

Magnetostrictive Linear Position Sensor

Square housing / slide & floating magnet Analog Output

L5 - HXXXX-1A



Profile

- Outside installation, easy to use
- Absolute position output, without zero operation
- Contactless sensing with highest durability
- Design of low power consumption, reduce the temperature drift
- Slide magnet with joint bearings, can withstand large lateral stress
- Starting point, end point and range can be programmed

CE UL RoHS Analog

Features

- High resolution, analog output 14bit D/A
- Floating magnet, maximum vertical distance 15mm
- Linearity deviation < $\pm 0.02\%$ rated length
- Repeatability < $\pm 0.002\%$ rated length

Parameter of measurement	
Measuring Length	50~2500mm
Output	0~20mA (Min./Max.Load: 0/500 Ω) 4~20mA (Min./Max.Load: 0/500 Ω) 0~10V (Min.Load > 5k Ω) -10~+10V (Min.Load > 5k Ω)
Resolution	14 bits D/A
Linearity	< $\pm 0.02\%$ F.S.
Repeatability	< $\pm 0.002\%$ F.S.
Frequency response	Depend on Measuring range

Design & Material	
Sensor head	Inside
Sensor stroke	Aluminium alloy
Mounting holder	304L Stainless

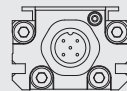
Installation & Accessories	
Installation direction	Any orientation
Installation	Mounting holder, M5x20 Specified screw
Magnet	Flat rail sliding block magnet L5-0000-ACMB-0004, Not included in delivery Trapezoid Floating Magnet L5-0000-ACMB-0005, Not included in delivery Rectangle Floating Magnet L5-0000-ACMB-0006, Not included in delivery
Mounting holder	L5-0000-ACMT-0002, Not included in delivery (At least two)
Connector	E1-1205-0001, Not included in delivery

Electrical characteristics	
Connection	Cable or M12,5 pins Connector
Voltage	24VDC (-15 / +20%)
Current	< 50mA (Depend on Measuring range)
Polarity protection*	Max. -30VDC
Overvoltage protection*	Max. 36VDC
Electric strength	500V (DC ground to machine ground)
Error indicator	Red and Green LED indicator

* Max. 5mins

Operation condition	
Magnet speed	Any
Operating temperature	-40°C ~ +85°C
Humidity/Dew point	R.H.90%, No Condensation
Temperature coefficient	< 30ppm/°C
Protection Level	IP65

Sensor diagnostic display

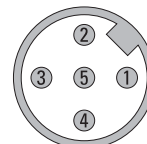


Indicator	Description
Green ON	Normal function
Green Flash	Programming mode
Red Flash	Magnet out of measuring range
Red ON	Magnet not detected or damaged magnet

Wiring

Signal	Ub	GND	Analog Uoutput	Comm. Port	Signal GND
Cable(color)	Brown	Blue	White	Black	Gray
M12, 5 Pins Connector	1	3	2	4	5

M12, 5 pins Pin top view (sensor)



