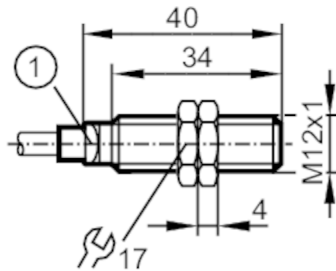


IFS307



Inductive sensor

IFB3002-BPKG/5M/PUR



1 LED yellow



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	2
Housing	Threaded type
Dimensions [mm]	M12 x 1 / L = 40

Application

Application	Suitable for industrial, mobile, cooling and lubricating applications; Industrial applications
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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]	700
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

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis [% of Sr]	1...15
Switch-point drift [% of Sr]	-10...10

Operating conditions

Ambient temperature [°C]	-40...85
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IFS307



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Protection		IP 65; IP 66; IP 67; IP 68; IP 69K	
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	
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes	
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes	
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes	
Fast temperature changes	EN 60068-2-14 Na	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles	
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)	
MTTF	[years]	1710	
UL approval	Ta	-25...75 °C	
	Enclosure type	Type 1	
	voltage supply	Limited Voltage/Current	
	UL approval number	A002	
	File number UL	E174191	
Mechanical data			
Weight	[g]	140.7	
Housing		Threaded type	
Mounting		flush mountable	
Dimensions	[mm]	M12 x 1 / L = 40	
Thread designation		M12 x 1	
Material		brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated	
Displays / operating elements			
Display	Switching status	1 x LED, yellow	
Accessories			
Items supplied	lock nuts: 2		
	tooth lock washer: 1, stainless steel		
Remarks			
Pack quantity		1 pcs.	

IFS307



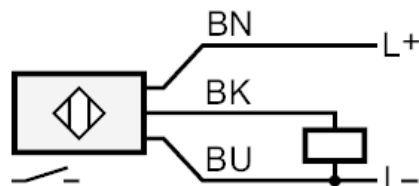
Inductive sensor

IFB3002-BPKG/5M/PUR

Electrical connection

Cable: 5 m, PUR, Ø 4 mm; burning behaviour to ECE R118 rev. 2; 3 x 0.34 mm²

Connection



	Core colors :
BK =	black
BN =	brown
BU =	blue