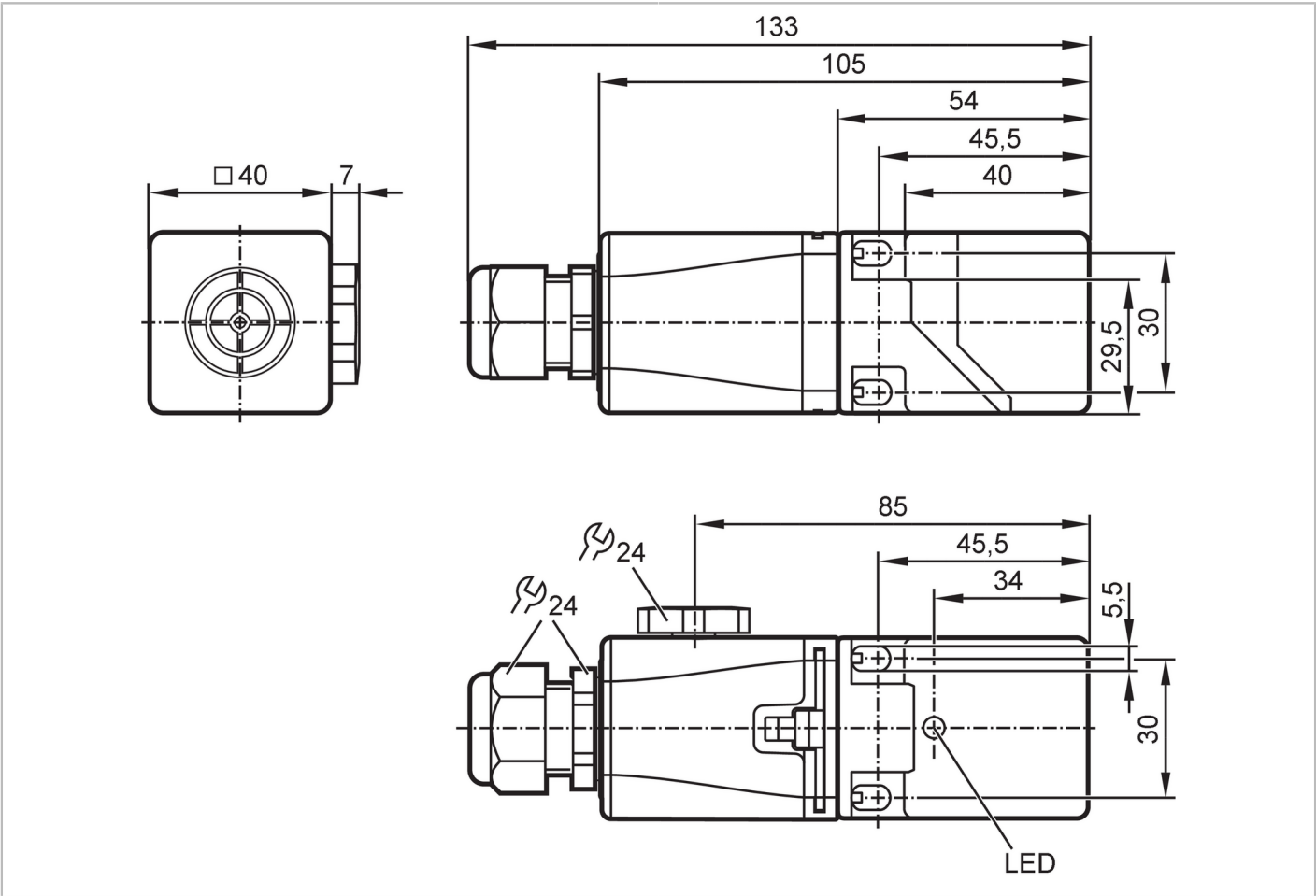


IM002A



Inductive sensor

IME2040-FBOA/3D



Product characteristics

Output function		normally open / closed; (selectable)
Sensing range	[mm]	40
Housing		rectangular
Dimensions	[mm]	40 x 40 x 105

Application

Application	For applications in hazardous areas
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Electrical data

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

Outputs

Output function		normally open / 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)

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Inductive sensor

IME2040-FBOA/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 utilization category AC-140
Short-circuit proof		no
Overload protection		no

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

Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 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		
Approval		BVS 20 ATEX E 056X; IECEx BVS 20.0043X
ATEX marking		 II 3D Ex tc IIIC T95°C Dc
EMC		EN 60947-5-2
MTTF	[years]	554

Mechanical data		
Weight	[g]	253
Housing		rectangular
Mounting		non-flush mountable
Dimensions	[mm]	40 x 40 x 105
Material		housing: PC black; sensing face: PC black; connection module: PA black; Mounting adapter: PC black; screw: steel galvanized

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		
Pack quantity		1 pcs.

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Electrical connection

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

Connection

