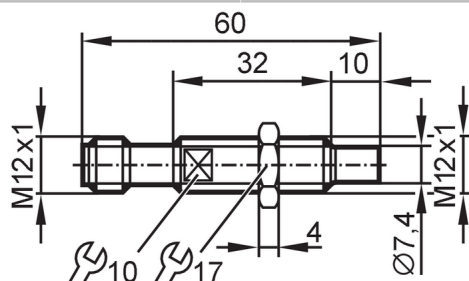


M9H209



Position sensor for hydraulic cylinders

M9K3004-BPKG/B/AM/US



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	4
Housing	Threaded type

Application

Application	Detects ferrous metals
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Electrical data

Operating voltage [V]	10...36 DC
Current consumption [mA]	< 23
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	1.6
Max. leakage current [mA]	0.1
Permanent current rating of switching output DC [mA]	200
Switching frequency DC [Hz]	1000
Short-circuit protection	yes
Overload protection	yes

Monitoring range

Sensing range [mm]	4
Operating distance [mm]	3.3

Accuracy / deviations

Hysteresis [% of Sr]	< 10
Switch-point drift [% of Sr]	10
Repeatability [% of Sr]	10

Operating conditions

Ambient temperature [°C]	-25...85
Protection	IP 65; IP 68; IP 69K

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Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
	DIN ISO 11452-5	100 V/m
Vibration resistance	EN 60068-2-6 Fc	20 g 50 sweep cycles per frequency; 1 octave per minute in 3 axes / 10...3000 Hz -20...50 °C
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes / -40...85 °C
Continuous shock resistance	EN 60068-2-27 Ea	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes / -20...50 °C
MTTF [years]		1701
UL approval	Ta	-25...75 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	C005
	File number UL	E174191
Mechanical data		
Weight [g]		33.8
Housing		Threaded type
Mounting		non-flush mountable
Material		housing: stainless steel
Tightening torque [Nm]		7
Full-metal housing		yes
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Connector: 1 x M12; coding: A; Contacts: 4; Moulded body: PEI		

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Connection

