

New pressure-resistant position sensors



Sensors for pressure up to 500 bar for steel detection

- Metal sensing face for heavy duty
- High burst pressure of 2,000 bar for the M12 housing
- Standard M12 and M14 housing types
- Best performance at an attractive price
- Resistant: withstands 10 million pressure cycles



Operating principle

The new operating principle is based on a magnetic-inductive technology that detects only ferromagnetic metals (e.g. tool steel). The sensor is flush-mountable. Even in case of overflush installation the sensor detects the steel target and shows reliable switching behaviour with a sensing range of 1.8 mm. A sealing ring and a supporting ring are used for sealing against the pressure zone.

Application examples

Besides use as a limit switch in hydraulic cylinders, the sensor can also be used on other hydraulic components such as valves or pumps. Furthermore, it is used in mechanical engineering processes, e.g. in plastic injection-moulding or process industry applications. The new MFH and M9H series sensors offer an impressive performance at an attractive price.



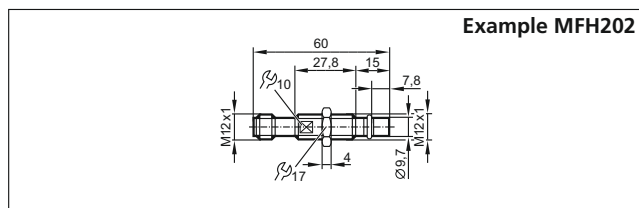
Type	Total length [mm]	Sensing range [mm]	f [Hz]	Ambient temperature [°C]	Output	Order no.
Operating principle: magnetically biased						
M12	93	1.8 f	1000	-25...120	PNP, normally open	MFH200
M12	93	1.8 f	1000	-25...120	NPN, normally open	MFH201
M12	60	1.8 f	1000	-25...120	PNP, normally open	MFH202
M12	60	1.8 f	1000	-25...120	NPN, normally open	MFH203
M12	60	1.8 f	1000	-25...120	PNP, normally closed	MFH204
M14	53	1.8 f	1000	-25...85	PNP, normally open	M9H200

Two designs for many different requirements

The MFH with its standard M12 housing can be installed and adjusted on many different hydraulic cylinders. That is why most cylinder types are covered by only one sensor.

Due to its end stop the M9H allows quick mounting. The processing / installation time is reduced if always the same cylinder type is used.



Dimensions



Wiring diagram







Power supplies

Type	Description	Order no.
	Plastic housing, 24 V DC, 2.5 A	DN1031
	Metal housing, 24 V DC, 3.3 A	DN4011

Common technical data		
Operating voltage	[V]	10...36 DC
Current rating	[mA]	200
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
Protection rating, protection class		IP 65 / IP 68 / IP 69K, III
Housing material		stainless steel 316L / 1.4404
Connection		M12 connector

Connection technology

Type	Description	Order no.
	Socket, M12, 2 m black, PUR cable	EVC001
	Socket, M12, 5 m black, PUR cable, LED	EVC008
	Cable socket, M12, shielded, 120 °C 5 m black, PUR cable	E12339
	Cable socket, M12, shielded, 120 °C 10 m black, PUR cable	E12340

ifm article no. 78001883 · We reserve the right to make technical alterations without prior notice. · 04/2015