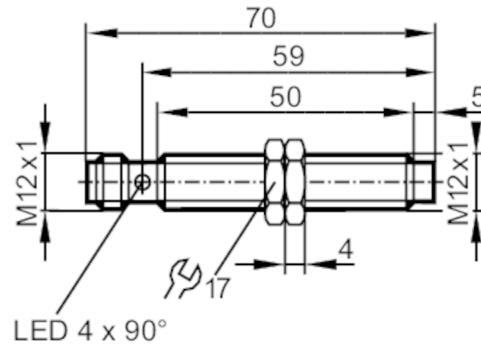


IFC238



Inductive sensor

IFK3007-BPKG/US-104



Product characteristics

| | |
|--------------------|------------------|
| Electrical design | PNP |
| Output function | normally open |
| Sensing range [mm] | 7 |
| Housing | Threaded type |
| Dimensions [mm] | M12 x 1 / L = 70 |

Application

| | |
|-------------|---|
| System | gold-plated contacts; Increased sensing range |
| Application | Oils and coolants |

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 10...30 DC |
| Current consumption [mA] | < 10 |
| 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] | 700 |
| Short-circuit protection | yes |
| Overload protection | yes |

Monitoring range

| | |
|----------------------------|----------|
| Sensing range [mm] | 7 |
| Real sensing range Sr [mm] | 7 ± 10 % |
| Operating distance [mm] | 0...5.67 |
| 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 |

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

Operating conditions

| | | |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...70 |
|---------------------|------|----------|

| | |
|------------|--------------------|
| Protection | IP 68; ("Coolant") |
|------------|--------------------|

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 61000-4-5 Surge | 0,5 kV |
| | EN 61000-4-6 HF conducted | 10 V |
| | EN 55011 | class B |

| | | |
|------|---------|------|
| MTTF | [years] | 1134 |
|------|---------|------|

| | |
|----------------------------|----|
| Embedded software included | no |
|----------------------------|----|

| | | |
|-------------|--------------------|-----------|
| UL approval | Ta | 0...40 °C |
| | Enclosure type | Type 1 |
| | UL approval number | A003 |
| | File number UL | E174191 |

Mechanical data

| | | |
|--------|-----|------|
| Weight | [g] | 29.6 |
|--------|-----|------|

| | |
|---------|---------------|
| Housing | Threaded type |
|---------|---------------|

| | |
|----------|---------------------|
| Mounting | non-flush mountable |
|----------|---------------------|

| | | |
|------------|------|------------------|
| Dimensions | [mm] | M12 x 1 / L = 70 |
|------------|------|------------------|

| | |
|--------------------|---------|
| Thread designation | M12 x 1 |
|--------------------|---------|

| | |
|----------|---|
| Material | housing: 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. |
|---------------|--------|

Electrical connection - plug

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



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Connection

