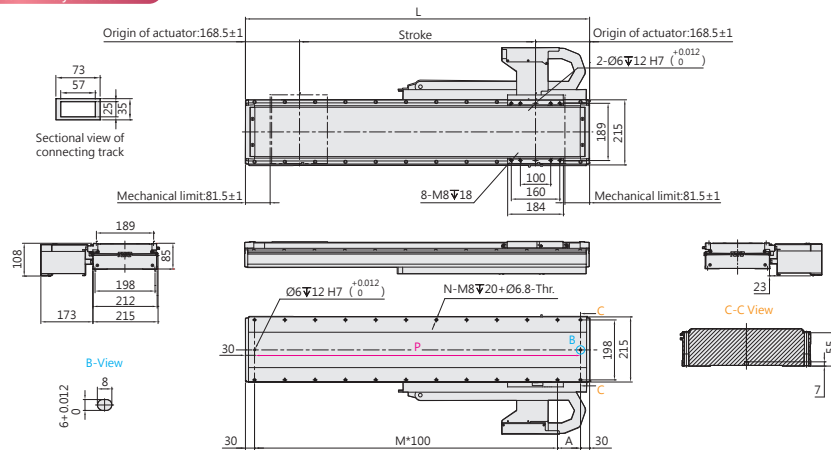
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58.0	59.0	60.1	61.1	62.1

LTF2-75-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9	55.9	56.9	58.0	59.0	60.1	61.1	62.1

Features  
 LGW Series  
 LGF Series  
**LTF2 Series**  
 LNF2 Series  
 LCF2 Series  
 LAF / LSF Series  
 LAU Series  
 LMR Series  
 Controller

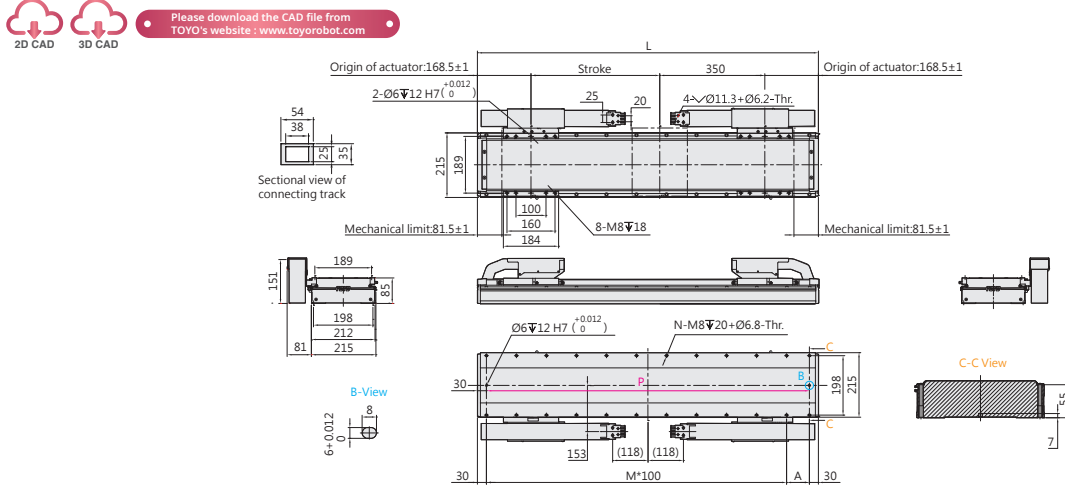
# LTF2-75

Standard type

With Iron Core

## LTF2-75-DHS2-D

Unit : mm



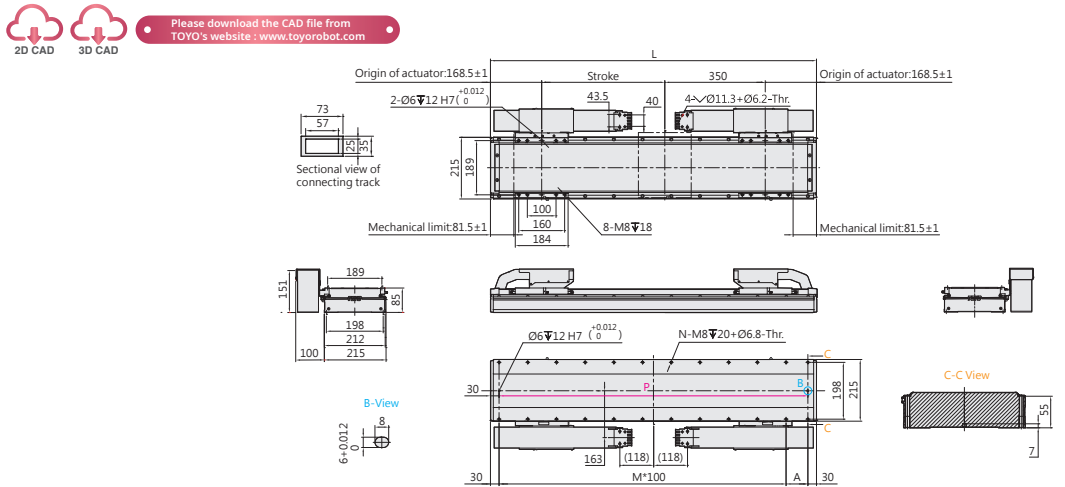
Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7

Stroke	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	3117	3181	3245	3309	3373	3437	3501	3565	3629	3693	3757	3821	3885
L	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	66.7	67.8	68.8	69.8	70.9	71.9	73	74	75	76.1	77.1	78.2	79.2	80.2	81.3	82.3	83.4	84.4	85.4	86.5	87.5	88.6	89.6	90.6	91.7	92.7	93.8	94.8	95.9

## LTF2-75-DHL2-D

Unit : mm



Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7

Stroke	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	3117	3181	3245	3309	3373	3437	3501	3565	3629	3693	3757	3821	3885
L	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	58	58	60	62	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	90	90	92	94
P	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	66.7	67.8	68.8	69.8	70.9	71.9	73	74	75	76.1	77.1	78.2	79.2	80.2	81.3	82.3	83.4	84.4	85.4	86.5	87.5	88.6	89.6	90.6	91.7	92.7	93.8	94.8	95.9

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

Features

LGW Series

LGJ Series

**LTF2 Series**

LN2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LTF2

LTF2-15

LTF2-20

LTF2-30

LTF2-45

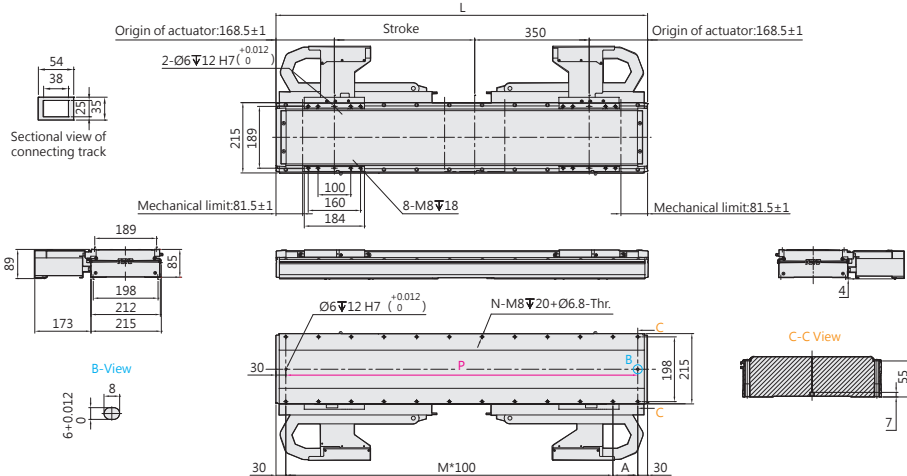
**LTF2-75**

### LTF2-75-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



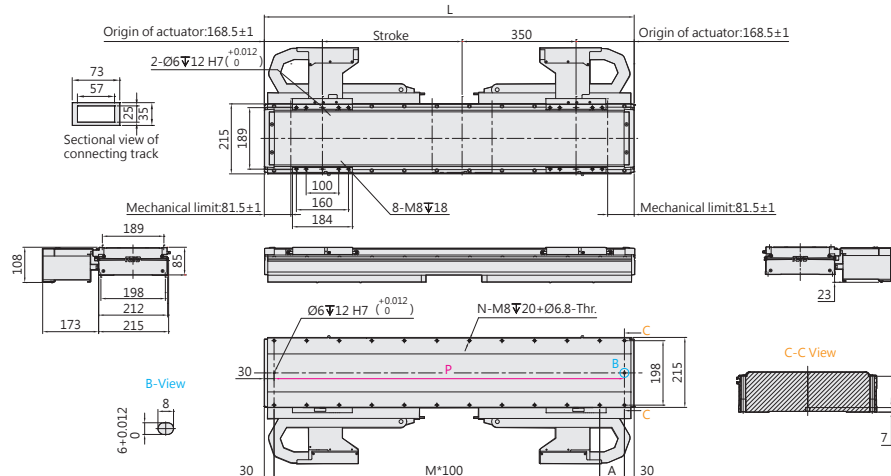
Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7	66.7	67.8	68.8	69.8

### LTF2-75-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736	2800	2864	2928	2992
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26	27	27	28	29
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56	58	58	60	62
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7	66.7	67.8	68.8	69.8

# LTF2-75

Standard type

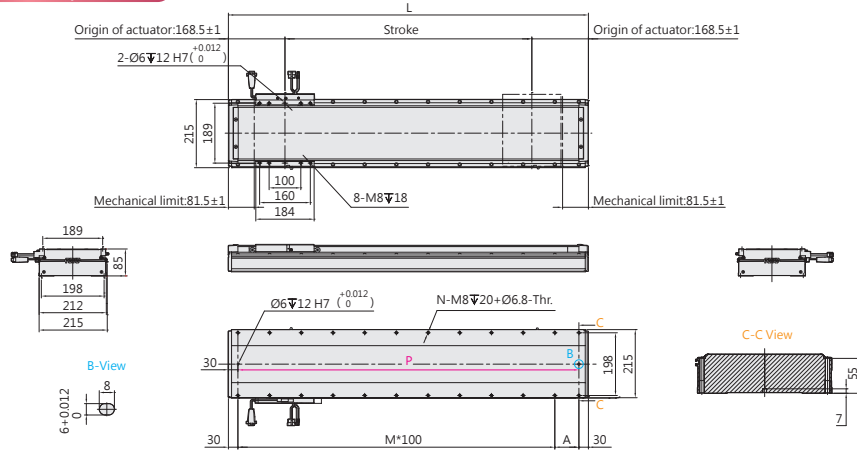
With Iron Core

## LTF2-75-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187
L	560	624	688	752	816	880	944	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544
A	100	64	28	92	56	20	84	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84
M	4	5	6	6	7	8	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24
N	12	14	16	16	18	20	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484
KG	22.6	23.7	24.7	25.7	26.8	27.8	28.9	29.9	30.9	32.0	33.0	34.1	35.1	36.2	37.2	38.2	39.3	40.3	41.4	42.4	43.4	44.5	45.5	46.6	47.6	48.6	49.7	50.7	51.8	52.8	53.8	54.9

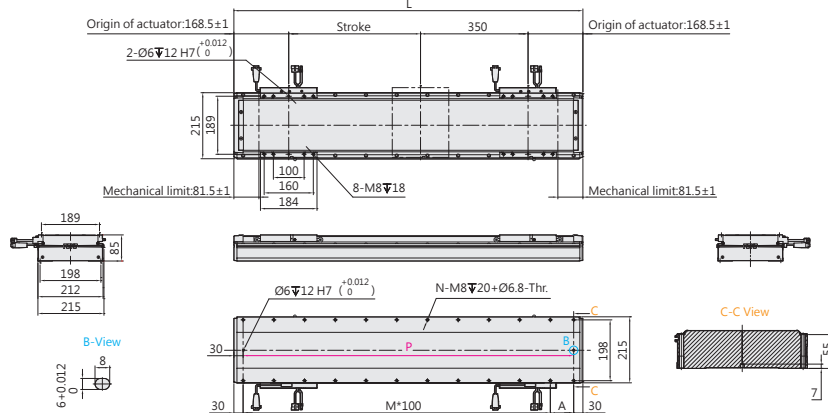
Stroke	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3851	3915	3979	4043	4107	4171	4235
L	2608	2672	2736	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	54	54	56	58	58	60	62	64	66	66	68	68	70	72	72	74	76	76	78	80	80	82	84	84	86	86	88	88	90	90	92	94
P	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	55.9	56.9	58.0	59.0	60.1	61.1	62.1	63.2	64.2	65.3	66.3	67.3	68.4	69.4	70.5	71.5	72.5	73.6	74.6	75.7	76.7	77.7	78.8	79.8	80.9	81.9	82.9	84.0	85.0	86.1	87.1	88.1

## LTF2-75-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	301	365	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029
L	1008	1072	1136	1200	1264	1328	1392	1456	1520	1584	1648	1712	1776	1840	1904	1968	2032	2096	2160	2224	2288	2352	2416	2480	2544	2608	2672	2736
A	48	112	76	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76
M	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	24	24	25	25	26
N	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	52	52	54	54	56
P	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676
KG	37.6	38.6	39.7	40.7	41.8	42.8	43.9	44.9	45.9	47	48	49.1	50.1	51.1	52.2	53.2	54.3	55.3	56.3	57.4	58.4	59.5	60.5	61.5	62.6	63.6	64.6	65.7

Stroke	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	3117	3181	3245	3309	3373	3437	3501	3565	3629	3693	3757	3821	3885
L	2800	2864	2928	2992	3056	3120	3184	3248	3312	3376	3440	3504	3568	3632	3696	3760	3824	3888	3952	4016	4080	4144	4208	4272	4336	4400	4464	4528	4592
A	40	104	68	32	96	60	24	88	52	116	80	44	108	72	36	100	64	28	92	56	20	84	48	112	76	40	104	68	32
M	27	27	28	29	29	30	31	31	32	32	33	34	34	35	36	36	37	38	38	39	40	40	41	41	42	43	43	44	45
N	58	58	60	62	64	66	66	68	68	70	72	74	76	76	78	80	80	82	84	84	86	86	88	88	90	90	92	94	
P	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3764	3828	3892	3956	4020	4084	4148	4212	4276	4340	4404	4468	4532
KG	66.7	67.8	68.8	69.8	70.9	71.9	73	74	75	76.1	77.1	78.2	79.2	80.2	81.3	82.3	83.4	84.4	85.4	86.5	87.5	88.6	89.6	90.6	91.7	92.7	93.8	94.8	95.9

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

**LTF2 Series**

LNFP Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

**LTF2**  
LTF2-15  
LTF2-20  
LTF2-30  
LTF2-45  
LTF2-75

Features

LGW Series

LGF Series

LTF2 Series

**LNFP2 Series**

LCP2 Series

LAF / LSF Series

LAU Series

LNR Series

Controller

## Memo



# LNF2

(Closed type)

## Iron Core Linear Motor Robot

### Contents

MEDIUM

LNF2-15



Width 133mm

Max. stroke 3024mm..... 125

Continuous payload 20kg

MEDIUM

LNF2-20



Width 155mm

Max. stroke 3018mm..... 135

Continuous payload 40kg

MEDIUM

LNF2-30



Width 155mm

Max. stroke 3018mm..... 145

Continuous payload 54kg

LARGE

LNF2-45



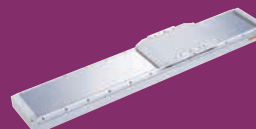
Width 215mm

Max. stroke 3053mm..... 155

Continuous payload 90kg

LARGE

LNF2-75



Width 215mm

Max. stroke 3053mm..... 165

Continuous payload 120kg

## Spec Index

### LNF2 iron core linear motor module (Closed type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard	Linear Motor Robot	133	LNF2-15	Single motor	3A	±0.002	LMF15	59	20	3500
				Double motor	3A*2	±0.002	LMF15			
		155	LNF2-20	Single motor	3A	±0.002	LMF20	113	40	3500
				Single motor	3A*2	±0.002	LMF20			
		155	LNF2-30	Single motor	3A	±0.002	LMF30	158	54	3500
				Single motor	3A*2	±0.002	LMF30			
		215	LNF2-45	Single motor	6A	±0.002	LMF45	251	90	3500
				Single motor	6A*2	±0.002	LMF45			
		215	LNF2-75	Single motor	6A	±0.002	LMF75	340	120	3500
				Single motor	6A*2	±0.002	LMF75			

※ LNF2-15, LNF2-20, LNF2-30, LNF2-45, LNF2-75 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.

Max. Linear Speed (mm/s)													Page	
Stroke	200	300	325	425	450	2650	2750	2800	2850	2900	2950	3000		3024
		3500											125	
			3500										135	
		3500											145	
			3500										155	
			3500										165	
				1500										
				1500										

# LNF2-15

Closed type

With Iron Core



Maximum Stroke 3024mm

Maximum Speed 3500mm/s

Continuous Thrust 59N

Continuous Payload 20kg

### Ordering Method

## LNF2-15-RHS2-N-3024-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	208-3024mm Pitch 64mm
Double motor	332-3020mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

※ It is compulsory to select N for the controller while choosing cable length N.

#### Hall Cable

-	None
H	Hall

#### Controller type

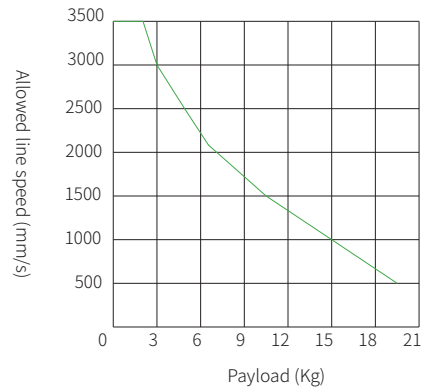
LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronics
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

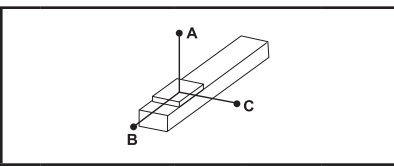
Specification			
Spec	Model	LNF2-15	
	Repeatability (mm)	±0.002	
	Max. Force (N)	266	
	Rated Force (N)	59	
	Max. Payload (kg) <sup>※1</sup>	20	
	Stroke (mm)	Single motor	208-3024 / 64 pitch
		Double motor	332-3020 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

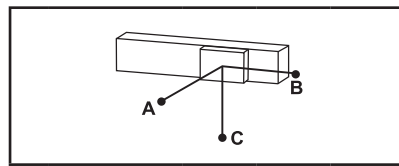
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



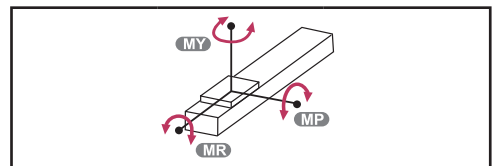
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LNF2-15	Load	A	B	C
	5 kg	3500	700	600
	10 kg	1750	350	300
	15 kg	1150	230	200
	20 kg	850	170	140

Wall Installation <sup>※2</sup>				
LNF2-15	Load	A	B	C
	5 kg	600	700	3500
	10 kg	300	350	1750
	15 kg	200	230	1150
	20 kg	140	170	850

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LNF2-15	MY	1667
	MP	1667
	MR	1469

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTP2 Series

LNF2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LNR Series

Controller

LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-15 Closed type

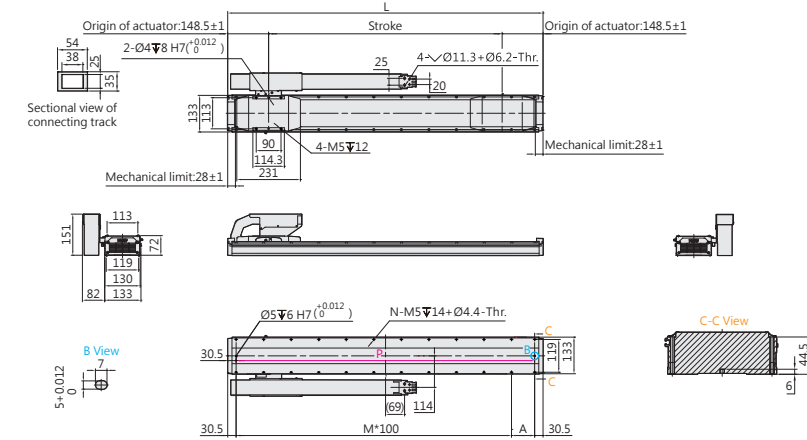
# With Iron Core

## LNF2-15-RHS2-N



Please download the CAD file from TOYO's website: [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

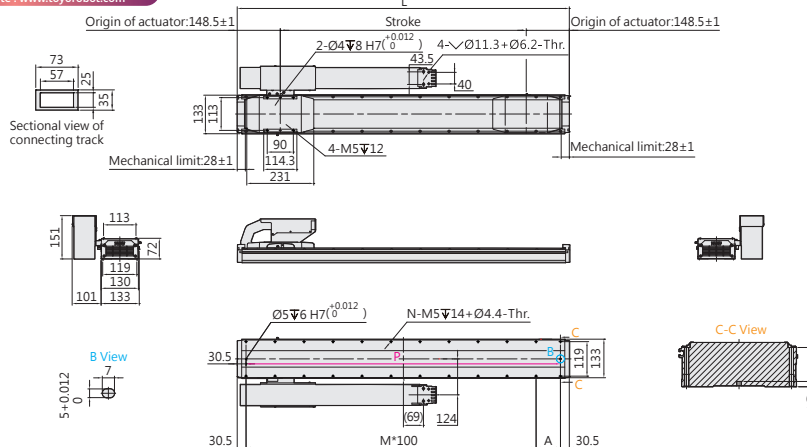
Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

## LNF2-15-RHL2-N



Please download the CAD file from TOYO's website: [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

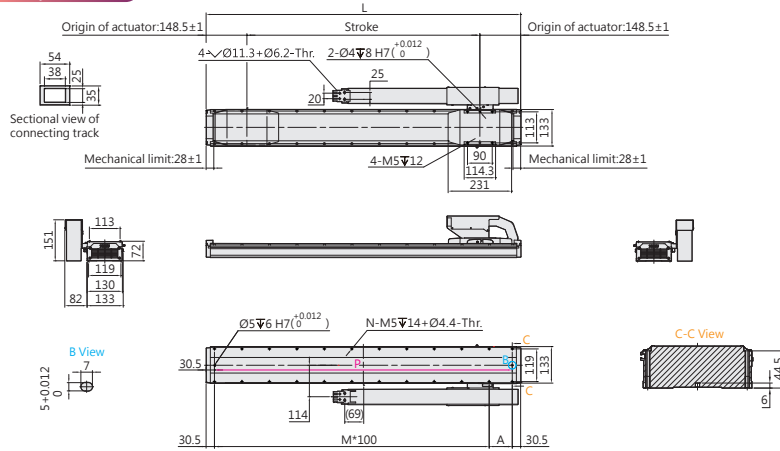
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LNF2-15-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

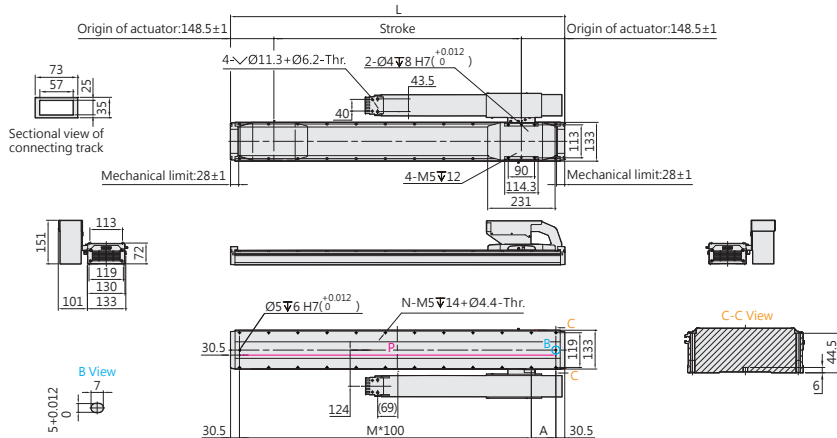
Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

LNF2-15-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

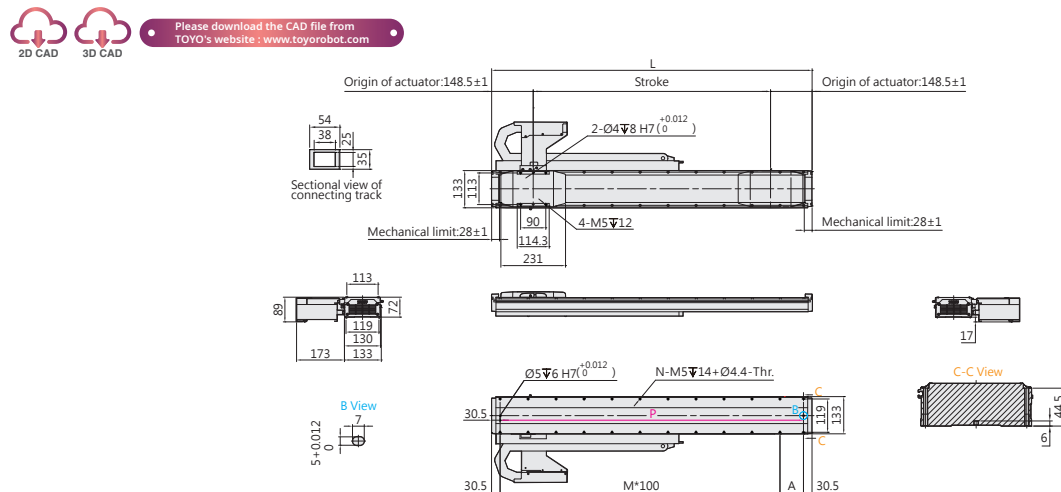
Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

# LNF2-15 Closed type

# With Iron Core

## LNF2-15-RWS2-N

Unit : mm



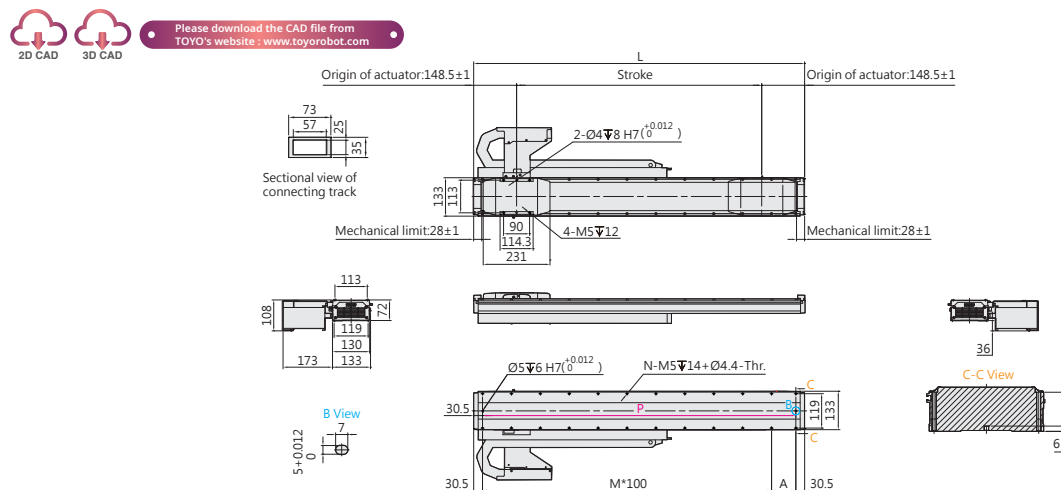
Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6

Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0

## LNF2-15-RWL2-N

單位 Unit :mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6

Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0



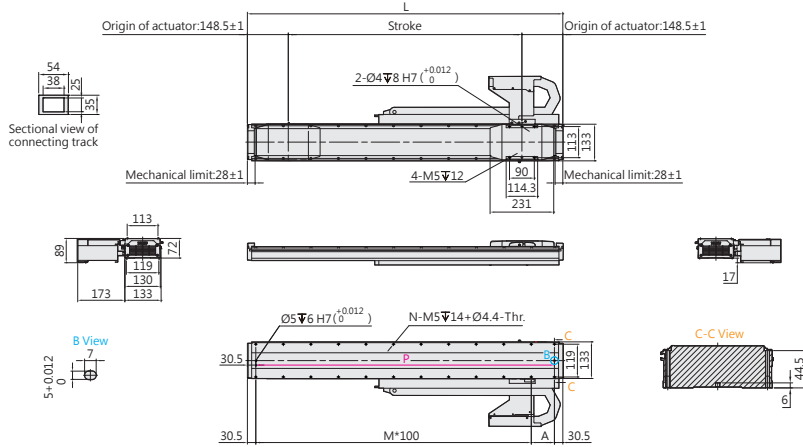
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LNF2-15-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



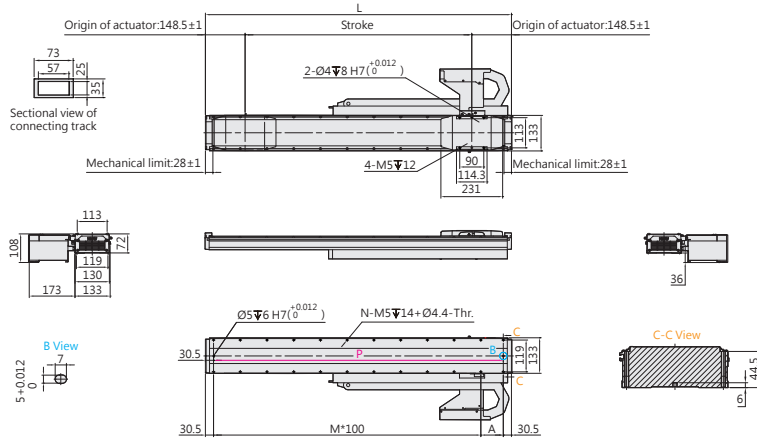
Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0

LNF2-15-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0

Features  
LGF Series  
LGF Series  
LTF2 Series  
LNF2 Series  
LGF2 Series  
LAF / LSF Series  
LAU Series  
LNR Series  
Controller

# LNF2-15 Closed type

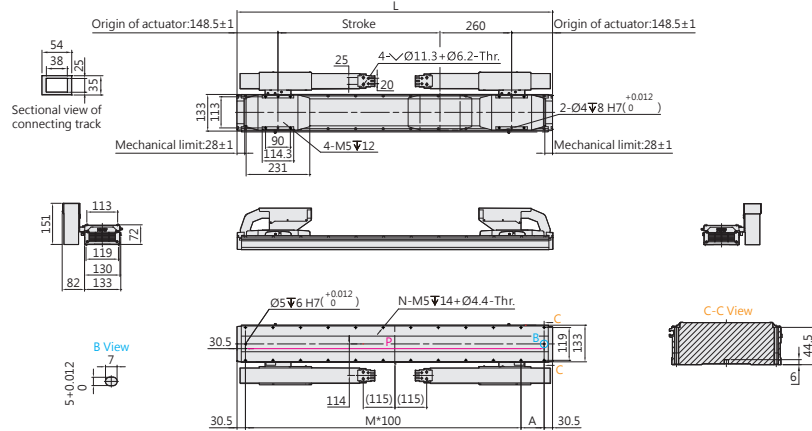
# With Iron Core

## LNF2-15-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1

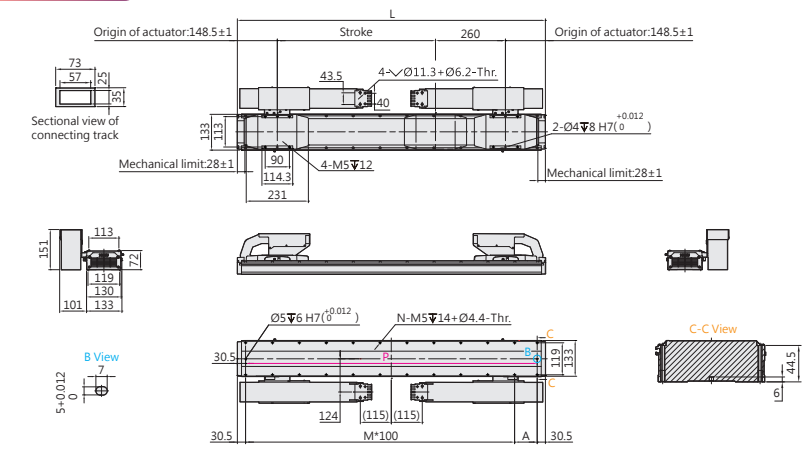
Stroke	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020
L	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321	3385	3449	3513	3577
A	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	21	22	22	23	23	24	25	25	26	27	28	29	29	30	31	31	32	32	33	34	34	
N	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72
P	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516
KG	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2	31.7	32.2	32.6	33.1	33.6	34.0	34.5	35.0	35.5

## LNF2-15-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1

Stroke	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020
L	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321	3385	3449	3513	3577
A	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	21	22	22	23	23	24	25	25	26	27	28	29	29	30	31	31	32	32	33	34	34	
N	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72
P	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516
KG	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2	31.7	32.2	32.6	33.1	33.6	34.0	34.5	35.0	35.5

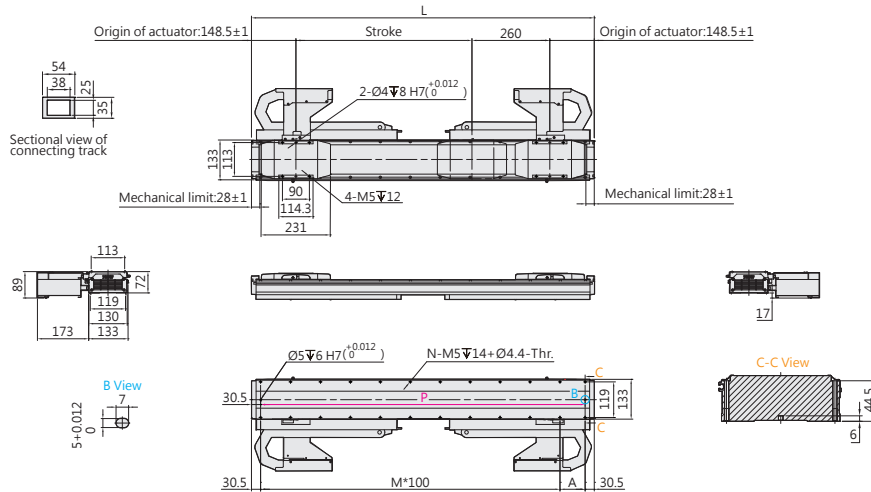
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-15-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



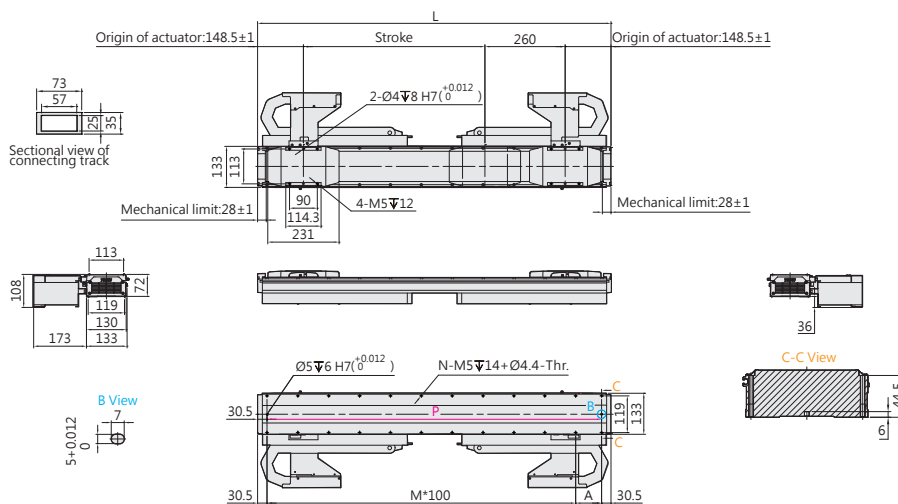
Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2

### LNF2-15-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2

# LNF2-15 Closed type

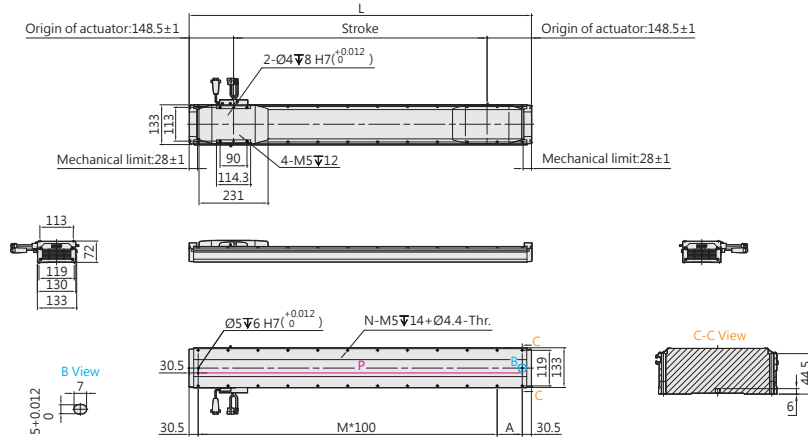
# With Iron Core

## LNF2-15-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

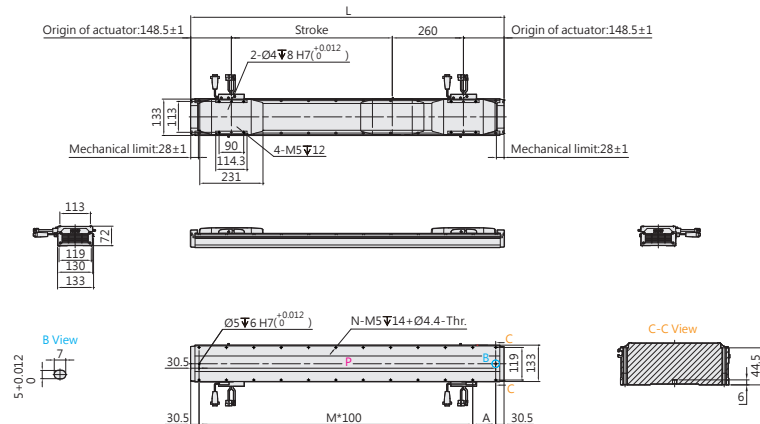
Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

## LNF2-15-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169	
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	20
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	44
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1	25.5

Stroke	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020
L	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321	3385	3449	3513	3577
A	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34
N	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72
P	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516
KG	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2	31.7	32.2	32.6	33.1	33.6	34.0	34.5	35.0	35.5

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

**LNF2 Series**

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LNF2  
**LNF2-15**  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-20

Closed type

With Iron Core



Maximum Stroke 3018mm

Maximum Speed 3500mm/s

Continuous Thrust 59N

Continuous Payload 20kg

### Ordering Method

## LNF2-20-RHS2-N-3018-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	202~3018mm Pitch 64mm
Double motor	320~3008mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

#### Hall Cable

-	None
H	Hall

#### Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

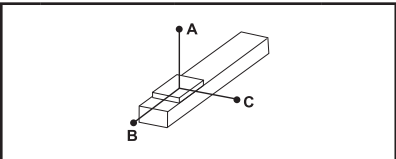
Specification			
<b>Spec</b>	Model	LNF2-20	
	Repeatability (mm)	±0.002	
	Max. Force (N)	510	
	Rated Force (N)	113	
	Max. Payload (kg) <sup>※1</sup>	40	
	Stroke (mm)	Single motor	202-3018 / 64 pitch
		Double motor	320-3008 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

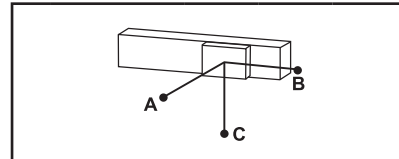
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



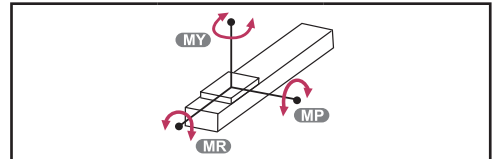
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LNF2-20	Load	A	B	C
	10 kg	2200	450	320
	20 kg	1100	220	160
	30 kg	720	140	100
	40 kg	540	100	75

Wall Installation <sup>※2</sup>				
LNF2-20	Load	A	B	C
	10 kg	320	450	2200
	20 kg	160	220	1100
	30 kg	100	140	720
	40 kg	75	100	540

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LNF2-15	MY	2461
	MP	2461
	MR	1865

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features  
LGM Series  
LGF Series  
LTF2 Series  
LNF2 Series  
LCP2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-20

Closed type

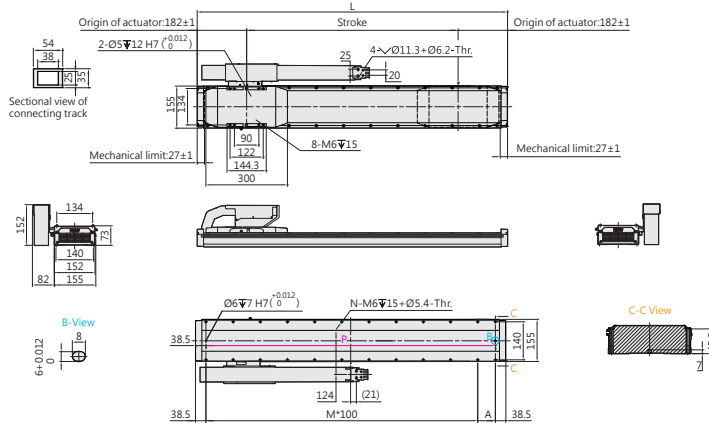
With Iron Core

## LNF2-20-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

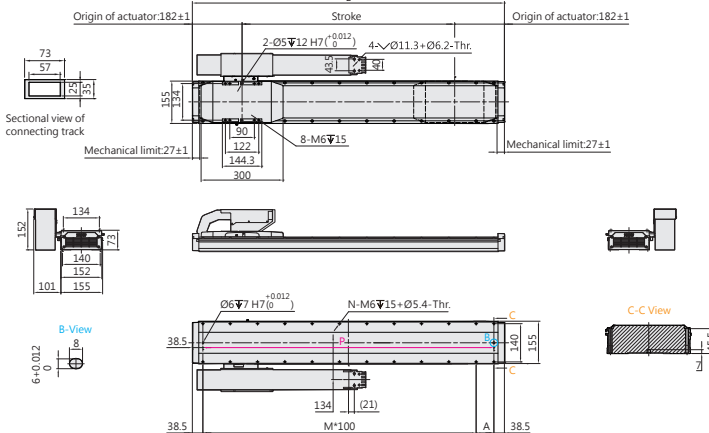
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

## LNF2-20-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0



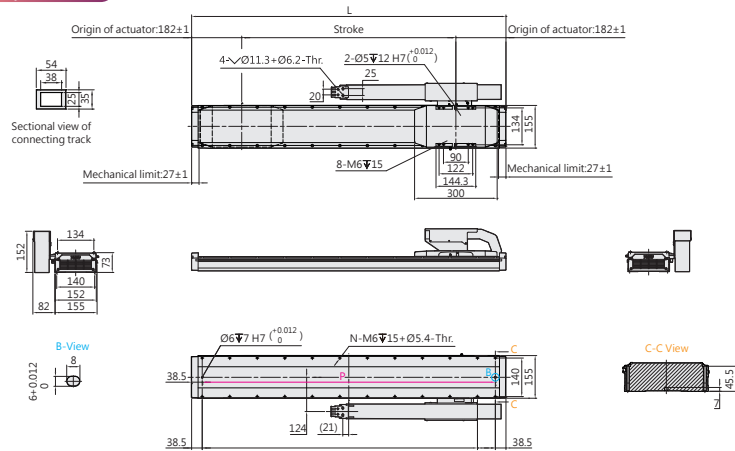
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-20-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	15	16	16	17	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

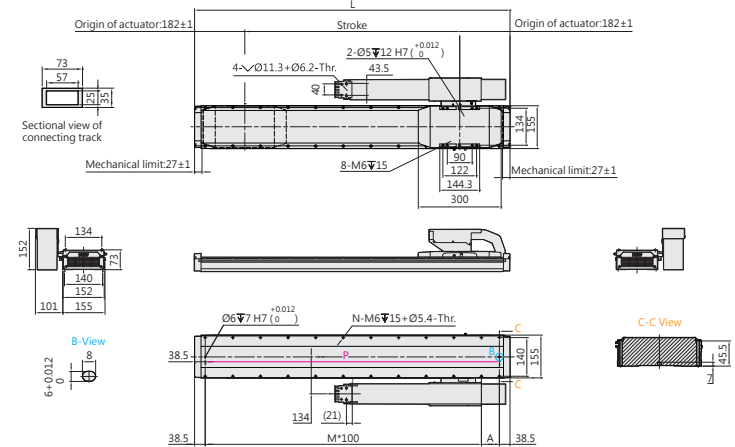
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

### LNF2-20-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	15	16	16	17	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

Features

LGW Series

LGF Series

LTF2 Series

LNF2 Series

LCF2 Series

LAJ / LSF Series

LAU Series

LNR Series

Controller

LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

Features  
LGF Series  
LTF2 Series  
LNF2 Series  
LGF2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LNF2-20 Closed type

# With Iron Core

**LNF2-20-RWS2-N** Unit : mm

2D CAD 3D CAD [Please download the CAD file from TOYO's website : www.toyorobot.com](http://www.toyorobot.com)

Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

**LNF2-20-RWL2-N** Unit : mm

2D CAD 3D CAD [Please download the CAD file from TOYO's website : www.toyorobot.com](http://www.toyorobot.com)

Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

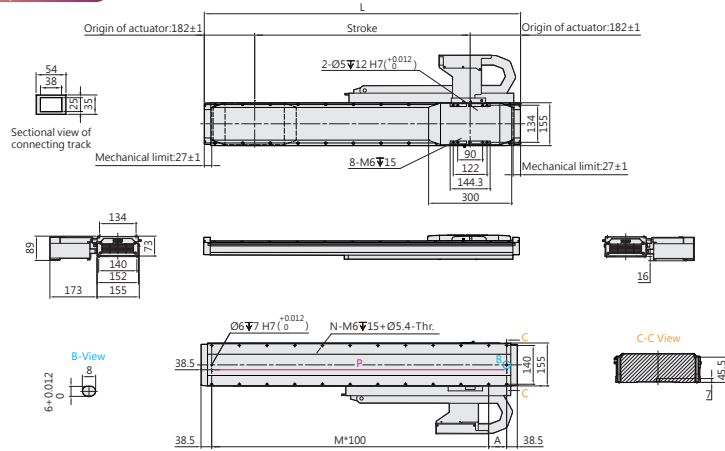
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-20-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



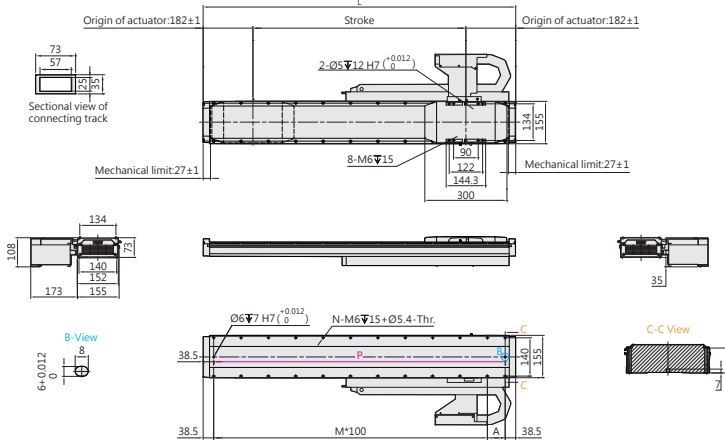
Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

### LNF2-20-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

# LNF2-20 Closed type

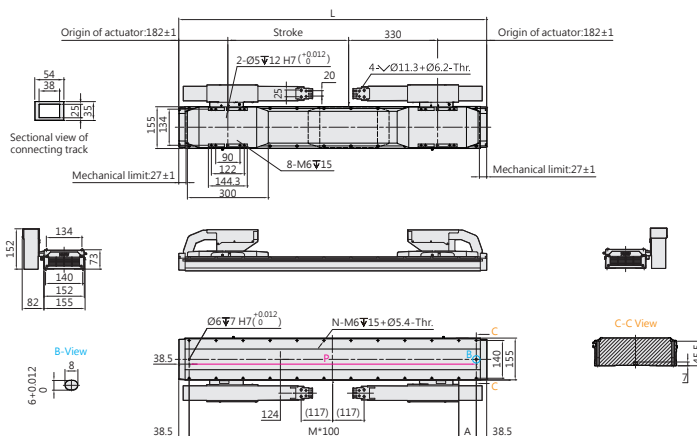
# With Iron Core

## LNF2-20-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

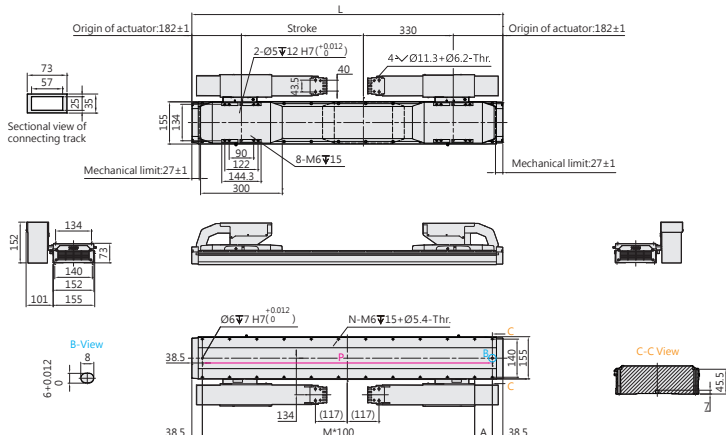
Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

## LNF2-20-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

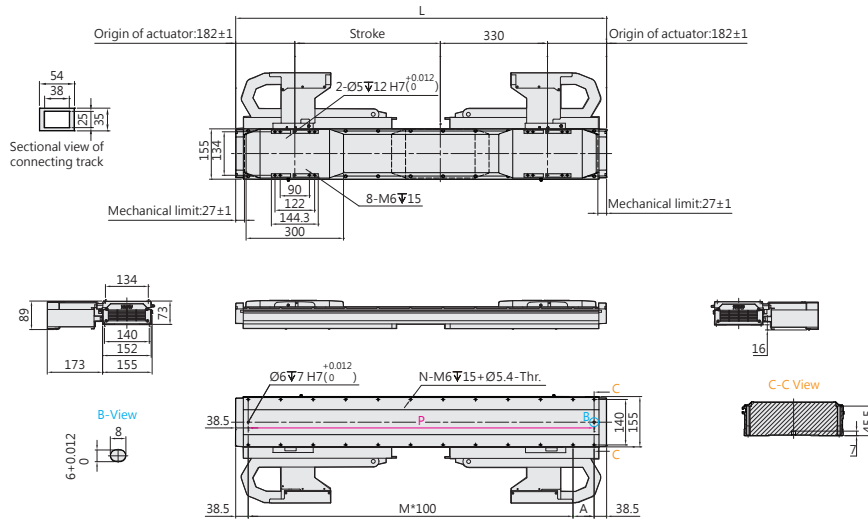
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LNF2-20-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



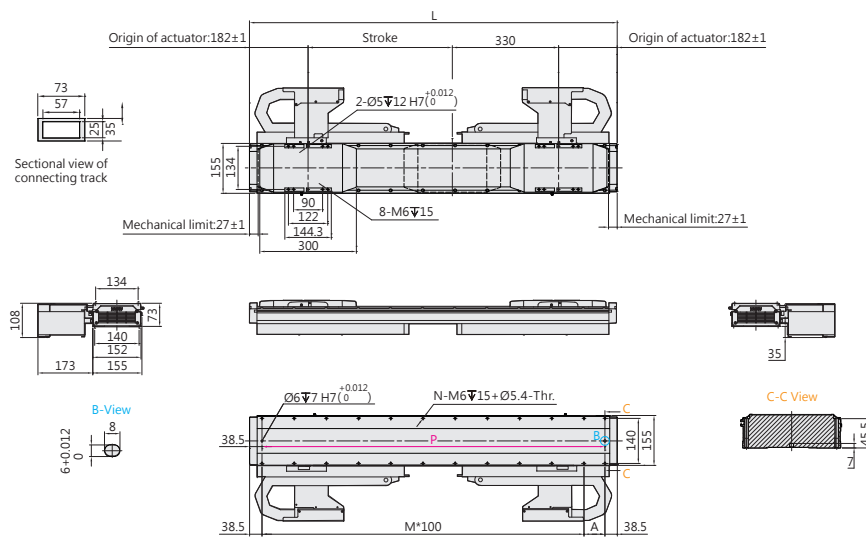
Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

LNF2-20-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

Features

LGW Series

LGF Series

LTP2 Series

**LNF2 Series**

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LNF2  
LNF2-15  
**LNF2-20**  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-20

Closed type

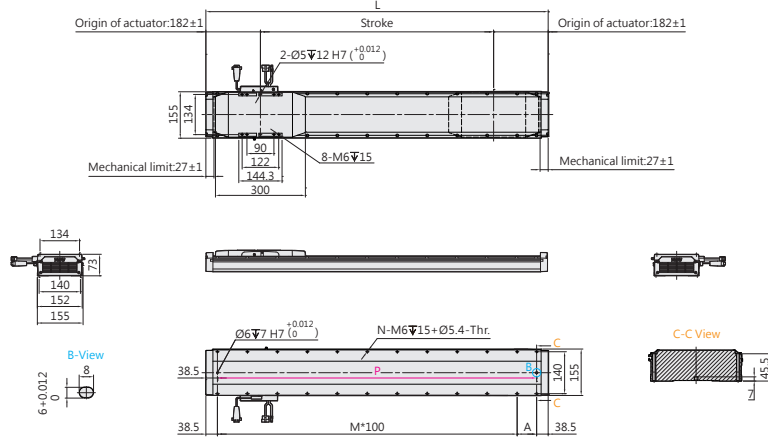
With Iron Core

## LNF2-20-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

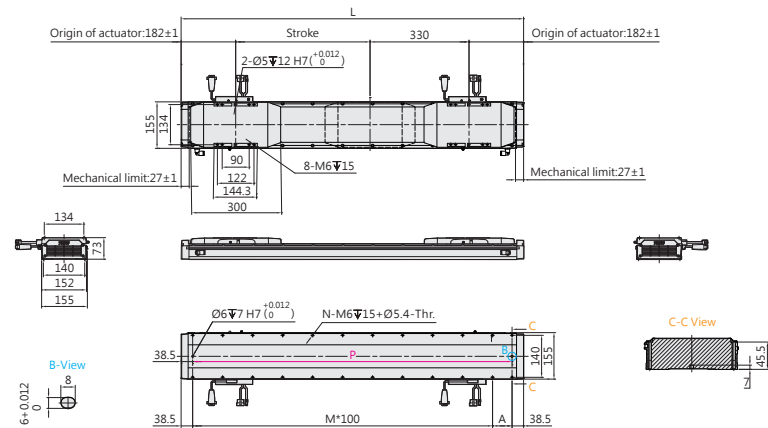
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

## LNF2-20-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

**LNF2 Series**

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LNF2

LNF2-15

**LNF2-20**

LNF2-30

LNF2-45

LNF2-75

# LNF2-30

Closed type

With Iron Core



Maximum Stroke 3018mm

Maximum Speed 3500mm/s

Continuous Thrust 158N

Continuous Payload 54kg

### Ordering Method

## LNF2-30-RHS2-N-3018-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	202-3018mm Pitch 64mm
Double motor	320-3008mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

※ It is compulsory to select N for the controller while choosing cable length N.

