



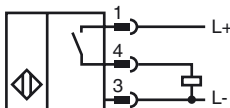
**Model Number**

NMB2-12GM65-E2-FE-V1

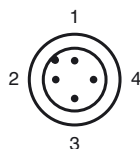
**Features**

- Stainless steel sensing face
- Sensing range 2 mm
- 3-wire DC
- Ferrous targets

**Connection**



**Pinout**



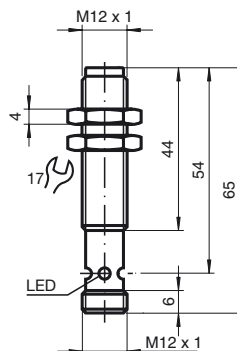
Wire colors in accordance with EN 60947-5-2

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

**Accessories**

- V1-G-OR2M-POC**  
Female cordset, M12, 4-pin, TPE cable, welding-bead resistant
- V1-G-2M-PUR**  
Cable socket, M12, 4-pin, PUR cable
- V1-W-2M-PUR**  
Cable socket, M12, 4-pin, PUR cable
- AB-12**  
Mounting aid

**Dimensions**



**Technical Data**

**General specifications**

Switching element function	PNP	NO
Rated operating distance	$s_n$	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 1.62 mm
Actuating element		Ferrous targets
Reduction factor $r_{Al}$		0
Reduction factor $r_{Cu}$		0
Reduction factor $r_{304}$		0.25
Reduction factor $r_{316Ti}$		0.1
Reduction factor $r_{Si37}$		1
Reduction factor $r_{Brass}$		0

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	100 Hz
Hysteresis	$H$	3 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2$ V DC
Operating current	$I_L$	$\leq 200$ mA
Current consumption		$< 14$ mA
Off-state current	$I_r$	$\leq 10$ $\mu$ A

**Functional safety related parameters**

MTTF <sub>d</sub>		990 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	-40 ... 70 °C (-40 ... 158 °F)
---------------------	--------------------------------

**Mechanical specifications**

Connection type	V1 connector (M12 x 1), 4-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	Stainless steel 1.4305 / AISI 303
Protection degree	IP67 / IP68 / IP69K - cordset dependent according to cable specification

**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 $\leq 36$ V do not bear a CCC marking because they do not require approval.

Release date: 2012-12-13 14:36 Date of issue: 2012-12-13 9:08429\_eng.xml