



## Model Number

NRB8-18GS40-E2-V1

## Features

- Reduction factor = 1
- Magnetic field resistant
- Stainless steel housing

## Accessories

### BF 18

Mounting flange, 18 mm

### EXG-18

Quick mounting bracket with dead stop

### V1-G

Female connector, M12, 4-pin, field attachable

### V1-W

Female connector, M12, 4-pin, field attachable

### V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

### V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

## Technical Data

### General specifications

Switching function	Normally open (NO)
Output type	PNP
Rated operating distance	$s_n$ 8 mm
Installation	flush
Output polarity	DC
Assured operating distance	$s_a$ 0 ... 6.48 mm
Reduction factor $r_{Al}$	1
Reduction factor $r_{Cu}$	1
Reduction factor $r_{304}$	1
Reduction factor $r_{S37}$	1
Output type	3-wire

### Nominal ratings

Operating voltage	$U_B$ 10 ... 30 V DC
Switching frequency	$f$ 0 ... 1200 Hz
Hysteresis	$H$ typ. 5 %
Reverse polarity protection	reverse polarity protected
Short-circuit protection	pulsing
Voltage drop	$U_d$ $\leq 2$ V
Rated insulation voltage	$U_{BIS}$ 60 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	$I_0$ $\leq 12$ mA
Time delay before availability	$t_v$ $\leq 20$ ms
Constant magnetic field	$B$ 200 mT
Alternating magnetic field	$B$ 200 mT
Switching state indicator	Multihole-LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	1393 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

### Mechanical specifications

Connection type	Connector M12 x 1, 4-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP67
Mass	36 g

### General information

Scope of delivery	2 self locking nuts in scope of delivery
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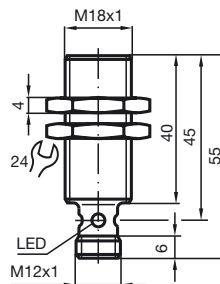
### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

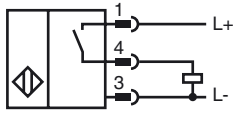
### Approvals and certificates

Protection class	II
Rated insulation voltage	$U_i$ 60 V
Rated impulse withstand voltage	$U_{imp}$ 800 V
UL approval	cULus Listed, General Purpose Class 2 power source
CSA approval	cCSAus Listed, General Purpose Class 2 power source
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

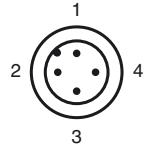
## Dimensions



**Electrical Connection**



**Pinout**



Wire colors in accordance with EN 60947-5-2

1		BN	(brown)
2		WH	(white)
3		BU	(blue)
4		BK	(black)