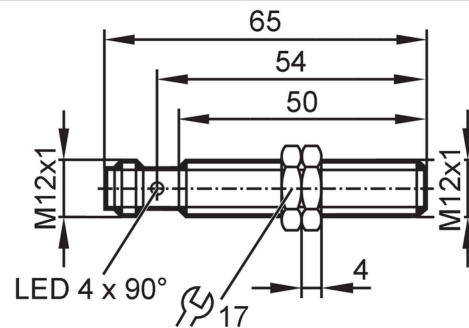


IFW200



Inductive sensor

IFK3003BBPKG/K1/SC/US104



Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	3
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 65

Application

Special feature		Gold-plated contacts; Increased sensing range; Correction factor K = 1; Magnetic-field immune
Application		Use in welding applications
Magnetic-field immune		yes
Max. magnetic field immunity	[mT]	300

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 20
Protection class		II
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]	2000
Short-circuit protection		yes
Overload protection		yes

Detection zone


Sensing range	[mm]	3
Real sensing range Sr	[mm]	3 ± 10 %
Operating distance	[mm]	0...2.4
Increased sensing range		yes

IFW200



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Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 1 / brass: 1 / aluminium: 1 / copper: 1
Hysteresis	[% of Sr]	3...15
Switch point drift	[% of Sr]	-10...10
Correction factor K = 1		yes
Operating conditions		
Ambient temperature	[°C]	-25...70
Protection		IP 67
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
MTTF	[years]	665
Embedded software included		yes
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval no.	A005
	File number UL	E174191
Mechanical data		
Weight	[g]	29.1
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M12 x 1 / L = 65
Thread designation		M12 x 1
Materials		housing: brass anti-spatter; sensing face: LCP black; LED window: PEI; lock nuts: brass anti-spatter
Displays / operating elements		
Display	switching status	4 x 90° LED, yellow
Accessories		
Items supplied		lock nuts: 2
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Connector: 1 x M12; coding: A; Contacts: 3, gold-plated		
		

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Connection

