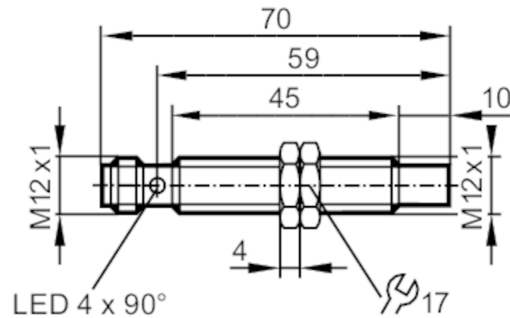


# IFT246



## Inductive full-metal sensor

IFK3006-ANKG/AM/PI/US-104



### Product characteristics

Electrical design		NPN
Output function		normally open
Sensing range	[mm]	6
Housing		threaded type
Dimensions	[mm]	M12 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...30 DC
Current consumption	[mA]	< 25
Protection class		III
Reverse polarity protection		yes

### Outputs

Electrical design		NPN
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]	250
Short-circuit protection		yes
Overload protection		yes

### Detection zone

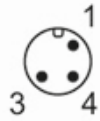
Sensing range	[mm]	6
Real sensing range Sr	[mm]	6 ± 10 %
Operating distance	[mm]	0...4.9
Increased sensing range		yes

# IFT246



## Inductive full-metal sensor

IFK3006-ANKG/AM/PIUS-104

Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.8 / copper: 0.6	
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	EN 60068-2-75 Ehc	1 J
MTTF [years]	1265	
UL approval	Ta	0...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A012
	File number UL	E174191
Mechanical data		
Weight [g]	29.7	
Housing	threaded type	
Mounting	non-flush mountable	
Dimensions [mm]	M12 x 1 / L = 70	
Thread designation	M12 x 1	
Materials	housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); lock nuts: stainless steel (1.4404 / 316L)	
Tightening torque [Nm]	15	
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		
		

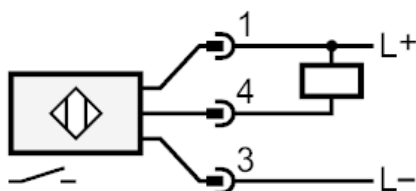
# IFT246



## Inductive full-metal sensor

IFK3006-ANKG/AM/PI/US-104

### Connection



### Diagrams and graphs

