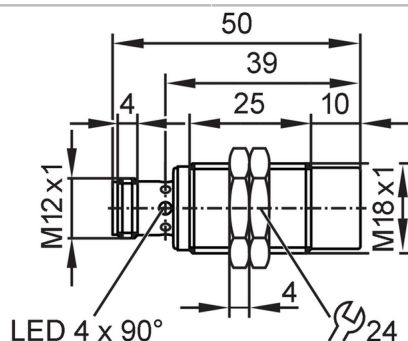


Inductive sensor

IGB2012-ARKG/M/US-104-DRS



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	12
Housing	Threaded type
Dimensions [mm]	M18 x 1 / L = 50

Application

Special feature	gold-plated contacts; Increased sensing range
Application	Industrial applications

Electrical data

Operating voltage [V]	10...30 DC
Protection class	II
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Minimum load current [mA]	2
Max. leakage current [mA]	0.5
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	250
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	12
Real sensing range Sr [mm]	12 ± 10 %
Operating distance [mm]	0...9.72
Increased sensing range	yes



Inductive sensor

IGB2012-ARKG/M/US-104-DRS

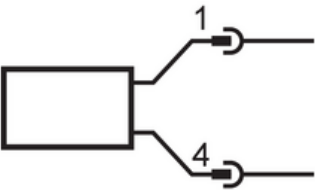
Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3	
Hysteresis	[% of Sr]	1...20	
Switch-point drift	[% of Sr]	-10...10	
Operating conditions			
Ambient temperature		[°C]	-25...70
Protection			IP 67
Tests / approvals			
EMC		EN 61000-4-2 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
		EN 60947-5-2	
MTTF	[years]	2233	
UL approval		Ta	0...40 °C
		Enclosure type	Type 1
		voltage supply	Limited Voltage/Current
		UL approval number	A068
		File number UL	E174191
Mechanical data			
Weight		[g]	44.5
Housing			Threaded type
Mounting			non-flush mountable
Dimensions		[mm]	M18 x 1 / L = 50
Thread designation			M18 x 1
Material			housing: brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated
Tightening torque		[Nm]	25
Displays / operating elements			
Display		Switching status	4 x 90° LED, yellow
Accessories			
Items supplied			lock nuts: 2
Remarks			
Remarks		For direct replacement of 3-wire PNP sensors In this case pin 3 (grey in the wiring diagram) is not used.	
Pack quantity			1 pcs.
Electrical connection - plug			
Connector: 1 x M12; coding: A; Contacts: 2, gold-plated			
			



Inductive sensor

IGB2012-ARKG/M/US-104-DRS

Connection



PNP		
1	L+	
4	L-	DO (NO) (PNP)
NPN		
1	L+	DO (NO) (NPN)
4	L-	
DO: digital output; NO: normally open		