



### Model Number

NEB3-F41-E1-V3

### Features

- 3-wire DC
- Metal housing
- 3 mm quasi flush

### Accessories

#### V3-GM

Female connector, M8, 3-pin, field attachable

#### V3-WM

Female connector, M8, 3-pin, field attachable

#### V3-GM-2M-PUR

Cable socket, M8, 3-pin, PUR cable

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

Cable socket, M8, 3-pin, PUR cable

## Technical Data

### General specifications

Switching element function		NPN	NC
Rated operating distance	$s_n$	3 mm	
Installation		quasi flush	
Output polarity		DC	
Assured operating distance	$s_a$	0 ... 2.4 mm	
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2)	
		9 mm x 9 mm x 1 mm	
Reduction factor $r_{Al}$		0.35	
Reduction factor $r_{Cu}$		0.3	
Reduction factor $r_{304}$		0.7	
Reduction factor $r_{Brass}$		0.45	

### Nominal ratings

#### Installation conditions

B		6 mm
C		9 mm
F		16 mm
G		1 mm
Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 1000 Hz
Hysteresis	H	2 ... 20 typ. 10 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		$\leq 10$ %
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

#### 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

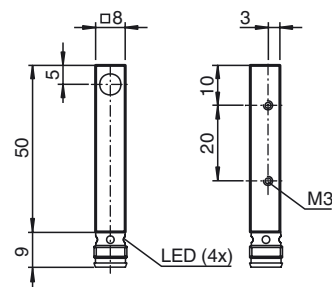
#### Compliance with standards and directives

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

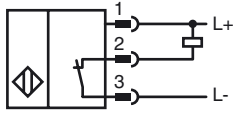
#### Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

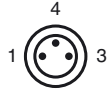
## Dimensions



Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-2

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

Installation Conditions

