



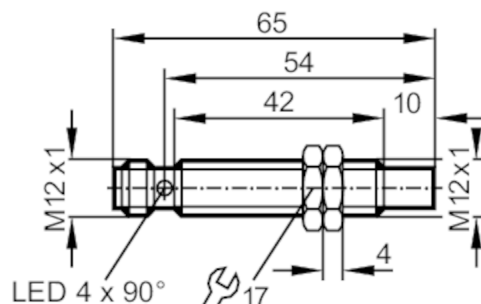
## Inductive sensor

IFK3008-BPKG/M/K1/SC/US104-DPS

phase-out article

Alternative articles: IFW201

When selecting an alternative article and accessories please note that technical data may differ!



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP              |
| Output function    | normally open    |
| Sensing range [mm] | 8                |
| 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                                                                                                         |

### 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] | 200           |
| Switching frequency DC [Hz]                          | 2000          |
| Short-circuit protection                             | yes           |
| Type of short-circuit protection                     | pulsed        |
| Overload protection                                  | yes           |



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| Detection zone                |                           |                                                                     |
|-------------------------------|---------------------------|---------------------------------------------------------------------|
| Sensing range                 | [mm]                      | 8                                                                   |
| Real sensing range Sr         | [mm]                      | 8 ± 10 %                                                            |
| Operating distance            | [mm]                      | 0...6.5                                                             |
| Increased sensing range       |                           | yes                                                                 |
| 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]                   | 1975                                                                |
| 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]                       | 35                                                                  |
| Housing                       |                           | threaded type                                                       |
| Mounting                      |                           | non-flush mountable                                                 |
| Dimensions                    | [mm]                      | M12 x 1 / L = 65                                                    |
| Thread designation            |                           | M12 x 1                                                             |
| Materials                     |                           | housing: brass anti-spatter; sensing face: Duroplast (PF)           |
| Displays / operating elements |                           |                                                                     |
| Display                       | switching status          | 4 x 90° LED, yellow                                                 |
| Accessories                   |                           |                                                                     |
| Items supplied                |                           | lock nuts: 2                                                        |
| Remarks                       |                           |                                                                     |
| Pack quantity                 |                           | 1 pcs.                                                              |

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### Electrical connection - plug

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



### Connection

