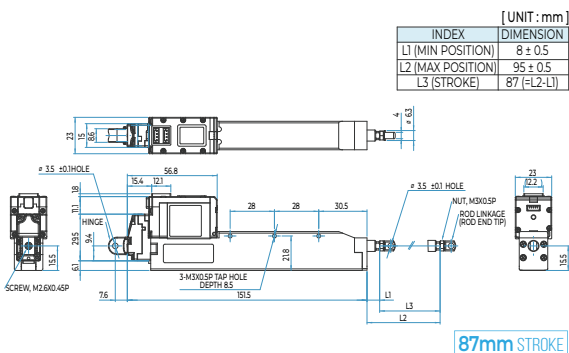
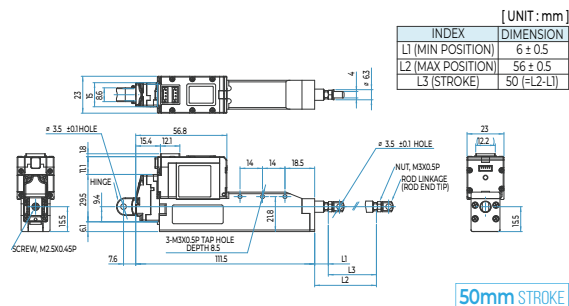
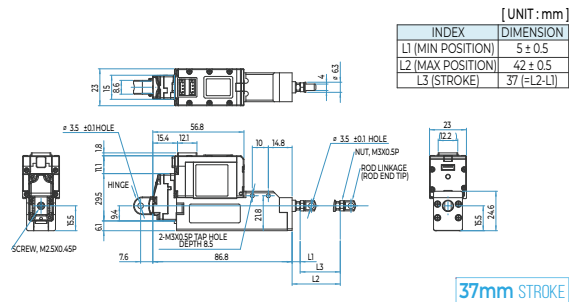
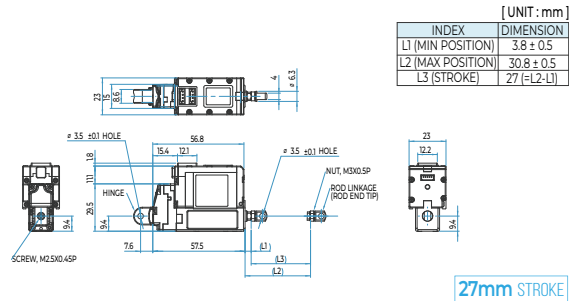


## PRODUCT DIMENSION

### 17Lf Servo Series



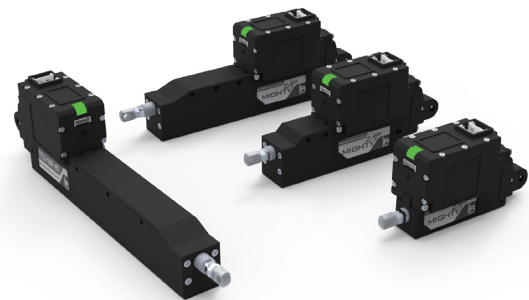
# 17LF SERVO SERIES

## WITH EXPANSION I/O PORT

**MINI.  
SMARTER.  
MORE ROBUST.**



### Introduction



- ▶ Compact size with built-in drive, position sensor, 17mm diameter DC motor and gear box
- ▶ Better durability & faster speed under similar rated load comparing to 12Lf series thanks to the bigger 17mm diameter DC motor
- ▶ Position, current and speed control along with position & current feedback
- ▶ Easy & versatile digital I/O control through expansion I/O port (No coding) (Switch, JOG, Index Action, Force Off, Pause, Stop, Alarm Out, Restart, etc.)
- ▶ Index Action feature which enables user's motion save & run on Manager software.
- ▶ 27/37/50/87mm(\*) stroke option  
(\*): Each 3mm stroke can be added when adjusting the long stroke limit through Total Manager software.
- ▶ Rated load of 17N~70N depending on the lead angle for each stroke  
· Speed is inversely proportional to the rated load, so the higher the rated load, the slower the speed.
- ▶ RS-485 MODBUS-RTU protocol applied (IR open protocol is not provided)

