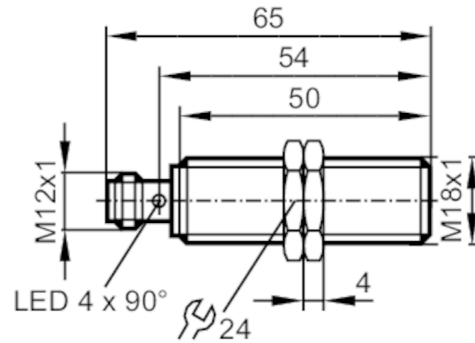




Inductive sensor

IGK3005-BPKG/K1/V4A/US-104



Product characteristics

| | |
|--------------------|------------------|
| Electrical design | PNP |
| Output function | normally open |
| Sensing range [mm] | 5 |
| Housing | threaded type |
| Dimensions [mm] | M18 x 1 / L = 65 |

Application

| | |
|-----------------------------------|--|
| Special feature | Gold-plated contacts; Correction factor K = 1; Magnetic-field immune |
| Application | Use in machine tools, coolants and lubricants |
| Magnetic-field immune | yes |
| Max. magnetic field immunity [mT] | 300 |

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 10...30 DC |
| Current consumption [mA] | 20 |
| Protection class | II |
| 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] | 5 |
| Real sensing range S_r [mm] | $5 \pm 10\%$ |
| Operating distance [mm] | 0...4.05 |

Accuracy / deviations

| | |
|-------------------|---|
| Correction factor | steel: 1 / stainless steel: 1 / brass: 1 / aluminium: 1 / copper: 1 |
|-------------------|---|



Inductive sensor

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| | | |
|-------------------------|-----------|----------|
| Hysteresis | [% of Sr] | 3...15 |
| Switch point drift | [% of Sr] | -10...10 |
| Correction factor K = 1 | | yes |

Operating conditions

| | | |
|---------------------|------|--------------------|
| Ambient temperature | [°C] | -25...70 |
| Protection | | IP 68; ("Coolant") |

Tests / approvals

| | | |
|----------------------------|-----------------|-------------------------|
| MTTF | [years] | 657 |
| 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] | 45.5 |
| Housing | | threaded type |
| Mounting | | flush mountable |
| Dimensions | [mm] | M18 x 1 / L = 65 |
| Thread designation | | M18 x 1 |
| Materials | | housing: stainless steel (1.4404 / 316L); sensing face: LCP white; LED window: PEI white; lock nuts: brass white bronze coated |

Displays / operating elements

| | | |
|---------|------------------|---------------------|
| Display | switching status | 4 x 90° LED, yellow |
|---------|------------------|---------------------|

Accessories

| | | |
|----------------|--|--------------|
| Items supplied | | lock nuts: 2 |
|----------------|--|--------------|

Remarks

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

Electrical connection - plug

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



IGC232



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Connection

