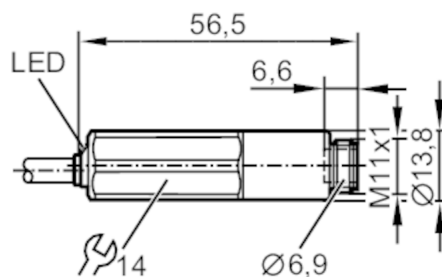


M9H211



Position sensor

M9B2002-ARKG/B/AM/2M/ZH



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Housing	tubular
Dimensions [mm]	Ø 13.8 / L = 56.5

Application

Application	lubricant distributor with plunger
Media	Detects ferrous metals
Min. burst pressure [MPa]	200
Pressure rating	350 bar 35 MPa

Electrical data

Operating voltage [V]	10...36 DC
Rated insulation voltage [V]	60
Protection class	III
Reverse polarity protection	yes
Max. power-on delay time [ms]	300

Outputs

Electrical design	PNP/NPN
Output function	normally open
Max. voltage drop switching output DC [V]	5.9
Minimum load current [mA]	5
Max. leakage current [mA]	0.8
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	10
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Real sensing range Sr [mm]	2 ± 10 %
Operating distance [mm]	0...1.62

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Position sensor

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Accuracy / deviations		
Hysteresis	[% of Sr]	3...15
Operating conditions		
Ambient temperature	[°C]	-25...85
Protection		IP 65; IP 67
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m 80...2000 MHz
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V 0,15...80 MHz
	EN 61000-4-8	30 A/m
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	50x 20 g / 10...3000 Hz -20 °C
	EN 60068-2-6 Fc	50x 20 g / 10...3000 Hz +50 °C
Shock resistance	EN 60068-2-27 Ea	3 x 100 g 11 ms / -25 °C
	EN 60068-2-27 Ea	3 x 100 g 11 ms / +85 °C
Continuous shock resistance	EN 60068-2-27 Ea	4000 x 40 g 6 ms / -20 °C / 50 °C
MTTF	[years]	830
Mechanical data		
Weight	[g]	108.7
Housing		tubular
Mounting		flush mountable
Dimensions	[mm]	Ø 13.8 / L = 56.5
Material		sensing face: stainless steel (1.4404 / 316L); housing: stainless steel (1.4404 / 316L); end cap: TPU (urethane)
Tightening torque	[Nm]	< 18
Process connection		threaded connection M11 x 1 external thread
Displays / operating elements		
Display	Switching status	LED, yellow
Remarks		
Pack quantity		1 pcs.

M9H211



Position sensor

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Electrical connection

Cable: 2 m, PUR; 2 x 0.34 mm²

Connection

