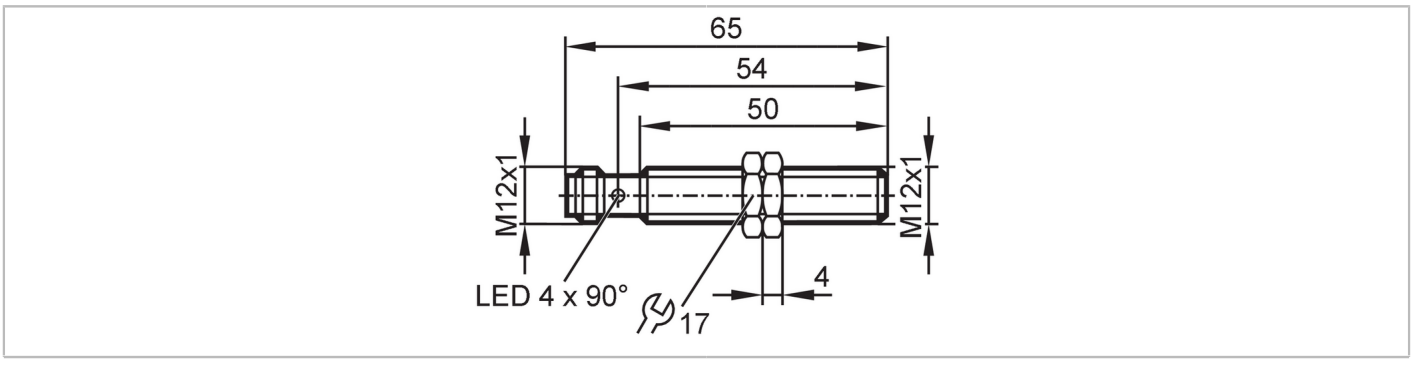
# IFW204

## Inductive sensor

IFK3004UBPKG/K1/SC/US-104




| | | |
|---|---|---|
| **Product characteristics** | | |
| Electrical design | | PNP |
| Output function | | normally open |
| Sensing range | [mm] | 4 |
| 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 |
| 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] | 4 |
| Real sensing range Sr | [mm] | 4 ± 10 % |
| Operating distance | [mm] | 0...3.24 |
| Increased sensing range | | yes |

# IFW204

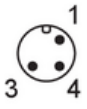
## Inductive sensor

IFK3004UBPKG/K1/SC/US-104

| | | | |
|---|---|---|---|
| **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] | -40...85 | |
| 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 |
| MTTF | [years] | 466 | |
| Embedded software included | | yes | |
| 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] | 29.3 | |
| 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;<br>LED window: PEI; lock nuts: brass anti-spatter | |
| **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: 3, gold-plated



# IFW204

## Inductive sensor

**IFK3004UBPKG/K1/SC/US-104**

## Connection

