

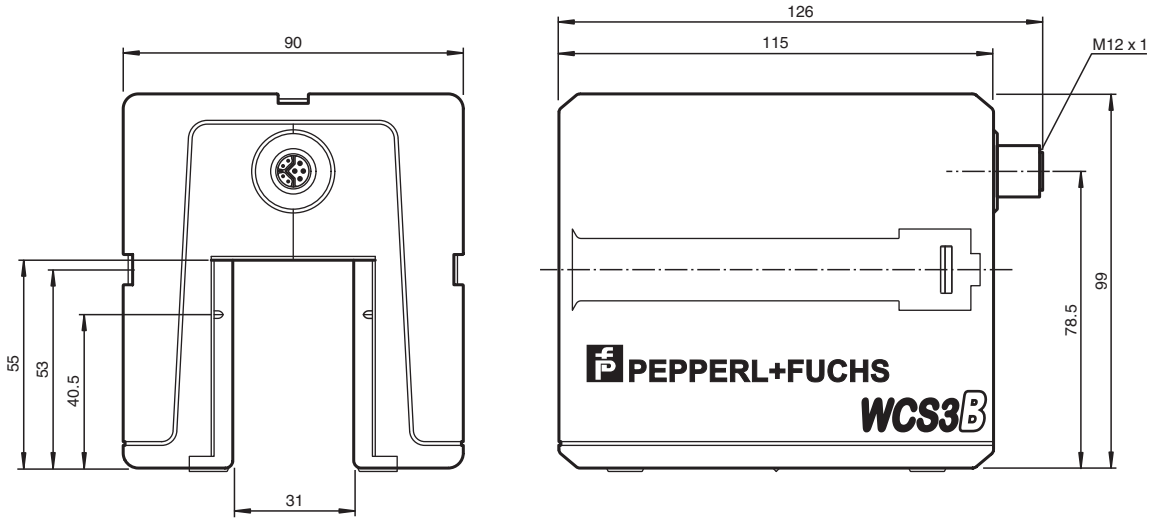

# Read head

## WCS3B-LS510H

- Non-contact, absolute position encoder
- Output of position and speed
- Automatic detection of dirt accumulation
- Unicast communication
- A shared connection for supply and Ethernet
- Extended temperature range

