



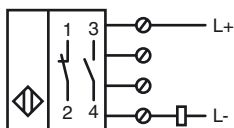
Model Number

NBB20-U1-Z2

Features

- 20 mm embeddable
- 2-wire DC
- 2 LEDs indicator for 360° visibility

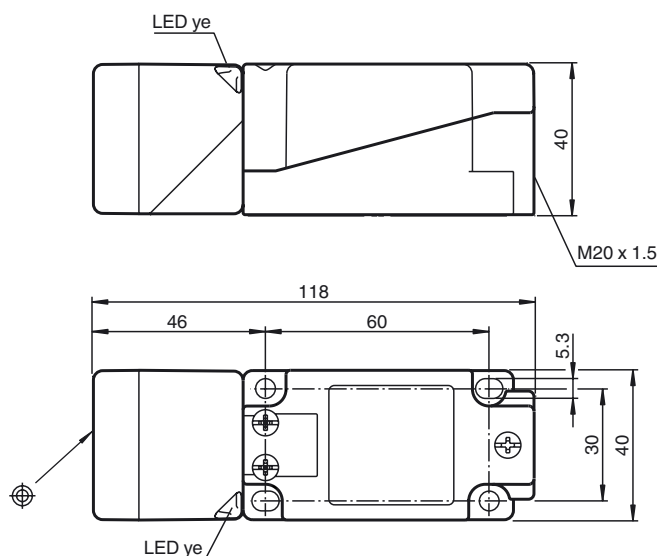
Connection



Accessories

- V1-M20-80**
Receptacles, M12/M20; plastic version
- MHW 01**
Modular mounting bracket
- MH 04-2681F**
Mounting aid for VariKont, +U1+ and +U9*

Dimensions



Technical Data

General specifications		
Switching element function	DC	NO/NC
Rated operating distance	s_n	20 mm
Installation		embeddable
Output polarity		DC
Assured operating distance	s_a	0 ... 16.2 mm
Reduction factor r_{Al}		0.3
Reduction factor r_{Cu}		0.3
Reduction factor r_{303}		0.7
Nominal ratings		
Operating voltage	U_B	5 ... 60 V DC
Switching frequency	f	0 ... 250 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protected		tolerant
Short-circuit protection		yes
Voltage drop	U_d	≤ 5 V
Operating current	I_L	2 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA
Indication of the switching state		2 LED, yellow
Functional safety related parameters		
MTTF _d		1162 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		screw terminals
Core cross-section		≤ 2.5 mm ²
Housing material		PA/metal with epoxy powder coating
Sensing face		PA
Housing base		plastic
Protection degree		IP68 / IP69K
Mass		225 g
Note		Tightening torque: 1.8 Nm (housing) Tightening torque: 1.0 Nm (Screw terminal)
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)

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