#### Hall Cable

-	None
H	Hall

#### Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronics
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

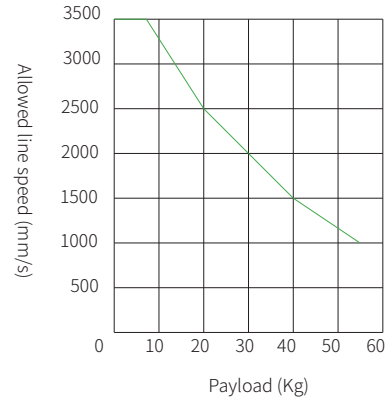


Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

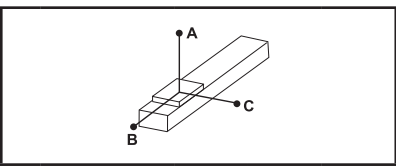
Specification			
<b>Spec</b>	Model	LNF2-30	
	Repeatability (mm)	±0.002	
	Max. Force (N)	713	
	Rated Force (N)	158	
	Max. Payload (kg) <sup>※1</sup>	54	
	Stroke (mm)	Single motor	202-3018 / 64 pitch
		Double motor	320-3008 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

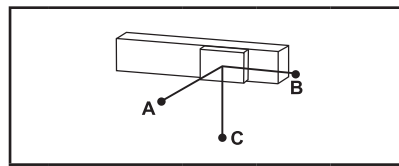
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)

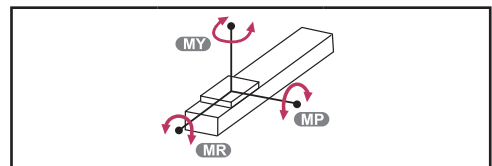


(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LNF2-30	Load	A	B	C
	25 kg	830	150	110
	35 kg	580	105	75
	45 kg	450	75	55
	54 kg	360	60	45

Wall Installation <sup>※2</sup>				
LNF2-15	Load	A	B	C
	25 kg	110	150	830
	35 kg	75	105	580
	45 kg	55	75	450
	54 kg	45	60	360

**Static Loading Moment**



(Unit : N.m)

LNF2-30	MY	2461
	MP	2461
	MR	1865

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTP2 Series

LNF2 Series

LCP2 Series

LAU Series

LAU Series

LNR Series

Controller

LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-30

Closed type

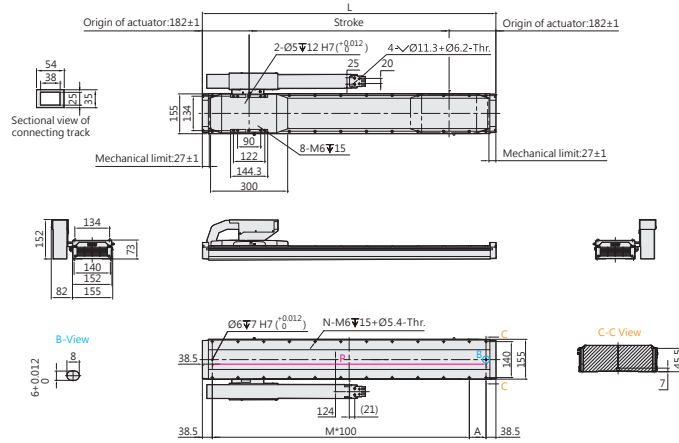
With Iron Core

## LNF2-30-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

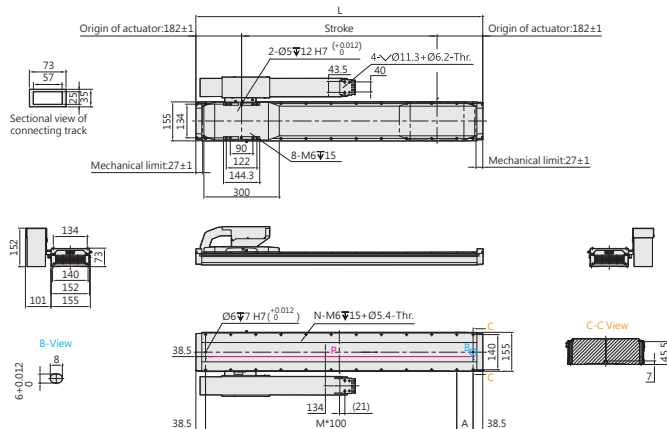
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

## LNF2-30-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

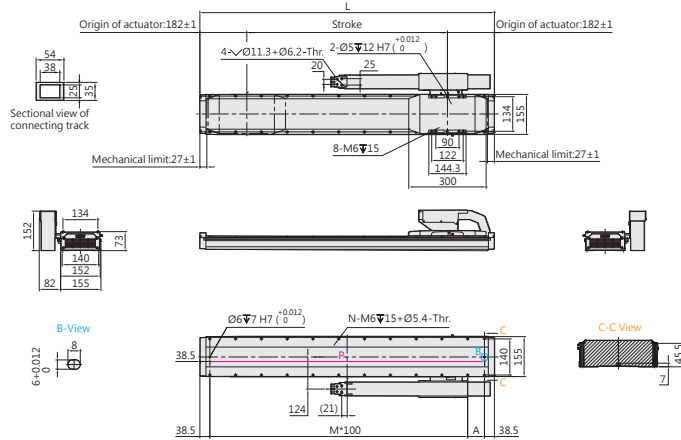
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LNF2-30-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

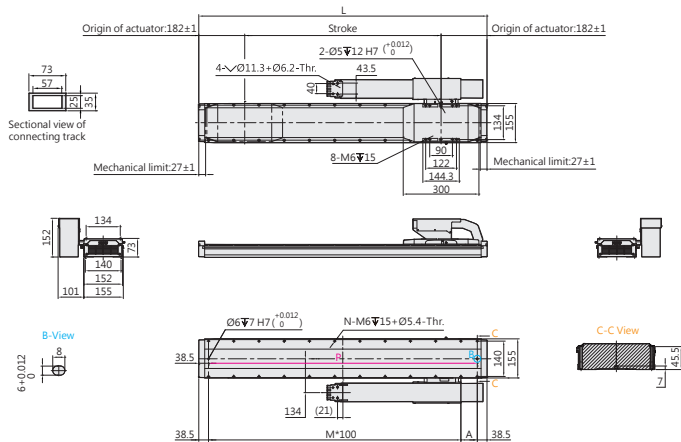
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

LNF2-30-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

Features

LGM Series

LGF Series

LTF2 Series

**LNF2 Series**

LCF2 Series

LAJ / LSF Series

LAU Series

LMB Series

Controller

LNF2

LNF2-15

LNF2-20

**LNF2-30**

LNF2-45

LNF2-75

# LNF2-30

Closed type

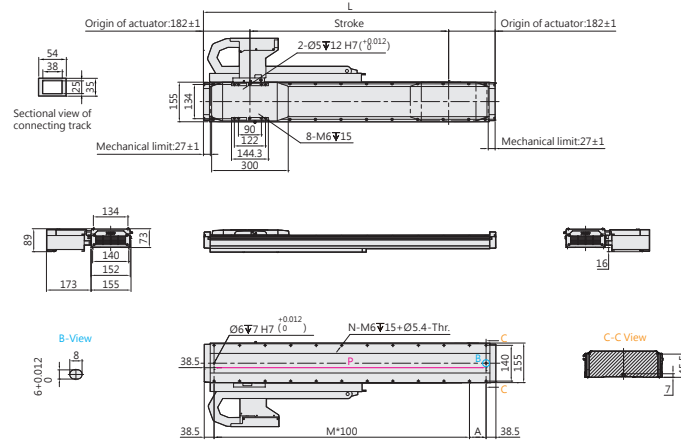
With Iron Core

## LNF2-30-RWS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

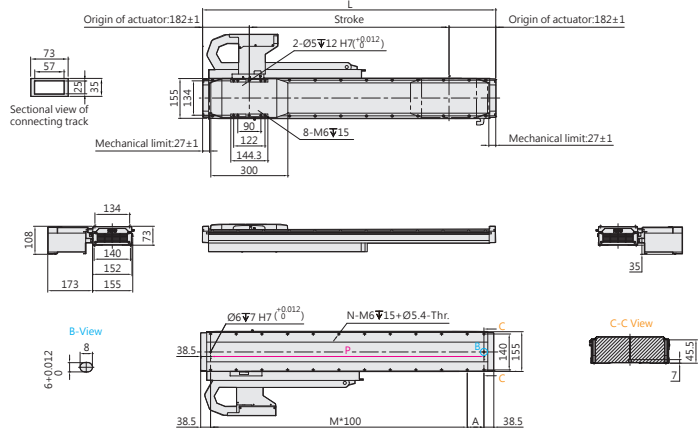
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

## LNF2-30-RWL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

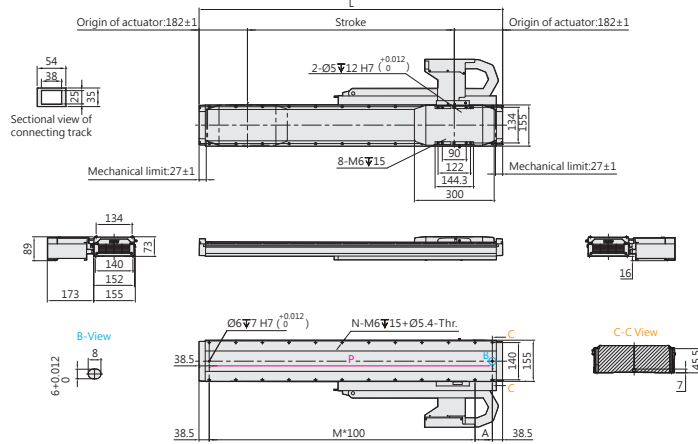
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-30-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

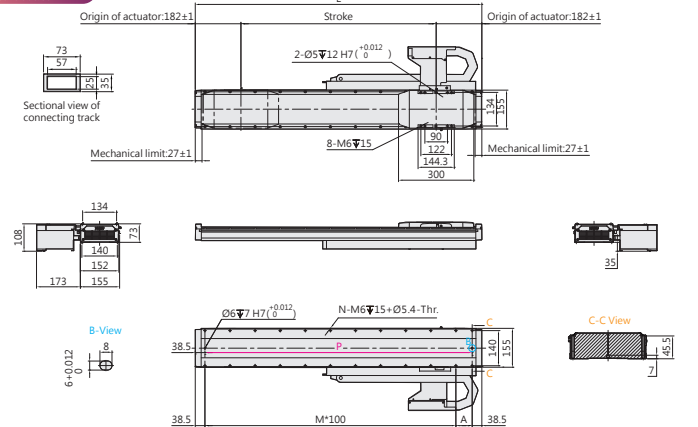
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

### LNF2-30-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

Features  
LGF Series  
LGF Series  
LTF2 Series  
LNF2 Series  
LGF2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LNF2-30 Closed type

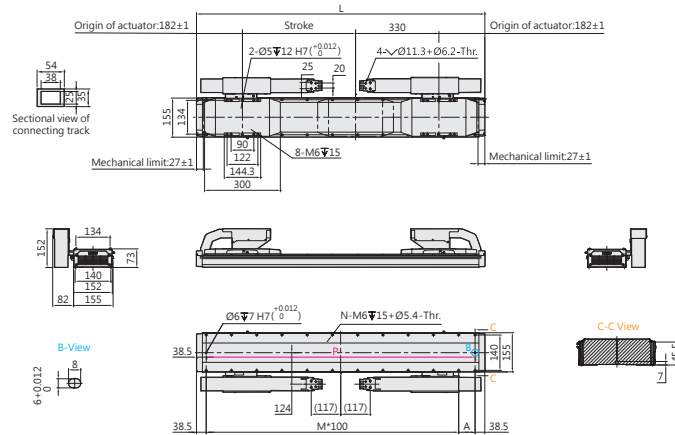
# With Iron Core

## LNF2-30-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

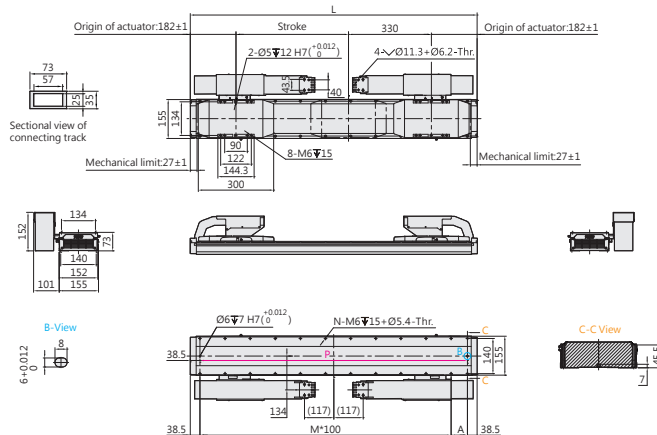
Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

## LNF2-30-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

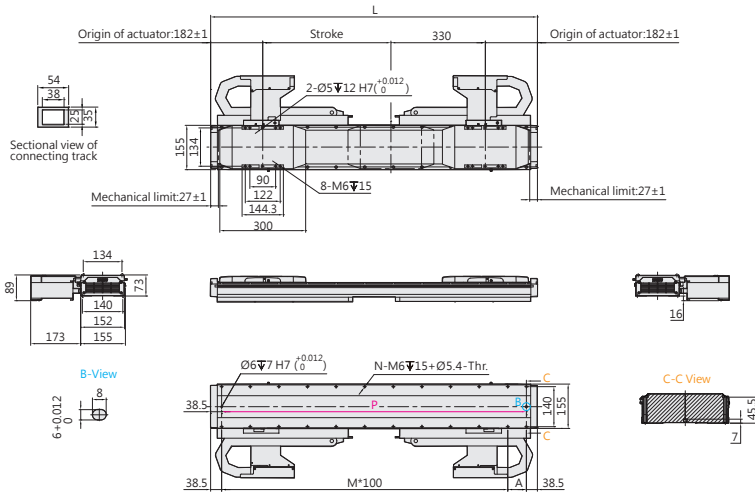
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-30-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



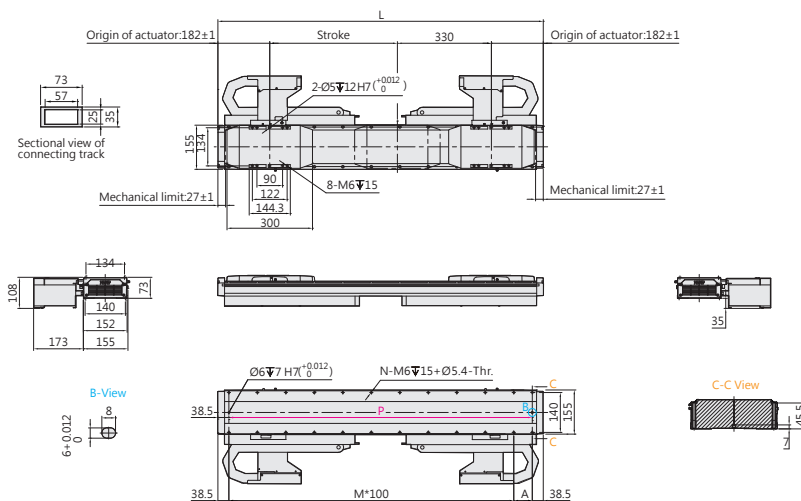
Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

### LNF2-30-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

Features

LGM Series

LGF Series

LTP2 Series

**LNF2 Series**

LCP2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LNF2  
LNF2-15  
LNF2-20  
**LNF2-30**  
LNF2-45  
LNF2-75

Features  
LGF Series  
LTFZ Series  
LNF2 Series  
LGF2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LNF2-30

Closed type

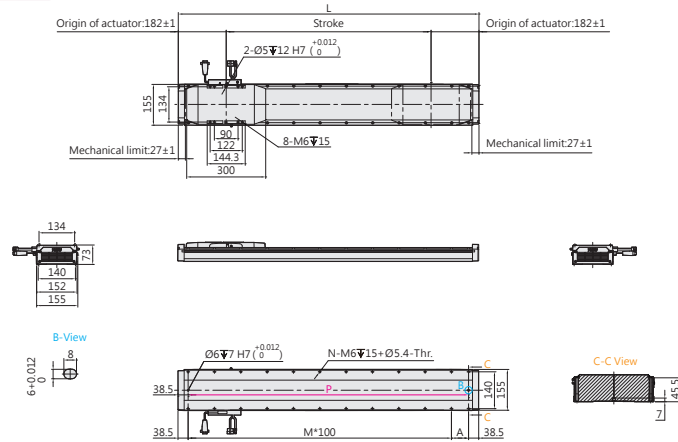
With Iron Core

## LNF2-30-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

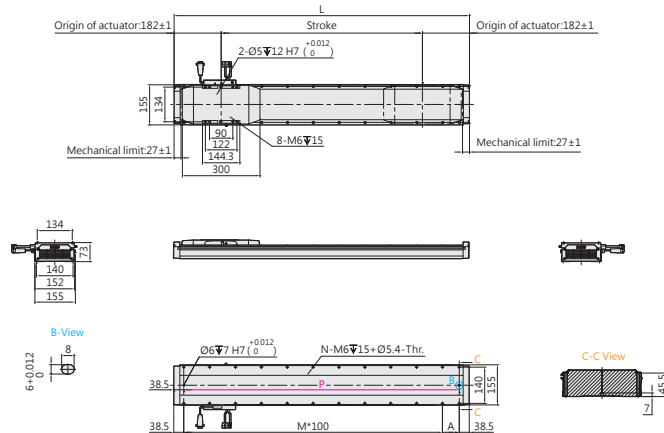
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

## LNF2-30-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6



Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

**LNF2 Series**

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LNF2  
LNF2-15  
LNF2-20  
**LNF2-30**  
LNF2-45  
LNF2-75

# LNF2-45

Closed type

With Iron Core



Maximum Stroke 3053mm

Maximum Speed 3500mm/s

Continuous Thrust 251N

Continuous Payload 90kg

### Ordering Method

## LNF2-45-RHS2-N-3053-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	203-3019mm Pitch 64mm
Double motor	429-3053mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

※ It is compulsory to select N for the controller while choosing cable length N.

#### Hall Cable

-	None
H	Hall

#### Controller type

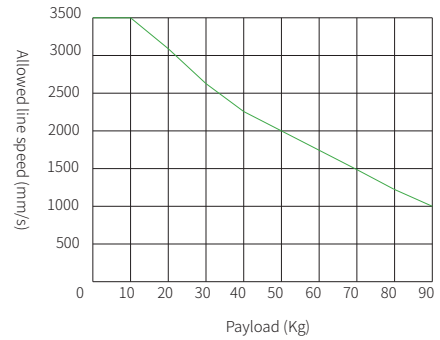
LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronics
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

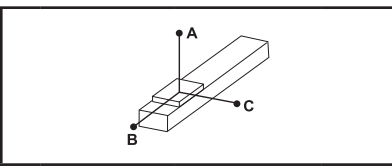
Specification			
<b>Spec</b>	Model	LNF2-45	
	Repeatability (mm)	±0.002	
	Max. Force (N)	1128	
	Rated Force (N)	251	
	Max. Payload (kg) <sup>※1</sup>	90	
	Stroke (mm)	Single motor	203-3019 / 64 pitch
		Double motor	429-3053 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

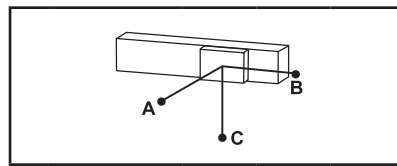
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



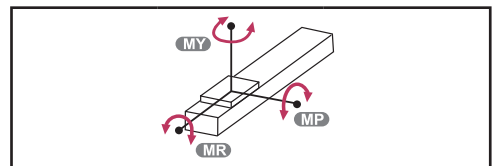
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LNF2-45	Load	A	B	C
	45 kg	700	125	120
	60 kg	520	90	90
	75 kg	410	70	65
	90 kg	330	55	55

Wall Installation <sup>※2</sup>				
LNF2-15	Load	A	B	C
	45 kg	120	125	700
	60 kg	90	90	520
	75 kg	65	70	410
	90 kg	55	55	330

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LNF2-15	MY	3625
	MP	3625
	MR	3757

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTF2 Series

LNF2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LNR Series

Controller

LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-45

Closed type

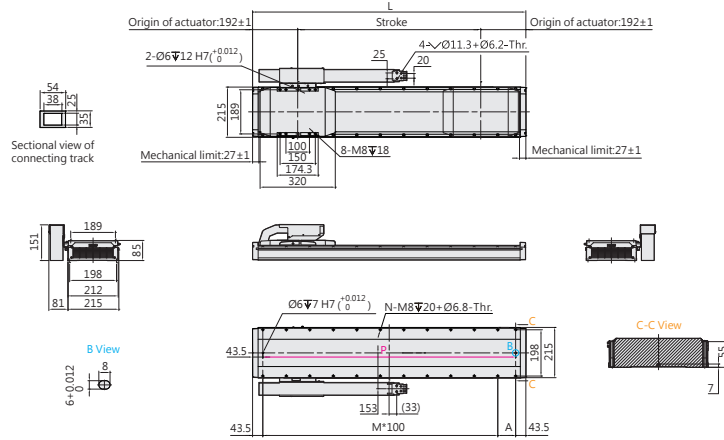
With Iron Core

## LNF2-45-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

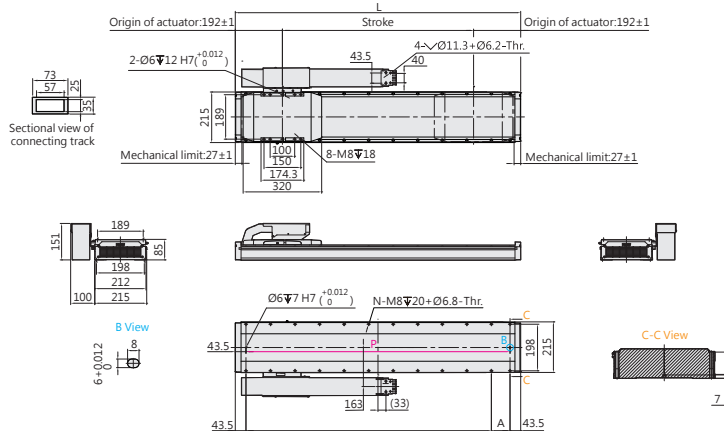
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

## LNF2-45-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

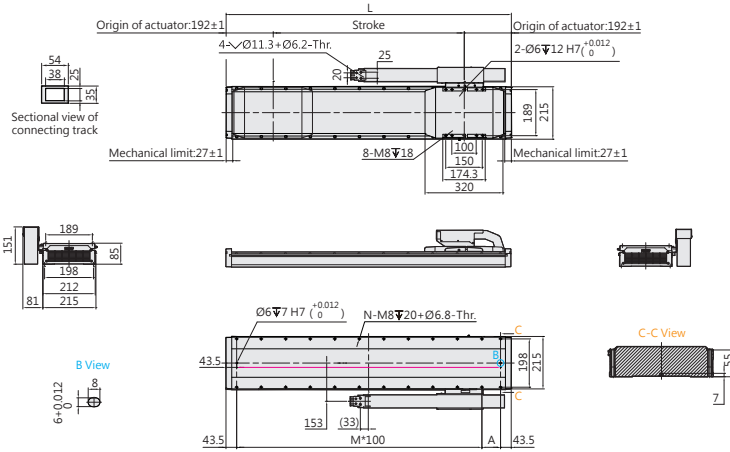
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-45-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

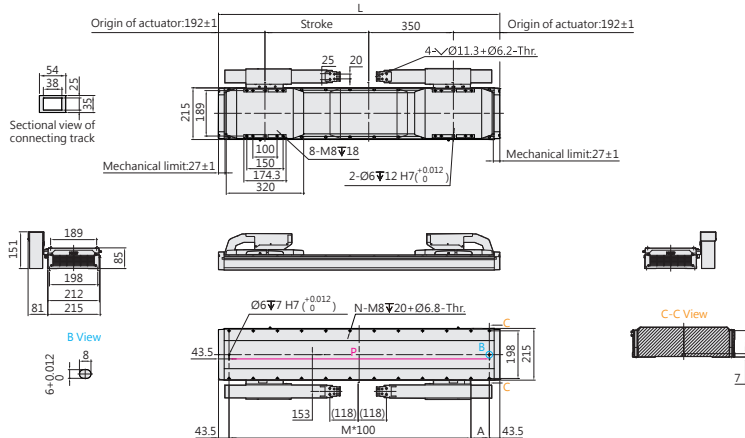
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

### LNF2-45-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

Features

LGW Series

LGF Series

LTP2 Series

LNF2 Series

LCP2 Series

LAJ / LSF Series

LAU Series

LNR Series

Controller

LNF2

LNF2-15

LNF2-20

LNF2-30

LNF2-45

LNF2-75

Features  
LGF Series  
LTF2 Series  
LGF2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LNF2-45 Closed type

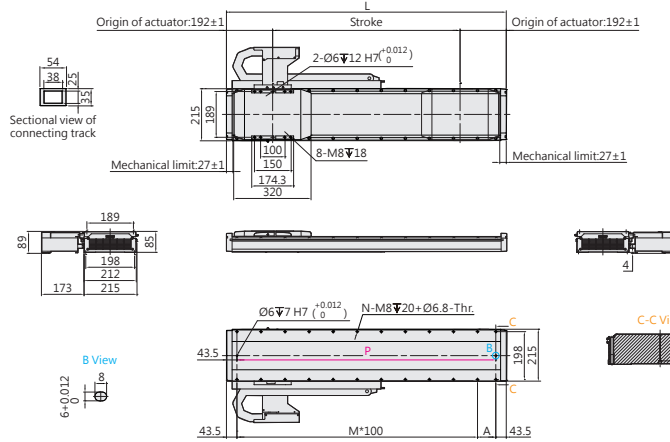
# With Iron Core

## LNF2-45-RWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

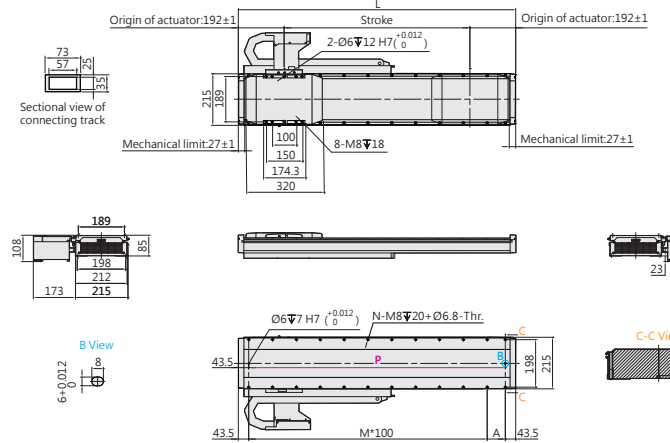
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

## LNF2-45-RWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

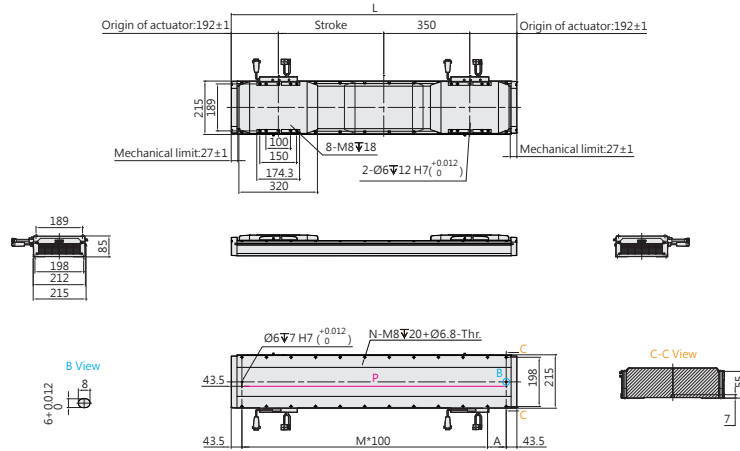
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-45-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

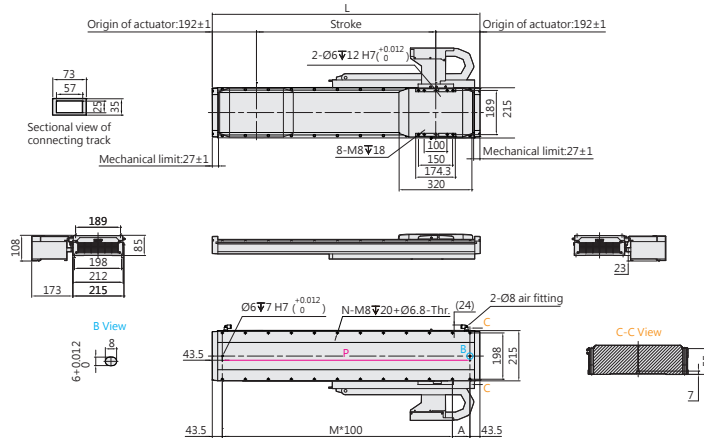
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

### LNF2-45-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

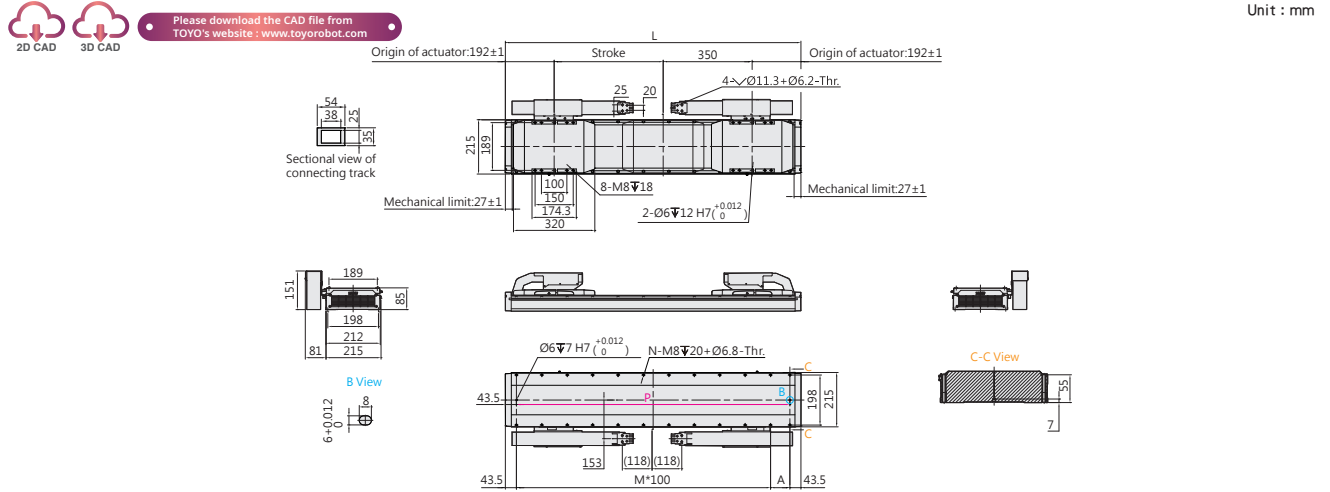
  

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

# LNF2-45 Closed type

## With Iron Core

### LNF2-45-DHS2-D

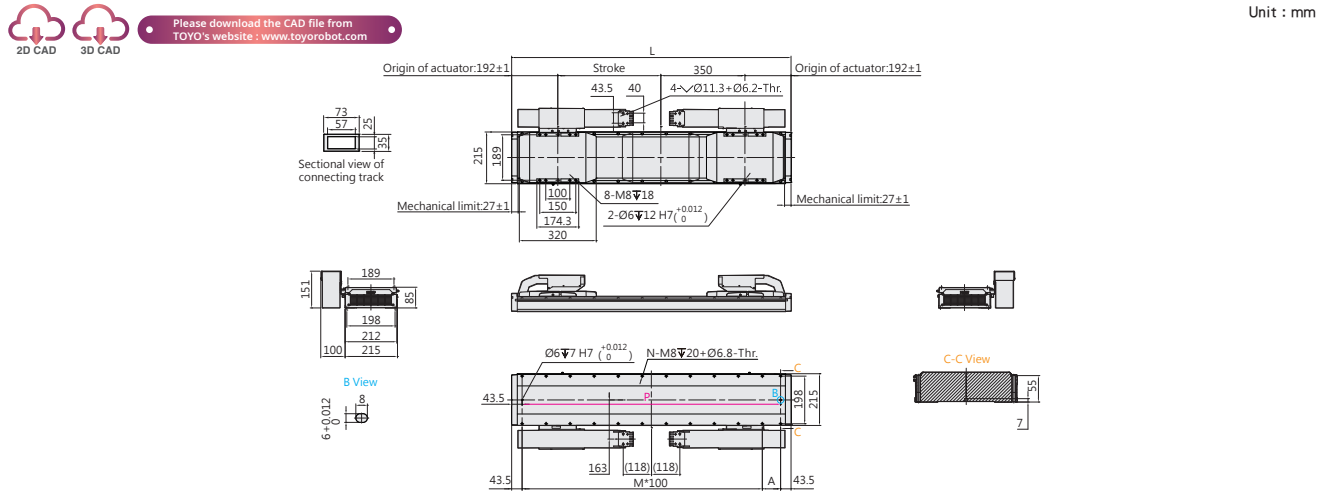


Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3

### LNF2-45-DHL2-D



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3



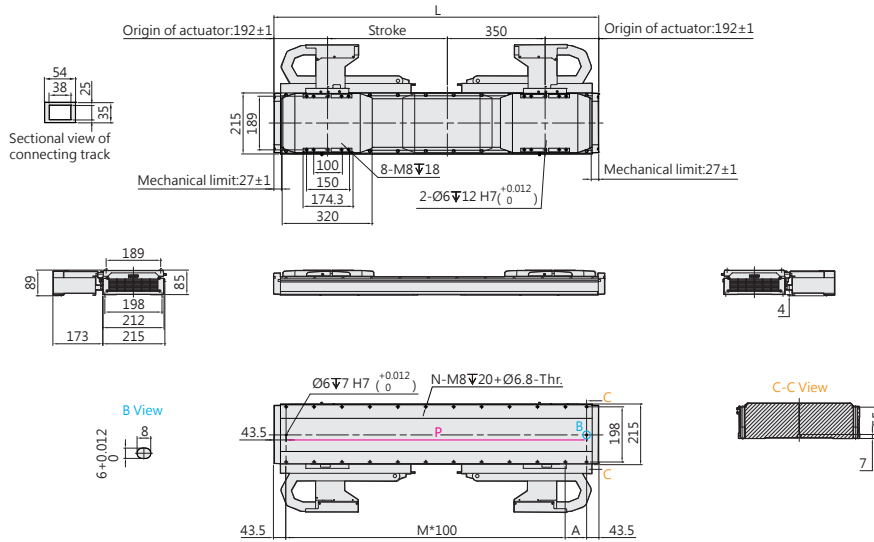
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-45-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



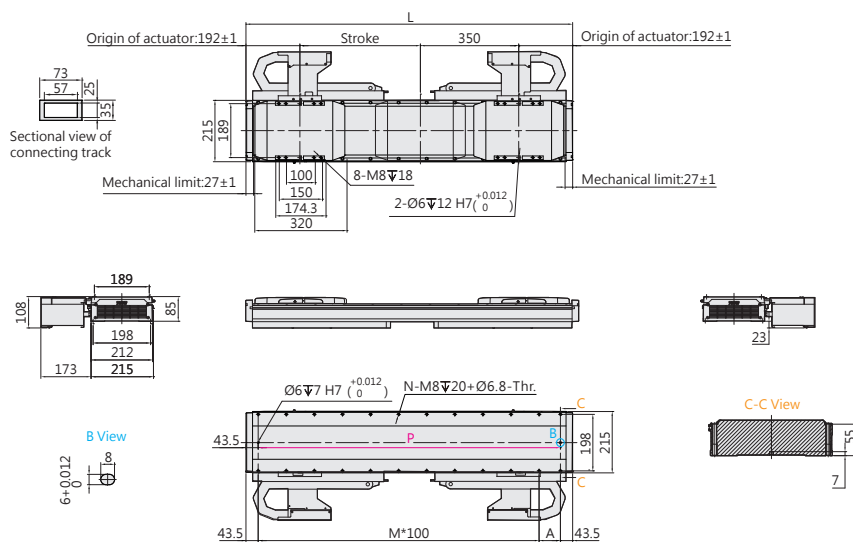
Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

### LNF2-45-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

# LNF2-45

Closed type

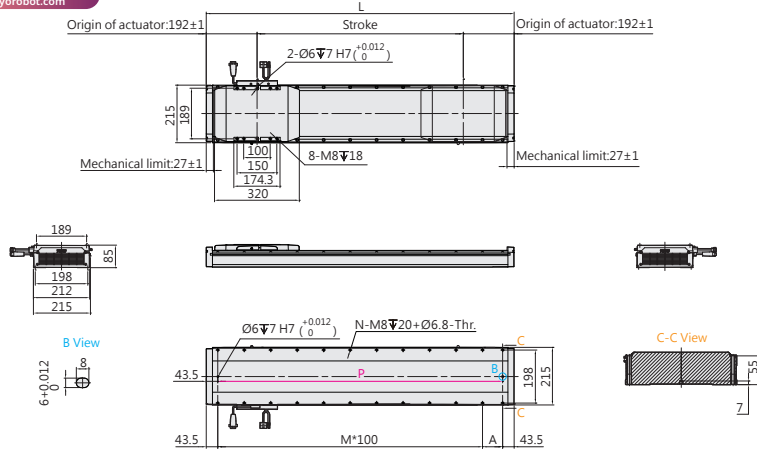
With Iron Core

## LNF2-45-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

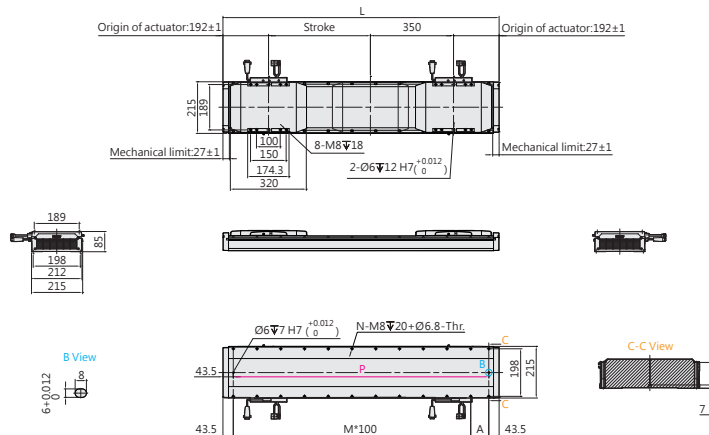
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

## LNF2-45-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3	

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

**LNF2 Series**

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

**LNF2**

LNF2-15

LNF2-20

LNF2-30

**LNF2-45**

LNF2-75

# LNF2-75

Closed type

With Iron Core



Maximum Stroke 3053mm

Maximum Speed 3500mm/s

Continuous Thrust 340N

Continuous Payload 120kg

### Ordering Method

## LNF2-75-RHS2-N-3053-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	203-3019mm Pitch 64mm
Double motor	429-3053mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

#### Hall Cable

-	None
H	Hall

#### Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronics
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

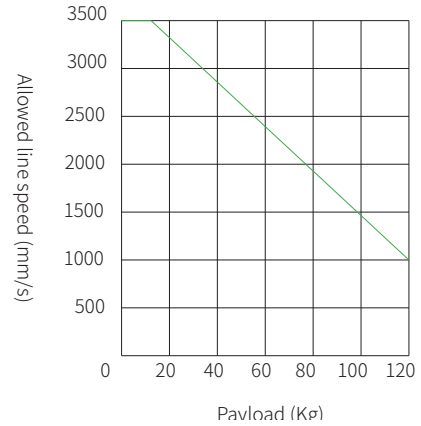
※ It is compulsory to select N for the controller while choosing cable length N.

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

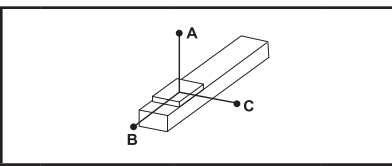
Specification			
<b>Spec</b>	Model	LNF2-75	
	Repeatability (mm)	±0.002	
	Max. Force (N)	1532	
	Rated Force (N)	340	
	Max. Payload (kg) <sup>※1</sup>	120	
	Stroke (mm)	Single motor	203-3019 / 64 pitch
		Double motor	429-3053 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

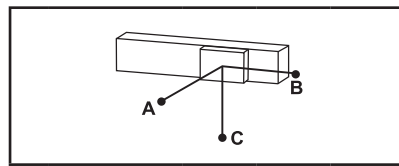
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



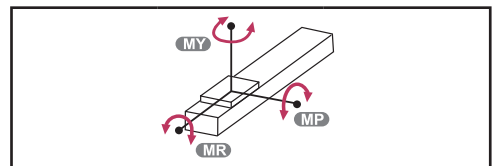
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LNF2-75	Load	A	B	C
	60 kg	450	70	70
	80 kg	340	50	45
	100 kg	260	35	35
	120 kg	200	25	25

Wall Installation <sup>※2</sup>				
LNF2-75	Load	A	B	C
	60 kg	70	70	450
	80 kg	45	50	340
	100 kg	35	35	260
	120 kg	25	25	200

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LNF2-75	MY	3625
	MP	3625
	MR	3757

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTP2 Series

LNF2 Series

LCP2 Series

LAJ / LSF Series

LAU Series

LMR Series

Controller

LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

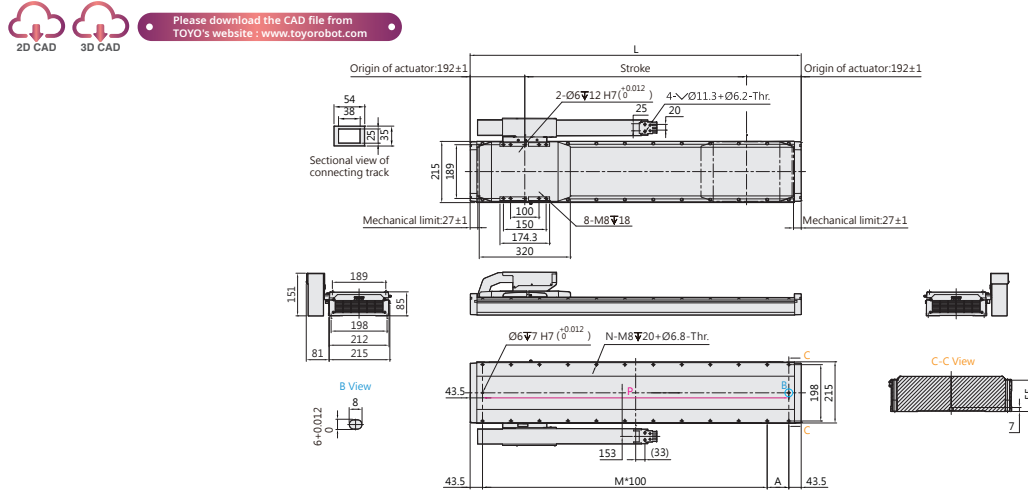
Features  
LGF Series  
LGF Series  
LTF2 Series  
LGF2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LNF2-75 Closed type

# With Iron Core

## LNF2-75-RHS2-N

Unit : mm

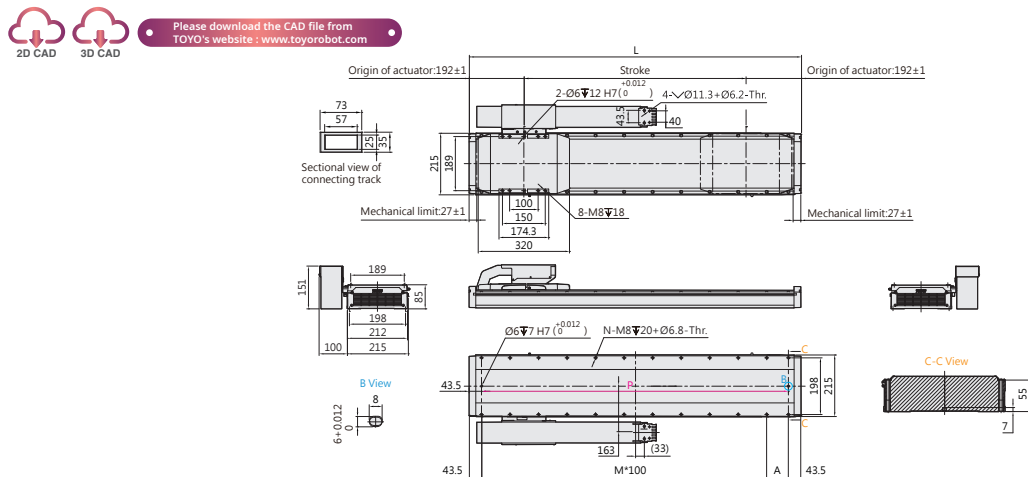


Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

## LNF2-75-RHL2-N

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

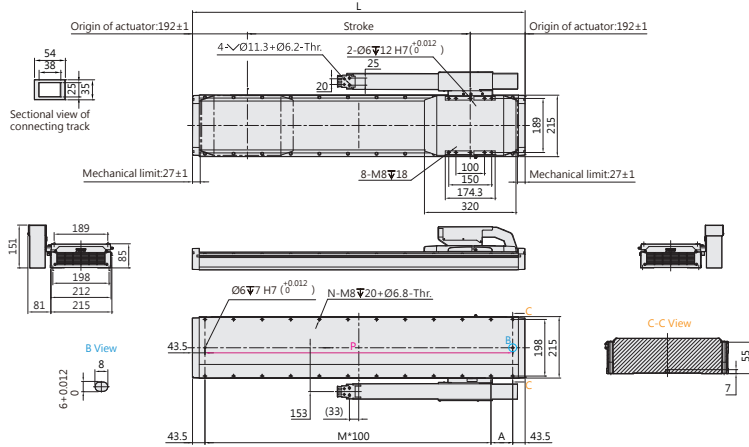
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LNF2-75-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

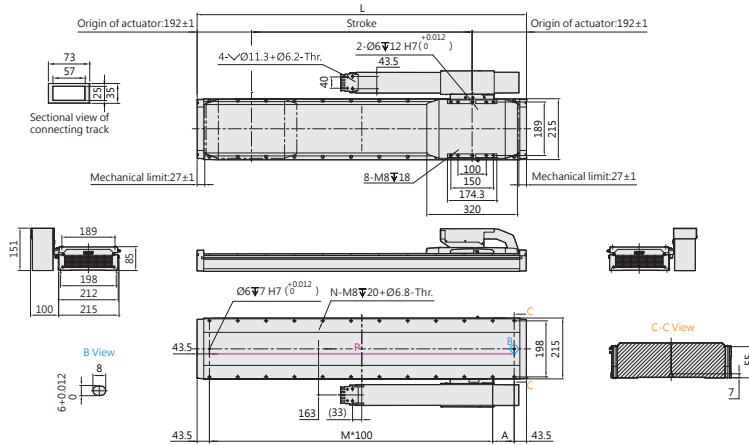
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

### LNF2-75-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

Features

LGM Series

LGF Series

LTP2 Series

LNF2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

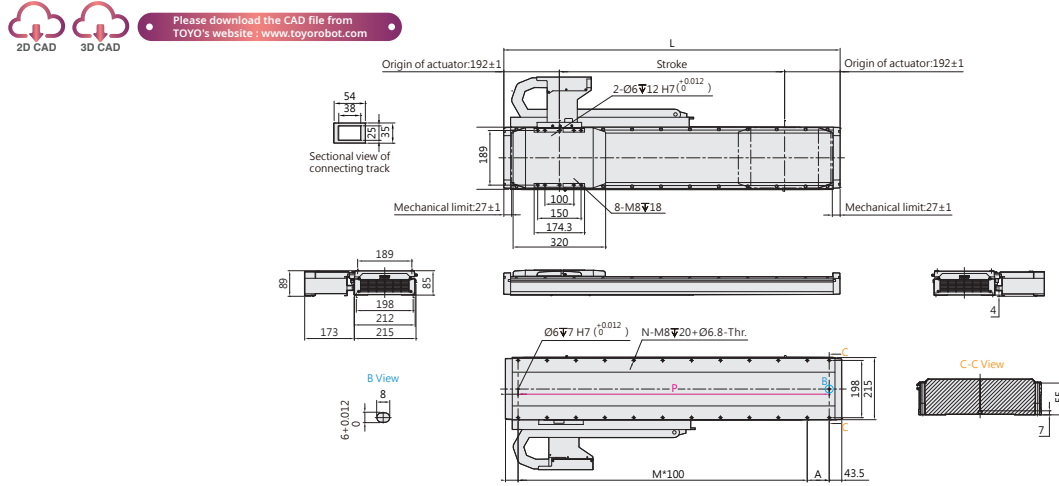
LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-75 Closed type

# With Iron Core

## LNF2-75-RWS2-N

Unit : mm

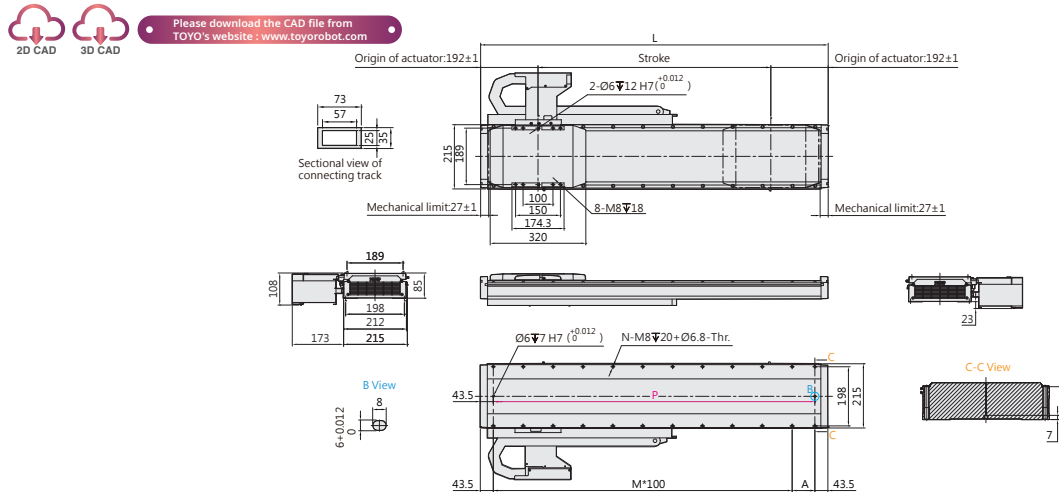


Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

## LNF2-75-RWL2-N

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2



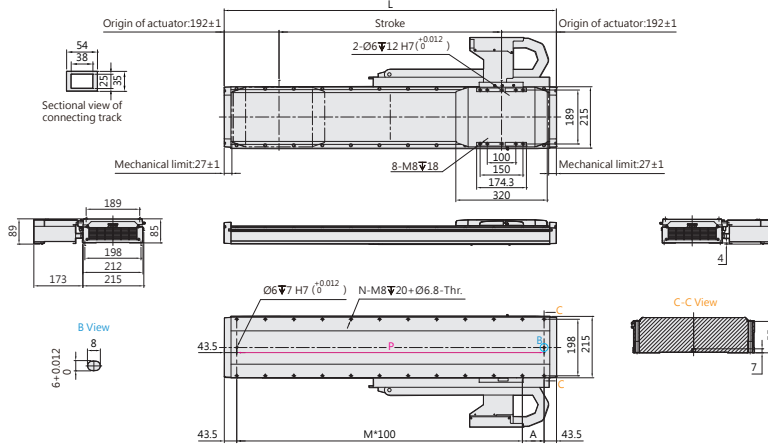
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LNF2-75-LWS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

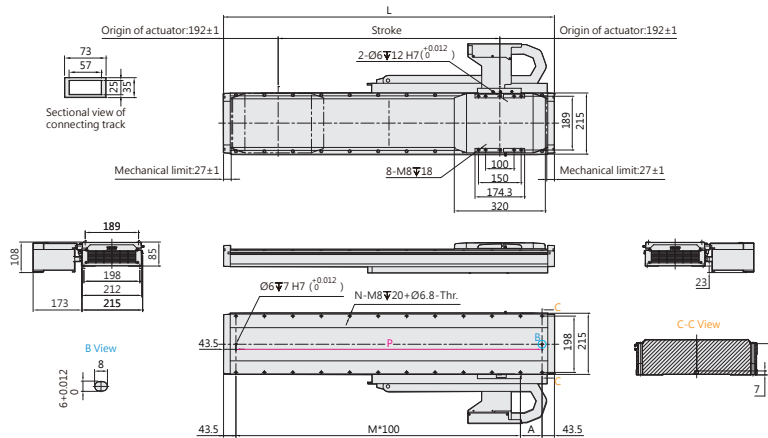
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

LNF2-75-LWL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

Features

LGM Series

LGF Series

LTF2 Series

LNF2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LNF2

LNF2-15

LNF2-20

LNF2-30

LNF2-45

LNF2-75

# LNF2-75 Closed type

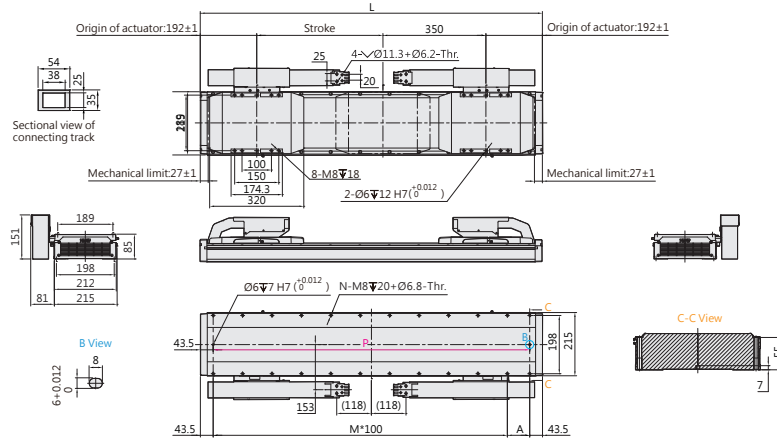
## With Iron Core

### LNF2-75-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

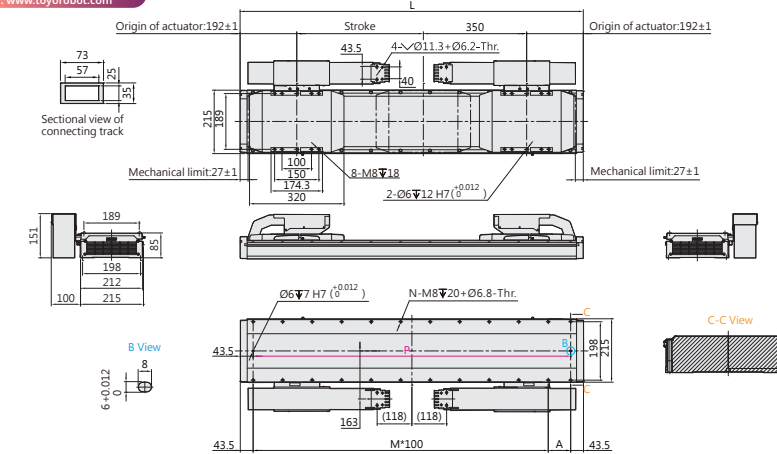
Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3

