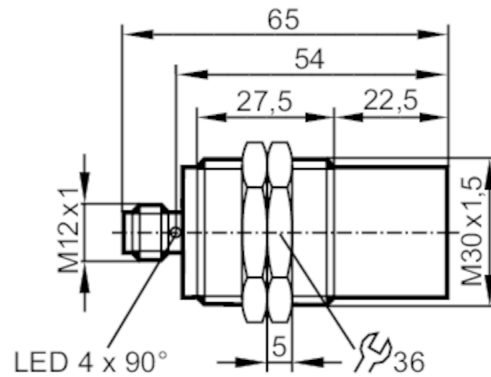




Inductive full-metal sensor

IIK3025-BPKG/AM/P/US-104



Product characteristics

| | | |
|-------------------|------|--------------------|
| Electrical design | | PNP |
| Output function | | normally open |
| Sensing range | [mm] | 25 |
| Dimensions | [mm] | M30 x 1.5 / L = 65 |

Application

| | | |
|-------------------------|-------|---|
| Special feature | | Gold-plated contacts; Increased sensing range; Full-metal housing |
| Application | | constant cleaning with aggressive cleaning agents; regular cleaning processes |
| Pressure rating | [bar] | 100 |
| Note on pressure rating | | sensing face |

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] | 100 |
| Short-circuit protection | | yes |
| Overload protection | | yes |

Detection zone

| | | |
|-------------------------|------|-----------|
| Sensing range | [mm] | 25 |
| Real sensing range Sr | [mm] | 25 ± 10 % |
| Operating distance | [mm] | 0...20.25 |
| Increased sensing range | | yes |



Inductive full-metal sensor

IHK3025-BPKG/AM/P/US-104

| Accuracy / deviations | | |
|-------------------------------|--|--|
| Correction factor | steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.6 / copper: 0.5 | |
| Hysteresis [% of Sr] | 3...15 | |
| Switch point drift [% of Sr] | -10...10 | |
| Operating conditions | | |
| Ambient temperature [°C] | 0...100 | |
| 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 emission | class B |
| Impact resistance | 1 J | |
| 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 Nc | TA = 0°C; TB = 100°C; t1 = 30 min; t2 = < 10 s 50 cycles |
| MTTF [years] | 1386 | |
| Embedded software included | yes | |
| UL approval | Ta | 0...70 °C |
| | Enclosure type | Type 1 |
| | power supply | Limited Voltage/Current |
| | UL Approval no. | A012 |
| | File number UL | E174191 |
| Mechanical data | | |
| Weight [g] | 165.165 | |
| Mounting | non-flush mountable | |
| Dimensions [mm] | M30 x 1.5 / L = 65 | |
| Thread designation | M30 x 1.5 | |
| Materials | housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404) | |
| Tightening torque [Nm] | 80 | |
| Full-metal housing | yes | |
| Displays / operating elements | | |
| Display | switching status | 4 x 90° LED, yellow |
| Accessories | | |
| Items supplied | lock nuts: 2 | |
| Remarks | | |
| Pack quantity | 1 pcs. | |

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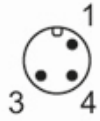


Inductive full-metal sensor

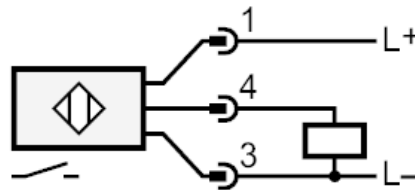
IIK3025-BPKG/AM/P/US-104

Electrical connection

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



Connection



Diagrams and graphs

