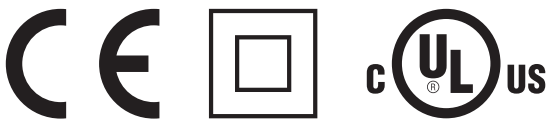


Inductive sensor

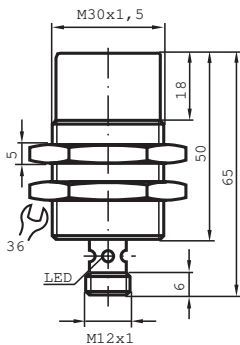
NRN30-30GH50-E2-V1



- Reduction factor = 1
- Magnetic field resistant
- Stainless steel housing
- Front face FDA conform



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	30 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 24.3 mm
Reduction factor r_{Al}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		1
Reduction factor r_{316}		1
Output type		3-wire

Nominal ratings

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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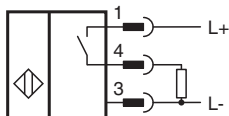
Singapore: +65 6779 9091
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PEPPERL+FUCHS

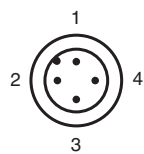
Technical Data

Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 300 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2 V
Rated insulation voltage	U_{BIS}	60 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	≤ 14 mA
Time delay before availability	t_v	max. 15 ms
Constant magnetic field	B	200 mT
Alternating magnetic field	B	200 mT
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		1140.2 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
Approvals and certificates		
Protection class		II
Rated insulation voltage	U_i	60 V
Rated impulse withstand voltage	U_{imp}	800 V
UL approval		cULus Listed, Type 1 enclosure Class 2 power source
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1, 4-pin
Housing material		stainless steel 1.4404 / AISI 316L
Sensing face		LCP, (conforms with FDA)
Degree of protection		IP67
Mass		134 g
General information		
Scope of delivery		Supplied with 2 nuts

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

Accessories

	BF 30	Mounting flange, 30 mm
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Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 292542_eng.pdf