### LNF2-75-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3

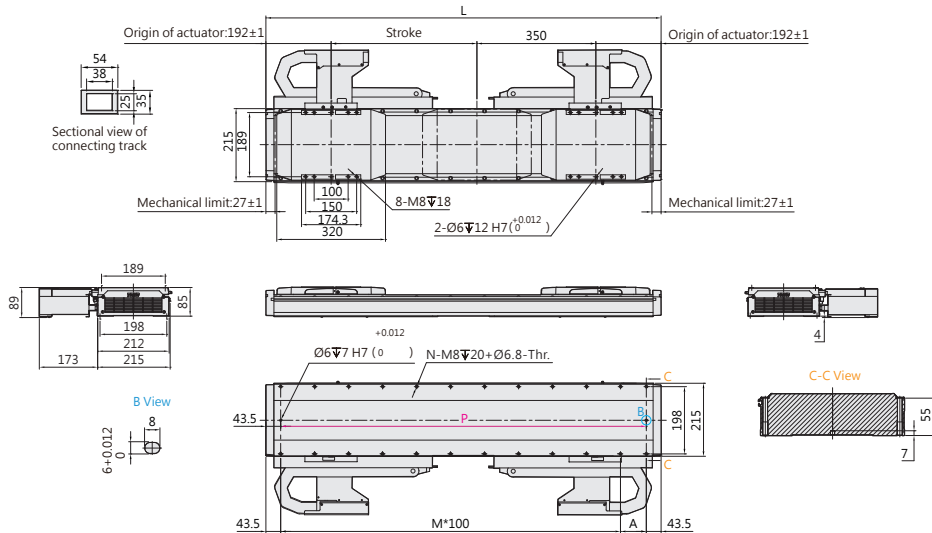
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LNF2-75-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



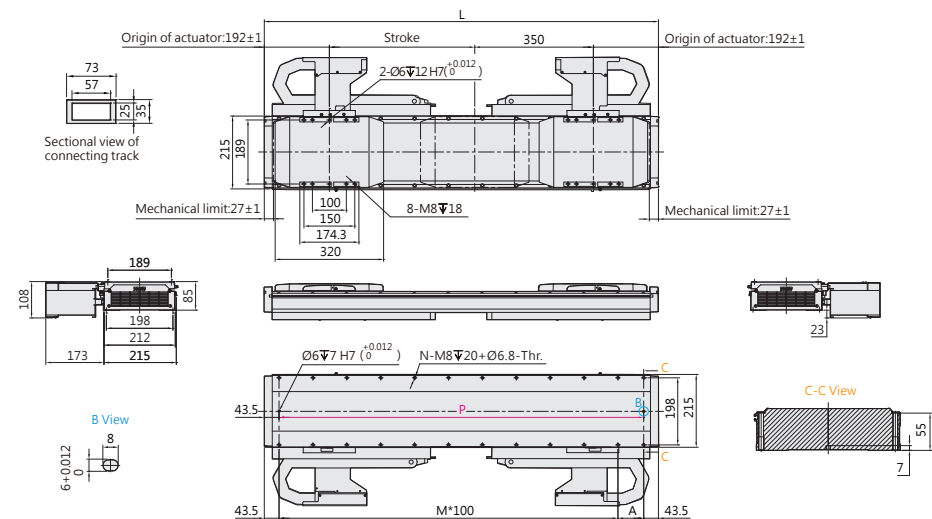
Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

LNF2-75-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

Features

LGM Series

LGF Series

LTP2 Series

LNF2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMB Series

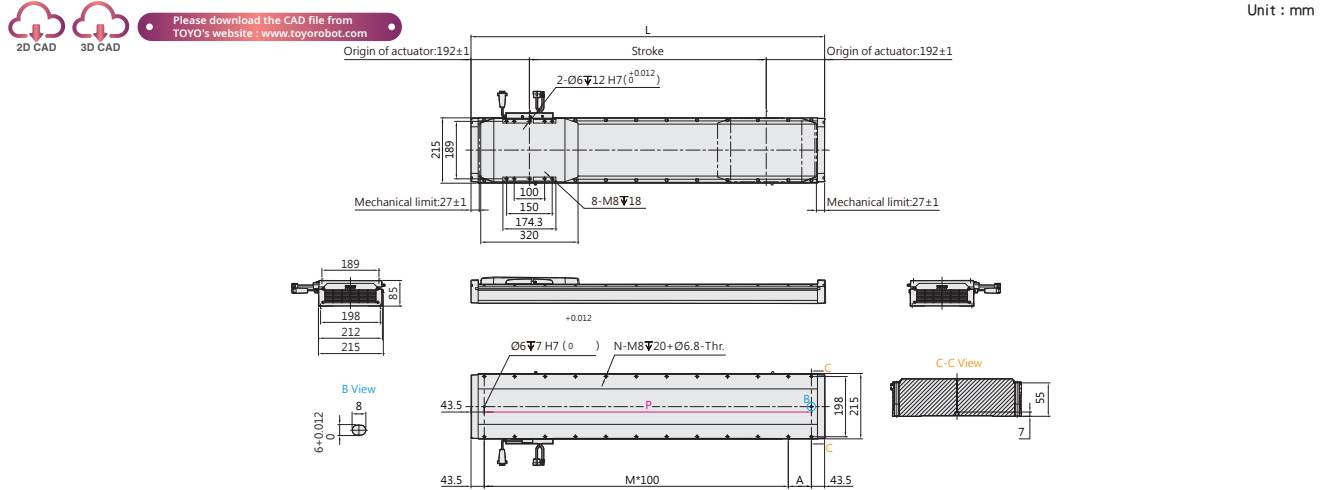
Controller

LNF2  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

# LNF2-75 Closed type

## With Iron Core

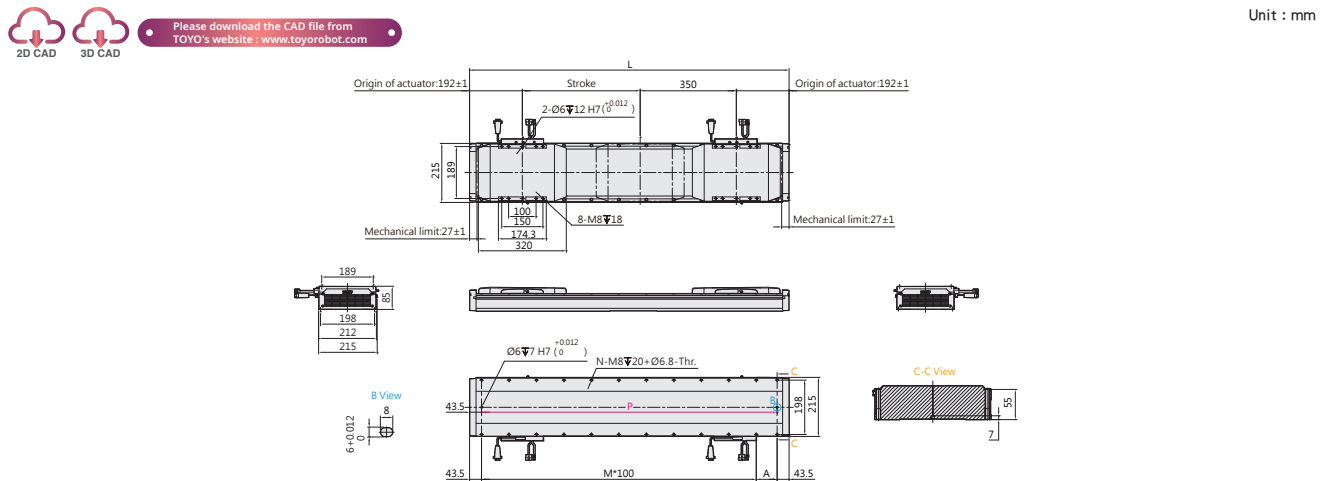
### LNF2-75-N-N



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	8	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

### LNF2-75-N-D



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	
N	50	52	54	54	56	58	60	62	62	64	64	66	68	68	70	72	72	74	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

**LNF2 Series**

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

**LNF2**  
LNF2-15  
LNF2-20  
LNF2-30  
LNF2-45  
LNF2-75

Features

LGW Series

LGF Series

LTF2 Series

LNFP2 Series

LCPF2 Series

LAF / LSF Series

LAU Series

LNR Series

Controller

## Memo

# LCF2

(Clean room type)

**Class  
1**

## Iron Core Linear Motor Robot

### Contents

MEDIUM

LCF2-15



Width 133mm

Max. stroke 3024mm..... 179

Continuous payload 20kg

MEDIUM

LCF2-20



Width 155mm

Max. stroke 3018mm..... 189

Continuous payload 40kg

MEDIUM

LCF2-30



Width 155mm

Max. stroke 3018mm..... 199

Continuous payload 54kg

LAREGE

LCF2-45



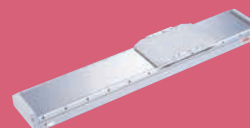
Width 215mm

Max. stroke 3053mm..... 209

Continuous payload 90kg

LAREGE

LCF2-75



Width 215mm

Max. stroke 3053mm..... 219

Continuous payload 120kg

## Spec Index

### LCF2 iron core linear motor module (Class1)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Clean Room	Linear Motor Robot	133	LCF2-15	Single motor	3A	±0.002	LMF15	59	20	3500
				Double motor	3A*2	±0.002	LMF15			
		155	LCF2-20	Single motor	3A	±0.002	LMF20	113	40	3500
				Single motor	3A*2	±0.002	LMF20			
		155	LCF2-30	Single motor	3A	±0.002	LMF30	158	54	3500
				Single motor	3A*2	±0.002	LMF30			
		215	LCF2-45	Single motor	6A	±0.002	LMF45	251	90	3500
				Single motor	6A*2	±0.002	LMF45			
		215	LCF2-75	Single motor	6A	±0.002	LMF75	340	120	3500
				Single motor	6A*2	±0.002	LMF75			

※ LCF2-15, LCF2-20, LCF2-30, LCF2-45, LCF2-75 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 5m/s<sup>2</sup>.

※ Please consult with our sales department for customized stroke.

※ 1500 mm/s maximum linear speed for all cleanroom-rated models.



Max. Linear Speed (mm/s)													Page			
Stroke	200	300	325	425	450	2650	2750	2800	2850	2900	2950	3000		3024	3053	
															3500	179
															3500	189
															3500	199
															3500	209
															1500	219
															1500	

# LCF2-15

Clean room Type

With Iron Core



Maximum Stroke 3024m

Maximum Speed 3500mm/s

Continuous Thrust 59N

Continuous Payload 20kg

### Ordering Method

## LCF2-15-RHS2-N-3024-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	208-3024mm Pitch 64mm
Double motor	332-3020mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

#### Hall Cable

-	None
H	Hall

#### Controller type

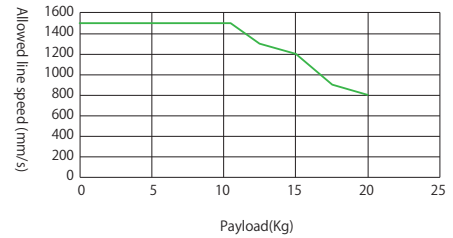
LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronic
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

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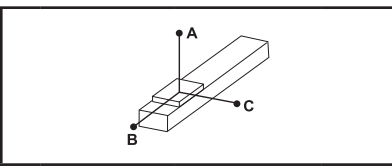
Specification			
<b>Spec</b>	Model	LCF2-15	
	Repeatability (mm)	±0.002	
	Max. Force (N)	266	
	Rated Force (N)	59	
	Max. Payload (kg) <sup>※1</sup>	20	
	Stroke (mm)	Single motor	208-3024 / 64 pitch
		Double motor	332-3020 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

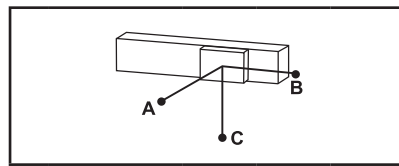
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



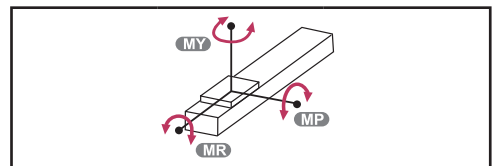
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LCF2-15	Load	A	B	C
	5 kg	3500	700	600
	10 kg	1750	350	300
	15 kg	1150	230	200
	20 kg	850	170	140

Wall Installation <sup>※2</sup>				
LCF2-15	Load	A	B	C
	5 kg	600	700	3500
	10 kg	300	350	1750
	15 kg	200	230	1150
	20 kg	140	170	850

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LCF2-15	MY	1667
	MP	1667
	MR	1469

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTF2 Series

LNf2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

Features  
LGF Series  
LGF Series  
LTFZ Series  
LNPF Series  
LAF / LSF Series  
LAU Series  
LNR Series  
Controller

# LCF2-15

Clean room Type

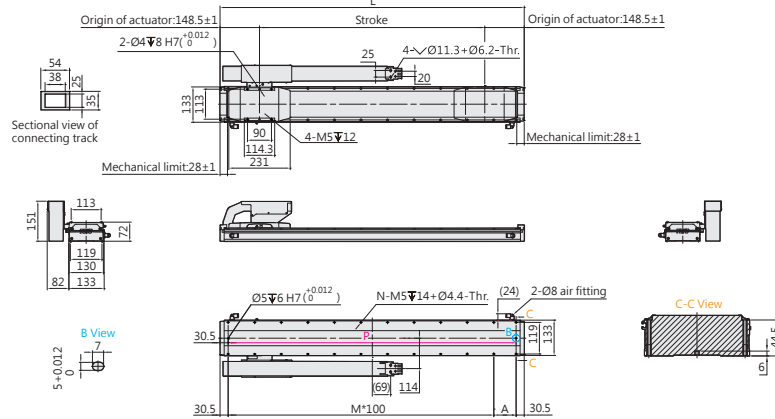
With Iron Core

## LCF2-15-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

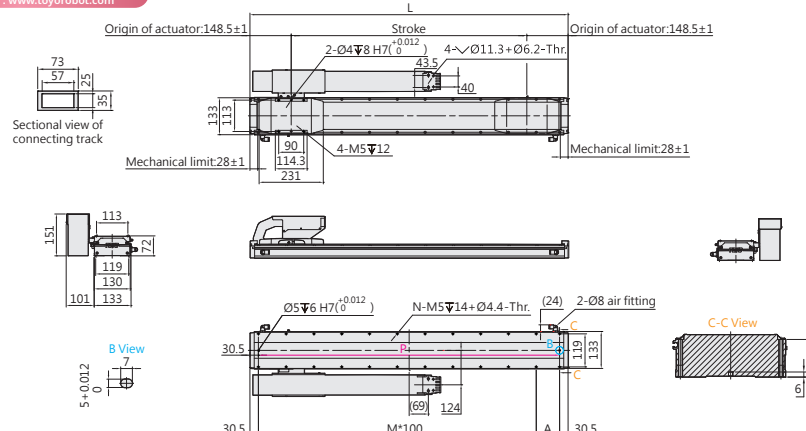
Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

## LCF2-15-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

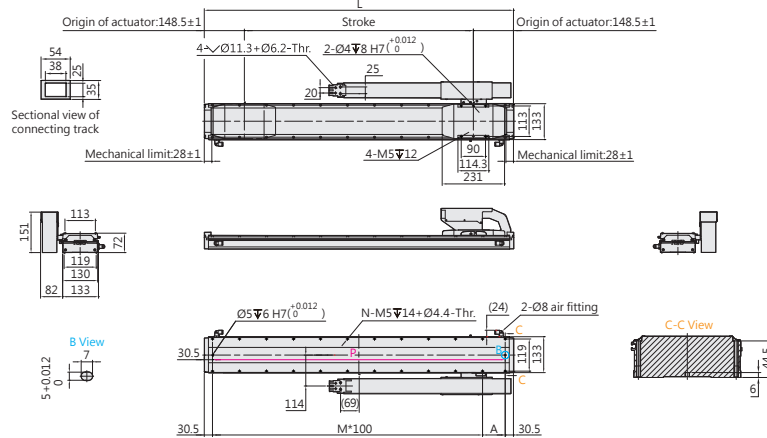
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-15-LHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

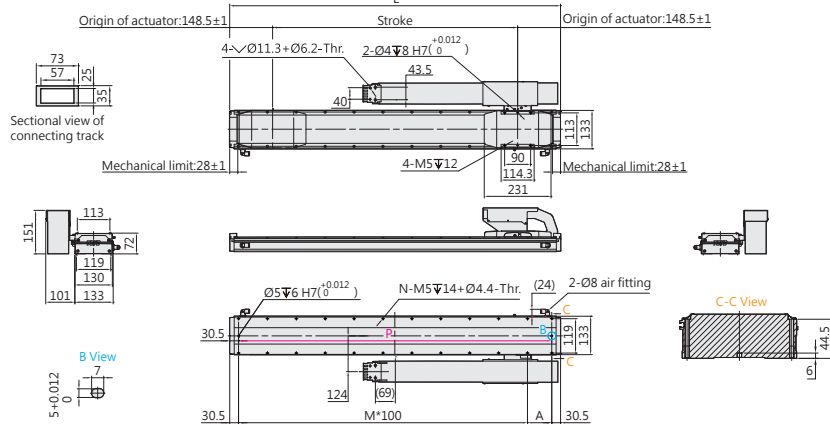
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L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

LCF2-15-LHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

Features

LGW Series

LGJ Series

LTP2 Series

LNJ2 Series

LCF2 Series

LAJ / LSF Series

LAU Series

LJR Series

Controller

LCF2

LCF2-15

LCF2-20

LCF2-30

LCF2-45

LCF2-75

# LCF2-15

Clean room Type

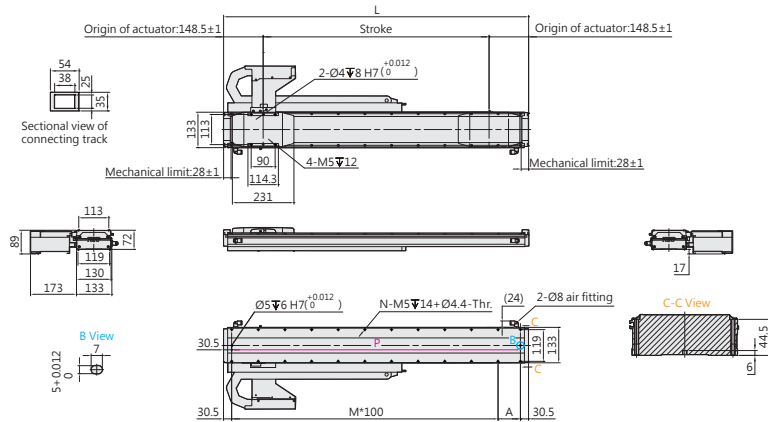
With Iron Core

## LCF2-15-RWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



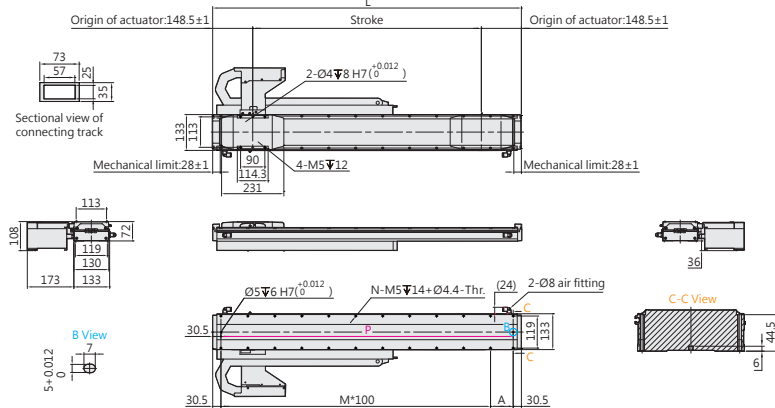
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L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	14	15	15	16	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0

## LCF2-15-RWL2-N

單位 Unit :mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	14	15	15	16	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0

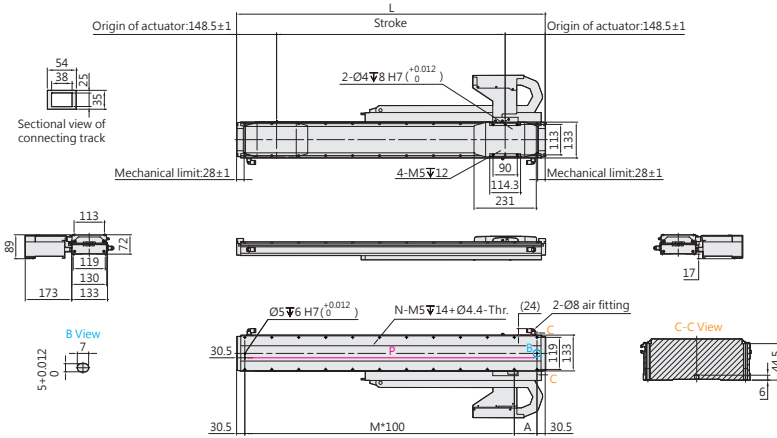
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LCF2-15-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



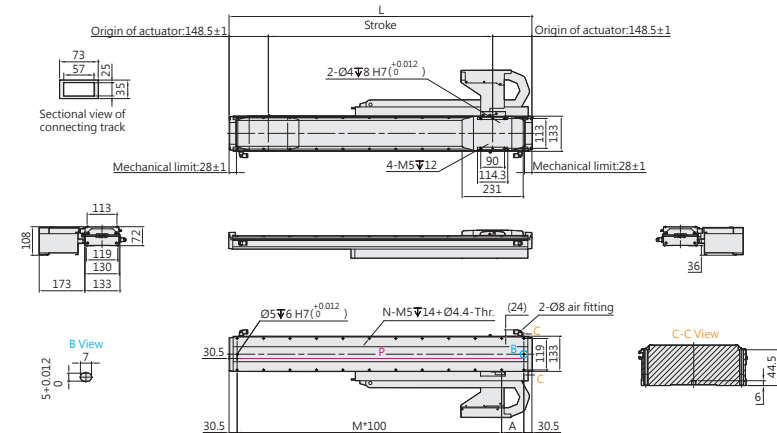
Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	10	11	11	12	13	13	14	15	15	16	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0

### LCF2-15-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	4	4	5	6	6	7	7	8	9	10	11	11	12	13	13	14	15	15	16	16
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6
Stroke	1488	1552	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704
L	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	20.1	20.5	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0

Features  
LGF Series  
LTFZ Series  
LNFZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-15

Clean room Type

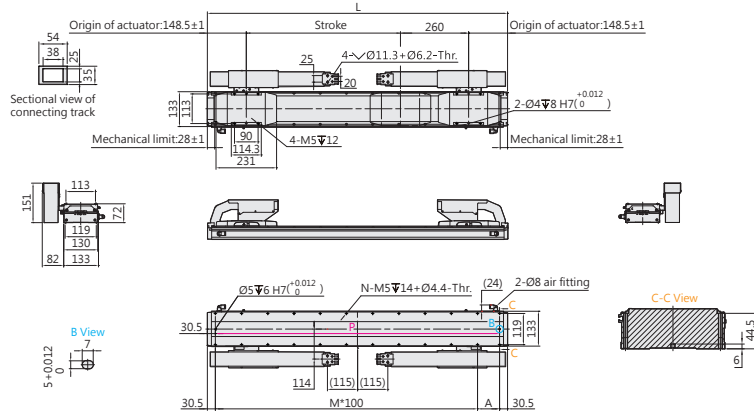
With Iron Core

## LCF2-15-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1

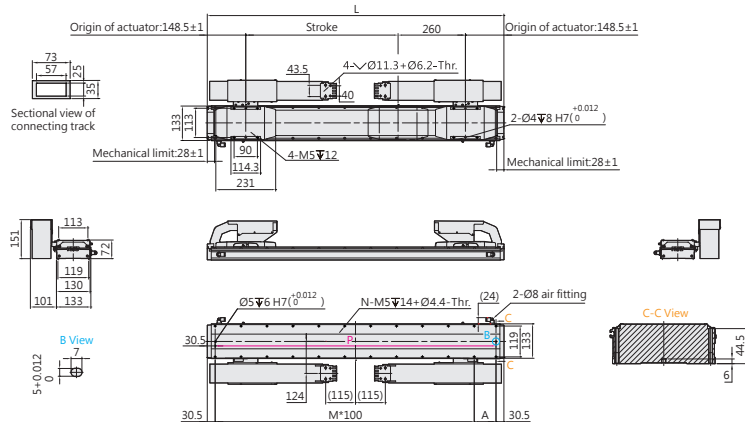
Stroke	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020
L	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321	3385	3449	3513	3577
A	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34
N	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72
P	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516
KG	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2	31.7	32.2	32.6	33.1	33.6	34.0	34.5	35.0	35.5

## LCF2-15-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1

Stroke	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020
L	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321	3385	3449	3513	3577
A	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34
N	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72
P	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516
KG	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2	31.7	32.2	32.6	33.1	33.6	34.0	34.5	35.0	35.5



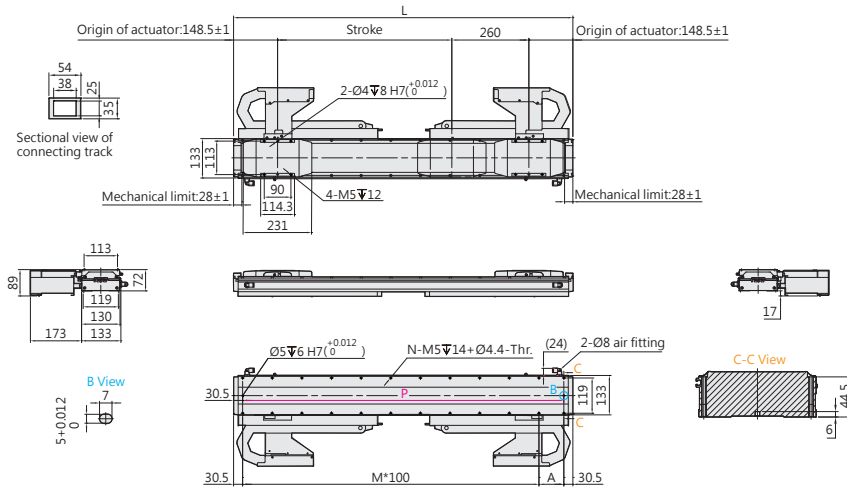
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LCF2-15-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



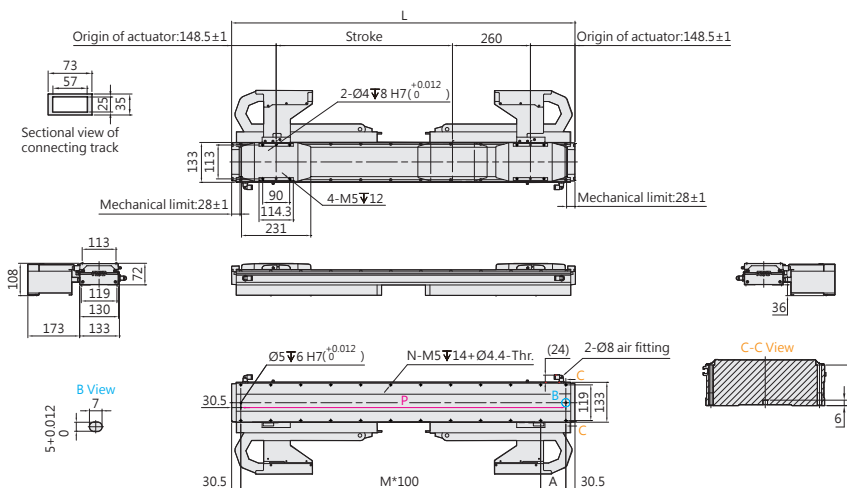
Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2

### LCF2-15-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2

Features

LGW Series

LGJ Series

LTP2 Series

LNJ2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LCF2  
**LCF2-15**  
 LCF2-20  
 LCF2-30  
 LCF2-45  
 LCF2-75

Features  
LGF Series  
LTFZ Series  
LNFZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-15

Clean room Type

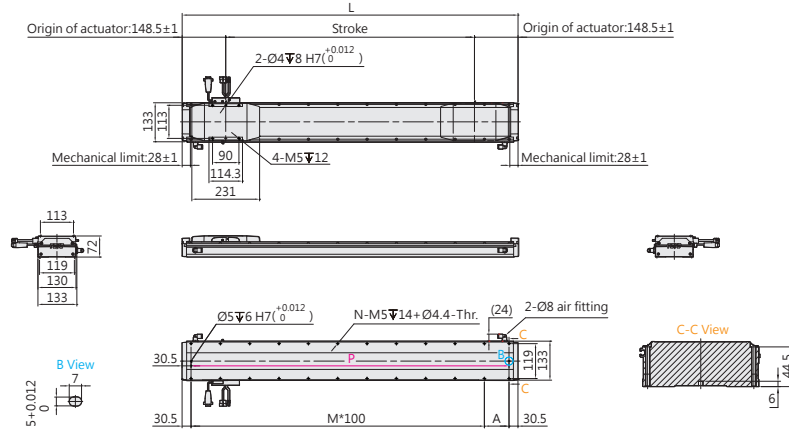
With Iron Core

## LCF2-15-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	208	272	336	400	464	528	592	656	720	784	848	912	976	1040	1104	1168	1232	1296	1360	1424	1488	1552
L	505	569	633	697	761	825	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849
A	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88
M	4	4	5	6	6	7	7	8	9	9	10	11	11	12	13	14	15	15	16	16	16	17
N	12	12	14	16	16	18	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38
P	444	508	572	636	700	764	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788
KG	10.6	11.1	11.6	12.0	12.5	13.0	13.4	13.9	14.4	14.9	15.3	15.8	16.3	16.8	17.2	17.7	18.2	18.6	19.1	19.6	20.1	20.5

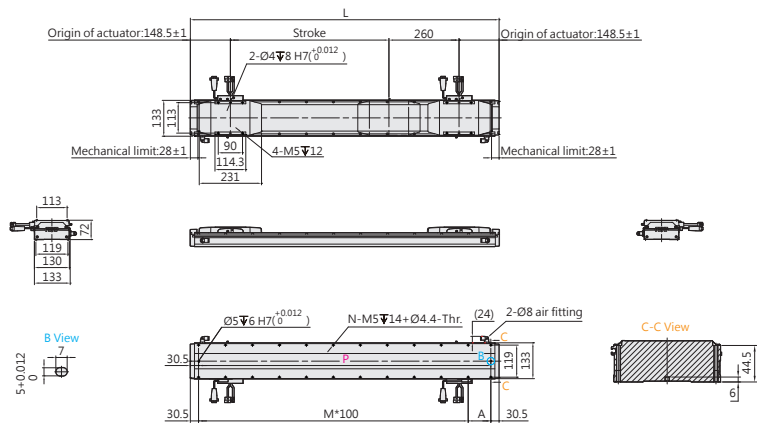
Stroke	1616	1680	1744	1808	1872	1936	2000	2064	2128	2192	2256	2320	2384	2448	2512	2576	2640	2704	2768	2832	2896	2960	3024
L	1913	1977	2041	2105	2169	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321
A	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60
M	18	18	19	20	20	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32
N	40	40	42	44	44	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68
P	1852	1916	1980	2044	2108	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260
KG	21.0	21.5	22.0	22.4	22.9	23.4	23.8	24.3	24.8	25.2	25.7	26.2	26.6	27.1	27.6	28.1	28.5	29.0	29.5	29.9	30.4	30.9	31.3

## LCF2-15-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	332	396	460	524	588	652	716	780	844	908	972	1036	1100	1164	1228	1292	1356	1420	1484	1548	1612
L	889	953	1017	1081	1145	1209	1273	1337	1401	1465	1529	1593	1657	1721	1785	1849	1913	1977	2041	2105	2169
A	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108
M	7	8	9	9	10	11	11	12	13	13	14	15	15	16	16	17	18	18	19	20	20
N	18	20	22	22	24	26	26	28	30	30	32	34	34	36	36	38	40	40	42	44	44
P	828	892	956	1020	1084	1148	1212	1276	1340	1404	1468	1532	1596	1660	1724	1788	1852	1916	1980	2044	2108
KG	15.6	16.1	16.6	17.1	17.6	18.0	18.5	19.0	19.5	19.9	20.4	20.9	21.3	21.8	22.3	22.7	23.2	23.7	24.2	24.6	25.1

Stroke	1676	1740	1804	1868	1932	1996	2060	2124	2188	2252	2316	2380	2444	2508	2572	2636	2700	2764	2828	2892	2956	3020
L	2233	2297	2361	2425	2489	2553	2617	2681	2745	2809	2873	2937	3001	3065	3129	3193	3257	3321	3385	3449	3513	3577
A	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	21	22	22	23	23	24	25	25	26	27	27	28	29	29	30	31	31	32	32	33	34	34
N	46	48	48	50	50	52	54	54	56	58	58	60	62	62	64	66	66	68	68	70	72	72
P	2172	2236	2300	2364	2428	2492	2556	2620	2684	2748	2812	2876	2940	3004	3068	3132	3196	3260	3324	3388	3452	3516
KG	25.6	26.1	26.5	27.0	27.5	27.9	28.4	28.9	29.3	29.8	30.3	30.8	31.2	31.7	32.2	32.6	33.1	33.6	34.0	34.5	35.0	35.5

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

LNFP Series

**LCF2 Series**

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
**LCF2-15**  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

# LCF2-20

Clean room Type

With Iron Core



Maximum Stroke 3018m

Maximum Speed 3500mm/s

Continuous Thrust 59N

Continuous Payload 20kg

## Ordering Method

# LCF2-20-RHS2-N-3018-LS10-R-N-05H-LC100-A001

Model

Customization order no.

### No. of motor

N	Single motor
D	Double motor

### Stroke

Single motor	202-3018mm Pitch 64mm
Double motor	320-3008mm Pitch 64mm

### Position of origin

R	Right
L	Left

### Sensor

N	None
XX	Quantity

### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

### Hall Cable

-	None
H	Hall

### Controller type

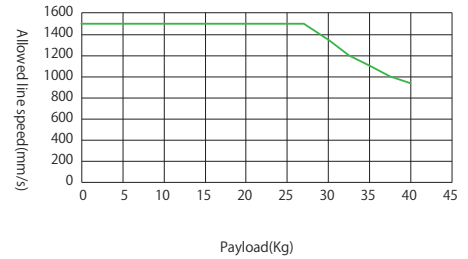
LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

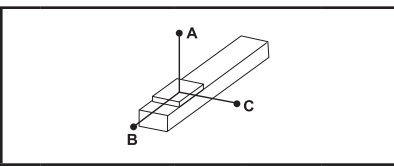
Specification			
Spec	Model	LCF2-20	
	Repeatability (mm)	±0.002	
	Max. Force (N)	510	
	Rated Force (N)	113	
	Max. Payload (kg) <sup>※1</sup>	40	
	Stroke (mm)	Single motor	202-3018 / 64 pitch
		Double motor	320-3008 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

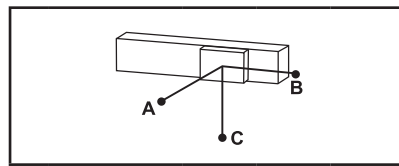
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



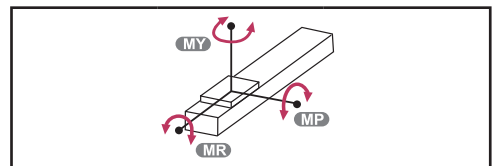
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LCF2-20	Load	A	B	C
	10 kg	2200	450	320
	20 kg	1100	220	160
	30 kg	720	140	100
	40 kg	540	100	75

Wall Installation <sup>※2</sup>				
LCF2-20	Load	A	B	C
	10 kg	320	450	2200
	20 kg	160	220	1100
	30 kg	100	140	720
	40 kg	75	100	540

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LCF2-15	MY	2461
	MP	2461
	MR	1865

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGJ Series

LTP2 Series

LNJ2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMR Series



Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

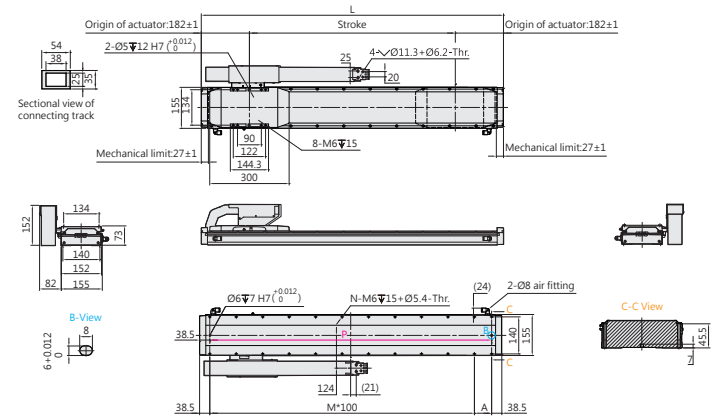
Features  
LGF Series  
LTFZ Series  
LNFZ Series  
LGF Series  
LAU Series  
LNR Series  
Controller

# LCF2-20 Clean room Type With Iron Core

Unit : mm

Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)





Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

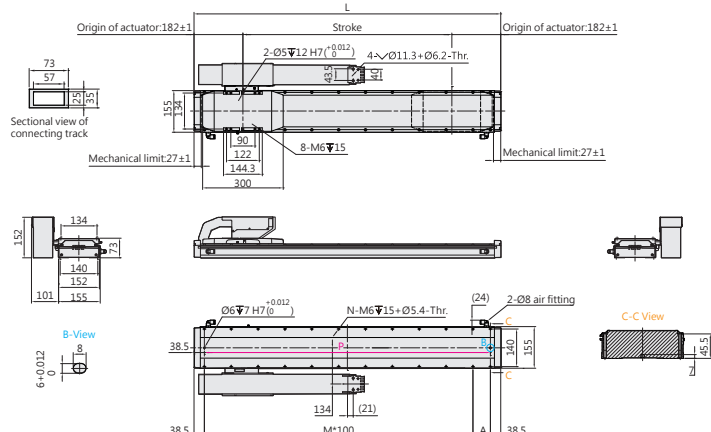
  

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

Unit : mm

Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

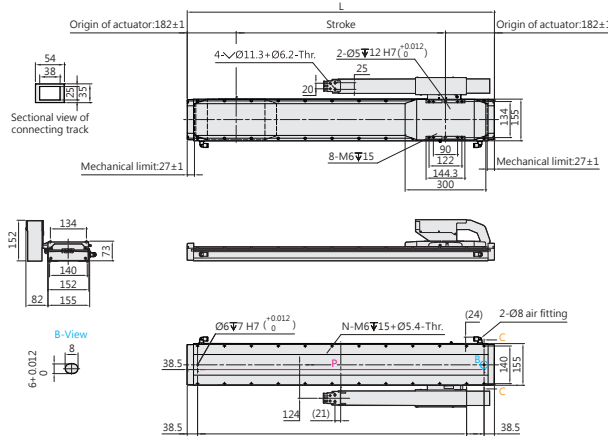
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-20-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	15	16	16	17	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

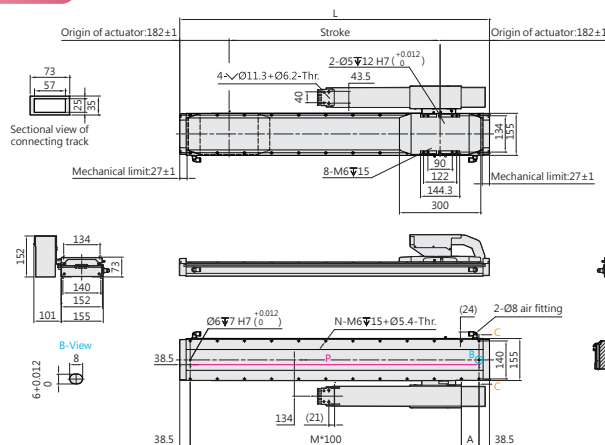
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

LCF2-20-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	15	16	16	17	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

Features

LGW Series

LGF Series

LTP2 Series

LNFP Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

# LCF2-20

Clean room Type

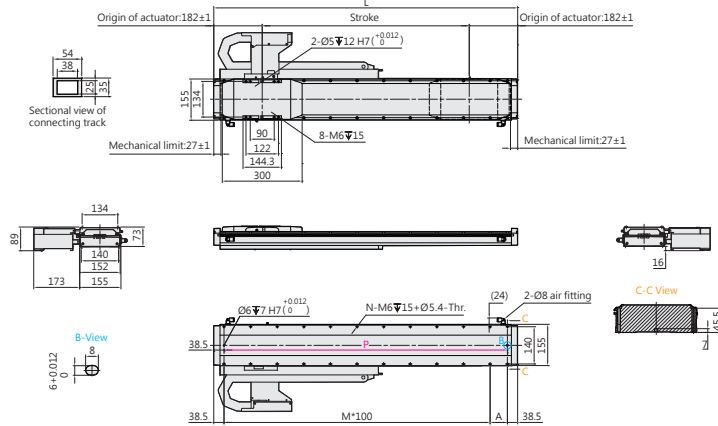
With Iron Core

## LCF2-20-RWS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



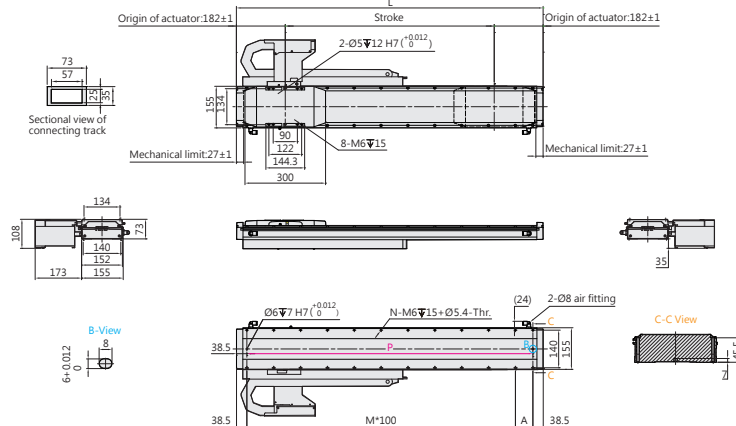
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L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

## LCF2-20-RWL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4



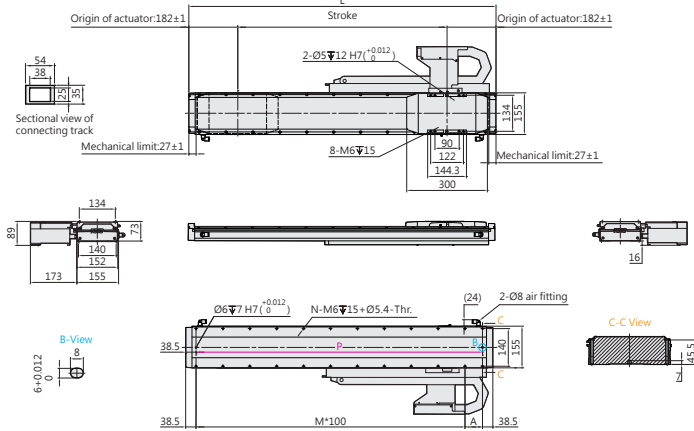
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-20-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

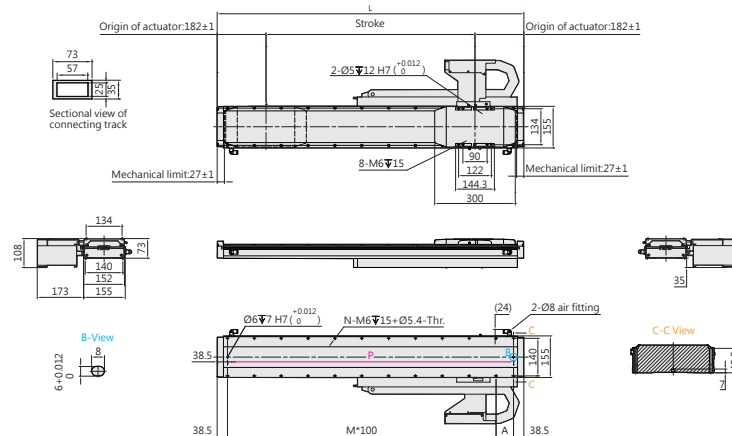
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

LCF2-20-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

Features

LGW Series

LGF Series

LTP2 Series

LN2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LCF2

LCF2-15

LCF2-20

LCF2-30

LCF2-45

LCF2-75

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-20

Clean room Type

# With Iron Core

LCF2-20-DHS2-D

2D CAD 3D CAD [Please download the CAD file from TOYO's website : www.toyorobot.com](http://www.toyorobot.com)

Unit : mm

Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

LCF2-20-DHL2-D

2D CAD 3D CAD [Please download the CAD file from TOYO's website : www.toyorobot.com](http://www.toyorobot.com)

Unit : mm

Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

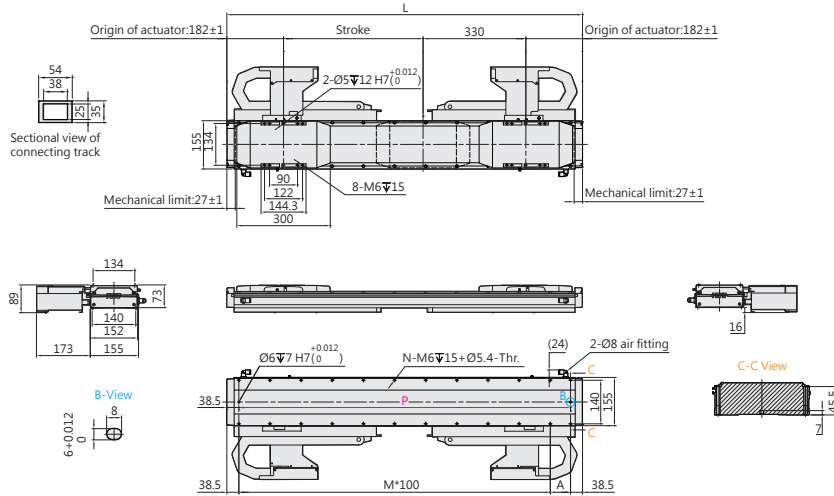
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-20-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



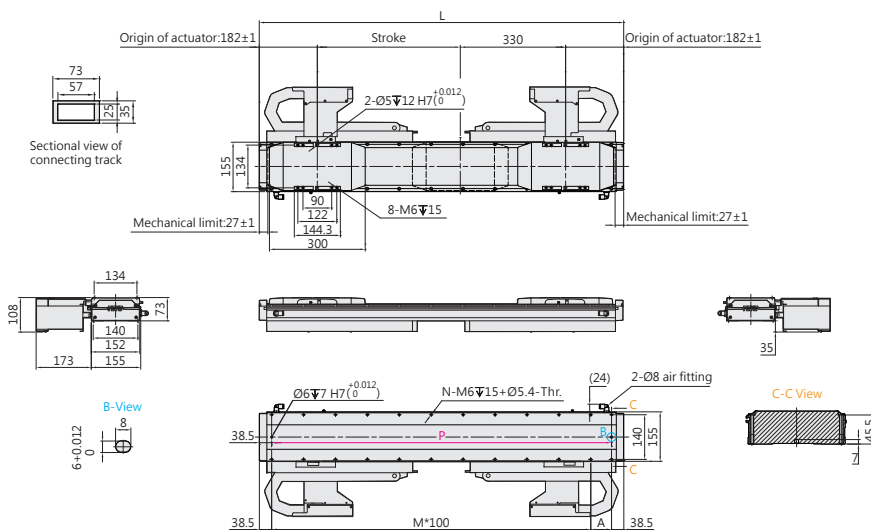
Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

LCF2-20-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

Features

LGW Series

LGJ Series

LTP2 Series

LNJ2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LNR Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

Features  
LGF Series  
LTF2 Series  
LNFP2 Series  
LCP2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-20

Clean room Type

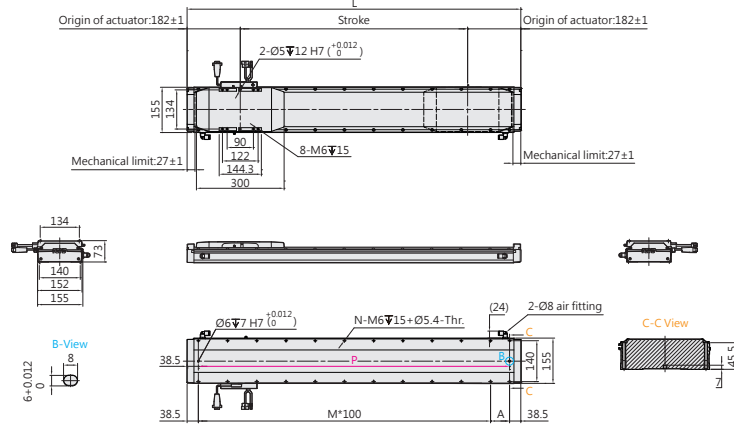
With Iron Core

## LCF2-20-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

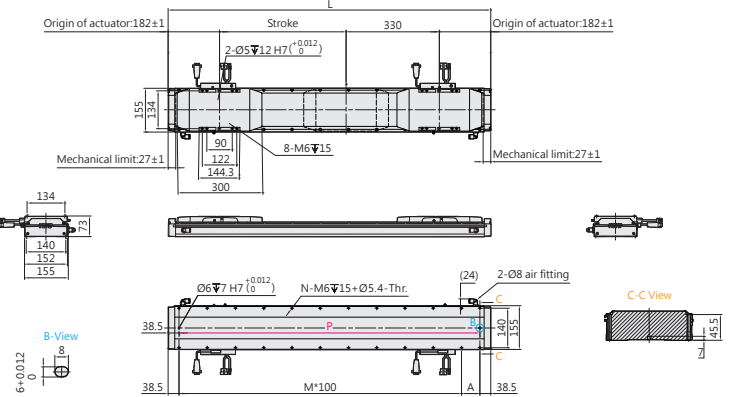
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

## LCF2-20-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	33.9	34.4	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

LNFP Series

**LCF2 Series**

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
LCF2-15  
**LCF2-20**  
LCF2-30  
LCF2-45  
LCF2-75

# LCF2-30

Clean room Type

With Iron Core



Maximum Stroke 3018m

Maximum Speed 3500mm/s

Continuous Thrust 158N

Continuous Payload 54kg

### Ordering Method

## LCF2-30-RHS2-N-3018-LS10-R-N-05H-LC100-A001

Model

Customization order no.

