

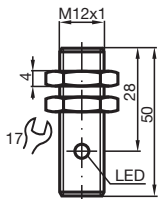
Induktiver Sensor NJ2-12GM40-E2-V1



■ 2 mm bündig



Abmessungen



Technische Daten

Allgemeine Daten

Schaltfunktion		SchließBer (NO)
Ausgangstyp		PNP
Schaltabstand	s_n	2 mm
Einbau		bündig
Ausgangspolarität		DC
Gesicherter Schaltabstand	s_a	0 ... 1,62 mm
Realschaltabstand	s_r	1,8 ... 2,2 mm typ.
Reduktionsfaktor r_{Al}		0,23
Reduktionsfaktor r_{Cu}		0,21
Reduktionsfaktor r_{V2A} (1.4301)		0,7
Ausgangsart		3-Draht

Kenndaten

Betriebsspannung	U_B	10 ... 60 V
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Veröffentlichungsdatum: 2020-12-10 Ausgabedatum: 2020-12-10 Dateiname: 282942_ger.pdf

Beachten Sie „Allgemeine Hinweise zu Pepper+Fuchs-Produktinformationen“.

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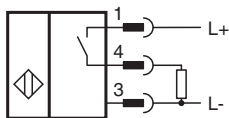
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Technische Daten

Schaltfrequenz	f	0 ... 3000 Hz
Hysterese	H	1 ... 10 typ. 3 %
Verpolschutz		verpolgeschützt
Kurzschlusschutz		taktend
Spannungsfall	U_d	≤ 3 V
Spannungsfall bei I_L		
Spannungsfall $I_L = 100$ mA, Schaltelement Ein	U_d	1,2 ... 2,5 V
Betriebsstrom	I_L	0 ... 200 mA
Reststrom	I_r	$\leq 0,5$ mA
Leerlaufstrom	I_0	≤ 9 mA
Bereitschaftsverzug	t_v	≤ 20 ms
Schaltzustandsanzeige		LED, gelb
Kenndaten funktionale Sicherheit		
MTTF _d		750 a
Gebrauchsdauer (T_M)		20 a
Diagnosedeckungsgrad (DC)		0 %
Normen- und Richtlinienkonformität		
Normenkonformität		
Normen		EN 60947-5-2:2007 IEC 60947-5-2:2007
Zulassungen und Zertifikate		
UL-Zulassung		cULus Listed, General Purpose
CSA-Zulassung		cCSAus Listed, General Purpose
CCC-Zulassung		Certified by China Compulsory Certification (CCC)
Umgebungsbedingungen		
Umgebungstemperatur		-25 ... 70 °C (-13 ... 158 °F)
Lagertemperatur		-40 ... 85 °C (-40 ... 185 °F)
Mechanische Daten		
Anschlussart		Gerätestecker M12 x 1 , 4-polig
Gehäusematerial		Edelstahl 1.4305 / AISI 303 (V2A)
Stirnfläche		PBT
Schutzart		IP67
Allgemeine Informationen		
Lieferumfang		Lieferung mit 2 Muttern mit Sperrverzahnung

Anschluss



Anschlussbelegung



Adernfarben gemäß EN 60947-5-2

1	BN	(braun)
2	WH	(weiß)
3	BU	(blau)
4	BK	(schwarz)

Zubehör

	BF 12	Befestigungsflansch, 12 mm
	EXG-12	Schnellmontagehalterung mit Festanschlag
	V1-G-2M-PUR	Kabeldose M12 gerade A-kodiert, 4-polig, PUR-Kabel grau
	V1-W-2M-PUR	Kabeldose M12 gewinkelt A-kodiert, 4-polig, PUR-Kabel grau

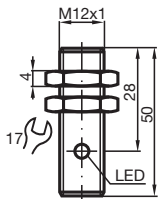
Inductive sensor NJ2-12GM40-E2-V1



■ 2 mm flush



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Actual operating distance	s_r	1.8 ... 2.2 mm typ.
Reduction factor r_{Al}		0.23
Reduction factor r_{Cu}		0.21
Reduction factor r_{304}		0.7
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 60 V
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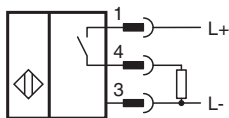
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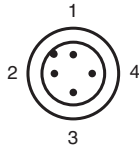
Technical Data

Switching frequency	f	0 ... 3000 Hz
Hysteresis	H	1 ... 10 typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Voltage drop at I_L		
Voltage drop $I_L = 100$ mA, switching element on	U_d	1.2 ... 2.5 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 0.5 mA
No-load supply current	I_0	≤ 9 mA
Time delay before availability	t_v	≤ 20 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		750 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		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67
General information		
Scope of delivery		2 self locking nuts in scope of delivery

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

	BF 12	Mounting flange, 12 mm
	EXG-12	Quick mounting bracket with dead stop
	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

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