

Inductive sensor

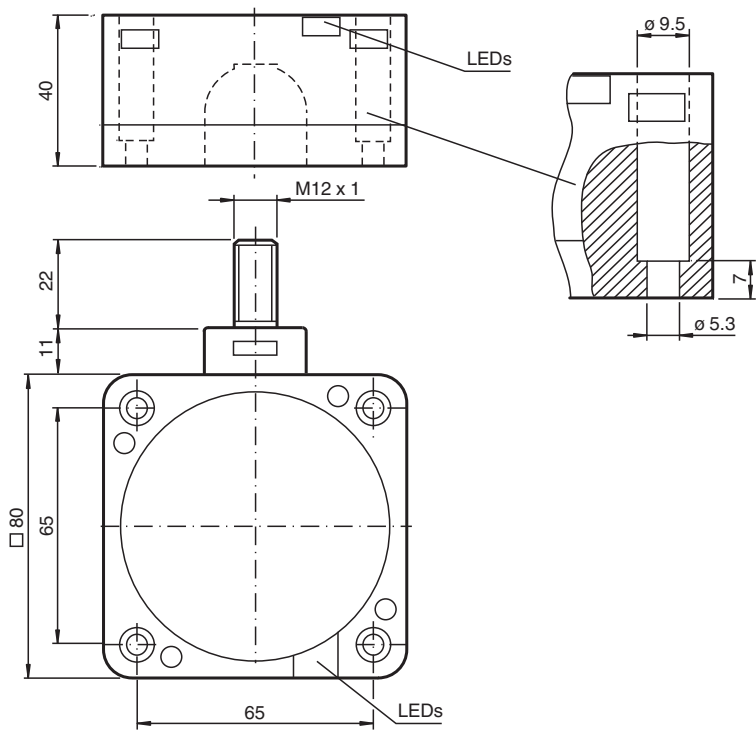
NRN75-FP-A2-C-P3-V1



- 75 mm non-flush
- Reduction factor = 1
- Weld Immune



Dimensions



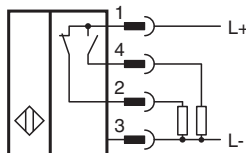
Technical Data

General specifications		
Switching function		complementary
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

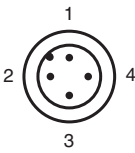
Technical Data

Reduction factor r_{304}		1
Reduction factor r_{Si37}		1
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
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
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		824 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		0 ... 50 °C (32 ... 122 °F) (± 10 % changing operating distance) -25 ... 70 °C (-13 ... 158 °F) (± 20 % changing operating distance)
Mechanical specifications		
Connection type		Connector M12 x 1 , 4-pin
Housing material		PBT/metal
Sensing face		PBT, PTFE coated
Housing base		PBT
Degree of protection		IP68

Connection



Connection Assignment

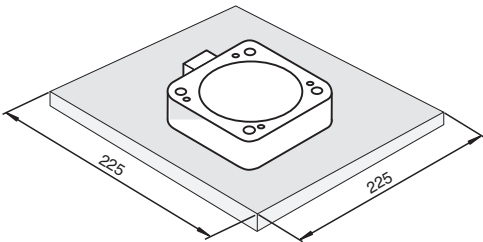


Wire colors in accordance with EN 60947-5-2

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

	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
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Release date: 2020-03-23 Date of issue: 2020-03-30 Filename: 187796_eng.pdf

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	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable
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