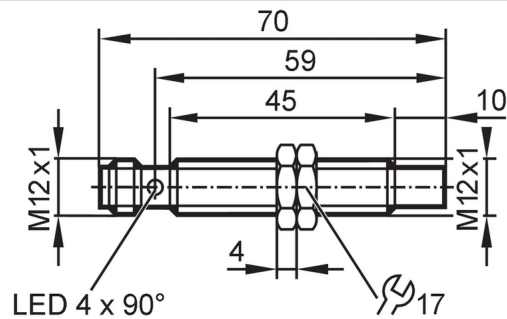


IFT245



Inductive full-metal sensor

IFK3006-BPKG/AMPI/US



Product characteristics

| | | |
|-------------------|------|------------------|
| Electrical design | | PNP |
| Output function | | normally open |
| Sensing range | [mm] | 6 |
| Housing | | threaded type |
| Dimensions | [mm] | M12 x 1 / L = 70 |

Application

| | | |
|-------------------------|---|--------|
| Special feature | Gold-plated contacts; Increased sensing range; Full-metal housing | |
| Application | Use in hygienic areas / regular cleaning processes | |
| Pressure rating | 100 bar | 10 MPa |
| Note on pressure rating | sensing face | |

Electrical data

| | | |
|-----------------------------|------|------------|
| Operating voltage | [V] | 10...30 DC |
| Current consumption | [mA] | < 25 |
| 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] | 250 |
| Short-circuit protection | | yes |
| Overload protection | | yes |

Detection zone

| | | |
|-------------------------|------|----------|
| Sensing range | [mm] | 6 |
| Real sensing range Sr | [mm] | 6 ± 10 % |
| Operating distance | [mm] | 0...4.9 |
| Increased sensing range | | yes |

Accuracy / deviations

| | | |
|-------------------|---|--|
| Correction factor | steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.8 / copper: 0.6 | |
|-------------------|---|--|

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| | | |
|--------------------|-----------|----------|
| Hysteresis | [% of Sr] | 1...20 |
| Switch point drift | [% of Sr] | -10...10 |

Operating conditions

| | | |
|---------------------|------|-----------------------------|
| Ambient temperature | [°C] | 0...100 |
| Protection | | IP 65; 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 | EN 60068-2-75 Ehc | 1 J |
| MTTF | [years] | 1265 |
| Embedded software included | | yes |
| UL approval | Ta | 0...70 °C |
| | Enclosure type | Type 1 |
| | voltage supply | Limited Voltage/Current |
| | UL approval no. | A012 |
| | File number UL | E174191 |

Mechanical data

| | | |
|--------------------|------|---|
| Weight | [g] | 29.75 |
| Housing | | threaded type |
| Mounting | | non-flush mountable |
| Dimensions | [mm] | M12 x 1 / L = 70 |
| Thread designation | | M12 x 1 |
| Materials | | housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); lock nuts: stainless steel (316L/1.4404) |
| Tightening torque | [Nm] | 15 |
| 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. |
|---------------|--|--------|

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 3, gold-plated



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Connection



Diagrams and graphs

