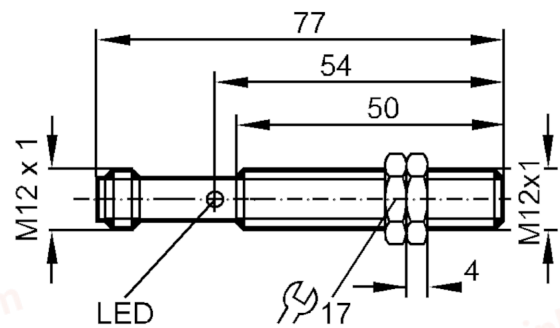


# IF0299

## Inductive sensor

IFA2002-ABOW/SL/BS-400B



### Product characteristics

|                 |      |                  |
|-----------------|------|------------------|
| Output function |      | normally open    |
| Sensing range   | [mm] | 2                |
| Housing         |      | threaded type    |
| Dimensions      | [mm] | M12 x 1 / L = 77 |

### Electrical data

|                             |      |             |
|-----------------------------|------|-------------|
| Frequency AC                | [Hz] | 45...65     |
| Operating voltage           | [V]  | 20...250 AC |
| Protection class            |      | I           |
| Reverse polarity protection |      | no          |

### Outputs

|                                                 |      |                       |
|-------------------------------------------------|------|-----------------------|
| Output function                                 |      | normally open         |
| Max. voltage drop switching output AC           | [V]  | 8.5                   |
| Minimum load current                            | [mA] | 8                     |
| Max. leakage current                            | [mA] | 1.7                   |
| Permanent current rating of switching output AC | [mA] | 200; (250 (...50 °C)) |
| Short-time current rating of switching output   | [mA] | 900; (20 ms / 0,5 Hz) |
| Switching frequency AC                          | [Hz] | 25                    |
| Short-circuit proof                             |      | no                    |
| Overload protection                             |      | no                    |

### Detection zone

|                       |      |          |
|-----------------------|------|----------|
| Sensing range         | [mm] | 2        |
| Real sensing range Sr | [mm] | 2 ± 10 % |
| Operating distance    | [mm] | 0...1.62 |

### Accuracy / deviations

|                    |           |          |
|--------------------|-----------|----------|
| Hysteresis         | [% of Sr] | 3...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          | 4 kV CD / 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]                   | 932                                                                                                                          |
| Mechanical data                                                                     |                           |                                                                                                                              |
| Weight                                                                              | [g]                       | 34.4                                                                                                                         |
| Housing                                                                             |                           | threaded type                                                                                                                |
| Mounting                                                                            |                           | flush mountable                                                                                                              |
| Dimensions                                                                          | [mm]                      | M12 x 1 / L = 77                                                                                                             |
| Thread designation                                                                  |                           | M12 x 1                                                                                                                      |
| Materials                                                                           |                           | housing: brass white bronze coated; sensing face: PBT-GF30 natural; Nuts: brass white bronze coated; LED window: PBT natural |
| Tightening torque                                                                   | [Nm]                      | A = 3 mm: 3,5 Nm; B: 7 Nm                                                                                                    |
| Displays / operating elements                                                       |                           |                                                                                                                              |
| Display                                                                             | switching status          | 1 x LED, red                                                                                                                 |
| Electrical connection                                                               |                           |                                                                                                                              |
| Required protection                                                                 |                           | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting                                                                     |
| Accessories                                                                         |                           |                                                                                                                              |
| Items supplied                                                                      |                           | lock nuts: 2                                                                                                                 |
| Remarks                                                                             |                           |                                                                                                                              |
| Remarks                                                                             |                           | Recommendation: Check the safe functioning of the unit after a short circuit.                                                |
| Pack quantity                                                                       |                           | 1 pcs.                                                                                                                       |
| Electrical connection - plug                                                        |                           |                                                                                                                              |
| Connector: 1 x M12; coding: B                                                       |                           |                                                                                                                              |
|  |                           |                                                                                                                              |



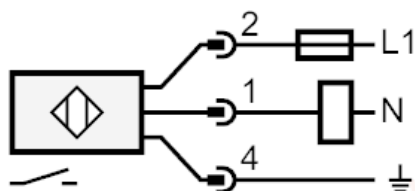
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## Inductive sensor

IFA2002-ABOW/SL/BS-400B



### Connection



Note miniature fuse to IEC60127-2 sheet 1  $\leq 2$  A fast acting

### Diagrams and graphs

#### Installation

