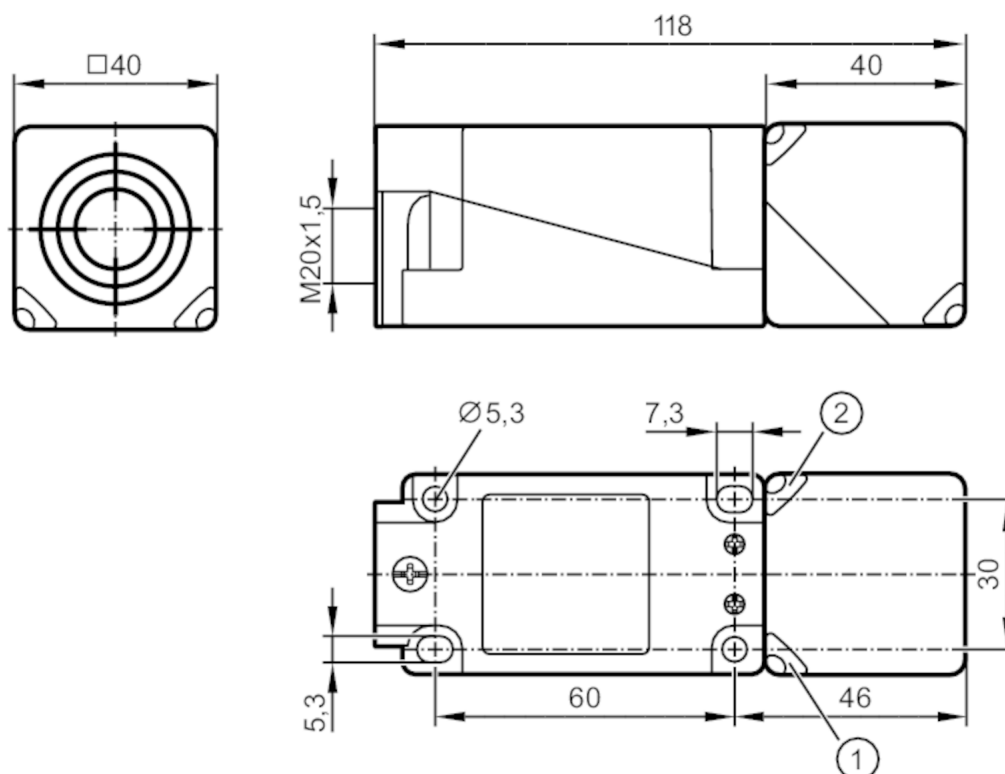


Inductive sensor

IVE2020-FBKA



- 1 LED green
2 LED yellow



Product characteristics

Output function		normally open / normally closed; (selectable)
Sensing range	[mm]	20
Housing		rectangular
Dimensions	[mm]	40 x 40 x 118

Electrical data

Operating voltage	[V]	24...250 AC / 24...230 DC
Protection class		II
Reverse polarity protection		yes

Outputs

Output function		normally open / normally closed; (selectable)
Max. voltage drop switching output DC	[V]	5
Max. voltage drop switching output AC	[V]	8
Minimum load current	[mA]	5
Max. leakage current	[mA]	1.5
Permanent current rating of switching output AC	[mA]	500
Permanent current rating of switching output DC	[mA]	500



Inductive sensor

IVE2020-FBKA

Switching frequency AC	[Hz]	30
Switching frequency DC	[Hz]	100
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: 0.4 / copper: 0.3
Hysteresis	[% of S_r]	1...10
Switch point drift	[% of S_r]	-10...10

Operating conditions

Ambient temperature	[°C]	-25...85
Note on ambient temperature		for UL application: ...70 °C
Max. height above sea level	[m]	2000
Protection		IP 67

Tests / approvals

EMC	EN 61000-4-2 ESD	8 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	15 V
	EN 55011	Class A
Vibration resistance	EN 60068-2-6 Fc	10 g (10...2000 Hz) / 50 sweep cycles, 1 octave per minute, in 3 axes
Shock resistance	EN 60068-2-27 Ea	30 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes
Fast temperature change	EN 60068-2-14 Na	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles
MTTF	[years]	272.6
UL approval	Ta	0...70 °C
	Enclosure type	Type 1
	File number UL	E174191
Notes		For use in NFPA 79 applications only

Mechanical data

Weight	[g]	268
Housing		rectangular
Mounting		flush mountable
Dimensions	[mm]	40 x 40 x 118
Materials		PA 6.6; diecast zinc epoxy coated; sensing face: PA 6.6; LED window: PA; screws: stainless steel stainless steel (1.4305 / 303)

IV0009



Inductive sensor

IVE2020-FBKA

Displays / operating elements

Display	switching status	1 x LED, yellow
	operation	1 x LED, green

Electrical connection

Required protection	$\leq 3\text{ A}$ und $\geq 300\text{ V AC/DC}$
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Remarks

Remarks	5 positions of the active zone possible
	Cable gland (E11270) to be ordered separately
Pack quantity	1 pcs.

Electrical connection

terminals: ...2.5 mm²; Cable gland: M20 X 1.5

Connection

