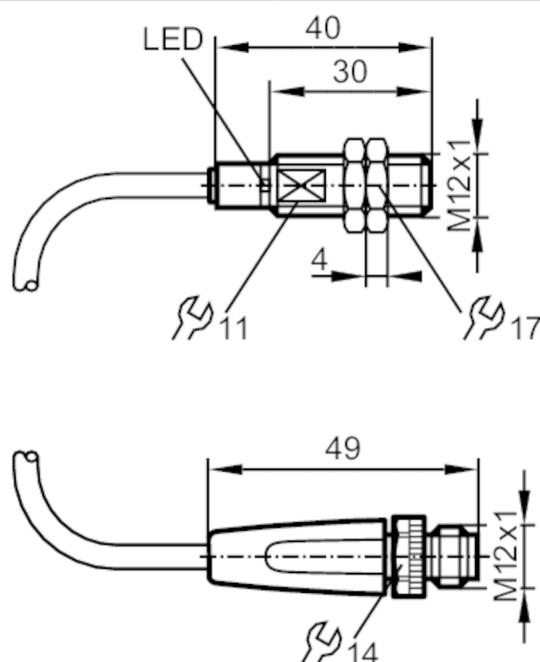


## Inductive full-metal sensor

IFB2004BARKG/AM/SC/0,3M/US/2LE



### Electrical data

|                             |     |            |
|-----------------------------|-----|------------|
| Operating voltage           | [V] | 10...36 DC |
| Protection class            |     | III        |
| 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] | 0.6           |
| Permanent current rating of switching output DC | [mA] | 100           |
| Switching frequency DC                          | [Hz] | 75            |
| Short-circuit protection                        |      | yes           |
| Type of short-circuit protection                |      | pulsed        |
| Overload protection                             |      | yes           |

### Detection zone

|                         |      |          |
|-------------------------|------|----------|
| Sensing range           | [mm] | 4        |
| Operating distance      | [mm] | 0...3.25 |
| Increased sensing range |      | yes      |

### Accuracy / deviations

|                   |           |                                                                           |
|-------------------|-----------|---------------------------------------------------------------------------|
| Correction factor |           | steel: 1 / stainless steel: 0.7 / brass: 0.2 / aluminium: 0.1 / copper: 0 |
| Hysteresis        | [% of Sr] | 1...20                                                                    |

# IFR203



## Inductive full-metal sensor

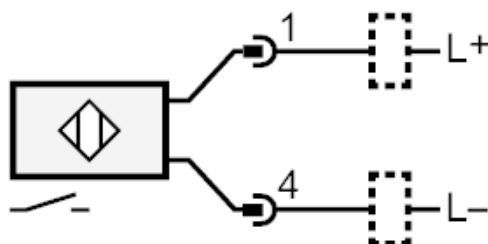
IFB2004BARKG/AM/SC/0,3M/US/2LE

| 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 emission         | class B                                                                                                                                                                                    |
| MTTF                                                                                | [years]                   | 1422                                                                                                                                                                                       |
| UL approval                                                                         | Ta                        | 0...40 °C                                                                                                                                                                                  |
|                                                                                     | Enclosure type            | Type 1                                                                                                                                                                                     |
|                                                                                     | voltage supply            | Limited Voltage/Current                                                                                                                                                                    |
|                                                                                     | File number UL            | E174191                                                                                                                                                                                    |
| Mechanical data                                                                     |                           |                                                                                                                                                                                            |
| Weight                                                                              | [g]                       | 49                                                                                                                                                                                         |
| Housing                                                                             |                           | threaded type                                                                                                                                                                              |
| Mounting                                                                            |                           | flush mountable                                                                                                                                                                            |
| Dimensions                                                                          | [mm]                      | M12 x 1 / L = 40                                                                                                                                                                           |
| Thread designation                                                                  |                           | M12 x 1                                                                                                                                                                                    |
| Materials                                                                           |                           | housing: stainless steel (1.4404 / 316L) anti-spatter; sensing face: stainless steel (1.4404 / 316L) anti-spatter; cable plug: PA; lock nuts: stainless steel (1.4404 / 316L) anti-spatter |
| Full-metal housing                                                                  |                           | yes                                                                                                                                                                                        |
| Displays / operating elements                                                       |                           |                                                                                                                                                                                            |
| Display                                                                             | switching status          | 1 x LED, green                                                                                                                                                                             |
|                                                                                     | setting aid               | 1 x LED, red                                                                                                                                                                               |
| Optical setting aid                                                                 |                           | yes                                                                                                                                                                                        |
| Electrical connection                                                               |                           |                                                                                                                                                                                            |
| Connection                                                                          |                           | plug                                                                                                                                                                                       |
| Accessories                                                                         |                           |                                                                                                                                                                                            |
| Accessories (supplied)                                                              |                           | lock nuts: 2                                                                                                                                                                               |
| Remarks                                                                             |                           |                                                                                                                                                                                            |
| Pack quantity                                                                       |                           | 1 pcs.                                                                                                                                                                                     |
| Electrical connection - plug                                                        |                           |                                                                                                                                                                                            |
| Cable: 0.3 m, PVC; 2 x 0.5 mm <sup>2</sup>                                          |                           |                                                                                                                                                                                            |
| Connector: 1 x M12; Contacts: gold-plated                                           |                           |                                                                                                                                                                                            |
|  |                           |                                                                                                                                                                                            |

## Inductive full-metal sensor

IFB2004BARKG/AM/SC/0,3M/US/2LE

### Connection



### Diagrams and graphs

#### Installation