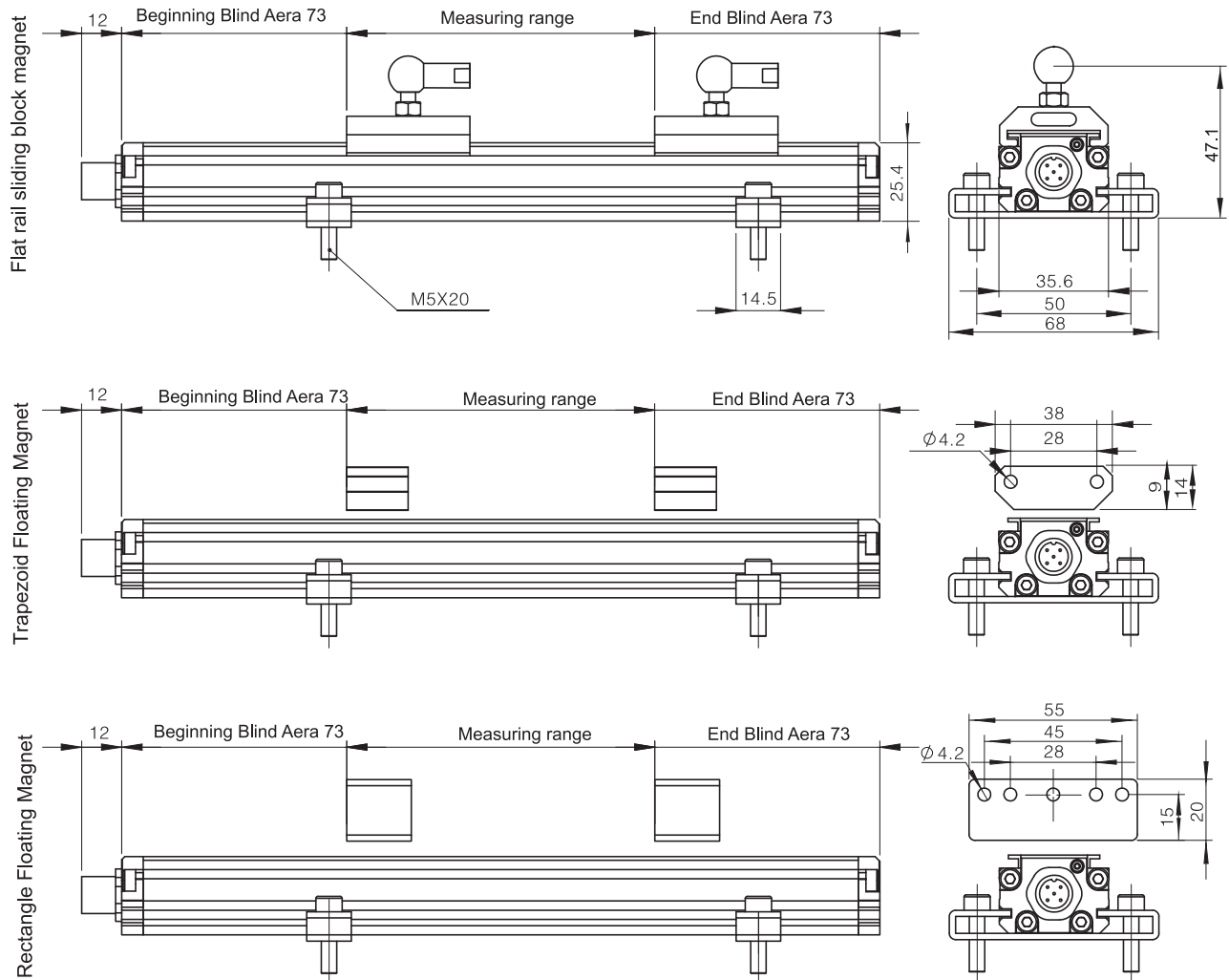
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Ordering example Outside Cylinder	L5 - H 1 2 0 0 - 1 A 1 1 - XXXX 0 P - S					
	a	b	c	d	e	f
a Measuring range 1200 = 1200 mm Max.2500 mm in 5-mm increments	c Operation Voltage 1 = 24 VDC	e Output V010 = 0~10VOutput V011 = 10~0VOutput A010 = 4~20mAOutput A011 = 20~4mAOutput V020 = -10~+10VOutput V021 = +10~-10VOutput A020 = 0~20mAOutput A021 = 20~0mAOutput	f Blind Aera (Bignning+End) S = 73 + 73 (mm)	b Output 1A = Analog Output	d wiring 1 = M12, 5 pinsConnector PXX = Standard cable outlet, XX meters TXX = High temperature cable outlet, XX meters	

Dimensions



Note: (1) Default delivery 2pcs mounting clamps, there will be more one each 500mm longer than 1000mm.
 (2) Position measurement is via floating magnets travelling along the sensing rod without any mechanical contact.
 Square floating magnet : Max.Horizontal offset upto ±3mm, Max.Vertical distance upto 5mm.