

Contactless Magnetostrictive Position Sensor

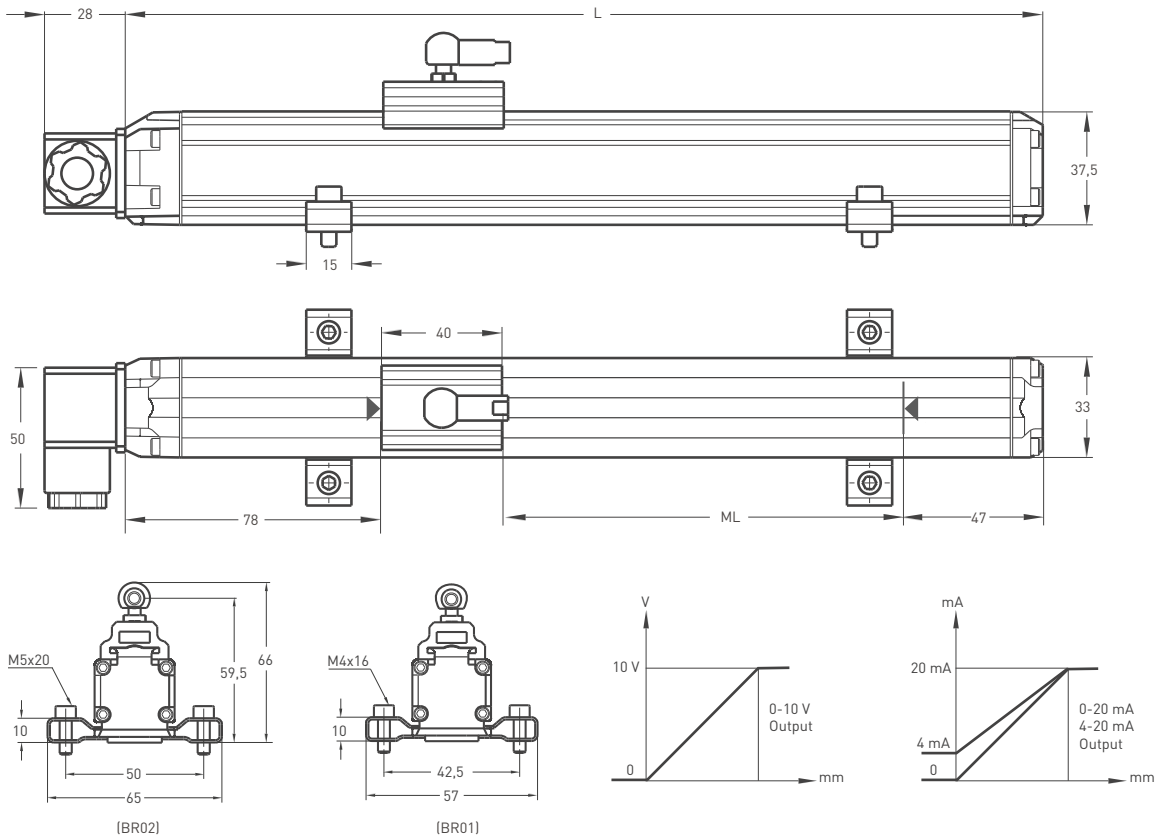
- Measuring range 50 - 5000 mm
- 16 bit resolution
- 0...10 V, 0...20 mA, 4...20 mA
10...0 V, 20...0 mA, 20...4 mA output
- 24 VDC supply



Technical specifications

Measurement stroke	50 to 5000 mm
Resolution	16 bit DAC output
Repeatability	±0,005% (full scale)
Output	0 ... 10 V , 10 ... 0 V , 4 ... 20 mA, 0 ... 20 mA , 20 ... 4 mA , 20 ... 0 mA
Power supply	24 VDC ±10%
Displacement speed	< 10 m/s
Update time	(0-600mm, 0,5ms), (600-1500mm, 1ms), (1500-3000mm, 2ms), (1501-5000mm, 3ms)
Load Resistance	RLoad max = 500 Ohm, for current output
Max. consumption	50 mA - 90 mA (depending on stroke length)
Max. output noise	< 5 mVpp
Linearity	±0,05% full scale (min. 100 µm)
Reverse polarity protection	Yes, Up to (-30 VDC)
Overvoltage protection	Yes, Up to (30 VDC)
Vibration	EN 60068-2-6 , 5-200 Hz 200 m/s ² (20g) , 2h 30min each axis (x,y,z)
Case dimensions	33 mm x 37,5 mm
Case material	Anodized aluminium
Mechanical fixing	Variable brackets
Protection level	IP 65 - EN 60529
Operating temperature	-10°C ... +70°C
Storage temperature	-30°C ... +90°C

