

# IF5597



## Inductive sensor

IF-2004-FRKG/PH



### 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 Sr | [mm] | 4 ± 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 Sr] | 1...15                                                                      |
| Switch point drift | [% of Sr] | -10...10                                                                    |

### Operating conditions

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

### Tests / approvals

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

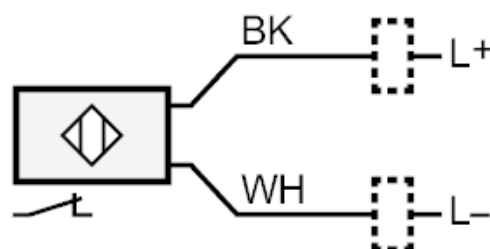
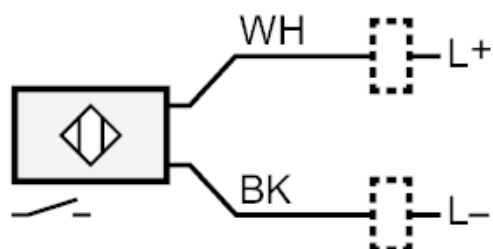
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| Mechanical data                                 |                  |                     |
|-------------------------------------------------|------------------|---------------------|
| Weight                                          | [g]              | 80                  |
| 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                                     |                  |                     |
| Accessories (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                                      |                  |                     |



Core colours :

BK = black  
WH = white