No. of motor

N	Single motor
D	Double motor

Stroke

Single motor	202-3018mm Pitch 64mm
Double motor	320-3008mm Pitch 64mm

Position of origin

R	Right
L	Left

Sensor

N	None
XX	Quantity

Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Hall Cable

-	None
H	Hall

Controller type

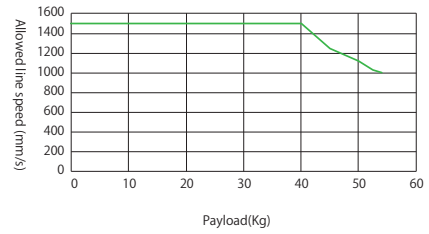
LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronic
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

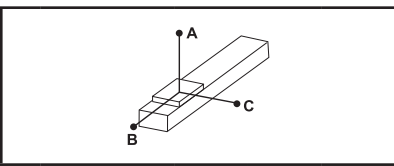
Specification			
Spec	Model	LCF2-30	
	Repeatability (mm)	±0.002	
	Max. Force (N)	713	
	Rated Force (N)	158	
	Max. Payload (kg) <sup>※1</sup>	54	
	Stroke (mm)	Single motor	202-3018 / 64 pitch
		Double motor	320-3008 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

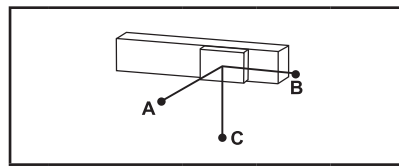
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



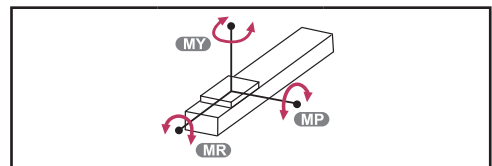
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LCF2-30	Load	A	B	C
	25 kg	830	150	110
	35 kg	580	105	75
	45 kg	450	75	55
	54 kg	360	60	45

Wall Installation <sup>※2</sup>				
LCF2-15	Load	A	B	C
	25 kg	110	150	830
	35 kg	75	105	580
	45 kg	55	75	450
	54 kg	45	60	360

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LCF2-30	MY	2461
	MP	2461
	MR	1865

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTF2 Series

LNf2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

Features  
LGF Series  
LTFZ Series  
LNFZ Series  
LCFZ Series  
LAF / LSF Series  
LAU Series  
LNR Series  
Controller

# LCF2-30

Clean room Type

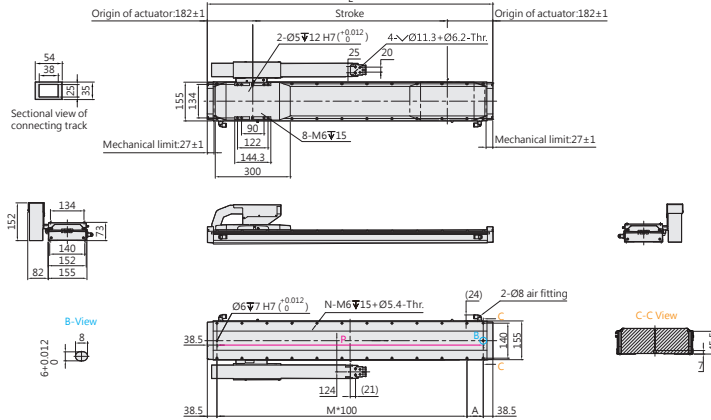
With Iron Core

## LCF2-30-RHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

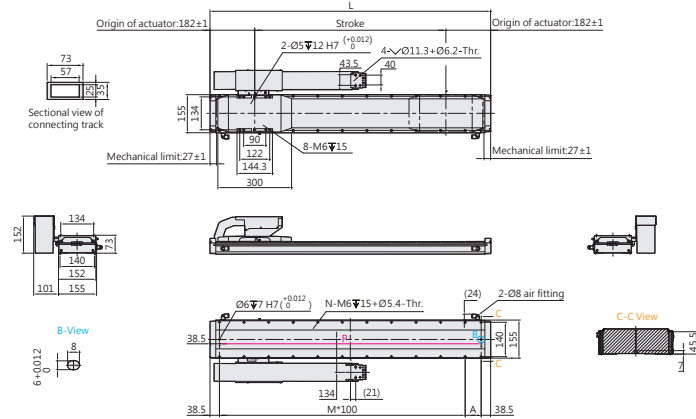
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

## LCF2-30-RHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0



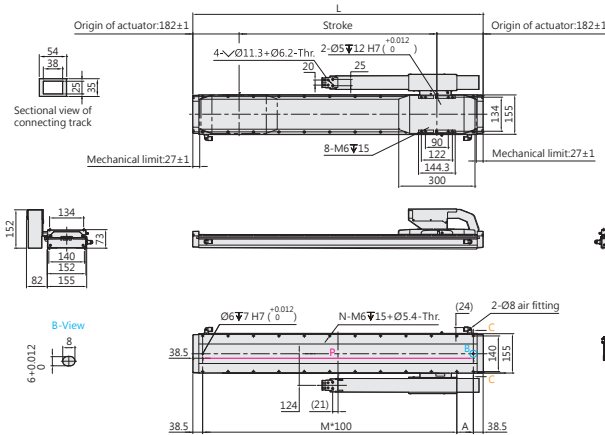
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LCF2-30-LHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

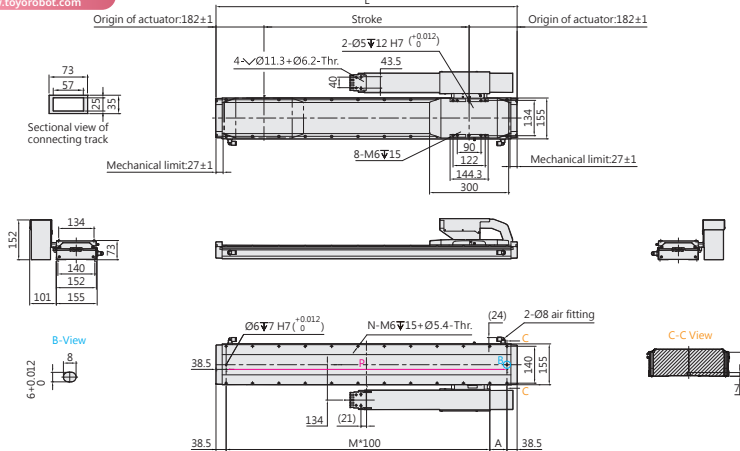
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

### LCF2-30-LHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNPF Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-30

Clean room Type

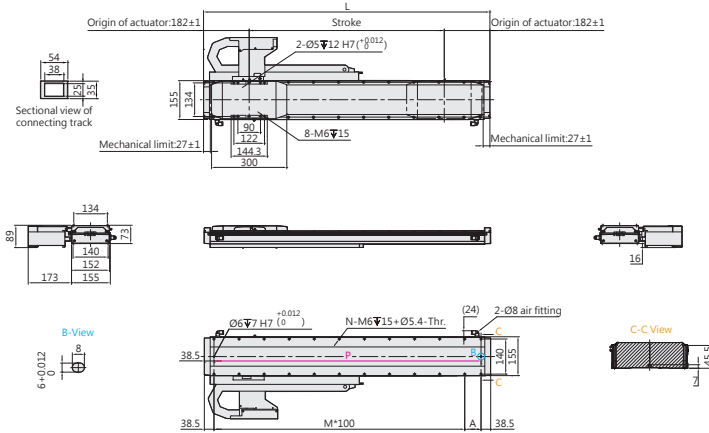
With Iron Core

## LCF2-30-RWS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

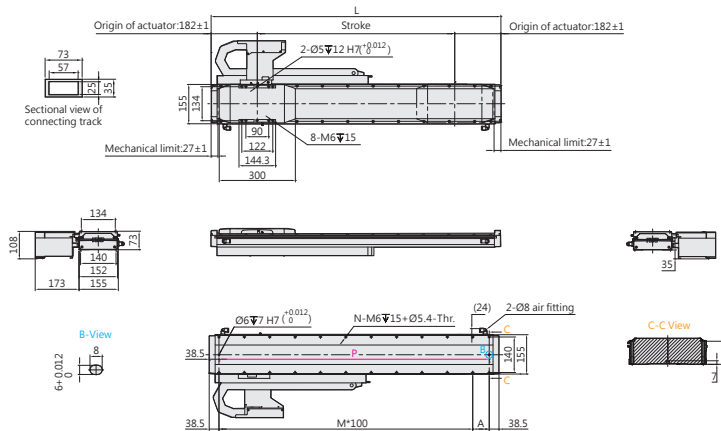
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

## LCF2-30-RWL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5

Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

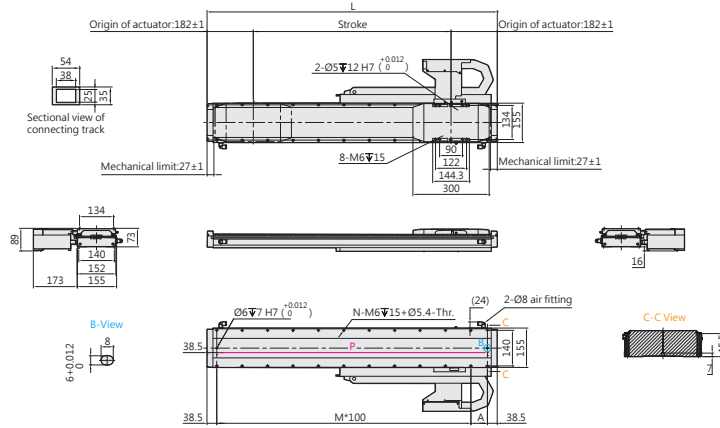
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-30-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



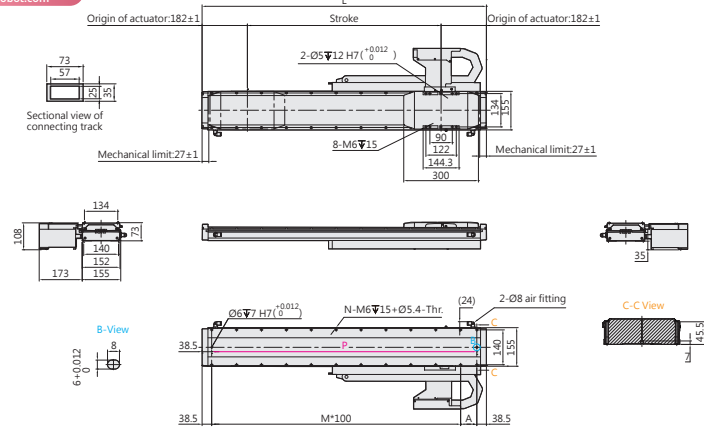
Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

LCF2-30-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	
Stroke	1418	1482	1546	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634
L	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	25.1	25.7	26.3	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFZ Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-30

Clean room Type

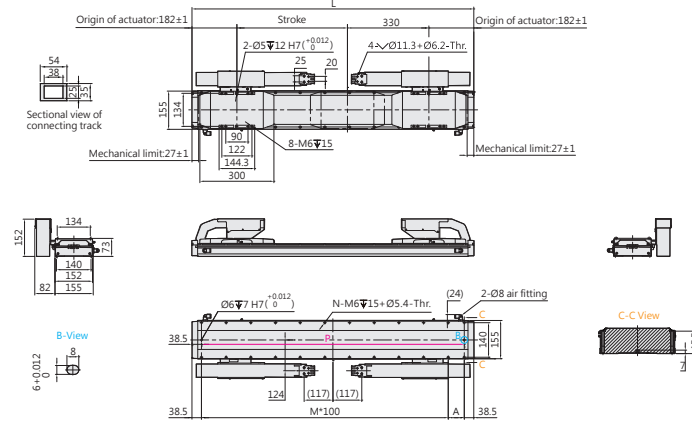
With Iron Core

## LCF2-30-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

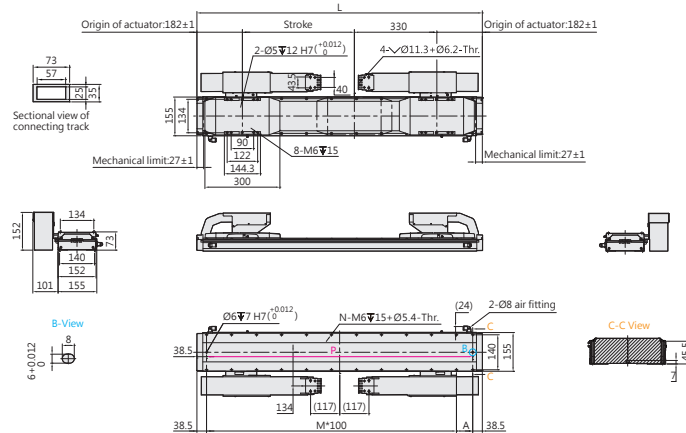
Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

## LCF2-30-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

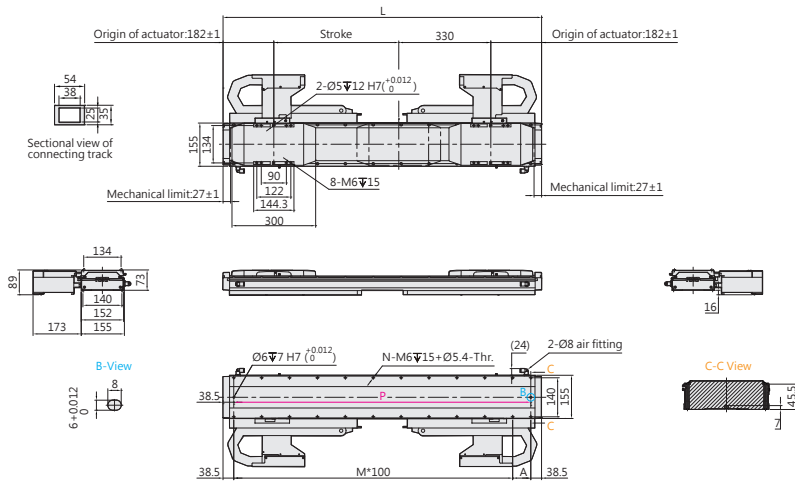
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LCF2-30-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



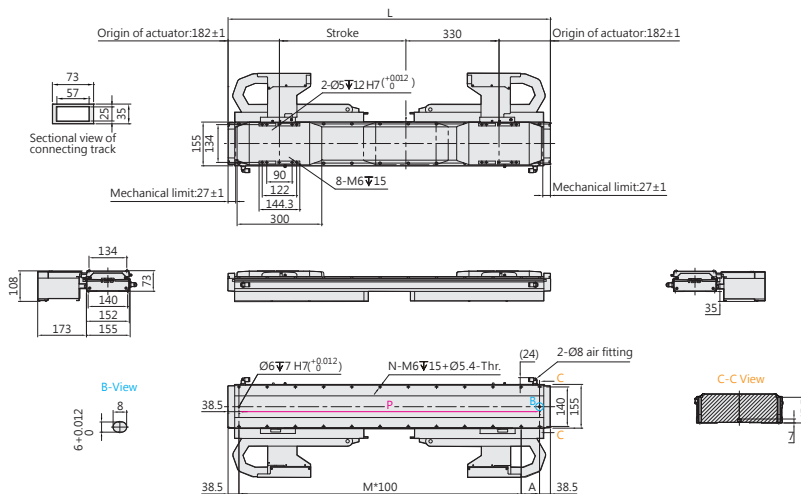
Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

### LCF2-30-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1

Features  
LGW Series  
LGF Series  
LTF2 Series  
LNPF Series  
LCF2 Series  
LAF / LSF Series  
LAU Series  
LMB Series  
Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

Features  
LGF Series  
LTFZ Series  
LNFP Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-30

Clean room Type

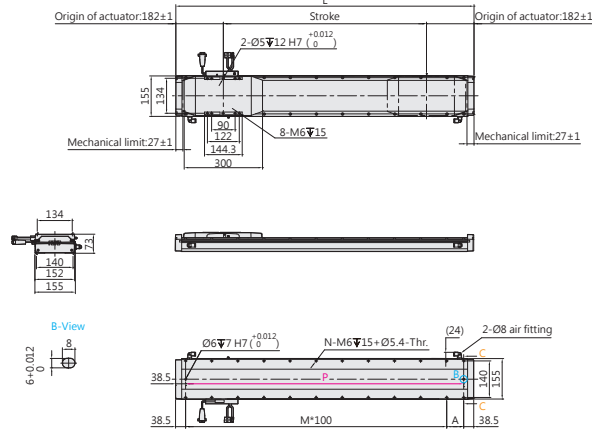
With Iron Core

## LCF2-30-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	202	266	330	394	458	522	586	650	714	778	842	906	970	1034	1098	1162	1226	1290	1354	1418	1482	1546
L	566	630	694	758	822	886	950	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910
A	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33
M	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40
P	489	553	617	681	745	809	873	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833
KG	13.7	14.3	14.9	15.5	16.2	16.7	17.3	17.9	18.5	19.1	19.7	20.3	20.9	21.5	22.1	22.7	23.3	23.9	24.5	25.1	25.7	26.3

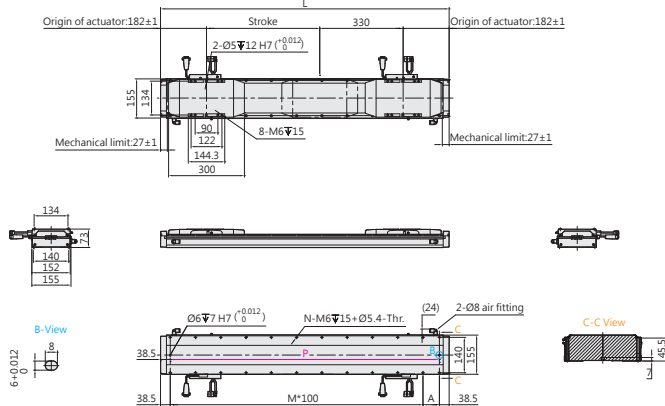
Stroke	1610	1674	1738	1802	1866	1930	1994	2058	2122	2186	2250	2314	2378	2442	2506	2570	2634	2698	2762	2826	2890	2954	3018
L	1974	2038	2102	2166	2230	2294	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382
A	97	61	125	89	53	117	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105
M	18	19	19	20	21	21	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32
N	40	42	42	44	46	46	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68
P	1897	1961	2025	2089	2153	2217	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305
KG	26.9	27.5	28.1	28.7	29.3	29.9	30.5	31.0	31.6	32.2	32.8	33.4	34.0	34.6	35.2	35.8	36.4	37.0	37.6	38.2	38.8	39.4	40.0

## LCF2-30-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	320	384	448	512	576	640	704	768	832	896	960	1024	1088	1152	1216	1280	1344	1408	1472	1536	1600
L	1014	1078	1142	1206	1270	1334	1398	1462	1526	1590	1654	1718	1782	1846	1910	1974	2038	2102	2166	2230	2294
A	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125	89	53	117
M	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19	19	20	21	21
N	22	22	24	24	26	28	28	30	32	32	34	36	36	38	40	40	42	42	44	46	46
P	937	1001	1065	1129	1193	1257	1321	1385	1449	1513	1577	1641	1705	1769	1833	1897	1961	2025	2089	2153	2217
KG	22.6	23.2	23.8	24.4	25.0	25.6	26.2	26.8	27.4	28.0	28.6	29.2	29.8	30.4	31.0	31.6	32.2	32.7	33.3	34.0	34.6

Stroke	1664	1728	1792	1856	1920	1984	2048	2112	2176	2240	2304	2368	2432	2496	2560	2624	2688	2752	2816	2880	2944	3008
L	2358	2422	2486	2550	2614	2678	2742	2806	2870	2934	2998	3062	3126	3190	3254	3318	3382	3446	3510	3574	3638	3702
A	81	45	109	73	37	101	65	129	93	57	121	85	49	113	77	41	105	69	33	97	61	125
M	22	23	23	24	25	25	26	26	27	28	28	29	30	30	31	32	32	33	34	34	35	35
N	48	50	50	52	54	54	56	56	58	60	60	62	64	64	66	68	68	70	72	72	74	74
P	2281	2345	2409	2473	2537	2601	2665	2729	2793	2857	2921	2985	3049	3113	3177	3241	3305	3369	3433	3497	3561	3625
KG	35.2	35.7	36.3	36.9	37.5	38.1	38.7	39.3	39.9	40.5	41.1	41.7	42.3	42.9	43.5	44.1	44.7	45.3	45.9	46.5	47.0	47.6

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

LNFP Series

**LCF2 Series**

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
LCF2-15  
LCF2-20  
**LCF2-30**  
LCF2-45  
LCF2-75

# LCF2-45

Clean room Type

With Iron Core



Maximum Stroke 3053m

Maximum Speed 3500mm/s

Continuous Thrust 251N

Continuous Payload 90kg

### Ordering Method

## LCF2-45-RHS2-N-3053-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	203-3019mm Pitch 64mm
Double motor	429-3053mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

#### Hall Cable

-	None
H	Hall

#### Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

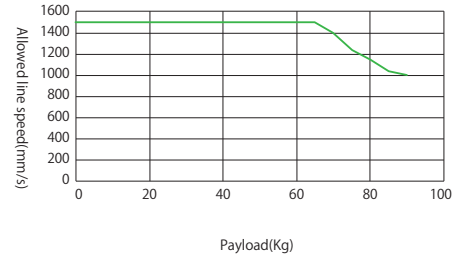


Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

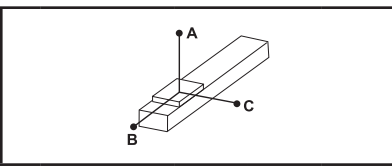
Specification			
Spec	Model	LCF2-45	
	Repeatability (mm)	±0.002	
	Max. Force (N)	1128	
	Rated Force (N)	251	
	Max. Payload (kg) <sup>※1</sup>	90	
	Stroke (mm)	Single motor	203-3019 / 64 pitch
		Double motor	429-3053 / 64 pitch
Maximum Speed (mm/s)	3500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

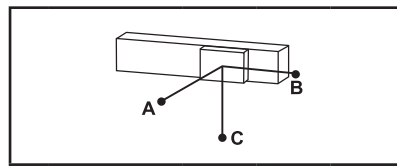
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



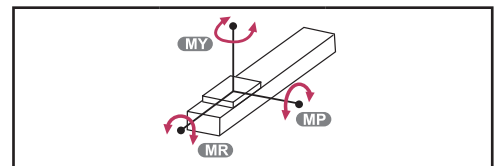
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LCF2-45	Load	A	B	C
	45 kg	700	125	120
	60 kg	520	90	90
	75 kg	410	70	65
	90 kg	330	55	55

Wall Installation <sup>※2</sup>				
LCF2-15	Load	A	B	C
	45 kg	120	125	700
	60 kg	90	90	520
	75 kg	65	70	410
	90 kg	55	55	330

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LCF2-15	MY	3625
	MP	3625
	MR	3757

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGJ Series

LTP2 Series

LNJ2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

# LCF2-45

Clean room Type

# With Iron Core

### LCF2-45-RHS2-N

Unit : mm

2D CAD 3D CAD [Please download the CAD file from TOYO's website : www.toyorobot.com](http://www.toyorobot.com)

Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

### LCF2-45-RHL2-N

Unit : mm

2D CAD 3D CAD [Please download the CAD file from TOYO's website : www.toyorobot.com](http://www.toyorobot.com)

Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

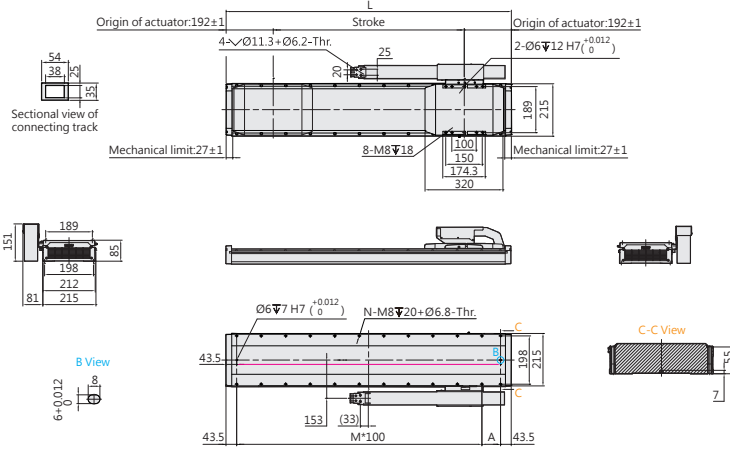
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-45-LHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

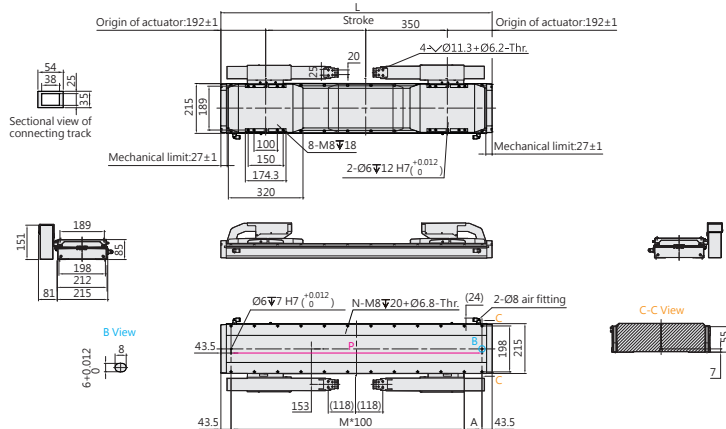
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

LCF2-45-LHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

Features

LGW Series

LGF Series

LTF2 Series

LNf2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LCF2

LCF2-15

LCF2-20

LCF2-30

LCF2-45

LCF2-75

Features  
LGF Series  
LTF2 Series  
LNFP2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-45

Clean room Type

# With Iron Core

LCF2-45-RWS2-N Unit : mm

2D CAD 3D CAD ● Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

LCF2-45-RWL2-N Unit : mm

2D CAD 3D CAD ● Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

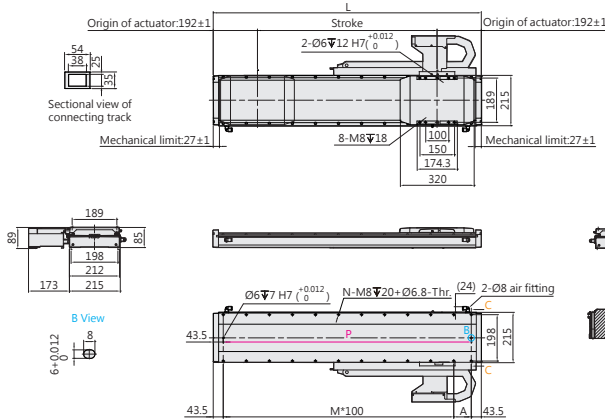
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-45-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

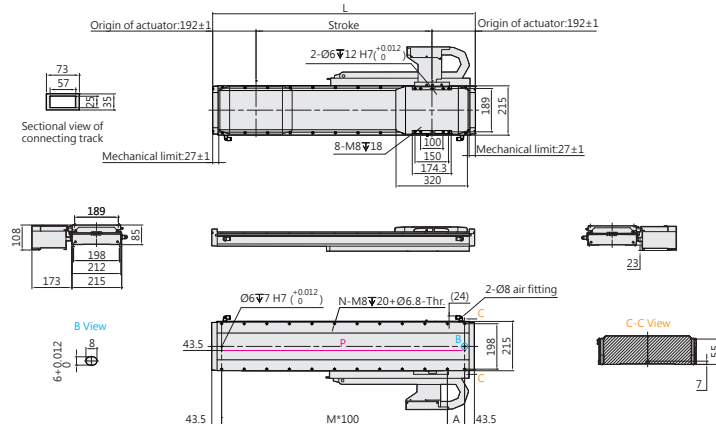
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

LCF2-45-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

# LCF2-45

Clean room Type

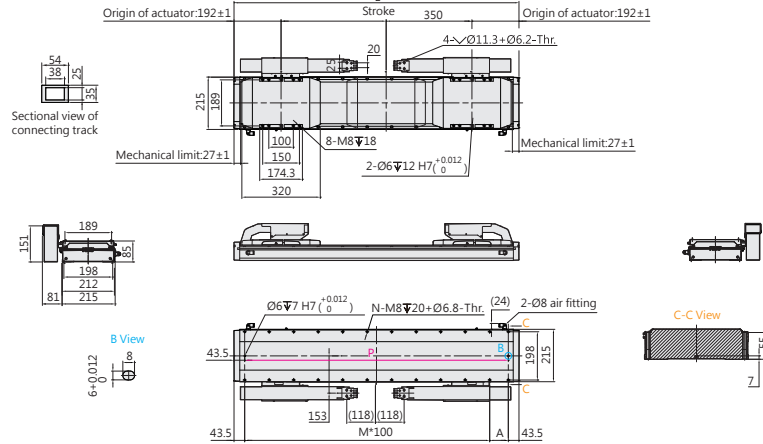
With Iron Core

## LCF2-45-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

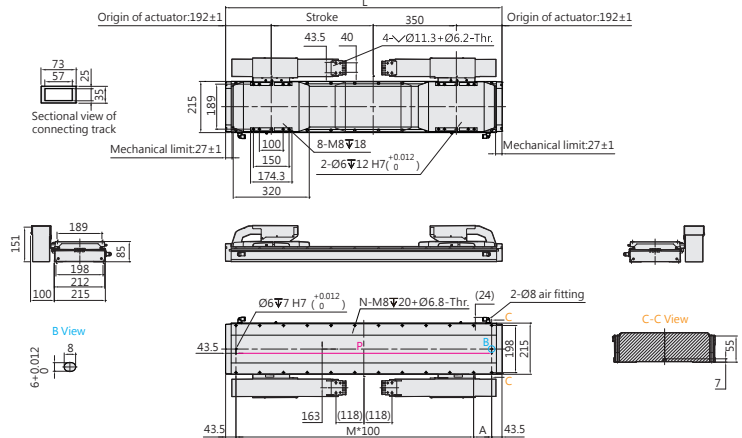
Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3

## LCF2-45-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3

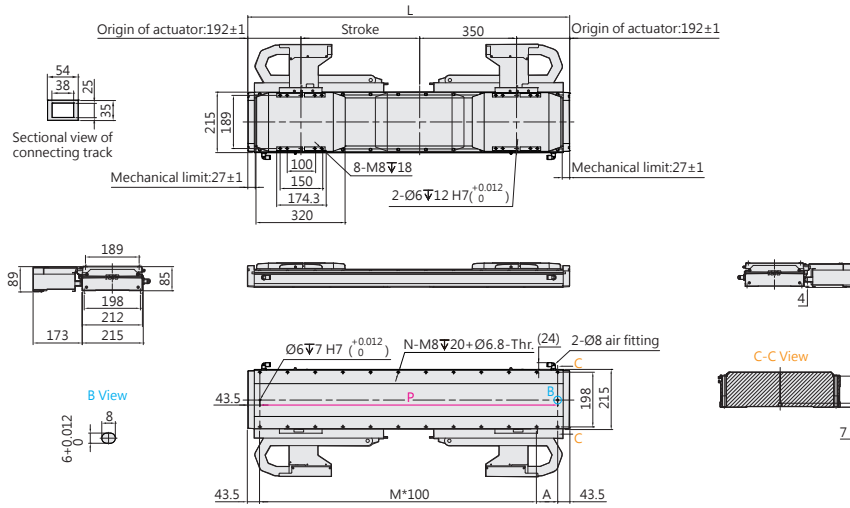
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-45-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



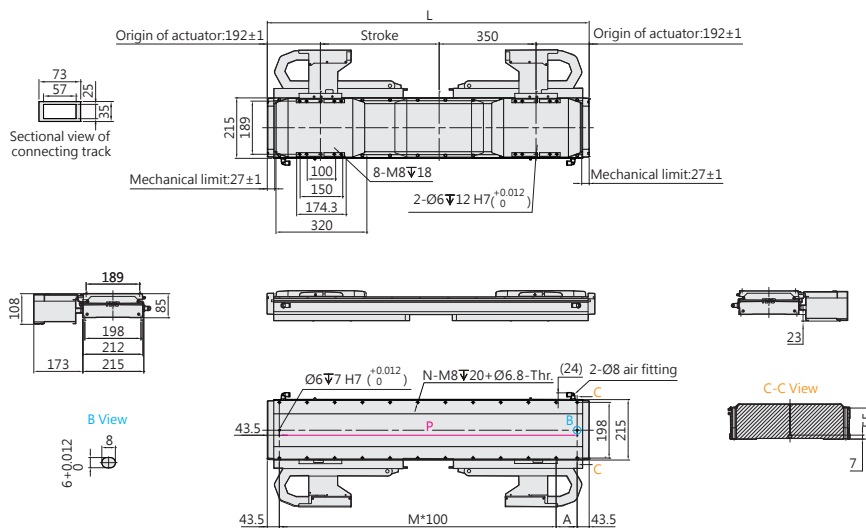
Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

LCF2-45-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

# LCF2-45

Clean room Type

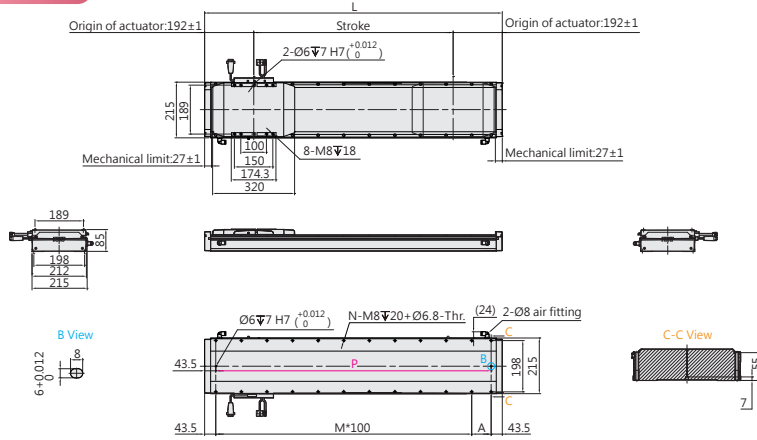
With Iron Core

## LCF2-45-N-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

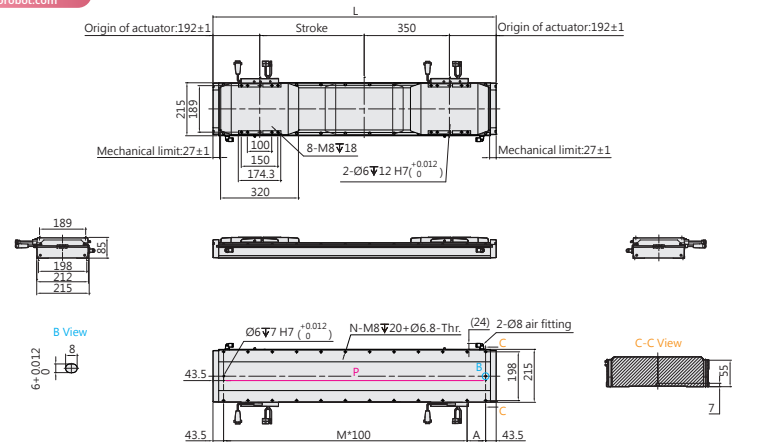
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

## LCF2-45-N-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3



Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

LNFP Series

**LCF2 Series**

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
**LCF2-45**  
LCF2-75

# LCF2-75

Clean room Type

With Iron Core



Maximum Stroke 3053m

Maximum Speed 3500mm/s

Continuous Thrust 340N

Continuous Payload 120kg

### Ordering Method

## LCF2-75-RHS2-N-3053-LS10-R-N-05H-LC100-A001

Model

Customization order no.

#### No. of motor

N	Single motor
D	Double motor

#### Stroke

Single motor	203-3019mm Pitch 64mm
Double motor	429-3053mm Pitch 64mm

#### Position of origin

R	Right
L	Left

#### Sensor

N	None
XX	Quantity

#### Module installation type and cable track orientation

Item	Cable direction	Mounting direction	Cable track size
Single motor	R Right	H Horizontally	L2 Large cable track
	L Left	W Wall mount	S2 Small cable track
Double motor	D Double Slider	H Horizontally	L2 Large cable track
		W Wall mount	S2 Small cable track
None	N No Cable		

#### Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	SIKO 1μm magnetic encoder
TS10	TOYO 1μm magnetic encoder

#### Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

#### Hall Cable

-	None
H	Hall

#### Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

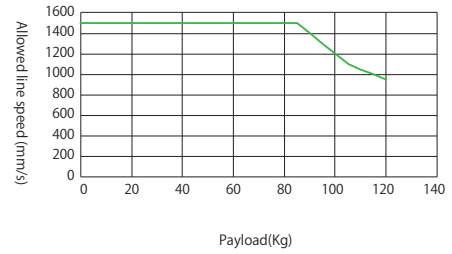
※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

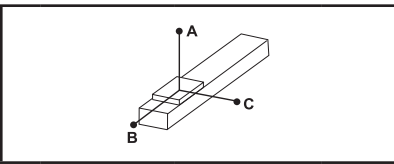
Specification			
Spec	Model	LCF2-75	
	Repeatability (mm)	±0.002	
	Max. Force (N)	1532	
	Rated Force (N)	340	
	Max. Payload (kg) <sup>※1</sup>	120	
	Stroke (mm)	Single motor	203-3019 / 64 pitch
		Double motor	429-3053 / 64 pitch
	Maximum Speed (mm/s)	3500	

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

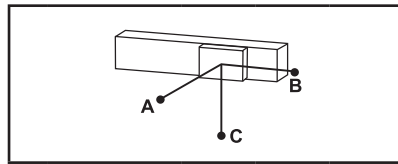
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



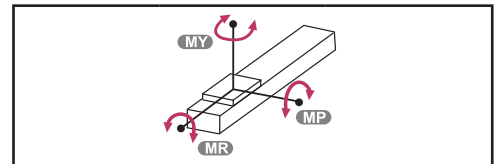
(Unit : mm)

Horizontal Installation <sup>※2</sup>				
LCF2-75	Load	A	B	C
	60 kg	450	70	70
	80 kg	340	50	45
	100 kg	260	35	35
	120 kg	200	25	25

Wall Installation <sup>※2</sup>				
LCF2-75	Load	A	B	C
	60 kg	70	70	450
	80 kg	45	50	340
	100 kg	35	35	260
	120 kg	25	25	200

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LCF2-75	MY	3625
	MP	3625
	MR	3757

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGJ Series

LTP2 Series

LNJ2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

# LCF2-75

Clean room Type

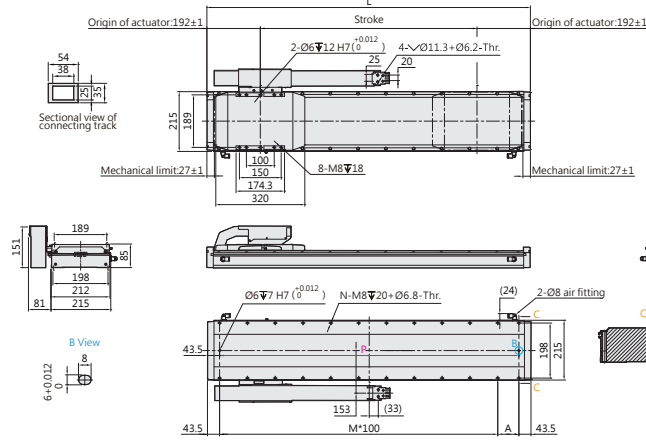
With Iron Core

## LCF2-75-RHS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

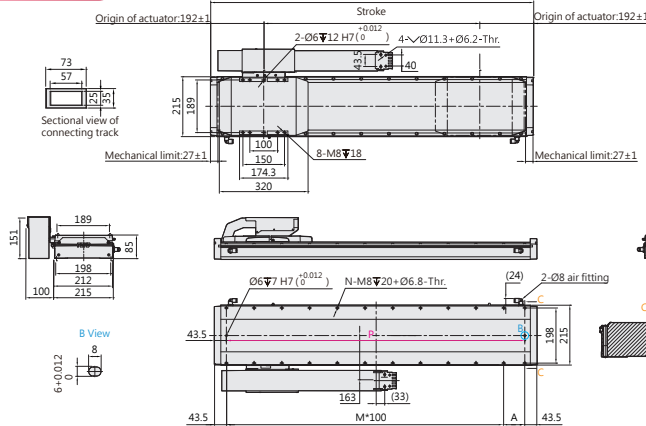
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

## LCF2-75-RHL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

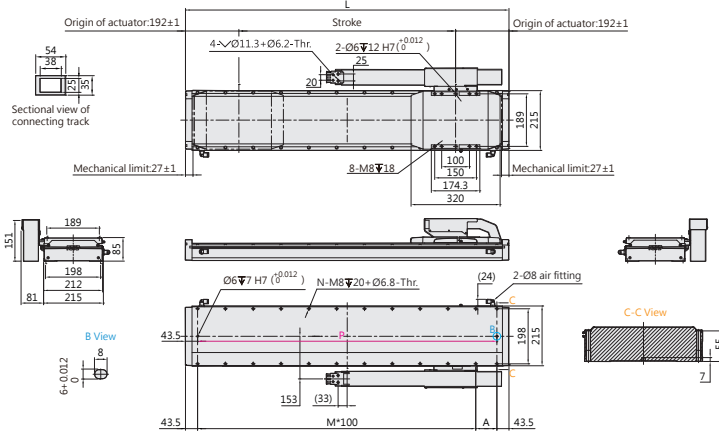
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-75-LHS2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

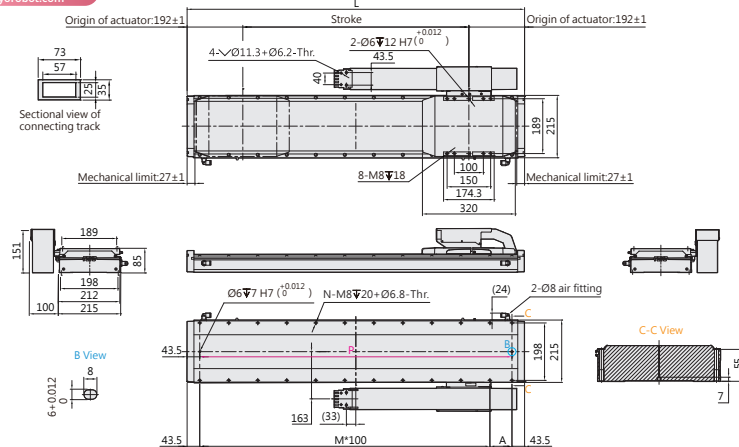
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

LCF2-75-LHL2-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6

Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

Features

LGW Series

LGF Series

LTP2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LCF2

LCF2-15

LCF2-20

LCF2-30

LCF2-45

LCF2-75

Features  
LGF Series  
LTFZ Series  
LNFZ Series  
LCFZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-75

Clean room Type

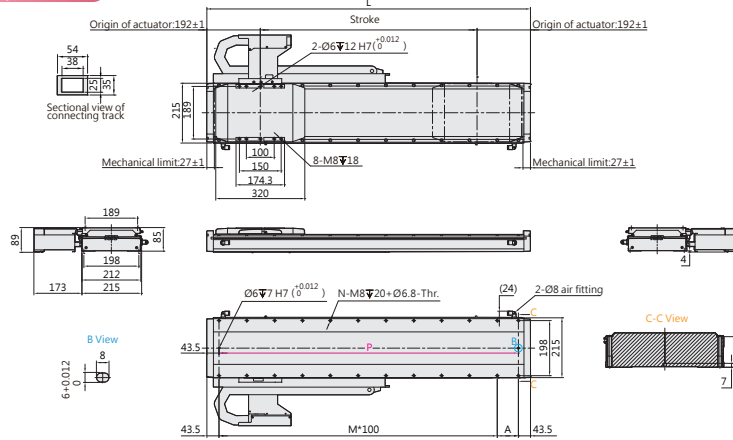
With Iron Core

## LCF2-75-RWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

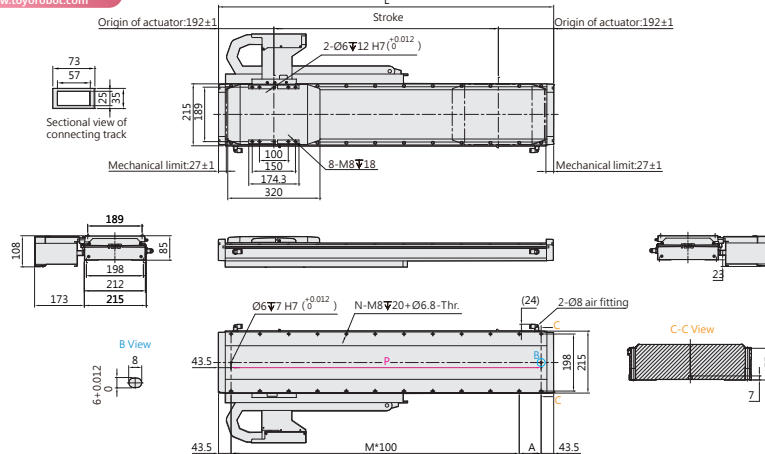
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

## LCF2-75-RWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

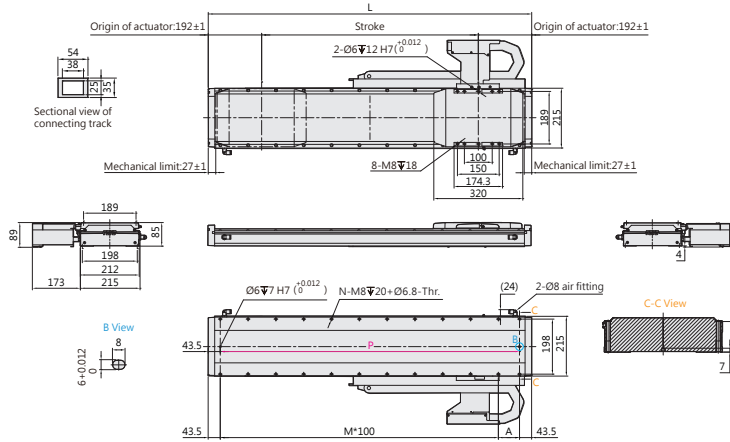
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-75-LWS2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

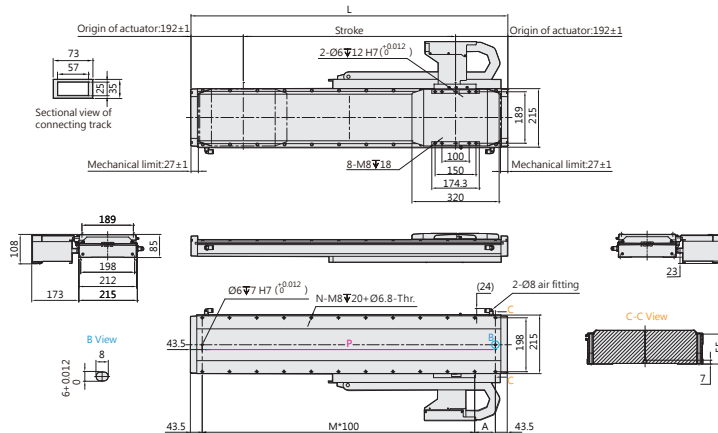
Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

LCF2-75-LWL2-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5

Stroke	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635
L	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	42.5	43.5	44.6	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2

Features

LGW Series

LGJ Series

LTP2 Series

LN2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LCF2

LCF2-15

LCF2-20

LCF2-30

LCF2-45

LCF2-75

Features  
LGF Series  
LGF Series  
LTFZ Series  
LNPF Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LCF2-75

Clean room Type

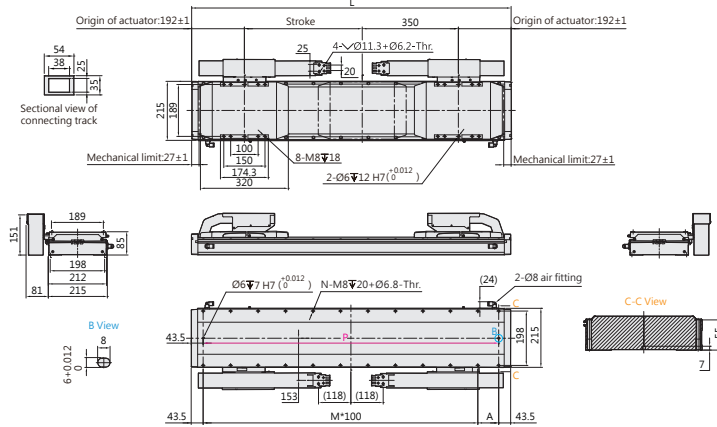
With Iron Core

## LCF2-75-DHS2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

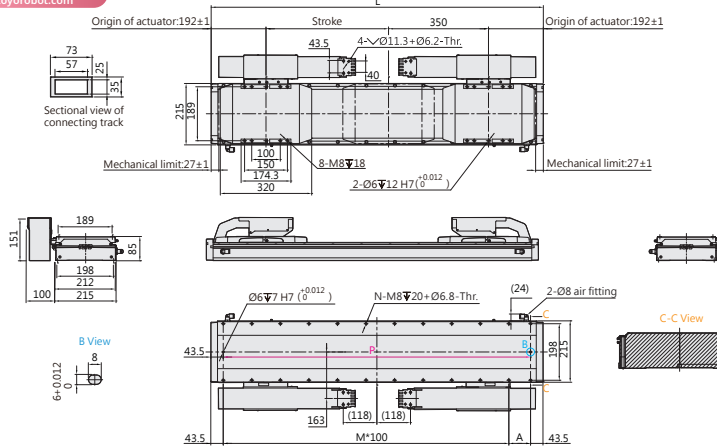
Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3

## LCF2-75-DHL2-D



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4

Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36
N	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68	70	72	72	74	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3



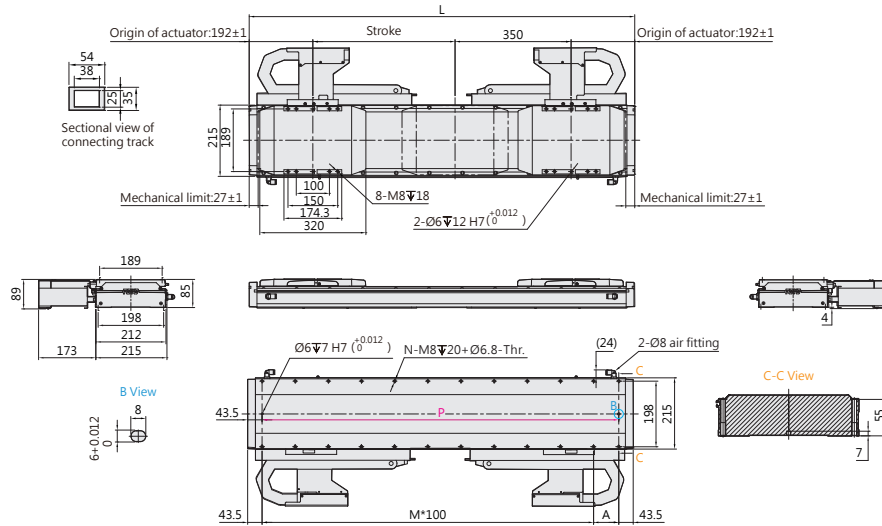
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LCF2-75-DWS2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



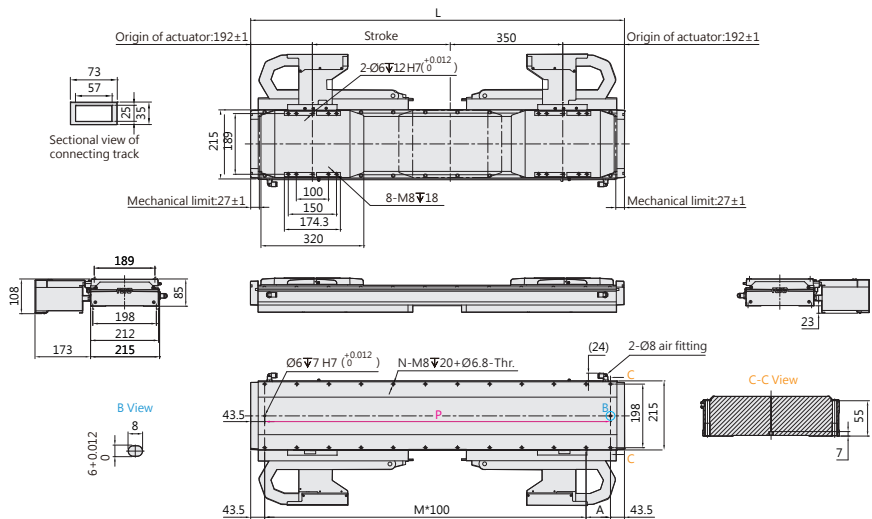
Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

LCF2-75-DWL2-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	1773	1837	1901	1965	2029	2093	2157	2221	2285
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23	24	25	25	26	27	27	28	29
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8

Features

LGW Series

LGF Series

LTP2 Series

LN2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LCF2  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

# LCF2-75

Clean room Type

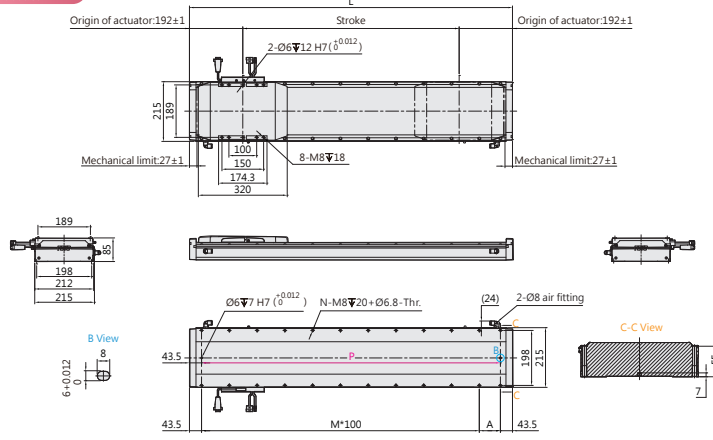
With Iron Core

## LCF2-75-N-N

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



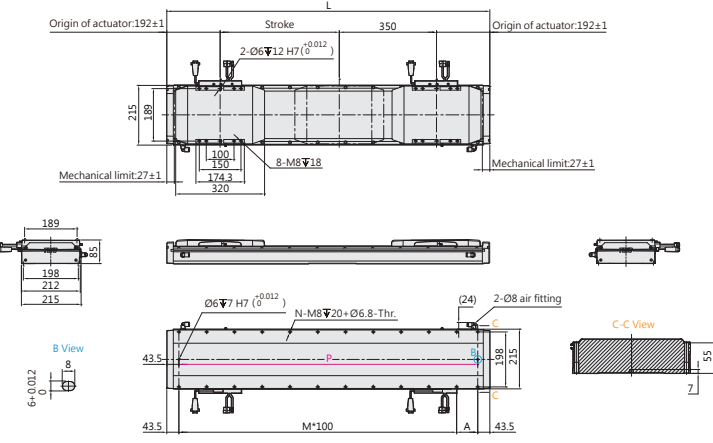
Stroke	203	267	331	395	459	523	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	
L	587	651	715	779	843	907	971	1035	1099	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	
A	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	
M	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	14	15	16	16	17	18	
N	12	14	14	16	18	18	20	22	22	24	26	26	28	30	30	32	32	34	36	36	38	40	
P	500	564	628	692	756	820	884	948	1012	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	
KG	22.7	23.8	24.8	25.8	26.9	27.9	29.0	30.0	31.0	32.1	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.5	42.5	43.5	44.6	
Stroke	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019
L	1995	2059	2123	2187	2251	2315	2379	2443	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403
A	108	72	36	100	64	128	92	56	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116
M	18	19	20	21	21	22	23	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	32
N	40	42	44	44	46	46	48	50	50	52	54	54	56	58	58	60	62	62	64	64	66	68	68
P	1908	1972	2036	2100	2164	2228	2292	2356	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316
KG	45.6	46.7	47.7	48.7	49.8	50.8	51.9	52.9	53.9	55.0	56.0	57.0	58.1	59.1	60.2	61.2	62.2	63.3	64.3	65.4	66.4	67.4	68.5

## LCF2-75-N-D

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	429	493	557	621	685	749	813	877	941	1005	1069	1133	1197	1261	1325	1389	1453	1517	1581	1645	1709	
L	1163	1227	1291	1355	1419	1483	1547	1611	1675	1739	1803	1867	1931	1995	2059	2123	2187	2251	2315	2379	2443	2443
A	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	64	128	92	56	56
M	10	11	11	12	13	13	14	14	15	16	16	17	18	18	19	20	20	21	21	22	23	23
N	24	26	26	28	30	30	32	32	34	36	36	38	40	40	42	44	44	46	46	48	50	50
P	1076	1140	1204	1268	1332	1396	1460	1524	1588	1652	1716	1780	1844	1908	1972	2036	2100	2164	2228	2292	2356	2356
KG	40.6	41.7	42.7	43.8	44.8	45.8	46.9	47.9	49.0	50.0	51.0	52.1	53.1	54.2	55.2	56.2	57.3	58.3	59.4	60.4	61.4	61.4
Stroke	1773	1837	1901	1965	2029	2093	2157	2221	2285	2349	2413	2477	2541	2605	2669	2733	2797	2861	2925	2989	3053	3053
L	2507	2571	2635	2699	2763	2827	2891	2955	3019	3083	3147	3211	3275	3339	3403	3467	3531	3595	3659	3723	3787	3787
A	120	84	48	112	76	40	104	68	32	96	60	124	88	52	116	80	44	108	72	36	100	100
M	23	24	25	25	26	27	27	28	29	29	30	30	31	32	32	33	34	34	35	36	36	36
N	50	52	54	54	56	58	60	62	62	64	64	66	68	68	70	72	72	74	74	76	76	76
P	2420	2484	2548	2612	2676	2740	2804	2868	2932	2996	3060	3124	3188	3252	3316	3380	3444	3508	3572	3636	3700	3700
KG	62.5	63.5	64.6	65.6	66.6	67.7	68.7	69.8	70.8	71.8	72.9	73.9	75.0	76.0	77.0	78.1	79.1	80.2	81.2	82.2	83.3	83.3

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

## Memo

Features

LGM Series

LGF Series

LTP2 Series

LNFP Series

**LCF2 Series**

LAF / LSF Series

LAU Series

LMR Series

Controller

**LCF2**  
LCF2-15  
LCF2-20  
LCF2-30  
LCF2-45  
LCF2-75

Features

LGW Series

LGF Series

LTF2 Series

LNFP2 Series

LCP2 Series

LAF/LSF Series

LAU Series

LMR Series

Controller

## Memo

# LAF/LSF

(Aluminum / Steel type)

## Iron Core Linear Motor Robot

### Contents

#### SMALL

L A F 7  
L S F 7



Width 82mm

Max. stroke 1590mm..... 233

Continuous payload 10kg

#### MEDIUM

L A F 15  
L S F 15



Width 124mm

Max. stroke 1600mm..... 239

Continuous payload 20kg

#### MEDIUM

L A F 20  
L S F 20



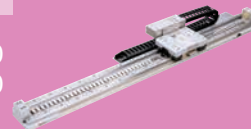
Width 146mm

Max. stroke 1600mm..... 245

Continuous payload 40kg

#### MEDIUM

L A F 30  
L S F 30



Width 146mm

Max. stroke 1540mm..... 251

Continuous payload 50kg

# Spec Index

## Spec Index

### LAF iron core linear motor robot (Aluminum type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard(Aluminum)	Linear Motor Robot	82	LAF7	Single motor	3A	±0.002	LMF15	40	10	3500
		124	LAF15			±0.002	LMF20	60	20	3500
		146	LAF20			±0.002	LMF20	115	40	3500
		146	LAF30			±0.002	LMF30	160	50	3500

※ LAF7 type, the data of continuous payload can be speed 1m/s and maximum acceleration 4m/s<sup>2</sup>.  
 ※ LAF15, LAF20, LAF30 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 3m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.

