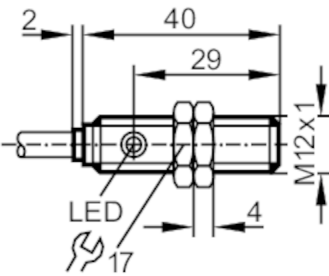




Inductive sensor

IFB2002-FRKG/3M/PH



| Product characteristics                         |           |                                                                             |
|-------------------------------------------------|-----------|-----------------------------------------------------------------------------|
| Electrical design                               |           | PNP/NPN                                                                     |
| Output function                                 |           | normally open / normally closed; (selectable)                               |
| Sensing range                                   | [mm]      | 2                                                                           |
| Housing                                         |           | threaded type                                                               |
| Dimensions                                      | [mm]      | M12 x 1 / L = 40                                                            |
| Electrical data                                 |           |                                                                             |
| Operating voltage                               | [V]       | 10...36 DC                                                                  |
| Protection class                                |           | III                                                                         |
| Reverse polarity protection                     |           | yes                                                                         |
| Outputs                                         |           |                                                                             |
| Electrical design                               |           | PNP/NPN                                                                     |
| Output function                                 |           | normally open / normally closed; (selectable)                               |
| Max. voltage drop switching output DC           | [V]       | 4.6                                                                         |
| Minimum load current                            | [mA]      | 4                                                                           |
| Max. leakage current                            | [mA]      | 0.5                                                                         |
| Permanent current rating of switching output DC | [mA]      | 150                                                                         |
| Switching frequency DC                          | [Hz]      | 1200                                                                        |
| 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] | 1...15                                                                      |
| Switch point drift                              | [% of Sr] | -10...10                                                                    |
| Operating conditions                            |           |                                                                             |
| Ambient temperature                             | [°C]      | -25...80                                                                    |

IF5943



Inductive sensor

IFB2002-FRKG/3M/PH

|            |       |
|------------|-------|
| Protection | IP 67 |
|------------|-------|

Tests / approvals

|      |              |         |
|------|--------------|---------|
| EMC  | EN 60947-5-2 |         |
|      | EN 55011     | class B |
| MTTF | [years]      | 2554    |

Mechanical data

|                    |      |                         |
|--------------------|------|-------------------------|
| Weight             | [g]  | 115.2                   |
| Housing            |      | threaded type           |
| Mounting           |      | flush mountable         |
| Dimensions         | [mm] | M12 x 1 / L = 40        |
| Thread designation |      | M12 x 1                 |
| Materials          |      | brass nickel-plated; PC |

Displays / operating elements

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

Accessories

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

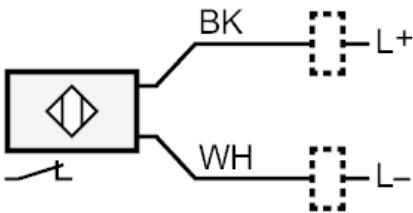
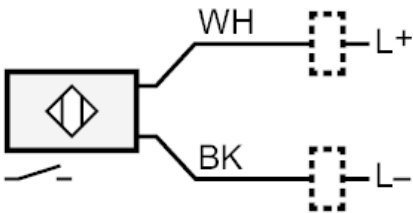
Remarks

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

Electrical connection

Cable: 3 m, PUR / PVC; 2 x 0.34 mm²

Connection



BK =  
WH =

Core colours :  
black  
white