



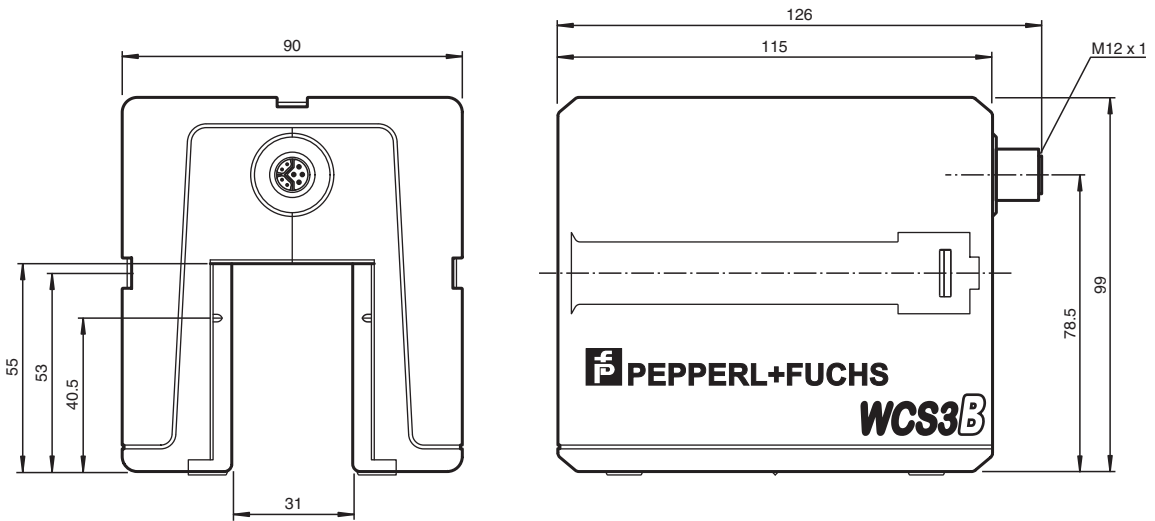
Read head WCS3B-LS710S

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

Read head with EtherCAT interface

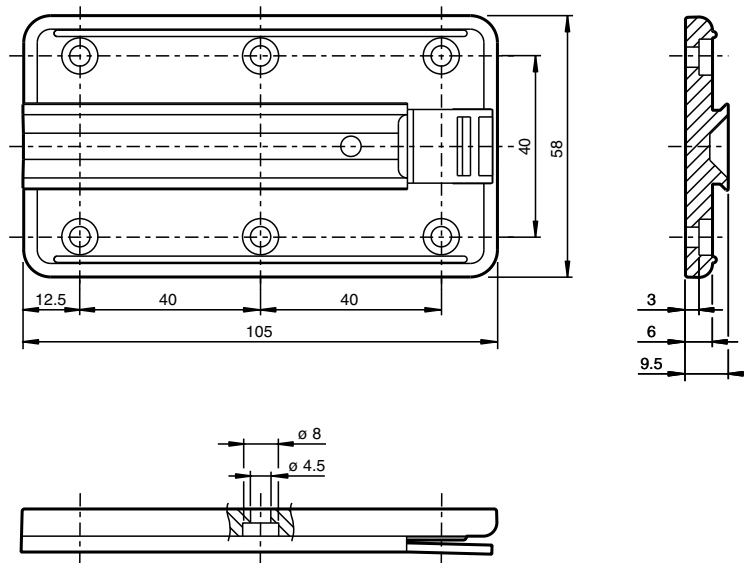


Dimensions



Release date: 2022-10-20 Date of issue: 2022-10-20 Filename: 199290-0055_eng.pdf

Dimensions



Technical Data

General specifications

| | | |
|------------------------------|---|--|
| Sampling rate | | 1.5 ms |
| 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) |

Functional safety related parameters

| | | |
|--------------------------------|--|-------|
| MTTF _d | | 160 a |
| Mission Time (T _M) | | 20 a |
| Diagnostic Coverage (DC) | | 0 % |

