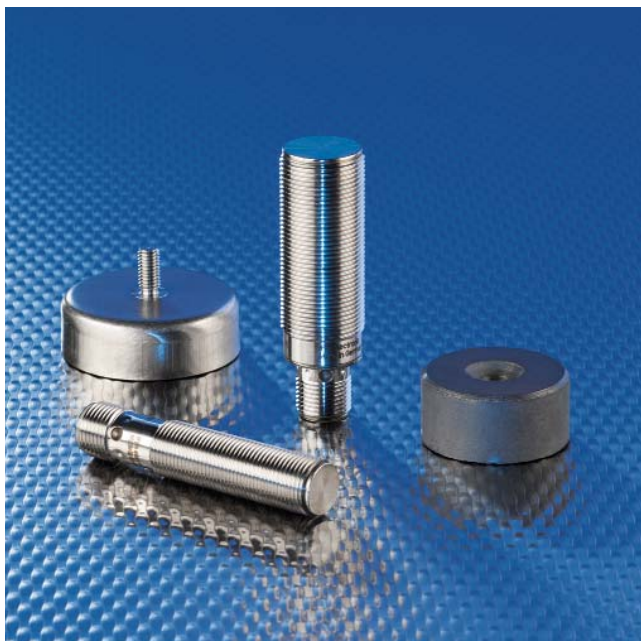




# Our magnetic sensors begin where others end.



**Now in full-metal housing:  
Reliable switch point even in the  
event of mechanical tolerances.**

- Long sensing ranges even through non-magnetisable metals.
- No mutual interference of the sensors.
- Temperature-stable and reproducible switch point.
- IP 69K up to 100 °C in full-metal food-grade housing.
- Impact, shock and vibration-resistant for demanding applications.

IP 67  
IP 68  
IP 69 K

GMR  
Technology



Vibration  
and shock  
resistant

## Use in hygienic areas and the food industry

Magnetic sensors can be installed behind covers of stainless steel, non-ferrous metal, plastic, wood or glass which ensures inexpensive and fast mounting. There is no need for bore holes or flush installation.

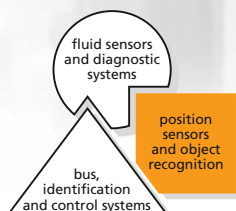
The sensors are also used for cleaning pipes to detect pigs through pipe walls.

## Mechanically demanding applications

Thanks to the tolerant response behaviour, reliable switch-point detection is also ensured with high mechanical tolerances. Long-life applications can be found on telescope and swivel arms or industrial trucks for example.



Full-metal magnetic sensors for early detection of approaching objects.



Type	Sensing range [mm]	Protection rating	Output function	Electrical design	Ambient temperature [°C]	I <sub>load</sub> [mA]	Order no.
------	--------------------	-------------------	-----------------	-------------------	--------------------------	------------------------	-----------

**M12 connector, 4-pole**

M12	60	IP 65, IP 67	NO	DC, PNP	-25...75	200	<b>MFS211</b>
M12	60	IP 65, IP 67	NO	DC, NPN	-25...75	200	<b>MFS209</b>
M12	60	IP 65, IP 67	NC	DC, PNP	-25...75	200	<b>MFS210</b>
M12	60	IP 68, IP 69K	NO	DC, PNP	0...100	100	<b>MFT202</b>

**M12 connector, 4-pole**

M18	70	IP 65, IP 67	NO	DC, PNP	-25...75	200	<b>MGS204</b>
M18	70	IP 65, IP 67	NO	DC, NPN	-25...75	200	<b>MGS205</b>
M18	70	IP 65, IP 67	NC	DC, PNP	-25...75	200	<b>MGS206</b>
M18	70	IP 68, IP 69K	NO	DC, PNP	0...100	100	<b>MGT203</b>







**Accessories**

Type	Description	Order no.
	Angle bracket for type M12, stainless steel	<b>E10735</b>
	Angle bracket for type M18, stainless steel	<b>E10736</b>
	Mounting clamp M12, PC	<b>E11047</b>
	Mounting clamp M18, PC	<b>E11048</b>
	Mounting clip for type M12, stainless steel (1.4310, 301)	<b>E11533</b>
	Mounting clip for type M18, stainless steel (1.4310, 301)	<b>E11534</b>
	Damping element M1.0, samarium cobalt	<b>E10749</b>
	Damping element M2.0, alnico	<b>E10750</b>
	Damping element M3.0, barium ferrite	<b>E10751</b>
	Damping element M4.0, barium ferrite	<b>E10752</b>
	Damping element M5.0, barium ferrite	<b>E10753</b>
	Damping element M5.1, barium ferrite with plastic sheathing ABS	<b>E10754</b>
	Damping element M4.1, barium ferrite / stainless steel (1.4571, 316Ti)	<b>E11803</b>
	Damping element M3.1, barium ferrite / stainless steel (1.4571, 316Ti)	<b>E12291</b>

**Common technical data**

Operating voltage	[V]	10...30
Current consumption	[mA]	< 20
Hysteresis	[% of Sr]	1...10
Protection class		III
Switching frequency	[Hz]	5000
Short-circuit protection, pulsed		•
Reverse polarity / overload protection		• / •
Voltage drop	[V]	< 2.5
Function display	LED	yellow (4 X 90°)
Housing length	[mm]	60
Housing material		high-grade stainless steel

**Connectors and splitter boxes**

Type	Description	Order no.
	Socket, M12, 4-pole, 5 m orange, PVC cable	<b>EVT001</b>
	Socket, M12, 4-pole, 10 m orange, PVC cable	<b>EVT002</b>
	Socket, M12, 4-pole, 5 m orange, PVC cable	<b>EVT004</b>
	Socket, M12, 4-pole, 10 m orange, PVC cable	<b>EVT005</b>
	Socket, M12, 4-pole, 5 m orange, PVC cable, LED	<b>EVT007</b>
	Socket, M12, 4-pole, 10 m orange, PVC cable, LED	<b>EVT008</b>