



Model number

WCS3B-LS221ES

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

Features

- Measuring length max. 629 m
- RS-485 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

Matching system components

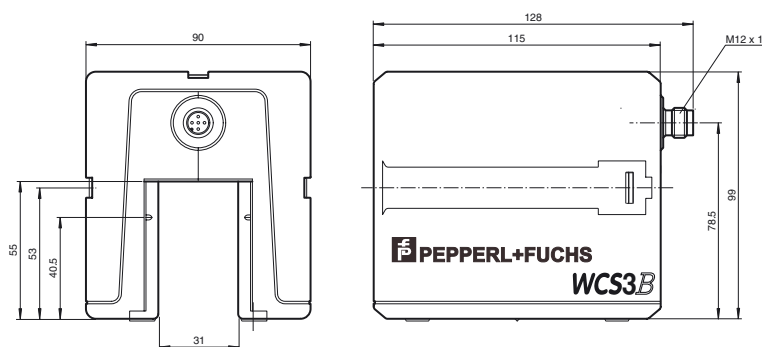
WCS3-CS70-E

WCS3 code rail extender

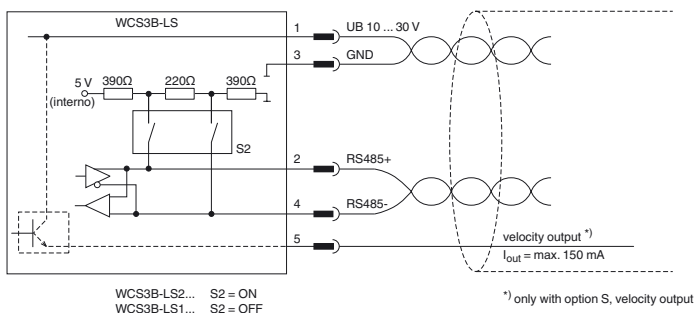
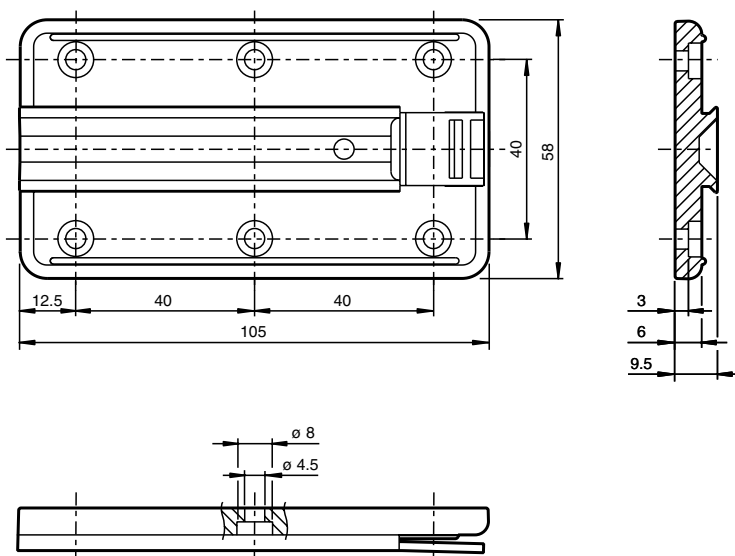
Note

with RS-485 interface

Dimensions



Mounting plate



Technical data

General specifications

Passage speed	v	≤ 12.5 m/s
Measuring range		max. 629 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)

Functional safety related parameters

MTTF _d	157 a
Mission Time (T _M)	20 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

Data flow indicator	1 LED yellow flashing: data communication active
Velocity indicator	2 LED yellow on: if the speed limit is not exceeded off, if speed limit is exceeded
Error indicator	3 Dual LED green on: code rail detected, normal function green flashing: invalid position red on: internal diagnostic test failed red flashing: read head outside of code rail

Electrical specifications

Operating voltage	U _B	10 ... 30 V DC
Power consumption	P ₀	2.2 VA

Interface

Interface type	RS 485 interface
Data output code	binary code
Protocol	2 , extended to 629 m
Transfer rate	62.5 kBit/s
Address	0
Termination	with RS 485 termination
Query cycle time	≥ 5 ms

Output

Output velocity	switch output
Output type	1 switch output PNP, NO , short-circuit protected
Switching voltage	Operating voltage
Switching current	150 mA

Standard conformity

Emitted interference	EN 61000-6-4:2007+A1:2011
Noise immunity	EN 61000-6-2:2005
Shock resistance	EN 60068-2-27:2009
Vibration resistance	EN 60068-2-6:2008

Ambient conditions

Operating temperature	0 ... 60 °C (32 ... 140 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Relative humidity	90 % , noncondensing

Mechanical specifications

Connection type	5-pin, M12 x 1 connector
Degree of protection	IP54
Material	
Housing	ABS , PC (Polycarbonate)
Mass	500 g

General information

Ordering information	Mounting plate included with delivery
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