

Non-Contact Magnetostrictive Position Sensor In Cylinder Applications

ANALOG 4-20 mA

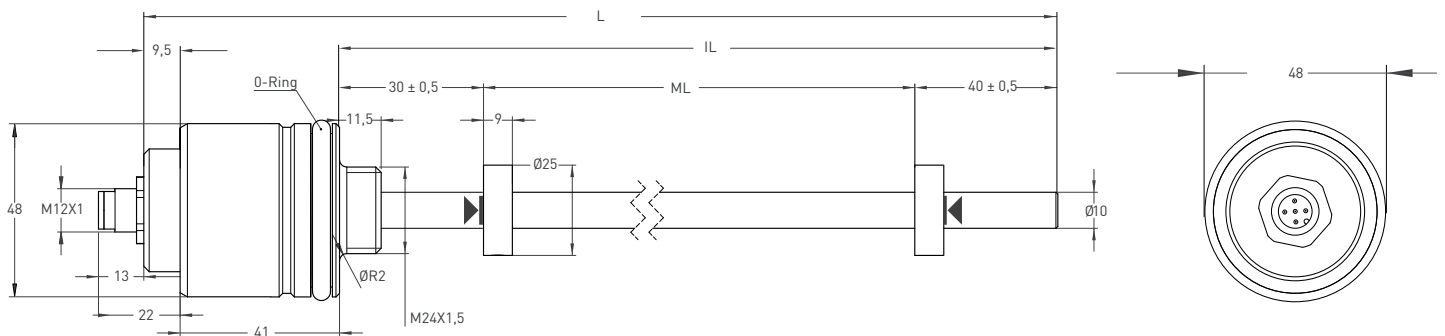
- Measuring length 50 - 3000 mm
- 15 bit resolution
- 0 - 20 mA, 4 - 20 mA output
- 24 VDC power supply



Technical Specifications

Measurement stroke	50 to 3000 mm
Resolution	15 bit DAC output
Repeatability	100 µm
Output	0-20mA, 4-20mA
Power supply	24 VDC ±10%
Displacement speed	max. <5 m/s
Linearity	50-100 mm < %1, 100-300 mm < %0.2, 300-500 mm < %0.1, 500-3000 mm > %0.05
Sampling rate	Up to 2 kHz (depending on stroke length)
Vibration	EN 60068-2-6 , 5-200 Hz 200 m/s ² (20g) , 2h 30min each axis {x,y,z}
Shock	EN 60068-2-2:2007 500 m/s ² (50g) , 11ms. {x,y,z axis}
Update time	0-600mm, 0,5ms 600-1500mm, 1ms 1500-3000mm, 2ms
Max. consumption	< 50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Load resistance	max. 500 Ohm
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to 30 VDC
Pressure rating	< 500 bar
Sealing	O-ring: NBR Backup Ring: PTFE
Mounting	M18 x 1.5 or 3/4"-16 UNF O-ring or Flat
Case material	Profile :Anodized aluminium Tube: Stainless steel Caps: Stainless steel
Protection level	IP 67
Operating temperature	-10°C ... +70°C
Storage temperature	-30°C ... +90°C

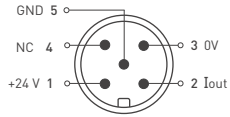
Mechanical Specifications



MSP-B (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000		
ML (Measuring length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000		
IL (Installation length)	129	179	229	279	329	379	429	479	529	579	629	679	729	779	829	879	929	979	1079	1179	1279	1379	1479	1579	1829	2079	2329	2579	2829		
L (Total length)	179	229	279	329	379	429	479	529	579	629	679	729	779	829	879	929	979	1079	1179	1279	1379	1479	1579	1729	1979	2229	2479	2729	3229		
Dead zone calculation	30 / 40																														

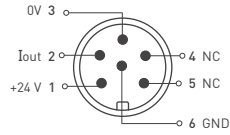
Round Connector

5 pin Connector Configuration



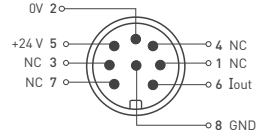
CN5 M12 (A) / M16 (B)
5 pin

6 pin Connector Configuration

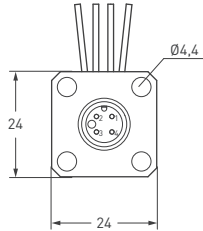


CN6 M12 (A) / M16 (B)
6 pin

8 pin Connector Configuration

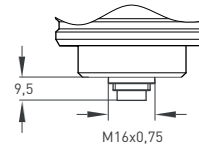
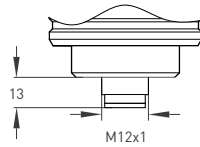
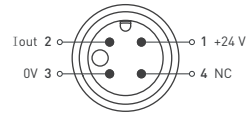


CN8 M12 (A) / M16 (B)
8 pin

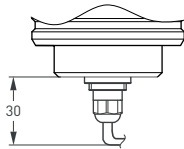


CF4A M12 (A) 4 pin

4 pin Male Connector Configuration



Cable



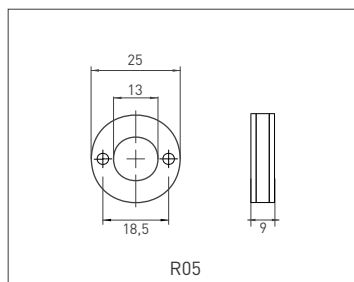
Current Output

+V : Brown
0V : Blue
0V sense : Black
Output 1 : White (Iout)
Earth : Shield

Cable Length

1 M : 1 meter (standard)
(other cable lengths available)

Cursor



R05

Ordering Procedure

Model	Measuring range	Rod & Thread	Resolution	Cursor	Output	Connector/Cable	Dead zone
MSPB	300	EA10	B	1R05	V10	CN5A	30/40
MSPB	50 - 3000 mm	EA10: Ø10 M24x1,5 EA0 : Ø10 tube Ø24 flange	B : 15 bit	R05: 25 mm	I40 : -4-20mA I04 : -20-4mA I20 : -0-20mA I02 : -20-0mA	CN5A : 5 pin, M12 connector CN5B : 5 pin, M16 connector CN6A : 6 pin, M12 connector CN6B : 6 pin, M16 connector CN8A : 8 pin, M12 connector CN8B : 8 pin, M16 connector CF4A : 4 pin, M12 connector 1M: 1 meter (standard)	30/40