Inductive sensor

NBB25-FPS-A2

- 25 mm flush
- 4-wire DC

CE UK CA

Dimensions
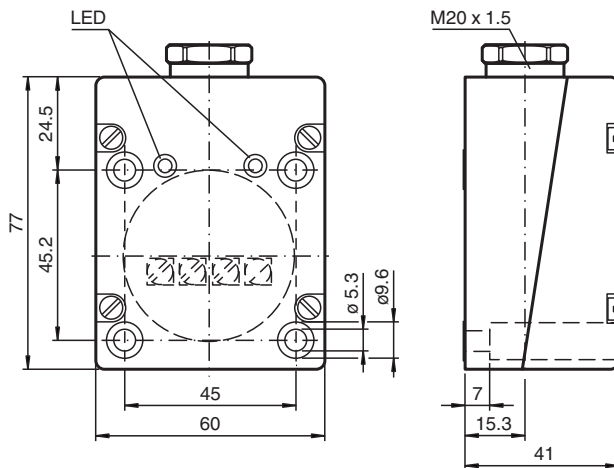
Technical Data

General specifications

Switching function		complementary
Output type		PNP
Rated operating distance	s_n	25 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 15.75 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 75 mm x 75 mm x 1 mm
Reduction factor r_{Al}		0.5
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.5
Output type		4-wire

Nominal ratings

Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 70 Hz
Hysteresis	H	0.05 ... 5.5 mm

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

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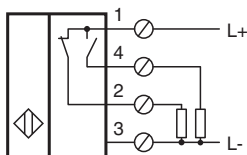Germany: +49 621 776 1111
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Technical Data

Reverse polarity protection		yes
Short-circuit protection		yes
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		10 %
Voltage drop	U_d	≤ 2.5 V
Repeat accuracy	R	1 mm
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 0.01 mA
No-load supply current	I_0	≤ 20 mA
Time delay before availability	t_v	≤ 100 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		1390 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		
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		screw terminals
Core cross section		up to 2.5 mm²
Housing material		PBT
Sensing face		PBT
Housing base		PBT
Degree of protection		IP65
Mass		270 g

Connection

Release date: 2022-06-30 Date of issue: 2022-06-30 Filename: 236511_eng.pdf

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Installation Conditions

These sensors are especially designed for embeddable mounting in conveyor floors. Due to its precise location in metal base plates the sensor is afforded a high degree of mechanical protection. No clearance is required between the sensor and the base plate, avoiding the need for protective guarding to prevent possible foot injury.

The large sensing range ensures positive detection, and thus provides consistent control and monitoring of the conveyor.

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