



**Model Number**

**NBN40-U1-E0**

**Features**

- **Sensor head bidirectional and rotatable**
- **40 mm non-flush**
- **3-wire DC**
- **4 LEDs indicator for 360° visibility**

**Accessories**

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

**Technical Data**

**General specifications**

Switching element function		NPN	NO
Rated operating distance	$s_n$	40 mm	
Installation		non-flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 32.4 mm	
Reduction factor $r_{Al}$		0.31	
Reduction factor $r_{Cu}$		0.3	
Reduction factor $r_{304}$		0.74	
Reduction factor $r_{Brass}$		0.39	

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V DC	
Switching frequency	$f$	0 ... 150 Hz	
Hysteresis	$H$	typ. 5 %	
Reverse polarity protection		reverse polarity protected	
Short-circuit protection		pulsing	
Voltage drop	$U_d$	$\leq 2$ V	
Operating current	$I_L$	0 ... 200 mA	
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C	
No-load supply current	$I_0$	$\leq 20$ mA	
Time delay before availability	$t_v$	80 ms	
Operating voltage indicator		LED, green	
Switching state indicator		LED, yellow	

**Functional safety related parameters**

MTTF <sub>d</sub>	1510 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
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**Mechanical specifications**

Connection type	screw terminals
Core cross-section	$\leq 2.5$ mm <sup>2</sup>
Housing material	PA/metal with epoxy powder coating
Sensing face	PA
Housing base	plastic
Degree of protection	IP68 / IP69K
Mass	225 g
Note	Tightening torque: 1.8 Nm (housing) Tightening torque: 1.0 Nm (Screw terminal)

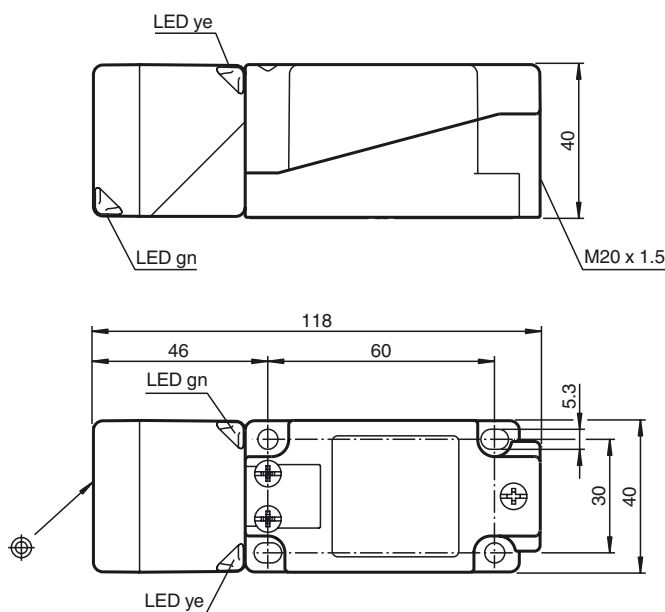
**Compliance with standards and directives**

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

**Approvals and certificates**

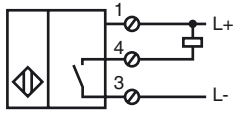
UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

**Dimensions**



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Electrical Connection



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