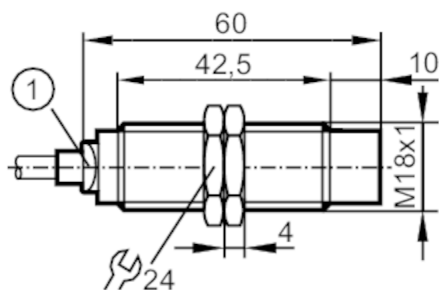


IGS272



Inductive sensor

IGK3012-BNKG/2M/PUR



1 LED yellow



Product characteristics

| | |
|--------------------|------------------|
| Electrical design | NPN |
| Output function | normally closed |
| Sensing range [mm] | 12 |
| Housing | Threaded type |
| Dimensions [mm] | M18 x 1 / L = 60 |

Application

| | |
|-------------|--|
| System | Increased sensing range |
| Application | Suitable for industrial, mobile, cooling and lubricating applications; Industrial applications |

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 10...30 DC |
| Current consumption [mA] | < 10 |
| Protection class | III |
| Reverse polarity protection | yes |

Outputs

| | |
|--|-----------------|
| Electrical design | NPN |
| Output function | normally closed |
| Max. voltage drop switching output DC [V] | 2.5 |
| Permanent current rating of switching output DC [mA] | 100 |
| Switching frequency DC [Hz] | 300 |
| Short-circuit protection | yes |
| Overload protection | yes |

Monitoring range

| | |
|----------------------------|-----------|
| Sensing range [mm] | 12 |
| Real sensing range Sr [mm] | 12 ± 10 % |
| Operating distance [mm] | 0...9.72 |
| 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 Sr] | 3...15 |
| Switch-point drift [% of Sr] | -10...10 |

IGS272



Inductive sensor

IGK3012-BNKG/2M/PUR

| 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] | 819 |
| Embedded software included | | yes |
| UL approval | Ta | -25...75 °C |
| | Enclosure type | Type 1 |
| | voltage supply | Limited Voltage/Current |
| | UL approval number | A002 |
| | File number UL | E174191 |
| Mechanical data | | |
| Weight | [g] | 92.7 |
| Housing | | Threaded type |
| Mounting | | non-flush mountable |
| Dimensions | [mm] | M18 x 1 / L = 60 |
| Thread designation | | M18 x 1 |
| Material | | brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated |
| Displays / operating elements | | |
| Display | Switching status | 1 x LED, yellow |
| Accessories | | |
| Items supplied | | lock nuts: 2 |
| Remarks | | |
| Pack quantity | | 1 pcs. |

IGS272



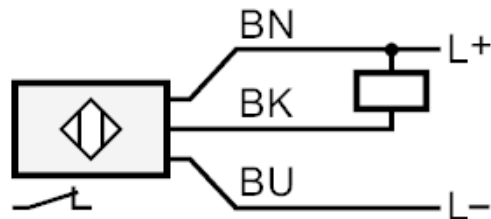
Inductive sensor

IGK3012-BNKG/2M/PUR

Electrical connection

Cable: 2 m, PUR, Ø 4 mm; burning behaviour to ECE R118 rev. 2; 3 x 0.34 mm²

Connection



Core colors :

| | |
|------|-------|
| BK = | black |
| BN = | brown |
| BU = | blue |