### LSF iron core linear motor robot (Steel type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard(Aluminum)	Linear Motor Robot	82	LSF7	Single motor	3A	±0.002	LMF15	40	10	3500
		124	LSF15			±0.002	LMF20	60	20	3500
		146	LSF20			±0.002	LMF20	115	40	3500
		146	LSF30			±0.002	LMF30	160	50	3500

※ LSF7 type, the data of continuous payload can be speed 1m/s and maximum acceleration 4m/s<sup>2</sup>.  
 ※ LSF15, LSF20, LSF30 these three types, the data of continuous payload can be speed 1m/s and maximum acceleration 3m/s<sup>2</sup>.  
 ※ Please consult with our sales department for customized stroke.

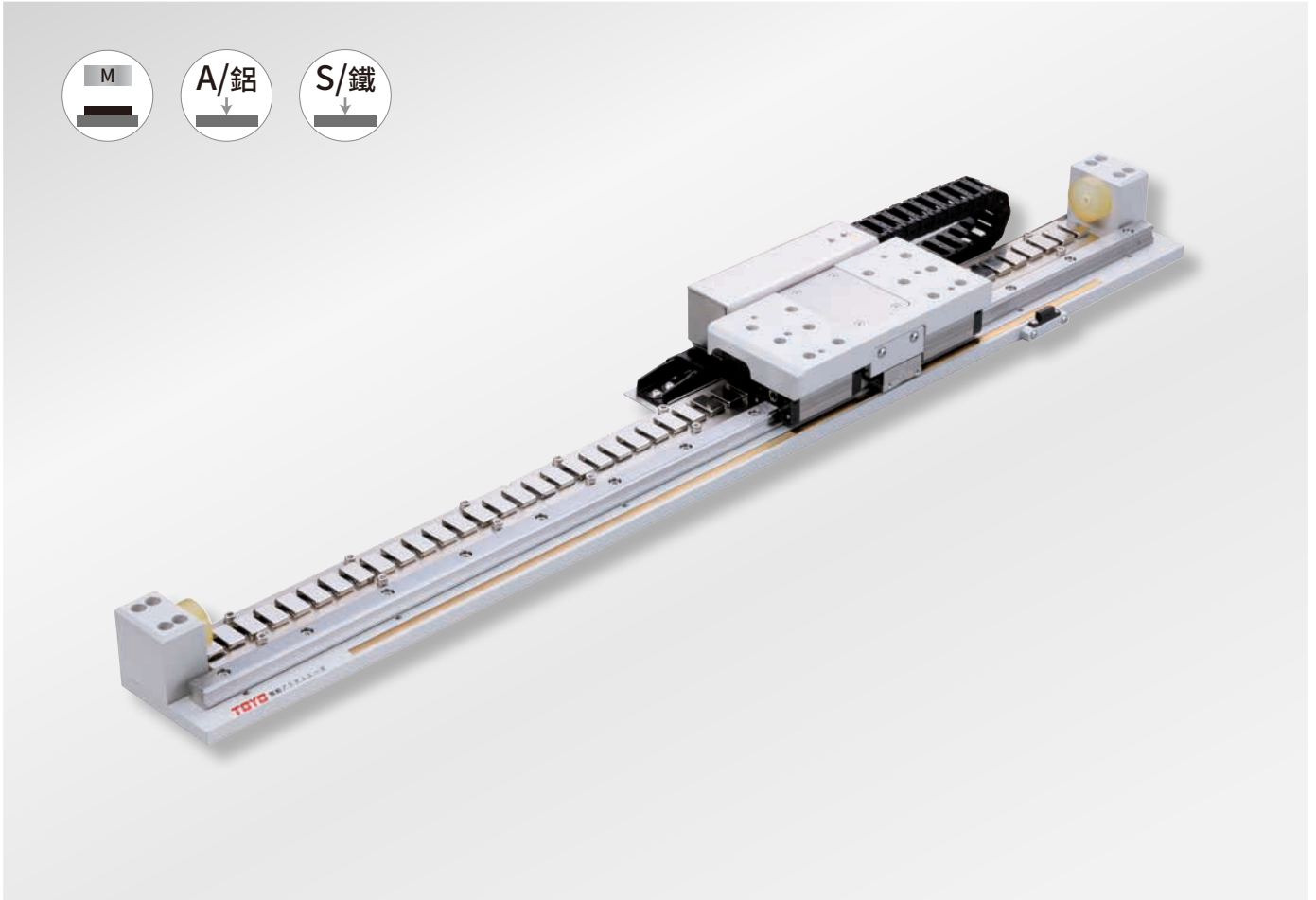
Max. Linear Speed (mm/s)																	Page
Stroke	125	0	100	200	300	400	500	600	700	800	900	1000	1200	1300	1400	1500	
				3500													233
				3500													239
				3500													245
				3500													251

Max. Linear Speed (mm/s)																	Page
Stroke	125	0	100	200	300	400	500	600	700	800	900	1000	1200	1300	1400	1500	
				3500													233
				3500													239
				3500													245
				3500													251

# LAF7 / LSF7

Standard type

With Iron Core



Maximum Stroke **1590mm**

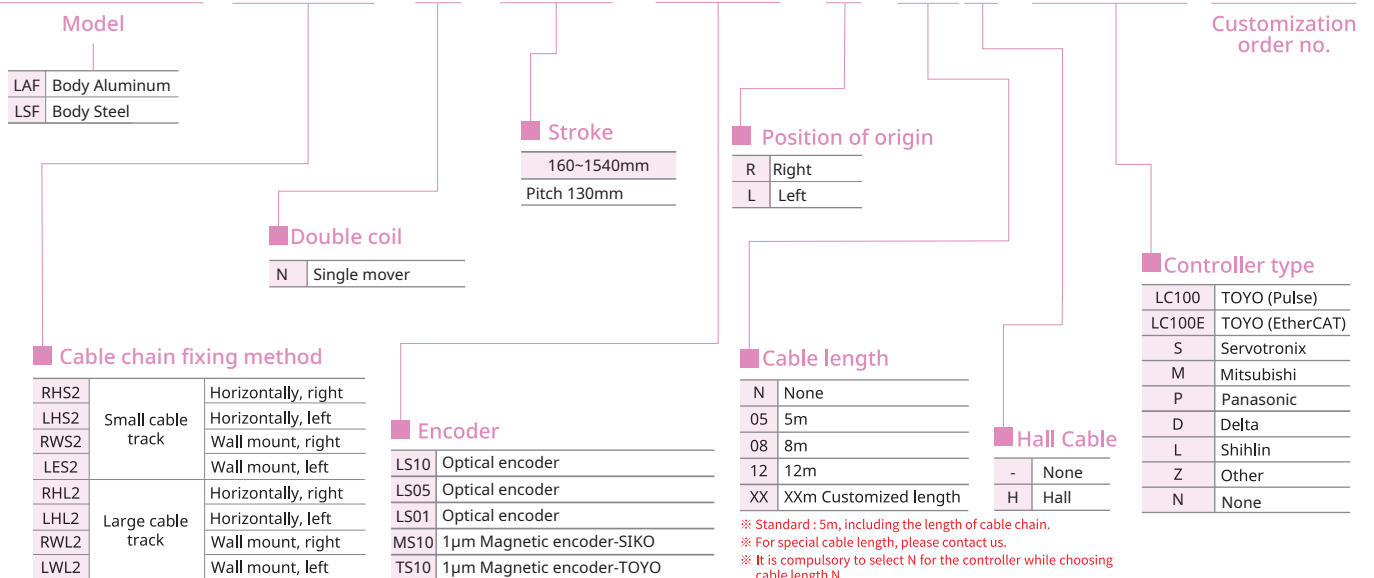
Maximum Speed **3500mm/s**

Continuous Thrust **59N**

Continuous Payload **10kg**

## Ordering Method

# LA(S)F7 - RHS - N - 1590 - LS10 - R - 05H - LC100 - A001



※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.



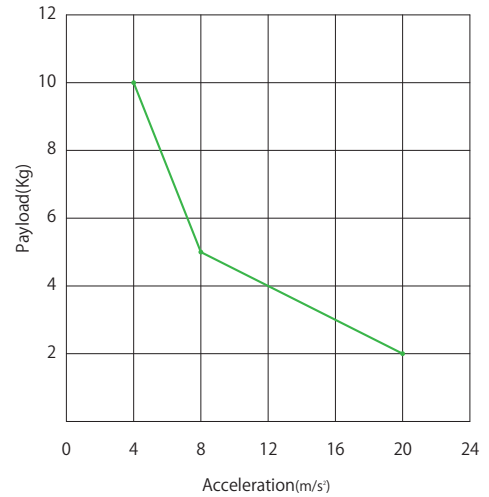
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

**Specification**

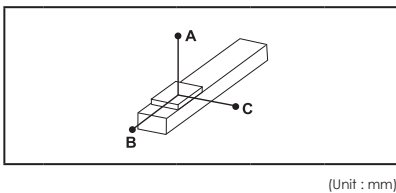
<b>Spec</b>	Model	LAF7 / LSF7
	Repeatability (mm)	±0.002
	Mxa. Force (N)	120
	Rated Force (N)	40
	Mxa. Payload (kg) ※1	10
	Stroke (mm)	160~1590
	Maximum Speed (mm/s)	3500

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

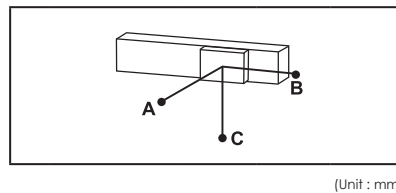
**Payload & Acceleration**



**Allowable Overhang**

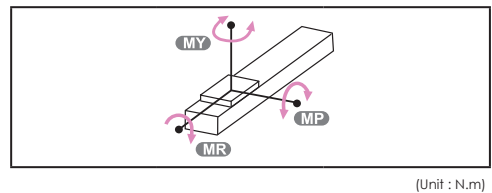


Horizontal Installation ※2				
LAF7 / LSF7	Load	A	B	C
	1kg	2900	2900	650
	3kg	2900	1300	200
	5kg	2800	800	100
	7kg	2300	550	80
	9kg	2000	450	50
	10kg	2000	400	50



Wall Installation ※2				
LAF7 / LSF7	Load	A	B	C
	1kg	600	2900	2900
	3kg	190	1200	2900
	5kg	80	600	2400
	7kg	50	350	1650

**Static Loading Moment**



LAF7 / LSF7	MY	155
	MP	155
	MR	190

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGF Series

LTP2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LA(S)F  
LA(S)F7  
LA(S)F15  
LA(S)F20  
LA(S)F30

Features  
LGF Series  
LTF2 Series  
LNF2 Series  
LCP2 Series  
LAF/LSF Series  
LAU Series  
LMR Series  
Controller

# LAF7 / LSF7

Standard type

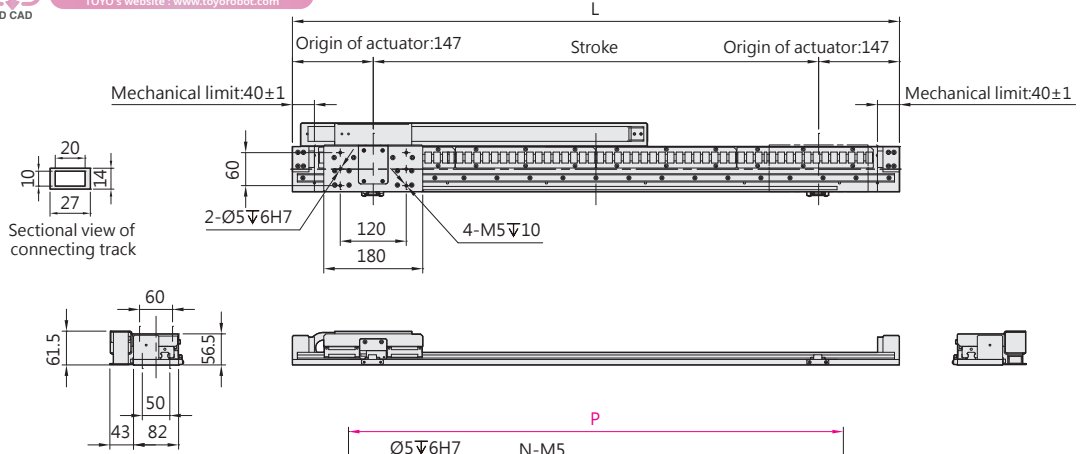
With Iron Core

## LAF7/LSF7-RHS



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



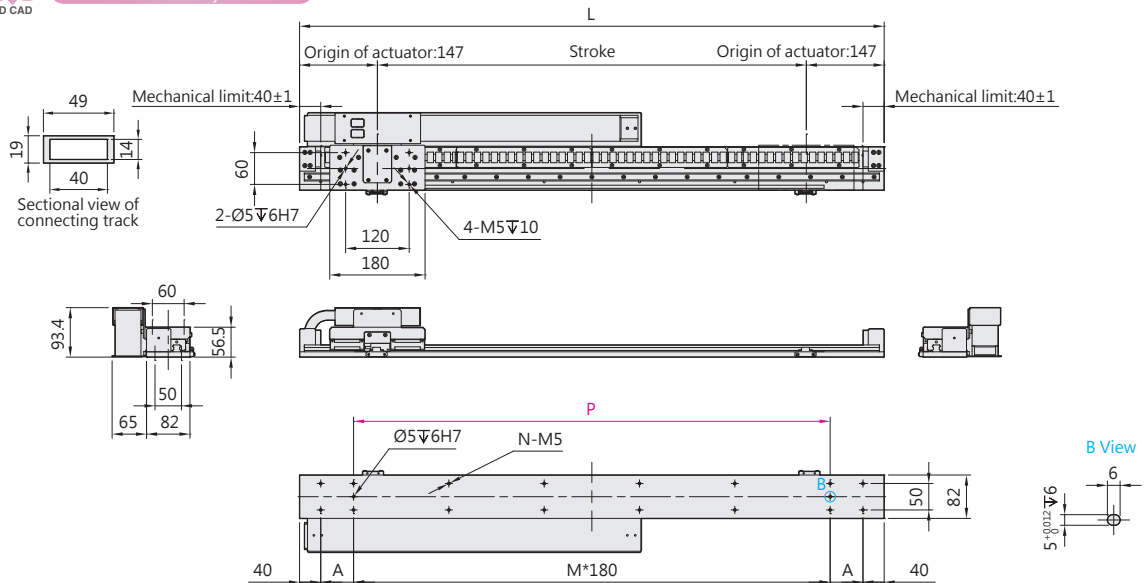
Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

## LAF7/LSF7-RHL



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

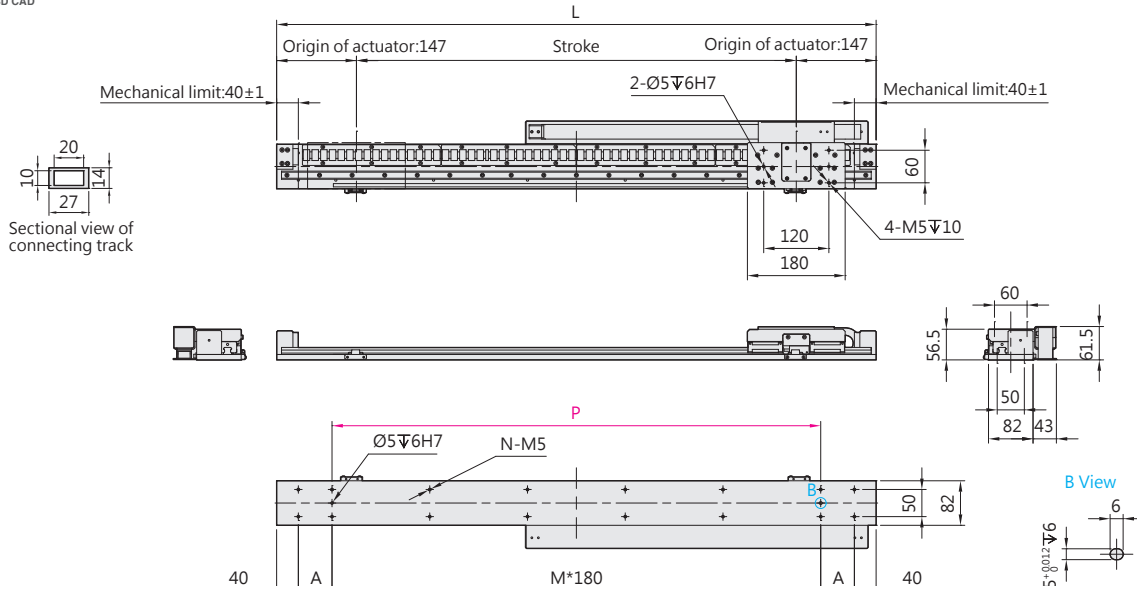
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF7/LSF7-LHS

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



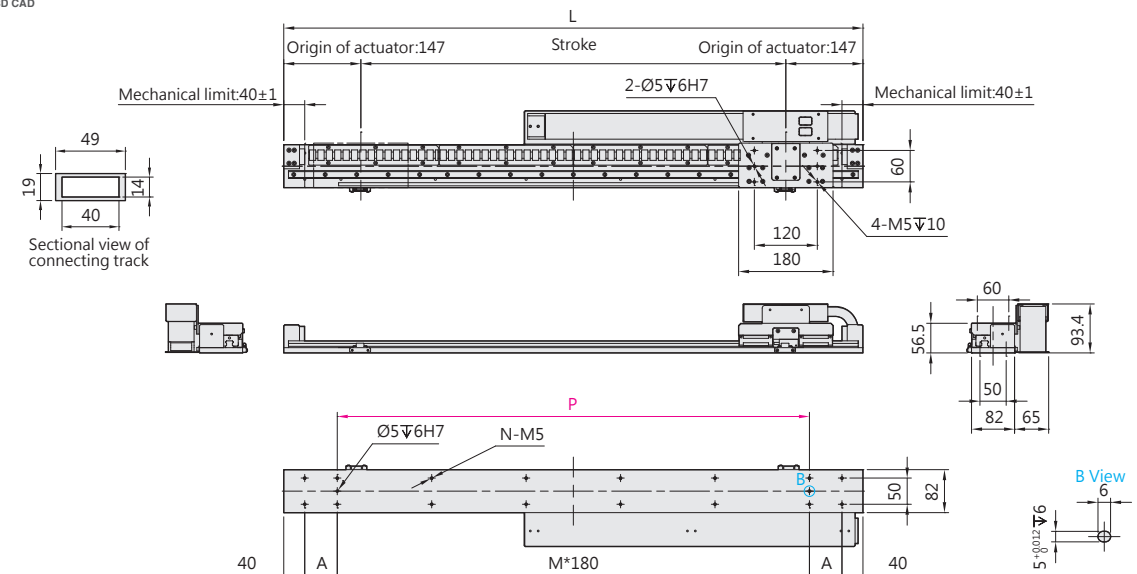
Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

LAF7/LSF7-LHL

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

Features

LGW Series

LGJ Series

LTP2 Series

LN2 Series

LC2 Series

LAF/LSF Series

LAU Series

LMR Series

Controller

LA(S)F

LA(S)F7

LA(S)F15

LA(S)F20

LA(S)F30

# LAF7 / LSF7

Standard type

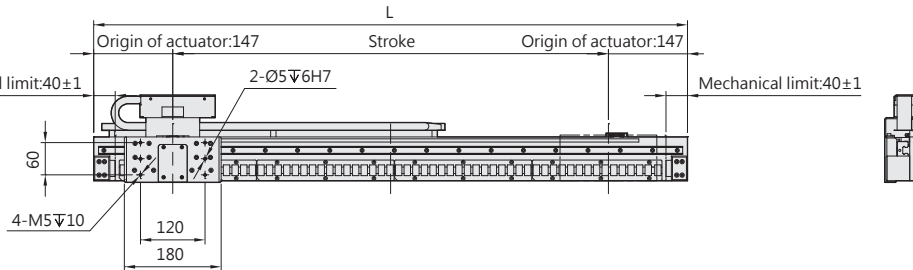
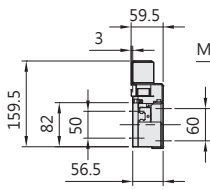
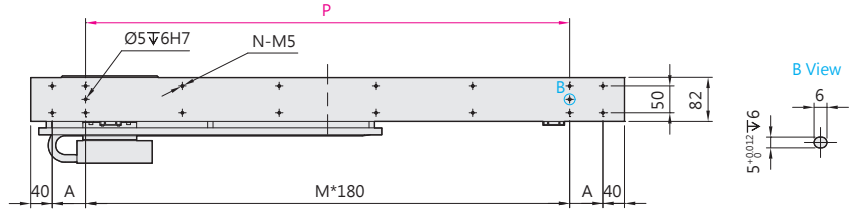
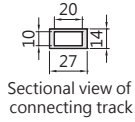
With Iron Core

## LAF7/LSF7-RWS



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



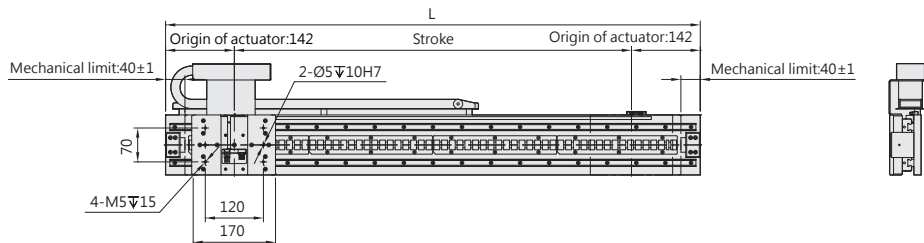
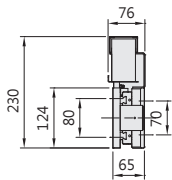
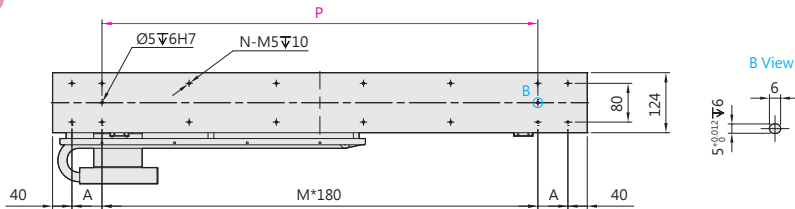
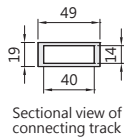
Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

## LAF7/LSF7-RWL



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

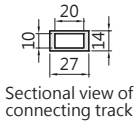
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF7/LSF7-LWS

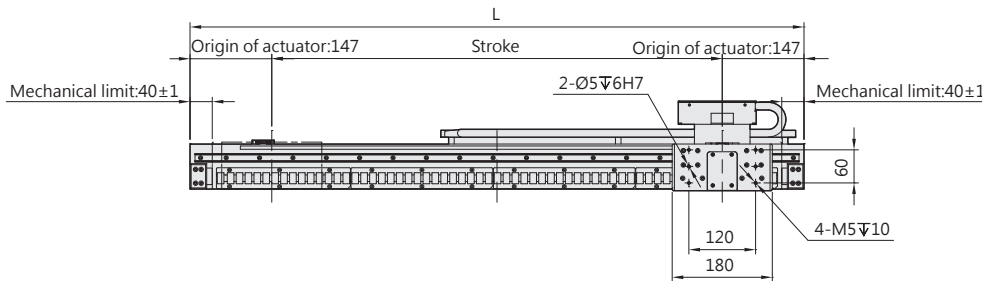
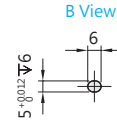
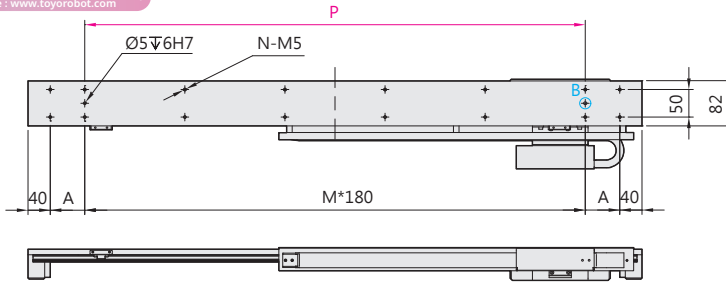
Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Sectional view of connecting track



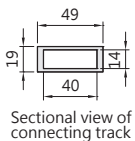
Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	16	16	20	20	20	24	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

LAF7/LSF7-LWL

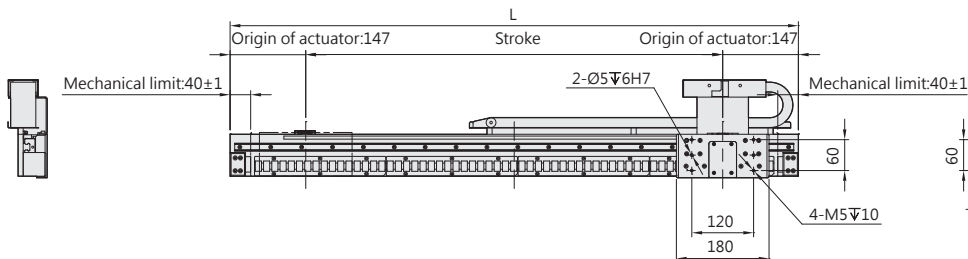
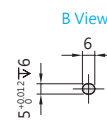
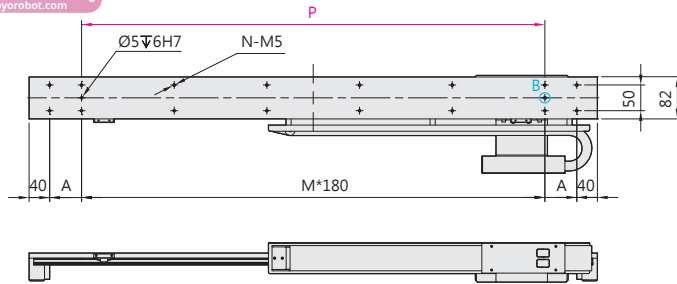
Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Sectional view of connecting track



Stroke	160	290	420	550	680	810	940	1070	1200	1330	1460	1590
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	16	16	20	20	20	24	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	5.2	5.8	6.5	7.2	7.8	8.4	9.2	9.9	10.6	11.2	11.9	12.6

Features

LGW Series

LGJ Series

LTP2 Series

LN2 Series

LC2 Series

LAF/LSF Series

LAU Series

LMB Series

Controller

LA(S)F

LA(S)F7

LA(S)F15

LA(S)F20

LA(S)F30

Features

LGM Series

LGF Series

LTF2 Series

LNPF Series

LCF2 Series

LAF / LSF Series

LAU Series

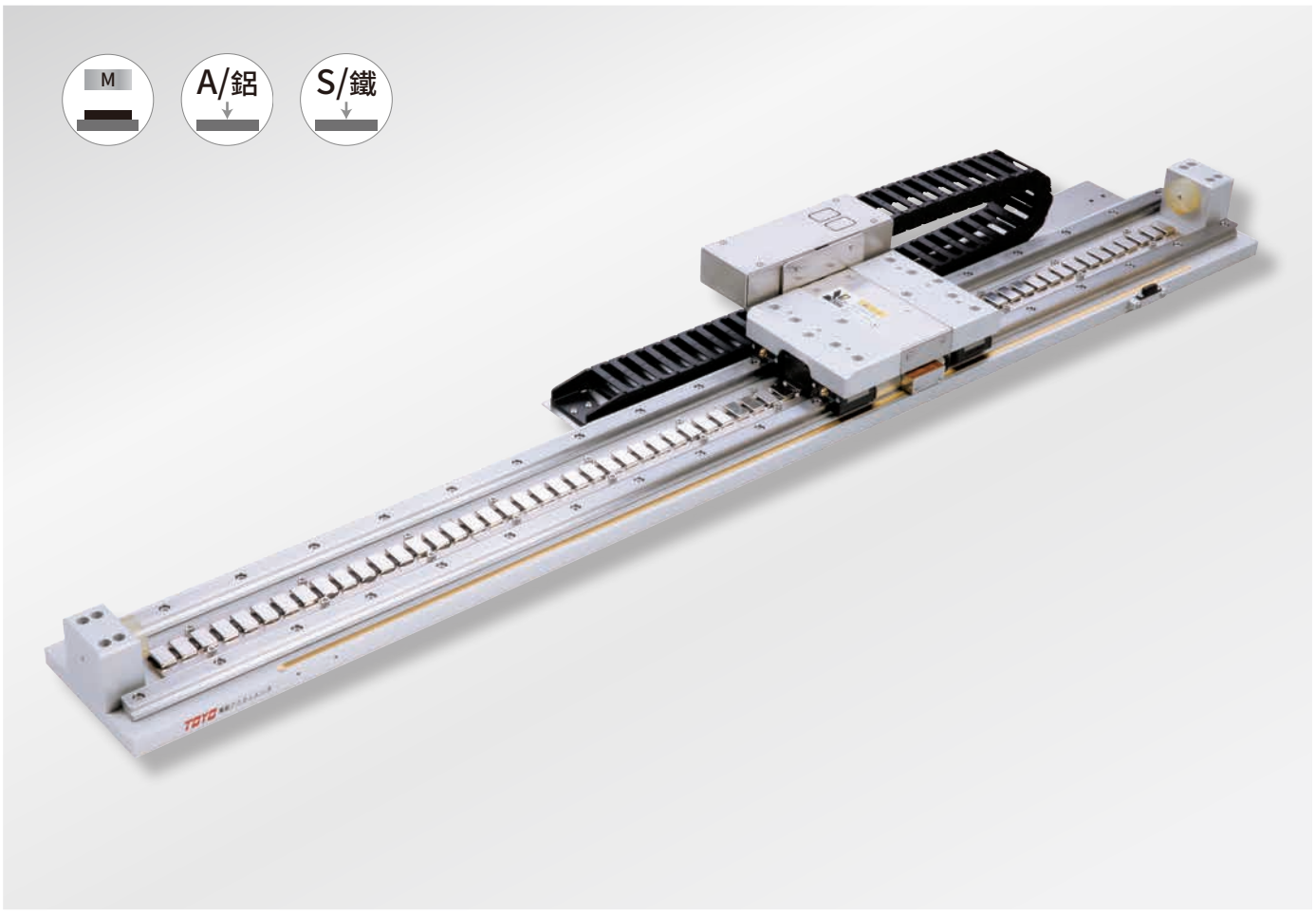
LMR Series

Controller

# LAF15 / LSF15

Standard type

# With Iron Core



Maximum Stroke **1600m**

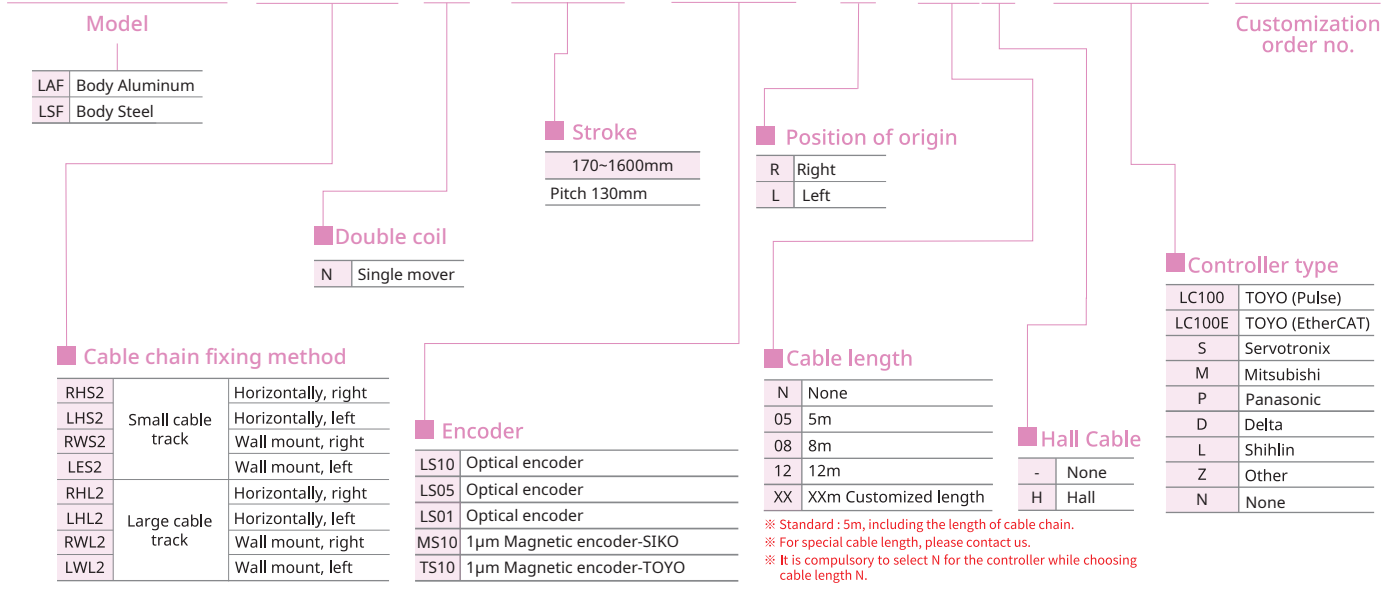
Maximum Speed **3500mm/s**

Continuous Thrust **59N**

Continuous Payload **20kg**

## Ordering Method

# LA(S)F15 - RHS - N - 1600 - LS10 - R - 05H - LC100 - A001



※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

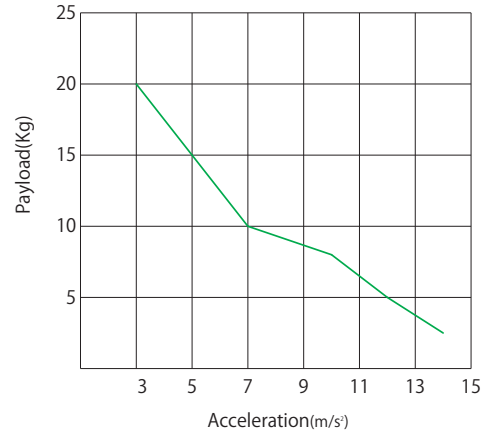
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

**Specification**

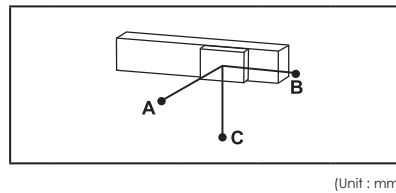
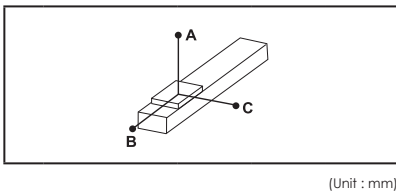
<b>Spec</b>	Model	LAF15 / LSF15
	Repeatability (mm)	±0.002
	Mxa. Force (N)	270
	Rated Force (N)	59
	Mxa. Payload (kg) <sup>※1</sup>	20
	Stroke (mm)	170~1600
	Maximum Speed (mm/s)	3500

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

**Payload & Acceleration**



**Allowable Overhang**

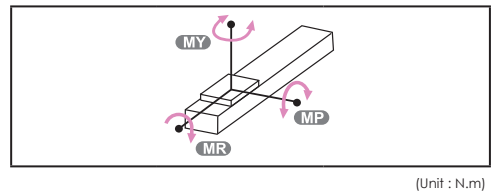


Horizontal Installation <sup>※2</sup>				
LAF15 / LSF15	Load	A	B	C
	5kg	2900	2900	900
	10kg	2500	1500	450
	15kg	2300	1000	300
	20kg	1750	500	200

Wall Installation <sup>※2</sup>				
LAF15 / LSF15	Load	A	B	C
	5kg	850	1800	3000
	10kg	400	900	2100
	15kg	250	550	1900
	20kg	160	400	1750

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



LAF15 / LSF15	MY	280
	MP	280
	MR	250

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGM Series

LGF Series

LTF2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LA(S)F  
LA(S)F7  
LA(S)F15  
LA(S)F20  
LA(S)F30

# LAF15 / LSF15

Standard type

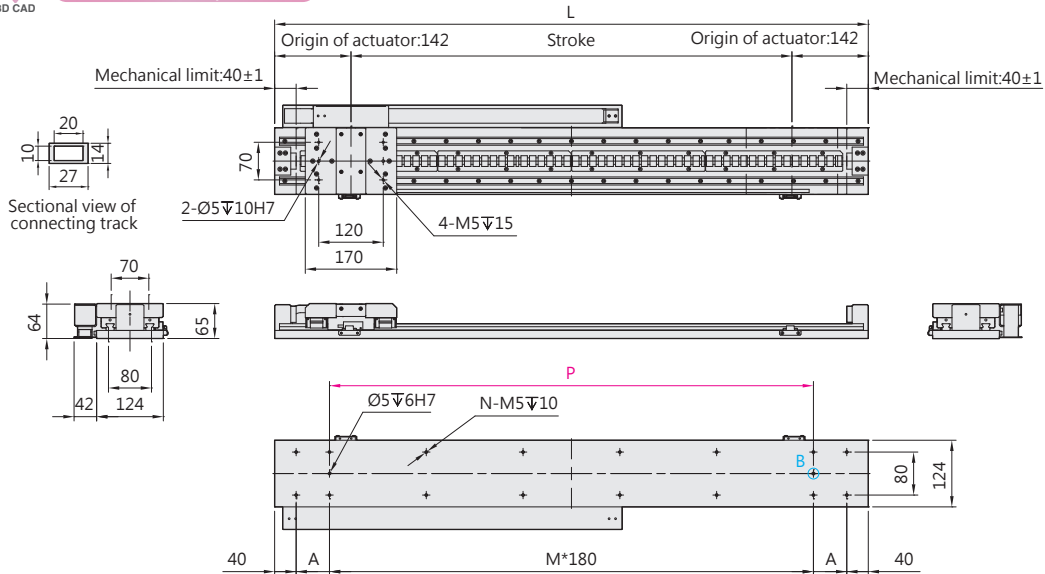
With Iron Core

## LAF15 / LSF15-RHS

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



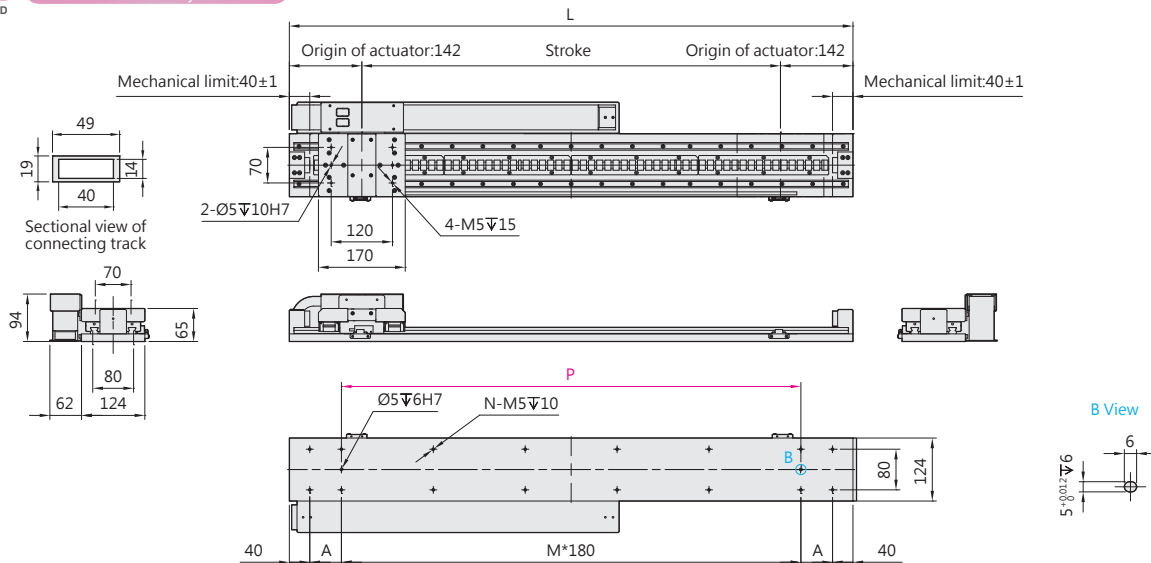
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0

## LAF15 / LSF15-RHL

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0



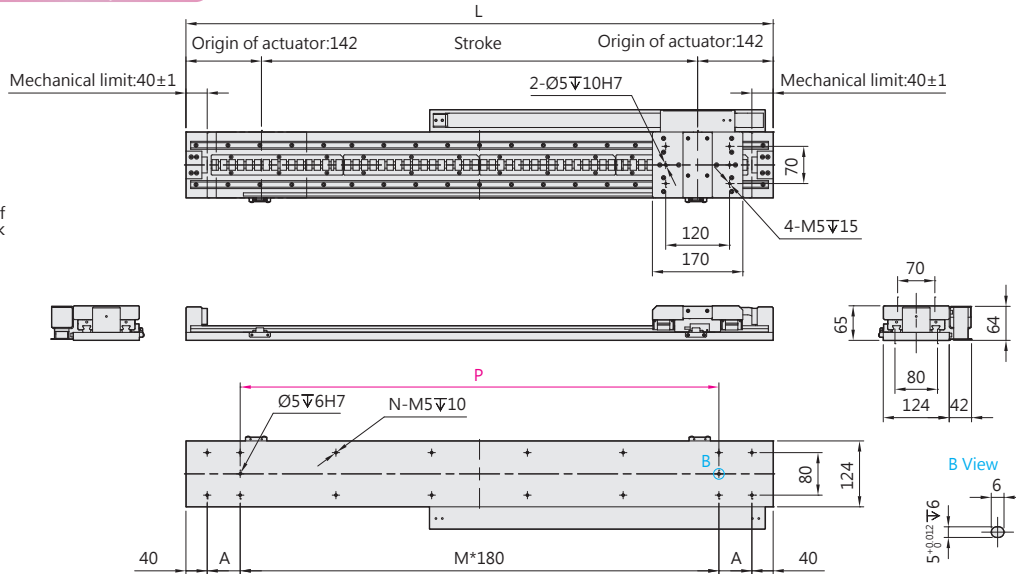
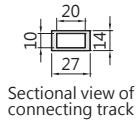
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF15 / LSF15-LHS

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



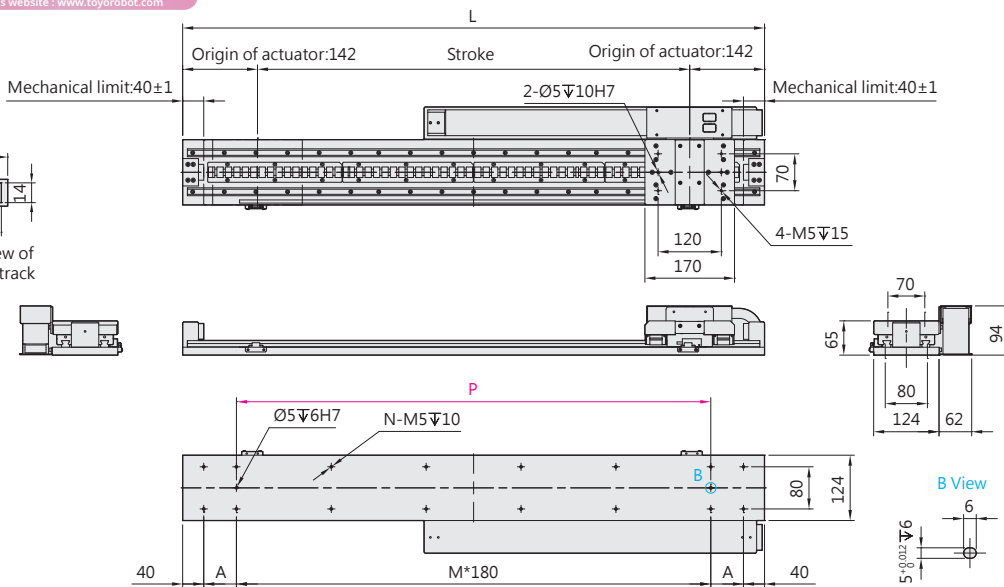
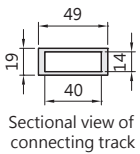
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0

LAF15 / LSF15-LHL

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0

Features

LGW Series

LGJ Series

LTP2 Series

LN2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LA(S)F

LA(S)F7

LA(S)F15

LA(S)F20

LA(S)F30

# LAF15 / LSF15

Standard type

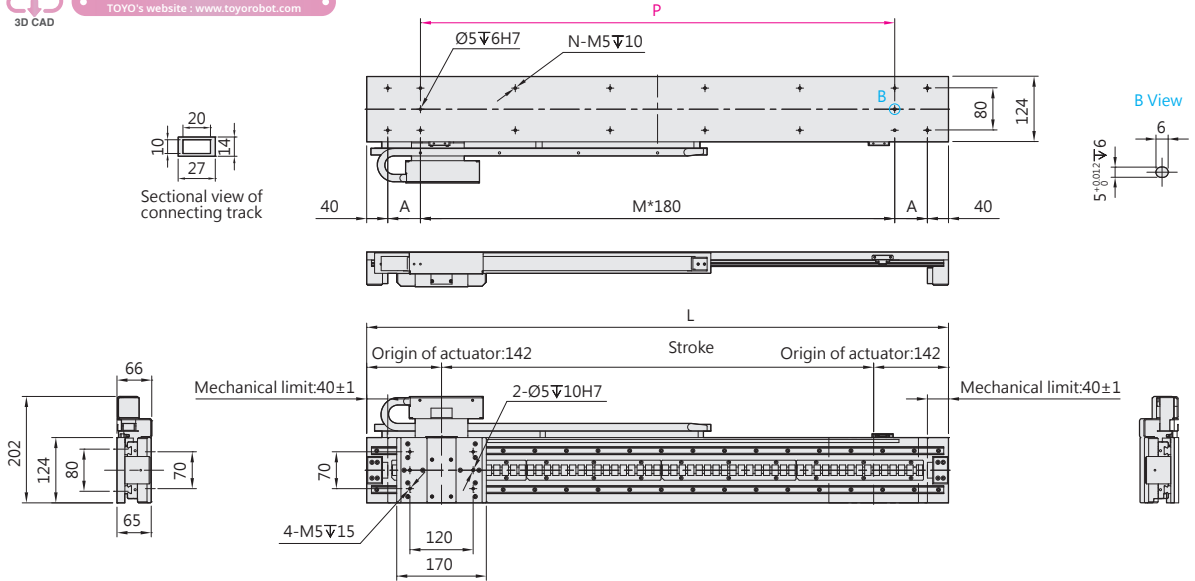
With Iron Core

## LAF15 / LSF15-RWS



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



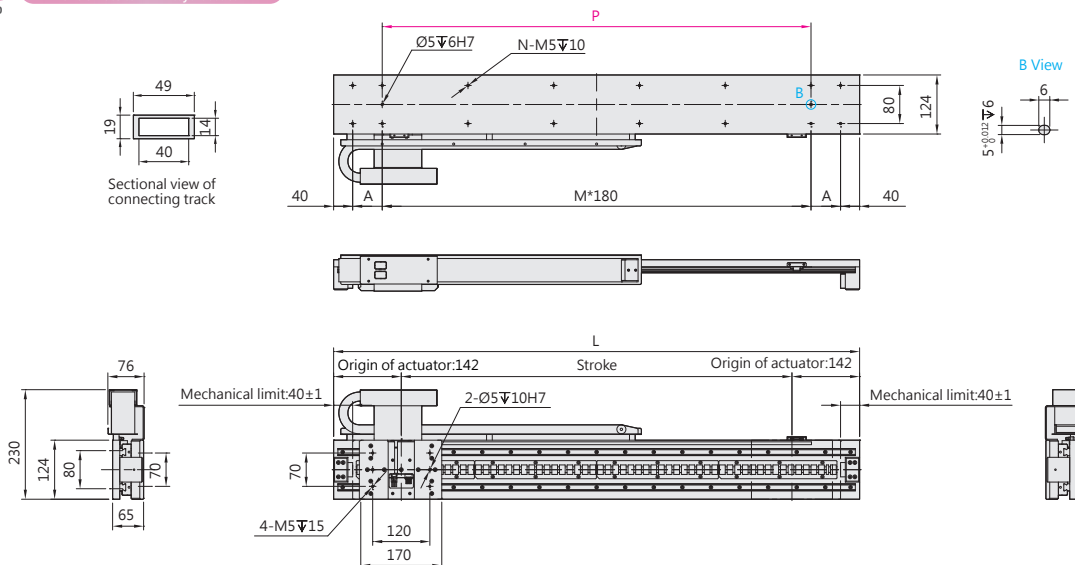
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0

## LAF15 / LSF15-RWL



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0

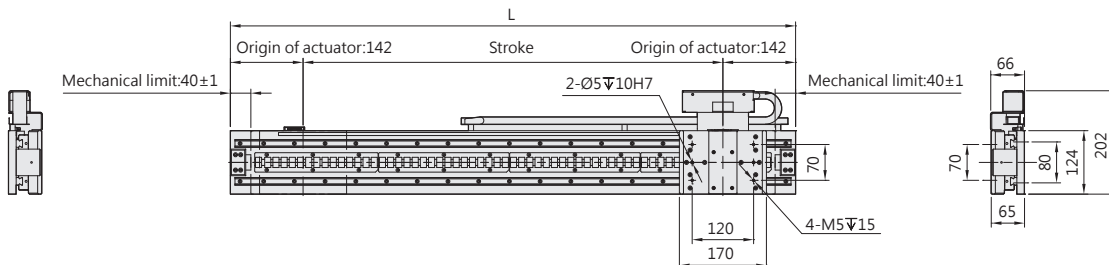
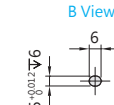
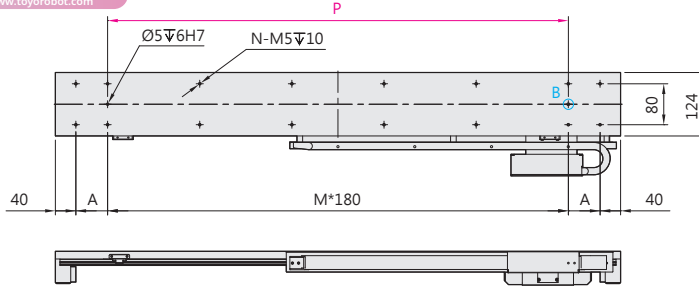
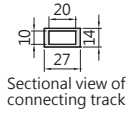
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF15 / LSF15-LWS

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



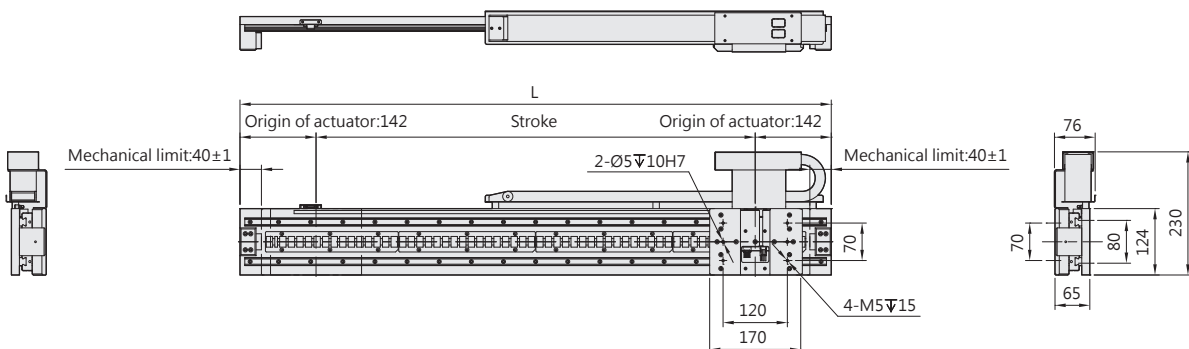
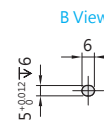
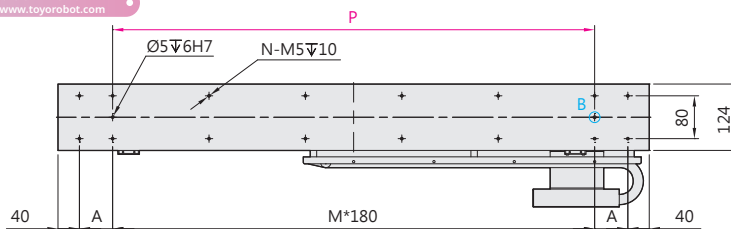
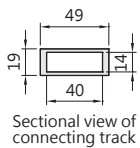
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0

LAF15 / LSF15-LWL

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	7.9	9.2	10.3	11.6	12.9	14.1	15.4	16.7	18.0	19.3	20.6	22.0

