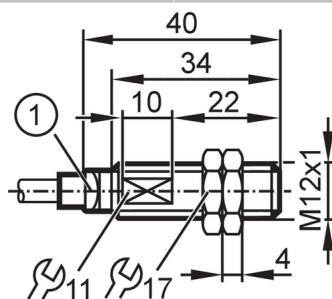




Inductive sensor

IFB2004BARKG/2M/PUR



1 LED yellow



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	4
Housing	Threaded type
Dimensions [mm]	M12 x 1 / L = 40

Application

Special feature	Drag chain suitability; Increased sensing range
Application	Industrial applications

Electrical data

Operating voltage [V]	10...30 DC
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Minimum load current [mA]	2
Max. leakage current [mA]	0.6
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	700
Short-circuit protection	yes
Overload protection	yes

Monitoring range

Sensing range [mm]	4
Real sensing range S_r [mm]	$4 \pm 10\%$
Operating distance [mm]	0...3.24
Increased sensing range	yes

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis [% of S_r]	3...15

IFS709



Inductive sensor

IFB2004BARKG/2M/PUR

Switch-point drift	[% of Sr]	-10...10
--------------------	-----------	----------

Operating conditions

Ambient temperature	[°C]	-40...85
Protection		IP 65; IP 66; 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	class B
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 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]	909
UL approval	Ta	-25...75 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A007
	File number UL	E174191

Mechanical data

Weight	[g]	70.3
Housing		Threaded type
Mounting		flush mountable
Dimensions	[mm]	M12 x 1 / L = 40
Thread designation		M12 x 1
Material		housing: brass white bronze coated; LED window: PEI; lock nuts: brass white bronze coated; sensing face: PBT orange
Drag chain suitability		yes
Drag chain suitability	Bending radius for flexible applications	min. 10 x cable diameter
	Bending cycles	> 5 Mio.

Displays / operating elements

Display	Switching status	1 x LED, yellow
---------	------------------	-----------------

Accessories

Items supplied	lock nuts: 2
	tooth lock washer: 1, stainless steel

Remarks

Pack quantity	1 pcs.
---------------	--------

IFS709



Inductive sensor

IFB2004BARKG/2M/PUR

Electrical connection

Cable: 2 m, PUR; 2 x 0.34 mm²

Connection



BN = Core colors :
brown
BU = blue