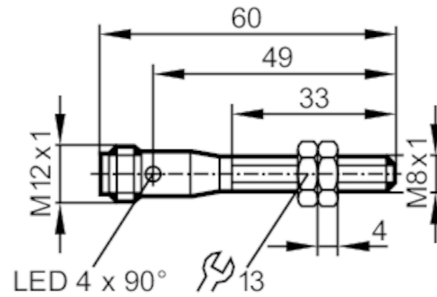


IER200



Inductive full-metal sensor

IEK3002BBPKG/AM/SC/US-104-DPS



Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	2
Housing		threaded type
Dimensions	[mm]	M8 x 1 / L = 60

Application

Special feature	Gold-plated contacts; Increased sensing range; Full-metal housing	
Application	Use in welding applications	
Pressure rating	50 bar	10 MPa
Note on pressure rating	sensing face	

Electrical data

Operating voltage	[V]	10...36 DC
Current consumption	[mA]	< 20
Protection class		III
Reverse polarity protection		yes

Outputs

Electrical design		PNP
Output function		normally open
Max. voltage drop switching output DC	[V]	2.5
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	100
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Detection zone


Sensing range	[mm]	2
Real sensing range Sr	[mm]	2 ± 10 %
Operating distance	[mm]	0...1.6
Increased sensing range		yes

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Accuracy / deviations		
Correction factor	stainless steel: 0.6 / brass: 0.4 / aluminium: 0.3 / copper: 0.2	
Hysteresis [% of Sr]	1...15	
Switch point drift [% of Sr]	-10...10	
Operating conditions		
Ambient temperature [°C]	0...85	
Protection	IP 67; IP 68	
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
Impact resistance	1 J	
Embedded software included	yes	
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	File number UL	E174191
Mechanical data		
Weight [g]	21.5	
Housing	threaded type	
Mounting	flush mountable	
Dimensions [mm]	M8 x 1 / L = 60	
Thread designation	M8 x 1	
Materials	housing: stainless steel (316L/1.4404) anti-spatter; sensing face: stainless steel (316L/1.4404) anti-spatter; lock nuts: stainless steel (316L/1.4404) anti-spatter	
Tightening torque [Nm]	3.5	
Full-metal housing	yes	
Displays / operating elements		
Display	switching status	4 x LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	
Electrical connection - plug		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		

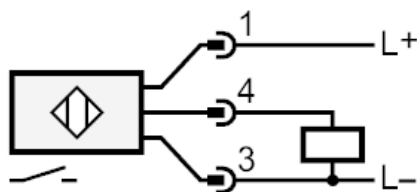
IER200



Inductive full-metal sensor

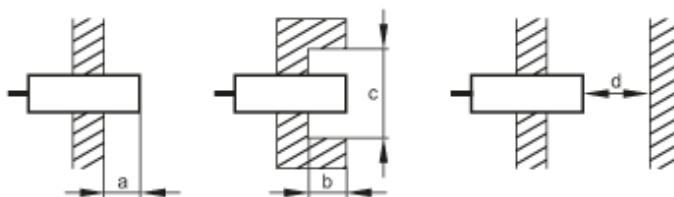
IEK3002BBPKG/AM/SC/US-104-DPS

Connection



Diagrams and graphs

Installation



[mm]	a	b	c (Ø)	d
Fe	0	0	-	6
Al	4	4	24	6

