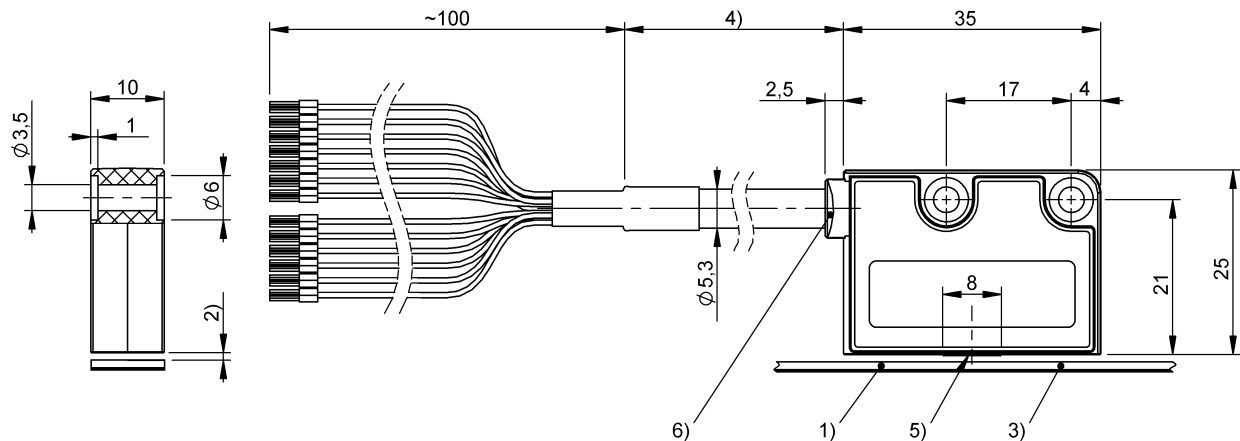




1) not included in scope of delivery, 2) Distance to tape, 3) Tape, 4) Cable length, 5) Active measurement surface, 6) LED green, reference signal



Basic features

Additional features 01	Reference signal, individually or fixed-periodic
Additional features 03	Real-time capable
Application	linear/rotary motion
Approval/Conformity	cURus CE EAC WEEE
Measuring principle	incremental measuring system
Series	S2E

Display/Operation

Function indicator	Green LED
--------------------	-----------

Electrical connection

Bending radius min., fixed cable	7.5 x D
Bending radius min., flexible cable	15 x D
Cable diameter D	5.3...5.6 mm
Cable length L	10 m, Drag chain compatible
Conductor cross-section	0.08 mm ²
Connection	Cable, 10 m, PUR
Connection type	Cable, 10 m, PUR
Connection version	axial
Number of conductors	12
Polarity reversal protected	yes

Electrical data

Current consumption max. at 24 V DC	40 mA
Operating voltage U _b	10...30 VDC
Overvoltage protection	no

Environmental conditions

Altitude max.	2000 m
Ambient temperature	-20...80 °C
Cable temperature, drag chain	-25...80 °C
Cable temperature, fixed routing	-25...80 °C
Cable temperature, flexible routing	-25...80 °C
EN 55016-2-3, Radiation	Industrial areas
EN 60068-2-27, Continuous shock	100 g, 2 ms
EN 60068-2-27, Shock	100 g, 6 ms
EN 60068-2-6, Vibration	12 g, 10...2000 Hz
EN 61000-4-2, ESD	Severity Level 3
EN 61000-4-3, RFI	Severity Level 3
EN 61000-4-4, Burst	Severity Level 3
EN 61000-4-5, Surge	Severity Level 2
EN 61000-4-6, High-frequency fields	Severity Level 3
EN 61000-4-8 Magnetic fields	Severity Level 4
Ext. magnetic fields max., in operation	1 mT (no effect)
IP rating	IP67
Overall system temperature coefficient	10.5 ppm/K
Relative humidity	≤ 90 %, non-condensing
Storage temperature	-30...85 °C

Functional safety

MTTF (40 °C) 252 a

Interface

Differential signals no
Interface Digital A/B (HTL)
Reference signal Individually or fixed-periodic
Signal sequence A before B = rising

Material

Cable flame-resistant UL94 V0 and IEC 60332/2
Housing material PBT
Material jacket PUR

Mechanical data

Dimension 10 x 25 x 35 mm
Lateral offset (Y) ±0.5 mm
Mounting part Through-hole 3.5 mm
Pitch max. ±1.0 °
Pole width 5 mm
Procedure direction Lengthwise to tape
Roll max. ±3.0 °
Tangential offset (X) max. ±0.5 mm
Weight 11 g (excluding cable)
Yaw max. ± 3.0 °

Range/Distance

Edge separation min. 0.94 µs
Interpolation factor 1000
Non-linearity max. ±100 µm (distance 0.01...2.0 mm)
Non-linearity of sensor head, max. ±50 µm
Read distance 0.01...2 mm
Repeat accuracy ≤ 5 µm
Resolution 5 µm (edge separation A/B)
Traverse speed max. 3 m/s

Wiring Diagrams (Schematic)

Colour		Colour	
WH	+A	BU	GND
BN	NC	RD	U _B
GN	+B	BK	GND Sense
YE	NC	VT	U _B Sense
GY	+Z	GYPK	NC
PK	NC	RDBU	NC