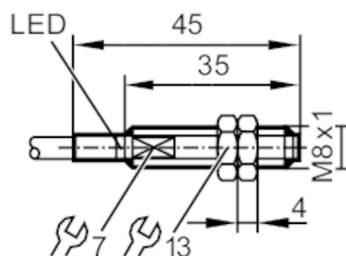


## Inductive full-metal sensor

IEB2002BARKG/AM/SC/3,0M/2LED



## Product characteristics

|                    |                 |
|--------------------|-----------------|
| Electrical design  | PNP/NPN         |
| Output function    | normally open   |
| Sensing range [mm] | 2               |
| Housing            | threaded type   |
| Dimensions [mm]    | M8 x 1 / L = 45 |

## Application

|                         |                                                                                |
|-------------------------|--------------------------------------------------------------------------------|
| Special feature         | Increased sensing range; Full-metal housing; Optical setting aid; anti-spatter |
| Application             | Use in welding applications                                                    |
| Pressure rating [bar]   | 50                                                                             |
| Note on pressure rating | sensing face                                                                   |

## 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]                            | 0.75          |
| Permanent current rating of switching output DC [mA] | 100           |
| Switching frequency DC [Hz]                          | 150           |
| Short-circuit protection                             | yes           |
| Type of short-circuit protection                     | pulsed        |
| Overload protection                                  | yes           |

## Detection zone

|                         |         |
|-------------------------|---------|
| Sensing range [mm]      | 2       |
| Operating distance [mm] | 0...1.6 |
| Increased sensing range | yes     |



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| Accuracy / deviations         |                           |                                                                                                                                                                            |
|-------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Correction factor             |                           | steel: 1 / stainless steel: 0.6 / brass: 0.4 / aluminium: 0.3 / copper: 0.2                                                                                                |
| Hysteresis                    | [% of Sr]                 | 1...20                                                                                                                                                                     |
| 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                                                                                                                                                                    |
| Impact resistance             |                           | 1 J                                                                                                                                                                        |
| MTTF                          | [years]                   | 1384                                                                                                                                                                       |
| UL approval                   | Ta                        | 0...40 °C                                                                                                                                                                  |
|                               | Enclosure type            | Type 1                                                                                                                                                                     |
|                               | voltage supply            | Limited Voltage/Current                                                                                                                                                    |
|                               | File number UL            | E174191                                                                                                                                                                    |
| Mechanical data               |                           |                                                                                                                                                                            |
| Weight                        | [g]                       | 73                                                                                                                                                                         |
| Housing                       |                           | threaded type                                                                                                                                                              |
| Mounting                      |                           | flush mountable                                                                                                                                                            |
| Dimensions                    | [mm]                      | M8 x 1 / L = 45                                                                                                                                                            |
| Thread designation            |                           | M8 x 1                                                                                                                                                                     |
| Materials                     |                           | housing: stainless steel (1.4404 / 316L) anti-spatter; sensing face: stainless steel (1.4404 / 316L) anti-spatter; 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                                                                                                                                                                        |
| Accessories                   |                           |                                                                                                                                                                            |
| Items supplied                |                           | lock nuts: 2                                                                                                                                                               |
| Remarks                       |                           |                                                                                                                                                                            |
| Pack quantity                 |                           | 1 pcs.                                                                                                                                                                     |

# IER204



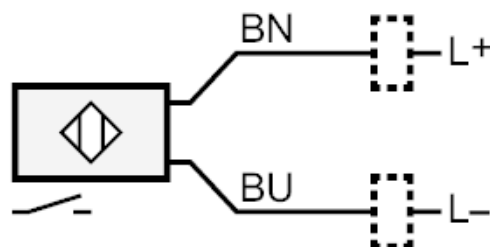
## Inductive full-metal sensor

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### Electrical connection

Cable: 3 m, PUR; 2 x 0.34 mm<sup>2</sup>

### Connection



Core colours :

BN =

brown

BU =

blue