



## Read head

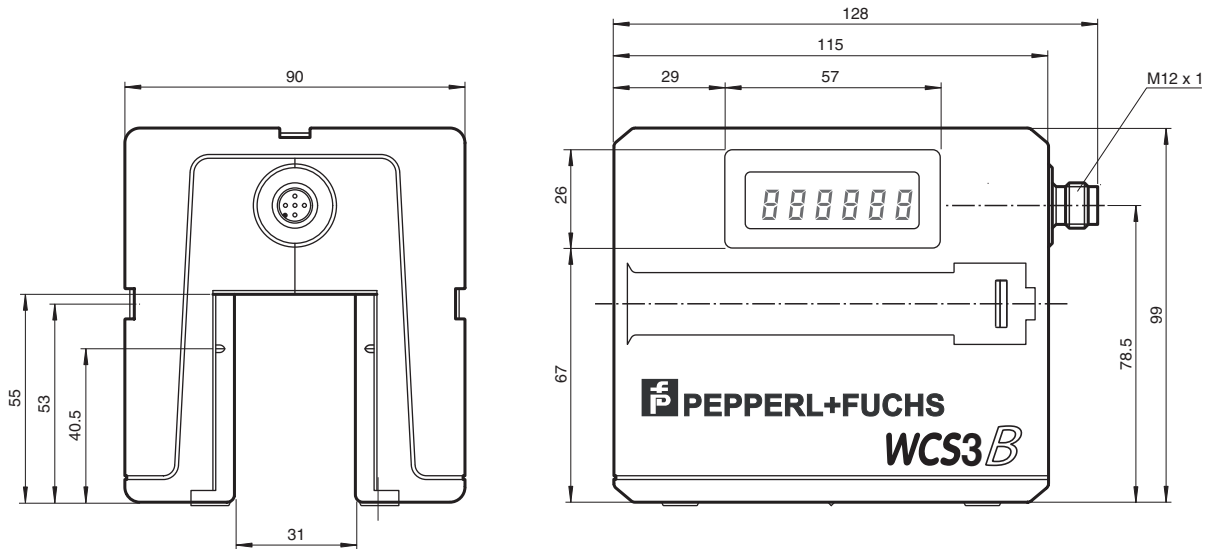
### WCS3B-LS810DHS

- IO-Link interface for service and process data
- Non-contact, absolute position encoder
- Automatic detection of dirt accumulation
- Integrated display module
- Extended temperature range
- Output of position and speed
- Acceleration measurement in 3 axis
- Output of the ID number for ID pads

Read head, IO-Link interface

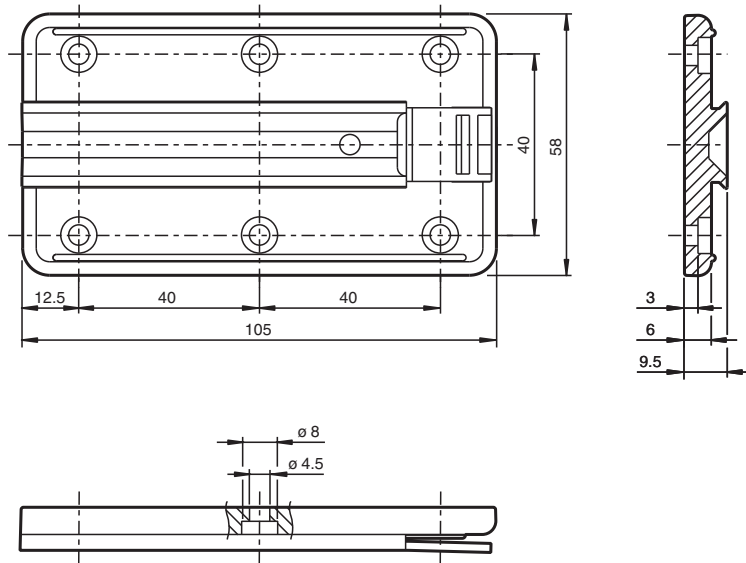


## Dimensions



Release date: 2024-11-29 Date of issue: 2024-11-29 Filename: 199290-0061\_eng.pdf

## Dimensions



## Technical Data

### General specifications

Passage speed	v	≤ 12.5 m/s
Measuring length		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)

### Functional safety related parameters

MTTF <sub>d</sub>		40 a
Mission Time (T <sub>M</sub> )		10 a
Diagnostic Coverage (DC)		0 %

### Indicators/operating means

Operation indicator		LED green: constantly on - power on flashing - IO-Link mode
Data flow indicator		LED yellow: data communication active
Error indicator		LED red flashing: read head outside of code rail solid on: internal diagnostic test failed
Display		Display module, 6-digit , adaptable to installation position

### Electrical specifications

Operating voltage	U <sub>B</sub>	18 ... 30 V DC
Power consumption	P <sub>0</sub>	12 VA

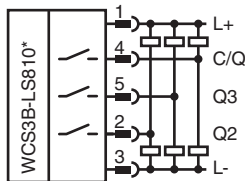
### Interface

Interface type		IO-Link
IO-Link revision		1.1
Device profile		Identification and Diagnosis - I&D Firmware update
Process data		Input: 18 Byte - Position value 32 Bit - Velocity value 16 Bit - Acceleration values 3 x 16 Bit - Ident number 16 Bit - Heartbeat 8 Bit - status data 24 Bit output: 1 Byte - control signals 8 Bit
Vendor ID		1 (0x0001)
Device ID		6291713 (0x600101)
Transfer rate		COM3 (230.4 kbits/s)

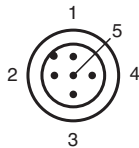
## Technical Data

Min. cycle time	1.5 ms
SIO mode support	no
Compatible master port type	Class A
<b>Standard conformity</b>	
Communication interface	IEC 61131-9 / IO-Link V1.1.3
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>Approvals and certificates</b>	
CSA approval	cCSAus Certified, General Purpose Class 2 power source
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V
<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	5-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

## Connection Assignment



## Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)
5	GY	(gray)