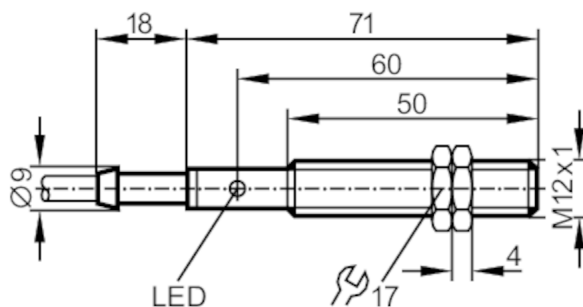


## Inductive sensor

IF-2004-FRKG/PH



## Product characteristics

|                    |                                               |
|--------------------|-----------------------------------------------|
| Electrical design  | PNP/NPN                                       |
| Output function    | normally open / normally closed; (selectable) |
| Sensing range [mm] | 4                                             |
| Housing            | threaded type                                 |
| Dimensions [mm]    | M12 x 1 / L = 71                              |

## Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...55 DC |
| Protection class            | II         |
| 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] | 400                                           |
| Switching frequency DC [Hz]                          | 1500                                          |
| Short-circuit protection                             | yes                                           |
| Type of short-circuit protection                     | pulsed                                        |
| Overload protection                                  | yes                                           |

## Detection zone

|                               |              |
|-------------------------------|--------------|
| Sensing range [mm]            | 4            |
| Real sensing range $S_r$ [mm] | $4 \pm 10\%$ |
| Operating distance [mm]       | 0...3.25     |

## Accuracy / deviations

|                                  |                                                                             |
|----------------------------------|-----------------------------------------------------------------------------|
| Correction factor                | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 |
| Hysteresis [% of $S_r$ ]         | 1...15                                                                      |
| Switch point drift [% of $S_r$ ] | -10...10                                                                    |

# IF5597



## Inductive sensor

IF-2004-FRKG/PH

### Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...80 |
| Protection          |      | IP 67    |

### Tests / approvals

|      |         |              |
|------|---------|--------------|
| EMC  |         | EN 60947-5-2 |
| MTTF | [years] | 1815         |

### Mechanical data

|                    |      |                     |
|--------------------|------|---------------------|
| Weight             | [g]  | 77.2                |
| Housing            |      | threaded type       |
| Mounting           |      | non-flush mountable |
| Dimensions         | [mm] | M12 x 1 / L = 71    |
| Thread designation |      | M12 x 1             |
| Materials          |      | PBT                 |

### Displays / operating elements

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

### Accessories

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

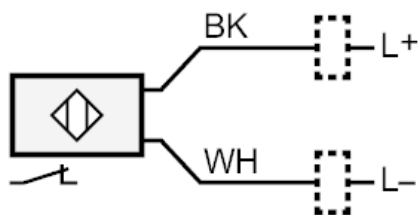
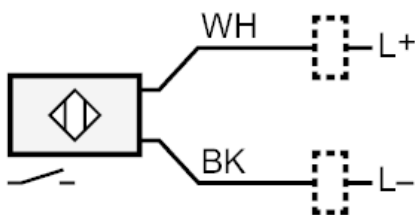
### Remarks

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

### Electrical connection

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

### Connection



BK =  
WH =

Core colours :  
black  
white