



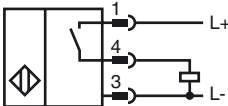
Model Number

NBB2-12GM50-E2-C3-V1

Features

- 2 mm embeddable
- 3-wire DC
- Weld Immune
- Slag repellent coatings

Connection



Wire colors in accordance with EN 60947-5-2

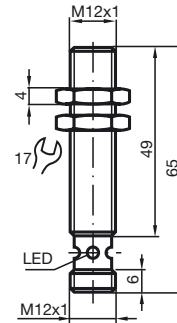
1	BN
2	WH
3	BU
4	BK

Accessories

V1-G-OR2M-POC

Female cordset, M12, 4-pin, TPE cable, welding-bead resistant

Dimensions



Technical Data

General specifications

Switching element function	PNP	NO
Rated operating distance	s_n	2 mm
Installation		embeddable
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Reduction factor r_{Al}		0.3
Reduction factor r_{Cu}		0.2
Reduction factor r_{V2A}		0.7

Nominal ratings

Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1500 Hz
Hysteresis	H	typ. 5%
Reverse polarity protected		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μ A at 25 °C
No-load supply current	I_0	≤ 15 mA
Constant magnetic field	B	200 mT
Alternating magnetic field	B	200 mT
Indication of the switching state		Multihole-LED, yellow

Functional safety related parameters

MTTF _d	2430 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Operating display	4-way dual LED Green: power Yellow: output
-------------------	--

Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
---------------------	--------------------------------

Mechanical specifications

Connection type	Device connector M12 x 1, 4-pin
Housing material	brass, teflon coated
Sensing face	Ceramic coated
Protection degree	IP67

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
CSA approval	cCSAus Listed, General Purpose
CCC approval	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.