



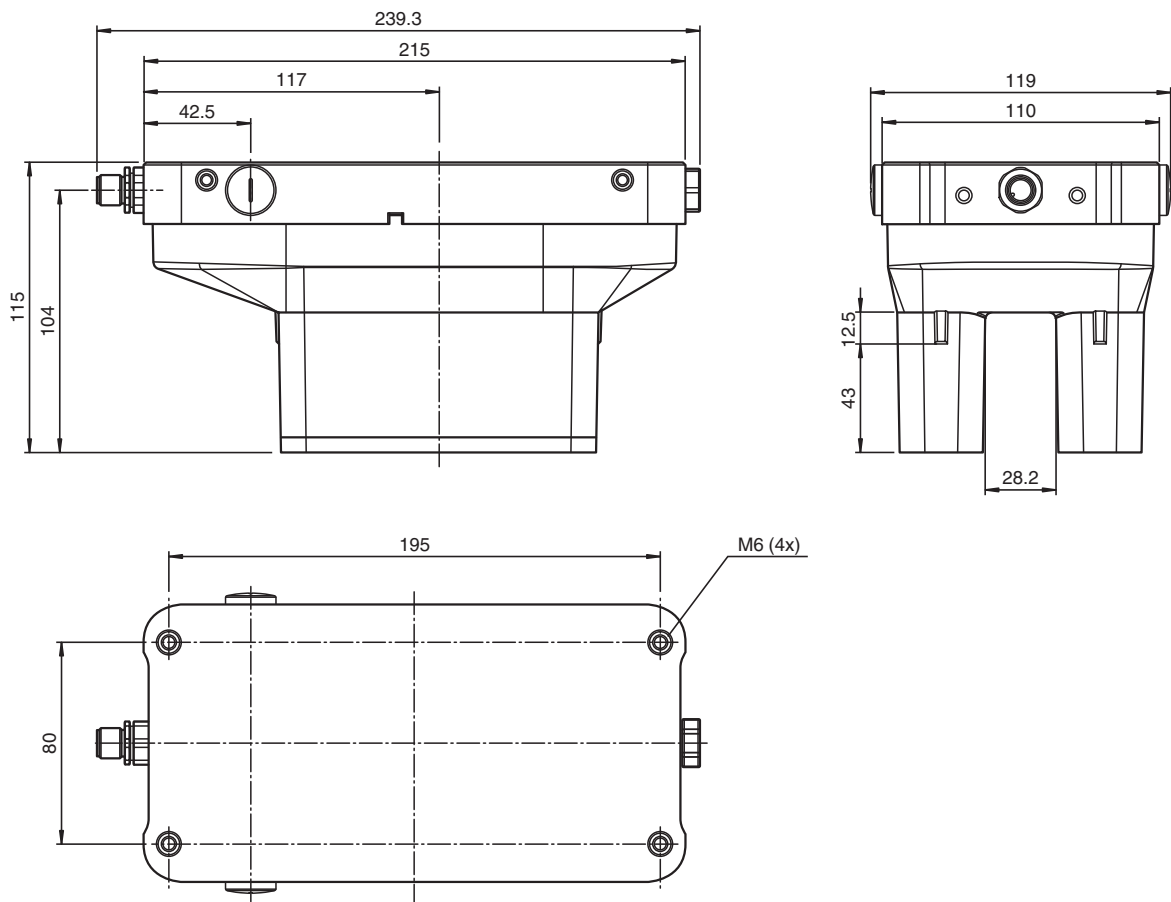
Read head WCS3B-LS311DH-OM

- For outdoor use
- Non-contact, absolute position encoder
- Extended temperature range
- Automatic detection of dirt accumulation
- Freely selectable cable outlet due to rotating insert
- SSI interface

Reading head, SSI interface, Gray code



Dimensions



Technical Data

General specifications

Passage speed	v	≤ 12.5 m/s
Measuring range		max. 314.5 m

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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

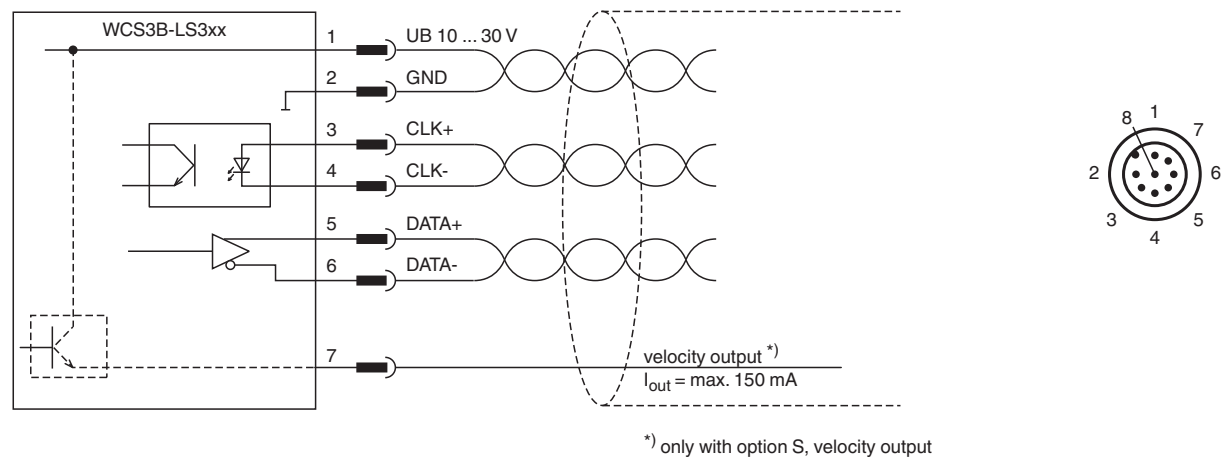
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

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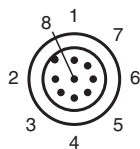
Technical Data

Free tolerances to code rail	horizontal: 28 mm (± 14 mm) vertical: 25.5 mm (+11.5 mm/-14 mm)	
Resolution		± 0.4 mm (1,250 positions/m)
Functional safety related parameters		
MTTF _d		51 a
Mission Time (T _M)		10 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
Display		Display module, 6-digit , adaptable to installation position
Electrical specifications		
Operating voltage	U _B	10 ... 30 V DC
Power consumption	P ₀	11 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		
Operating temperature		-40 ... 60 °C (-40 ... 140 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		8-pin, M12 x 1 connector
Degree of protection		IP67 / IP69
Material		
Housing		PET , PC (Polycarbonate)
Mass		1000 g
Note		The reader must not be operated without the protective housing!

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

	WCS3B-OBP	Stopping plugs For WCS3B-OP* housing
	WCS3B-OPC	Outdoor protective cover for WCS3B reader
	WCS3B-OPH	Outdoor protective housing for reader WCS3B

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