Indicators/operating means

| | | |
|----------------|--|---|
| LED indication | | Status indication Green: code rail detected, normal function Red: system error Flashing red: no code rail detected |
| LED ERROR | | Error status (red) see manual for coding |
| LED RUN | | Off: init Flashing (green): pre-operational Single flash (green): safe-operational On (green): operational |
| LED Link/Act | | Port status (green) |

Electrical specifications

| | | |
|-------------------|----------------|----------------|
| Operating voltage | U _B | 10 ... 30 V DC |
| Power consumption | P ₀ | 6 W |

Interface

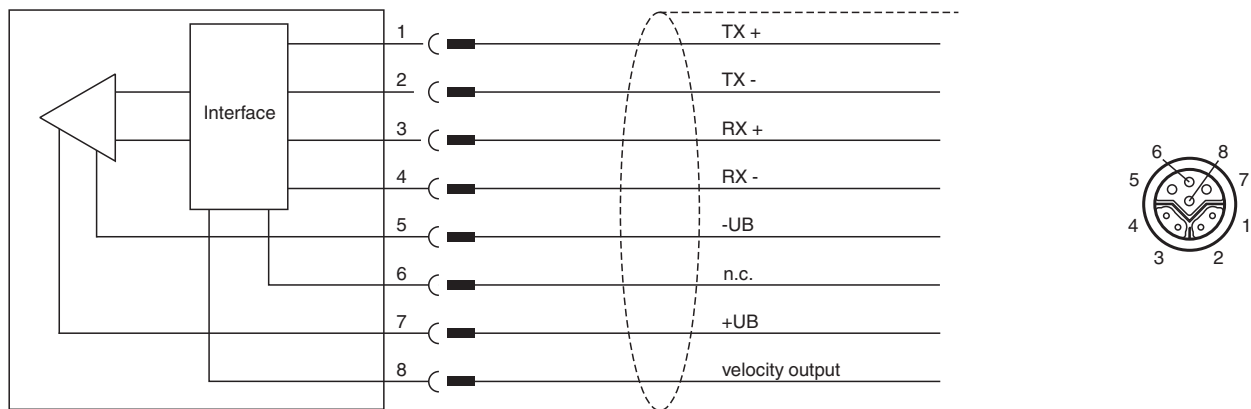
| | | |
|------------------|--|------------------------|
| Interface type | | Ethernet ; 100 BASE-TX |
| Data output code | | binary code |
| Protocol | | EtherCAT |
| Transfer rate | | 100 MBit/s |

Output

Technical Data

| | |
|-----------------------------------|--|
| Output velocity | switching output short-circuit protected |
| Switching voltage | Operating voltage |
| Load current | max. 25 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 | 8-pin, M12 x 1 connector socket, Y-coded |
| Cable gland | Max. tightening torque of the cap nut: ≤ 0.4 Nm |
| Degree of protection | IP54 |
| Material | |
| Housing | ABS , PC (Polycarbonate) |
| Mass | 500 g |
| General information | |
| Ordering information | Mounting plate included with delivery |









Connection Assignment



Connection Assignment



Accessories

| | | |
|---|------------------------------|--|
|  | WCS3B-PL2 | Transparent protective case and seal for WCS3B reader |
|  | WCS-MP1 | Mounting plate for reading heads WCS2 and WCS3 |
|  | V19SY-G-BK10M-PUR-ABG | Male single-ended cordset, M12, 8-pin, Y encryption, PUR cable, shielded |
|  | V45-G | Male connector RJ45 straight 4-pin, Cat5, shielded, field-attachable |
|  | V45-GP | Male connector RJ45 straight 4-pin, Cat5, shielded, field-attachable, Outdoor |
|  | V15S-W-ABG-PG9 | Male connector M12 angled A-coded 5-pin, for cable diameter 5 - 8 mm, shielded, field-attachable |
|  | V15S-G-ABG-PG9 | Male connector M12 straight A-coded 5-pin, for cable diameter 5 - 8 mm, shielded, field-attachable |
|  | V19SY-Y-V1D/V1S | Y-Splitter M12 plug 8-pin Y-coded to M12 socket 4-pin D-coded / M12 plug 4-pin A-coded |