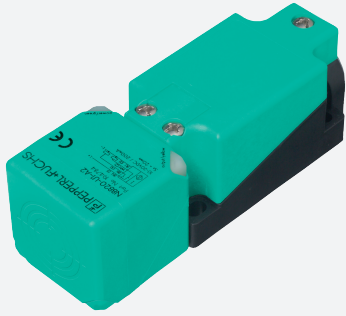


Inductive sensor

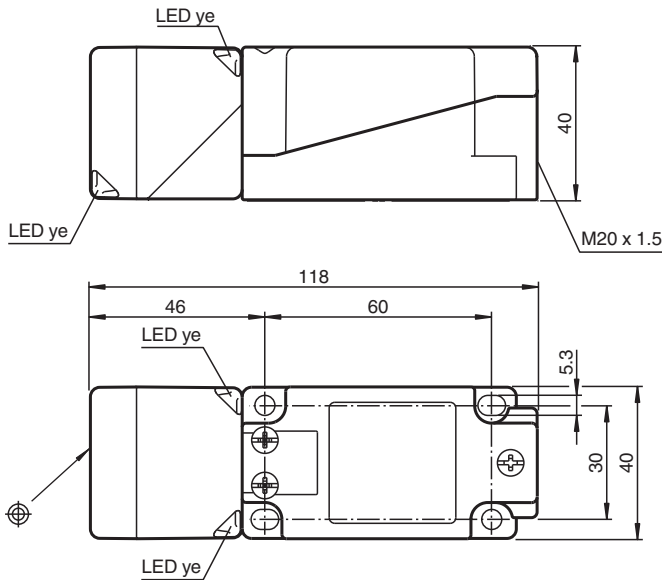
NBB20-U1-Z2



- Sensor head bidirectional and rotatable
- 20 mm flush
- 2-wire DC
- 2 LEDs indicator for 360° visibility



Dimensions



Technical Data

General specifications

Switching function		Normally open/closed (NO/NC)
Output type		Two-wire
Rated operating distance	s_n	20 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 16.2 mm
Actual operating distance	s_r	18 ... 22 mm typ. 20 mm
Reduction factor r_{Al}		0.3
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Output type		2-wire

Nominal ratings

Operating voltage	U_B	5 ... 60 V DC
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Technical Data

Switching frequency	f	0 ... 250 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity tolerant
Short-circuit protection		yes
Voltage drop	U_d	≤ 5 V
Voltage drop at I_L		
Voltage drop $I_L = 100$ mA, switching element on	U_d	... 5 V
Operating current	I_L	2 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA
Switching state indicator		2 LED, yellow
Functional safety related parameters		
MTTF _d		1162 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		screw terminals
Information for connection		A maximum of two conductors with the same core cross section may be mounted on one terminal connection! tightening torque 1.2 Nm + 10 %
Core cross section		up to 2.5 mm ²
Minimum core cross-section		without wire end ferrules 0.5 mm ² , with connector sleeves 0.34 mm ²
Maximum core cross-section		without wire end ferrules 2.5 mm ² , with connector sleeves 1.5 mm ²
Housing material		PA/metal with epoxy powder coating
Sensing face		PA
Housing base		plastic
Degree of protection		IP68 / IP69K
Mass		225 g
Dimensions		
Height		40 mm
Width		40 mm
Length		118 mm
Note		Tightening torque: 1.8 Nm (housing)

Connection

