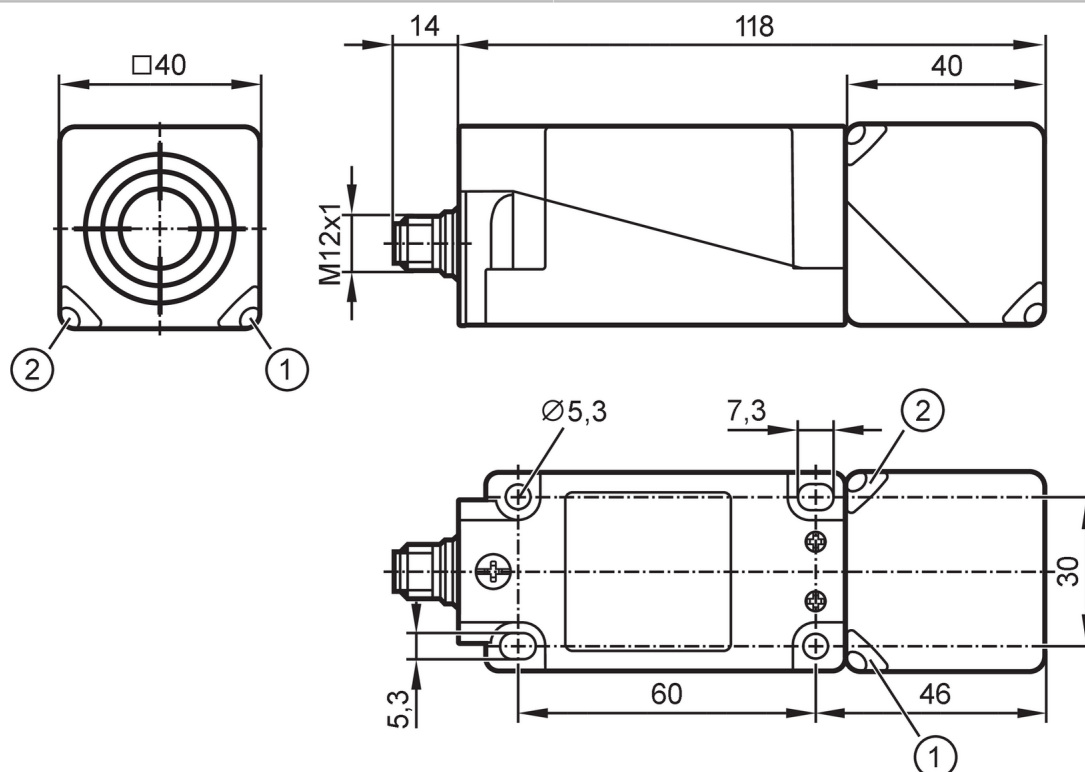


IV5060



Inductive sensor

IVE3020UBPKG/US



- 1 LED green
- 2 LED yellow



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	20
Housing	rectangular
Dimensions [mm]	40 x 40 x 118

Application

Special feature	Magnetic-field immune
Magnetic-field immune	yes

Electrical data

Operating voltage [V]	10...30 DC; (UL - Class 2 source required ; "supply limited voltage / current" acc. to UL)
Current consumption [mA]	20; (24 V)
Protection class	II
Reverse polarity protection	yes

Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	3
Permanent current rating of switching output DC [mA]	200

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Switching frequency DC	[Hz]	5
Short-circuit protection		yes
Type of short-circuit protection		yes (non-latching)
Overload protection		yes

Monitoring range		
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 / aluminum: 0.3 / copper: 0.3
Hysteresis	[% of Sr]	1...10
Switch-point drift	[% of Sr]	-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 68; IP 69K

Tests / approvals		
EMC	EN 61000-4-2 ESD	4 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	10 V
	EN 55011	class B
Vibration resistance	EN 60682-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-29 Eb	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes
Fast temperature changes	EN 60068-2-14 Na	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles
MTTF	[years]	582.6
UL approval	Ta	0...70 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	File number UL	E174191

Mechanical data		
Weight	[g]	253
Housing		rectangular
Mounting		flush mountable
Dimensions	[mm]	40 x 40 x 118
Material		PA 6.6; diecast zinc epoxy coated; sensing face: PA 6.6; LED window: PA; lower part: PA 6.6; screws: stainless steel

Displays / operating elements		
Display	Switching status	1 x LED, yellow
	Power	1 x LED, green

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Remarks	
Remarks	5 positions of the active zone possible
	For use in NFPA 79 Applications only
Pack quantity	1 pcs.

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 4



Connection