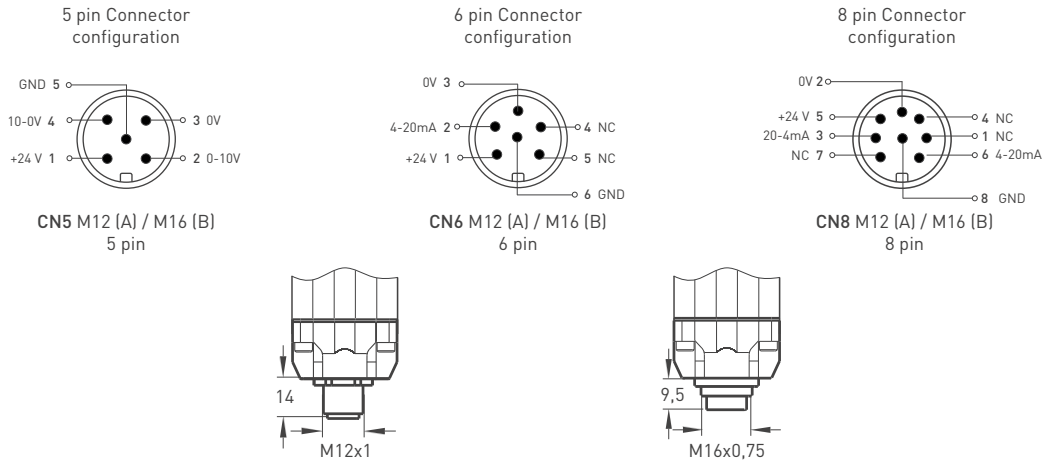
Mechanical specifications



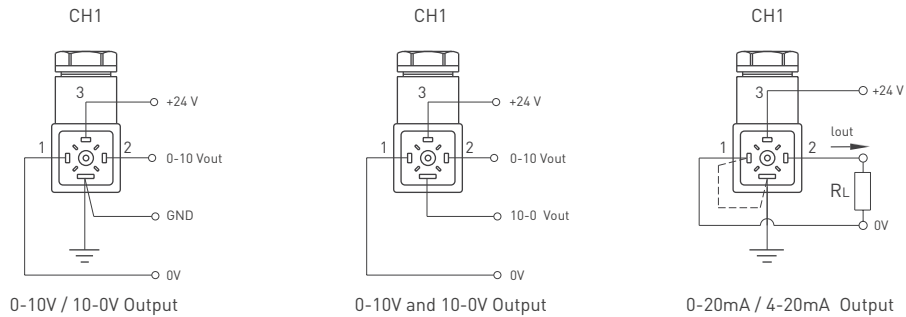
MSW (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1340	1400	1500	1750	2000	2250	2500	3000	4000	5000
L (Total Length)	175	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1025	1125	1225	1325	1425	1525	1625	1875	2125	2457	2707	3217	4217	5247

For 78/47 mm dead zone calculation

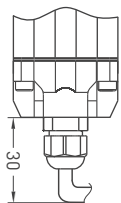
Round Connector



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

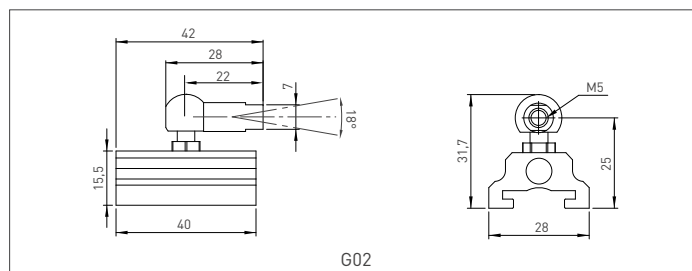
Current Output

+V : Brown
0V : Blue
0V Sense : Black
Output 1 : White (4-20mA)
Output 2 : Orange (20-4mA)
Earth : Shield

Cable Length

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

Cursor



Ordering Procedure

Model	Measuring Range	Resolution	Cursor	Output	Connector / Cable	Bracket	Dead Zone (mm)
MSW	300	A	1G02	V10	CH1	BR02	78/47
MSW	50 ... 5000mm	A: 16 bit B: 12 bit	1G02: 1 cursor 2G02: 2 cursors	V10 :0-10V I40 :4-20mA V01 :10-0V I04 :20-4mA V11 :0-10V/10-0V I41 :4-20mA/20-4mA V50 :0-5V I20 :0-20mA V05 :5-0V I02 :20-0mA V51 :0-5V/5-0V I21 :0-20mA/20-0mA	CH1 : Hydraulic type CN5A : M12 CN5B : M16 CN6A : M12 CN6B : M16 CN8A : M12 CN8B : M16 1M : 1 meter 2M5 : 2,5 meters	BR01 BR02	≤ 2000 mm MSW:78/47 > 2000-3000 mm MSW:160/47 > 3000-4000 mm MSW:190/47 > 4000-5000 mm MSW:230/47