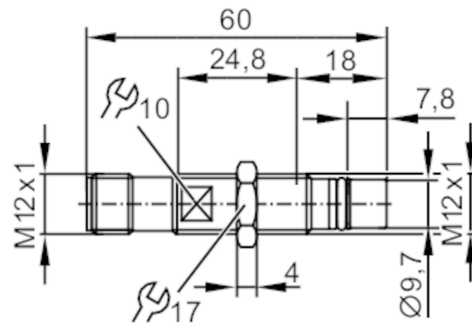


MFH209



Pressure-resistant position sensor for hydraulic cylinders

MFH4002BCPKG/B/AM/500/US



| Product characteristics | |
|--|---------------------------------|
| Electrical design | PNP |
| Output function | normally open / normally closed |
| Sensing range [mm] | 1.8 |
| Housing | threaded type |
| Dimensions [mm] | M12 x 1 / L = 60 |
| Application | |
| Special feature | Full-metal housing |
| Application | hydraulic cylinders |
| Media | detects ferrous metals |
| Min. bursting pressure [bar] | 2000 |
| Pressure rating [bar] | 500 |
| 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 / normally closed |
| 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 |
| Type of short-circuit protection | pulsed |
| Overload protection | yes |
| Detection zone | |
| Sensing range [mm] | 1.8 |

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Pressure-resistant position sensor for hydraulic cylinders

MFB4002BCPKG/B/AM/500/US

| Accuracy / deviations | | |
|-----------------------------|---------------------------|--|
| Hysteresis | [% of Sr] | < 15 |
| Switch point drift | [% of Sr] | 10 |
| Repeatability | [% of Sr] | 10 |
| Operating conditions | | |
| Pressure peak | [bar] | 1000 |
| Ambient temperature | [°C] | -25...120 |
| Protection | | IP 65; IP 68; IP 69K |
| 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, 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] | 2006 |
| UL approval | UL Approval no. | C009 |
| Mechanical data | | |
| Weight | [g] | 30.7 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M12 x 1 / L = 60 |
| Thread designation | | M12 x 1 |
| Materials | | housing: stainless steel; O-ring: FKM; supporting ring: PTFE |
| Tightening torque | [Nm] | < 25 |
| Full-metal housing | | yes |
| Accessories | | |
| Items supplied | | lock nuts: 1 |
| Remarks | | |
| Pack quantity | | 1 pcs. |

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Pressure-resistant position sensor for hydraulic cylinders

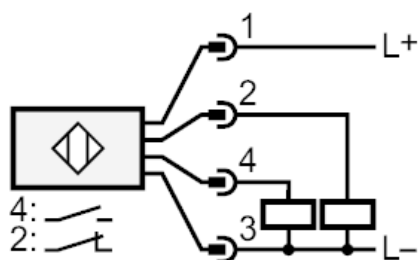
MFB4002BCPKG/B/AM/500/US

Electrical connection - plug

Connector: 1 x M12; coding: A



Connection



Diagrams and graphs

Installation

