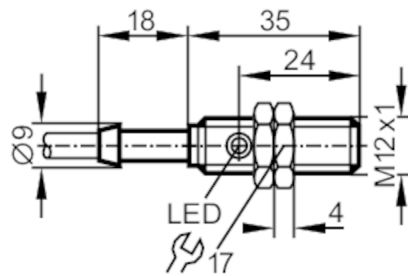


# IF5291

## Inductive sensor

IFB3002-BPKG/PH



| Product characteristics                         |           |                                                                             |
|-------------------------------------------------|-----------|-----------------------------------------------------------------------------|
| Electrical design                               |           | PNP                                                                         |
| Output function                                 |           | normally open                                                               |
| Sensing range                                   | [mm]      | 2                                                                           |
| Housing                                         |           | threaded type                                                               |
| Dimensions                                      | [mm]      | M12 x 1 / L = 35                                                            |
| Electrical data                                 |           |                                                                             |
| Operating voltage                               | [V]       | 10...36 DC                                                                  |
| Current consumption                             | [mA]      | < 15                                                                        |
| Protection class                                |           | II                                                                          |
| Reverse polarity protection                     |           | yes                                                                         |
| Outputs                                         |           |                                                                             |
| Electrical design                               |           | PNP                                                                         |
| Output function                                 |           | normally open                                                               |
| Max. voltage drop switching output DC           | [V]       | 2.5                                                                         |
| Permanent current rating of switching output DC | [mA]      | 150                                                                         |
| Switching frequency DC                          | [Hz]      | 1500                                                                        |
| Short-circuit protection                        |           | yes                                                                         |
| Type of short-circuit protection                |           | pulsed                                                                      |
| Overload protection                             |           | yes                                                                         |
| Detection zone                                  |           |                                                                             |
| Sensing range                                   | [mm]      | 2                                                                           |
| Real sensing range Sr                           | [mm]      | 2 ± 10 %                                                                    |
| Operating distance                              | [mm]      | 0...1.6                                                                     |
| Accuracy / deviations                           |           |                                                                             |
| Correction factor                               |           | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 |
| Hysteresis                                      | [% of Sr] | 3...15                                                                      |
| Switch point drift                              | [% of Sr] | -10...10                                                                    |
| Operating conditions                            |           |                                                                             |
| Ambient temperature                             | [°C]      | -25...80                                                                    |
| Protection                                      |           | IP 67                                                                       |

# IF5291



## Inductive sensor

IFB3002-BPKG/PH

### Tests / approvals

|      |              |         |
|------|--------------|---------|
| EMC  | EN 60947-5-2 |         |
|      | EN 55011     | class B |
| MTTF | [years]      | 2531    |

### Mechanical data

|                    |      |                                             |
|--------------------|------|---------------------------------------------|
| Weight             | [g]  | 83                                          |
| Housing            |      | threaded type                               |
| Mounting           |      | flush mountable                             |
| Dimensions         | [mm] | M12 x 1 / L = 35                            |
| Thread designation |      | M12 x 1                                     |
| Materials          |      | brass white bronze coated; sensing face: PC |

### Displays / operating elements

|         |                  |                 |
|---------|------------------|-----------------|
| Display | switching status | 1 x LED, yellow |
|---------|------------------|-----------------|

### Accessories

|                |              |
|----------------|--------------|
| Items supplied | lock nuts: 2 |
|----------------|--------------|

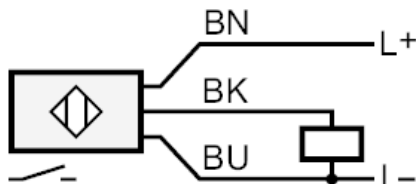
### Remarks

|               |        |
|---------------|--------|
| Pack quantity | 1 pcs. |
|---------------|--------|

### Electrical connection

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

### Connection



BN = Core colours : brown  
BU = blue  
BK = black