



Model Number

NBN25-30GM50-E2-V1-M1

Features

- 25 mm non-flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C
- With increased sealing, protection class
IP68 / IP69K
- E1-Type approval

Accessories

BF 30

Mounting flange, 30 mm

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 25 mm
Installation	non-flush
Output polarity	DC
Assured operating distance	s_a 0 ... 20.25 mm
Actuating element	mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 75 mm x 75 mm x 1 mm
Reduction factor r_{Al}	0.5
Reduction factor r_{Cu}	0.4
Reduction factor r_{304}	0.7
Reduction factor r_{Brass}	0.5
Output type	3-wire

Nominal ratings

Installation conditions	
A	28 mm
B	40 mm
C	75 mm
F	120 mm
Operating voltage	U_B 7 ... 30 V
Switching frequency	f 0 ... 450 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. 4 μ A at 25 °C
No-load supply current	I_0 \leq 10 mA
Time delay before availability	t_v \leq 100 ms
Switching state indicator	Multihole-LED, yellow

Functional safety related parameters

MTTF _d	1494 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

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

Mechanical specifications

Connection type	Connector plug M12 x 1, 3-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP68 / IP69K
Mass	100 g

General information

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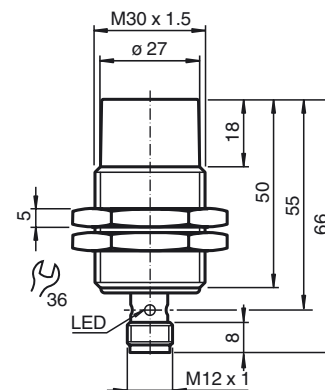
Compliance with standards and directives

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 EN 12895: 2015

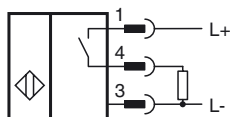
Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source
CCC approval	CCC approval / marking not required for products rated \leq 36 V
E1 Type approval	10R-04

Dimensions



Electrical Connection



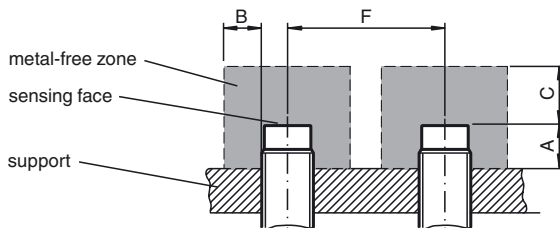
Pinout



Wire colors in accordance with EN 60947-5-2

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

Installation Conditions



Installation Hint

Mains-borne interference in accordance with ISO 7637-2:

Pulse	1	2a	2b	3a	3b	4
Severity level	III	III	III	III	III	III
Failure criterion	A	A	C	A	A	C

EN 61000-4-2: CD: 8 kV / AD: 15 kV
Severity level IV IV

EN 61000-4-3: 36 V/m (80...2500 MHz)
Severity level IV

EN 61000-4-4: 2 kV
Severity level III

EN 61000-4-6: 30 V (0.01...80 MHz)
Severity level III

EN 55011: Class A