CE

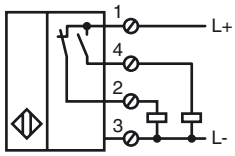
Model Number

NBN30-FPS-A2

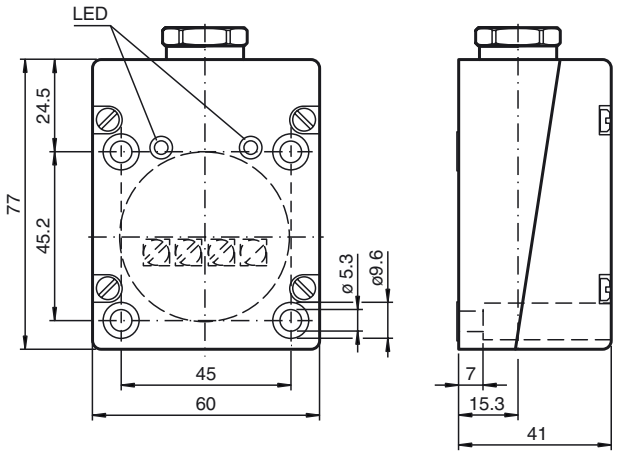
Features

- **30 mm non-flush**
- **4-wire DC**

Connection



Dimensions



Technical Data

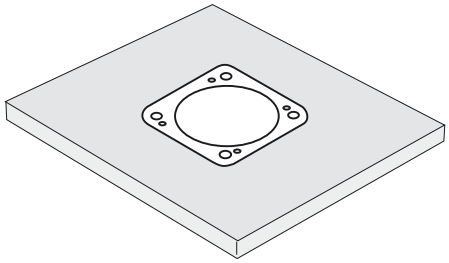
General specifications		
Switching element function		PNP NO/NC
Rated operating distance	s_n	30 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 24.3 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 90 mm x 90 mm x 1 mm
Reduction factor r_{Al}		0.2
Reduction factor r_{Cu}		0.1
Reduction factor r_{304}		0.5
Reduction factor r_{Brass}		0.2
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 50 Hz
Hysteresis	H	0.05 ... 7.26 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		0.75 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 display		LED, green
Indication of the switching state		LED, yellow
Functional safety related parameters		
$MTTF_d$		1430 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
Protection degree		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		Products with a maximum operating voltage of ≤36 V do not bear a CCC marking because they do not require approval.

Release date: 2012-09-25 10:04 Date of issue: 2012-09-25 236513_eng.xml

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.



Release date: 2012-09-25 10:04 Date of issue: 2012-09-25 236513_eng.xml

Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776-4411 fa-info@pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com