



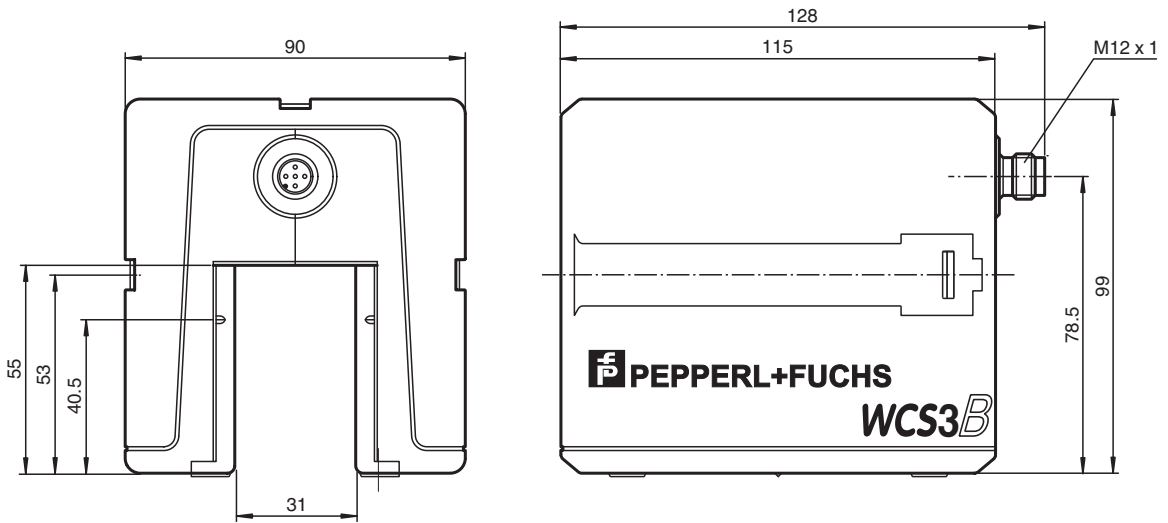
Read head WCS3B-LS221ES

- Measuring length max. 629 m
- RS-485 interface
- Non-contact, absolute position encoder
- Automatic detection of dirt accumulation
- Speed transfer

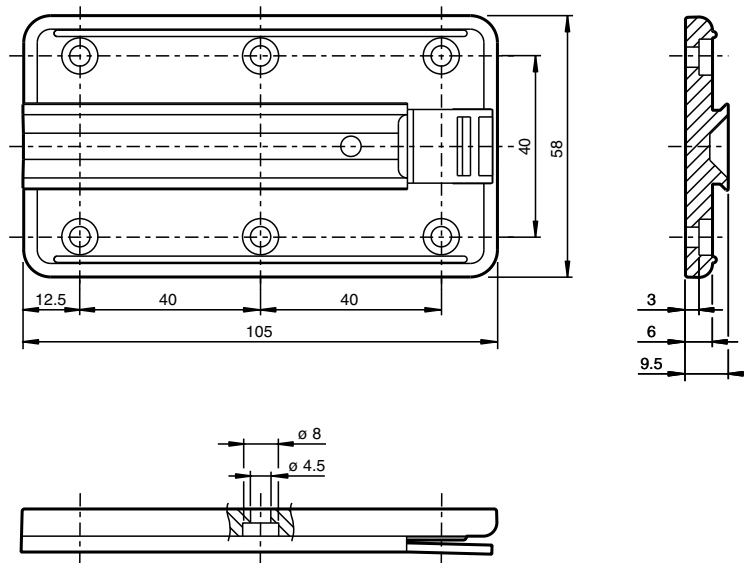
Read head, RS-485 interface, with RS-485 termination resistor



Dimensions



Dimensions



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		151 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

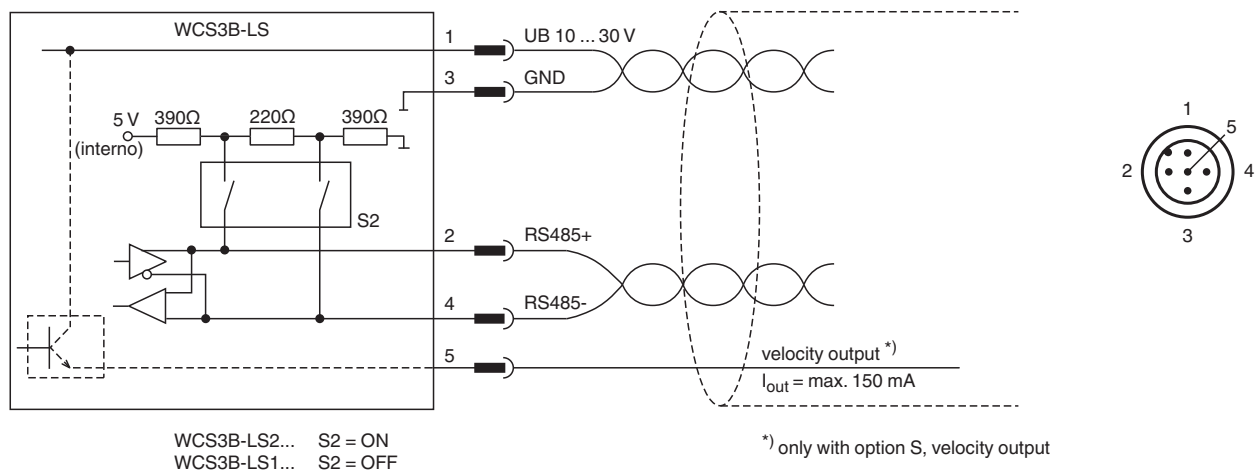
Interface

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

Technical Data

Output	
Output velocity	switching 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
Approvals and certificates	
CSA approval	cCSAus Certified, General Purpose Class 2 power source
CCC approval	CCC approval / marking not required for products rated ≤ 36 V
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

Connection



Accessories

	WCS3B-PL2	Transparent protective case and seal for WCS3B reader
	WCS-MP1	Mounting plate for reading heads WCS2 and WCS3