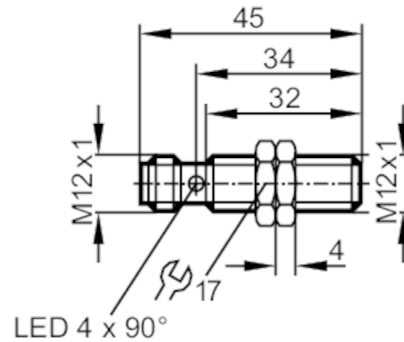




## Inductive sensor

IFB2004BARKG/M/US-104-ARS



### Product characteristics

|                   |      |                  |
|-------------------|------|------------------|
| Electrical design |      | PNP/NPN          |
| Output function   |      | normally open    |
| Sensing range     | [mm] | 4                |
| Housing           |      | threaded type    |
| Dimensions        | [mm] | M12 x 1 / L = 45 |

### Application

|                 |  |   |
|-----------------|--|---|
| Special feature |  | Gold-plated contacts; Increased sensing range |
| Application     |  | Industrial applications / factory automation  |

### Electrical data

|                             |     |            |
|-----------------------------|-----|------------|
| Operating voltage           | [V] | 10...30 DC |
| Protection class            |     | II         |
| Reverse polarity protection |     | yes        |

### Outputs

|   |      |               |
|---|------|---------------|
| Electrical design                               |      | PNP/NPN       |
| Output function                                 |      | normally open |
| Max. voltage drop switching output DC           | [V]  | 2.5           |
| Minimum load current                            | [mA] | 2             |
| Max. leakage current                            | [mA] | 0.5           |
| Permanent current rating of switching output DC | [mA] | 100           |
| Switching frequency DC                          | [Hz] | 700           |
| Short-circuit protection                        |      | yes           |
| Type of short-circuit protection                |      | pulsed        |
| Overload protection                             |      | yes           |

### Detection zone

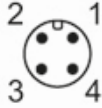
|                         |      |          |
|-------------------------|------|----------|
| Sensing range           | [mm] | 4        |
| Real sensing range Sr   | [mm] | 4 ± 10 % |
| Operating distance      | [mm] | 0...3.25 |
| Increased sensing range |      | yes      |

# IFS202



## Inductive sensor

IFB2004BARKG/M/US-104-ARS

| Accuracy / deviations   |   |                     |
|---|---|---------------------|
| Correction factor   | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3 |                     |
| Hysteresis [% of Sr]  | 3...15  |                     |
| Switch point drift [% of Sr]  | -10...10  |                     |
| 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]  | 2487  |                     |
| UL approval   | Ta  | 0...40 °C           |
|   | Enclosure type  | Type 1              |
|   | voltage supply  | Hazardous voltage   |
|   | File number UL  | E174191             |
| Mechanical data   |   |                     |
| Weight [g]  | 25.1  |                     |
| Housing   | threaded type   |                     |
| Mounting  | flush mountable   |                     |
| Dimensions [mm]   | M12 x 1 / L = 45  |                     |
| Thread designation  | M12 x 1   |                     |
| Materials   | brass white bronze coated; sensing face: PBT                                |                     |
| 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   |   |                     |
|  |   |                     |

# IFS202



## Inductive sensor

IFB2004BARKG/M/US-104-ARS

### Connection

