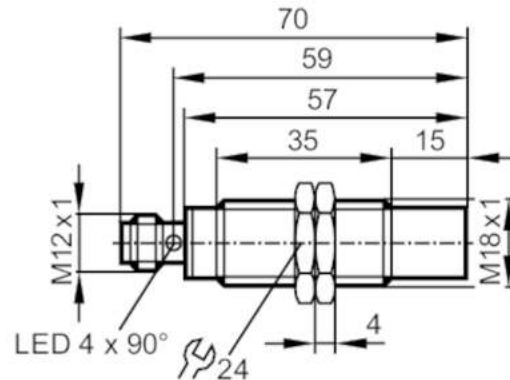


# IGT249



## Inductive full-metal sensor

IGK3012-BPKG/AM/P/US



### Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	12
Housing	threaded type
Dimensions [mm]	M18 x 1 / L = 70

### Application

Special feature	Gold-plated contacts; Increased sensing range; Full-metal housing
Application	constant cleaning with aggressive cleaning agents; regular cleaning processes
Pressure rating [bar]	100
Note on pressure rating	sensing face

### Electrical data

Operating voltage [V]	10...36 DC
Current consumption [mA]	< 25
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]	500
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

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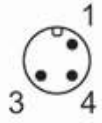
Detection zone		
Sensing range	[mm]	12
Real sensing range Sr	[mm]	12 ± 10 %
Operating distance	[mm]	0...9.7
Increased sensing range		yes
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 1 / brass: 0.7 / aluminium: 0.6 / copper: 0.4
Hysteresis	[% of Sr]	1...20
Switch point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	0...100
Protection		IP 65; 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 emission	class B
Impact resistance		1 J
MTTF	[years]	1262
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	File number UL	E174191
Mechanical data		
Weight	[g]	63.016
Housing		threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M18 x 1 / L = 70
Thread designation		M18 x 1
Materials		housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); LED window: PEI; lock nuts: stainless steel (1.4404 / 316L)
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 - plug		
Connector: 1 x M12; coding: A; Contacts: gold-plated		

# IGT249

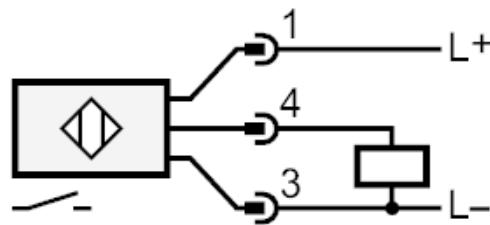


## Inductive full-metal sensor

IGK3012-BPKG/AM/P/US



### Connection



### Diagrams and graphs

#### Installation

