BALLUFF

For more process security and greater equipment up-time

WELD-IMMUNE MAGNETIC FIELD SENSOR FOR INTELLIGENT POSITION FEEDBACK

Welding is a harsh environment: High temperatures and flying sparks can cause heat damage, and weld spatter can stick to sensors and cables, impairing their functionality. High welding currents generate magnetic interference fields, which can also affect sensor function. This isn't an issue with our interference-immune BMF 415KW magnetic field sensor. It was designed specifically for use in pneumatic drives, which are used in weld field applications. Its weld spark-resistant cable contributes to high equipment up-time.

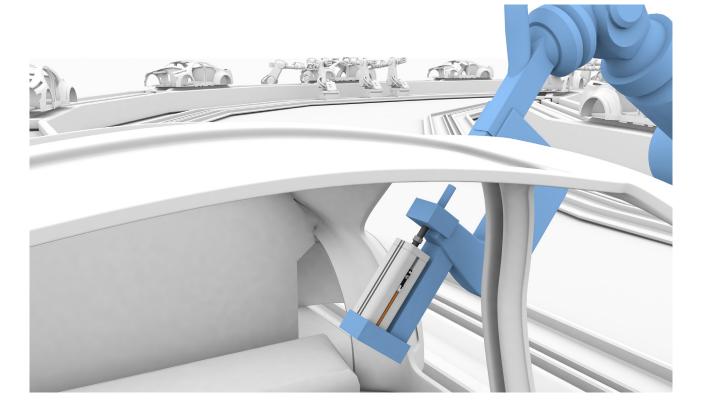
For greater process security, the sensor can detect magnetic interference fields and suppress them.

An IO-Link interface can be used to read comprehensive diagnostic data and obtain information, for example, about the device status or current ambient conditions.

Features

- Immune to magnetic interference fields from high welding currents (AC and MFDC equipment)
- IO-Link versions: Interference suppression time configurable from 50 to 1000 ms
- Flexibility: M8 or M12 connector, open cable end
- Condition monitoring via IO-Link:
 e.g. signal quality, device temperature or operating hours
- Weld spark-resistant TPU or silicon cable











IO-LINK

TPU CABLE, ORANGE		BMF00MU	BMF00MZ	BMF00MP
TPU CABLE, BLACK		BMF00NH	BMF00NL	BMF00NC
SILICONE CABLE, BLACK		BMF00N5	BMF00N8	BMF00N2
Operating voltage		1830 V DC	1830 V DC	1830 V DC
Rated operating current		50 mA	50 mA	50 mA
Size		T-slot	T-slot	T-slot
Mounting		Can be installed from above	Can be installed from above	Can be installed from above
Housing material		PA 12	PA 12	PA 12
Approval/conformity		CE, cULus, EAC, IO-Link	CE, cULus, EAC, IO-Link	CE, cULus, EAC, IO-Link
IP rating		IP67	IP67	IP67
Ambient temperature		080 °C	080 °C	080 °C
Connection		M8-male, 4-pin, A-coded	M12-male, 4-pin, A-coded	
Cable		300 mm, welding spark resistant	300 mm, welding spark resistant	2 m, welding spark resistant
IO-Link	Baud rate	38.4 kBaud	38.4 kBaud	38.4 kBaud
	Switching output	IO configurable NO/NC	IO configurable NO/NC	IO configurable NO/NC
	Interface	IO-Link 1.1	IO-Link 1.1	IO-Link 1.1







PNP NORMALLY OPEN (NO)

TPU CABLE, ORANGE	BMF00MW	BMF00N0	BMF00MR
TPU CABLE, BLACK	BMF00NJ	BMF00NM	BMF00NE
SILICONE CABLE, BLACK	BMF00N6	BMF00N9	BMF00N3
Operating voltage	1030 V DC	1030 V DC	1030 V DC
Rated operating current	50 mA	50 mA	50 mA
Size	T-slot	T-slot	T-slot
Mounting	Can be installed from above	Can be installed from above	Can be installed from above
Housing material	PA 12	PA 12	PA 12
Approval/conformity	CE, cULus, EAC, IO-Link	CE, cULus, EAC, IO-Link	CE, cULus, EAC, IO-Link
IP rating	IP67	IP67	IP67
Ambient temperature	080 °C	080 °C	080 °C
Connection	M8-male, 4-pin, A-coded	M12-male, 4-pin, A-coded	
Cable	300 mm, welding spark resistant	300 mm, welding spark resistant	2 m, welding spark resistant