


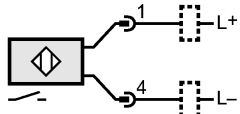
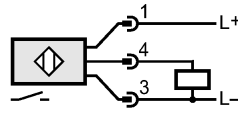
Product characteristics

Inductive sensor
Metal thread M18 x 1
Quick disconnect
e1 type approval
Increased sensing range
gold-plated contacts
Sensing range 12 mm; [nfl] non-flush mountable

Electrical data	
Electrical design	3-wire DC PNP; 2-wire DC PNP/NPN
Operating voltage [V]	10...36 DC
Current consumption [mA]	< 10 only in 3-wire operation
Protection class	II
Reverse polarity protection	yes
Outputs	
Output function	normally open
Voltage drop [V]	< 2.5
Minimum load current [mA]	> 2; only in 2-wire operation
Leakage current [mA]	< 0.5; only in 2-wire operation
Current rating [mA]	100
Short-circuit protection	yes (non-latching)
Overload protection	yes
Switching frequency [Hz]	200
Monitoring range	
Sensing range [mm]	12
Real sensing range (Sr) [mm]	12 ± 10 %
Operating distance [mm]	0...9.72
Accuracy / deviations	
Correction factors	mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.5 / aluminium approx. 0.46 / Cu approx. 0.4
Hysteresis [% of Sr]	1...20
Switch-point drift [% of Sr]	-10...10
Environment	
Ambient temperature [°C]	-40...85
Protection	IP 67 / IP 69K

Tests / approvals	
EMC	Automotive area Noise emission and noise interference according to the automotive directive 95/54/EC (e1 type approval) Noise interference according to DIN ISO 11452-2: 100 V/m

**IGM201 - Inductive sensor - eclass: 27270101 / 27-27-01-01**

	<p>Conducted interference according to ISO 7637-2</p> <table border="0"> <tr> <td>Pulse</td> <td>1 2 3a 3b 4 5</td> </tr> <tr> <td>Severity level</td> <td>IV IV IV IV IV IV</td> </tr> <tr> <td>Failure criterion</td> <td>C C A A A C</td> </tr> <tr> <td>EN 61000-4-2 ESD:</td> <td>4 kV CD / 8 kV AD</td> </tr> <tr> <td>EN 61000-4-3 HF radiated:</td> <td>10 V/m</td> </tr> <tr> <td>EN 61000-4-4 Burst:</td> <td>2 kV</td> </tr> <tr> <td>EN 61000-4-5 Surge:</td> <td>0.5 kV (line to line, Ri: 20hm)</td> </tr> <tr> <td>EN 61000-4-6 HF conducted:</td> <td>10 V</td> </tr> <tr> <td>EN 55011:</td> <td>class B</td> </tr> </table>	Pulse	1 2 3a 3b 4 5	Severity level	IV IV IV IV IV IV	Failure criterion	C C A A A C	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 61000-4-5 Surge:	0.5 kV (line to line, Ri: 20hm)	EN 61000-4-6 HF conducted:	10 V	EN 55011:	class B
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Vibration resistance	<p>EN 60068-2-6 Fc</p> <p>20 g (10...3000 Hz) / -20°C and 50°C</p> <p>50 cycles per frequency, 1 octave per minute in each of 3 mutually perpendicular axes</p>																		
Shock resistance	<p>EN 60068-2-27 Ea</p> <p>100 g (11 ms half sine; 3 shocks in each direction along the three coordinate axes) / -40°C and 85°C</p>																		
Continuous shock resistance	<p>EN 60068-2-29 Eb</p> <p>40 g (6 ms; 4000 shocks in each direction along the three coordinate axes) / -20°C and 50°C</p>																		
Fast temperature changes	<p>EN 60068-2-14 Na</p> <p>TA = -40°C; TB = 85°C; t1 = 30 min; t2 = &lt; 10 s; 50 cycles</p>																		
Salt spray test	<p>EN 60068-2-52 Kb</p> <p>severity level 5 (4 test cycles)</p>																		
MTTF [Years]	1143																		
Mechanical data																			
Mounting	non-flush mountable																		
Housing materials	housing: stainless steel; active face: PBT; lock nuts: brass																		
Weight [kg]	0.054																		
Displays / operating elements																			
Output status indication LED	yellow (4 x 90°)																		
Electrical connection																			
Connection	M12 connector; gold-plated contacts																		
<b>Wiring</b>																			
	 																		
Accessories																			
Accessories (included)	2 lock nuts																		
Remarks																			
Pack quantity [piece]	1																		