

Magnetostrictive Linear Position Sensor

Split Body SSI Output

L5 - DXXXX-12



Profile

- Split body, compact design
- Separated sensor head, replace easily
- Contactless sensing with highest durability
- Absolute position output, without zero operation
- Design of low power consumption, reduce the temperature drift
- Direct stroke measurement inside the cylinder, protect level IP69K

Features

- Status LEDs for indicating operating status and diagnostics
- Split body design, high protection level and shock resistance

- Linearity deviation < $\pm 0.01\%$ rated length
- Repeatability < $\pm 0.002\%$ rated length

Parameter of measurement

Measuring Length	25 - 2500 mm
SSI Signal	24,25,26 bits Binary Gray
Baud rate	70kBd ~ 1MBd Cable Length: < 3 < 50 < 100 < 200 < 400m Baud rate: 1000 < 400 < 300 < 200 < 100kBd
Resolution	0.5 / 1 / 2 / 5 / 10 / 20 / 50 / 100 μ m
Linearity	< $\pm 0.01\%$ F.S. (Min. $\pm 40\mu$ m)
Repeatability	< $\pm 0.002\%$ F.S. (± 1 bit)
Update time	Range : 300 750 1000 2000 5000 mm Frequency: 3.7 3.0 2.3 1.2 0.5 kHz

Design & Material

Sensor head	Aluminium alloy
Mounting holder	Aluminium alloy
Mounting flange	304LStainless

Installation & Accessories

Installation direction	Any orientation
Installation	Threaded flange M18x1.5 or on demand
Magnet	L5-0000-ACRI-0001, Not included in delivery
Antimagnetical Spacer	L5-0000-ACMT-0001, Not included in delivery
Connector	E1-2206-0100, Not included in delivery

Electrical characteristics

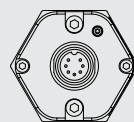
Connection	Cable or M16, 7pins/8 pins Connector
Voltage	24VDC (-15% / +20%)
Current	< 60mA (Depend on Measuring range)
Polarity protection*	Max. -30VDC
Overvoltage protection*	Max. 36VDC
Electric strength	500V (DC ground to machine ground)
Error indicator	Red and Green LED indicator

* 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	Inside rod IP69K, Sensor head IP67
Pressure rating	35MPa (Continuously) / 70MPa (Peak value)

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	+C	-C	+D	-D
Cable(color)	Brown	White	Yellow	Green	Pink	Gray
M16, 7 pins connector	5	6	3	4	2	1

M16, 7pins Pin top view (sensor)

