



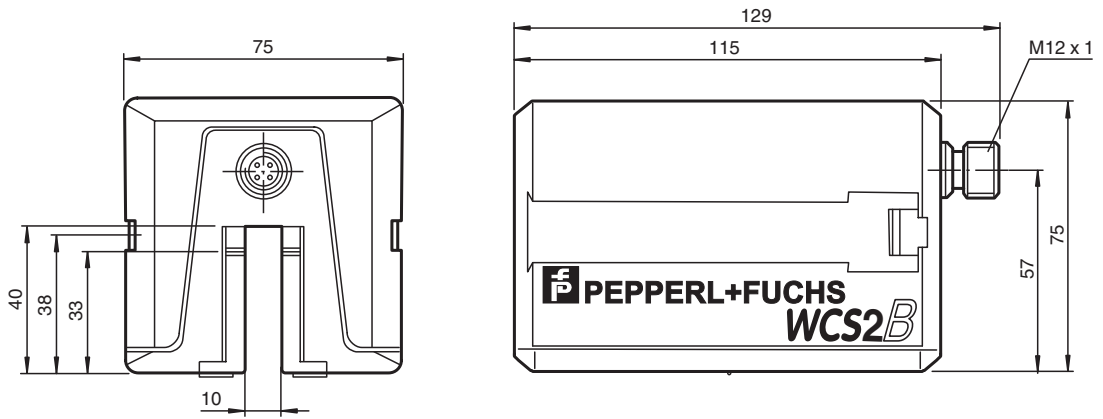
## Read head WCS2B-LS111

- RS-485 interface
- Non-contact, absolute position encoder
- Automatic detection of dirt accumulation

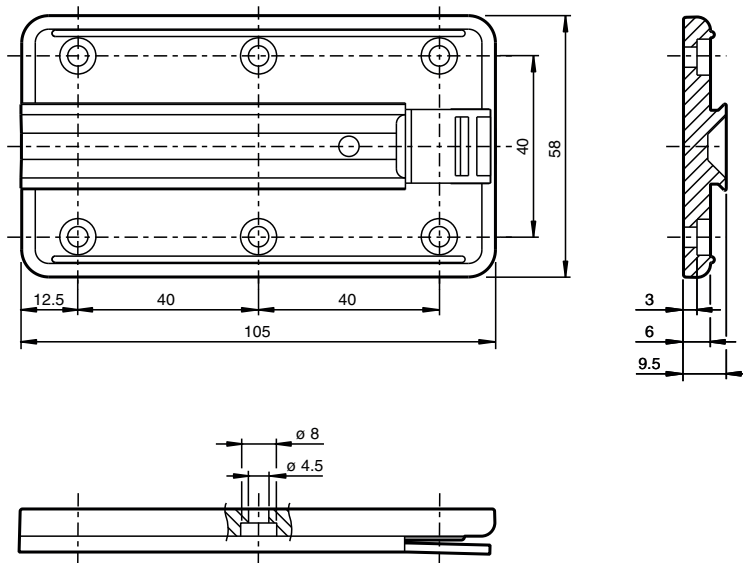
Reading head, RS-485 interface, without RS-485 termination resistor



### Dimensions



## Dimensions



## Technical Data

### General specifications

|                              |   |  |
|------------------------------|---|--|
| Passage speed                | v | ≤ 12.5 m/s   |
| Measuring range              |   | max. 327 m   |
| Free tolerances to code rail |   | horizontal: 10 mm (± 5 mm)<br>vertical: 10 mm (± 5 mm) |
| Resolution                   |   | ± 0.42 mm (1,200 positions/m)                          |

### Functional safety related parameters

|                                |  |      |
|--------------------------------|--|------|
| MTTF <sub>d</sub>              |  | 66 a |
| Mission Time (T <sub>M</sub> ) |  | 10 a |
| Diagnostic Coverage (DC)       |  | 0 %  |

### Electrical specifications

|                   |                |                |
|-------------------|----------------|----------------|
| Operating voltage | U <sub>B</sub> | 10 ... 30 V DC |
| Power consumption | P <sub>0</sub> | 2 VA           |

### Interface

|                  |  |                            |
|------------------|--|----------------------------|
| Interface type   |  | RS 485 interface           |
| Data output code |  | binary code                |
| Protocol         |  | 1, 2                       |
| Transfer rate    |  | 187.5 MBit/s               |
| Termination      |  | without RS 485 termination |

### Standard conformity

|                      |  |  |
|----------------------|--|--|
| Emitted interference |  | DIN EN 61000-6-4                                     |
| Noise immunity       |  | DIN EN 61000-6-2                                     |
| 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 |

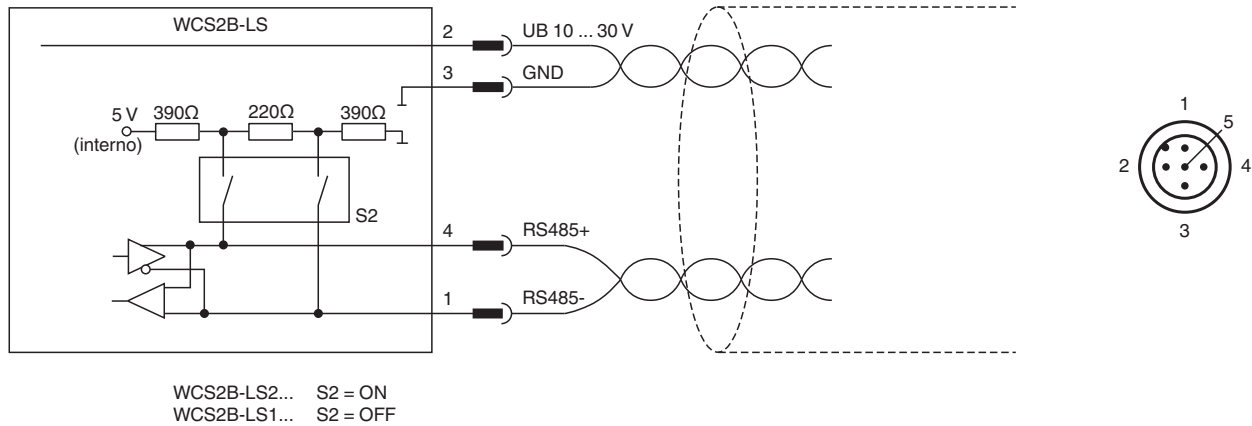
### Ambient conditions

|                       |  |                             |
|-----------------------|--|-----------------------------|
| Operating temperature |  | 0 ... 60 °C (32 ... 140 °F) |
|-----------------------|--|-----------------------------|

**Technical Data**

|                                  |                                       |
|----------------------------------|---------------------------------------|
| 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                                  |
| <b>Material</b>                  |                                       |
| Housing                          | ABS , Polycarbonate , Polyamide (PA)  |
| Mass                             | 500 g                                 |
| <b>General information</b>       |                                       |
| Ordering information             | Mounting plate included with delivery |

**Connection**



**Accessories**

|  |                 |  |
|--|-----------------|--|
|  | <b>WCS-MP1</b>  | Mounting plate for reading heads WCS2 and WCS3       |
|  | <b>WCS2-PL2</b> | Transparent protective case and seal for WCS2 reader |

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