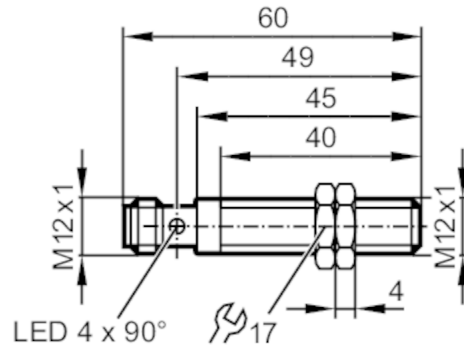


# IF503A



## Inductive full-metal sensor

IFK3003BBPKG/AM/US104DPS/3G/3D



### Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	3
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 60

### Application

Special feature		Gold-plated contacts; Increased sensing range; Full-metal housing
Pressure rating	[bar]	100
Note on pressure rating		sensing face

### Electrical data

Operating voltage	[V]	10...36 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
Max. leakage current	[mA]	0.1
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]	3
Operating distance	[mm]	0...2.4
Increased sensing range		yes

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Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.1	
Hysteresis [% of Sr]	1...20	
Operating conditions		
Ambient temperature [°C]	-40...60	
Protection	IP 67; (when used outside the hazardous area: IP 65, IP 67, IP 68, IP 69K)	
Tests / approvals		
ATEX marking	II 3G Ex nA IIC T6 Gc X	
	II 3D Ex tc IIIC T85°C Dc IP67 X	
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]	1633	
Mechanical data		
Weight [g]	53.5	
Housing	threaded type	
Mounting	flush mountable	
Dimensions [mm]	M12 x 1 / L = 60	
Thread designation	M12 x 1	
Materials	stainless steel (1.4301 / 304); stainless steel (1.4404 / 316L); PEI; lock nuts: stainless steel	
Full-metal housing	yes	
Displays / operating elements		
Display	switching status	4 x 90° LED, yellow
Accessories		
Accessories (supplied)	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	
Electrical connection - plug		
Connector: 1 x M12; Contacts: gold-plated		
		

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### Connection

