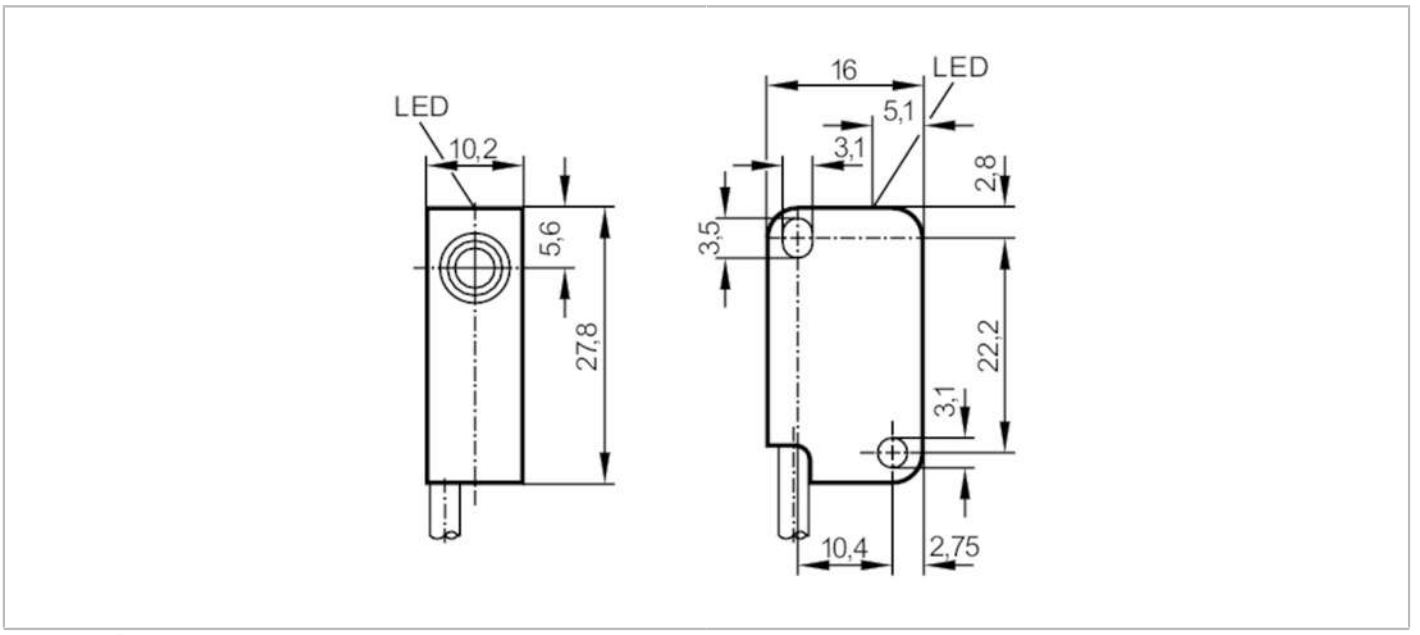
IS5031

Inductive sensor

IS-3003-BPKG



Product characteristics		
Electrical design		PNP
Output function		normally open
Sensing range	[mm]	3
Housing		rectangular
Dimensions	[mm]	28 x 10 x 16
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 15
Protection class		III
Reverse polarity protection		yes
Outputs		
Electrical design		PNP
Output function		normally open
Max. voltage drop switching output DC	[V]	2.5
Max. leakage current	[mA]	0.5
Permanent current rating of switching output DC	[mA]	200
Short-time current rating of switching output	[mA]	200
Switching frequency DC	[Hz]	100
Short-circuit protection		yes
Overload protection		yes
Detection zone		
Sensing range	[mm]	3
Real sensing range Sr	[mm]	3 ± 10 %

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Operating distance	[mm]	0...2.43	
Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2	
Hysteresis	[% of Sr]	1...15	
Switch point drift	[% of Sr]	-10...20	
Operating conditions			
Ambient temperature	[°C]	0...50	
Protection		IP 67	
Tests / approvals			
EMC		EN 61000-4-2 ESD	-- CD / 8 kV AD
		EN 61000-4-3 HF radiated	10 V/m
		EN 61000-4-4 Burst	2 kV
		EN 61000-4-5 Surge	0,5 kV
		EN 61000-4-6 HF conducted	10 V
		EN 55011	class B
Vibration resistance		EN 60947-5-2	
Shock resistance		EN 60947-5-2	
MTTF	[years]	3044	
UL approval		Ta	0...50 °C
		Enclosure type	Type 1
		power supply	Class 2
		File number UL	E174191
Mechanical data			
Weight	[g]	44.1	
Housing		rectangular	
Mounting		non-flush mountable	
Dimensions	[mm]	28 x 10 x 16	
Materials		cover: PBT; housing: PBT	
Tightening torque	[Nm]	< 0.5; (with washer)	
Displays / operating elements			
Display		switching status	1 x LED, yellow
Remarks			
Pack quantity		1 pcs.	

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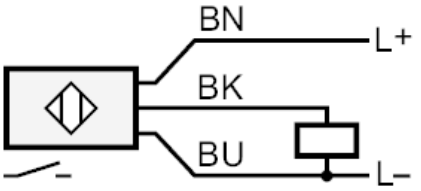
Electrical connection

Cable: 2 m, PVC, Ø 3.5 mm; 3 x 0.14 mm²

Connection



	Core colours :
BK =	black
BN =	brown
BU =	blue