



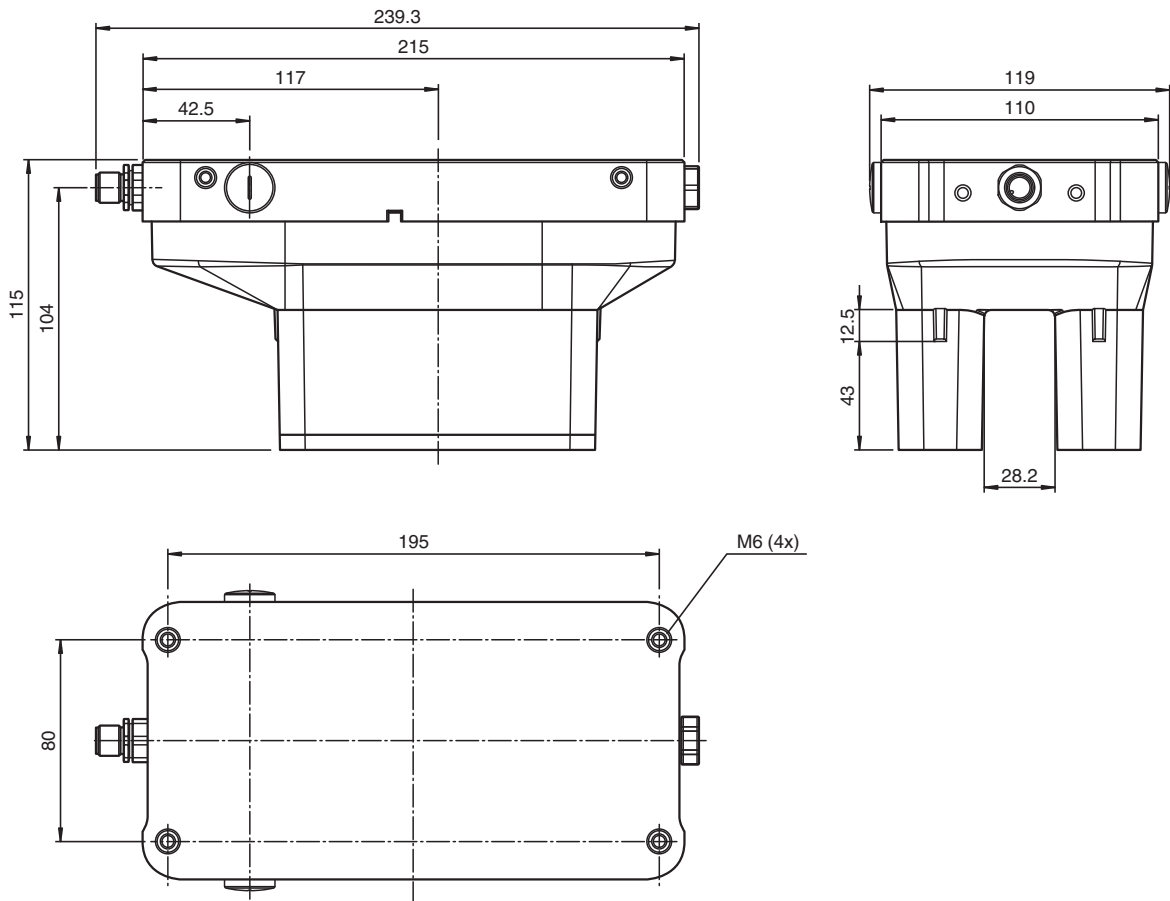
Read head WCS3B-LS311DH-OM

- 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

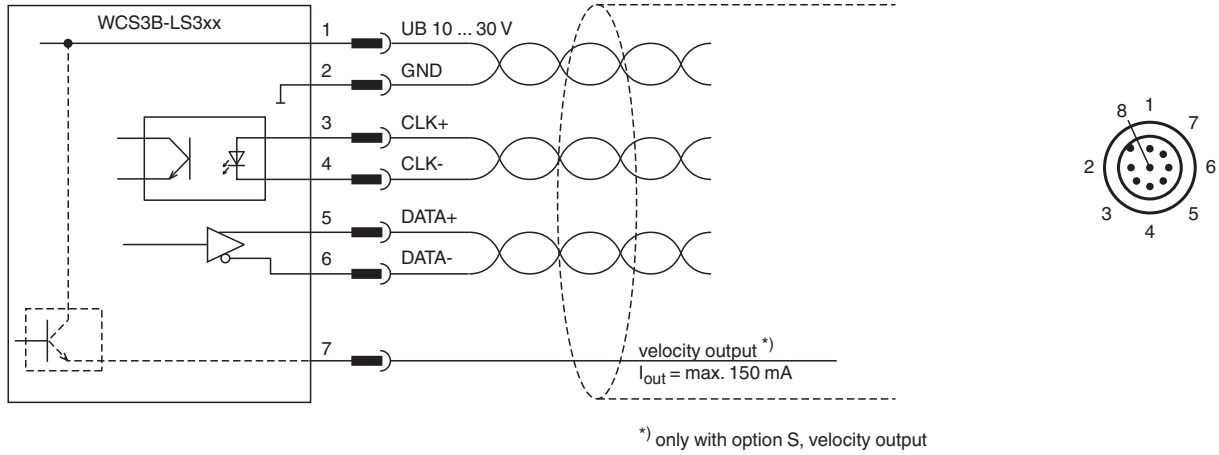
Passage speed	v	≤ 12.5 m/s
Measuring range		max. 314.5 m

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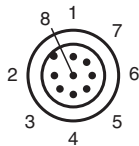
Technical Data

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	tp	≥ 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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