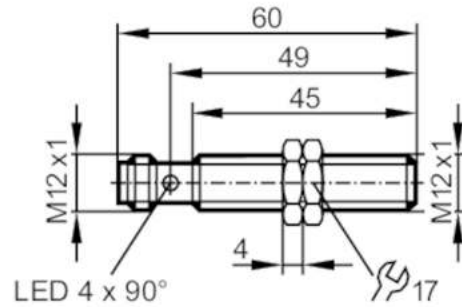


IFS285



Inductive sensor

IFK3004BBPKG/K1/US-104



Product characteristics

| | |
|--------------------|------------------|
| Electrical design | PNP |
| Output function | normally open |
| Sensing range [mm] | 4 |
| Housing | threaded type |
| Dimensions [mm] | M12 x 1 / L = 60 |

Application

| | |
|-----------------------------------|---|
| Special feature | Gold-plated contacts; Increased sensing range; Correction factor K = 1; Magnetic-field immune |
| Application | Suitable for industrial, mobile, cooling and lubricating applications; Industrial applications / factory automation |
| Magnetic-field immune | yes |
| Max. magnetic field immunity [mT] | 300 |

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] | 2000 |
| Short-circuit protection | yes |
| Overload protection | yes |

Detection zone

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

IFS285



Inductive sensor

IFK3004BBPKG/K1/US-104

| | | |
|--------------------------------------|---------------------------|---|
| Increased sensing range | | yes |
| Accuracy / deviations | | |
| Correction factor | | steel: 1 / stainless steel: 1 / brass: 1 / aluminium: 1 / copper: 1 |
| Hysteresis | [% of Sr] | 3...15 |
| Switch point drift | [% of Sr] | -10...10 |
| Correction factor K = 1 | | yes |
| 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, 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 change | 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 |
| Embedded software included | | yes |
| UL approval | Ta | -25...70 °C |
| | Enclosure type | Type 1 |
| | power supply | Limited Voltage/Current |
| | UL Approval no. | A005 |
| | File number UL | E174191 |
| Mechanical data | | |
| Weight | [g] | 27.4 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M12 x 1 / L = 60 |
| Thread designation | | M12 x 1 |
| Materials | | brass white bronze coated; sensing face: LCP white; LED window: PEI; lock nuts: brass white bronze coated |
| Displays / operating elements | | |
| Display | switching status | 4 x LED, yellow |
| Accessories | | |
| Items supplied | | lock nuts: 2 |
| Remarks | | |
| Pack quantity | | 1 pcs. |

IFS285



Inductive sensor

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Electrical connection - plug

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



Connection

