

Inductive sensor

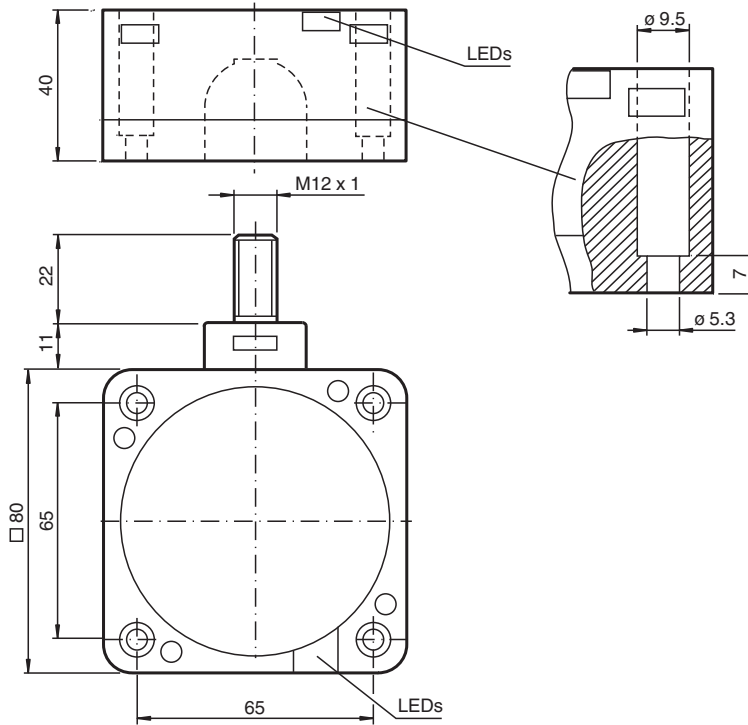
NRN75-FP-E2-C-P3-V1



- 75 mm non-flush
- Reduction factor = 1
- Weld Immune
- Short-term interference suppression magnetic fields



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	75 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 55 mm
Reduction factor r_{Al}		1
Reduction factor r_{Cu}		1
Reduction factor r_{304}		1

Release date: 2022-06-22 Date of issue: 2022-06-22 Filename: 183429_eng.pdf

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

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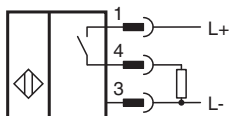
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PF PEPPERL+FUCHS

Technical Data

Reduction factor r_{S137}		1
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1 Hz
Hysteresis	H	typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Temperature drift		± 10 % at 0 ... 50 °C (32 ... 122 °F) ± 20 % at -25 ... 0 °C (-13 ... 32 °F) and 50 ... 70 °C (122 ... 158 °F)
Rated insulation voltage	U_{BIS}	50 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA
No-load supply current	I_0	≤ 20 mA
Time delay before availability	t_v	≤ 300 ms
Constant magnetic field	B	5 mT
Alternating magnetic field	B	5 mT
Tuning-out		typ. 50 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		944 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤ 36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		PBT/metal
Sensing face		PBT, PTFE coated
Housing base		PBT
Degree of protection		IP68

Connection



Connection Assignment



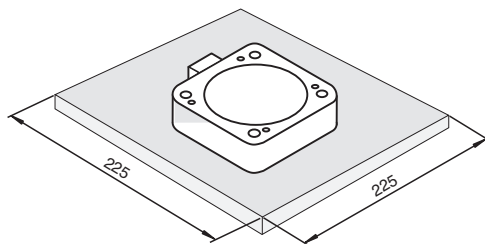
Wire colors in accordance with EN 60947-5-2

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

Mounting

These sensors are also suitable for mounting on metal. The stated switching distance is achieved with a metal base plate, min. dimensions 225 mm x 225 mm.

When mounted on a non-metallic base plate the switching distance is reduced by approx. 10 %.





Accessories

	<p>V1-G-2M-PUR</p>	<p>Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey</p>
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Accessories

	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
	V1-G-OR2M-POC	Female cordset single-ended M12 straight A-coded, 4-pin, POC cable welding-bead resistant orange, suitable for robotic applications, torsion resistant, oil resistant, molecularly cross-linked

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