

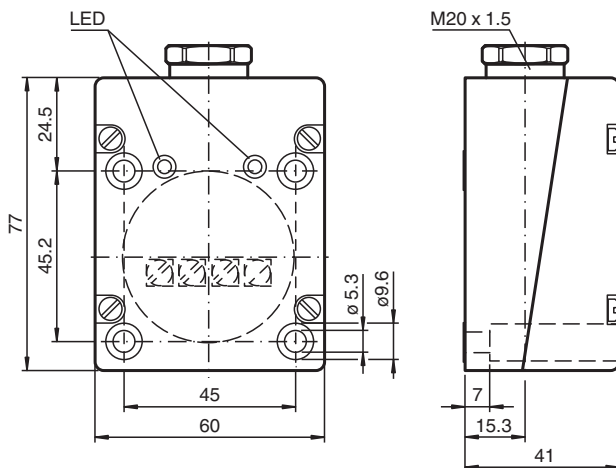


## Inductive sensor NBN30-FPS-A2

- 30 mm non-flush
- 4-wire DC



### Dimensions



### Technical Data

General specifications		
Switching function		complementary
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		4-wire
Nominal ratings		
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 50 Hz

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## Technical Data

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	$U_d$	$\leq 2.5$ V
Repeat accuracy	R	0.75 mm
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	$\leq 0.01$ mA
No-load supply current	$I_0$	$\leq 20$ mA
Time delay before availability	$t_v$	$\leq 100$ ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1430 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
CCC approval		CCC approval / marking not required for products rated $\leq 36$ V
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		screw terminals
Core cross section		up to 2.5 mm <sup>2</sup>
Housing material		PBT
Sensing face		PBT
Housing base		PBT
Degree of protection		IP65
Mass		270 g
Dimensions		
Height		41 mm
Width		60 mm
Length		77 mm

## Connection

