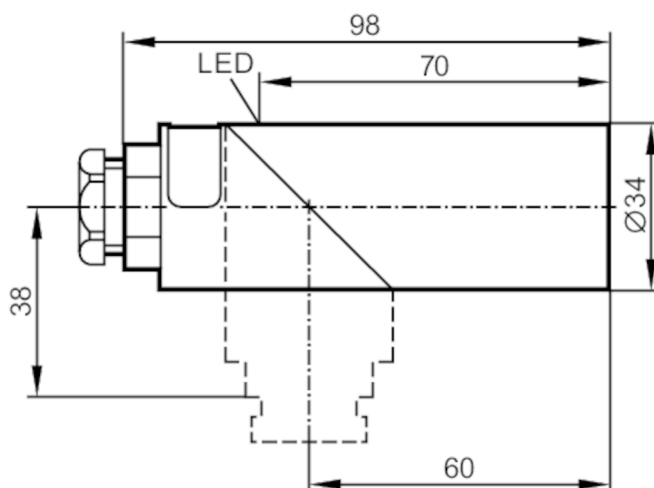




## Inductive sensor

IBE3020-FPKG



### 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 / normally closed; (selectable) |
| Max. voltage drop switching output DC           | [V]  | 2.5                                           |
| Permanent current rating of switching output DC | [mA] | 250                                           |
| Switching frequency DC                          | [Hz] | 350                                           |
| Short-circuit protection                        |      | yes                                           |
| Type of short-circuit protection                |      | pulsed                                        |
| Overload protection                             |      | yes                                           |

### Detection zone

|                          |      |                |
|--------------------------|------|----------------|
| Sensing range            | [mm] | 20             |
| Real sensing range $S_r$ | [mm] | $20 \pm 10 \%$ |
| Operating distance       | [mm] | 0...16.2       |

### Accuracy / deviations

|                    |               |                                                                             |
|--------------------|---------------|-----------------------------------------------------------------------------|
| Correction factor  |               | steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2 |
| Hysteresis         | [% of $S_r$ ] | 1...15                                                                      |
| Switch point drift | [% of $S_r$ ] | -10...10                                                                    |

### Operating conditions

|                     |      |          |
|---------------------|------|----------|
| Ambient temperature | [°C] | -25...80 |
| Protection          |      | IP 65    |



## Inductive sensor

IBE3020-FPKG

## Tests / approvals

|             |                |                   |
|-------------|----------------|-------------------|
| EMC         | EN 60947-5-2   |                   |
|             | EN 55011       | class B           |
| MTTF        | [years]        | 2450              |
| UL approval | Ta             | 0...40 °C         |
|             | Enclosure type | Type 1            |
|             | voltage supply | Unlimited Voltage |
|             | File number UL | E174191           |

## Mechanical data

|            |      |                     |
|------------|------|---------------------|
| Weight     | [g]  | 185                 |
| Housing    |      | cylindrical         |
| Mounting   |      | non-flush mountable |
| Dimensions | [mm] | Ø 34 / L = 98       |
| Materials  |      | PBT; end cap: PC    |

## Displays / operating elements

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

## Accessories

|                        |                    |
|------------------------|--------------------|
| Accessories (supplied) | Mounting clamps: 1 |
|------------------------|--------------------|

## Remarks

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

## Electrical connection

terminals: ...2.5 mm<sup>2</sup>; Cable sheath: Ø 7...13 mm; Cable gland: M20 X 1.5

## Connection