Features

LGW Series

LGF Series

LTP2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LA(S)F

LA(S)F7

LA(S)F15

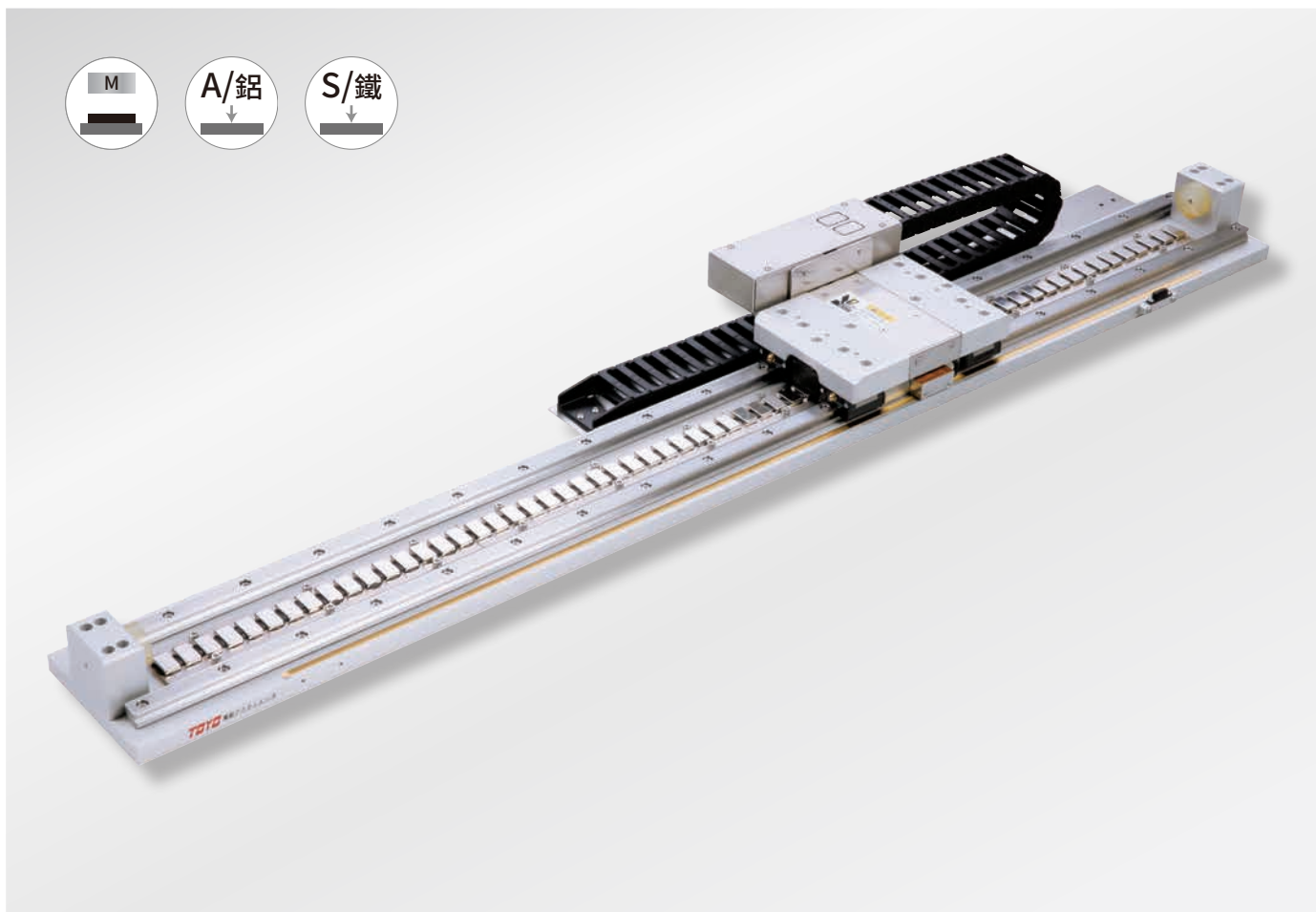
LA(S)F20

LA(S)F30

# LAF20 / LSF20

Standard type

With Iron Core



Maximum Stroke **1600m**

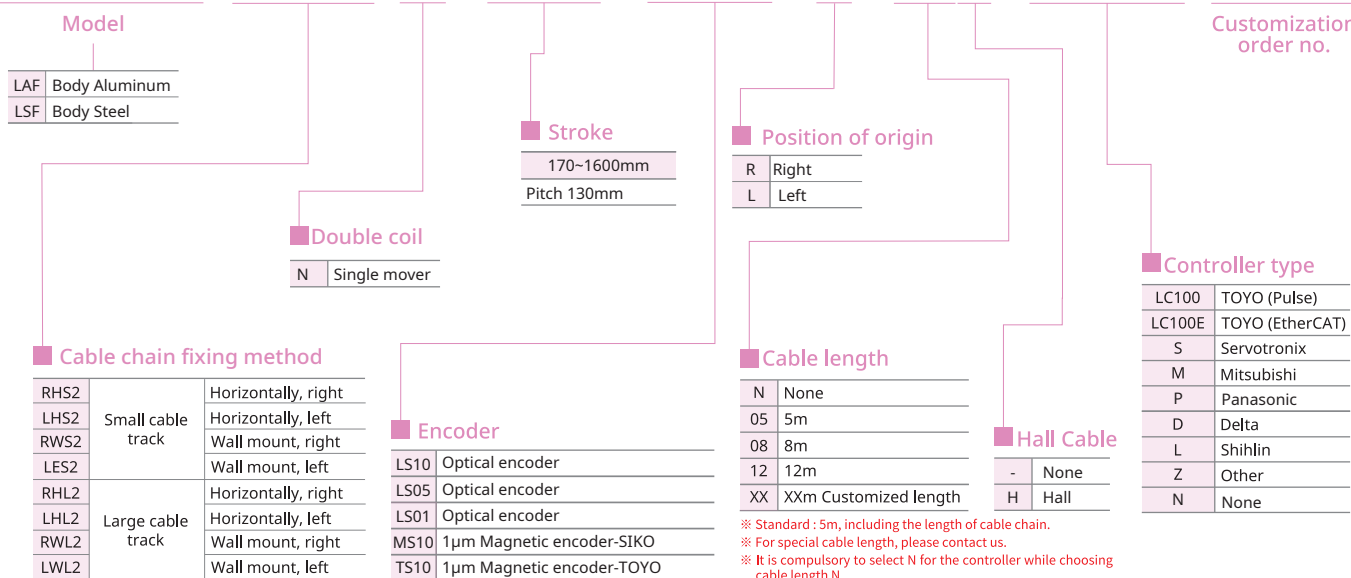
Maximum Speed **3500mm/s**

Continuous Thrust **113N**

Continuous Payload **40kg**

## Ordering Method

# LA(S)F20 - RHS - N - 1600 - LS10 - R - 05H - LC100 - A001



※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

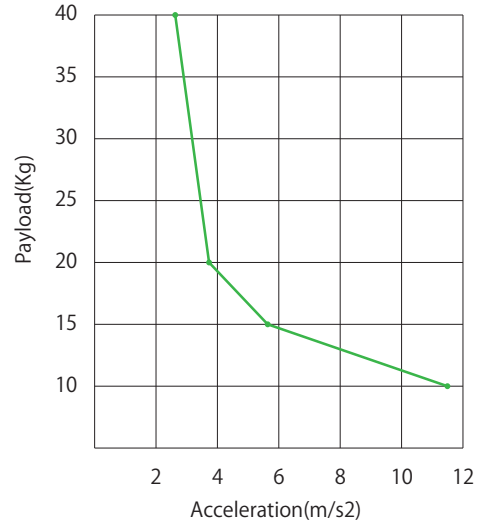
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

**Specification**

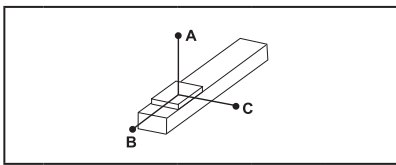
<b>Spec</b>	Model	LAF20 / LSF20
	Repeatability (mm)	±0.002
	Mxa. Force (N)	510
	Rated Force (N)	113
	Mxa. Payload (kg) <sup>※1</sup>	40
	Stroke (mm)	170~1600
	Maximum Speed (mm/s)	3500

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

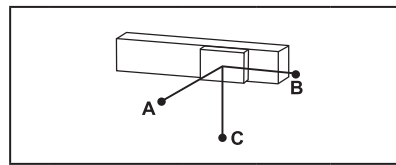
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



(Unit : mm)

**Horizontal Installation <sup>※2</sup>**

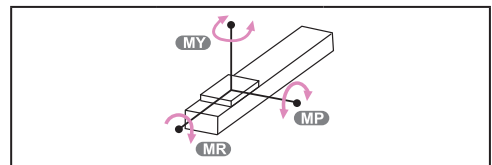
LAF20 / LSF20	Load	A	B	C
	10kg	3100	1700	1150
	15kg	2800	1100	850
	20kg	2600	850	700
	25kg	2100	700	500
	30kg	1800	600	350
	35kg	1500	520	250
	40kg	1300	450	200

**Wall Installation <sup>※2</sup>**

LAF20 / LSF20	Load	A	B	C
	10kg	1200	1300	2500
	15kg	850	800	2000
	20kg	650	600	2000
	25kg	450	390	1200
	30kg	300	300	1000
	35kg	250	250	850
	40kg	200	200	750

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LAF20 / LSF20	MY	350
	MP	350
	MR	300

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGF Series

LTF2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LA(S)F  
LA(S)F7  
LA(S)F15  
LA(S)F20  
LA(S)F30

# LAF20 / LSF20

Standard type

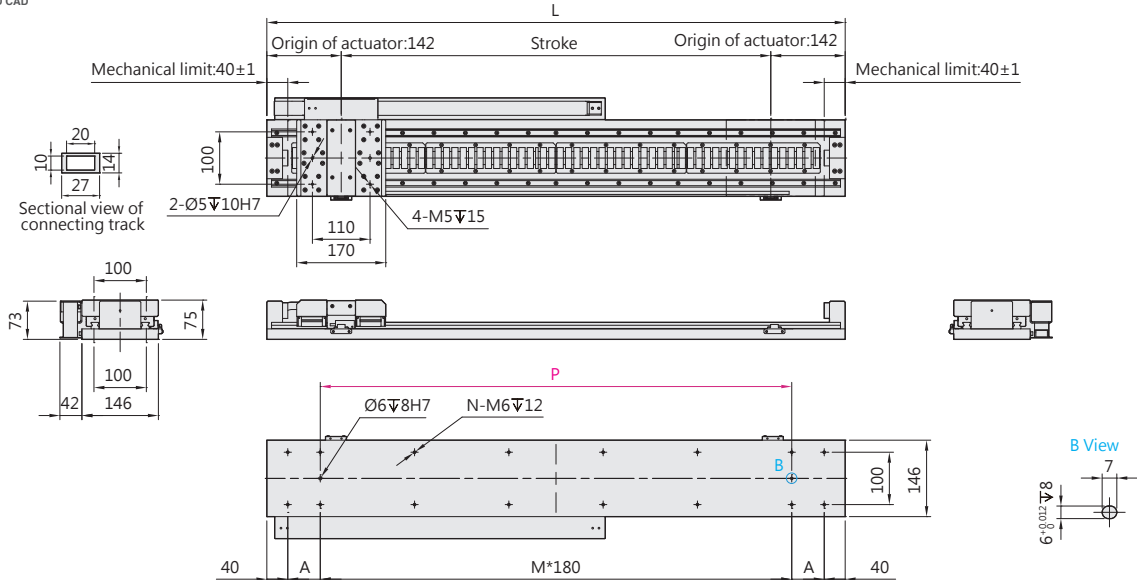
With Iron Core

## LAF20 / LSF20-RHS



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



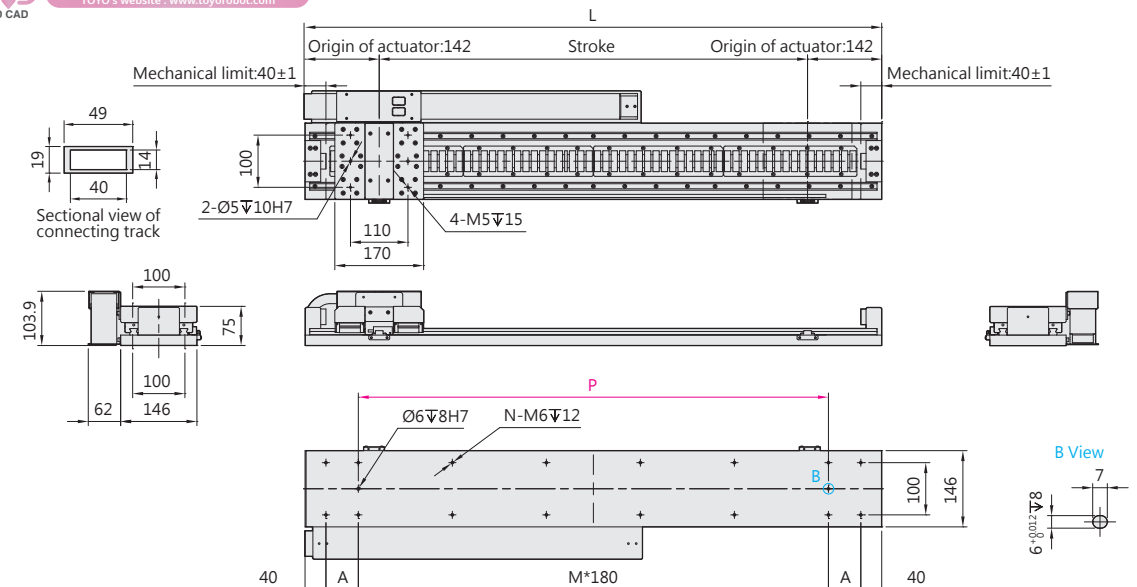
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8

## LAF20 / LSF20-RHL



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8

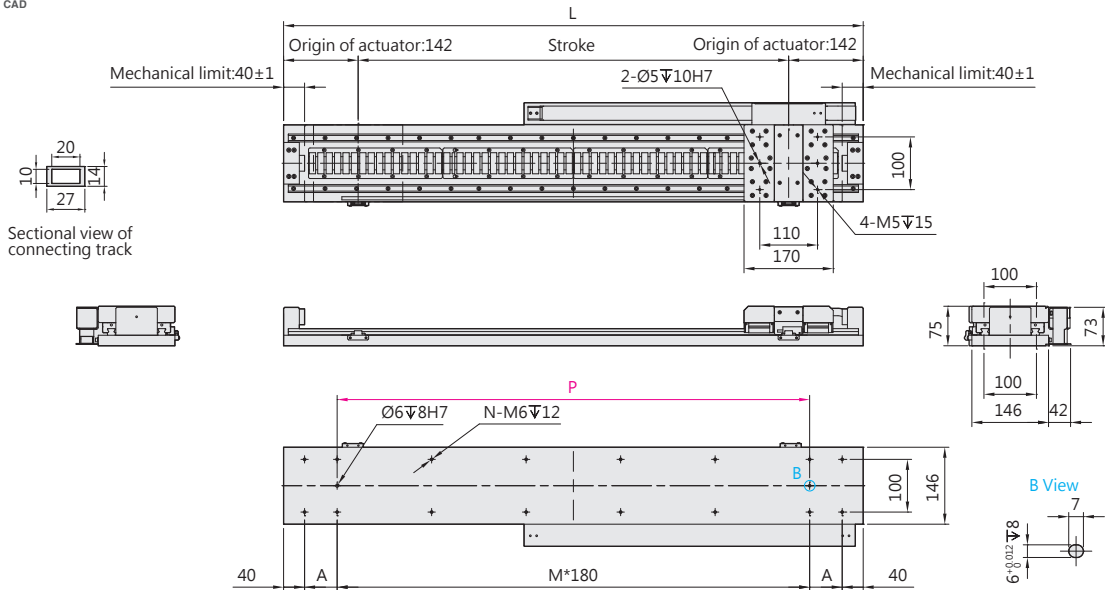
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF20 / LSF20-LHS

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



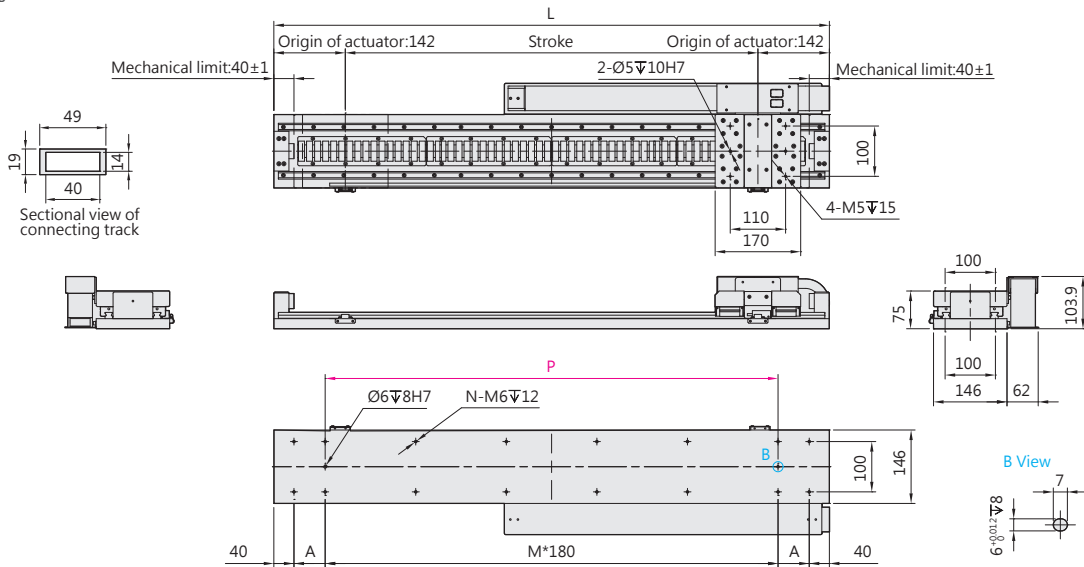
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	900	900	1260	1260	1260	1620	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8

LAF20 / LSF20-LHL

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	900	900	1260	1260	1260	1620	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8

Features  
LGM Series  
LGF Series  
LTP2 Series  
LNP2 Series  
LCP2 Series  
LAF / LSF Series  
LAU Series  
LMB Series  
Controller  
LA(S)F  
LA(S)F7  
LA(S)F15  
LA(S)F20  
LA(S)F30

# LAF20 / LSF20

Standard type

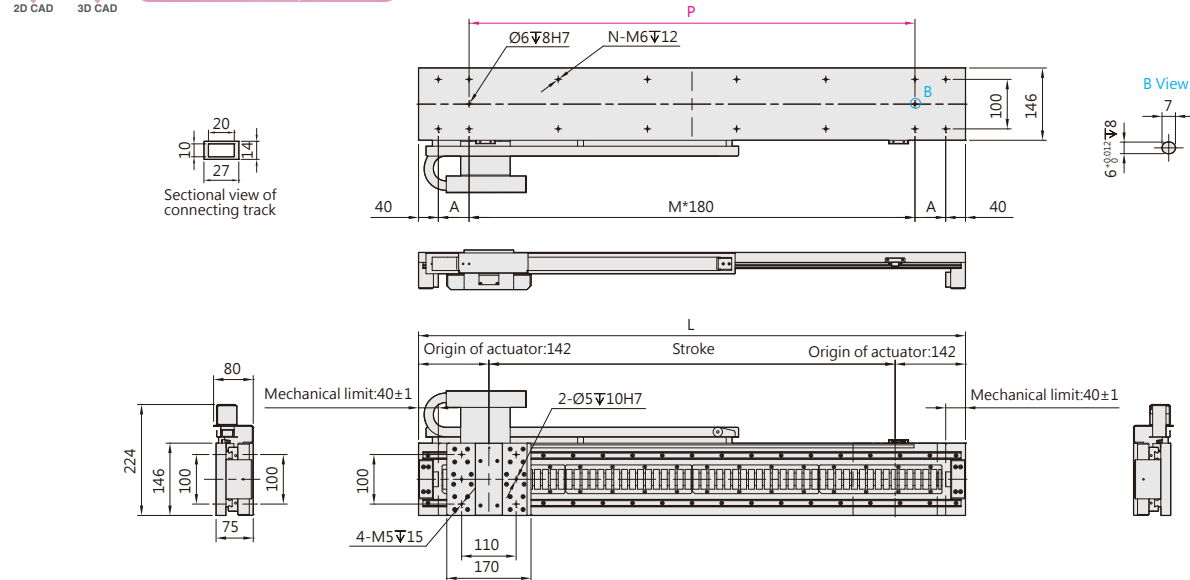
With Iron Core

## LAF20 / LSF20-RWS



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



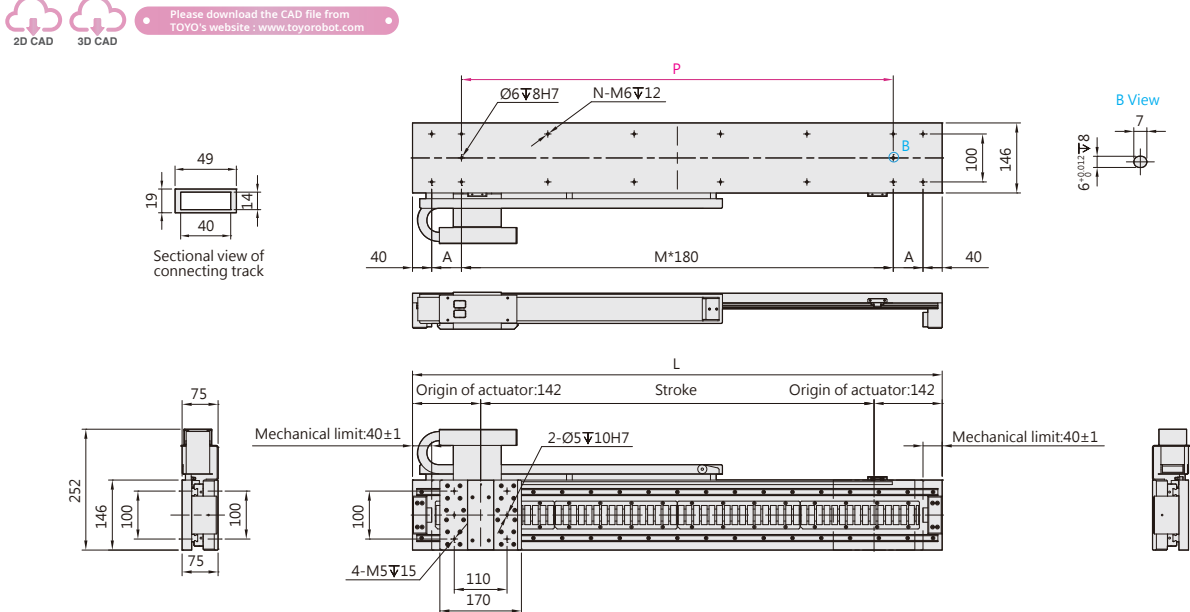
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8

## LAF20 / LSF20-RWL



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8



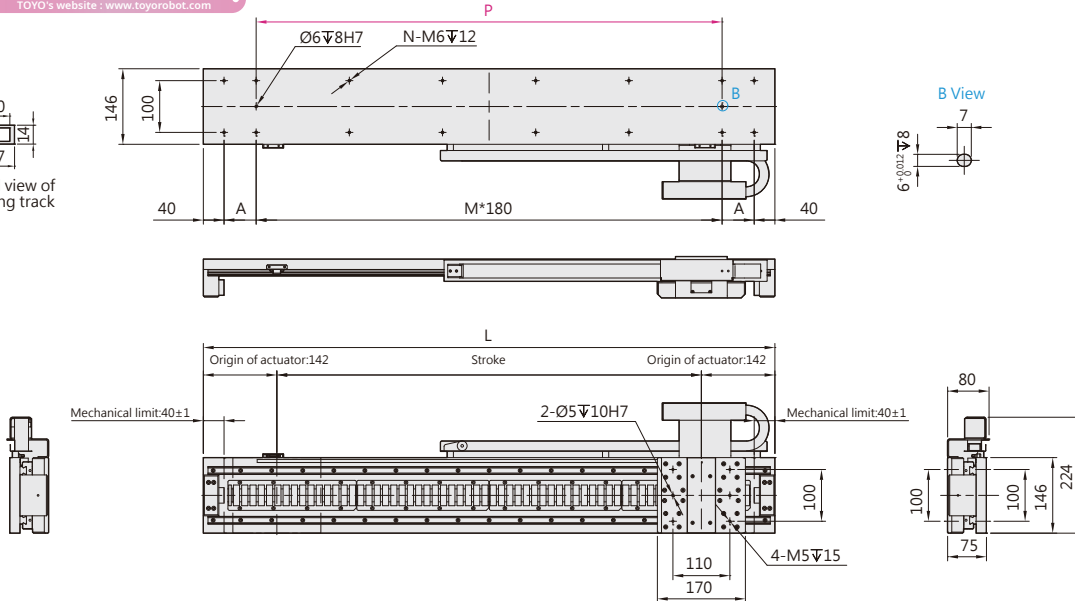
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF20 / LSF20-LWS

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



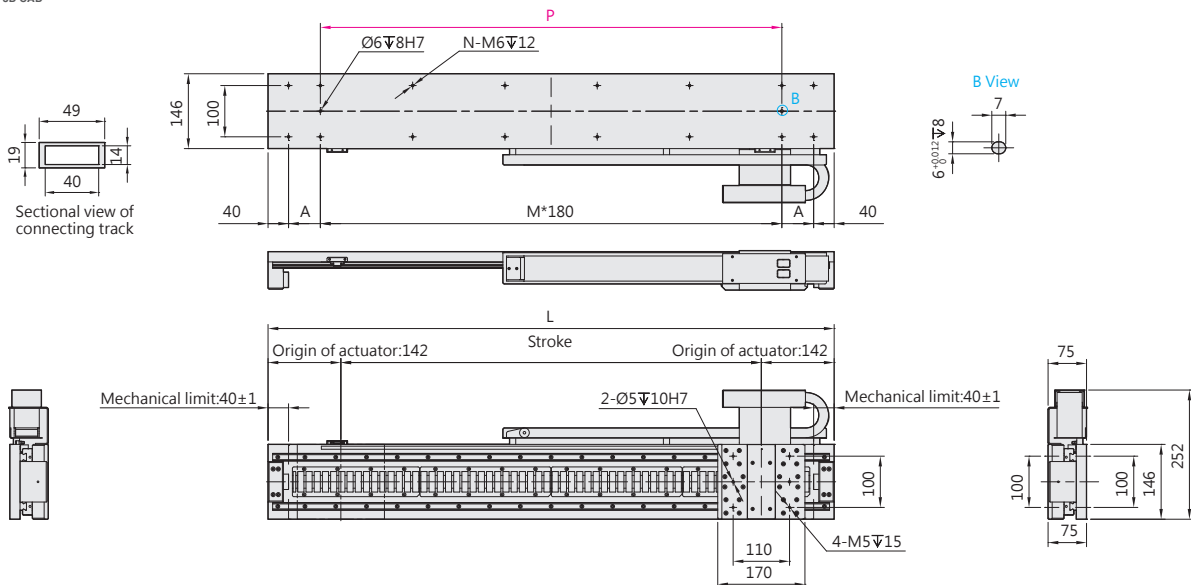
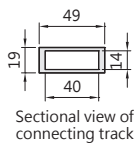
Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8

LAF20 / LSF20-LWL

Unit : mm

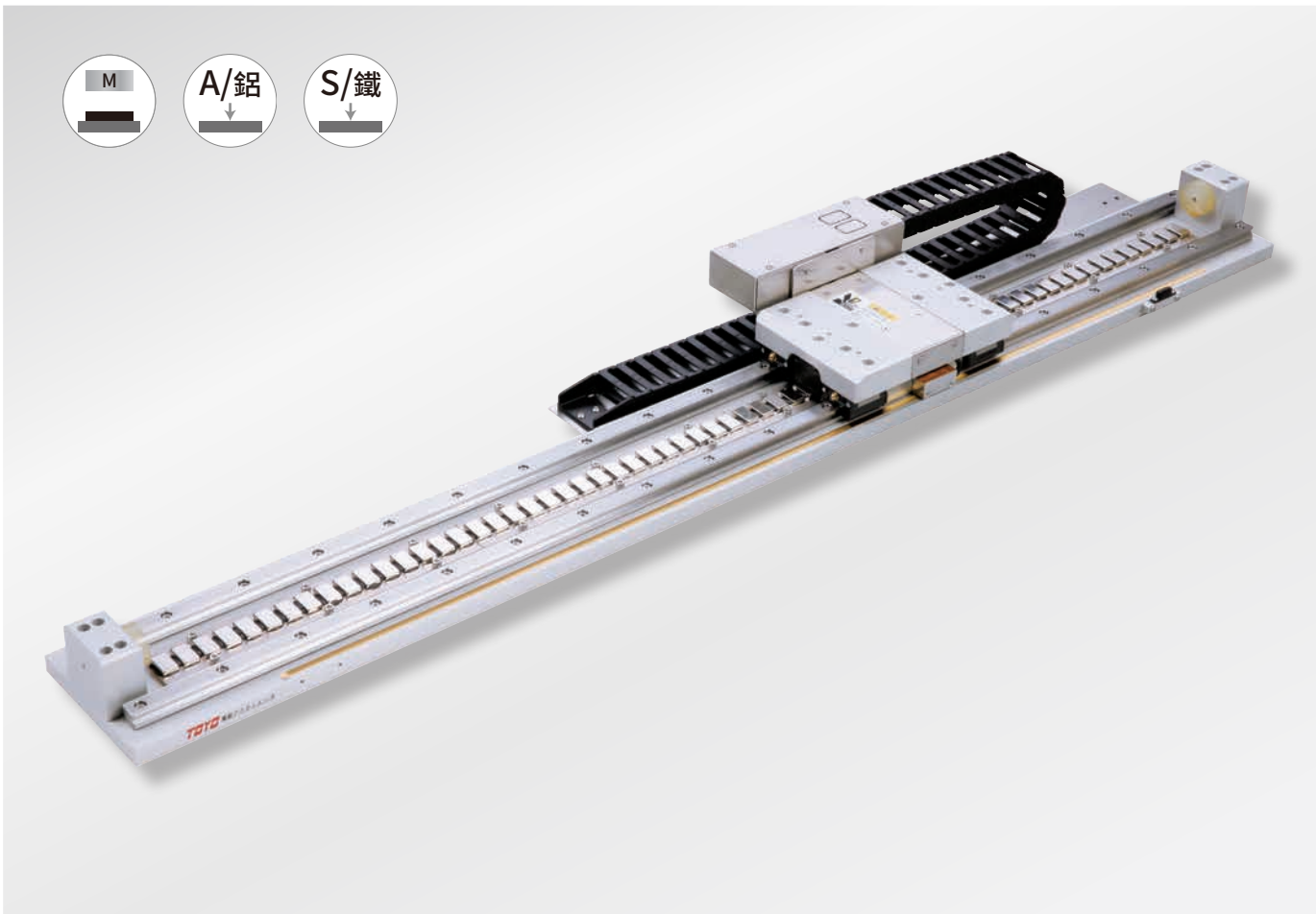


Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	170	300	430	560	690	820	950	1080	1210	1340	1470	1600
L	454	584	714	844	974	1104	1234	1364	1494	1624	1754	1884
A	97	162	47	112	177	62	127	12	77	142	27	92
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	11.2	12.7	14.5	16.1	17.8	19.5	21.3	23.0	24.7	26.3	28.1	29.8

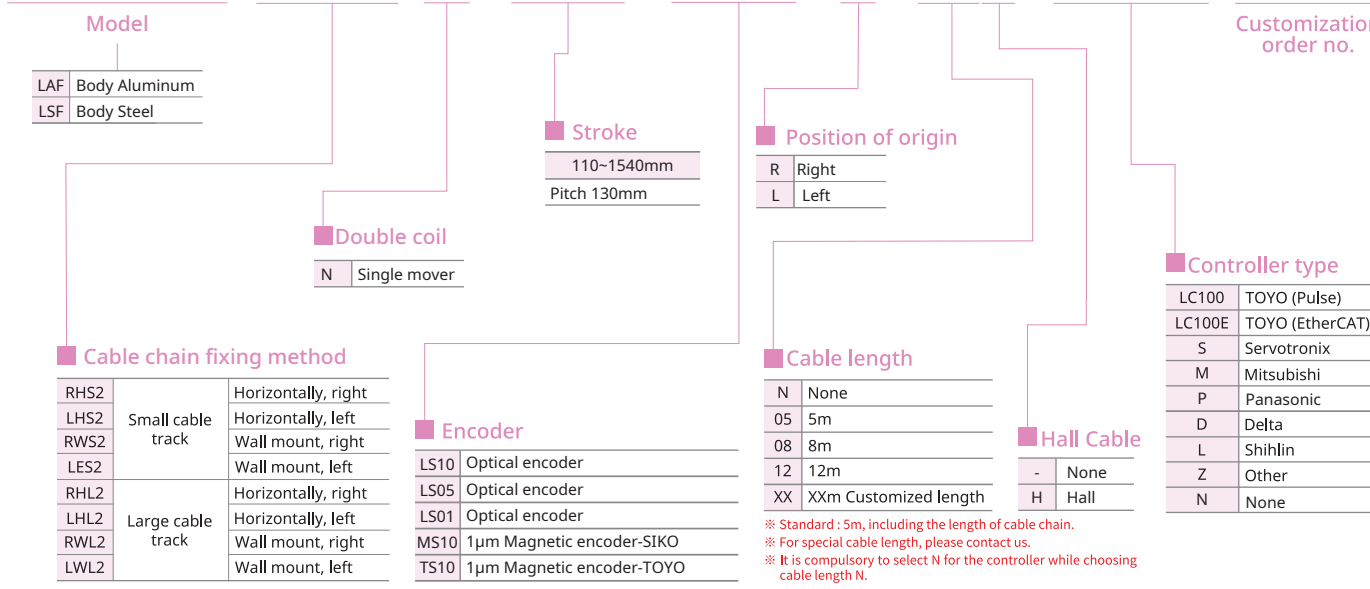
# LAF30 / LSF30 Standard type With Iron Core



Maximum Stroke **1540m**      Maximum Speed **3500mm/s**      Continuous Thrust **158N**      Continuous Payload **50kg**

## Ordering Method

# LA(S)F30 - RHS - N - 1540 - LS10 - R - 05H - LC100 - A001



※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

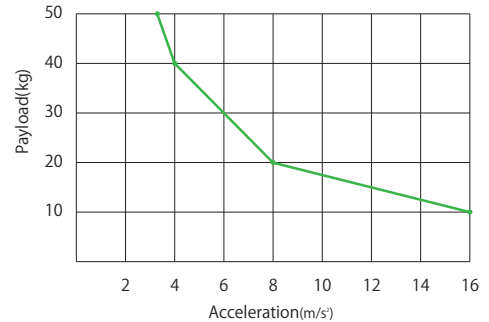
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

**Specification**

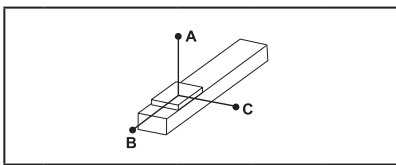
<b>Spec</b>	Model	LAF30 / LSF30
	Repeatability (mm)	±0.002
	Mxa. Force (N)	713
	Rated Force (N)	158
	Mxa. Payload (kg) <sup>※1</sup>	50
	Stroke (mm)	110~1540
	Maximum Speed (mm/s)	3500

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

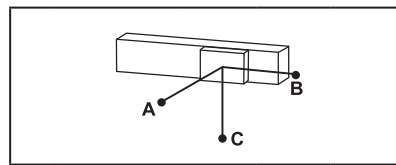
**Payload & Acceleration**



**Allowable Overhang**



(Unit : mm)



(Unit : mm)

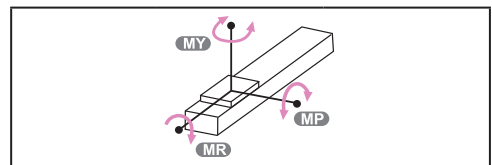
**Horizontal Installation <sup>※2</sup>**

LAF30 / LSF30	Load	A	B	C
	10kg	3300	2400	1200
	20kg	2200	1200	650
	30kg	2000	800	500
	40kg	1550	550	300
	50kg	1200	350	150
	35kg	1500	520	250
	40kg	1300	450	200

**Wall Installation <sup>※2</sup>**

LAF30 / LSF30	Load	A	B	C
	10kg	1250	1300	2700
	20kg	600	600	1700
	30kg	400	350	1400
	40kg	200	200	600
	50kg	140	150	450
	35kg	250	250	850
	40kg	200	200	750

**Static Loading Moment**



(Unit : N.m)

LAF30 / LSF30	MY	370
	MP	370
	MR	300

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGF Series

LTF2 Series

LNPF2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LA(S)F  
LA(S)F7  
LA(S)F15  
LA(S)F20  
LA(S)F30

# LAF30 / LSF30

Standard type

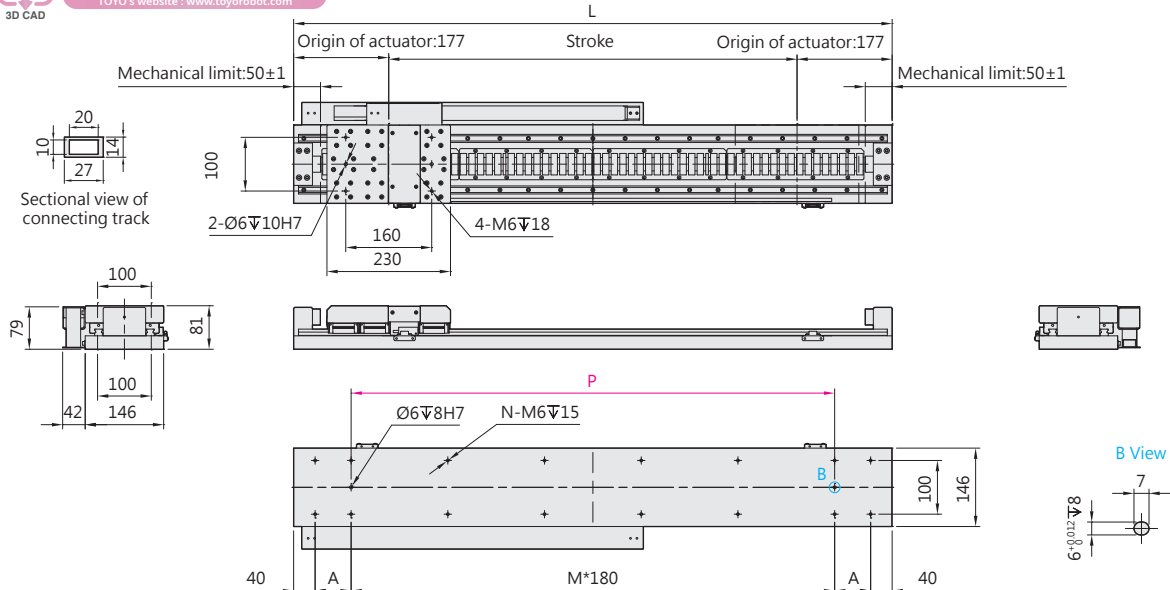
With Iron Core

## LAF30 / LSF30-RHS



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



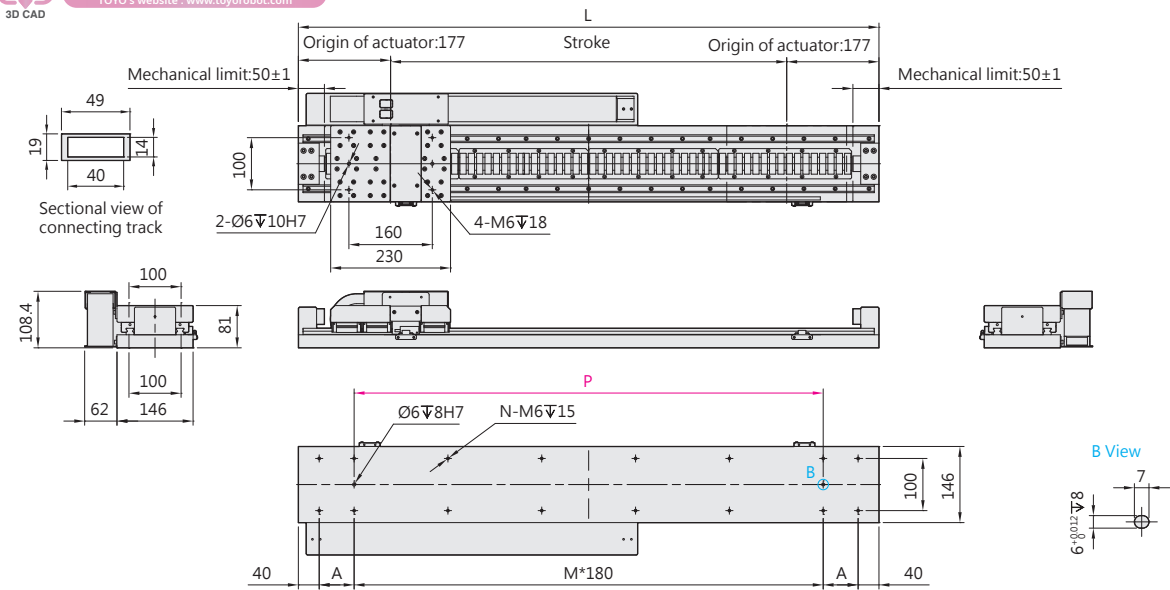
Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

## LAF30 / LSF30-RHL



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

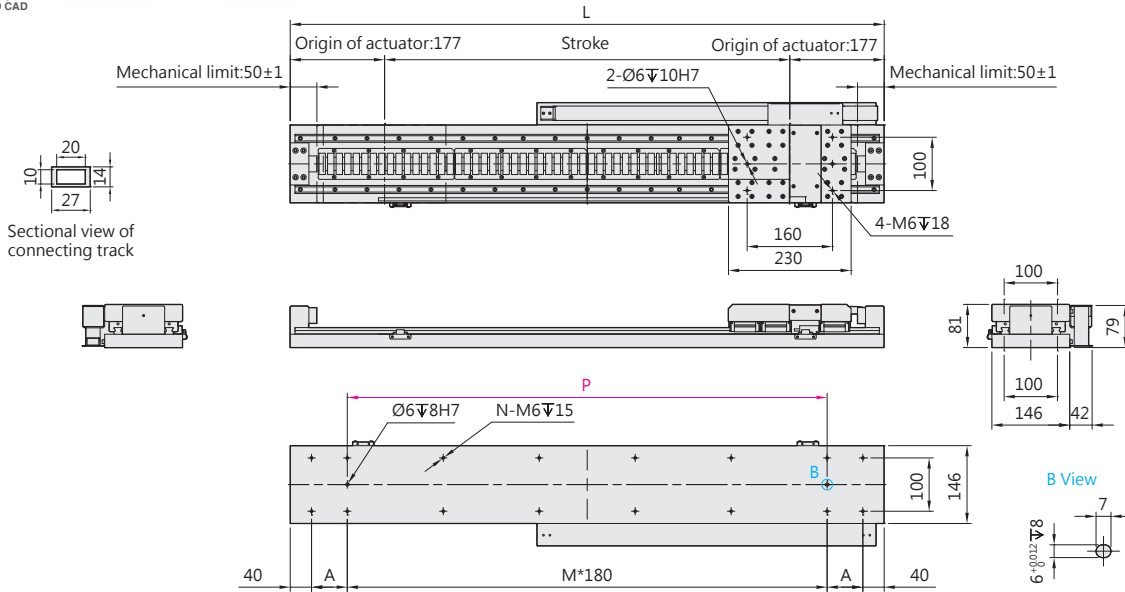
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF30 / LSF30-LHS

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



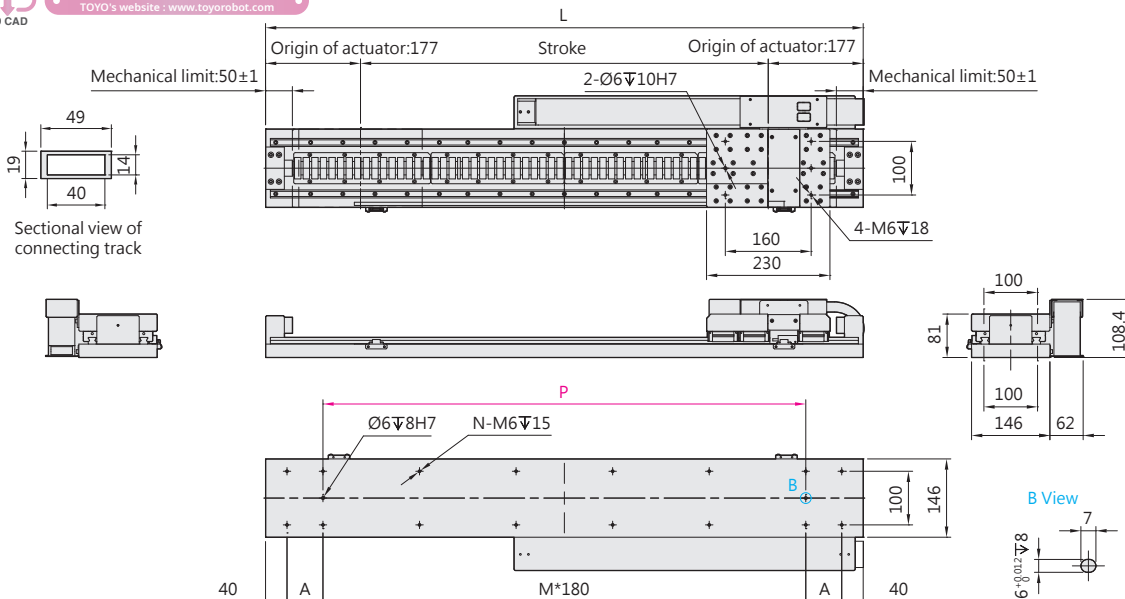
Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

LAF30 / LSF30-LHL

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

Features

LGW Series

LGJ Series

LTP2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMB Series

Controller

LA(S)F

LA(S)F7

LA(S)F15

LA(S)F20

LA(S)F30

# LAF30 / LSF30

Standard type

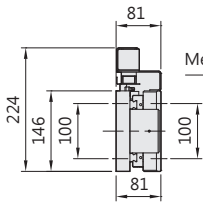
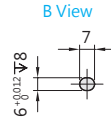
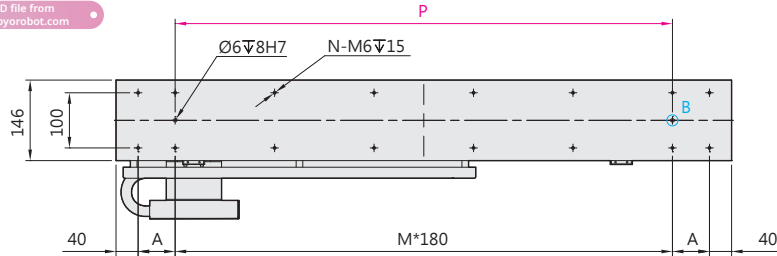
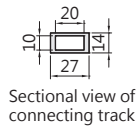
With Iron Core

## LAF30 / LSF30-RWS

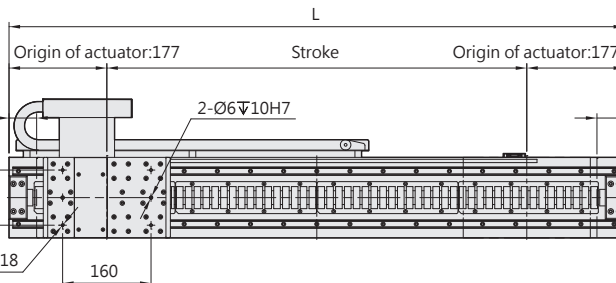


Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Mechanical limit:50±1



Mechanical limit:50±1

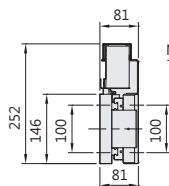
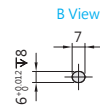
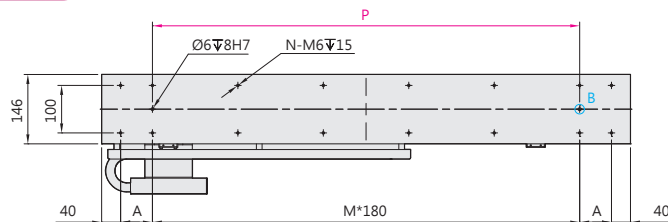
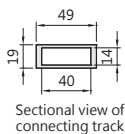
Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

## LAF30 / LSF30-RWL

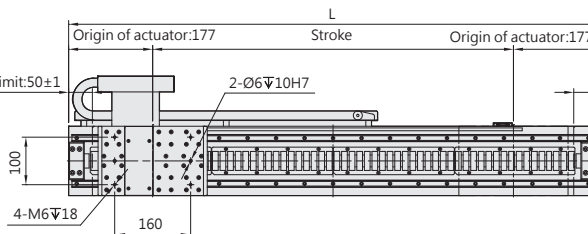


Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

單位 Unit: mm



Mechanical limit:50±1



Mechanical limit:50±1

Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	540	900	900	1260	1260	1260	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

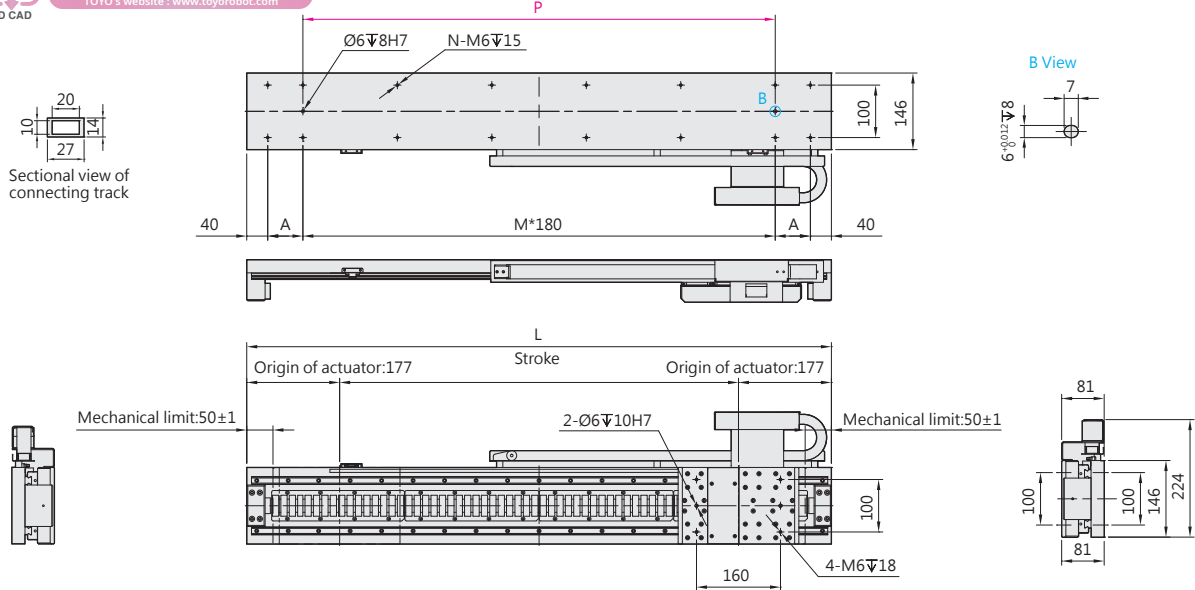
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

LAF30 / LSF30-LWS



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



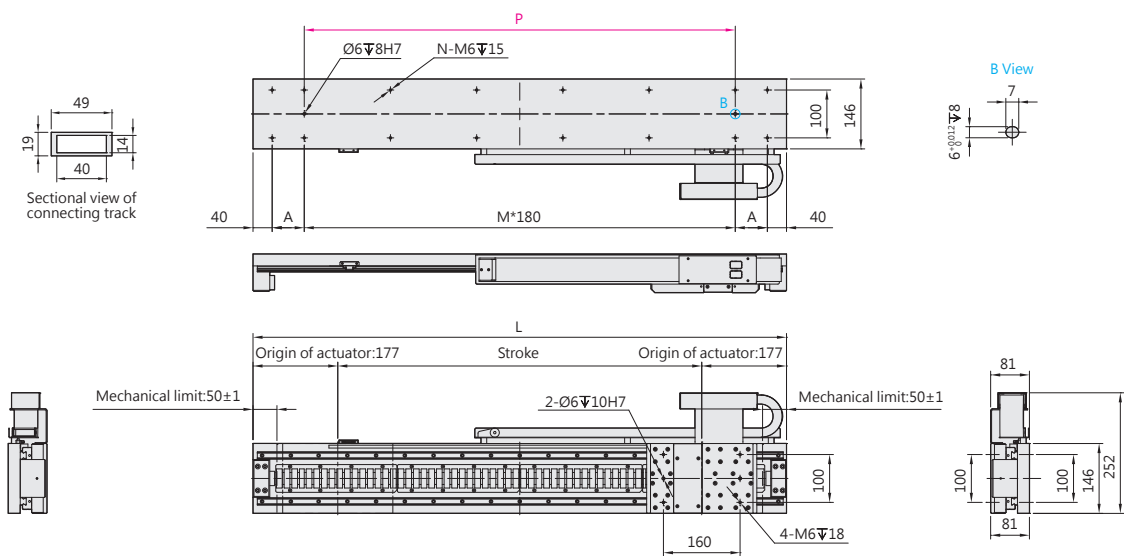
Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	900	900	1260	1260	1260	1620	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

LAF30 / LSF30-LWL



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	110	240	370	500	630	760	890	1020	1150	1280	1410	1540
L	464	594	724	854	984	1114	1244	1374	1504	1634	1764	1894
A	102	167	52	117	182	67	132	17	82	147	32	97
M	1	1	3	3	3	5	5	7	7	7	9	9
N	8	8	12	12	12	16	16	20	20	20	24	24
P	180	180	540	540	900	900	1260	1260	1260	1620	1620	1620
KG	14.6	16.5	18.5	20.3	22.3	24.3	26.3	28.1	30.1	32.1	34.1	36.1

特色説明  
Features

LGW Series

LGF Series

LTF2 Series

LNPF2 Series

LCPF2 Series

LAF / LSF Series

LAU Series

LMR Series

控制器規格  
Controller

## Memo



# LAU (Standard type)

## Linear Motor Robot without Iron Core

### Contents

SMALL

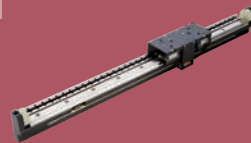
LAU3



Width 82mm  
Max. stroke 1290mm..... 261  
Continuous payload 4kg

MEDIUM

LAU5



Width 85mm  
Max. stroke 1290mm..... 265  
Continuous payload 15kg

# 仕様索引

## Spec Index

### LAU linear motor robot without iron core (Standard type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard(Aluminum)	Linear Motor Robot	85	LAU3	Single motor	3A	±0.002	AUM3-S1	28	4	2500
		85	LAU5			±0.002	AUM3-S2	57	15	2500

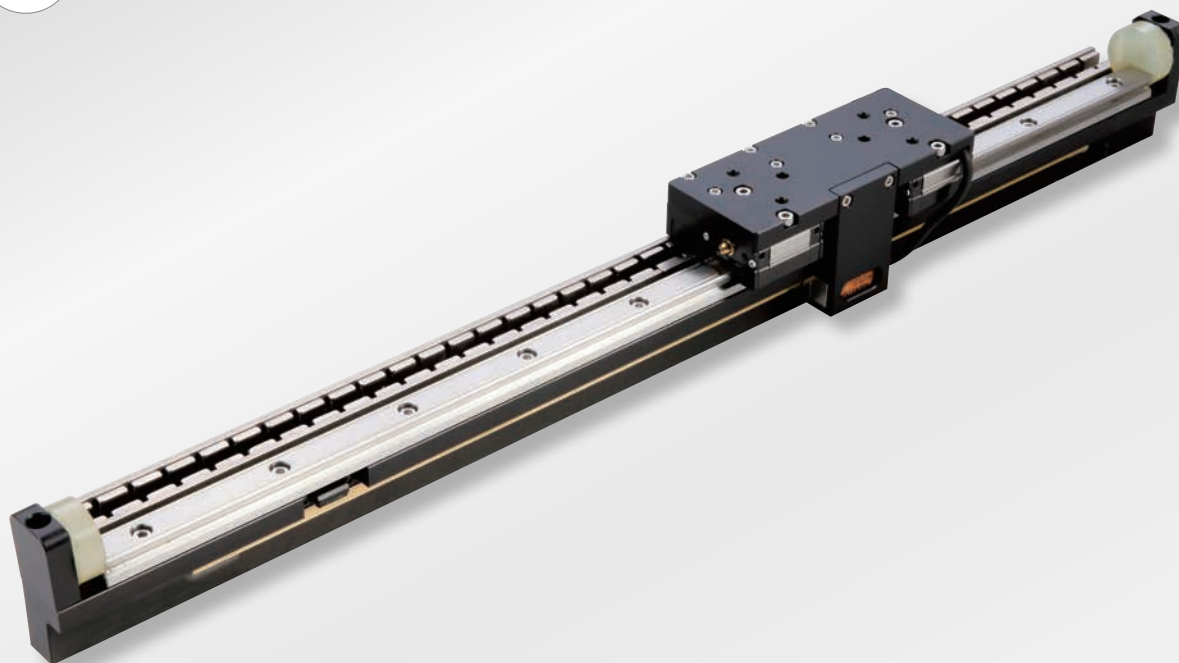
- \* LAU3 type, the data of continuous payload can be speed 1m/s and maximum acceleration 7m/s<sup>2</sup>.
- \* LAU5 type, the data of continuous payload can be speed 1m/s and maximum acceleration 4m/s<sup>2</sup>.
- \*Please consult with our sales department for customized stroke.

