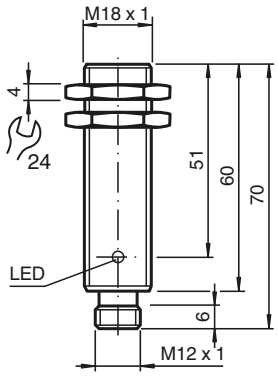
Inductive sensor

NBB8-18GM60-A2-V1

- 8 mm flush
- Increased operating distance



Dimensions



Technical Data

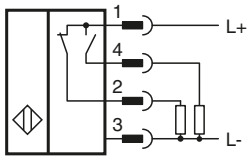
General specifications		
Switching function		complementary
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 6.08 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.7
Output type		4-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected

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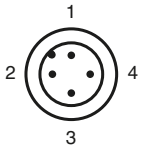
Technical Data

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 µA at 25 °C
No-load supply current	I_0	≤ 25 mA
Time delay before availability	t_v	≤ 20 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		1216 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
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 ≤36 V
Ambient conditions		
Ambient temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67

Connection



Connection Assignment



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Wire colors in accordance with EN 60947-5-2

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

Accessories

	**BF 18**	Mounting flange, 18 mm
	**EXG-18**	Quick mounting bracket with dead stop
	**V1-G-2M-PUR**	Female cordset, M12, 4-pin, PUR cable
	**V1-W-2M-PUR**	Female cordset, M12, 4-pin, PUR cable

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