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

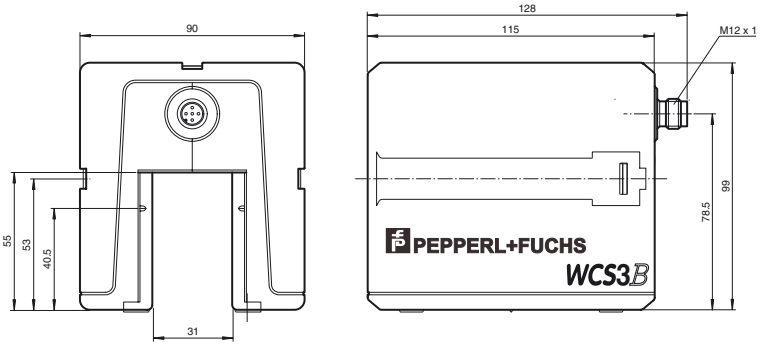
Matching system components

WCS3-CS70-E
WCS3 code rail extender

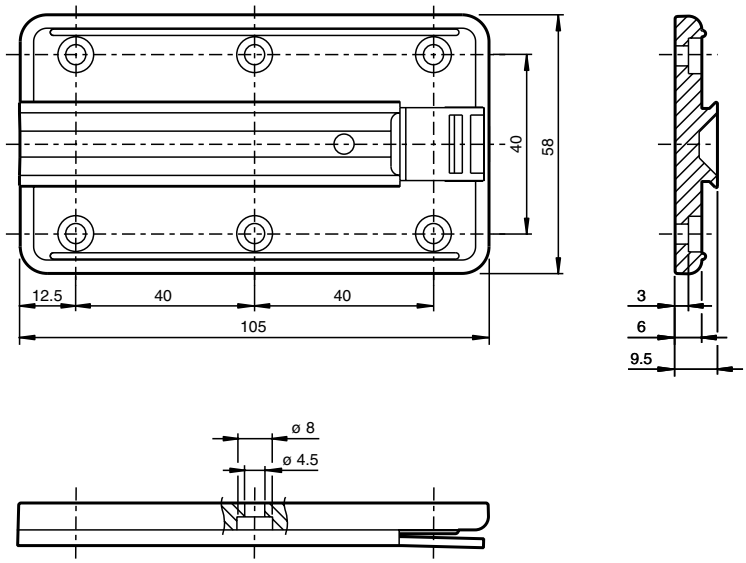
Note

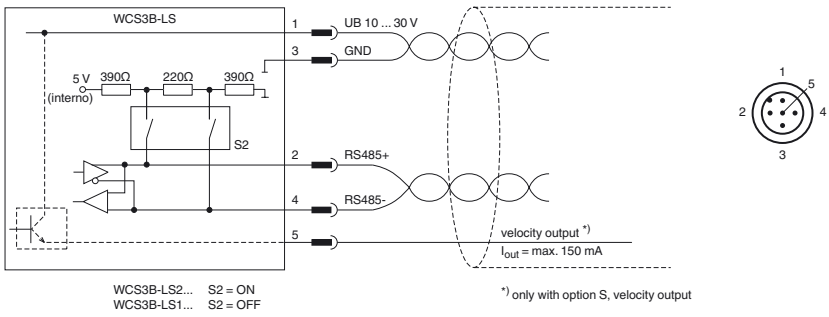
with RS-485 interface

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)

Release date: 2019-11-15 15:11 Date of issue: 2019-11-15 199290-0045_eng.xml

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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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".
Pepperl+Fuchs Group www.pepperl-fuchs.com
USA: +1 330 486 0001 fa-info@us.pepperl-fuchs.com
Germany: +49 621 776 1111 fa-info@de.pepperl-fuchs.com
Singapore: +65 6779 9091 fa-info@sg.pepperl-fuchs.com
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