Max. Linear Speed (mm/s)																	Page
Stroke	0	100	200	300	400	500	600	700	800	900	1000	1200	1300	1400	1500	1600	
																	261
																	265

# LAU3

Standard type

Without Iron Core



Maximum Stroke 1290m

Maximum Speed 2500mm/s

Continuous Thrust 28N

Continuous Payload 4kg

### Ordering Method

LAU3 - N - 1290 - LS10 - R - 05H - LC100 - A001

Model

Customization order no.

**Double coil**  
N Single mover

**Stroke**  
90~1290mm  
Pitch 120mm

**Position of origin**  
R Right  
L Left

**Encoder**

LS10	1μm Optical encoder
LS05	0.5μm Optical encoder
LS01	0.1μm Optical encoder
MS10	1μm Magnetic encoder-SIKO
TS10	1μm Magnetic encoder-TOYO

**Cable length**

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

**Hall Cable**

-	None
H	Hall

**Controller type**

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronics
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

※ It is compulsory to select N for the controller while choosing cable length N.

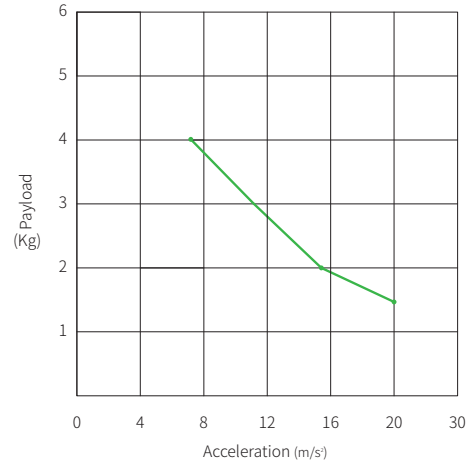
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

**Specification**

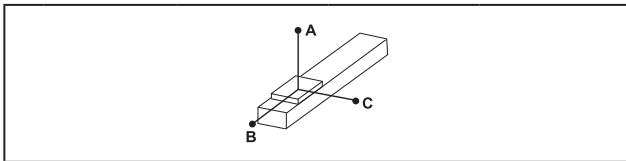
<b>Spec</b>	Model	LAU3
	Repeatability (mm)	±0.002
	Mxa. Force (N)	75
	Rated Force (N)	28
	Mxa. Payload (kg) ※1	4
	Stroke (mm)	90~1290
	Maximum Speed (mm/s)	2500

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 7m/s<sup>2</sup>. Different application will have different result.

**Payload & Acceleration**



**Allowable Overhang**

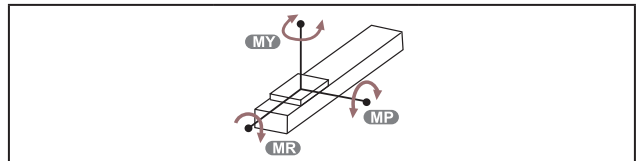


(Unit : mm)

Horizontal Installation ※2				
LAU3	Load	A	B	C
	1.5Kkg	710	345	128
	3kg	305	143	53
	4kg	132	57	21
	20kg	800	210	285

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LAU3	MY	52.5
	MP	52.5
	MR	19

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGF Series

LTP2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LAU  
LAU3  
LAU5

Features  
 LGM Series  
 LGF Series  
 LTFZ Series  
 LNFZ Series  
 LCFZ Series  
 LAF / LSF Series  
**LAU Series**  
 LMR Series  
 Controller

# LAU3

Standard type

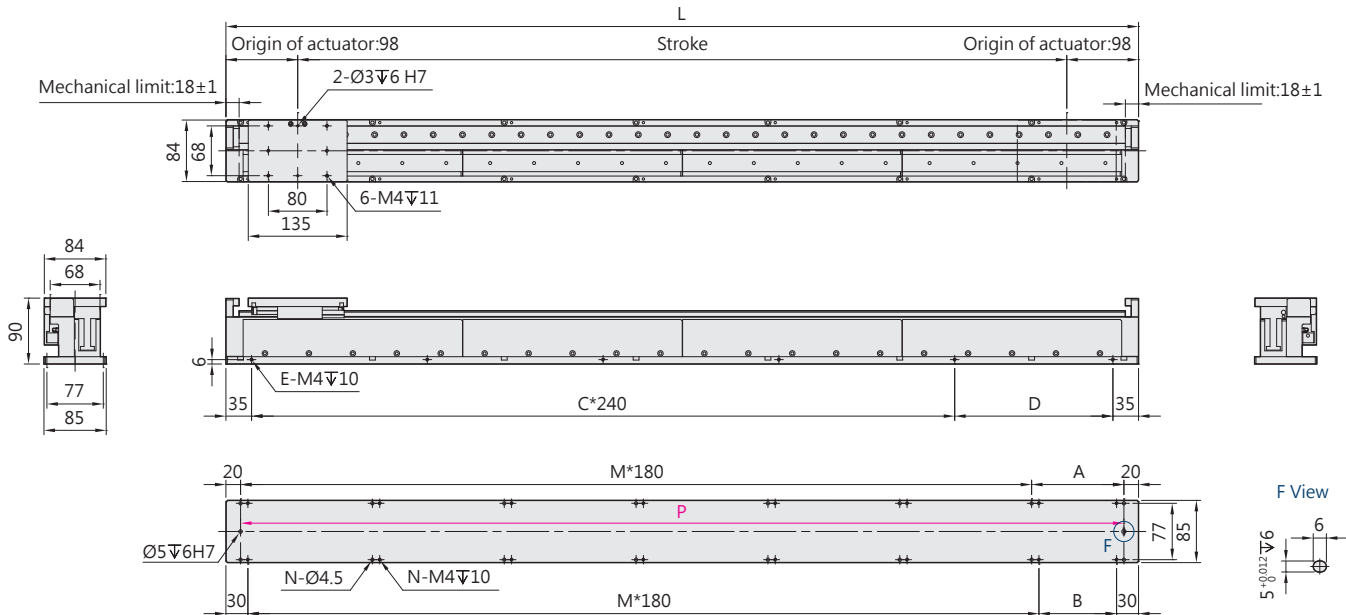
Without Iron Core

LAU3



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	90	210	330	450	570	690	810	930	1050	1170	1290
L	286	406	526	646	766	886	1006	1126	1246	1366	1486
A	66	186	126	66	186	126	66	186	126	66	186
B	46	166	106	46	166	106	46	166	106	46	166
C	0	1	1	2	2	3	3	4	4	5	5
D	216	96	216	96	216	96	216	96	216	96	216
E	2	3	3	4	4	5	5	6	6	7	7
M	1	1	2	3	3	4	5	5	6	7	7
N	6	6	8	10	10	12	14	14	16	18	18
P	246	366	486	606	726	846	966	1086	1206	1326	1446
KG	8.8	10.6	12.5	14.4	16.3	18.1	20	21.9	23.7	25.6	27.5

Features

LGW Series

LGF Series

LTP2 Series

LNFP Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LAU

LAU3

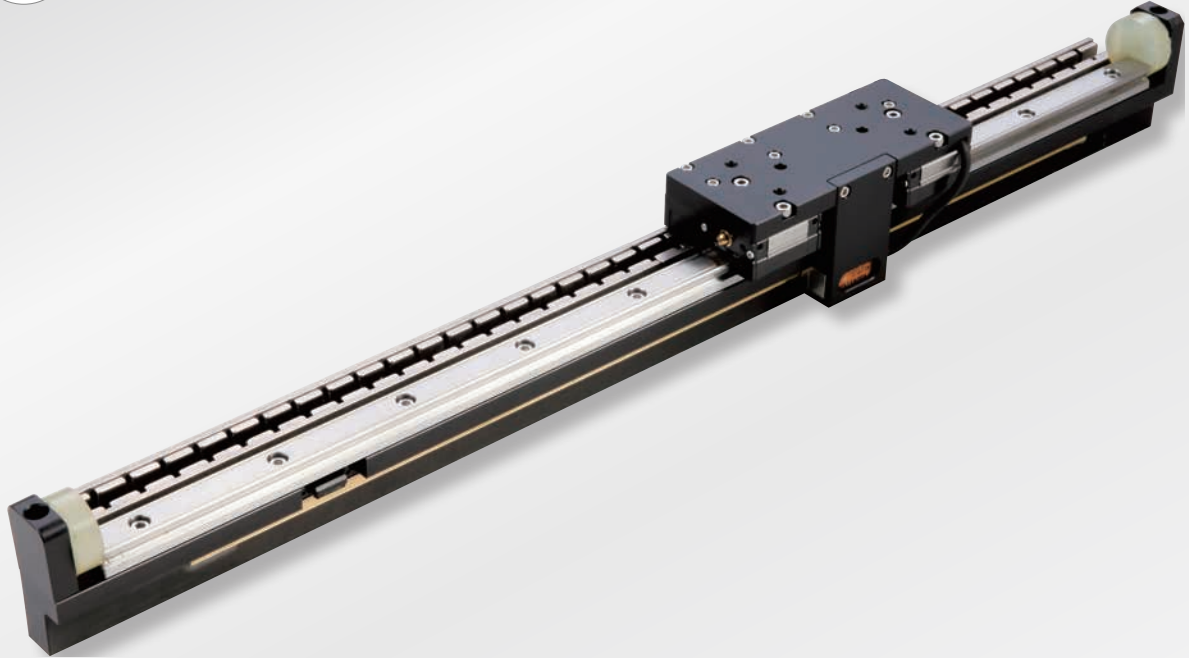
LAU5

## Memo

# LAU5

Standard type

Without Iron Core



Maximum Stroke 1290m

Maximum Speed 2500mm/s

Continuous Thrust 28N

Continuous Payload 4kg

### Ordering Method

LAU5 - N - 1290 - LS10 - R - 05H - LC100 - A001

Model

Customization order no.

**Double coil**  
N Single mover

**Stroke**  
90~1290mm  
Pitch 120mm

**Position of origin**  
R Right  
L Left

**Encoder**

LS10	1μm Optical encoder
LS05	0.5μm Optical encoder
LS01	0.1μm Optical encoder
MS10	1μm Magnetic encoder-SIKO
TS10	1μm Magnetic encoder-TOYO

**Cable length**

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

**Hall Cable**

-	None
H	Hall

**Controller type**

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronics
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.

※ For special cable length, please contact us.

※ It is compulsory to select N for the controller while choosing cable length N.

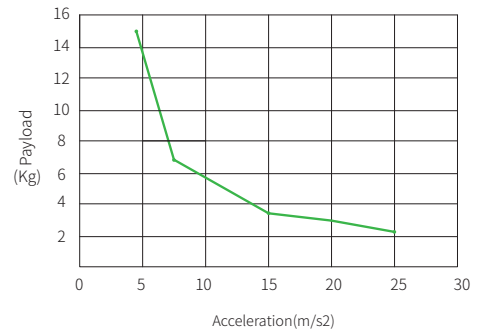


**Specification**

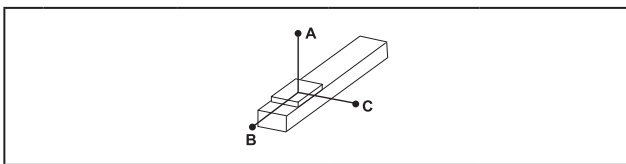
<b>Spec</b>	Model	LAU5
	Repeatability (mm)	±0.002
	Mxa. Force (N)	165
	Rated Force (N)	57
	Mxa. Payload (kg) ※1	15
	Stroke (mm)	90~1290
	Maximum Speed (mm/s)	2500

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 7m/s<sup>2</sup>. Different application will have different result.

**Payload & Acceleration**



**Allowable Overhang**

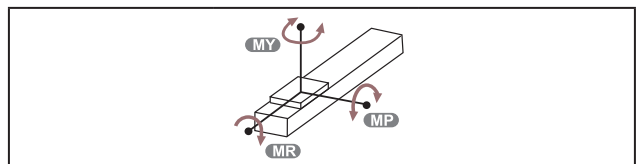


(Unit : mm)

Horizontal Installation ※2				
	Load	A	B	C
<b>LAU5</b>	5.6kg	225	390	46
	9.2kg	256	115	35
	15kg	360	92	29
	20kg	800	210	285

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

<b>LAU3</b>	<b>MY</b>	79
	<b>MP</b>	79
	<b>MR</b>	26

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

# LAU5

Standard type

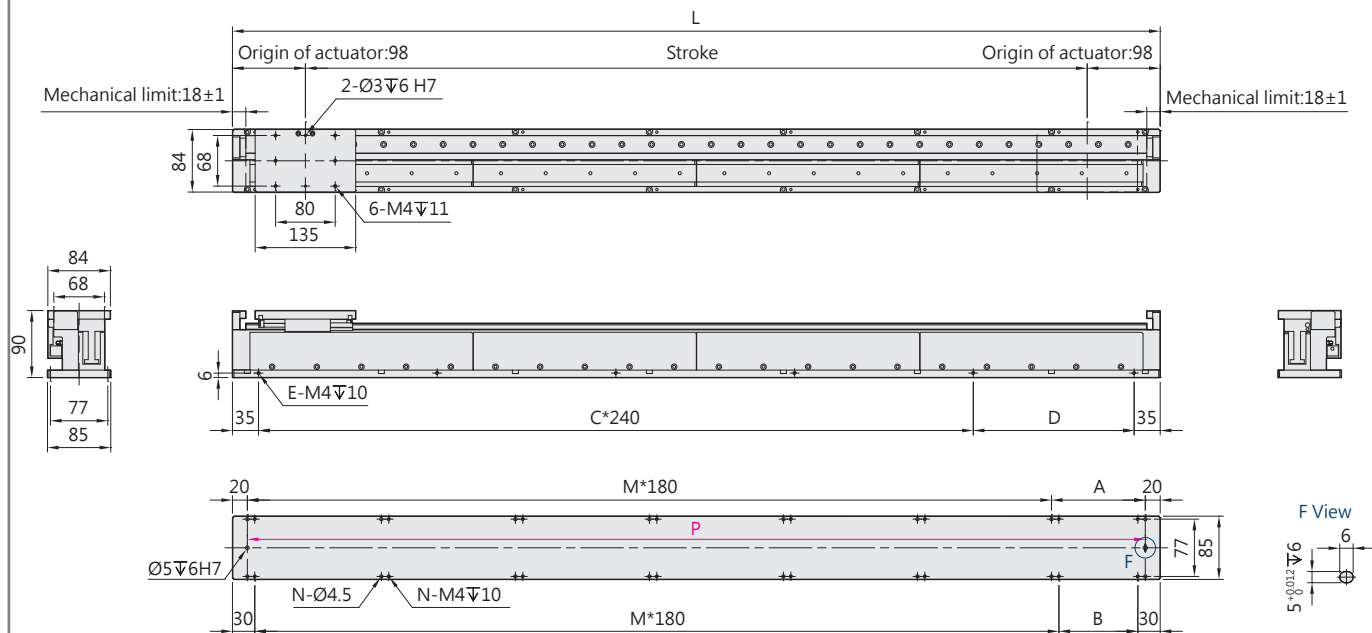
## Without Iron Core

LAU5



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	90	210	330	450	570	690	810	930	1050	1170	1290
L	286	406	526	646	766	886	1006	1126	1246	1366	1486
A	66	186	126	66	186	126	66	186	126	66	186
B	46	166	106	46	166	106	46	166	106	46	166
C	0	1	1	2	2	3	3	4	4	5	5
D	216	96	216	96	216	96	216	96	216	96	216
E	2	3	3	4	4	5	5	6	6	7	7
M	1	1	2	3	3	4	5	5	6	7	7
N	6	6	8	10	10	12	14	14	16	18	18
P	246	366	486	606	726	846	966	1086	1206	1326	1446
KG	9	10.9	12.8	14.7	16.5	18.4	20.3	22.2	24	25.9	27.8

Features

LGW Series

LGF Series

LTP2 Series

LNFP Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LAU  
LAU3  
LAU5

## Memo

Features

LGW Series

LGF Series

LTF2 Series

LNFP2 Series

LCP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

## Memo

# LMR (Standard type)

## Shaft Bar Linear Motor Robot

### Contents

SMALL

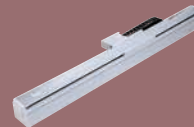
LMR 20



Width 95mm  
Max. stroke 990mm ..... 273  
Continuous payload 15kg

MEDIUM

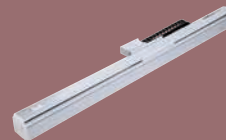
LMR 25



Width 112mm  
Max. stroke 1300mm ..... 279  
Continuous payload 24kg

LARGE

LMR 32



Width 120mm  
Max. stroke 1940mm ..... 285  
Continuous payload 51kg

# Spec Index

## LMR shaft bar linear motor robot (Standard type)

Env.	Drive Type	Profile Width (mm)	Model No.	No. of Rotors	Req. Current	Repeatability (mm)	Outer dia.	Thrust (N)	Payload (kg)*	Max. Speed (mm/s)
Standard	Shaft bar linear motor robot	95	LMR20-04	Single motor	3A	±0.002	20	44	12	2500
			LMR20-04	Double motor				44	12	2500
			LMR20-05	Single motor				55	15	2500
			LMR20-05	Double motor				55	15	2500
		112	LMR25-04	Single motor			25	64	16	2500
			LMR25-04	Double motor				64	16	2500
			LMR25-06	Single motor				96	24	2500
			LMR25-06	Double motor				96	24	2500
		120	LMR32-06	Single motor			32	140	35	2500
			LMR32-06	Double motor				140	35	2500
			LMR32-08	Single motor				187	51	2500
			LMR32-08	Double motor				187	51	2500

\*The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>.

\*Please consult with our sales department for customized stroke.

Max. Linear Speed (mm/s)																					Page	
Stroke	50	75	100	150	200	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800		1900
				250																	273	
			250																			
			250																			
			250																			
			250																	279		
			250																			
			250																			
			250																			
			2500																	285		
			2500																			
			2500																			
			2500																			

# LMR20

Standard type

## Shaft Bar



Maximum Stroke **990mm**

Maximum Speed **2500mm/s**

Continuous Thrust **55N**

Continuous Payload **20kg**

Outer dia. of Stator **φ20mm**

### Ordering Method

# LMR20 - 06 - RH - N - 990 - LS10 - R - 05H - LC100 - A001

Model

Thrust of motor

04
05

No. of motor

N	Single mover
D	Multi mover

Stroke

80-990mm
Pitch 60mm

※ Stroke range is different according to the pushing force and the number of the motor.

Position of origin

R	Right
L	Left

Customization order no.

Cable chain fixing method

RH	Horizontally fixed
LW	Wall mounting

Encoder

LS10	1μm optical encoder
LS05	0.5μm optical encoder
LS01	0.1μm optical encoder
MS10	1μm magnetic encoder-SIKO
TS10	1μm magnetic encoder-TOYO

Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

Hall Cable

-	None
H	Hall

Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

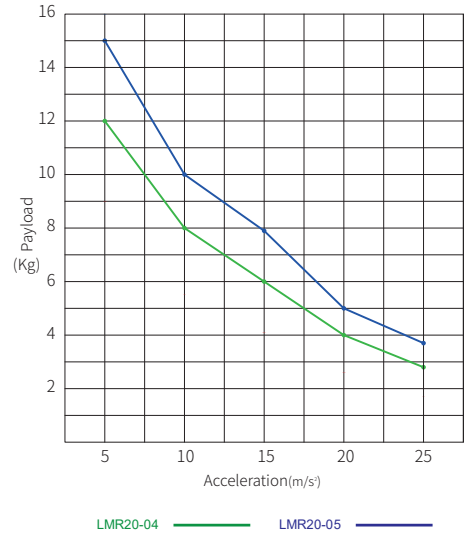


Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

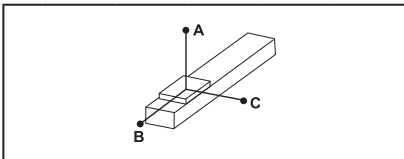
Specification					
Spec	Model		LMR20-04	LMR20-05	
	Repeatability (mm)		±0.002		
	Mxa. Force (N)		177	221	
	Rated Force (N)		44	55	
	Mxa. Payload (kg) <sup>※1</sup>		11	14	
	Stroke (mm)	N	150-990 / 60 pitch	180-960 / 60 pitch	
		D	80-800 / 60 pitch	80-740 / 60 pitch	
	Maximum Speed (mm/s)		2500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

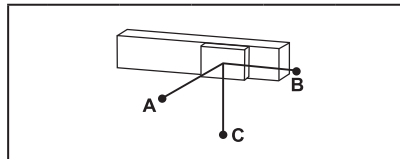
**Acceleration-Continuous Payload**



**Allowable Overhang**



(Unit : mm)



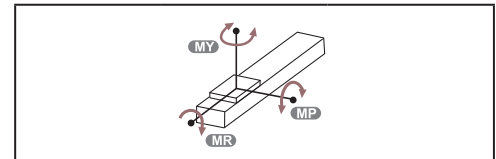
(Unit : mm)

Horizontal Installation <sup>※2</sup>					
	Speed (m/s)	Load (kg)	A	B	C
LMR20-04-RH	1	12	375	100	39
	1	5.5	890	253	99
	1.5	6.5	305	143	53
	1.5	3	710	345	128
	2	4	265	193	66
	2	2	559	415	141
	2.5	3.2	250	248	78
2.5	1.5	559	560	175	
LMR20-05-RH	1	15	360	92	29
	1	7.5	790	220	70
	1.5	9.2	256	115	35
	1.5	4.5	570	275	84
	2	5.6	225	390	46
	2	2.5	550	405	115
	2.5	3.8	260	255	67
2.5	2	515	520	137	

Wall Installation <sup>※2</sup>					
	Speed (m/s)	Load (kg)	A	B	C
LMR20-04-LW	1	12	39	100	374
	1	6	90	230	810
	1.5	7	49	131	280
	1.5	3.5	108	294	600
	2	4	66	193	265
	2	2	142	415	560
	2.5	2.9	86	275	280
2.5	1.5	175	560	560	
LMR20-05-LW	1	15	29	92	355
	1	7.5	70	220	790
	1.5	9	36	120	260
	1.5	4.5	84	275	570
	2	5.7	45	158	220
	2	2.5	115	405	550
	2.5	3.8	67	255	260
2.5	2	137	520	520	

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LMR20-04	MY	63
	MP	63
	MR	26
LMR20-05	MY	79
	MP	79
	MR	26

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFZ Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LMR20

Standard type

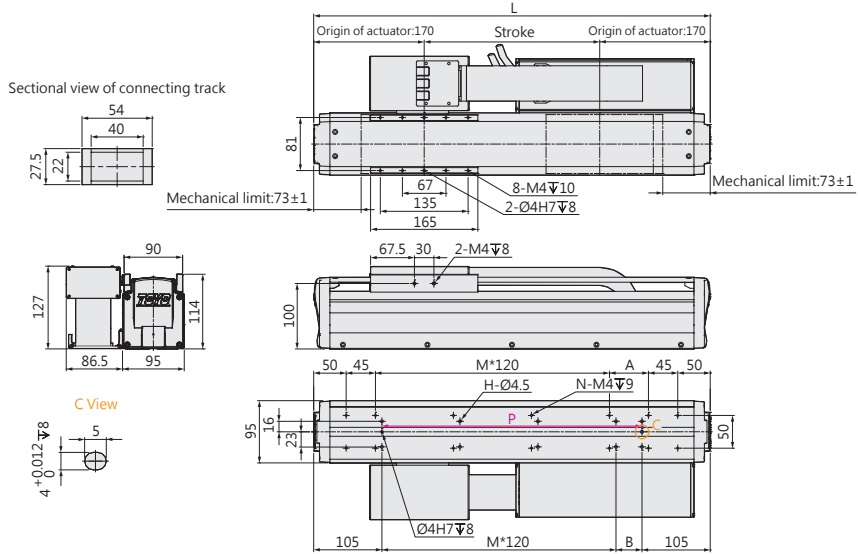
# Shaft Bar

## LMR20-04-RHN



Please download the CAD file from TOYO's website: [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



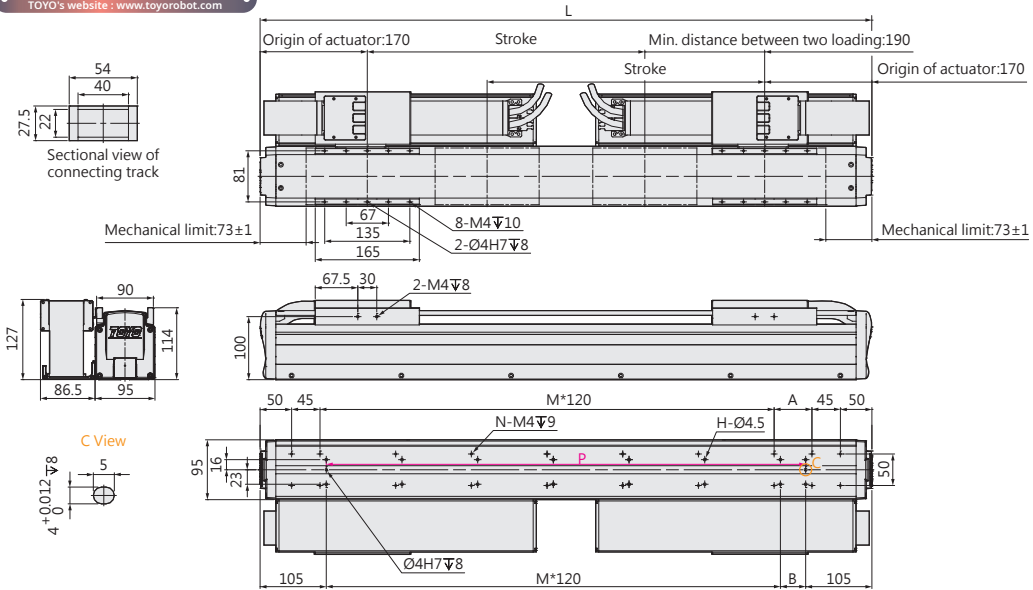
Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990
L	490	550	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40
P	280	340	400	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9
N	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
H	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22
KG	9.2	9.9	10.6	11.3	12	12.6	13.3	14	14.7	15.3	16	16.7	17.4	18.1	18.7

## LMR20-04-RHD



Please download the CAD file from TOYO's website: [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	80	140	200	260	320	380	440	500	560	620	680	740	800
L	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	60	120	60	120	60	120	60	120	60	120	60	120	60
B	40	100	40	100	40	100	40	100	40	100	40	100	40
P	400	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	3	3	4	4	5	5	6	6	7	7	8	8	9
N	14	14	16	16	18	18	20	20	22	22	24	24	26
H	10	10	12	12	14	14	16	16	18	18	20	20	22
KG	15.1	15.8	16.4	17.1	17.8	18.5	19.2	19.8	20.5	21.2	21.9	22.6	23.2

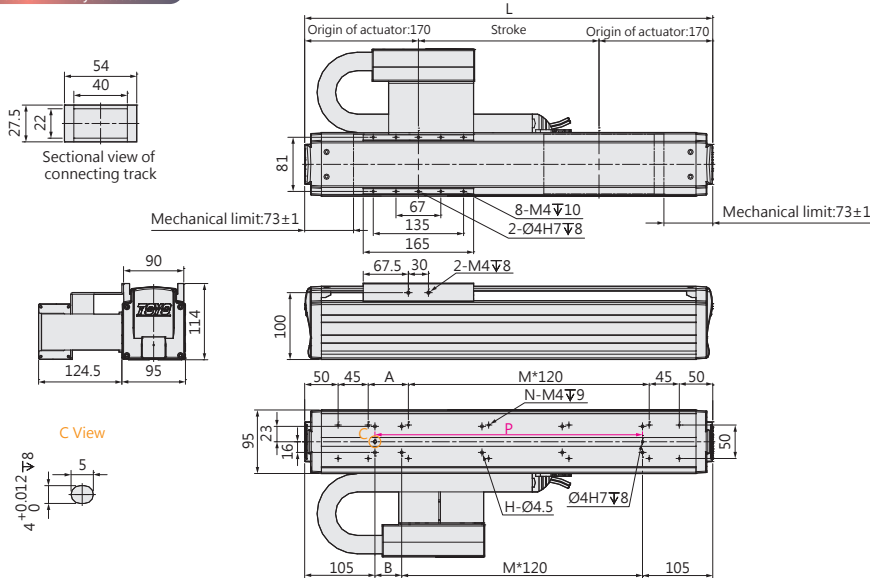
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LMR20-04-LWN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



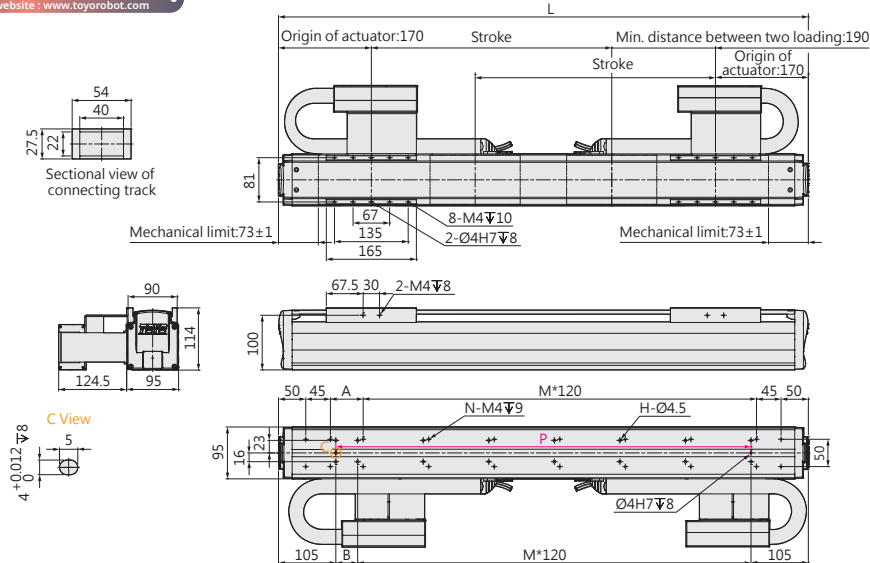
Stroke	150	210	270	330	390	450	510	570	630	690	750	810	870	930	990
L	490	550	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40
P	280	340	400	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9
N	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
H	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22
KG	9.2	9.9	10.5	11.2	11.8	12.5	13.1	13.8	14.4	15.1	15.7	16.4	17	17.7	18.3

### LMR20-04-LWD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	80	140	200	260	320	380	440	500	560	620	680	740	800
L	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	60	120	60	120	60	120	60	120	60	120	60	120	60
B	40	100	40	100	40	100	40	100	40	100	40	100	40
P	400	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	3	3	4	4	5	5	6	6	7	7	8	8	9
N	14	14	16	16	18	18	20	20	22	22	24	24	26
H	10	10	12	12	14	14	16	16	18	18	20	20	22
KG	15.2	15.8	16.4	17	17.6	18.2	18.8	19.4	20	20.6	21.2	21.8	22.4

Features  
LGM Series  
LGF Series  
LTP2 Series  
LNP2 Series  
LCP2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

LMR  
LMR20  
LMR25  
LMR32

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFZ Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LMR20

Standard type

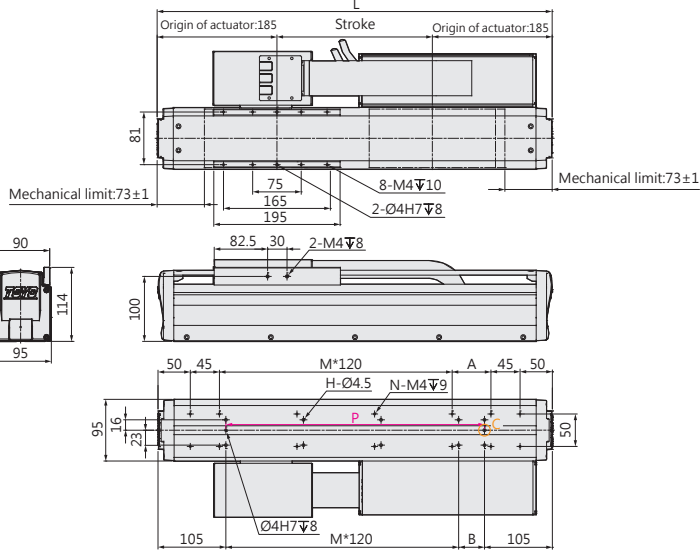
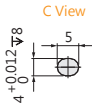
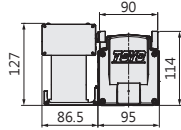
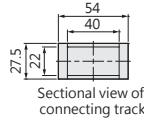
# Shaft Bar

## LMR20-05-RHN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



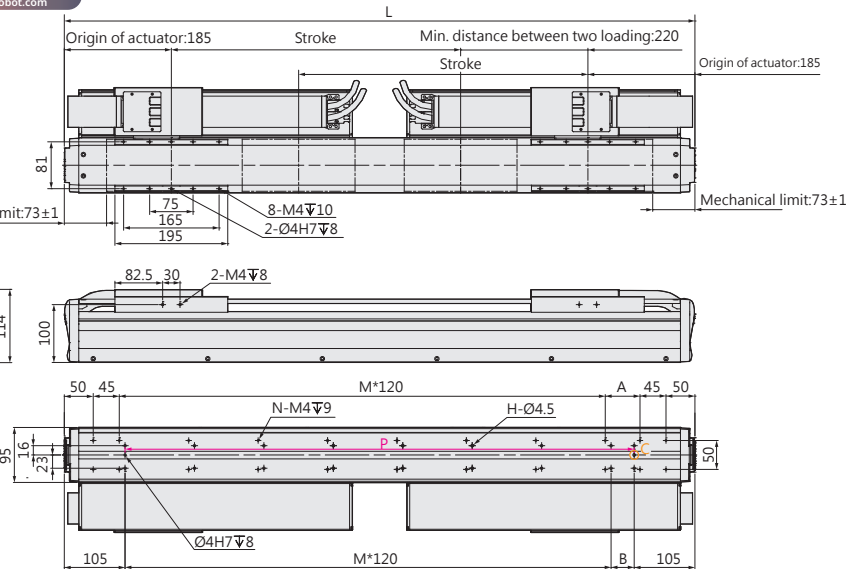
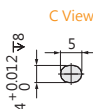
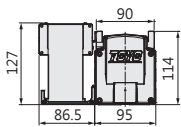
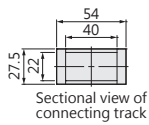
Stroke	180	240	300	360	420	480	540	600	660	720	780	840	900	960
L	550	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40
P	340	400	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	2	3	3	4	4	5	5	6	6	7	7	8	8	9
N	12	14	14	16	16	18	18	20	20	22	22	24	24	26
H	8	10	10	12	12	14	14	16	16	18	18	20	20	22
KG	10.2	10.9	11.6	12.3	12.9	13.6	14.3	15	15.7	16.3	17	17.7	18.4	19.1

## LMR20-05-RHD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	80	140	200	260	320	380	440	500	560	620	680	740
L	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	120	60	120	60	120	60	120	60	120	60	120	60
B	100	40	100	40	100	40	100	40	100	40	100	40
P	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	3	4	4	5	5	6	6	7	7	8	8	9
N	14	16	16	18	18	20	20	22	22	24	24	26
H	10	12	12	14	14	16	16	18	18	20	20	22
KG	16.3	17	17.7	18.4	18.5	19.7	20.4	21.1	21.8	22.4	23.1	23.8

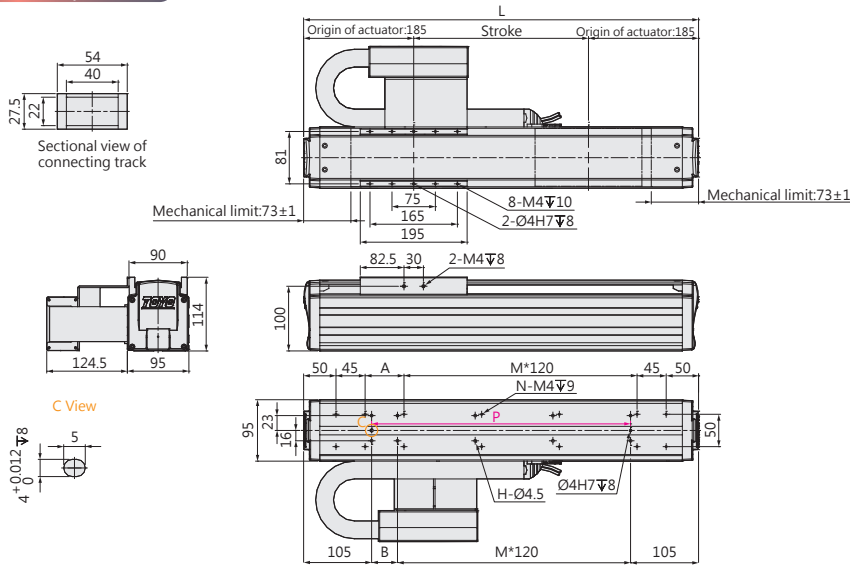
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LMR20-05-LWN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



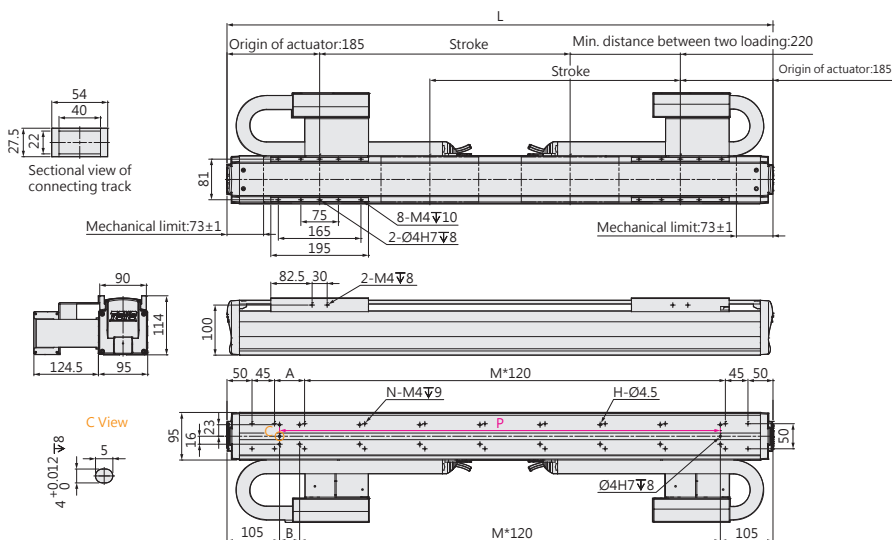
Stroke	180	240	300	360	420	480	540	600	660	720	780	840	900	960
L	550	610	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40
P	340	400	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	2	3	3	4	4	5	5	6	6	7	7	8	8	9
N	12	14	14	16	16	18	18	20	20	22	22	24	24	26
H	8	10	10	12	12	14	14	16	16	18	18	20	20	22
KG	10.3	11	11.6	12.2	12.8	13.5	14.1	14.7	15.1	16	16.6	17.2	17.9	18.5

### LMR20-05-LWD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	80	140	200	260	320	380	440	500	560	620	680	740
L	670	730	790	850	910	970	1030	1090	1150	1210	1270	1330
A	120	60	120	60	120	60	120	60	120	60	120	60
B	100	40	100	40	100	40	100	40	100	40	100	40
P	460	520	580	640	700	760	820	880	940	1000	1060	1120
M	3	4	4	5	5	6	6	7	7	8	8	9
N	14	16	16	18	18	20	20	22	22	24	24	26
H	10	12	12	14	14	16	16	18	18	20	20	22
KG	16.4	17	17.6	18.2	18.8	19.4	20	20.6	21.2	21.8	22.4	23

Features

LGW Series

LGf Series

LTP2 Series

LNf2 Series

LCf2 Series

LAf / Lsf Series

LAU Series

LMR Series

Controller

LMR

LMR20

LMR25

LMR32

# LMR25

Standard type

## Shaft Bar



Maximum Stroke 1300mm

Maximum Speed 2500mm/s

Continuous Thrust 96N

Continuous Payload 24kg

Outer dia. of Stator  $\phi$ 25mm

### Ordering Method

# LMR25 - 06 - RH - N - 1300 - LS10 - R - 05H - LC100 - A001

Model

■ Thrust of motor

04
06

■ No. of motor

N	Single mover
D	Multi mover

■ Stroke

50~1300mm
Pitch 60mm

※ Stroke range is different according to the pushing force and the number of the motor.

■ Position of origin

R	Right
L	Left

Customization order no.

■ Cable chain fixing method

RH	Horizontally fixed
LW	Wall mounting

■ Encoder

LS10	1 $\mu$ m optical encoder
LS05	0.5 $\mu$ m optical encoder
LS01	0.1 $\mu$ m optical encoder
MS10	1 $\mu$ m magnetic encoder-SIKO
TS10	1 $\mu$ m magnetic encoder-TOYO

■ Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

■ Hall Cable

-	None
H	Hall

■ Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

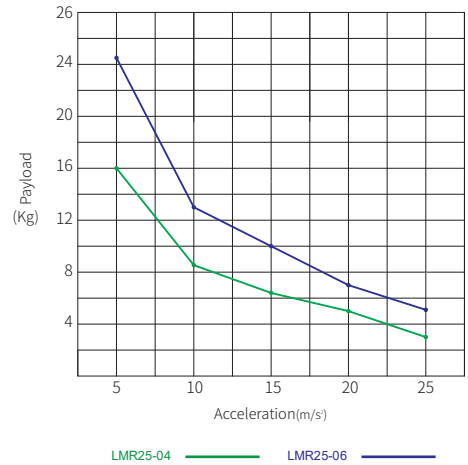
※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

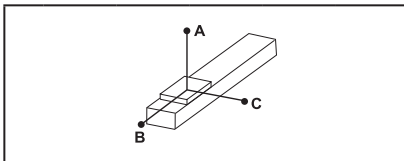
Specification				
Spec	Model	LMR25-04	LM25-06	
	Repeatability (mm)	±0.002		
	Mxa. Force (N)	257	386	
	Rated Force (N)	64	96	
	Mxa. Payload (kg) <sup>※1</sup>	16	24	
	Stroke (mm)	N	100-1300 / 60 pitch	120-1260 / 60 pitch
		D	70-1090 / 60 pitch	50-1010 / 60 pitch
	Maximum Speed (mm/s)	2500		

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

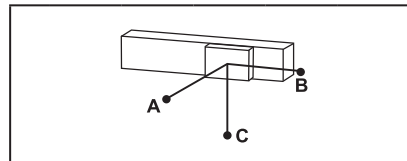
**Acceleration-Continuous Payload**



**Allowable Overhang**



(Unit : mm)



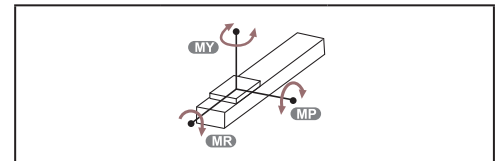
(Unit : mm)

Horizontal Installation <sup>※2</sup>					
	Speed (m/s)	Load (kg)	A	B	C
LMR25-04 - RH	1	16	550	151	92
	1	8	1155	333	204
	1.5	8.8	435	210	116
	1.5	4.5	890	440	245
	2	5.3	385	283	138
	2	2.5	850	635	310
	2.5	3.4	460	460	198
2.5	1.5	1070	1080	465	
LMR25-06 - RH	1	24	440	114	54
	1	12	980	276	132
	1.5	13.7	345	160	72
	1.5	6.5	790	385	170
	2	8.4	305	218	88
	2	4	680	505	202
	2.5	5.6	350	350	127
2.5	3	685	685	250	

Wall Installation <sup>※2</sup>					
	Speed (m/s)	Load (kg)	A	B	C
LMR25-04 - LW	1	16	92	150	550
	1	8	204	333	1155
	1.5	8.8	116	210	435
	1.5	4.5	246	440	890
	2	5.3	138	284	385
	2	2.5	310	635	850
	2.5	3.4	198	455	458
2.5	1.5	465	1080	1070	
LMR25-06 - LW	1	24	54	114	440
	1	12	132	275	990
	1.5	13.7	72	160	345
	1.5	7	158	355	730
	2	8.4	88	218	305
	2	4	204	505	680
	2.5	5.6	126	350	350
2.5	3	250	685	685	

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LMR25-04	MY	112
	MP	112
	MR	74
LMR25-06	MY	147
	MP	147
	MR	74

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGF Series

LTP2 Series

LNFP2 Series

LCF2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LMR  
LMR20  
LMR25  
LMR32

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFZ Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LMR25

Standard type

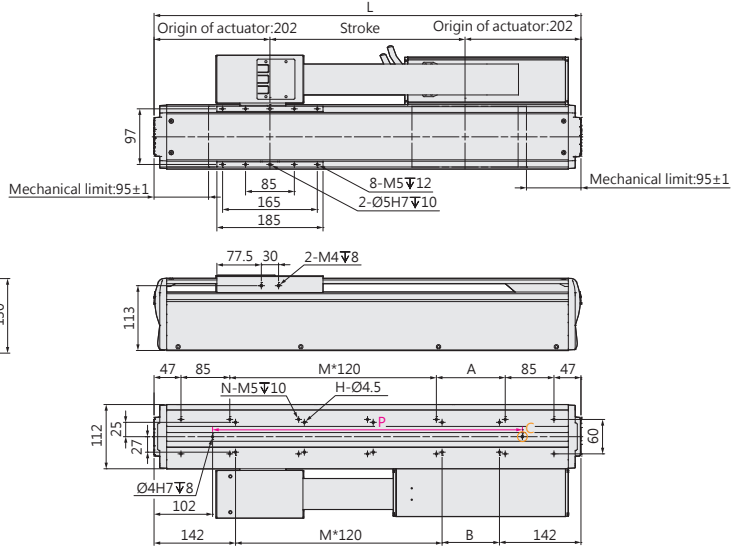
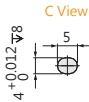
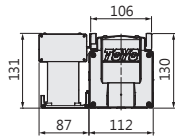
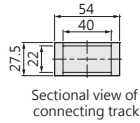
# Shaft Bar

## LMR25-04-RHN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



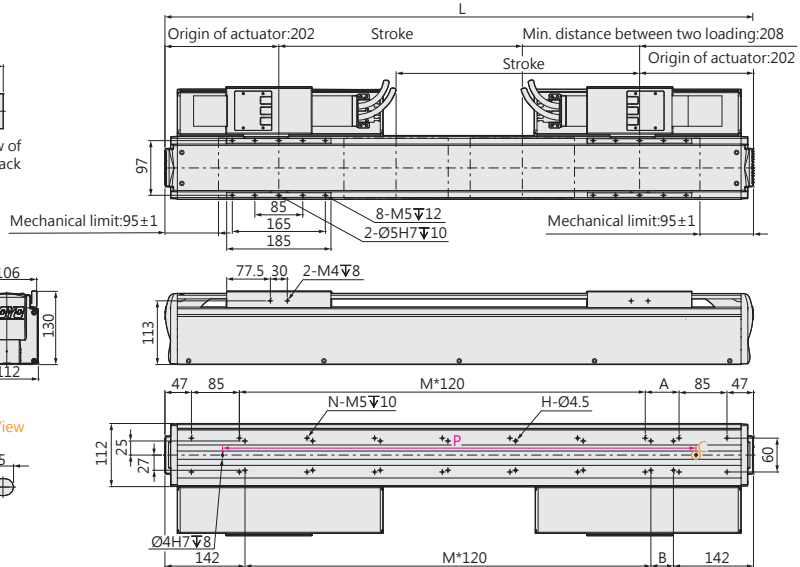
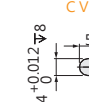
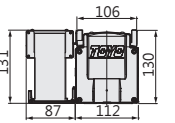
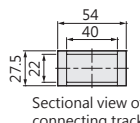
Stroke	100	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1000	1060	1120	1180	1240	1300
L	504	564	624	684	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	300	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	11.6	12.5	13.5	14.5	15.4	16.4	17.3	18.3	19.3	20.2	21.2	22.1	23.1	24.1	25	26	27	27.9	28.9	29.8	30.8

## LMR25-04-RHD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	70	130	190	250	310	370	430	490	550	610	670	730	790	850	910	970	1030	1090
L	684	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	20	20.9	21.9	22.8	23.8	24.8	25.7	26.7	27.6	28.6	29.6	30.5	31.5	32.4	33.4	34.4	35.3	36.3



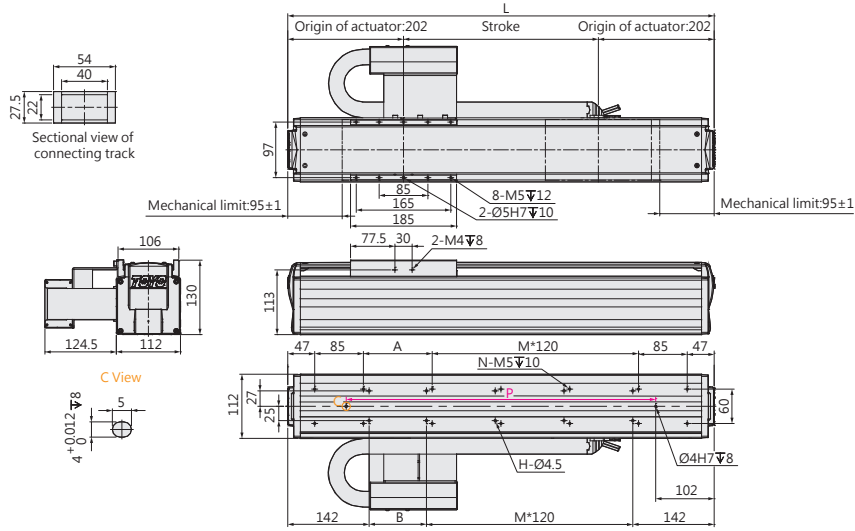
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### LMR25-04-LWN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



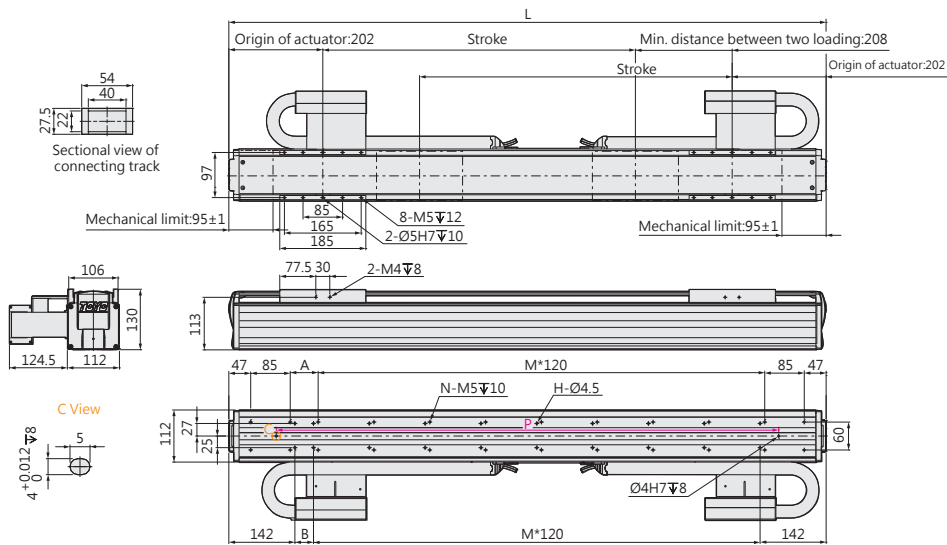
Stroke	100	160	220	280	340	400	460	520	580	640	700	760	820	880	940	1000	1060	1120	1180	1240	1300
L	504	564	624	684	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	300	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	11.8	12.7	13.6	14.5	15.4	16.3	17.2	18.1	19	20	20.9	21.8	22.7	23.6	24.5	25.4	26.3	27.2	28.1	29	30

### LMR25-04-LWD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	70	130	190	250	310	370	430	490	550	610	670	730	790	850	910	970	1030	1090
L	684	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	20	20.8	21.7	22.6	23.5	24.4	25.2	26.1	27	27.9	28.8	29.6	30.5	31.4	32.3	33.2	34	34.9

Features

LGM Series

LGF Series

LTF2 Series

LNFP2 Series

LCFP2 Series

LAFL / LSF Series

LAU Series

LMR Series

Controller

LMR

LMR20

LMR25

LMR32

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFZ Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LMR25

Standard type

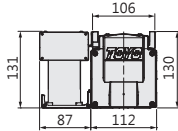
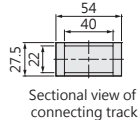
# Shaft Bar

## LMR25-06-RHN

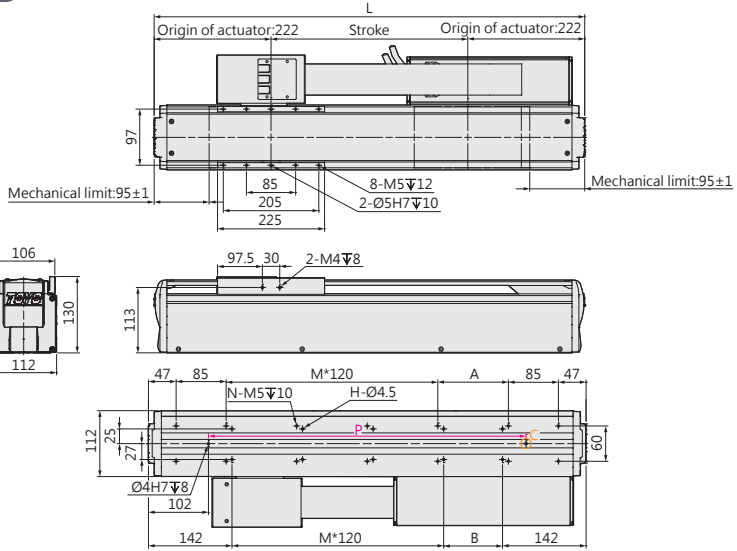
Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



C View



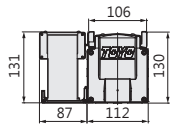
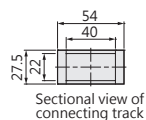
Stroke	120	180	240	300	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260
L	564	624	684	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	13.6	14.5	15.5	16.5	17.4	18.4	19.3	20.3	21.3	22.2	23.2	24.1	25.1	26.1	27	28	29	30	30.9	31.8

## LMR25-06-RHD

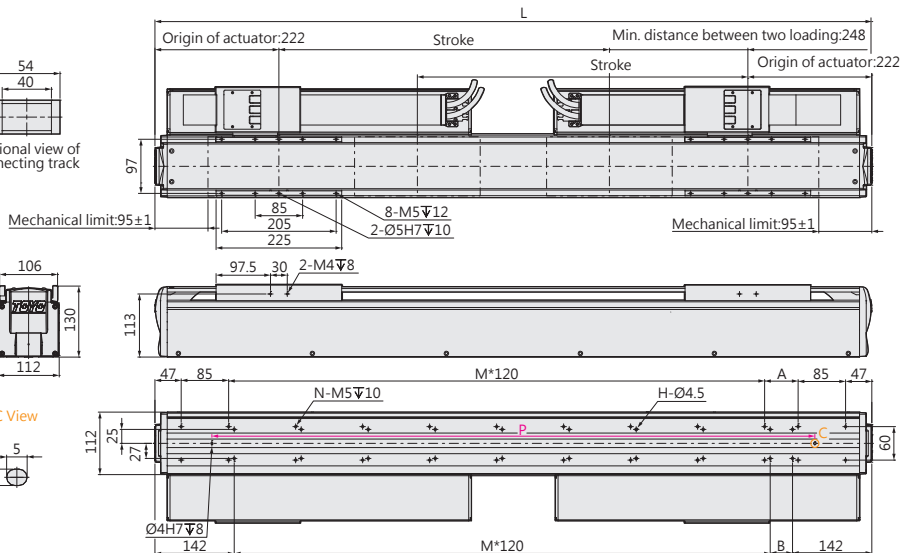
Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



C View



Stroke	50	110	170	230	290	350	410	470	530	590	650	710	770	830	890	950	1010
L	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	24.7	25.7	26.7	27.6	28.6	29.5	30.5	31.5	32.4	33.4	34.3	35.3	36.3	37.2	38.2	39.1	40.1

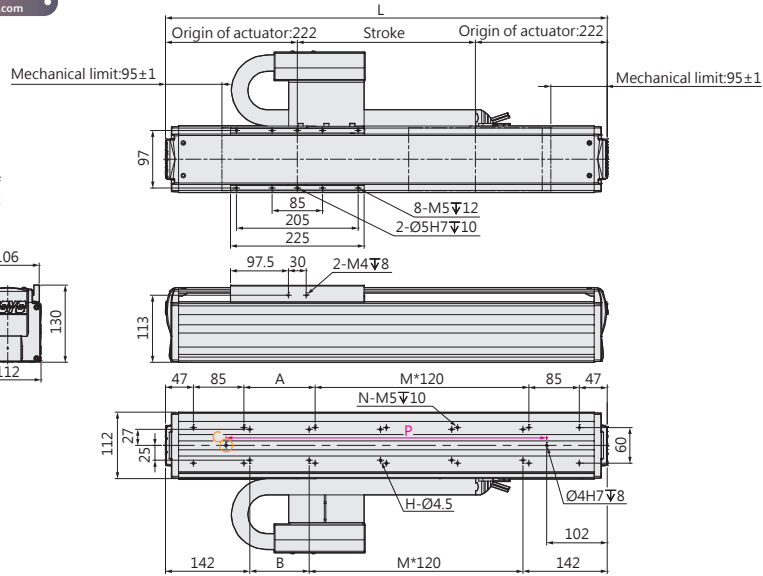
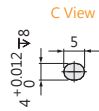
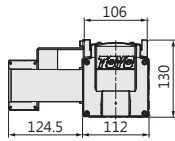
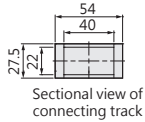
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LMR25-06-LWN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



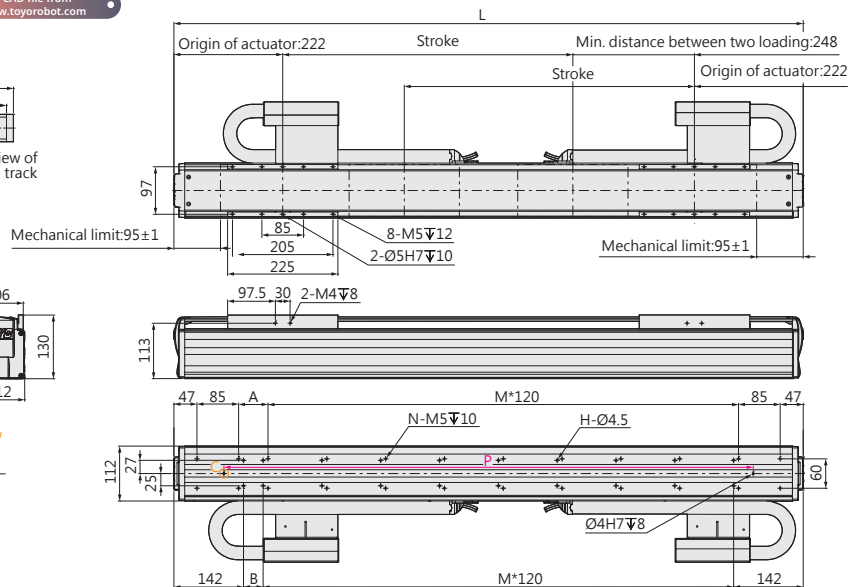
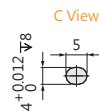
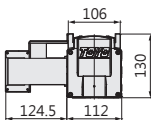
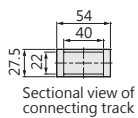
Stroke	120	180	240	300	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260
L	564	624	684	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	13.7	14.6	15.5	16.4	17.3	18.2	19.1	20	20.9	21.9	22.8	23.7	24.6	25.5	26.4	27.3	28.2	29.1	30	31

### LMR25-06-LWD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)



Stroke	50	110	170	230	290	350	410	470	530	590	650	710	770	830	890	950	1010
L	744	804	864	924	984	1044	1104	1164	1224	1284	1344	1404	1464	1524	1584	1644	1704
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500
M	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11
N	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
H	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
KG	24.7	25.6	26.5	27.4	28.3	29.1	30	30.9	31.8	32.7	33.5	34.4	35.3	36.2	37.1	38	38.8

Features

LGW Series

LGJ Series

LTP2 Series

LNFP2 Series

LCF2 Series

LAJ / LSF Series

LAU Series

LMR Series

Controller

LMR

LMR20

LMR25

LMR32

# LMR32

Standard type

## Shaft Bar



Maximum Stroke 1940mm

Maximum Speed 2500mm/s

Continuous Thrust 187N

Continuous Payload 47kg

Outer dia. of Stator  $\phi$ 32mm

### Ordering Method

# LMR32 - 06 - RH - N -1940- LS10 - R - 05H - LC100 - A001

Model

■ Thrust of motor

04
06

■ No. of motor

N	Single mover
D	Multi mover

■ Stroke

75~1940mm
Pitch 60mm

※ Stroke range is different according to the pushing force and the number of the motor.

