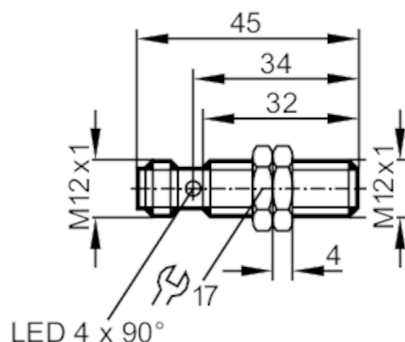




## Inductive sensor

IFB2004BARKG/M/US-104-DRS



### 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

|             |                                               |
|-------------|-----------------------------------------------|
| System      | gold-plated contacts; Increased sensing range |
| Application | Oils and coolants                             |

### 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                     | yes (non-latching) |
| Overload protection                                  | yes                |

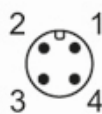
### Monitoring range

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



## Inductive sensor

IFB2004BARKG/M/US-104-DRS

| Accuracy / deviations                                                                          |                           |                                                                            |
|------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------|
| Correction factor                                                                              |                           | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 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 68; ("Coolant")                                                         |
| 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                                                                         |
| Housing                                                                                        |                           | Threaded type                                                              |
| Mounting                                                                                       |                           | flush mountable                                                            |
| Dimensions                                                                                     | [mm]                      | M12 x 1 / L = 45                                                           |
| Thread designation                                                                             |                           | M12 x 1                                                                    |
| Material                                                                                       |                           | brass white bronze coated; sensing face: LCP                               |
| Displays / operating elements                                                                  |                           |                                                                            |
| Display                                                                                        | Switching status          | 4 x 90° LED, yellow                                                        |
| Accessories                                                                                    |                           |                                                                            |
| Items supplied                                                                                 |                           | lock nuts: 2                                                               |
| Remarks                                                                                        |                           |                                                                            |
| Pack quantity                                                                                  |                           | 1 pcs.                                                                     |
| Electrical connection - plug                                                                   |                           |                                                                            |
| Connector: 1 x M12; coding: A; Contacts: gold-plated                                           |                           |                                                                            |
| <div></div> |                           |                                                                            |

# IFC200



## Inductive sensor

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### Connection

