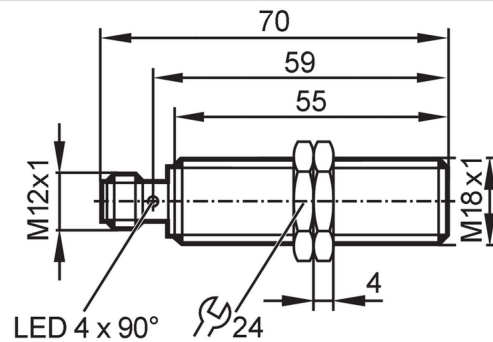


# IGC248



## Inductive full-metal sensor

IGK3005-BPKG/AM/US-104



### Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	5
Housing	threaded type
Dimensions [mm]	M18 x 1 / L = 70

### Application

Special feature	Gold-plated contacts; Full-metal housing
Application	Industrial applications / factory automation; Use in machine tools, coolants and lubricants
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	pulsed
Overload protection	yes

### Detection zone

Sensing range [mm]	5
Operating distance [mm]	0...4.05

### Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminium: 0.5 / copper: 0.2
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Hysteresis	[% of Sr]	1...20
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### Operating conditions

Ambient temperature	[°C]	-25...70
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Protection	IP 67; IP 68; ("Coolant")
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### 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
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MTTF	[years]	1114
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Embedded software included	no
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UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval no.	A012
	File number UL	E174191

### Mechanical data

Weight	[g]	55.3
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Housing	threaded type
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Mounting	flush mountable
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Dimensions	[mm]	M18 x 1 / L = 70
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Thread designation	M18 x 1
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Materials	housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404)
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Tightening torque	[Nm]	50
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Full-metal housing	yes
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### Displays / operating elements

Display	switching status	4 x 90° LED, yellow
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### Accessories

Items supplied	lock nuts: 2
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### Remarks

Pack quantity	1 pcs.
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### Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 3, gold-plated



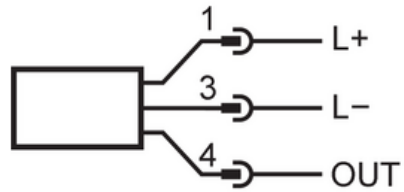
# IGC248



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### Connection



1	L+	
3	L-	
4	OUT	DO (NO)

DO: digital output; NO: normally open