

# IE5212

## Inductive sensor

IE-2002-FRKG/6M/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 $S_r$ [mm] | $2 \pm 10\%$ |
| 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    |

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| 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    |

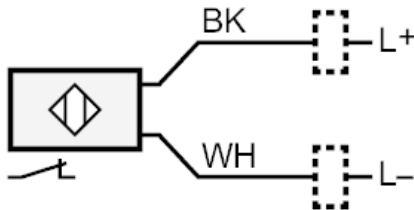
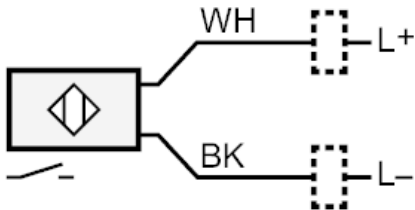
| Mechanical data    |      |                     |
|--------------------|------|---------------------|
| Weight             | [g]  | 99.4                |
| Housing            |      | Threaded type       |
| Mounting           |      | non-flush mountable |
| Dimensions         | [mm] | M8 x 1 / L = 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: 6 m, PUR / PVC; 2 x 0.14 mm² |  |  |
| Connection                          |  |  |



Core colors :  
BK = black  
WH = white