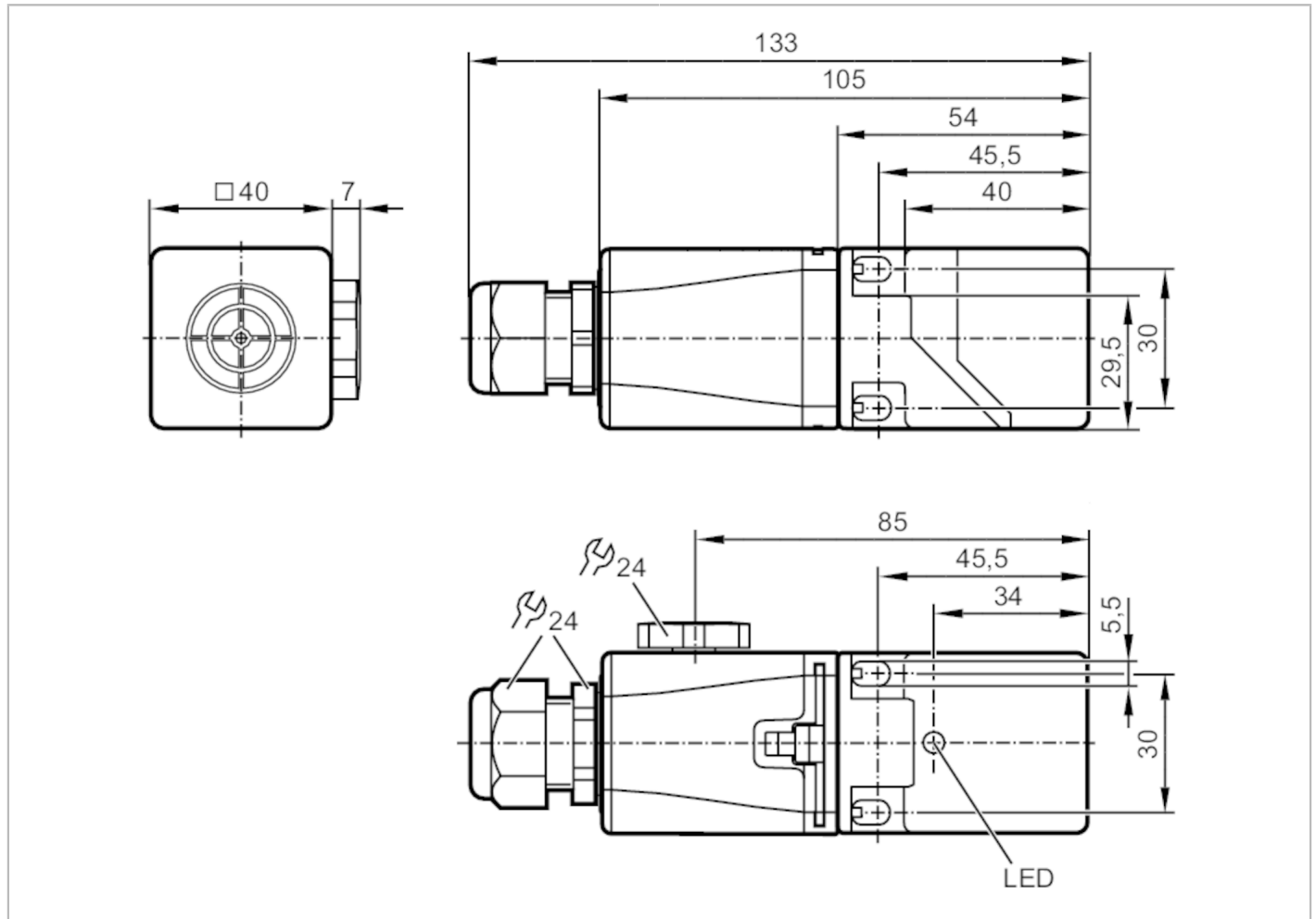


IM001A



Inductive sensor

IME2020BFBOA/3D



| Product characteristics | |
|---|---|
| Output function | normally open / normally closed; (selectable) |
| Sensing range [mm] | 20 |
| Housing | rectangular |
| Dimensions [mm] | 40 x 40 x 105 |
| Electrical data | |
| Operating voltage [V] | 20...250 AC/DC |
| Protection class | II |
| Reverse polarity protection | no |
| Outputs | |
| Output function | normally open / normally closed; (selectable) |
| Max. voltage drop switching output DC [V] | 6 |
| Max. voltage drop switching output AC [V] | 6.5 |
| Minimum load current [mA] | 5 |
| Max. leakage current [mA] | 2.5 (250 V AC) / 1.3 (130 V AC) / 0.8 (24 V DC) |

IM001A



Inductive sensor

IME2020BFBOA/3D

| | |
|--|--|
| Permanent current rating of switching output AC [mA] | 150 |
| Permanent current rating of switching output DC [mA] | 100 |
| Short-time current rating of switching output [mA] | 2200; (20 ms / 0,5 Hz) |
| Switching frequency AC [Hz] | 10 |
| Switching frequency DC [Hz] | 10 |
| Notes on switching frequency [Hz] | only for resistive loads; 2 Hz for utilisation category AC-140 |
| Short-circuit proof | no |
| Overload protection | no |

| | |
|----------------------------|-----------|
| Detection zone | |
| Sensing range [mm] | 20 |
| Real sensing range Sr [mm] | 20 ± 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 Sr] | 1...20 |
| Switch point drift [% of Sr] | -10...10 |

| | |
|-----------------------------|--------------|
| Operating conditions | |
| Ambient temperature [°C] | -20...60 |
| Protection | IP 65; IP 67 |

| | |
|--------------------------|-----------------------------|
| Tests / approvals | |
| ATEX marking | II 3D Ex tc IIIC T95°C Dc X |
| EMC | EN 60947-5-2 |
| MTTF [years] | 567 |

| | |
|------------------------|-------------------------|
| Mechanical data | |
| Weight [g] | 245.5 |
| Housing | rectangular |
| Mounting | flush mountable |
| Dimensions [mm] | 40 x 40 x 105 |
| Materials | PC; PA; stainless steel |

| | |
|--------------------------------------|----------------------------------|
| Displays / operating elements | |
| Display | switching status 1 x LED, yellow |

| | |
|------------------------------|--|
| Electrical connection | |
| Required protection | miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting; Place the fuse outside the hazardous area. |

| | |
|----------------|--|
| Remarks | |
| Remarks | Recommendation: Check the safe functioning of the unit after a short circuit. 5 positions of the active zone possible |
| Pack quantity | 1 pcs. |

IM001A



Inductive sensor

IME2020BFBOA/3D

Electrical connection

terminals: 0.34...2.5 mm²; Cable sheath: Ø 5...9 mm

Connection

