



**Model number**

**WCS3B-LS311S**

Reading head, SSI interface, Gray code

**Features**

- SSI interface
- Non-contact, absolute position encoder
- Automatic detection of dirt accumulation
- Speed transfer

**Accessories**

**WCS3B-PL2**

Transparent protective case and seal for WCS3B reader

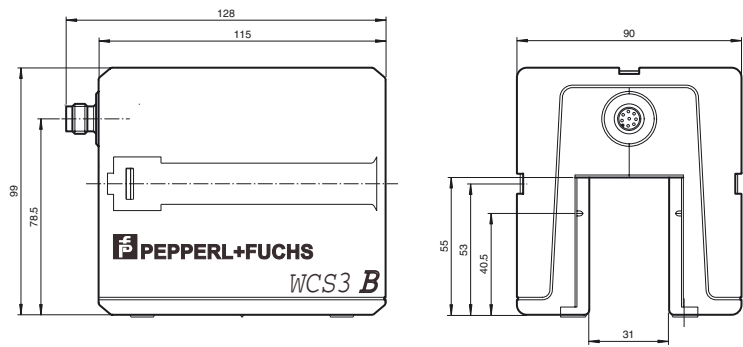
**WCS-MP1**

Mounting plate for reading heads WCS2 and WCS3

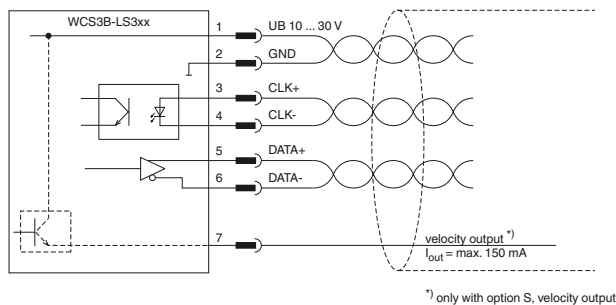
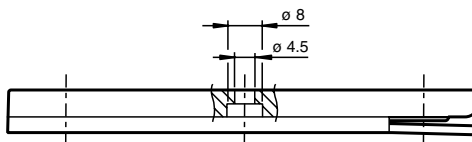
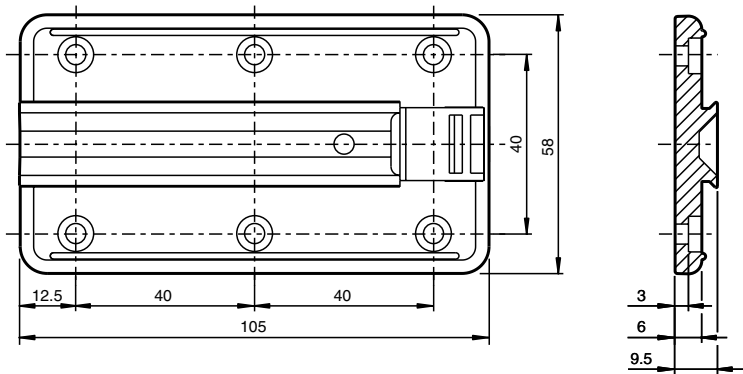
**Note**

with SSI interface

**Dimensions**



**Mounting plate**



**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>		170 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Indicators/operating means</b>		
Operation indicator		LED green: power on
Velocity indicator		LED yellow off, if speed limit is exceeded
Error indicator		LED red flashing: read head outside of code rail solid on: internal diagnostic test failed
<b>Electrical specifications</b>		
Operating voltage	U <sub>B</sub>	10 ... 30 V DC
Power consumption	P <sub>0</sub>	2 VA
<b>Interface</b>		
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 <sub>p</sub> ≤ 10 μs
<b>Output</b>		
Output velocity		switch output , short-circuit protected
Switching voltage		Operating voltage
<b>Standard conformity</b>		
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
<b>Ambient conditions</b>		
Operating temperature		0 ... 60 °C (32 ... 140 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Relative humidity		90 % , noncondensing
<b>Mechanical specifications</b>		
Connection type		8-pin, M12 x 1 connector
Degree of protection		IP54
Material		
Housing		ABS , PC (Polycarbonate)
Mass		500 g
<b>General information</b>		
Ordering information		Mounting plate included with delivery