

# Connector Plug

M12 × 1; 4-pin, D-coding

## ZAT51NN01

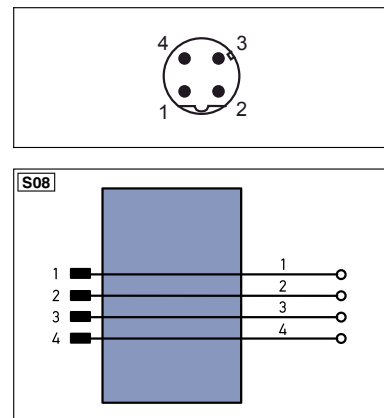
Part Number



### Technical Data

| Mechanical Data          |   |
|--------------------------|---|
| Connection 1             | Plug, straight                          |
| Connection mode 1        | M12 × 1, 4-pin, D-cod.                  |
| Torque                   | M12: 0,4 Nm                             |
| Cable Diameter           | 4...8 mm                                |
| Wire cross-section       | 0,14...0,34 mm <sup>2</sup>             |
| Assembling               | Insulation displacement connector (IDC) |
| Degree of Protection     | IP67                                    |
| Temperature Range        | -20...80 °C                             |
| Material Sleeve Nut      | CuZn, nickel-plated                     |
| Category                 | CAT 5                                   |
| Screened                 | yes                                     |
| Packaging unit           | 1 Piece                                 |
| Connection Diagram No.   | <b>S08</b>                              |
| Connection Equipment No. | <b>51</b>                               |

- D-coding
- Plug M12 × 1, straight



| Legend              |  |                     |                                      |
|---------------------|--|---------------------|--------------------------------------|
| +                   | Supply Voltage +                           | PT                  | Platinum measuring resistor          |
| -                   | Supply Voltage 0 V                         | nc                  | not connected                        |
| ~                   | Supply Voltage (AC Voltage)                | U                   | Test Input                           |
| A                   | Switching Output (NO)                      | Ū                   | Test Input inverted                  |
| Ā                   | Switching Output (NC)                      | W                   | Trigger Input                        |
| V                   | Contamination/Error Output (NO)            | W-                  | Ground for the Trigger Input         |
| Ṽ                   | Contamination/Error Output (NC)            | O                   | Analog Output                        |
| E                   | Input (analog or digital)                  | O-                  | Ground for the Analog Output         |
| T                   | Teach Input                                | BZ                  | Block Discharge                      |
| Z                   | Time Delay (activation)                    | AWV                 | Valve Output                         |
| S                   | Shielding                                  | a                   | Valve Control Output +               |
| RxD                 | Interface Receive Path                     | b                   | Valve Control Output 0 V             |
| TxD                 | Interface Send Path                        | SY                  | Synchronization                      |
| RDY                 | Ready                                      | SY-                 | Ground for the Synchronization       |
| GND                 | Ground                                     | E+                  | Receiver-Line                        |
| CL                  | Clock                                      | S+                  | Emitter-Line                         |
| E/A                 | Output/Input programmable                  | ≡                   | Grounding                            |
| ⊕                   | IO-Link                                    | SnR                 | Switching Distance Reduction         |
| PoE                 | Power over Ethernet                        | Rx +/-              | Ethernet Receive Path                |
| IN                  | Safety Input                               | Tx +/-              | Ethernet Send Path                   |
| QSSD                | Safety Output                              | Bus                 | Interfaces-Bus A(+)/B(-)             |
| Signal              | Signal Output                              | La                  | Emitted Light disengageable          |
| BL-D +/-            | Ethernet Gigabit bidirect. data line (A-D) | Mag                 | Magnet activation                    |
| EN <sup>resaz</sup> | Encoder 0-pulse 0-0 (TTL)                  | RES                 | Input confirmation                   |
|                     |  | EDM                 | Contactor Monitoring                 |
|                     |  | EN <sup>resaz</sup> | Encoder A/A (TTL)                    |
|                     |  | EN <sup>resaz</sup> | Encoder B/B (TTL)                    |
|                     |  | ENA                 | Encoder A                            |
|                     |  | ENB                 | Encoder B                            |
|                     |  | AMIN                | Digital output MIN                   |
|                     |  | AMAX                | Digital output MAX                   |
|                     |  | AOK                 | Digital output OK                    |
|                     |  | SY in               | Synchronization In                   |
|                     |  | SY OUT              | Synchronization OUT                  |
|                     |  | OLr                 | Brightness output                    |
|                     |  | M                   | Maintenance                          |
|                     |  | rsv                 | reserved                             |
|                     |  |                     | Wire Colors according to DIN IEC 757 |
|                     |  | BK                  | Black                                |
|                     |  | BN                  | Brown                                |
|                     |  | RD                  | Red                                  |
|                     |  | OG                  | Orange                               |
|                     |  | YE                  | Yellow                               |
|                     |  | GN                  | Green                                |
|                     |  | BU                  | Blue                                 |
|                     |  | VT                  | Violet                               |
|                     |  | GY                  | Grey                                 |
|                     |  | WH                  | White                                |
|                     |  | PK                  | Pink                                 |
|                     |  | GNYE                | Green/Yellow                         |

Specifications are subject to change without notice