■ Position of origin

R	Right
L	Left

Customization order no.

■ Cable chain fixing method

RH	Horizontally fixed
LW	Wall mounting

■ Encoder

LS10	1 $\mu$ m optical encoder
LS05	0.5 $\mu$ m optical encoder
LS01	0.1 $\mu$ m optical encoder
MS10	1 $\mu$ m magnetic encoder-SIKO
TS10	1 $\mu$ m magnetic encoder-TOYO

■ Cable length

N	None
05	5m
08	8m
12	12m
XX	XXm Customized length

■ Hall Cable

-	None
H	Hall

■ Controller type

LC100	TOYO (Pulse)
LC100E	TOYO (EtherCAT)
S	Servotronix
M	Mitsubishi
P	Panasonic
D	Delta
L	Shihlin
Z	Other
N	None

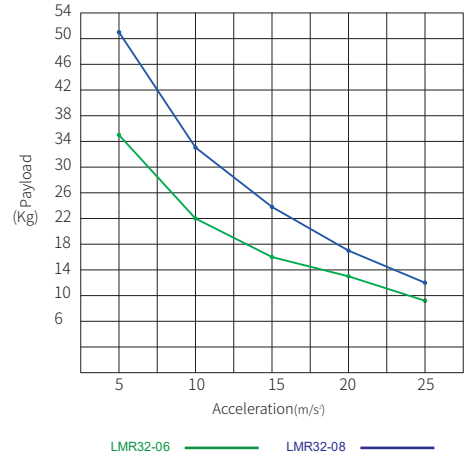
※ Standard : 5m, including the length of cable chain.  
 ※ For special cable length, please contact us.  
 ※ It is compulsory to select N for the controller while choosing cable length N.

Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

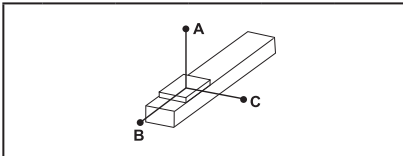
Specification			
Spec	Model	LMR32-06      LMR32-08	
	Repeatability (mm)	±0.002	
	Mxa. Force (N)	561              748	
	Rated Force (N)	140              187	
	Mxa. Payload (kg) <sup>※1</sup>	35                47	
	Stroke (mm)	N	140-1940 / 60 pitch    140-1880 / 60 pitch
		D	75-1695 / 60 pitch      80-1580 / 60 pitch
	Maximum Speed (mm/s)	2500	

※1 The continuous payload is the data when the robot runs with maximum speed 1m/s and acceleration 5m/s<sup>2</sup>. Different application will have different result.

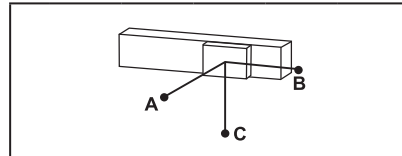
**Acceleration-Continuous Payload**



**Allowable Overhang**



(Unit : mm)



(Unit : mm)

**Horizontal Installation<sup>※2</sup>**

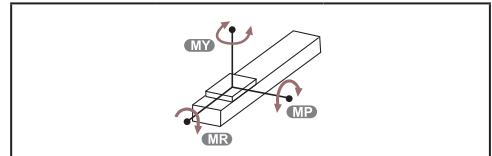
Model	Speed (m/s)	Load (kg)	A	B	C
	LMR32-06-RH	1	35	315	84
1		17	720	203	116
1.5		22	216	99	54
1.5		11	480	230	125
2		14.3	180	126	61
2		7	400	294	140
2.5		10	200	195	83
2.5	5	425	425	180	
LMR32-08-RH	1	51	272	64	27
	1	25	660	180	77
	1.5	29	218	95	38
	1.5	15	480	225	92
	2	19	180	122	46
	2	10	380	275	102
	2.5	13	208	200	68
2.5	6	495	490	165	

**Wall Installation<sup>※2</sup>**

Model	Speed (m/s)	Load (kg)	A	B	C
	LMR32-06-LW	1	38	43	72
1		19	105	178	640
1.5		22	54	99	205
1.5		11	125	230	480
2		14.1	62	129	182
2		7	140	294	400
2.5		10	83	195	200
2.5	5	180	425	425	
LMR32-08-LW	1	51	27	55	230
	1	25	76	154	570
	1.5	29	38	81	185
	1.5	15	90	195	410
	2	19	44	105	152
	2	10	99	235	325
	2.5	13	65	173	178
2.5	6.5	145	385	385	

※2 Even the speed is same, if acceleration and acceleration time is changed, the payload will be different. Above chart is based on acceleration time 0.2 sec.

**Static Loading Moment**



(Unit : N.m)

LMR32-06	MY	173
	MP	173
	MR	111
LMR32-08	MY	209
	MP	209
	MR	111

**Corresponding Controller Chart**

Exterior	Controller Model	Electrical Spec	Reference Page
	LC100	Single-phase/Three-phase 220V	P.291

Features

LGW Series

LGJ Series

LTP2 Series

LNJ2 Series

LCJ2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LMR  
LMR20  
LMR25  
LMR32

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFP Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LMR32

Standard type

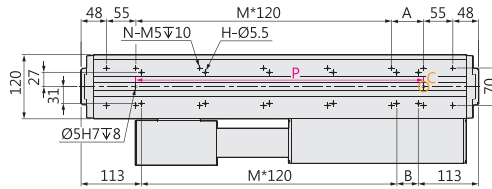
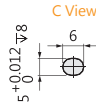
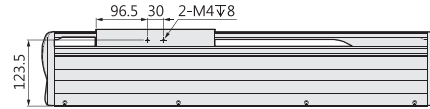
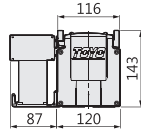
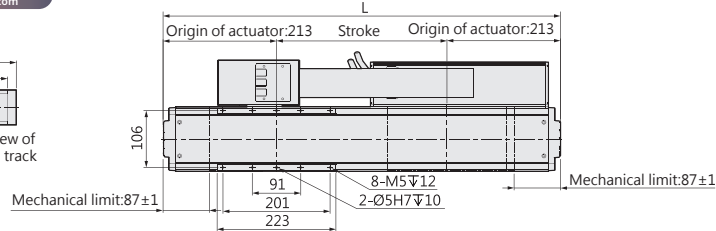
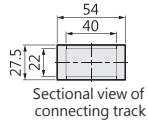
# Shaft Bar

## LMR32-06-RHN



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



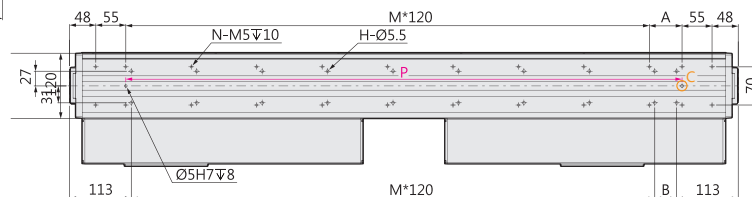
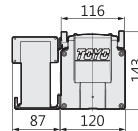
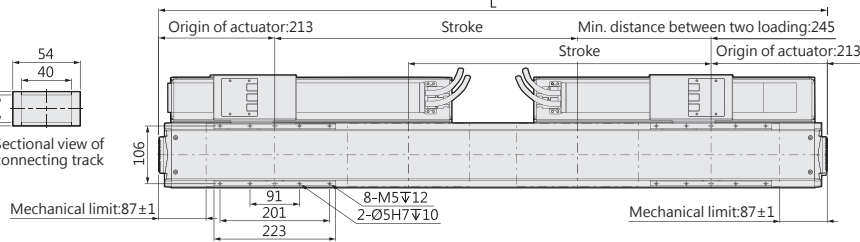
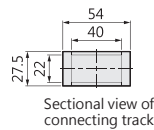
Stroke	140	200	260	320	380	440	500	560	620	680	740	800	860	920	980	1040	1100	1160	1220	1280	1340	1400	1460	1520	1580	1640	1700	1760	1820	1880	1940
L	566	626	686	746	806	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	14.3	15.5	16.8	18	19.2	20.5	21.7	22.9	24.1	25.4	26.6	27.4	28.7	29.9	31.2	32.4	33.7	35.2	36.4	37.7	38.9	40.1	41.4	42.6	43.8	45	46.3	47.5	48.7	50	51.2

## LMR32-06-RHD



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	75	135	195	255	315	375	435	495	555	615	675	735	795	855	915	975	1035	1095	1155	1215	1275	1335	1395	1455	1515	1575	1635	1695
L	746	806	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	24.5	25.7	27	28.1	29.4	30.6	31.8	33.1	33.9	35.15	36.4	37.7	38.9	40.2	41.7	42.9	44.1	45.4	46.6	47.8	49	50.3	51.5	52.7	54	55.2	56.4	57.7

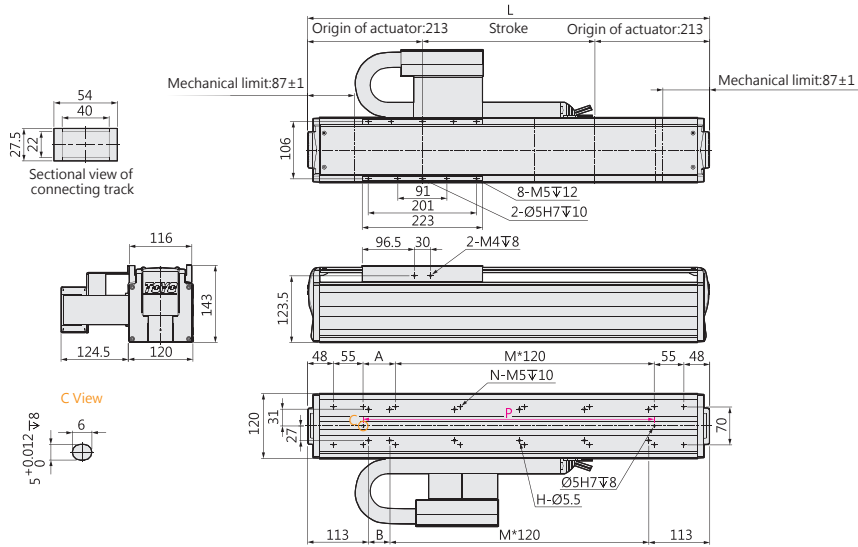
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LMR32-06-LWN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



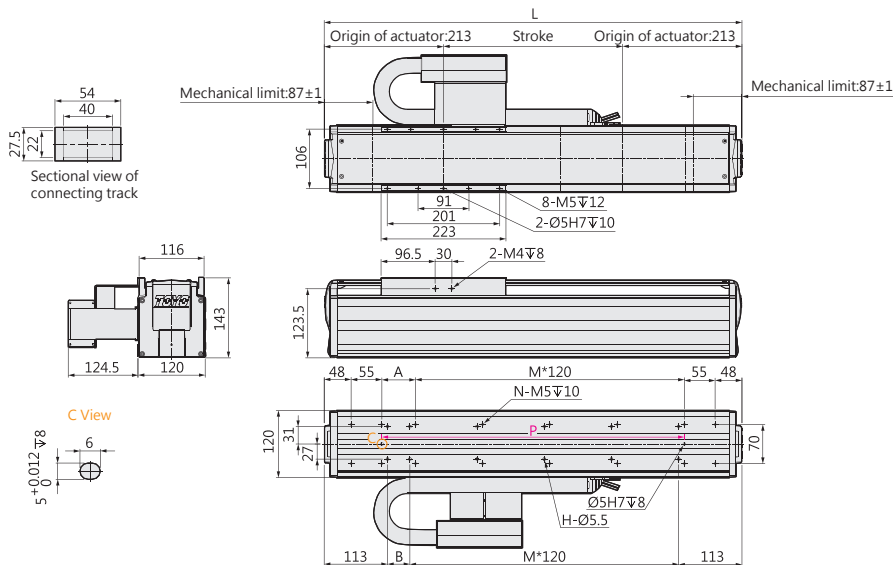
Stroke	140	200	260	320	380	440	500	560	620	680	740	800	860	920	980	1040	1100	1160	1220	1280	1340	1400	1460	1520	1580	1640	1700	1760	1820	1880	1940
L	566	626	686	746	806	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	360	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	14.6	15.7	16.9	18	19.2	20.3	21.5	22.6	23.8	24.9	26	27.2	28.4	29.5	30.7	31.8	33	34.1	35.3	36.4	37.6	38.7	39.9	41	42.1	43.3	44.5	45.6	46.8	47.9	49.1

### LMR32-LWD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	75	135	195	255	315	375	435	495	555	615	675	735	795	855	915	975	1035	1095	1155	1215	1275	1335	1395	1455	1515	1575	1635	1695
L	746	806	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	24.4	25.5	26.6	27.8	28.9	30.1	31.2	32.3	33.5	34.6	35.8	36.9	38	39.2	40.3	41.5	42.6	43.7	44.9	46	47.2	48.3	49.4	50.6	51.7	52.9	54	55.1

Features  
LGM Series  
LGF Series  
LTF2 Series  
LNF2 Series  
LCP2 Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller  
LMR  
LMR20  
LMR25  
LMR32

# LMR32

Standard type

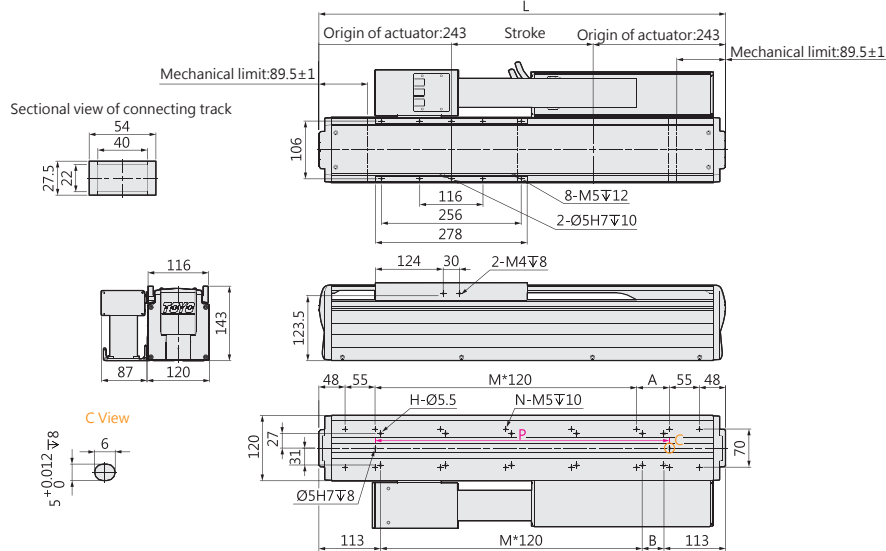
# Shaft Bar

## LMR32-08-RH-N



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



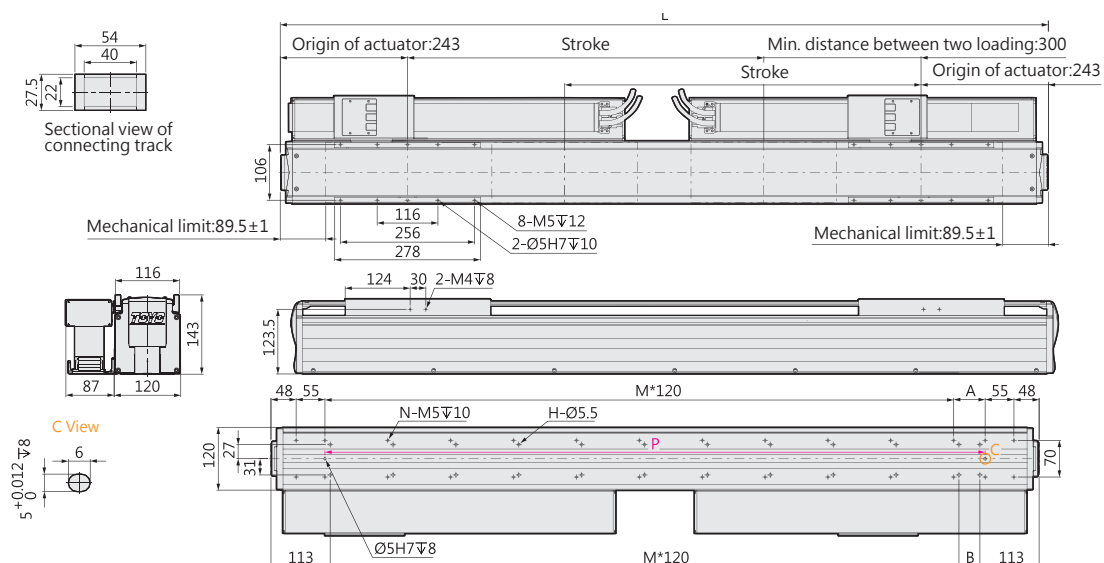
Stroke	140	200	260	320	380	440	500	560	620	680	740	800	860	920	980	1040	1100	1160	1220	1280	1340	1400	1460	1520	1580	1640	1700	1760	1820	1880
L	626	686	746	806	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	17.3	18.5	19.7	20.9	22.2	23.4	24.6	25.9	27.1	28.3	29.6	30.8	32	33.2	34.5	35.7	36.9	38.2	39.4	40.6	41.9	43.1	44.3	45.5	46.8	48	49.2	50.5	51.7	52.9

## LMR32-08-RHD



Please download the CAD file from TOYO's website : [www.toyorobot.com](http://www.toyorobot.com)

Unit : mm



Stroke	80	140	200	260	320	380	440	500	560	620	680	740	800	860	920	980	1040	1100	1160	1220	1280	1340	1400	1460	1520	1580
L	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	28.9	30.1	31.3	32.6	33.8	35	36.3	37.5	38.7	40	41.2	42.4	43.6	44.9	46.1	47.3	48.6	49.8	51	52.2	53.5	54.7	55.9	57.2	58.4	59.6



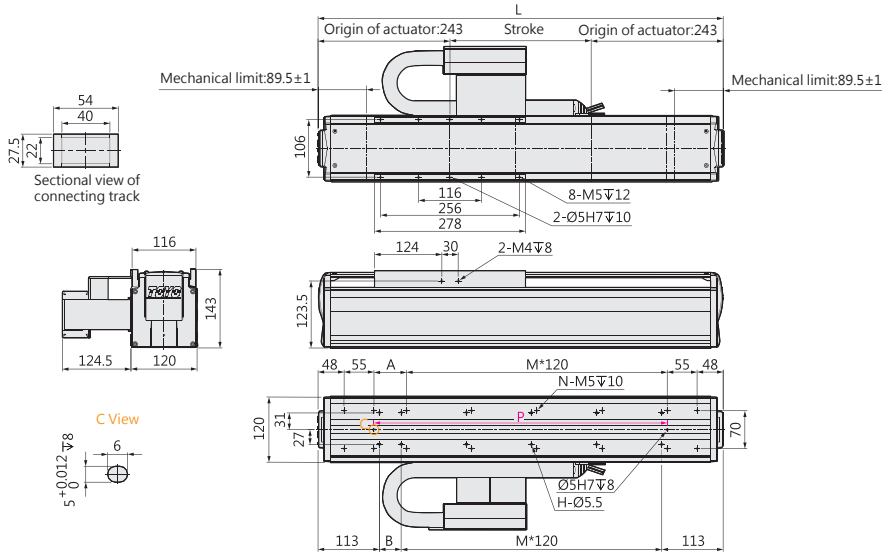
Toll-Free Number **CHINA 400-875-0009 Taiwan 0800-800-893**

### LMR32-08-LWN

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



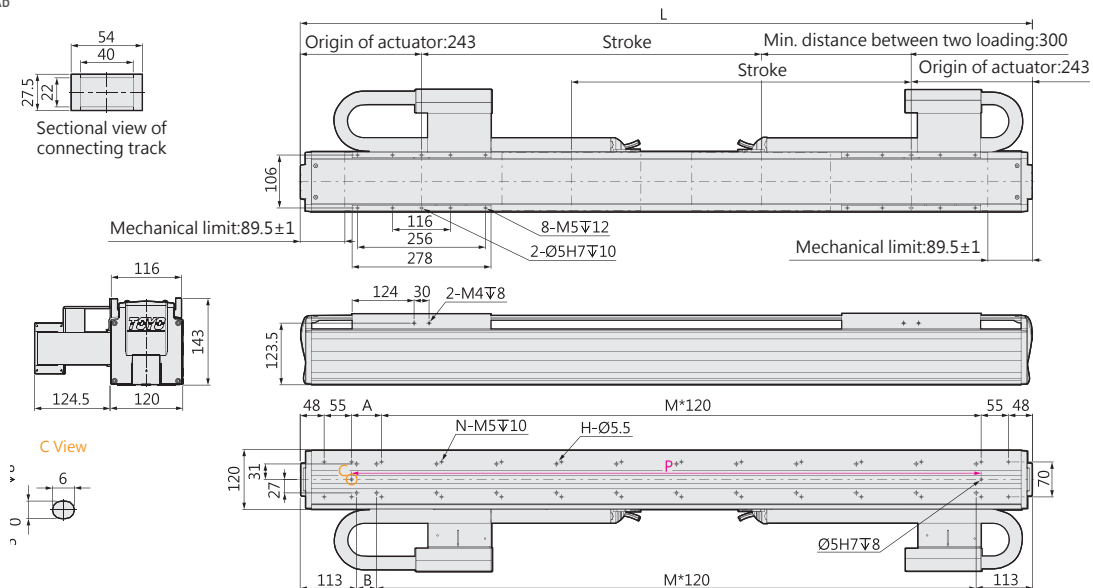
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L	626	686	746	806	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	420	480	540	600	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	17.4	18.6	19.7	20.9	22	23.2	24.3	25.5	26.6	27.8	28.9	30	31.2	32.4	33.5	34.7	35.8	37	38.1	39.3	40.4	41.6	42.7	43.9	45	46.2	47.3	48.5	49.6	50.8

### LMR32-08-LWD

Unit : mm



Please download the CAD file from TOYO's website : [www.toyo-robot.com](http://www.toyo-robot.com)



Stroke	80	140	200	260	320	380	440	500	560	620	680	740	800	860	920	980	1040	1100	1160	1220	1280	1340	1400	1460	1520	1580
L	866	926	986	1046	1106	1166	1226	1286	1346	1406	1466	1526	1586	1646	1706	1766	1826	1886	1946	2006	2066	2126	2186	2246	2306	2366
A	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120	60	120
B	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100	40	100
P	660	720	780	840	900	960	1020	1080	1140	1200	1260	1320	1380	1440	1500	1560	1620	1680	1740	1800	1860	1920	1980	2040	2100	2160
M	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17
N	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42
H	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38
KG	28.6	29.8	30.9	32.1	33.2	34.3	35.5	36.6	37.8	38.9	40	41.2	42.3	43.5	44.6	45.7	46.9	48	49.2	50.3	51.4	52.6	53.7	54.9	56	57.1

Features

LGW Series

LGF Series

LTP2 Series

LNFP2 Series

LCFP2 Series

LAF / LSF Series

LAU Series

LMR Series

Controller

LMR

LMR20

LMR25

LMR32

Features  
 LGW Series  
 LGF Series  
 LTF2 Series  
 LNF2 Series  
 LCF2 Series  
 LAF / LSF Series  
 LAU Series  
 LMR Series  
 Controller

# LC100 Controller

LC100, compatible to series of LGW, LGF, LTF2, LNF2, LCF2, LA(S)F, LAU and LMR.



## Five main features

### ■ Multi-function Motor Controller-driver

Designed and developed specifically for linear motor driving and control our controller-driver allows for high-speed, high-precision movement for a wide range of applications from large-payload handling to automated optical inspection. (For payload and speed specifications, please refer to the datasheet.)

### ■ Quick, Easy Motion Control Software Application

Our TOYO-SINGLE intuitive, easy-to-learn motion control software application provides automatic gain tuning and a digital oscilloscope for faster control parameter setting, inspection, and troubleshooting.

### ■ Shock Suppression

Each linear motor module's built-in shock suppression reduces low-frequency vibration makes our lineup a top choice for robot and long-stroke applications.

### ■ Multi-mode Communication Interface

The controller-driver multi-mode communication interface provides pulse input, serial RS-485 Modbus, IO positional encoding, analog output, pulse delivery monitoring control. Also, the controller-driver accepts EtherCAT expansion modules to allow control of up to 255 axes.

### ■ Great Price-performance Ratio

Our linear motor module's careful, intuitive integration of multiple functions provides customers with easy installation, right-out-of-the-box use.

## LC100 Specification

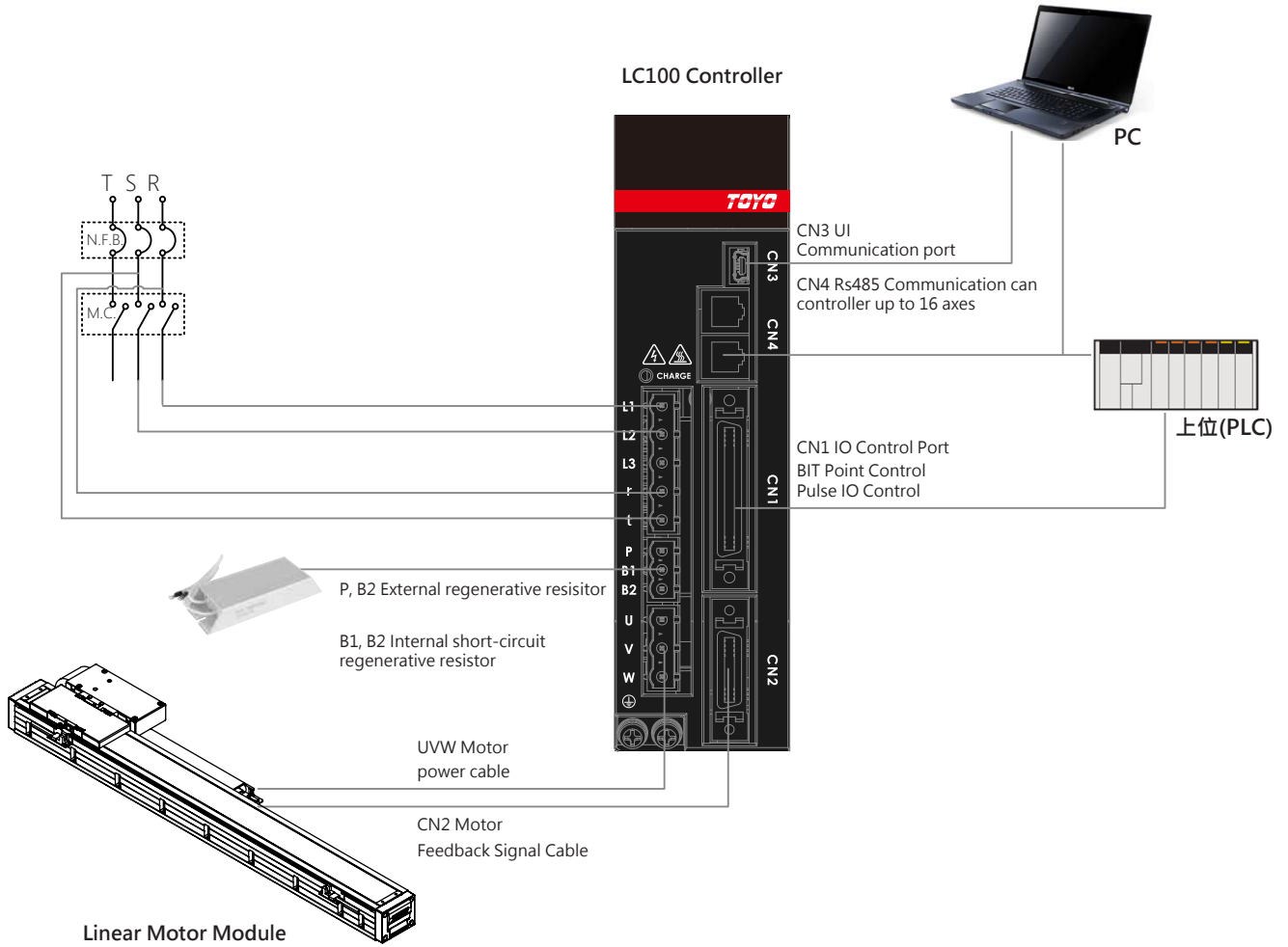
### Basic Specification

Item		Specification
Input power	Control power	Single-phase AC200~230V
	Power supply	Single-phase AC200~230V
Number of controlled axis		Single axis
Motor	Appropriate motor	Linear motor
	Rated output	2.8A corresponds to 400W, 5.6A corresponds to 750W
	Instant maximum output	14.2 corresponds to 400W, 25A corresponds to 750W
Motion control mode		ABS absolute position movement, INC relative position movement, INC-R continuous relative position movement, ABS-R continuous absolute position movement, ABS-T movement, INC-T movement, TSL torque monitoring
Pulse control mode		Input control: differential (4Mpps)/open pole set (200Kpps) signal (CW/CCW; PULSE/DIR; A/B phase) Output signal: A, /A, B, /B, Z, /Z
Position	Total number of points	1~255 points
	Points setting method	Communication setting point position I/O point position teaching
Encoder	Position management	Incremental
	Position checking	AB phase has a maximum pulse rate of 10 Mpps (4x resolution)
	Resolution	Resolution is determined by the encoder reader. Standard magnetic and optical encoder readers offer 1 $\mu$ m and 0.5 $\mu$ m resolution, respectively.
General DI/DO signal		DI(15 points)/DO(15 points)NPN Modify definition through parameter
Error history		Maximum storage for 50 error code
Safety circuit		Emergency stop switch (servo OFF) Emergency stop switch (servo OFF)
Communication		USB (Virtual COM Port): miniUSB/RS485 (half-duplex):RJ11
		Modbus RS-485 can control the operation and direct movement of up to 16 stations
		RExpandable EtherCAT module (255 stations)
Station number setting		Rotating DIP switch (0-F),16 station
Safety certification		CE ,EN61800-3/EN61800-5-1

Features  
LGM Series  
LGF Series  
LTFZ Series  
LNFZ Series  
LCPZ Series  
LAF / LSF Series  
LAU Series  
LMR Series  
Controller

# LC100 Control system structure

## System structure



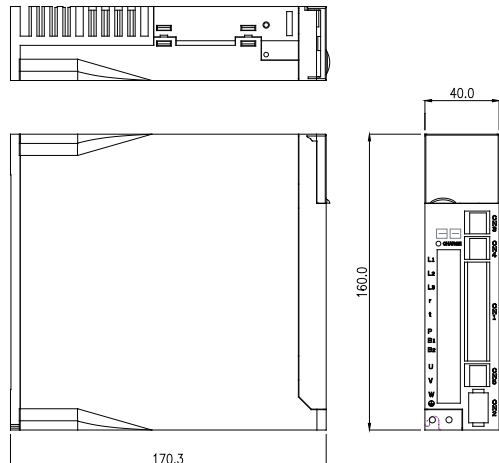
## Ordering model

### LC100

Spec of Controller	
Capacity	
LC100-4	400W
LC100-5	750W

## Controller dimension

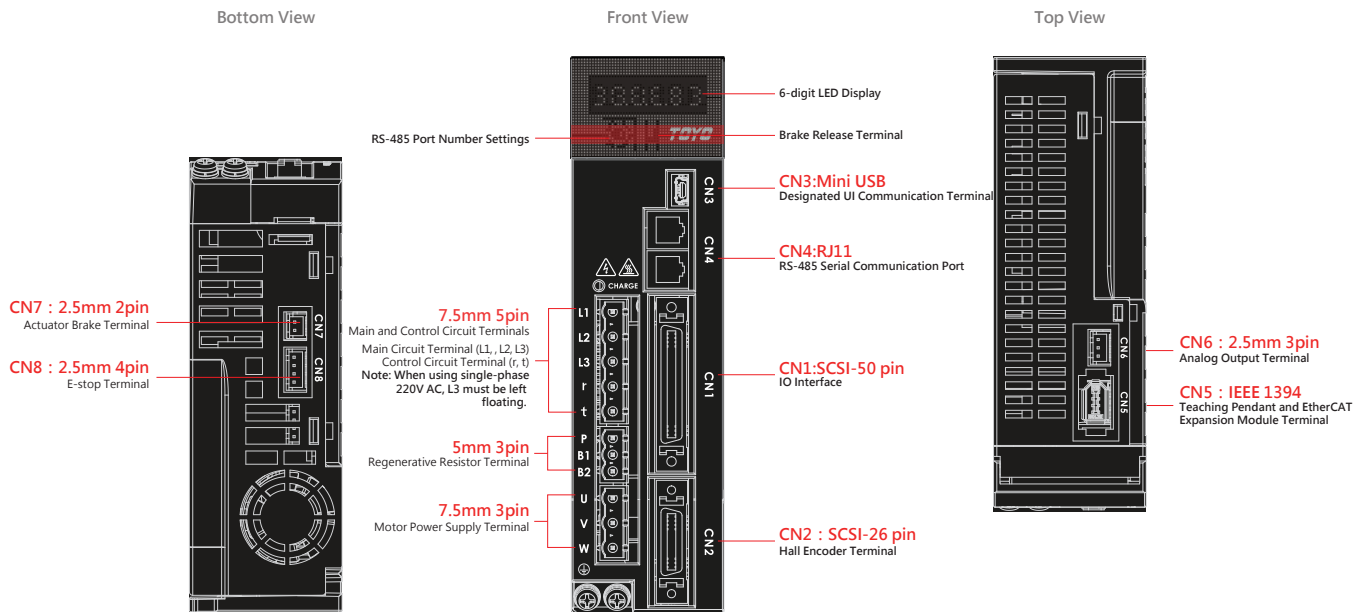
Unit : mm



# LC100 ordering code, assembly method and dimensions explanation

## Part Names and Descriptions

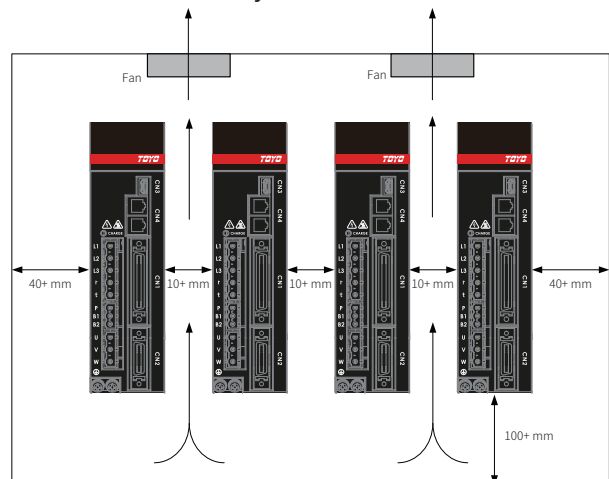
### LC100 Controller-Driver



## Restricted setting condition

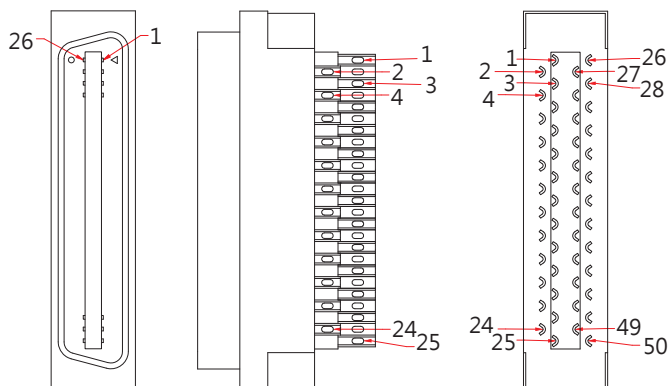
- Environment with corrosive, explosive and flammable gas and combustible liquids.
- Environment with heavy dust.
- Locations where can be polluted by other equipments' coolant.
- Locations with high vibrations(0.5G or above).
- Please locate the controller as shown below for correct installation position.
- Use temperature 0°~45°, storage temperature 0°~75°.

## Recommended assembly method



## LC100 Wiring diagram ( Power / IO / EMS )

### ■ CN1 IO 50 pin



### ■ IO signal

NO.		Signal name	Content description	NO.		Signal name	Content description
1	Dedicated	IN-COM	Input IN common contact Contactt (NPN:+)(PNP:-)	26	Dedicated	OUT-COM	Output OUT common contact Contact (NPN:-)(PNP:+)
2		IN-COM		27		OUT-COM	
3		ORG	28	ORG-S		Home	
4		/SERVO	Servo Signal	29	Digital	INP-S	Move to Target Point
5		ALM_RESET	Alarm Reset	30		READY	Servo Ready
6		START	Point Selection Start	31		SERVO-S	Servo On
7		PRGSEL0	Point Selection 0	32		PRGSEL0	Point Selection 0
8	PRGSEL1	Point Selection 1	33	PRGSEL1		Point Selection 1	
9	PRGSEL2	Point Selection 2	34	PRGSEL2		Point Selection 2	
10	PRGSEL3	Point Selection 3	35	PRGSEL3		Point Selection 3	
11	PRGSEL4	Point Selection 4	36	PRGSEL4		Point Selection 4	
12	PRGSEL5	Point Selection 5	37	PRGSEL5		Point Selection 5	
13	LOCK	Invalid	38	OUT 11		Reseved	
14	IN12	Reseved	39	OUT 12		Reseved	
15	IN13	Reseved	40	OUT13		Reseved	
16	IN14	Reseved	41	OUT14		Reseved	
17	IN15	Reseved	42	OUT 15		Reseved	
18	Dedicated	PULSE	Pulse Step, Open collector loop	43		Dedicated	/PULSE
19		DIR	Pulse Step, Open collector loop	44	/DIR		Pulse Step, Open collector loop
20		HPULSE	High-speed Pulse Step, Line drive circuit	45	/HPULSE		High-speed Pulse Step, Line drive circuit
21		HDIR	High-speed Pulse Step, Line drive circuit	46	/HDIR		High-speed Pulse Step, Line drive circuit
22		A	Pulse Output A	47	/A		Pulse Output /A
23		B	Pulse Output B	48	/B		Pulse Output /B
24		Z	Pulse Output C	49	/Z		Pulse Output A/C
25		GND	Driver internal 0V	50	FG		Shell shield/ Earth ground

## LC100 Accessories list

### Standard accessories

#### Driver Power Supply Connector

Model	PCN-00000014-OP
-------	-----------------



#### Motor Power Supply Connector

Model	PCN-00000015-OP
-------	-----------------



#### Regenerative Resistor Connector

Model	PCN-00000016-OP
-------	-----------------



#### Power Supply Cable

Model	LC100-CP- □
□	Cable Length
05	5m
08	8m
12	12m



#### Singal Cable

Model	LC100-CS- □
□	Cable Length
05	5m
08	8m
12	12m



#### I/O Connector (SCSI 50Pin)

Model	SAN-M-SCSI-50PIN
-------	------------------



### Optional accessories

#### IO Terminal (SSCI 50 Pin) Cable

Model	3M-MDR50/1.0M
-------	---------------



#### IO Terminal (SSCI 50 Pin) Block

Model	3M-MDR50-TB
-------	-------------



#### Mini USB Cable for UI Communication

Model	BUSB0300AMMBM
-------	---------------



#### RJ11 Jack for RS-485 Serial Communication

Model	22118-000034
-------	--------------



Features

LGW Series

LGF Series

LTP2 Series

LN2 Series

LC2 Series

LAF / LSF Series

LAU Series


LMR Series

Controller


# LC100 Control system structure

## TOYO Single user interface description

### Basic Specification

 TOYO-Single	Specification	O/S
	OS Model	Microsoft Windows 2000/XP/Vista/7/8.1/10
	CPU Model	Meet the requirement of the O/S
	Memory	Meet the requirement of the O/S
	Free HD space	20MB or above free space
	Communication ports	RS-485、USB
	Compatible controller	LC100

### Main Page-Position Points



**Basic status bar:**  
Display current system status, from left to right, product name, software name, communication port, station ID, firmware version, software version and connection status.

**Model and controller status:**  
Display current robot model and controller status.

**Current position:**  
Display the current position.

**Simulation display:**  
Simulate the movement of current hardware.

**Toolbar:**  
The toolbar contains: new connection, new data file, open data file, save, copy, paste, read position point list, read parameters, overwrite position point list, overwrite parameter, overwrite all, display unit change and disconnect.

**SERVO/ORG control:**  
Control servo ON or OFF, returning to the ORG, deceleration, stop and alarm reset.

**Position point list:**  
Set position point moving mode, speed, torque, dwell time and next step.

**Oscilloscope:**  
[Image of oscilloscope display]

**Function page selection:**  
To select the setting of position points, monitoring and parameters.

**Automatic operation:**  
Proceed with the selected position points automatically.

**Manual Operation:**  
Proceed with JOGGING and INCHING.

**Manual operation:**  
Proceed with the selected position points automatically.(suggest to use when

**Operating point:**  
Display current position point, confirming the teaching.

**Output monitoring:**  
Display current output from controller and alarm status.



**Monitoring Page**

**Input monitoring:**

Monitoring all input signal and all signal is forced to output.

**Output monitoring:**

Monitoring all output signal but cannot be forced to output to other device.



**Alarm log:**

Display the last 50 alarm, the latest one is on top.

**position and pushing position control:**

Torque limit movement control

**Motor status monitoring:**

Monitoring the motor status, such as current, rotation speed, current position and alarm status...etc.

**Parameter Page**

List of eight main demonstrated parameters:

**Parameter content**

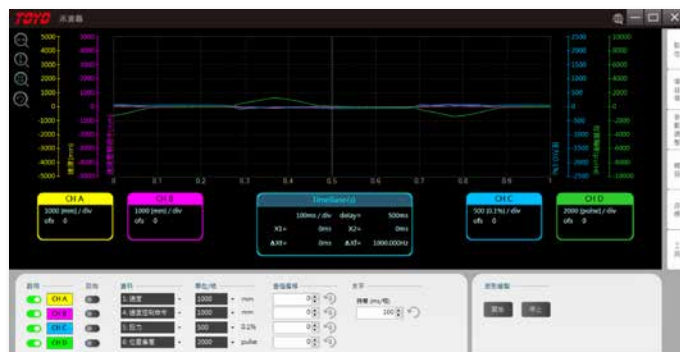
The content is including the name, description and the of parameters, description and setting value of parameters.

名稱	單位	範圍	預設
01: 速度	mm/min	0-10000	2000
02: 扭力限制	Nm	0-1000	0
03: 機軸原點位置	mm	0-1000	0
04: 機軸位置	mm	0-10000	0
05: 機軸速度	mm/sec	0-1000	0
06: 機軸電流	A	0-10000	0
07: 機軸電壓	V	0-10000	0
08: 機軸溫度	°C	0-10000	0

- Parameters of Motor
- Parameters of Thrust
- Common Parameters
- Setting of Input
- Setting of Output
- Speed Parameters
- Parameters of homing
- Parameters of communication setting

**Parameter Page**

The digital oscilloscope provides easy observation of the linear motor module's resonant frequencies for quick control gain tuning:



There is specification selection support fax form.

**Fax .+886-6-2552588**

Please provide us your inquiry sheet of product, we will help to deal with it and reply to you. Please copy and fax this page.

Toyo Linear Motor Selection Table				V1.1
Company Name		Register Person		Register Person
Contact person		Tel		
E-mail		Mobile No		
Industry Type				
Use Experience	<input type="checkbox"/> Yes Brand : <input type="checkbox"/> YASKAWA <input type="checkbox"/> MITSUBISHI <input type="checkbox"/> PBA <input type="checkbox"/> GHC <input type="checkbox"/> HIWIN <input type="checkbox"/> Other :			<input type="checkbox"/> NO
Driver Brand	<input type="checkbox"/> SERVOTRONIX <input type="checkbox"/> ELMO <input type="checkbox"/> MITSUBISHI <input type="checkbox"/> PANASONIC <input type="checkbox"/> Others <input type="checkbox"/> No			
Combination Types			Installation	
<input type="checkbox"/> Single Axis <input type="checkbox"/> Arm Type <input type="checkbox"/> Pole Type <input type="checkbox"/> Gantry Type <input type="checkbox"/> Gantry Type Shaft Driven			<input type="checkbox"/> Horizontal Mount <input type="checkbox"/> Reverse Mount <input type="checkbox"/> Wall Mount	
Figure				
Accuracy		Working Environment		
Repeatability (mm)		<input type="checkbox"/> General Environment Temperature( ° )		
Absolute Repeatability (mm)		<input type="checkbox"/> Clean Room Class Level ( )		
Workpiece Dimension(LxWxH)		Numbers of Slider		
Flatness (mm)		<input type="checkbox"/> X Axis : <input type="checkbox"/> One <input type="checkbox"/> two <input type="checkbox"/> multi ( Pcs)		
Straightness(mm)				
Square Trowel ( ° )		<input type="checkbox"/> Y Axis : <input type="checkbox"/> One <input type="checkbox"/> two <input type="checkbox"/> multi ( Pcs)		
HorizonInstallation Over11ang (mm)		Wall Installation Overhang (mm)		
A 方向 (mm) :		A 方向 (mm) :		
B 方向 (mm) :		B 方向 (mm) :		
C 方向 (mm) :		C 方向 (mm) :		

Continue from the previous page

Please copy and fax this page.

Single Axis Motion		Multi Axis Motion	
Payload (Kg)		Y Axis Payload (Kg) :	
Max Speed (Mm/s)		Y Axis Max Speed (Mm/s)	
Effective Stroke (Mm)		Y Axis Effective Stroke (Mm)	
Acceleration Time (S)		Cycle Time (S)	
Constant Speed Time (S)		Constant Speed Time (S)	
Deceleration Time (S)		Deceleration Time (S)	
Dwell Time (S)		Dwell Time (S)	
Cycle Time (S)		Cycle Time (S)	
Linear Motor Module Type		Homing Type	
<input type="checkbox"/> Iron Core <input type="checkbox"/> Ironless <input type="checkbox"/> linear Shaft		<input type="checkbox"/> Linear Scale Z Phase	<input type="checkbox"/>
Control Mode		SENSOR <input type="checkbox"/> Exteral Optronic Sensor <input type="checkbox"/>	
<input type="checkbox"/> Pulse <input type="checkbox"/> Communication ( <input type="checkbox"/> RS-232 <input type="checkbox"/> RS-485 ) <input type="checkbox"/> Others:EtherCAT			
Controller Brand And Model No.			
Special Requirment			
Case Purchased Previous	<input type="checkbox"/> Kit Only (Stator \ motor Coil) <input type="checkbox"/> Actuator Module Set by Yourself <input type="checkbox"/> Actuator Module Set by Toyo <input type="checkbox"/> Si Case(Integrated)		
Control Mode Previous	<input type="checkbox"/> Pulse <input type="checkbox"/> Communication (EtherCAT) <input type="checkbox"/> Others		
Discription of Preveious Case			
Case For This Time	<input type="checkbox"/> Kit Only (Stator \ motor Coil) <input type="checkbox"/> Actuator Module Set by Yourself <input type="checkbox"/> Actuator Module Set by Toyo <input type="checkbox"/> Si Case(Integrated)		
Competitors Price of This Case			
Expeted Price			
Expected Amount			
Require Time			

## Memo

## Memo

24 Taiwan: 0800-800-893

24 China: 400-875-0009



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[www.toyorobot.cn/about.html](http://www.toyorobot.cn/about.html)

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