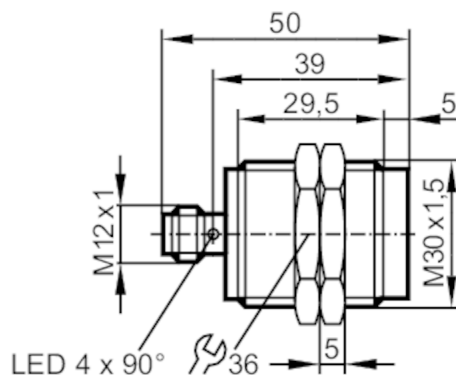




Inductive sensor

IIB4018QCPKG/US-104



Product characteristics

Electrical design	PNP
Output function	complementary
Sensing range [mm]	18
Housing	threaded type
Dimensions [mm]	M30 x 1.5 / L = 50

Application

Special feature	Gold-plated contacts; Increased sensing range
Application	Suitable for industrial, mobile, cooling and lubricating applications; Industrial applications / factory automation

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	complementary
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	200
Short-circuit protection	yes
Overload protection	yes

Detection zone

Sensing range [mm]	18
Real sensing range Sr [mm]	18 ± 10 %
Operating distance [mm]	0...14.58
Increased sensing range	yes



Inductive sensor

IIB4018QCPKG/US-104

Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.3 / aluminium: 0.3 / copper: 0.2	
Hysteresis [% of Sr]	1...15	
Switch point drift [% of Sr]	-10...10	
Operating conditions		
Ambient temperature [°C]	-40...85	
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
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles, 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 change	EN 60068-2-14 Nc	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles
MTTF [years]	364	
Embedded software included	no	
UL approval	UL Approval no.	A037
Mechanical data		
Weight [g]	107.1	
Housing	threaded type	
Mounting	quasi flush	
Dimensions [mm]	M30 x 1.5 / L = 50	
Thread designation	M30 x 1.5	
Materials	brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated	
Tightening torque [Nm]	50	
Displays / operating elements		
Display	switching status	4 x LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	

IIS340



Inductive sensor

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Electrical connection - plug

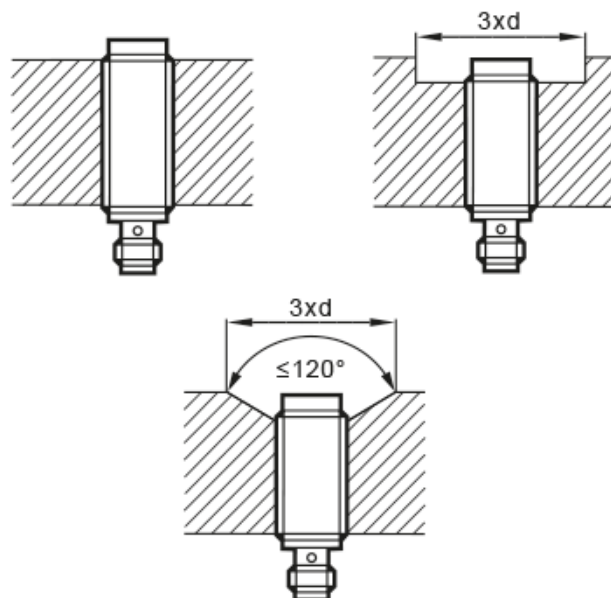
Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



Diagrams and graphs



Installation