



Model Number

NBB25-FPS-A2

Features

- 25 mm flush
- 4-wire DC

Technical Data

General specifications

Switching element function	PNP	NO/NC
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

Nominal ratings

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

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 mm ²
Housing material	PBT
Sensing face	PBT
Housing base	PBT
Degree of protection	IP65
Mass	270 g

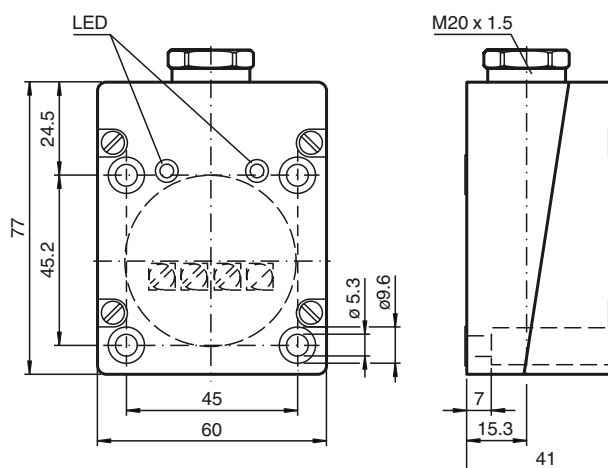
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

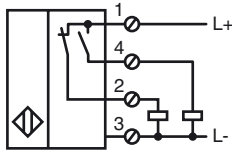
Approvals and certificates

CCC approval	CCC approval / marking not required for products rated ≤ 36 V
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Dimensions



Electrical Connection



Installation Hint

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.

