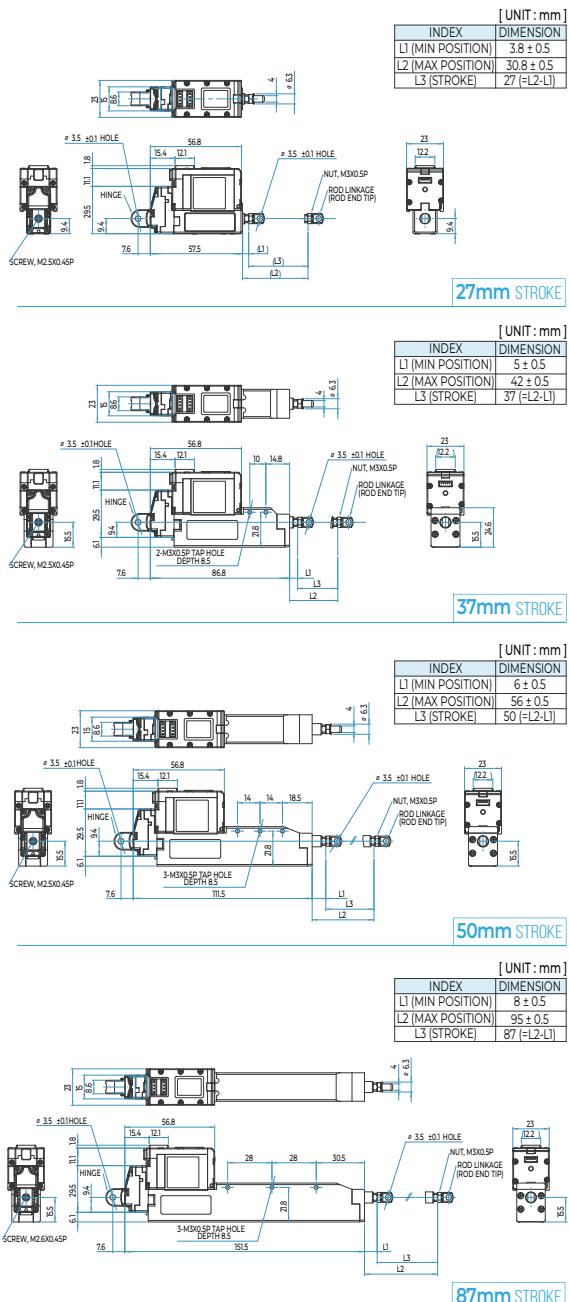


## PRODUCT DIMENSION

### 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				Lead Angle 22.2° / 9.3:1 / Engineering Plastic Gears		
	87mm (90mm*)	17Lf-17F-87				Lead Angle 12.3° / 9.3:1 / Engineering Plastic Gears		
20N	27mm (30mm*)	17Lf-20F-27	20N / 117mm/s	96N / 68N / 27N	Yes (Z axis Available)	Lead Angle 17° / 9.3:1 / Engineering Plastic Gears		
27N	37mm (40mm*)	17Lf-27F-37	27N / 82mm/s			Lead Angle 4.16° / 9.3:1 / Engineering Plastic Gears		
	50mm (53mm*)	17Lf-27F-50				Lead Angle 5.82° / 9.3:1 / Engineering Plastic Gears		
	87mm (90mm*)	17Lf-27F-87						
35N	27mm (30mm*)	17Lf-35F-27	35N / 90mm/s	182N / 129N / 50N	Yes (Z axis Available)	Lead Angle 4.16° / 9.3:1 / Engineering Plastic Gears		
50N	37mm (40mm*)	17Lf-50F-37	50N / 28mm/s			Lead Angle 17° / 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					

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

## 17LF COMMUNICATION TYPE COMMON SPECIFICATION

	Stroke	Unidirectional	LED Indication		Two Errors Indications (Input voltage, Overload)
Repeatability	27mm / 37mm	30µm (0.03mm)	Wire Harness	Comm./Power	RS-485 Molex to Molex Type(Molex 510650400, 4pins / 200mm length, 0.08×60 (22AWG)
	50mm	40µm (0.04mm)			I/O Port Wire harness : Molex 510210500, 5pins / 200mm length, 0.16 x 7 (26AWG)
	87mm	50µm (0.05mm)		I/O Port	
Mechanical Backlash	0.03mm (30µm)		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 37mm   86.8x57.9x23mm / 113.5g 50mm   111.5x57.9x23mm / 140g 87mm   151.5x57.9x23mm / 188g
Input Voltage Range	7~13V (Rated 12VDC)				
Recommended Duty Cycle	At Rated Load		Max 50%		Max 20%
	Idle		Stall		
Current Consumption	Default Setting		MAX		
	Under 30mA	400mA	800mA	1600mA	

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

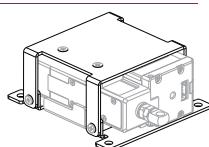
## Accessories | Mounting Solution

### 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.

