



### Model Number

NEB3-6,5M50-E0-V3

### Features

- Increased operating distance
- 3 mm quasi flush

### Accessories

#### BF 6,5

Mounting flange, 6.5 mm

#### V3-GM

Female connector, M8, 3-pin, field attachable

#### V3-WM

Female connector, M8, 3-pin, field attachable

#### V3-WM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

## Technical Data

### General specifications

Switching element function		NPN	NO
Rated operating distance	$s_n$	3 mm	
Installation		quasi flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 2.43 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 9 mm x 9 mm x 1 mm	
Reduction factor $r_{Al}$		0.5	
Reduction factor $r_{Cu}$		0.3	
Reduction factor $r_{304}$		0.8	
Reduction factor $r_{Brass}$		0.5	

### Nominal ratings

#### Installation conditions

A	in steel 1.0037 (St37): 1 mm
B	6 mm
C	9 mm
F	16 mm

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 1500 Hz
Hysteresis	$H$	0.03 ... 0.3 mm
Reverse polarity protection		yes
Short-circuit protection		pulsing
Overload resistance		yes
Wire breakage protection		yes
Surge suppression		yes
Ripple		10 %
Voltage drop	$U_d$	$\leq 2$ V
Repeat accuracy	$R$	0.15 mm
Operating current	$I_L$	0 ... 200 mA, above 50°C $\leq 150$ mA
Off-state current	$I_r$	$\leq 10$ $\mu$ A
No-load supply current	$I_0$	$\leq 15$ mA
Time delay before availability	$t_v$	$\leq 50$ ms
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	1740 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 85 °C (-13 ... 185 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

### Mechanical specifications

Connection type	Connector M8 x 1, 3-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Mass	20 g

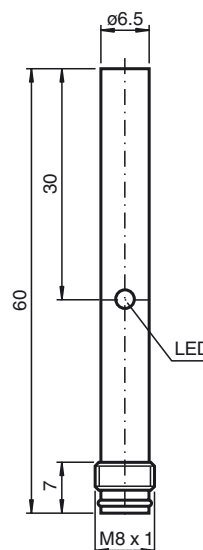
### Compliance with standards and directives

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

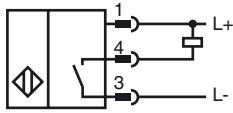
### Approvals and certificates

EAC conformity	TR CU 020/2011
UL approval	cULus Listed, General Purpose, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

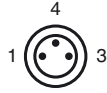
## Dimensions



**Electrical Connection**



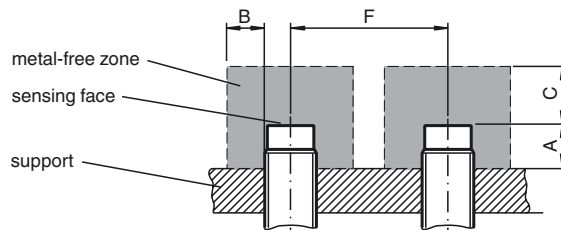
**Pinout**



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

**Installation Conditions**



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