

# Non-Contact Magnetostrictive Position Sensor

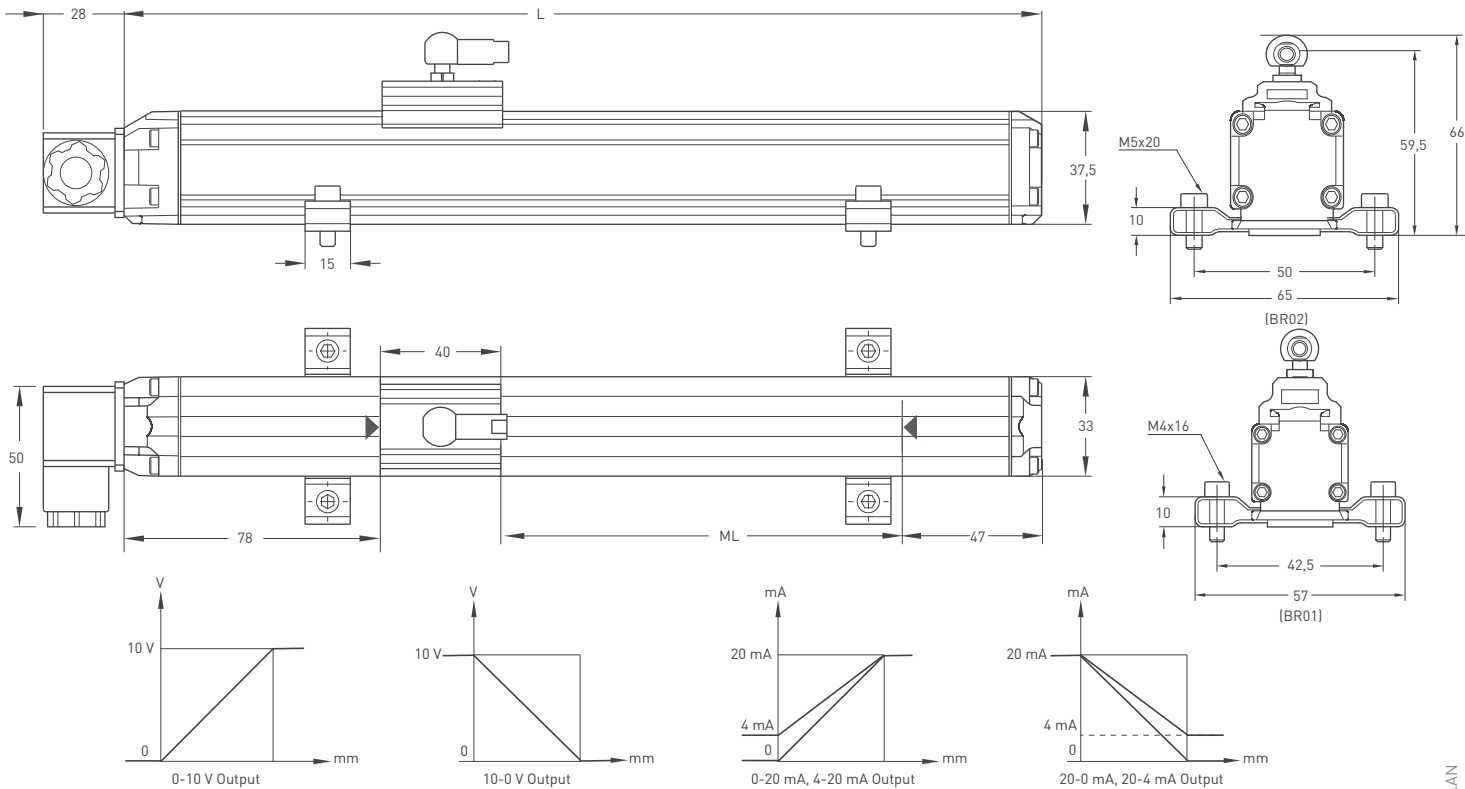


- Measuring length 50 to 5000 mm
- 16 bit resolution
- 0 - 10V, 0 - 20 mA, 4 - 20 mA output
- Speed information can be provided optionally.

