



Inductive full-metal sensor

IFB32,5BBPKG/AM/US-104/K0



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	2.5
Housing	Threaded type
Dimensions [mm]	M12 x 1 / L = 45

Application

System	gold-plated contacts; Increased sensing range; Full-metal housing; correction factor = 0
Application	Oils and coolants
Media	Ferrous only; aluminum chip immune
Pressure rating	100 bar 10 MPa
Note on pressure rating	sensing face

Electrical data

Operating voltage [V]	10...30 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	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	2.5
Operating distance [mm]	0...2.02
Increased sensing range	yes

IFC281



Inductive full-metal sensor

IFB32,5BBPKG/AM/US-104/K0

Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 0.5	
Hysteresis [% of Sr]	1...20	
Correction factor = 0	yes	
Operating conditions		
Ambient temperature [°C]	-25...70	
Protection	IP 68; ("Coolant")	
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	EN 60068-2-27 Ehc	1 J
MTTF [years]	1217	
Embedded software included	yes	
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current (Marking Class 2)
	UL approval number	A012
	File number UL	E174191
Mechanical data		
Weight [g]	26.25	
Housing	Threaded type	
Mounting	flush mountable	
Dimensions [mm]	M12 x 1 / L = 45	
Thread designation	M12 x 1	
Material	housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); LED window: PEI; lock nuts: brass white bronze coated	
Tightening torque [Nm]	15	
Full-metal housing	yes	
Displays / operating elements		
Display	Switching status	4 x 90° LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		



IFC281



Inductive full-metal sensor

IFB32,5BBPKG/AM/US-104/K0

Connection



Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated