IFR202

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Inductive full-metal sensor



IFK3004BANKG/AM/SC/V4A/US-104

Product characteristics Electrical design NPN Output function normally open Sensing range [mm] Housing Threaded type Dimensions [mm] Application gold-plated contacts; increased sensing range; Full- metal housing; Magnetic-field immune; weld coated Application Use in welding applications Pressure rating [bar] Note on pressure rating [bar] Magnetic-field immune yes; (pulse duration of the welding current: < 200 ms) Electrical data 0 Operating voltage [M] Protection class III Reverse polarity protection yes Protection class III Reverse polarity protection yes Output function normally open Max. voltage drop switching [M] Output function 100 Switching frequency DC [Hz] Switching frequency	$\begin{array}{c} 60 \\ 49 \\ 40 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 1$						
Electrical design NPN Output function normally open Sensing range [mmi] Housing Threaded type Dimensions [mmi] Application gold-plated contacts: Increased sensing range; Full- metal housing; Magnetic-field immune; weld coated Application Use in welding applications Pressure rating [bar] Note on pressure rating [bar] Magnetic-field immune yes; (pulse duration of the welding current: < 200 ms) Electrical data Operating voltage Operating voltage [M] Operating voltage [M] Reverse polarity protection yes Output function normally open Max. voltage drop switching [M] Max. voltage drop switching [M] Switching output DC [mA] Permanent current rating of soft-circuit protection yes Switching requency DC [Hz] Operating voltage for protection yes Output function normally open Max. voltage drop switching [M] <t< th=""><th></th><th></th><th></th></t<>							
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Note on pressure ratingsensing faceMagnetic-field immuneyes; (pulse duration of the welding current: < 200 ms)	Application		Use in welding applications				
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Operating voltage[V]1030 DCCurrent consumption[mA]< 20	Electrical data						
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Switching frequency DC[Hz]2Short-circuit protectionyesType of short-circuit protectionyes (non-latching)Overload protectionyesMonitoring range	Permanent current rating of	[mA]	100				
Short-circuit protectionyesType of short-circuit protectionyes (non-latching)Overload protectionyesMonitoring range		[Hz]	2				
Type of short-circuit protection yes (non-latching) Overload protection yes Monitoring range Yes	Short-circuit protection		yes				
protection yes (non-ratching) Overload protection yes Monitoring range Vertical data data data data data data data da	Type of short-circuit						
Monitoring range	protection		yes (กิบกาสเราแกง)				
	Overload protection		yes				
	Monitoring range						
Sensing range [mm] 4	Sensing range	[mm]	4				
Operating distance [mm] 03.25	Operating distance	[mm]	03.25				

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Increased sensing range		yes		
Accuracy / deviations	,			
Correction factor		steel: 1 / stainless steel:	0.6 / brass: 0.7 / aluminum: 0.6 / copper: 0.3	
Hysteresis	[% of Sr]	120		
Operating conditions				
Ambient temperature	[°C]		085	
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 emission	class B	
Impact resistance			1 J	
MTTF	[years]	1116		
Embedded software incl	luded	yes		
UL approval		Та	-2570 °C	
		Enclosure type	Type 1	
		voltage supply	Limited Voltage/Current	
		UL approval number	A012	
		File number UL	E174191	
Mechanical data				
Weight	[g]		27.6	
Housing		Threaded type		
Mounting		flush mountable		
Dimensions	[mm]	M12 x 1 / L = 60		
Thread designation		M12 x 1		
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		
Tightening torque	[Nm]	15		
Full-metal housing		yes		
Displays / operating el	lements			
Display		Switching status	4 x 90° LED, yellow	
		Power	1 x LED, green	
Accessories				
Items supplied		lock nuts: 2		
Remarks				
Pack quantity			1 pcs.	
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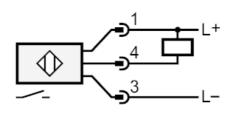
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Electrical connection



Connection



Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated

Diagrams and graphs

Installation

