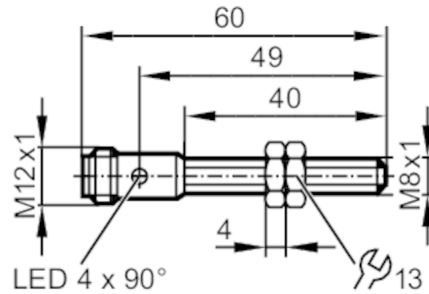


IER200



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

System		gold-plated contacts; Increased sensing range; Full-metal housing; weld coated
Application		Use in welding applications
Pressure rating	[bar]	50
Note on pressure rating		sensing face

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 10
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
Overload protection		yes

Monitoring range

Sensing range	[mm]	2
Real sensing range Sr	[mm]	2 ± 10 %
Operating distance	[mm]	0...1.62
Increased sensing range		yes

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminum: 0.6 / copper: 0.5
Hysteresis	[% of Sr]	1...20

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Switch-point drift	[% of Sr]	-10...10
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Operating conditions

Ambient temperature	[°C]	0...85
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Protection		IP 67; IP 68
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Tests / approvals

EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
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EN 61000-4-3 HF radiated	10 V/m
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EN 61000-4-4 Burst	2 kV
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EN 61000-4-6 HF conducted	10 V
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EN 55011	class B
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Impact resistance		1 J
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MTTF	[years]	1446
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UL approval	Ta	0...70 °C
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Enclosure type	Type 1
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voltage supply	Limited Voltage/Current
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UL approval number	A030
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File number UL	E174191
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Mechanical data

Weight	[g]	21.5
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Housing		Threaded type
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Mounting		flush mountable
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Dimensions	[mm]	M8 x 1 / L = 60
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Thread designation		M8 x 1
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Material		housing: stainless steel (1.4404 / 316L) weld coated; sensing face: stainless steel (1.4404 / 316L) weld coated; LED window: PEI; lock nuts: stainless steel (1.4404 / 316L) weld coated
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Tightening torque	[Nm]	< 5
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Full-metal housing		yes
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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



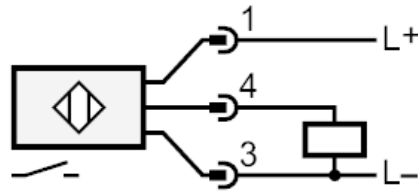
IER200



Inductive full-metal sensor

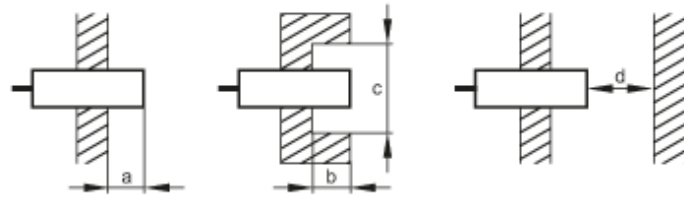
IEK3002BBPKG/AM/SC/US-104-DPS

Connection



Diagrams and graphs

Installation



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

