

Model Number

NRN75-FP-A2-P3

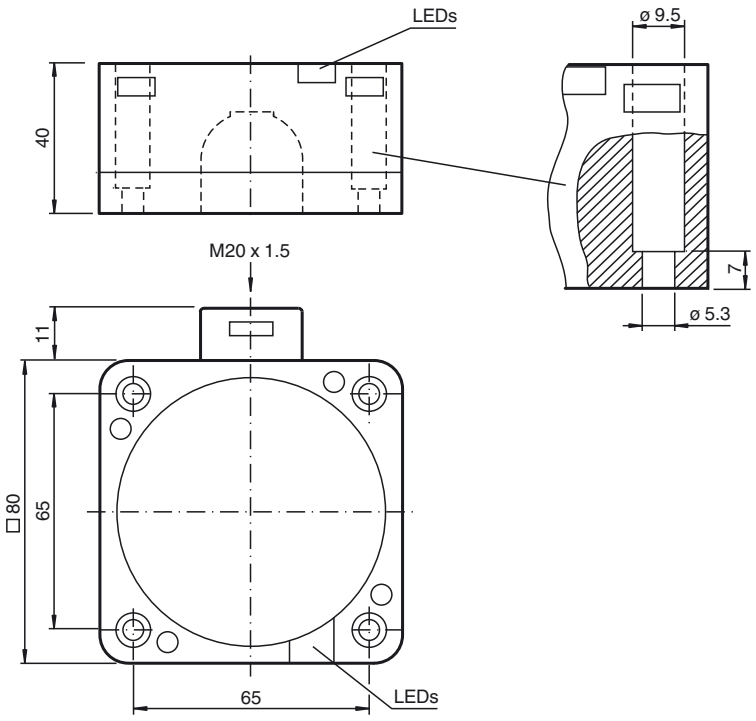
Features

- **75 mm non-flush**
- **Reduction factor = 1**

Technical Data

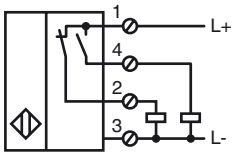
General specifications			
Switching element function		PNP	NO/NC
Rated operating distance	s_n	75 mm	
Installation		non-flush	
Output polarity		DC	
Assured operating distance	s_a	0 ... 55 mm	
Reduction factor r_{Al}		1	
Reduction factor r_{Cu}		1	
Reduction factor r_{304}		1	
Reduction factor r_{St37}		1	
Nominal ratings			
Operating voltage	U_B	10 ... 30 V DC	
Switching frequency	f	0 ... 50 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 %	
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		screw terminals	
Information for connection		A maximum of two conductors with the same core cross-section may be mounted on one terminal connection! tightening torque 1.2 Nm + 10 %	
Core cross-section		up to 2.5 mm^2	
Minimum core cross-section		without wire end ferrule 0.5 mm^2 , with connector sleeves 0.34 mm^2	
Maximum core cross-section		without wire end ferrule 2.5 mm^2 , with connector sleeves 1.5 mm^2	
Housing material		PBT	
Sensing face		PBT	
Housing base		aluminum painted	
Degree of protection		IP68	
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	

Dimensions



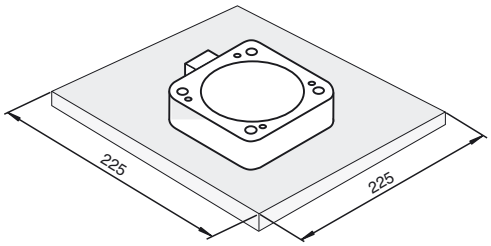
Release date: 2016-09-29 11:31 Date of issue: 2016-10-10 242779_eng.xml

Electrical Connection



Installation Hint

These sensors are also suitable for mounting on metal. The stated switching distance ia 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 %.



Release date: 2016-09-29 11:31 Date of issue: 2016-10-10 242779_eng.xml