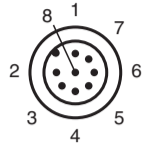


Elektrischer Anschluss/Electrical Connection

Signal	Cable, 8-core	Connection cable with M12 plug, 8-pin
GND	White	1
+U _B	Brown	2
A	Green	3
B	Grey	5
\bar{A}	Yellow	4
\bar{B}	Pink	6
n. c.	Blue	7
n. c.	Red	8
Screen	-	-



Technische Daten

Allgemeine Daten

Erfassungsart	magnetische Abtastung
Impulszahl	max. 5000

UL File Number E223176 "For use in NFPA 79 Applications only", if UL marking is marked on the product.

Kenndaten funktionale Sicherheit

MTTF _d	1093 a
Gebrauchsdauer (T _M)	20 a
Diagnosedeckungsgrad (DC)	0 %

Anzeigen/Bedienelemente

LED grün	Betriebsanzeige
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Elektrische Daten

Betriebsspannung	U _B 10 ... 30 V DC 5 V DC bei RS-422
Leerlaufstrom	I ₀ max. 55 mA

Ausgang

Ausgangstyp	Gegentakt, inkremental oder RS-422, inkremental
Spannungsfall	U _d < 2,5 V
Laststrom	pro Kanal max. 30 mA, kurzschlussfest (pro Kanal max. 20 mA, kurzschlussfest)
Ausgangsfrequenz	max. 800 kHz

Anschluss

Kabel	Ø4,7 mm, 4 x 2 x 0,128 mm ² Anschlusskabel mit M12-Stecker, 8-polig, L = 0,3 m
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Normenkonformität

Schutzart	DIN EN 60529, IP67
Klimaprüfung	DIN EN 60068-2-30
Störaussendung	EN 61000-6-4:2007/A1:2011
Störfestigkeit	EN 61000-6-2:2005
Schockfestigkeit	DIN EN 60068-2-27, 200 g, 6 ms
Schwingungsfestigkeit	DIN EN 60068-2-6, 40 g, 10 ... 2000 Hz

Umgebungsbedingungen

Arbeitstemperatur	-25 ... 85 °C (-13 ... 185 °F)
Lagertemperatur	-25 ... 85 °C (-13 ... 185 °F)

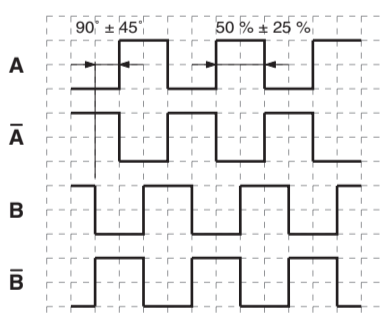
Mechanische Daten

Material	
Gehäuse	PA
Kabel	PUR
Polring	PA, kunststoffgebundener Hartferrit
Masse	ca. 190 g
Drehzahl	max. 20000 min ⁻¹

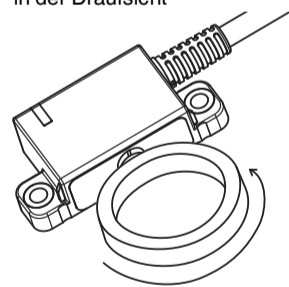
Zulassungen und Zertifikate

UL-Zulassung	cULus Listed, General Purpose, Class 2 Power Source, Type 1 enclosure, if UL marking is marked on the product. Anschlusskabel für die Feldverkabelung auf Anfrage
Maximal zulässige Umgebungstemperatur	≤ 80 °C (≤ 176 °F)

Signalausgänge



ccw - in der Draufsicht



LED-Anzeige

LED Status	Bedeutung
Grün leuchtet	Sensor funktionsbereit. Betriebsspannung liegt an und Polrad ist erkannt
LED aus	Mögliche Ursache: • zu geringe oder keine Betriebsspannung • Polrad nicht detektierbar (zu großer Abstand)

Adressen/Addresses



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Inkremental-Drehgeber Incremental rotary encoder

MNI20N



Doc. No.: 45-5362C
DIN A3 -> DIN
Part. No.: T158322
Date: 2020-07

PF PEPPERL+FUCHS
SENSING YOUR NEEDS

Technical Data

General specifications

Detection type	magnetic sampling
Pulse count	max. 5000

UL File Number E223176 "For use in NFPA 79 Applications only", if UL marking is marked on the product.

