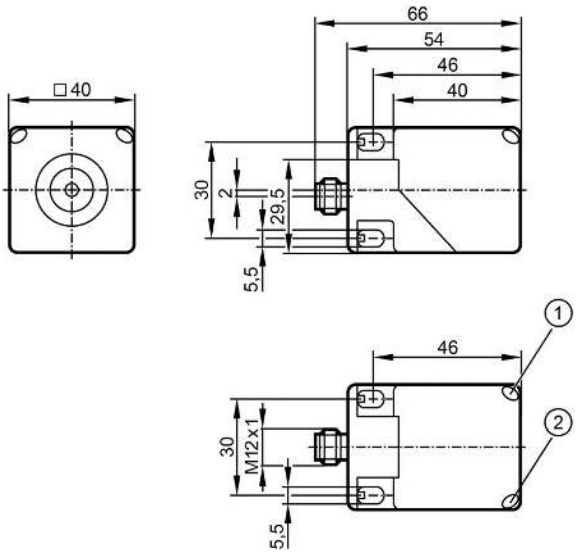
Inductive sensor
Order number: 100051
Type IM5163

Rectangular, plastics
M12 connector
Sensing face in 5 postions selectable
Sensing range 20 mm [f]
flush mountable



Made in Germany

Electrical data

Electrical design		DC PNP
Operating voltage	[V]	10...36 DC
Current consumption	[mA]	< 20
Protection class		II
Reverse polarity protection		yes

Outputs

Output function		normally open
Voltage drop	[V]	< 2,5
Leakage current	[mA]	< 0,1
Current rating	[mA]	200
Short-circuit protection		pulsed
Overload protection		yes
Switching frequency	[Hz]	100

Range

Sensing range	[mm]	20
Real sensing range (Sr)	[mm]	20 ± 10 %
Operating distance	[mm]	0...16,2
Correction factors		mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.4 / Al approx. 0.4 / Cu approx. 0.3
Hysteresis	[% of Sr]	1...20
Switch-point drift	[% of Sr]	-10...10

Enviroment

Ambient temperature	[°C]	-25...70
Protection		IP 67

Tests / approvals

EMC	EN 61000-4-2 ESD:	8 kV CD / 6 kV AD
	EN 61000-4-3 HF radiated:	10 V/m (80...1000 MHz)
	EN 61000-4-4 Burst:	2 kV
	EN 61000-4-5 Surge:	0,5 kV (line to line, Ri: 2 Ohm)
	EN 61000-4-6 HF conducted:	10 V (0,15...80 MHz)

	EN 55011:	class B
MTTF	[Years]	1.590

Mechanical data

Mounting		flush mountable
Housing materials		PA (polyamide)
Weight	[kg]	0,144

Displays / Operating elements

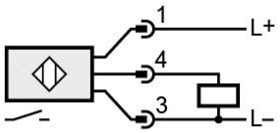
Output status indicatrion LED	yellow
Operating LED	green

Electrical connection

Connection	M12 connector; rotatable, locking, gold-plated contacts

Wiring





Accessories

Accessories (optional)	socket e.g. order number: 100163