

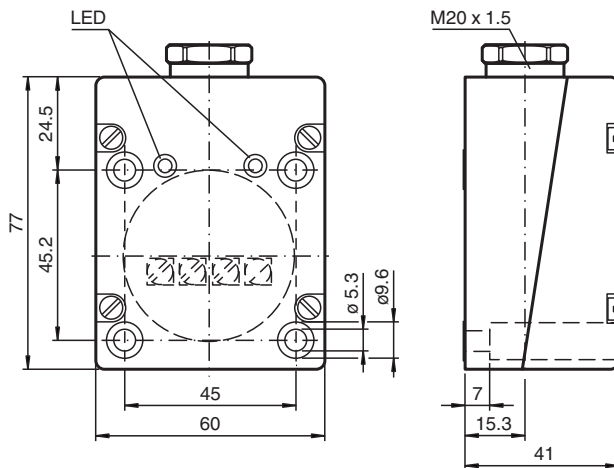


Inductive sensor NBN30-FPS-E5

- 30 mm non-flush
- 3-wire DC



Dimensions



Technical Data

General specifications		
Switching function		Normally open/closed (NO/NC)
Output type		PNP
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
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 65 V DC
Switching frequency	f	0 ... 50 Hz
Hysteresis	H	0.05 ... 7.26 mm

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

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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	$\leq 2.5 \text{ V}$
Repeat accuracy	R	0.75 mm
Operating current	I_L	0 ... 300 mA
Off-state current	I_r	$\leq 0.01 \text{ mA}$
No-load supply current	I_0	typ. 20 mA
Time delay before availability	t_v	$\leq 100 \text{ ms}$
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1170 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
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
General information		
Supplementary information		switching output terminal N.C.: terminal 2 N.O.: terminal 4

Connection

