

MMSW

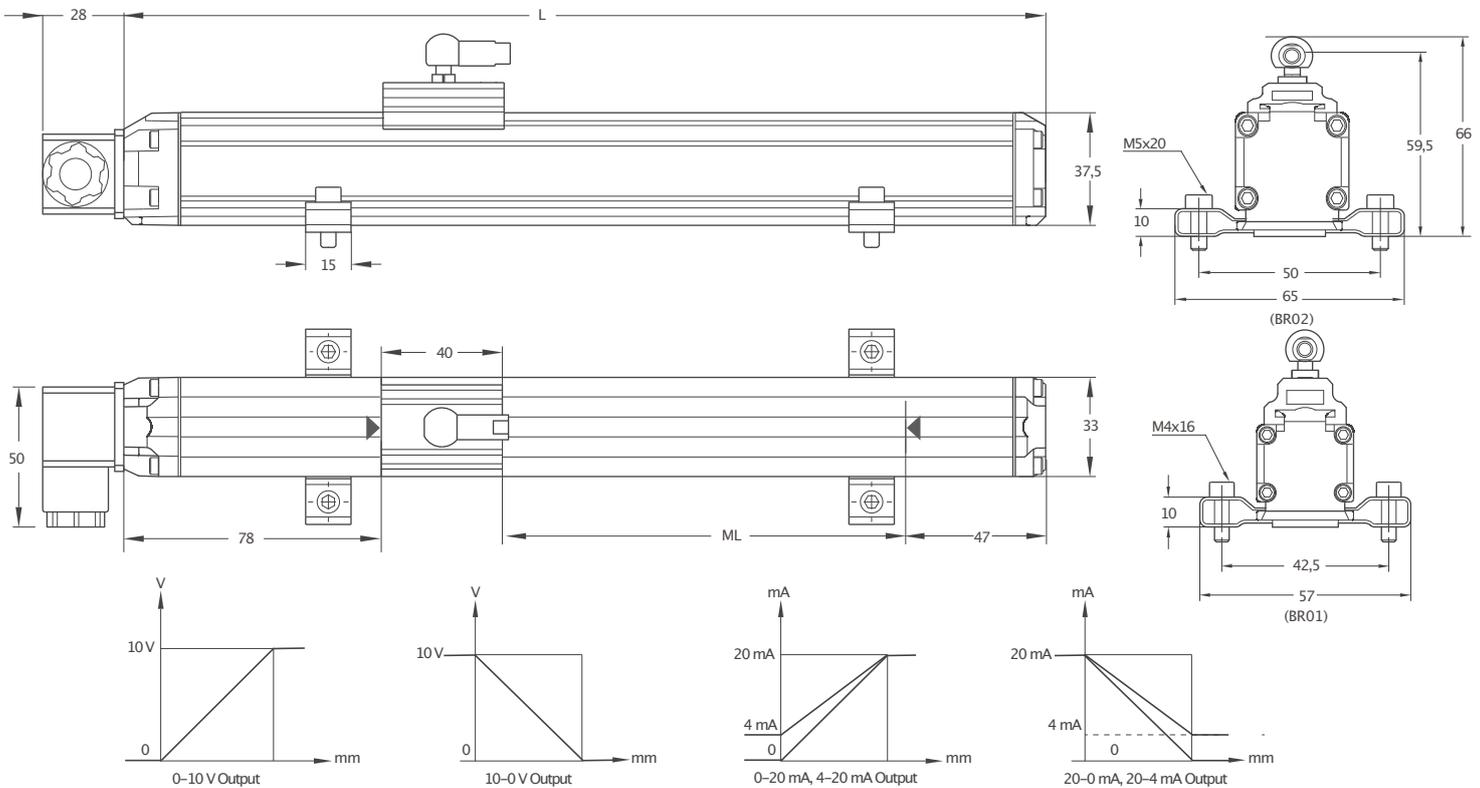
Non-Contact Magnetostrictive Position Sensor

