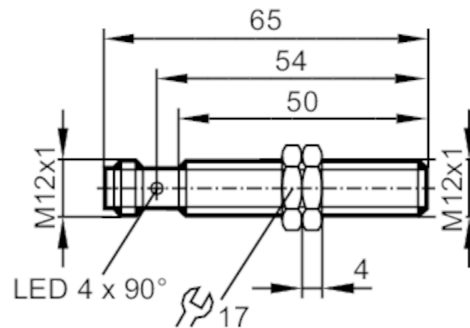


IFW200



Inductive sensor

IFK3003BBPKG/K1/SC/US104



Product characteristics

| | |
|--------------------|------------------|
| Electrical design | PNP |
| Output function | normally open |
| Sensing range [mm] | 3 |
| Housing | threaded type |
| Dimensions [mm] | M12 x 1 / L = 65 |

Application

| | |
|-----------------------------------|---|
| Special feature | Gold-plated contacts; Increased sensing range; Correction factor K = 1; Magnetic-field immune; anti-spatter |
| Application | Use in welding applications |
| 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] | 3 |
| Real sensing range Sr [mm] | 3 ± 10 % |
| Operating distance [mm] | 0...2.4 |
| Increased sensing range | yes |

IFW200



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| Accuracy / deviations | | |
|---|---|-------------------------|
| Correction factor | steel: 1 / stainless steel: 1 / brass: 1 / aluminium: 1 / copper: 1 | |
| 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 67 | |
| 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 |
| MTTF [years] | 665 | |
| UL approval | Ta | -25...70 °C |
| | Enclosure type | Type 1 |
| | voltage supply | Limited Voltage/Current |
| | UL Approval no. | A005 |
| | File number UL | E174191 |
| Mechanical data | | |
| Weight [g] | 29.1 | |
| Housing | threaded type | |
| Mounting | flush mountable | |
| Dimensions [mm] | M12 x 1 / L = 65 | |
| Thread designation | M12 x 1 | |
| Materials | housing: brass anti-spatter; sensing face: LCP black; LED window: PEI; lock nuts: brass anti-spatter | |
| Displays / operating elements | | |
| Display | switching status | 4 x 90° LED, yellow |
| Accessories | | |
| Accessories (supplied) | lock nuts: 2 | |
| Remarks | | |
| Pack quantity | 1 pcs. | |
| Electrical connection - plug | | |
| Connector: 1 x M12; Contacts: gold-plated | | |
| | | |

IFW200



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Connection

