

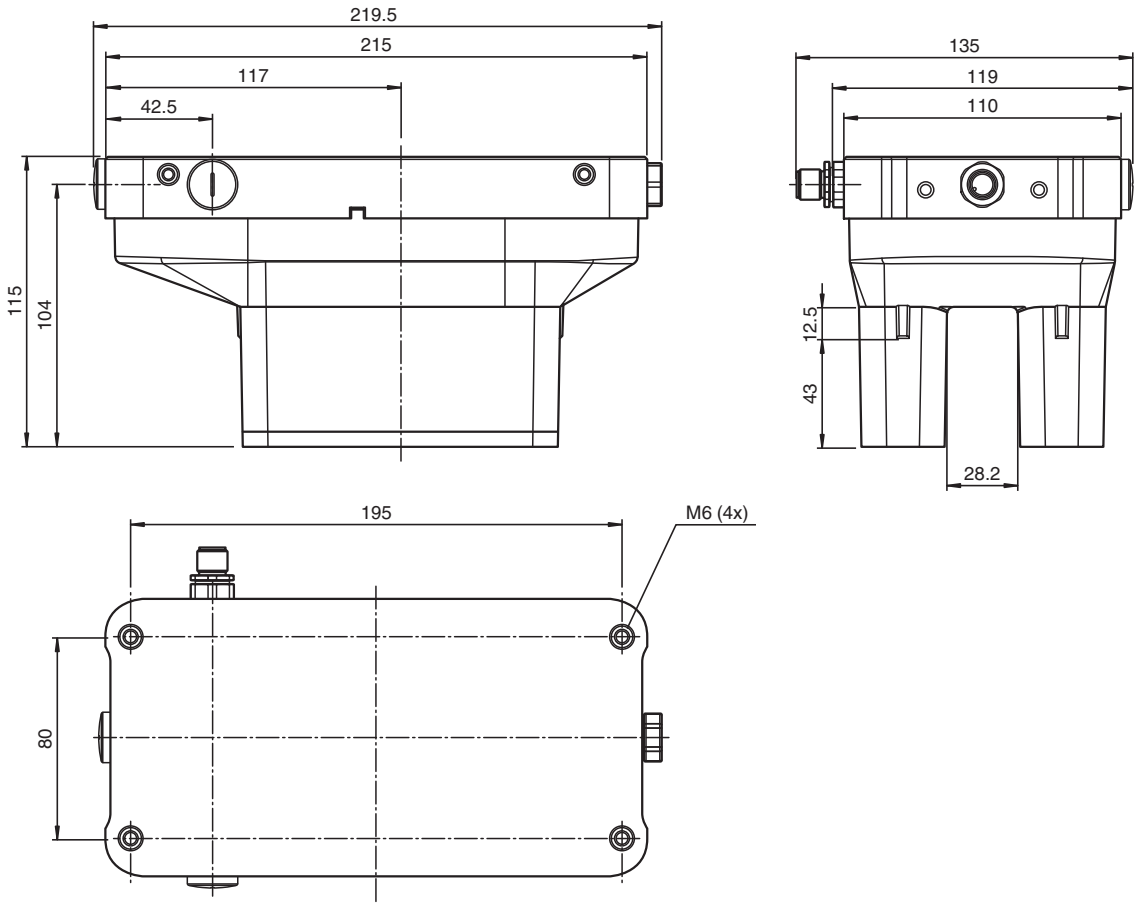
# Read head

## WCS3B-LS221H-OR

- For outdoor use
- Non-contact, absolute position encoder
- Extended temperature range
- Automatic detection of dirt accumulation
- RS-485 interface
- Freely selectable cable outlet due to rotating insert

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

## Dimensions




## Technical Data

| General specifications | | |
|---|---|---|
| Passage speed | v | ≤ 12.5 m/s |
| Measuring range | | max. 314.5 m |

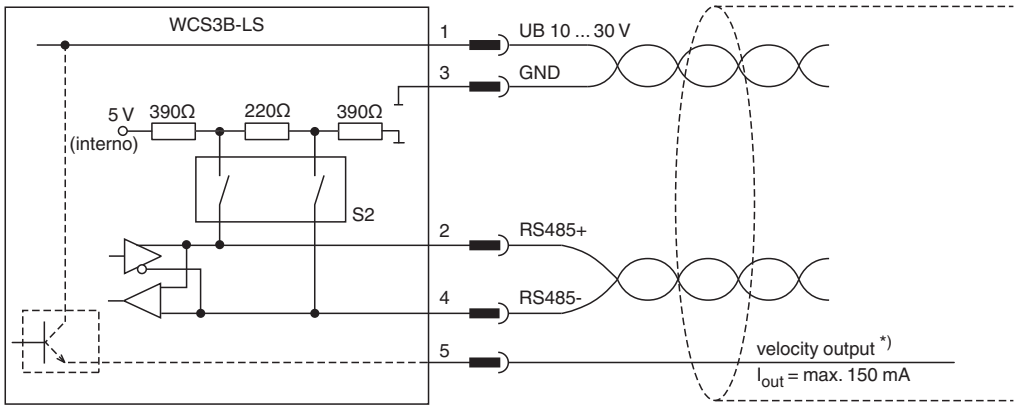
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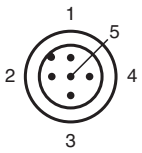
## Technical Data

| | | |
|---|---|---|
| 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** | | |
| $MTTF_d$ | | 60 a |
| Mission Time ($T_M$) | | 10 a |
| Diagnostic Coverage (DC) | | 0 % |
| **Indicators/operating means** | | |
| Operation indicator | | LED green: power on |
| Data flow indicator | | LED yellow: data communication active |
| Error indicator | | LED red<br>flashing: read head outside of code rail<br>solid on: internal diagnostic test failed |
| **Electrical specifications** | | |
| Operating voltage | $U_B$ | 10 ... 30 V DC |
| Power consumption | $P_0$ | 11 VA at 24 V DC |
| **Interface** | | |
| Interface type | | RS 485 interface |
| Data output code | | binary code |
| Protocol | | 1 , 2 |
| Transfer rate | | 62.5 kBit/s |
| Address | | 0 |
| Termination | | with RS 485 termination |
| **Standard conformity** | | |
| 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 |
| **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 | | 5-pin, M12 x 1 connector |
| Degree of protection | | IP67 / IP69 |
| Material | | |
| Housing | | PET , PC (Polycarbonate) |
| Mass | | 1000 g |
| Note | | The reader must not be operated without the protective housing! |

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## Connection




WCS3B-LS2... S2 = ON
WCS3B-LS1... S2 = OFF

*) only with option S, velocity output

## Accessories

| | | |
|---|---|---|
|  | **WCS3B-OBP** | Stopping plugs For WCS3B-OP* housing |
|  | **WCS3B-OPC** | Outdoor protective cover for WCS3B reader |
|  | **WCS3B-OPH** | Outdoor protective housing for reader WCS3B |

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