



**Model number**

**WCS3B-LS221DH**

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

**Features**

- RS 485 interface
- Non-contact, absolute position encoder
- Automatic detection of dirt accumulation
- Integrated display module
- Extended temperature range

**Accessories**

**WCS-MP1**

Mounting plate for reading heads WCS2 and WCS3

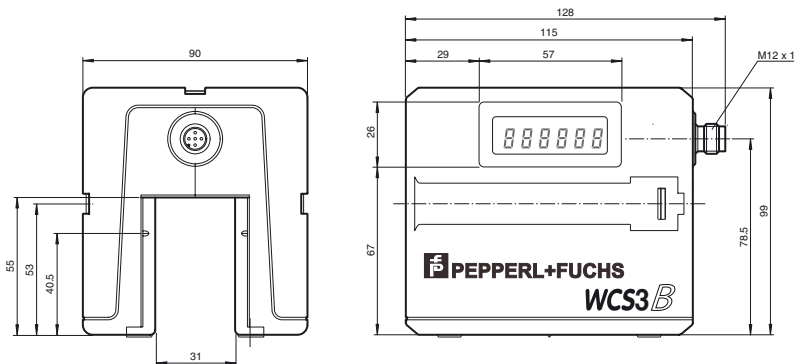
**WCS3B-PL2**

Transparent protective case and seal for WCS3B reader

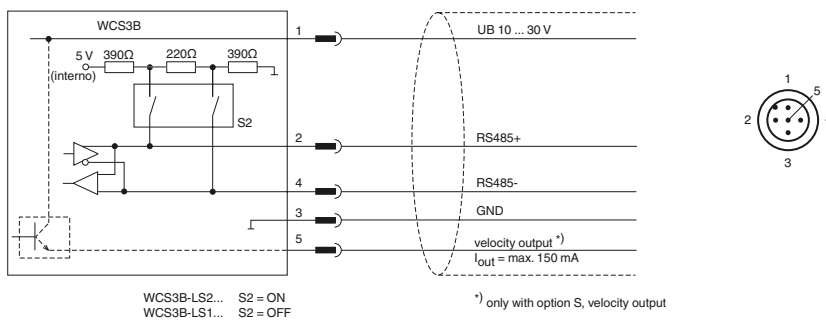
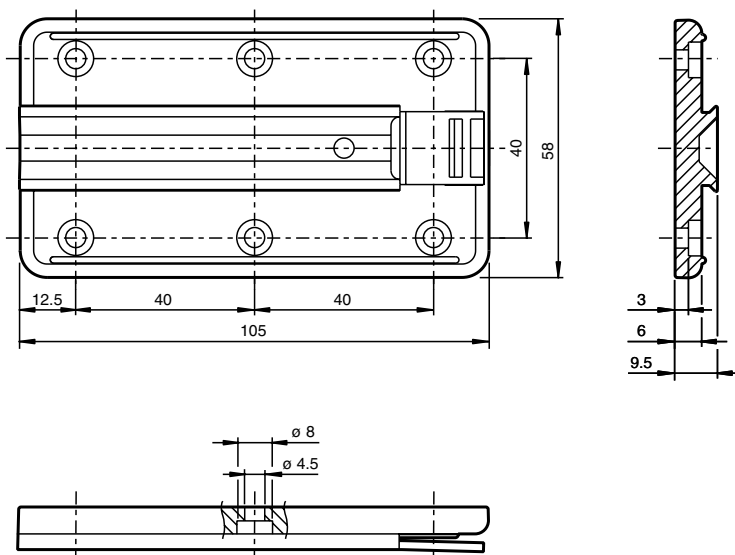
**Note**

with RS 485 interface

**Dimensions**



**Mounting plate**



WCS3B-LS2... S2 = ON  
WCS3B-LS1... S2 = OFF

<sup>1)</sup> only with option S, velocity output

**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)

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<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		50 a
Mission Time (T <sub>M</sub> )		10 a
Diagnostic Coverage (DC)		0 %
<b>Indicators/operating means</b>		
Operating display		LED green: power on
Data flow display		LED yellow: data communication active
Error display		LED red flashing: read head outside of code rail solid on: internal diagnostic test failed
Display		Display module, 6-digit , adaptable to installation position
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Power consumption	P <sub>0</sub>	11 VA at 24 V DC
<b>Interface</b>		
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
<b>Standard conformity</b>		
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
<b>Ambient conditions</b>		
Operating temperature		-40 ... 60 °C (-40 ... 140 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		90 % , noncondensing
<b>Mechanical specifications</b>		
Connection type		M12 x 1 connector, 5-pin
Protection degree		IP54
Material		
Housing		ABS , PC (Polycarbonate)
Mass		500 g
<b>General information</b>		
Ordering information		Mounting plate included with delivery