



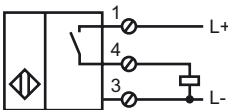
Model Number

NBB20-U1-E2

Features

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

Connection



Accessories

V1-M20-80

Receptacles, M12/M20; plastic version

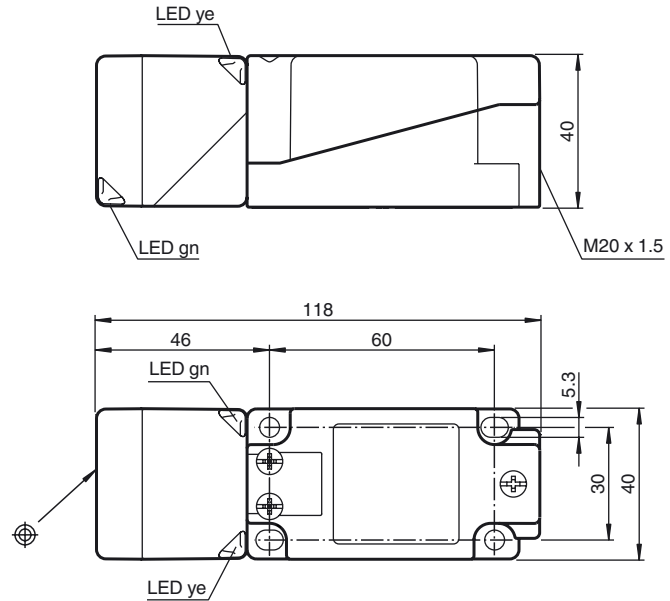
MHW 01

Modular mounting bracket

MH 04-2681F

Mounting aid for VariKont, +U1+ and +U9*

Dimensions



Technical Data

General specifications

Switching element function	PNP	NO
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}	0.33	
Reduction factor r_{Cu}	0.31	
Reduction factor r_{303}	0.74	
Reduction factor r_{Brass}	0.41	

Nominal ratings

Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 150 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protected	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	U_d	≤ 2 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
No-load supply current	I_0	≤ 20 mA
Operating voltage display	LED, green	
Indication of the switching state	LED, yellow	

Functional safety related parameters

MTTF _d	1460 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	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.

Release date: 2011-08-15 14:32 Date of issue: 2011-08-15 194771_eng.xml

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Proximity Sensors](#) category:

Click to view products by [Pepperl & Fuchs](#) manufacturer:

Other Similar products are found below :

[01.001.5653.1](#) [70.340.1028.0](#) [70.360.2428.0](#) [70.364.4828.0](#) [70.810.1053.0](#) [72.360.1628.0](#) [73.363.6428.0](#) [980659-1](#) [QT-12](#)
[E2ECQC2D1M1GJT03M](#) [E2EX10D1NN](#) [E2E-X14MD1-G](#) [E2E-X2D1-G](#) [E2EX2ME2N](#) [E2E-X3D1-N](#) [10M](#) [E2E-X4MD1-G](#)
[E2FMX1R5D12M](#) [E2K-F10MC1](#) [5M](#) [EC3016PPASL-1](#) [EI1204TBOSL-6](#) [EI5515NPAP](#) [BSA-08-25-08](#) [IC08ANC15PO-K](#) [25.161.3253.0](#)
[25.332.0653.1](#) [25.352.0653.0](#) [25.352.0753.0](#) [25.523.3253.0](#) [922FS1.5C-A4P-Z774](#) [SC606ABV0S30](#) [SM552A100](#) [SM952A126100LE](#)
[SM956A132600](#) [A1220EUA-T](#) [F3S-A162-U](#) [CL18](#) [QT-08L](#) [34.110.0010.0](#) [TL-C2MF1-M3-E4](#) [IA08BLF15NOM5](#) [IA08BSF15NOM5](#)
[IA12ASF04DOM1](#) [IS2](#) [IS31SE5000-UTLS2-TR](#) [34.110.0021.0](#) [34.110.0022.0](#) [CA150-120VACDC](#) [VM18VA3000Q](#) [XS508BSCBL2](#)
[XS512BLNAM12](#)