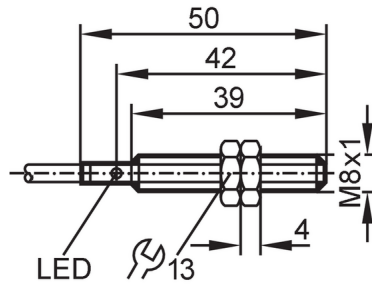


# IE5202



## Inductive sensor

IE-2002-FRKG/PH



### Product characteristics

|                    |                                      |
|--------------------|--------------------------------------|
| Electrical design  | PNP/NPN                              |
| Output function    | normally open / closed; (selectable) |
| Sensing range [mm] | 2                                    |
| Housing            | Threaded type                        |
| Dimensions [mm]    | M8 x 1 / L = 50                      |

### Electrical data

|                       |           |
|-----------------------|-----------|
| Operating voltage [V] | 5...36 DC |
| Protection class      | III       |

### Outputs

|  |                                      |
|--|--------------------------------------|
| Electrical design                                    | PNP/NPN                              |
| Output function                                      | normally open / closed; (selectable) |
| Max. voltage drop switching output DC [V]            | 4.6                                  |
| Minimum load current [mA]                            | 4                                    |
| Max. leakage current [mA]                            | 0.8                                  |
| Permanent current rating of switching output DC [mA] | 200                                  |
| Switching frequency DC [Hz]                          | 2000                                 |
| Short-circuit protection                             | yes                                  |
| Overload protection                                  | yes                                  |

### Monitoring range

|                            |          |
|----------------------------|----------|
| 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 / aluminum: 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    |

# IE5202



## Inductive sensor

IE-2002-FRKG/PH

### Tests / approvals

|      |                           |         |
|------|---------------------------|---------|
| EMC  | EN 61000-4-2 ESD          | 8 kV AD |
|      | EN 61000-4-3 HF radiated  | 3 V/m   |
|      | EN 61000-4-4 Burst        | 2 kV    |
|      | EN 61000-4-6 HF conducted | 3 V     |
|      | EN 55011                  | class B |
| MTTF | [years]                   | 3377    |

### Mechanical data

|                    |      |                     |
|--------------------|------|---------------------|
| Weight             | [g]  | 40.1                |
| Housing            |      | Threaded type       |
| Mounting           |      | non-flush mountable |
| Dimensions         | [mm] | M8 x 1 / L = 50     |
| Thread designation |      | M8 x 1              |
| Material           |      | PBT; TPE-E          |
| Tightening torque  | [Nm] | 0.25                |

### Displays / operating elements

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

### Accessories

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

### Remarks

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

### Electrical connection

Cable: 2 m, PUR / PVC; 2 x 0.14 mm<sup>2</sup>

### Connection



Core colors :  
 BK = black  
 WH = white