**Technical Specifications**

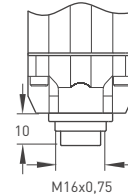
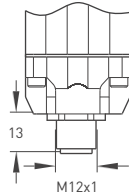
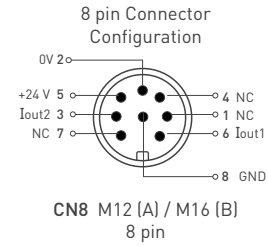
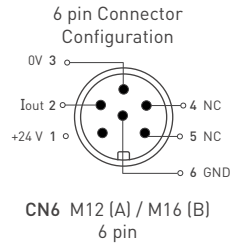
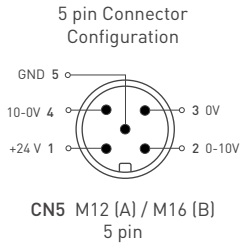
Measurement stroke	50 to 5000 mm
Resolution	16 bit DAC output
Linearity	±0,05% full scale (min. 100 µm)
Repeatability	±0,01% full scale
Output	0 - 10V, 10 - 0V, 0-20 mA, 20 - 0 mA, 4 - 20 mA, 20 - 4 mA (Speed information can be provided optionally.)
Power supply	24 VDC ±10%
Displacement speed	max. < 5m/s
Update time	(0-600mm, 0,5ms), (601-1500mm, 1ms), (1501-3000mm, 2ms), (3001-5000mm, 3ms)
Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Max. output value	10,5 V
Reverse polarity protection	Up to -30 VDC
Overvoltage protection	Up to +30 VDC
Vibration	EN 60068-2-6 , 5-200 Hz 200 m/s <sup>2</sup> (20g) , 2h 30min each axis (x,y,z)
Shock	EN 60068-2-2:2007 500 m/s <sup>2</sup> (50g) , 11ms. (x,y,z axis)
Case dimensions	33 mm x 33 mm
Case material	Anodized aluminium
Mechanical fixing	Variable brackets
Protection level	IP 67
Operating temperature	-10°C ... +70°C
Storage temperature	-30°C ... +90°C

**Mechanical Specifications**

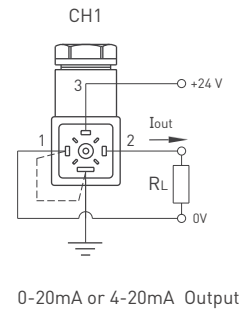
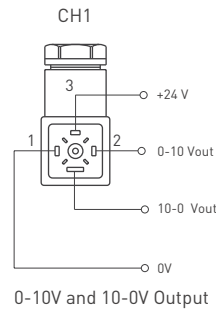
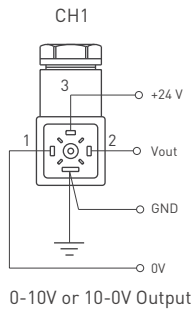


MSW (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000		
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000		
(Total Length)	215	265	315	365	415	465	515	565	615	665	715	765	815	865	915	965	1015	1065	1165	1265	1365	1465	1565	1665	1915	2242	2497	2747	3277	4317	5317		
Dead Zone Calculation	78/47																																

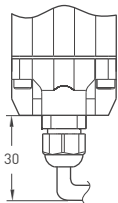
## Round Connector



## Hydraulic Type Connector



## Cable



### Voltage Output

+V : Brown  
0V : Blue  
0V Sense : Black  
Output 1 : White (0-10V)  
Output 2 : Orange (10-0V)  
Earth : Shield

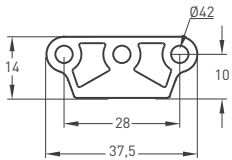
### Current Output

+V : Brown  
0V : Blue  
0V Sense : Black  
Output 1 : White (Iout 1)  
Output 2 : Orange (Iout 2)  
Earth : Shield

### Cable Length

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

## Cursor



C01

## Ordering Procedure

Model	Measuring range	Resolution	Cursor	Output1	Output2(optional)	Connector / Cable	Bracket	Dead zone	
MSW	300	A	1G02	V10	Sxxx	CH1	BR02	78/47	
MSW	50 - 5000mm	A: 16 bit B: 15 bit C: 14 bit D: 13 bit E: 12 bit	1G02: 1cursor	V10 : 0-10V 2V10 : 0-10V/0-10V V01 : 10-0V 2V01 : 10-0V/10-0V V11 : 0-10V/10-0V V50 : 0-5V 2V50 : 0-5V/0-5V V05 : 5-0V 2V05 : 5-0V/5-0V V51 : 0-5V/5-0V	I40 : 4-20mA 2I40 : 4-20mA/4-20mA I04 : 20-4mA 2I04 : 20-4mA/20-4mA I41 : 4-20mA/20-4mA I20 : 0-20mA 2I20 : 0-20mA/0-20mA I02 : 20-0mA 2I02 : 20-0mA/20-0mA I21 : 0-20mA/20-0mA	Sxxx S : Speed xxx : max. speed (mm/s)	CH1 : Hydraulic type CN5A : M12 CN5B : M16 CN6A : M12 CN6B : M16 CN8A : M12 CN8B : M16  1M : 1 meter 2M5 : 2,5 meter	BR01 BR02	≤ 2000 mm 78/47 > 2000-3000 mm 160/47 > 3000-4000 mm 190/47 > 4000-5000 mm 230/47