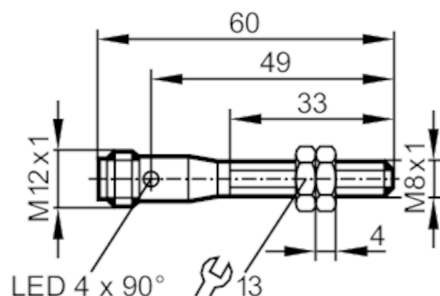


IER200



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; anti-spatter
Application	Use in welding applications
Pressure rating [bar]	50
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 S_r [mm]	$2 \pm 10 \%$
Operating distance [mm]	0...1.6

IER200



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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 (1.4404 / 316L) anti-spatter; sensing face: stainless steel (1.4404 / 316L) anti-spatter; lock nuts: stainless steel (1.4404 / 316L) anti-spatter
Tightening torque [Nm]	3.5
Full-metal housing	yes

Displays / operating elements

Display	switching status	4 x LED, yellow
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Accessories

Items supplied	lock nuts: 2
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Remarks

Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated



Inductive full-metal sensor

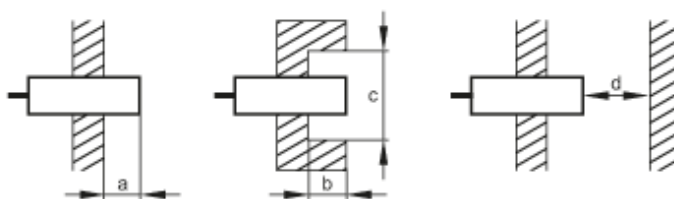
IEK3002BBPKG/AM/SC/US-104-DPS

Connection



Diagrams and graphs

Installation



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

