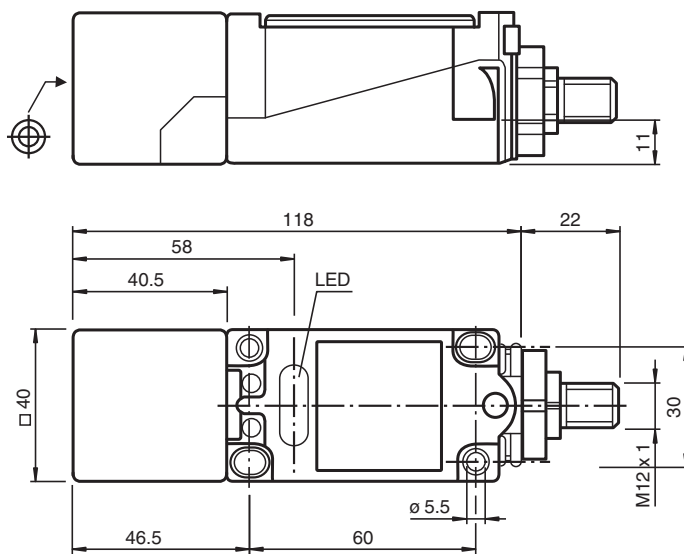


Inductive sensor NJ20+U1+E2-V1

■ 20 mm flush



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	20 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 16.2 mm
Reduction factor r_{Al}		0.3
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.8
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 150 Hz
Hysteresis	H	1 ... 10 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".

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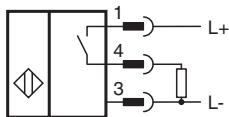
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PEPPERL+FUCHS

Technical Data

Voltage drop	U_d	≤ 2.8 V
Voltage drop at I_L		
Voltage drop $I_L = 1$ mA, switching element on	U_d	0.5 ... 2.3 V typ. 0.9 V
Voltage drop $I_L = 10$ mA, switching element on	U_d	0.8 ... 2.2 V typ. 1.4 V
Voltage drop $I_L = 20$ mA, switching element on	U_d	0.9 ... 2.3 V typ. 1.5 V
Voltage drop $I_L = 50$ mA, switching element on	U_d	0.9 ... 2.5 V typ. 1.6 V
Voltage drop $I_L = 100$ mA, switching element on	U_d	1 ... 2.6 V typ. 1.8 V
Voltage drop $I_L = 200$ mA, switching element on	U_d	1.2 ... 2.8 V typ. 2 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
Off-state current $T_U = 40$ °C, switching element off		≤ 100 μ A
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 50 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
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		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		PBT
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)

Accessories

	V1-G-2M-PUR	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey
	MHW 01	Modular mounting bracket
	MH 04-2681F	Mounting aid for VariKont, +U1+ and +U9*
	V1-W-2M-PUR	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey

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