



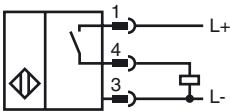
**Model Number**

NCB1,5-12GM60-E2-D-V1

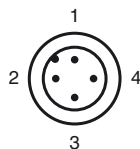
**Features**

- 1.5 mm embeddable
- Operating pressure 500 bar, peak pressure 800 bar
- For applications in hydraulic cylinder

**Connection**



**Pinout**



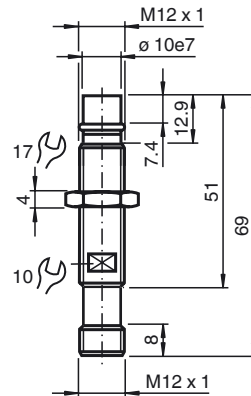
Wire colors in accordance with EN 60947-5-2

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

**Accessories**

- V1-G**  
4-pin, M12 female field-attachable connector
- V1-W**  
4-pin, M12 female field-attachable connector
- V1-G-2M-PUR**  
Cable socket, M12, 4-pin, PUR cable
- V1-W-2M-PUR**  
Cable socket, M12, 4-pin, PUR cable

**Dimensions**



**Technical Data**

**General specifications**

Switching element function	PNP	NO
Rated operating distance	$s_n$	1.5 mm
Installation	embeddable	
Output polarity	DC	

**Nominal ratings**

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 2000 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protected	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	$U_d$	$\leq 2$ V
Operating current	$I_L$	0 ... 200 mA
No-load supply current	$I_0$	$\leq 10$ mA

**Limit data**

Operating pressure	500 bar (7252 psi)
--------------------	--------------------

**Functional safety related parameters**

MTTF <sub>d</sub>	728 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

**Ambient conditions**

Ambient temperature	-25 ... 80 °C (-13 ... 176 °F)
---------------------	--------------------------------

**Mechanical specifications**

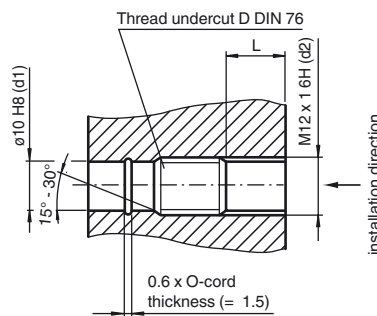
Connection type	Device connector M12 x 1 , 4-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	Ceramic
Protection degree	IP68

**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.



L: recommended installation depth:  $L \geq 0.8 \times d2$

Release date: 2012-02-16 14:27 Date of issue: 2012-02-17 123393\_eng.xml