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



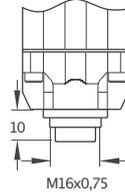
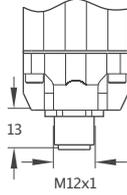
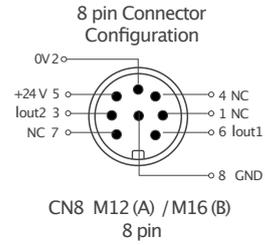
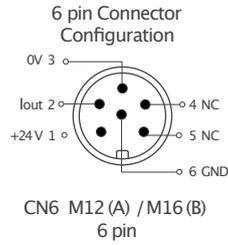
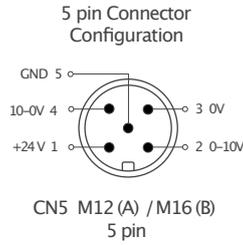
Technical Specifications	
Measurement stroke	50 to 5000mm
Resolution	16 bit DAC output
Linearity	50–100mm $\leq 1\%$, 100–300mm $\leq 0.2\%$, 300–500mm $\leq 0.1\%$, 500–5000mm $\leq 0.05\%$
Repeatability	$\pm 0,01\%$ full scale
Output	0 – 10V, 10 – 0V, 0–20mA, 20 – 0 mA, 4 – 20 mA, 20 – 4 mA (Speed information can be provided optionally.)
Power supply	24 VDC $\pm 10\%$
Displacement speed	max. <math>< 5\text{m/s}</math>
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	<math>< 5\text{ mVpp}</math>
Max. output value	10,5V
Reverse polarity protection	Up to –30VDC
Overvoltage protection	Up to +30VDC
Vibration	EN 60068–2–6, 5–200Hz 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)
Case dimensions	33 mm x 33 mm
Case material	Anodized aluminium
Mechanical fixing	Variable brackets
Protection level	IP 65
Operating temperature	–10°C ... +70°C
Storage temperature	–30°C ... +90°C

Mechanical Specifications

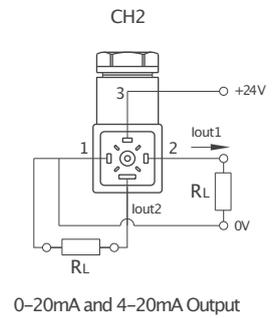
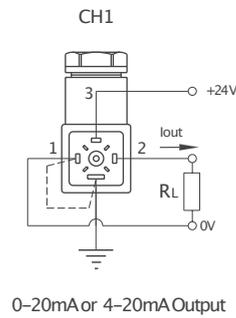
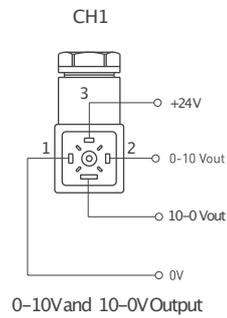
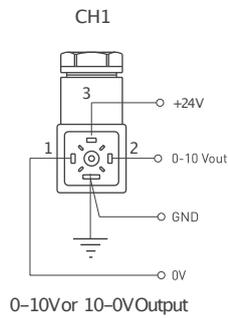


MMSW (mm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000
ML (Measuring Length)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300	1400	1500	1750	2000	2250	2500	3000	4000	5000
(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																														

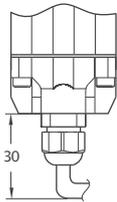
Round Connector



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

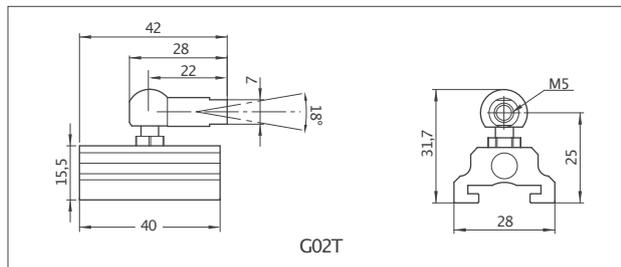
Current Output

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

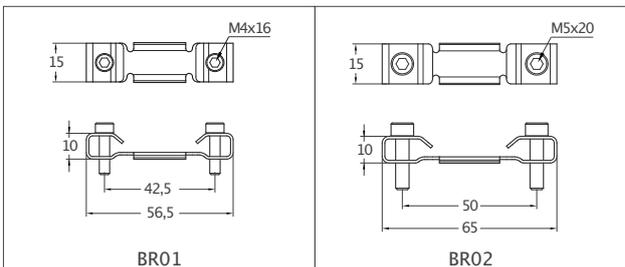
Cable Length

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

Cursor



Brackets



Ordering Procedure

Model	Measuring range	Resolution	Cursor	Output1	Output2(optional)	Connector /Cable	Bracket	Dead zone
MMSW	300	A	1G02T	V10	Sxxx	CH1	BR02	78/47
MMSW	50 - 5000mm	A: 16 bit B: 15 bit C: 14 bit D: 13 bit E: 12 bit	1G02T: 1kurzör	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	CH1 : 4 pin, hydraulic type connector 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 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