

# IF5750



## Inductive sensor

IFK3002UBPKG/SC/US-104-DPS



### Product characteristics

|                    |                  |
|--------------------|------------------|
| Electrical design  | PNP              |
| Output function    | normally open    |
| Sensing range [mm] | 2                |
| Housing            | Threaded type    |
| Dimensions [mm]    | M12 x 1 / L = 60 |

### Application

|                       |                       |
|-----------------------|-----------------------|
| System                | Magnetic-field immune |
| Magnetic-field immune | yes                   |

### Electrical data

|                             |            |
|-----------------------------|------------|
| Operating voltage [V]       | 10...36 DC |
| Current consumption [mA]    | 15; (24 V) |
| Protection class            | II         |
| Reverse polarity protection | yes        |

### Outputs

|                                                      |                    |
|------------------------------------------------------|--------------------|
| Electrical design                                    | PNP                |
| Output function                                      | normally open      |
| Max. voltage drop switching output DC [V]            | 2.5                |
| Permanent current rating of switching output DC [mA] | 250                |
| Switching frequency DC [Hz]                          | 1000               |
| Short-circuit protection                             | yes                |
| Type of short-circuit protection                     | yes (non-latching) |
| Overload protection                                  | yes                |

### Monitoring range

|                            |              |
|----------------------------|--------------|
| Sensing range [mm]         | 2            |
| Real sensing range Sr [mm] | $2 \pm 10\%$ |
| Operating distance [mm]    | 0...1.6      |

### Accuracy / deviations

|                   |                                                              |
|-------------------|--------------------------------------------------------------|
| Correction factor | steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 |
|-------------------|--------------------------------------------------------------|

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|                    |           |          |
|--------------------|-----------|----------|
| Hysteresis         | [% of Sr] | 1...15   |
| Switch-point drift | [% of Sr] | -10...10 |

### Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...70 |
| Protection          |      | IP 67    |

### Tests / approvals

|             |                |           |
|-------------|----------------|-----------|
| EMC         | EN 60947-5-2   |           |
|             | EN 55011       | class B   |
| MTTF        | [years]        | 1906      |
| UL approval | Ta             | 0...40 °C |
|             | Enclosure type | Type 1    |
|             | File number UL | E174191   |

### Mechanical data

|                    |      |                                                |
|--------------------|------|------------------------------------------------|
| Weight             | [g]  | 40                                             |
| Housing            |      | Threaded type                                  |
| Mounting           |      | flush mountable                                |
| Dimensions         | [mm] | M12 x 1 / L = 60                               |
| Thread designation |      | M12 x 1                                        |
| Material           |      | housing: brass PTFE coated; sensing face: PTFE |

### Displays / operating elements

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

### Accessories

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

### Remarks

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

### Electrical connection - plug

Connector: 1 x M12; coding: A



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### Connection

