

Inductive sensor

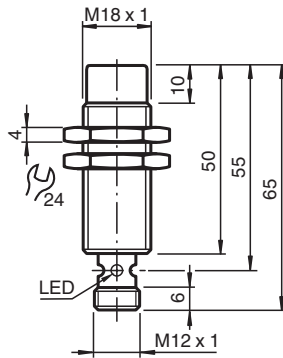
NBN8-18GM50-E2-C-V1



- 8 mm non-flush
- Weld Immune



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{Al}		0.3
Reduction factor r_{Cu}		0.2
Reduction factor r_{304}		0.6
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

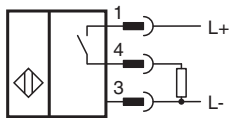
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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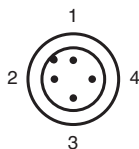
Technical Data

Voltage drop	U_d	$\leq 3 \text{ V}$
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	$\leq 15 \text{ mA}$
Constant magnetic field	B	150 mT
Alternating magnetic field	B	150 mT
Switching state indicator	Multihole-LED, yellow	
Functional safety related parameters		
MTTF _d	1740 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		
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 plug M12 x 1, 4-pin	
Housing material	Brass, PTFE coated	
Sensing face	PPS	
Degree of protection	IP67	

Connection



Connection Assignment








Connection Assignment

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
	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
	V1-G-OR2M-POC	Female cordset single-ended M12 straight A-coded, 4-pin, POC cable welding-bead resistant orange, suitable for robotic applications, torsion resistant, oil resistant, molecularly cross-linked
	V1-W-OR2M-POC	Female cordset single-ended M12 angled A-coded, 4-pin, POC cable welding-bead resistant orange, suitable for robotic applications, torsion resistant, oil resistant, molecularly cross-linked

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