Functional safety related parameters

MTTF _d	1093 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

LED green	Operating display
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Electrical specifications

Operating voltage	U _B 10 ... 30 V DC 5 V DC for RS-422
No-load supply current	I ₀ max. 55 mA

Output

Output type	push-pull, incremental or RS-422, incremental
Voltage drop	U _d < 2,5 V
Load current	max. per channel 30 mA, short-circuit protected (max. per channel 20 mA, conditionally short-circuit proof)
Output frequency	max. 800 kHz

Connection

Cable	Ø4,7 mm, 4 x 2 x 0,128 mm ² connection with plug M12, 8-pin, L = 0.3 m
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Standard conformity

Degree of protection	DIN EN 60529, IP67
Climatic testing	DIN EN 60068-2-30
Emitted interference	EN 61000-6-4:2007/A1:2011
Noise immunity	EN 61000-6-2:2005
Shock resistance	DIN EN 60068-2-27, 200 g, 6 ms
Vibration resistance	DIN EN 60068-2-6, 40 g, 10 ... 2000 Hz

Ambient conditions

Operating temperature	-25 ... 85 °C (-13 ... 185 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

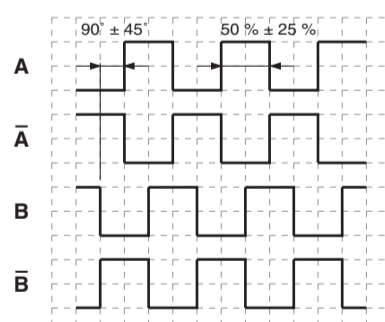
Mechanical specifications

Material	
Housing	PA
Cable	PUR
Magnetic ring	PA, Plastic-coated ferrite
Mass	approx. 190 g
Rotational speed	max. 20000 min ⁻¹

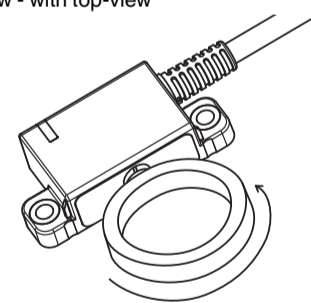
Approvals and certificates

UL approval	cULus Listed, General Purpose, Class 2 Power Source, Type 1 enclosure, if UL marking is marked on the product. adapters providing field wiring on request
Maximum permissible ambient temperature	≤ 80 °C (≤ 176 °F)

Signal outputs



ccw - with top-view



LED-Indicators

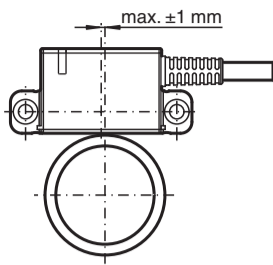
LED status	Description
Green On	Sensor ready for operation. Supply voltage applied and magnetic wheel is detected.
LED Off	Possible reason: • Supply voltage drop or no supply voltage • Magnetic wheel not detectable (e. g. too large gap)

Montagehinweise

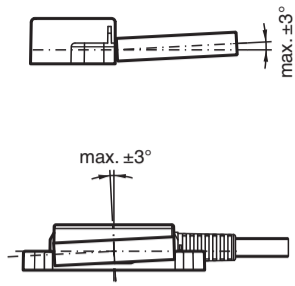
Einbau



Achsversatz



Winkerversatz

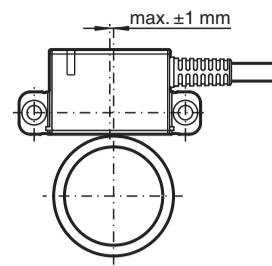


Mounting information

Installation



Shaft displacement



Angular displacement

