



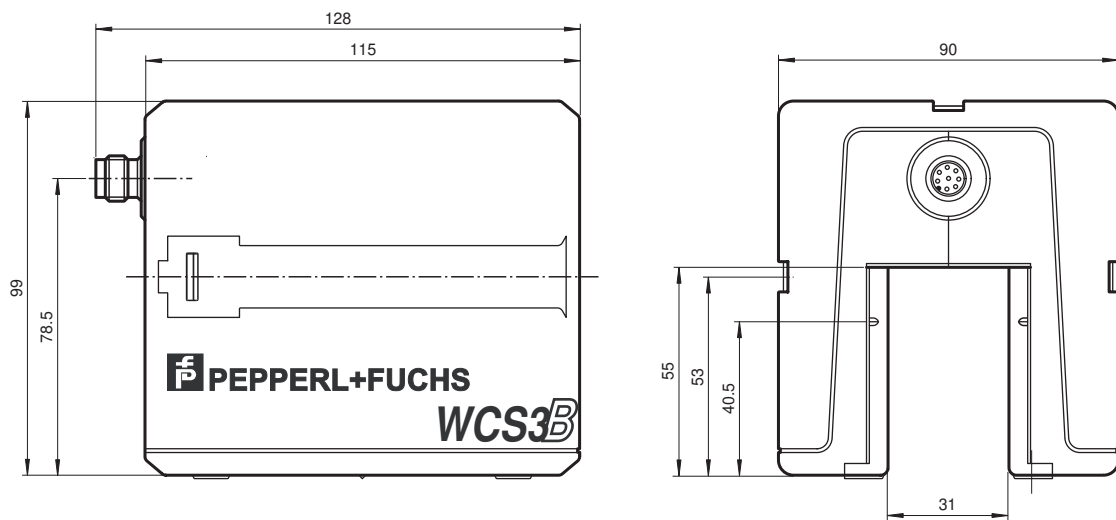
Read head WCS3B-LS311

- 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: 199290-0026_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

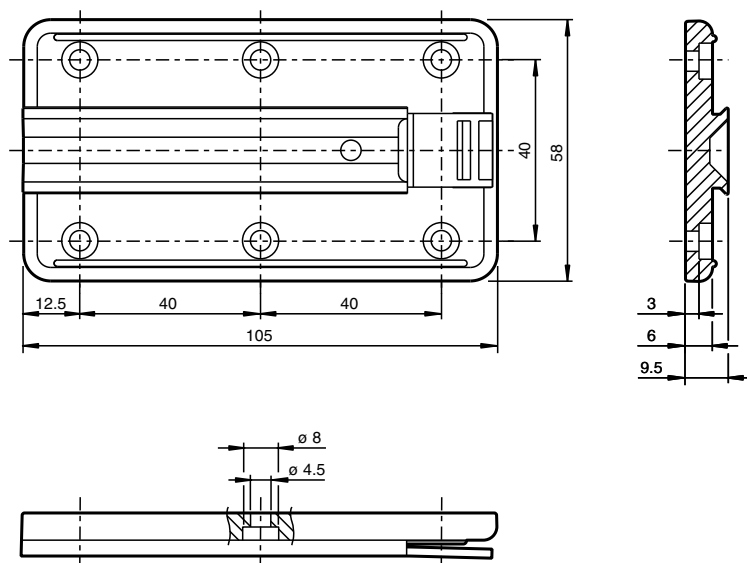
USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Dimensions



Technical Data

General specifications

Passage speed	v	≤ 12.5 m/s
Measuring range		max. 314.5 m
Free tolerances to code rail		horizontal: 31 mm (± 15.5 mm) vertical: 28 mm (± 14 mm)
Resolution		± 0.4 mm (1,250 positions/m)

Functional safety related parameters

MTTF _d		206 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %

Indicators/operating means

Operation indicator		LED green: power on
Data flow indicator		LED yellow: data communication active
Error indicator		LED red flashing: read head outside of code rail solid on: internal diagnostic test failed

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
Power consumption	P ₀	2 VA

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

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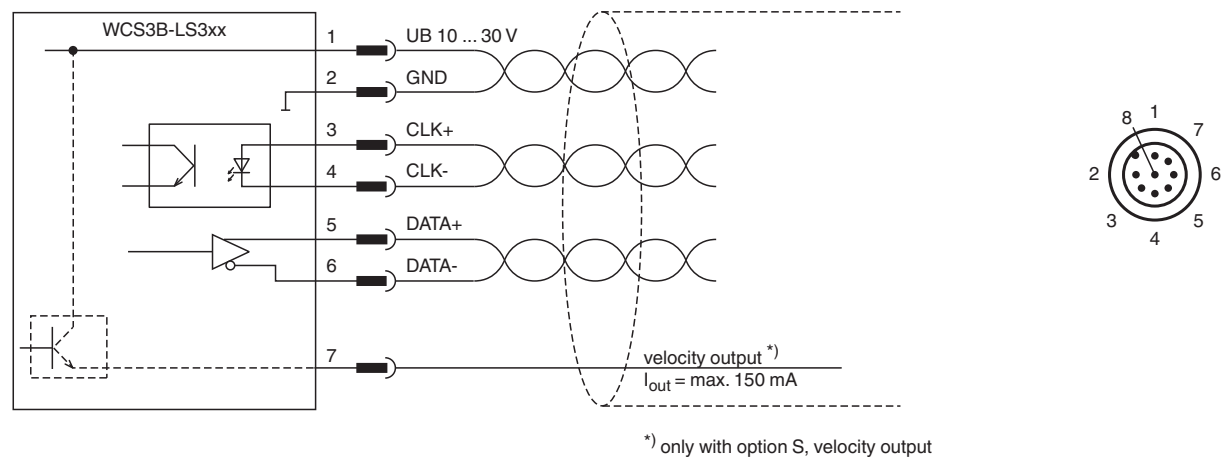
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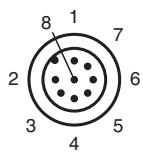
Technical Data

CSA approval	cCSAus Certified, General Purpose Class 2 power source
CCC approval	CCC approval / marking not required for products rated ≤36 V
Ambient conditions	
Operating temperature	0 ... 60 °C (32 ... 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 , PC (Polycarbonate)
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)

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Accessories

	WCS3B-PL2	Transparent protective case and seal for WCS3B reader
	WCS-MP1	Mounting plate for reading heads WCS2 and WCS3

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