



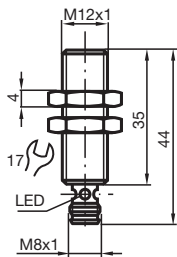
Inductive sensor

NBB4-12GM30-E2-V3

- Increased operating distance
- 4 mm flush



Dimensions



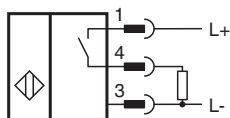
Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s _n	4 mm
Installation		flush
Output polarity		DC
Assured operating distance	s _a	0 ... 3.24 mm
Reduction factor r _{Al}		0.45
Reduction factor r _{Cu}		0.35
Reduction factor r ₃₀₄		0.7
Nominal ratings		
Operating voltage	U _B	10 ... 30 V
Switching frequency	f	0 ... 500 Hz

Technical Data

Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3 \text{ V}$
Operating current	I_L	0 ... 150 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.1 μA at 25 °C
Off-state current $T_U = 40 \text{ °C}$, switching element off		$\leq$
No-load supply current	I_0	$\leq 15 \text{ mA}$
Time delay before availability	t_v	$\leq 20 \text{ ms}$
Switching state indicator		Multihole-LED, yellow
Functional safety related parameters		
MTTF _d		1770 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		
EAC conformity		TR CU 020/2011
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		Connector M8 x 1 , 3-pin
Cable version		PBT
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
Mass		30 g

Connection



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
3	BU	(blue)
4	BK	(black)

Accessories

	BF 12	Mounting flange, 12 mm
	EXG-12	Quick mounting bracket with dead stop
	V3-WM-2M-PUR	Female cordset single-ended, M8, 3-pin, PUR cable

Release date: 2020-03-20 Date of issue: 2020-03-30 Filename: 087737_eng.pdf