



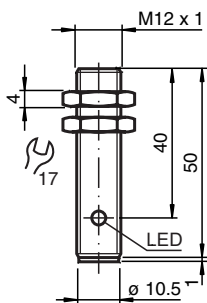
Inductive sensor

NBB2-12GM40-E0-V1

■ 2 mm flush



Dimensions



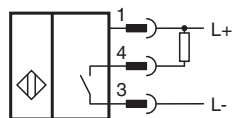
Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s _n	2 mm
Installation		flush
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 ₃₀₄		0.7
Nominal ratings		
Operating voltage	U _B	10 ... 30 V
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U _d	≤ 2 V

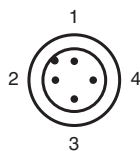
Technical Data

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	$\leq$ 15 mA
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		3220 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
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		CCC approval / marking not required for products rated $\leq$ 36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		Connector M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

Release date: 2020-03-20 Date of issue: 2020-03-30 Filename: 083305_eng.pdf

Accessories

	BF 12	Mounting flange, 12 mm
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	EXG-12	Quick mounting bracket with dead stop