



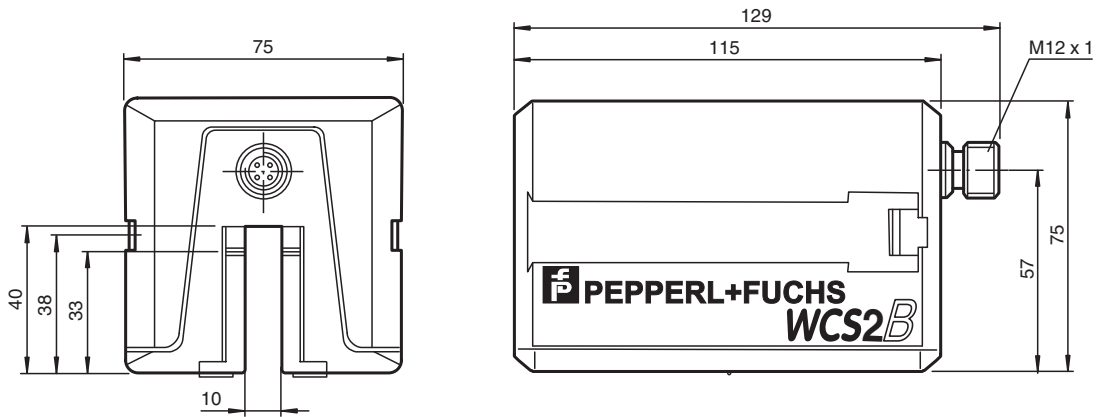
Read head WCS2B-LS311

- SSI interface
- Non-contact, absolute position encoder
- Automatic detection of dirt accumulation

Reading head, SSI interface, Gray code



Dimensions



Release date: 2023-01-09 Date of issue: 2023-01-09 Filename: 200779-0015_eng.pdf

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

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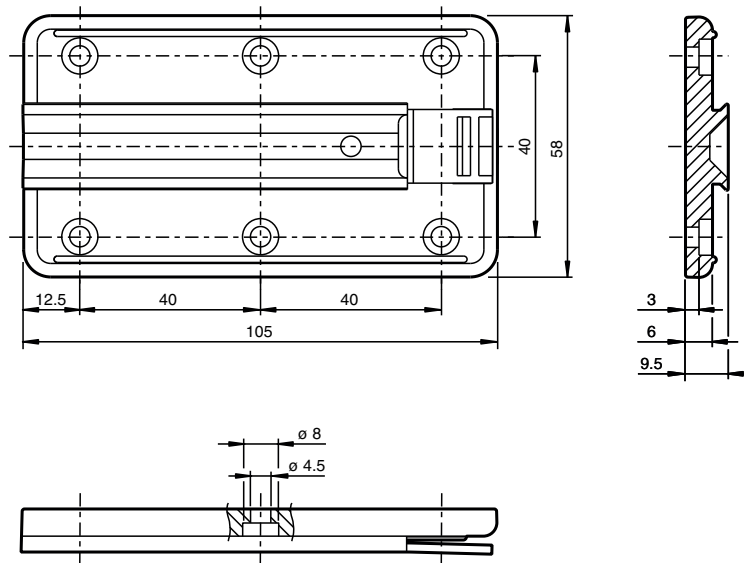
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Dimensions



Technical Data

General specifications

Passage speed	v	≤ 12.5 m/s
Measuring range		max. 327 m
Free tolerances to code rail		horizontal: 10 mm (± 5 mm) vertical: 10 mm (± 5 mm)
Resolution		± 0.42 mm (1,200 positions/m)

Functional safety related parameters

MTTF _d		170 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
Power consumption	P ₀	2 VA with Option H, heating: 9 VA at 24 V DC

Interface

Interface type		SSI interface
Data output code		Gray code , 25 bit
Clock frequency		100 ... 1000 kHz
Pause time	t _p	≥ 20 μs double request possible, if t _p ≤ 10 μs

Standard conformity

Emitted interference		DIN EN 61000-6-4
Noise immunity		DIN EN 61000-6-2
Shock resistance		DIN EN 60068-2-27, half sine 30 g, 18 ms
Vibration resistance		DIN EN 60068-2-6, sine, 5 g, 10 - 2000 Hz, 10 cycles

Approvals and certificates

CSA approval		cCSAus Certified, General Purpose Class 2 power source
CCC approval		CCC approval / marking not required for products rated ≤36 V

Ambient conditions

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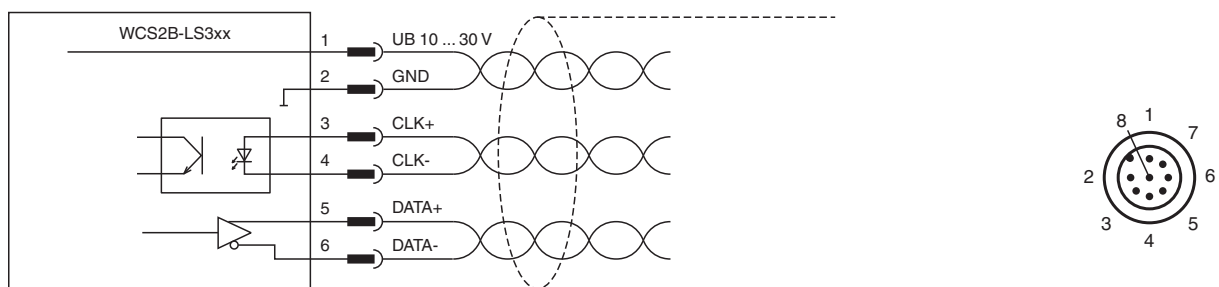
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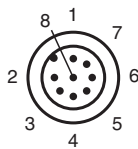
Technical Data

Operating temperature	0 ... 60 °C (32 ... 140 °F) with Option H, heating: -40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	90 % , noncondensing
Mechanical specifications	
Connection type	8-pin, M12 x 1 connector
Degree of protection	IP54
Material	
Housing	ABS , Polycarbonate , Polyamide (PA)
Mass	500 g
General information	
Ordering information	Mounting plate included with delivery

Connection





Connection Assignment



Wire colors

1	WH	(white)
2	BN	(brown)
3	GN	(green)
4	YE	(yellow)
5	GY	(gray)
6	PK	(pink)
7	BU	(blue)
8	RD	(red)

Accessories

	WCS-MP1	Mounting plate for reading heads WCS2 and WCS3
	WCS2-PL2	Transparent protective case and seal for WCS2 reader

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