

Non-Contact Magnetostrictive Position Sensor In Cylinder Applications

ANALOG 4-20 mA

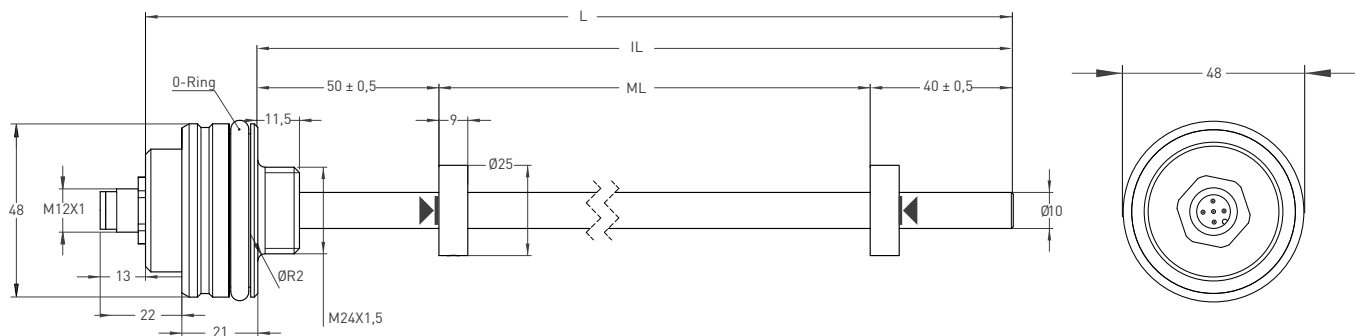
- Measuring length 50 - 3000 mm
- 15 bit resolution
- 0 - 20 mA, 4 - 20 mA output
- 24 VDC power supply



Technical Specifications

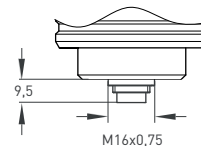
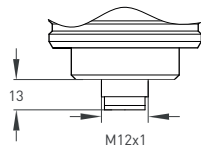
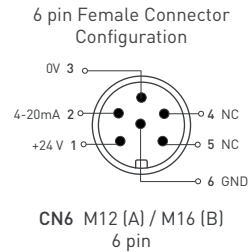
Measurement stroke	50 to 3000 mm	
Resolution	15 bit DAC output	
Repeatability	100 µm	
Output	0-20mA, 4-20mA	
Power supply	24 VDC ±10%	
Displacement speed	max. <5 m/s	
Linearity	100 mm	%1
	100 - 500 mm	%0,8
	500 - 1000 mm	%0,5
	1000 - 2500 mm	%0,2
Sampling rate	Up to 2 kHz (depending on stroke length)	
Vibration	EN 60068-2-6 , 5-200 Hz 200 m/s² (20g) , 2h 30min each axis (x,y,z)	
Shock	EN 60068-2-2:2007 500 m/s² (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

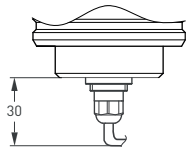


MSP (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000
IL (Installation Length)	149	199	249	299	349	399	449	499	549	599	649	699	749	799	849	899	949	999	1099	1199	1299	1399	1499	1599	1849	2099	2349	2599	3099
(Total Length)	179	229	279	329	379	429	479	529	579	629	679	829	879	929	979	1029	1079	1129	1229	1329	1429	1529	1629	1729	1979	2229	2479	2729	3229
Dead Zone Calculation	50 / 40																												

Round Connector



Cable



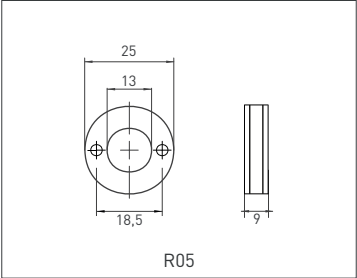
Current Output

+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



Ordering Procedure

Model	Measuring range	Rod & Thread	Sealing surface	Resolution	Cursor	Output	Connector/Cable	Dead zone
MSP	300	E10	S	B	1R05	V10	CN5A	50/40
MSP	50 - 3000 mm	E10 : Ø10 M18x1,5 U10 : Ø10 3/4"-16 UNF E010 : Ø10 M24x1,5 EA10 : Ø10 M24x1,5 EB10 : Ø10 M30x2	S: O-ring F: Flat	B : 15 bit	R05: 25 mm	I40 : 4-20mA I04 : 20-4mA I20 : 0-20mA I02 : 20-0mA	CN5A : M12 CN5B : M16 CN6A : M12 CN6B : M16 CN8A : M12 CN8B : M16 1M: 1 meter (standard)	50/40