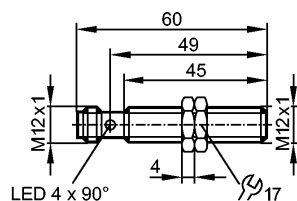


IFS285

IFK3004BBPKG/K1/US-104

Inductive sensors


Product characteristics

Inductive sensor

Metal thread M12 x 1

Quick disconnect

Increased sensing range

Weld field immune

Correction factor = 1

gold-plated contacts

Sensing range 4 mm; [f] flush mountable

Electrical data

Electrical design	DC PNP
Operating voltage [V]	10...30 DC
Current consumption [mA]	< 20
Protection class	III
Reverse polarity protection	yes

Outputs

Output function	normally open
Voltage drop [V]	< 2.5
Current rating [mA]	100
Short-circuit protection	yes
Overload protection	yes
Switching frequency [Hz]	2000

Monitoring range

Sensing range [mm]	4
Real sensing range (Sr) [mm]	4 ± 10 %
Operating distance [mm]	0...3.24

Accuracy / deviations

Correction factors	mild steel = 1 / stainless steel approx. 1 / brass approx. 1 / aluminium approx. 1 / copper approx. 1
Hysteresis [% of Sr]	3...15
Switch-point drift [% of Sr]	-10...10

Environment

Ambient temperature [°C]	-40...85
Protection	IP 65 / IP 66 / IP 67 / IP 68 / IP 69K
Max. electromagnetic field immunity [mT]	300

Tests / approvals

EMC	EN 61000-4-2 ESD:	4 kV CD / 8 kV AD
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IFS285

IFK3004BBPKG/K1/US-104

Inductive sensors

	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
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 cycles per frequency, 1 octave per minute in each of 3 mutually perpendicular axes
Shock resistance	EN 60068-2-27 Ea	100 g (11 ms half sine; 3 shocks in each direction along the three coordinate axes)
Continuous shock resistance	EN 60068-2-29 Eb	40 g (6 ms; 4000 shocks in each direction along the three coordinate axes)
Fast temperature changes	EN 60068-2-14 Na	TA = -40°C; TB = 85°C; t1 = 30 min; t2 = < 10 s; 50 cycles
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)
MTTF [Years]		466
UL approval number		A005

Mechanical data

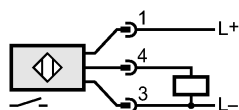
Mounting	flush mountable
Housing materials	brass white bronze coated; active face: LCP white; LED window: PEI; lock nuts: brass white bronze coated
Weight [kg]	0.028

Displays / operating elements

Output status indication	LED	4 x yellow
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Electrical connection

Connection	M12 connector; gold-plated contacts
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Wiring

Accessories

Accessories (included)	2 lock nuts
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Remarks

Pack quantity [piece]	1
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