



Low-profile long stroke hand with length measuring function
Double acting

LSTM-HP2 Series

● Operating stroke: 12, 16, 20 mm

Double acting



Specifications

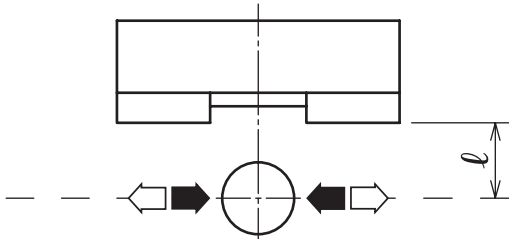
Item		LSTM		
Bore size	mm	ø12 x 2	ø16 x 2	ø20 x 2
Actuation		Double acting		
Working fluid		Compressed air		
Max. working pressure	MPa	0.7		
Min. working pressure	MPa	0.1		
Port size		M5		
Operating stroke	mm	12	16	20
Power supply voltage		24 VDC ±10%		
Current consumption		25 mA or less		
Indicator lamp		Green LED ON when power applied		
Analog output		1 V when finger is closed - 5V*1 when open, connection load 100kΩ or more		
Analog output linearity		±0.5% F.S. or less (ambient temperature 25°C)		
Repeatability of analog output		±0.04 mm or less (No deformation or wear of the actuator / jig when ambient temperature is 25 ° C)		
Valid measured range length	mm	12	16	20
Shock resistance (sensor/amplifier section)		294m/s ²		
Vibration resistance (sensor / amplifier section)		10 to 55Hz double amplitude 1.5mm, 2 hours in each X, Y, Z direction		
Degree of protection (sensor/amplifier section)		IEC Standard IP65		
Ambient temperature, humidity		10 to 60°C, 85% RH or less (no freezing)		
Weight	kg	0.26	0.50	0.90
Lubrication		Not required		

*1: There is output fluctuation of 1 mV / °C.

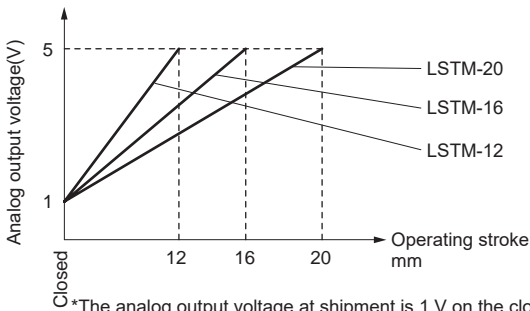
Gripping force

• Gripping force is the thrust (one finger) in the direction of the arrow shown in the figure.

- Open direction (←)
- Close direction (→)



Analog output characteristics



*The analog output voltage at shipment is 1 V on the closed side and 5 V on the open side, with the port closed and pressurized.

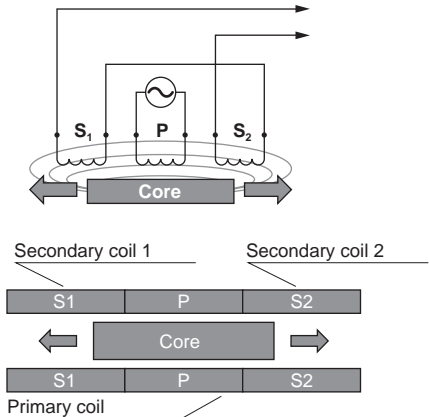
Unit: N

Bore size (mm)	Double acting
ø12	48
ø16	90
ø20	141

*Supply pressure: 0.5 MPa, ℓ=15mm value at stroke center

LVDT displacement sensor operation principle

When exciting the primary coil (P), induced voltage is generated in the two secondary coils (S1/S2) by electromagnetic induction. When the Hand is driven, the core position changes and a difference in induced voltage occurs between S1 and S2. This difference is used to output the position of the core as electric signals.



How to order

LSTM - 12 A 1 N - HP2

A Bore size (mm)

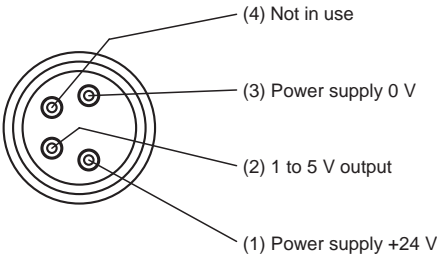
B Stroke

C Port position

D High precision positioning hole

Code	Description
A Bore size (mm)	
12	ø12
16	ø16
20	ø20
B Stroke	
A	Short stroke
C Port position	
1	Standard, axis direction
D High precision positioning hole	
N	None
A	Available

Plug contact array diagram



[Example of model No.]

LSTM-16A1A-HP2

Model: Low-profile long stroke hand with length measuring function

- A Bore size (mm) : ø16
- B Stroke : Short stroke
- C Port position : Standard, axis direction
- D High precision positioning hole : Available

Refer to the LSTM-HP2 Series of "Low-profile long stroke hand LST-HP Series (No.CC-1529A)" for dimensions.

SCPD3	Long service life cylinder
CMK2	
SCM	
SSD2	
MDC2	
MSD	
MSDG-L	
SMG	Environment-resistant cylinder
LCR	
LCG	
STM	
STG	
STR2	
SCPD3	Linear Slide Hand
CMK2	
SCM	
SCG	
SSD2	
SMG	
LCR	
STG	Low-profile long stroke hand
STS	
STL	
LSH	
LSHL	
LSHM	
LST	Wide Parallel Hand
LSTM	
HMC	
CKW	
ABP2	
SCPD3	Compatible with rechargeable batteries
CMK2	
SCM	
SSD2	
MSD	
MSDG-L	
SMG	
STG	Supports food mfg. processes
STM	
LCR	
LCG	
STR2	
LSH	
LSHL	
SCPD3	
CMK2	
SCM	
SCG	
SSD2	
STG	