

IB12012W

Inductive sensors • Increased ambient temperature

Sensor inductive, M12x1 76lang, flush, Sn: 3, 10-35V diagnostic coverage, 0-150°C, PNP NO, M12 plug connector, IP65, VA

including 2x Nut



Inductive proximity switches are contact-free sensors. They detect all conductive metals, regardless of whether they move or not. The achievable sensing range of the devices depends on the object material and its dimensions. The vibration-resistant sensors can be approached laterally or frontally. Inductive proximity switches are used for presence detection (e.g. goods carriers), positioning (e.g. dampers), counting (e.g. nuts /bolts), speed detection (e.g. for cog wheels), on conveyor systems (e.g. hose feedings) or distance measurements (e.g. press-in checking) of metallic objects.

Electrical features

Response/decay time	1ms
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	120mA
Readiness delay	80ms
Relative hysteresis	15%
Correction factor (aluminum)	0.3
Correction factor (copper)	0.2
Correction factor (brass)	0.4
Correction factor (St37)	1
Correction factor (stainl. steel)	0.7
Short-circuit protection	Yes
No-load current	15mA
Relative repeat accuracy	3%
Residual ripple	10%
Switching distance	3mm
Switching frequency	500Hz
Voltage drop	2V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 35V

Mechanical features

Alignment of cable entry	axial
Design	Cylinder, screw-thread
Thread length	54mm
Thread pitch	1mm
Cable infeed	axial
Length	76mm
Maximum tightening torque	20Nm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP65
Active area material of sensor	Plastic (Vectra®)
Housing material	Stainless steel 1.4305
Thread dimension	M12
Ambient temperature	0 - 150°C

Other features

Reference medium / object	Standard measuring plate FE360 12x12x1mm
Ambient temperature	0 - 150°C

Classification

ETIM 8	EC002714 Inductive proximity switch
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More

IPF Product Group	202 inductive sensors (high temperature)
packaging dimensions	120 x 100 x 17 mm
gross weight	40 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes
MTTF	959 year(s)
MTTFd	1917 year(s)
MTTFd (worst case)	192 year(s)

Connection