## PRODUCT SPECIFICATION

### PRODUCT DETAILS SPECIFICATIONS

Rated Load	Stroke	Communication Type	Rated Load / Max. Speed (No Load)	Stall Force at Current (1.6A / 800mA / 200mA)	Mechanical Self Lock (Z axis Availability)	Leadscrew / Gear Ratio / Gear Type	
		RS-485					
17N	37mm (40mm*)	17Lf-17F-37	17N / 105mm/s	90N / 58N / 23N	No (Caution : Z axis application)	Lead Angle 16.2° / 9.3:1 / Engineering Plastic Gears	
	50mm (53mm*)	17Lf-17F-50					
	87mm (90mm*)	17Lf-17F-87					
20N	27mm (30mm*)	17Lf-20F-27	20N / 117mm/s	96N / 68N / 27N		Lead Angle 22.2° / 9.3:1 / Engineering Plastic Gears	
27N	37mm (40mm*)	17Lf-27F-37	27N / 82mm/s				Lead Angle 12.3° / 9.3:1 Engineering Plastic Gears
	50mm (53mm*)	17Lf-27F-50					
	87mm (90mm*)	17Lf-27F-87					
35N	27mm (30mm*)	17Lf-35F-27	35N / 90mm/s	182N / 129N / 50N	Lead Angle 17° / 9.3:1 Engineering Plastic Gears		
50N	37mm (40mm*)	17Lf-50F-37	50N / 28mm/s			Yes (Z axis Available)	Lead Angle 4.16° / 9.3:1 Engineering Plastic Gears
	50mm (53mm*)	17Lf-50F-50					
	87mm (90mm*)	17Lf-50F-87					
70N	27mm (30mm*)	17Lf-70F-27	70N / 32mm/s	Lead Angle 5.82° / 9.3:1 Engineering Plastic Gears			

(\*): Maximum stroke length when adjusting long stroke limit through Total Manager software

### 17LF COMMUNICATION TYPE COMMON SPECIFICATION

Repeatability	Stroke		Unidirectional	LED Indication		Two Errors Indications (Input voltage, Overload)		
		27mm / 37mm	50mm	30μm (0.03mm)	Wire Harness	Comm./Power	RS-485 Molex to Molex Type (Molex 510650400, 4pins) / 200mm length, 0.08×60 (22AWG)	
	87mm		40μm (0.04mm)	I/O Port			I/O Port Wire harness : Molex 510210500, 5pins / 200mm length, 0.16 x 7 (26AWG)	
Mechanical Backlash	0.03mm (30μm)		50μm (0.05mm)		Communication Method / Protocol		RS-485 / MODBUS RTU (IR Open protocol is not supported)	
Motor Type	Coreless DC (17mm diameter)			Expansion I/O Port Function		Switch, JOG, Index Action, Force Off, Pause, Stop, Alarm Out, Restart etc.		
Rated Voltage / Motor Watt	12VDC / 3.8W			Operating Temperature		-10°C ~ 60°C		
Rod Type	Metal Alloy Rod			Ingress Protection		IP-54 (Dust & Water Tight)		
Current Accuracy	±15%at Over 50mA			Audible Noise		Approx. 50db at 1m		
Position Sensor	10KΩ linear Potentiometer			Dimension(LxHxW) / Wight (Dimension excluding the rod-end tip and hinge)		27mm   57.5x40.6x23mm / 65.5g		
Input Voltage Range	7 ~13V (Rated 12VDC)					37mm   86.8x57.9x23mm / 113.5g		
Recommended Duty Cycle	At Rated Load		At Max Applicable Load	50mm   111.5x57.9x23mm / 140g				
	Max 50%		Max 20%					
Current Consumption	Idle	at Rated Load	Stall		87mm   151.5x57.9x23mm / 188g			
	Under 30mA	400mA	Default Setting	MAX				

\* Design and Specification can be changed without prior notice for further improvement.

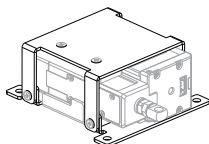
### Accessories | Mounting Solution

#### METAL BRACKET | IR-MB05

- Metal bracket dedicated for 17Lf series 27mm stroke actuator (Lateral Type)

\*17Lf series 37mm, 50mm, 87mm stroke actuators use existing IR-MB03

\* For IR-MB03 and other common accessories, refer to the 12Lf series leaflet.



#### METAL BRACKET | IR-MB06

- Metal bracket dedicated for 17Lf series 27mm stroke actuator (Vertical Type)

\*17Lf series 37mm, 50mm, 87mm stroke actuators use existing IR-MB03

\* For IR-MB03 and other common accessories, refer to the 12Lf series leaflet.

