



**Model number**

**WCS3B-LS221H-OM**

Read head, RS-485 interface, with RS-485 termination resistor

**Features**

- For outdoor use
- Non-contact, absolute position encoder
- Extended temperature range
- Automatic detection of dirt accumulation
- RS-485 interface
- Freely selectable cable outlet due to rotating insert

**Accessories**

**WCS3B-OBP**  
Stopping plugs For WCS3B-OP\* housing

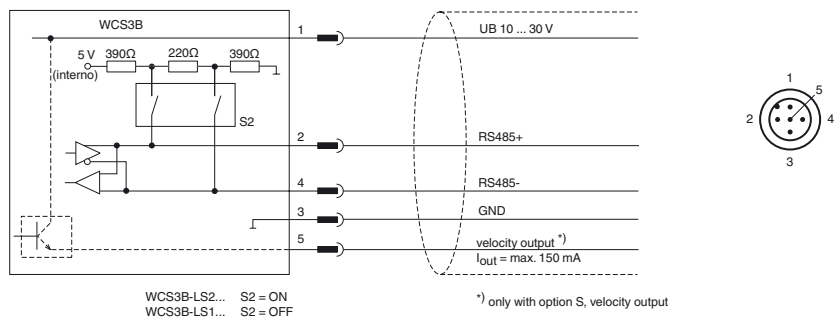
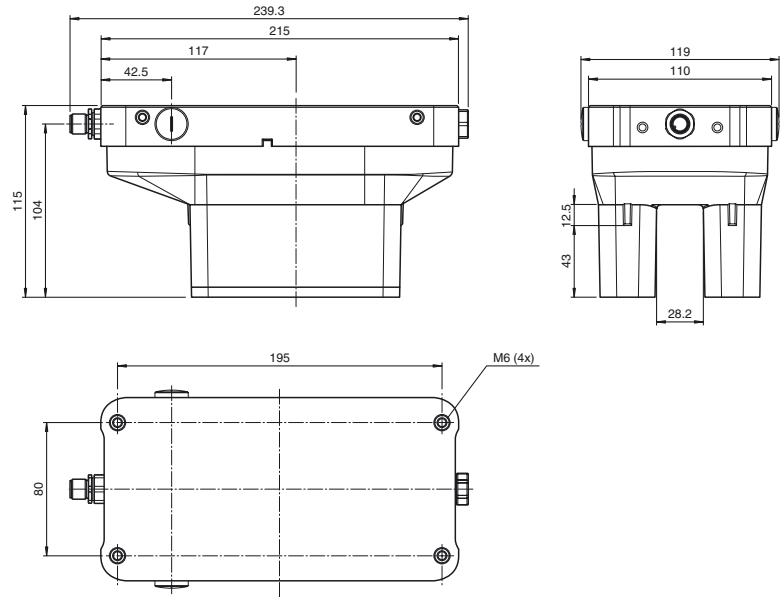
**WCS3B-OPC**  
Outdoor protective cover for WCS3B reader

**WCS3B-OPH**  
Outdoor protective housing for reader WCS3B

**Note**

with RS-485 interface

**Dimensions**



**Technical data**

**General specifications**

Passage speed	v	≤ 12.5 m/s
Measuring range		max. 314.5 m
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 <sub>d</sub>	60 a
Mission Time (T <sub>M</sub> )	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

**Electrical specifications**

Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Power consumption	P <sub>0</sub>	11 VA at 24 V DC

**Interface**

Interface type	RS 485 interface
Data output code	binary code
Protocol	1, 2
Transfer rate	62.5 kBit/s
Address	0
Termination	with RS 485 termination

**Standard conformity**

Emitted interference	DIN EN 61000-6-4 , DIN EN 12015
Noise immunity	DIN EN 61000-6-2 , DIN EN 12016
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

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**Ambient conditions**

Operating temperature	-40 ... 60 °C (-40 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

**Mechanical specifications**

Connection type	5-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!