

# Connection Line

M12 × 1; 4-pin

## ZAS02R502

Part Number

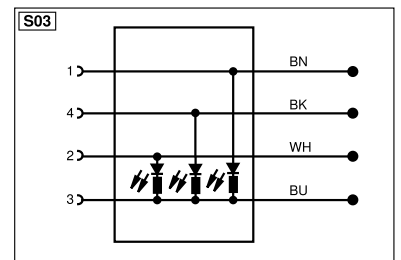
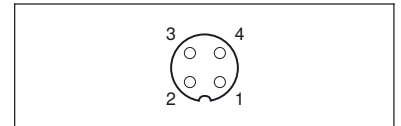


### Technical Data

| Mechanical Data                                    |                      |
|--|----------------------|
| Connection 1                                       | Socket, angled       |
| Connection mode 1                                  | M12 × 1, 4-pin       |
| Connection 2                                       | stripped             |
| Torque   | M12: 0,5 Nm          |
| Cable Length                                       | 5 m                  |
| Outer diameter (d)                                 | 4,7 mm               |
| Wire cross-section                                 | 0,34 mm <sup>2</sup> |
| Display  | LED                  |
| Degree of Protection                               | IP68/IP69K           |
| Temperature Range                                  | -25...80 °C          |
| Cable Jacket Material                              | PUR                  |
| Material Wire Insulation                           | PP                   |
| Material Sleeve Nut                                | Stainless steel 316L |
| Halogen-free                                       | yes                  |
| Drag Chain Suitable                                | yes                  |
| Bending radius (fixed installation)                | > 5 × d              |
| Bending radius (used in motion)                    | > 10 × d             |
| Travel speed (with 5 m horizontal travel distance) | ≤ 3,3 m/s            |
| Acceleration                                       | ≤ 5 m/s <sup>2</sup> |
| Bending cycles                                     | > 2000000            |
| Packaging unit                                     | 1 Piece              |

|                          |            |
|--------------------------|------------|
| Connection Diagram No.   | <b>S03</b> |
| Connection Equipment No. | <b>2</b>   |

- Halogen free, drag chain suitability
- Protection mode IP69K
- PUR, angled



All dimensions in mm (1 mm = 0.03937 Inch)

| Legend    |  |         |                                |  |                     |
|-----------|--|---------|--------------------------------|--|---------------------|
| +         | Supply Voltage +                           | nc      | Not connected                  | ENB <sub>RS422</sub>                   | Encoder B/B̄ (TTL)  |
| -         | Supply Voltage 0 V                         | U       | Test Input                     | ENA                                    | Encoder A           |
| ~         | Supply Voltage (AC Voltage)                | Ū       | Test Input inverted            | ENB                                    | Encoder B           |
| A         | Switching Output (NO)                      | W       | Trigger Input                  | AMIN                                   | Digital output MIN  |
| Ā         | Switching Output (NC)                      | W-      | Ground for the Trigger Input   | AMAX                                   | Digital output MAX  |
| V         | Contamination/Error Output (NO)            | O       | Analog Output                  | ACK                                    | Digital output OK   |
| Ṽ         | Contamination/Error Output (NC)            | O-      | Ground for the Analog Output   | SY In                                  | Synchronization In  |
| E         | Input (analog or digital)                  | BZ      | Block Discharge                | SY OUT                                 | Synchronization OUT |
| T         | Teach Input                                | AMV     | Valve Output                   | QLT                                    | Brightness output   |
| Z         | Time Delay (activation)                    | a       | Valve Control Output +         | M                                      | Maintenance         |
| S         | Shielding                                  | b       | Valve Control Output 0 V       | rsv                                    | Reserved            |
| RxD       | Interface Receive Path                     | SY      | Synchronization                | Wire Colors according to DIN IEC 60757 |                     |
| TxD       | Interface Send Path                        | SY-     | Ground for the Synchronization | BK                                     | Black               |
| RDY       | Ready                                      | E+      | Receiver-Line                  | BN                                     | Brown               |
| GND       | Ground                                     | S+      | Emitter-Line                   | RD                                     | Red                 |
| CL        | Clock                                      | ⊕       | Grounding                      | OG                                     | Orange              |
| E/A       | Output/Input programmable                  | SnR     | Switching Distance Reduction   | YE                                     | Yellow              |
| IO-Link   | IO-Link                                    | Rx+/-   | Ethernet Receive Path          | GN                                     | Green               |
| PoE       | Power over Ethernet                        | Tx+/-   | Ethernet Send Path             | BU                                     | Blue                |
| IN        | Safety Input                               | Bus     | Interfaces-Bus A(+)/B(-)       | VT                                     | Violet              |
| OSSD      | Safety Output                              | La      | Emitted Light disengageable    | GY                                     | Grey                |
| Signal    | Signal Output                              | Mag     | Magnet activation              | WH                                     | White               |
| Bi_D+/-   | Ethernet Gigabit bidirect. data line (A-D) | RES     | Input confirmation             | PK                                     | Pink                |
| ENo RS422 | Encoder 0-pulse 0/0̄ (TTL)                 | EDM     | Contactors Monitoring          | GNYE                                   | Green/Yellow        |
| PT        | Platinum measuring resistor                | ENAS422 | Encoder A/Ā (TTL)             |  |                     |