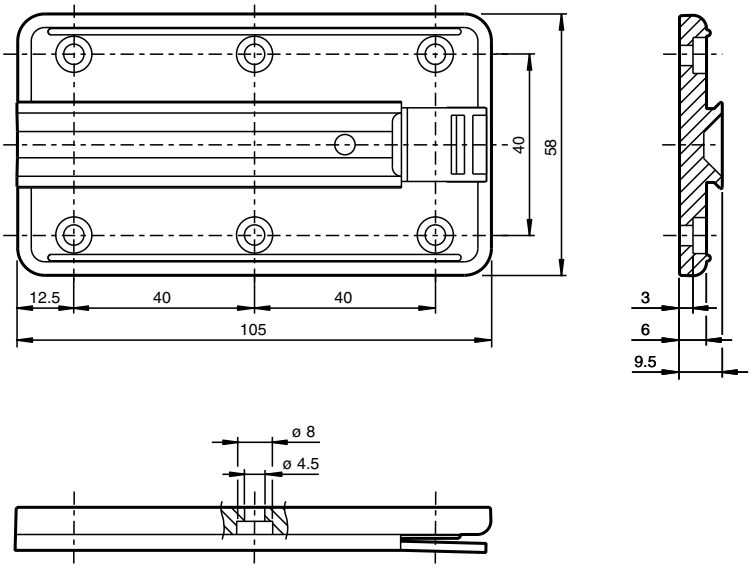
EtherNet/IP™

## Dimensions




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## Dimensions




## Technical Data

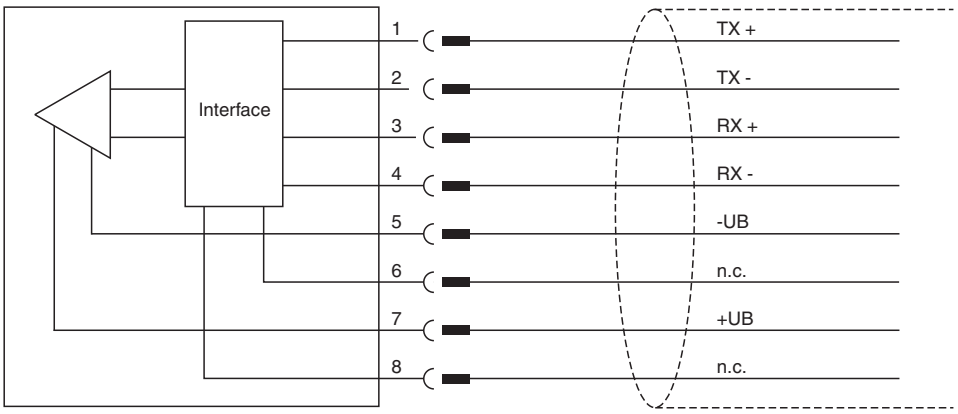
| | | |
|---|---|---|
| **General specifications** | | |
| Passage speed | v | ≤ 12.5 m/s |
| Measuring range | | max. 314.5 m |
| Free tolerances to code rail | | horizontal: 28 mm ( ± 14 mm )<br>vertical: 25.5 mm ( +11.5 mm/-14 mm ) |
| Resolution | | ± 0.4 mm (1,250 positions/m) |
| **Functional safety related parameters** | | |
| $MTTF_d$ | | 57 a |
| Mission Time ($T_M$) | | 10 a |
| Diagnostic Coverage (DC) | | 0 % |
| **Indicators/operating means** | | |
| LED green | | ETHERNET link<br>To: ETHERNET connection OK |
| LED yellow | | ETHERNET Bus Activity<br>Flashing: data transfer |
| LED red | | ETHERNET communication<br>To: communication error |
| LED red/green | | Status indication<br>Green: code rail detected, normal function<br>Red: system error<br>Flashing red: no code rail detected |
| **Electrical specifications** | | |
| Operating voltage | $U_B$ | 10 ... 30 V DC |
| Power consumption | $P_0$ | 15 W |
| **Interface** | | |
| Interface type | | 100 BASE-TX |
| Data output code | | binary code |
| Protocol | | EtherNet/IP |
| Transfer rate | | 100 MBit/s |
| **Standard conformity** | | |
| Emitted interference | | EN 61000-6-4:2007+A1:2011 |
| Noise immunity | | EN 61000-6-2:2005 |

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| | |
|---|---|
| Shock resistance | EN 60068-2-27:2009 |
| Vibration resistance | EN 60068-2-6:2008 |
| **Approvals and certificates** | |
| CSA approval | cCSAus Certified, General Purpose<br>Class 2 power source |
| CCC approval | CCC approval / marking not required for products rated ≤36 V |
| **Ambient conditions** | |
| Operating temperature | -40 ... 60 °C (-40 ... 140 °F) |
| Storage temperature | -40 ... 85 °C (-40 ... 185 °F) |
| **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







## Accessories

| | | |
|---|---|---|
|  | **V19SY-G-BK5M-PUR-ABG** | Male single-ended cordset, M12, 8-pin, Y encryption, PUR cable, shielded |
|  | **V19SY-G-BK2M-PUR-ABG** | Male single-ended cordset, M12, 8-pin, Y encryption, PUR cable, shielded |
|  | **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** | Field-attachable male connector |

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## Accessories

| | | |
|---|---|---|
|  | **V45-GP** | Field-attachable "Push-Pull" connector |
|  | **V15S-W-ABG-PG9** | Cable connector, M12, 5-pin, shielded, non pre-wired |
|  | **V15S-G-ABG-PG9** | Cable connector, M12, 5-pin, shielded, non pre-wired |
|  | **WCS-V45DIN-8P** | Terminal Block |

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