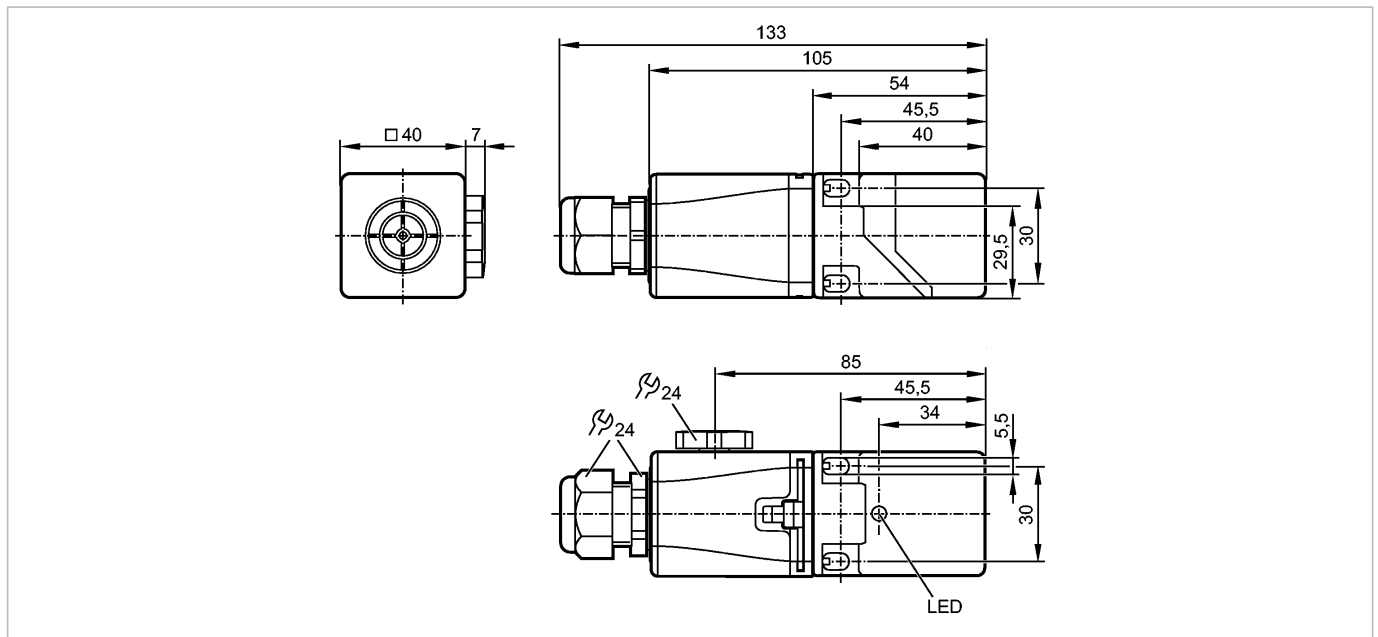


IM002A

IME2040-FBOA/3D

Inductive sensors



Product characteristics

Inductive sensor

Rectangular, plastics

Terminals

ATEX approval

Group II, category 3D

Sensing range 40 mm; [nf] non-flush mountable

Electrical data

Electrical design		AC/DC
Operating voltage	[V]	20...250 AC/DC
Protection class		II
Reverse polarity protection		no

Outputs

Output function		normally open / closed programmable
Voltage drop	[V]	< 6.5 AC / < 6 DC
Minimum load current	[mA]	5
Leakage current	[mA]	< 2.5 (250 V AC) / < 1.3 (130 V AC) / < 0.8 (24 V DC)
Current rating		
- Current rating (continuous)	[mA]	150 AC / 100 DC
- Current rating (peak)	[mA]	î: 2.2 A (20 ms / 0.5 Hz)
Short-circuit proof		no
Overload protection		no
Switching frequency	[Hz]	10; only for resistive loads; 2 Hz for utilisation category AC-140

Monitoring range

Sensing range	[mm]	40
Real sensing range (Sr)	[mm]	40 ± 10 %
Operating distance	[mm]	0...32.4

Accuracy / deviations

IM002A

IME2040-FBOA/3D

Inductive sensors

Correction factors	mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.4 / aluminium approx. 0.3 / copper approx. 0.2	
Hysteresis	[% of Sr]	1...20
Switch-point drift	[% of Sr]	-10...10

Environment		
Ambient temperature	[°C]	-20...60
Protection		IP 65 / IP 67

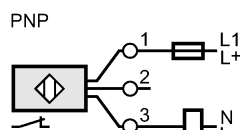
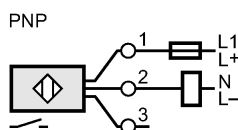
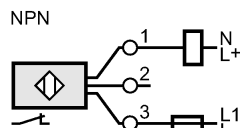
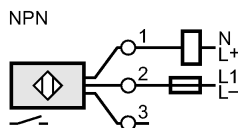
Tests / approvals		
Marking of the unit	Ⓔ II 3D Ex tc IIIC T95°C Dc X	
EMC	EN 60947-5-2	2008-08
MTTF	[Years]	554

Mechanical data		
Mounting	non-flush mountable	
Housing materials	PC; PA; stainless steel	
Weight	[kg]	0.246

Displays / operating elements		
Output status indication	LED	yellow

Electrical connection		
Connection	terminals 0.34 up to 2.5 mm ² ; cable diameter 5...9 mm	

Wiring



Note: miniature fuse to IEC60127-2 sheet 1, ≤ 2 A (fast acting)
Place the fuse outside the hazardous area.

Remarks		
Remarks	Recommendation: check the unit for reliable function after a short circuit. 5 positions of the active zone possible	
Pack quantity	[piece]	1