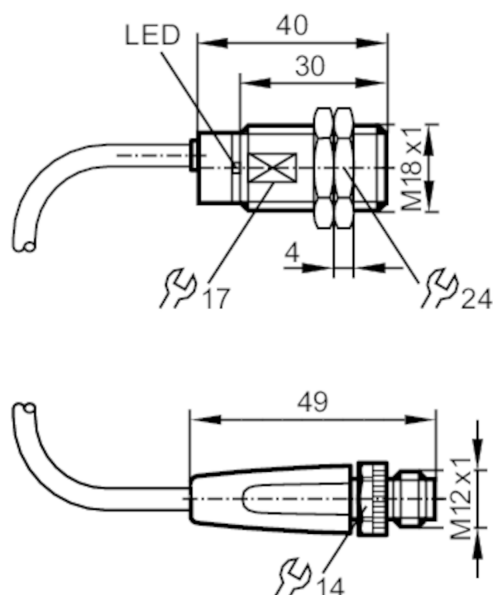


## Inductive full-metal sensor

IGB2006BARKG/AM/SC/0,3M/US/2LE



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP/NPN          |
| Output function    | normally open    |
| Sensing range [mm] | 6                |
| Housing            | threaded type    |
| Dimensions [mm]    | M18 x 1 / L = 40 |

### Application

|                         |                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------|
| Special feature         | Gold-plated contacts; Increased sensing range; Full-metal housing; Optical setting aid; anti-spatter |
| Application             | Use in welding applications                                                                          |
| Pressure rating [bar]   | 20                                                                                                   |
| 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]                            | 0.6           |
| Permanent current rating of switching output DC [mA] | 100           |



## Inductive full-metal sensor

IGB2006BARKG/AM/SC/0,3M/US/2LE

|                                      |                           |                                                                                                                                                                                            |
|--------------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Switching frequency DC               | [Hz]                      | 50                                                                                                                                                                                         |
| Short-circuit protection             |                           | yes                                                                                                                                                                                        |
| Type of short-circuit protection     |                           | pulsed                                                                                                                                                                                     |
| Overload protection                  |                           | yes                                                                                                                                                                                        |
| <b>Detection zone</b>                |                           |                                                                                                                                                                                            |
| Sensing range                        | [mm]                      | 6                                                                                                                                                                                          |
| Operating distance                   | [mm]                      | 0...4.9                                                                                                                                                                                    |
| Increased sensing range              |                           | yes                                                                                                                                                                                        |
| <b>Accuracy / deviations</b>         |                           |                                                                                                                                                                                            |
| Correction factor                    |                           | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.3 / copper: 0.1                                                                                                                |
| Hysteresis                           | [% of Sr]                 | 1...20                                                                                                                                                                                     |
| <b>Operating conditions</b>          |                           |                                                                                                                                                                                            |
| Ambient temperature                  | [°C]                      | -25...70                                                                                                                                                                                   |
| Protection                           |                           | IP 67                                                                                                                                                                                      |
| <b>Tests / approvals</b>             |                           |                                                                                                                                                                                            |
| 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                                                                                                                                                                                    |
| Impact resistance                    |                           | 1 J                                                                                                                                                                                        |
| MTTF                                 | [years]                   | 1484                                                                                                                                                                                       |
| UL approval                          | Ta                        | 0...40 °C                                                                                                                                                                                  |
|                                      | Enclosure type            | Type 1                                                                                                                                                                                     |
|                                      | power supply              | Limited Voltage/Current                                                                                                                                                                    |
|                                      | File number UL            | E174191                                                                                                                                                                                    |
| <b>Mechanical data</b>               |                           |                                                                                                                                                                                            |
| Weight                               | [g]                       | 67.1                                                                                                                                                                                       |
| Housing                              |                           | threaded type                                                                                                                                                                              |
| Mounting                             |                           | flush mountable                                                                                                                                                                            |
| Dimensions                           | [mm]                      | M18 x 1 / L = 40                                                                                                                                                                           |
| Thread designation                   |                           | M18 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                                                                                                                                                                                        |
| <b>Displays / operating elements</b> |                           |                                                                                                                                                                                            |
| Display                              | switching status          | 1 x LED, green                                                                                                                                                                             |
|                                      | setting aid               | 1 x LED, red                                                                                                                                                                               |
| Optical setting aid                  |                           | yes                                                                                                                                                                                        |
| <b>Accessories</b>                   |                           |                                                                                                                                                                                            |
| Items supplied                       |                           | lock nuts: 2                                                                                                                                                                               |
| <b>Remarks</b>                       |                           |                                                                                                                                                                                            |
| Pack quantity                        |                           | 1 pcs.                                                                                                                                                                                     |

# IGR203



## Inductive full-metal sensor

IGB2006BARKG/AM/SC/0,3M/US/2LE

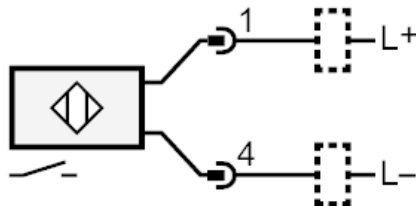
### Electrical connection - plug

Cable: 0.3 m, PVC; 2 x 0.5 mm<sup>2</sup>

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



### Connection



### Diagrams and graphs

#### Installation

