

|                           |                            |                                                                                     |
|---------------------------|----------------------------|-------------------------------------------------------------------------------------|
| 21700601                  | <b>DATA SHEET</b>          |  |
| Valid from:<br>09.02.2019 | <b>ED-IE-AX-6A-B-20-FC</b> |                                                                                     |

## Product description

- Field mountable Industrial Ethernet RJ45 connector with color coding acc. to T568B
- Connector acc. to IEC 60603-7-51
- Suitable for industrial applications, structured cabling for office building applications, data centers and home networks



## General properties

|                                              |                   |
|----------------------------------------------|-------------------|
| Ambient temperature                          | -40 to +85 °C     |
| Protection degree                            | IP 20             |
| Outer diameter, cable                        | 5.0 – 9.0 mm      |
| Outer diameter, wire                         | 1.0 – 1.6 mm      |
| Termination cross section, stranded, 7 wires | AWG27/7 – AWG22/7 |
| Termination cross section, solid             | AWG24/1 – AWG22/1 |

## Mechanical properties

|                                              |        |
|----------------------------------------------|--------|
| Insertion force                              | ≤ 30 N |
| Mating cycles                                | ≥ 750  |
| Cable extraction force (assembled connector) | ≥ 50 N |

## Electrical properties

|                                                                |              |
|----------------------------------------------------------------|--------------|
| Contact resistance                                             | ≤ 20 mΩ      |
| Insulation resistance                                          | ≥ 500 MΩ     |
| Proof voltage, contact-contact                                 | ≥ 1000 V, DC |
| Proof voltage, contact-shield                                  | ≥ 1500 V, DC |
| Current carrying capacity at 50 °C                             | 1 A          |
| Suitable for Power over Ethernet+<br>acc. to IEEE 802.3at:2009 | yes          |

## Transmission properties

|                                                       |                               |
|-------------------------------------------------------|-------------------------------|
| Suitable for 10 Gigabit Ethernet acc. to IEEE 802.3an | yes                           |
| Category 6A                                           | ISO/IEC 11801; DIN EN 50173-1 |
| Class E <sub>A</sub>                                  | ISO/IEC 11801; DIN EN 50173-1 |
| Category 6A                                           | ANSI/TIA/EIA-568-C.2          |

## Materials

|                                  |               |
|----------------------------------|---------------|
| Connector housing, base material | die-cast zinc |
| Connector housing, surface       | Ni            |
| Contacts, surface                | Au            |

## Standards

|                       |                                                               |
|-----------------------|---------------------------------------------------------------|
| Product standard      | RJ45 connector acc. to IEC 60603-7-51<br>ANSI/TIA/EIA-568-C.2 |
| Generic cable systems | ISO/IEC 11801<br>DIN EN 50173-1                               |

|                                           |                                       |             |
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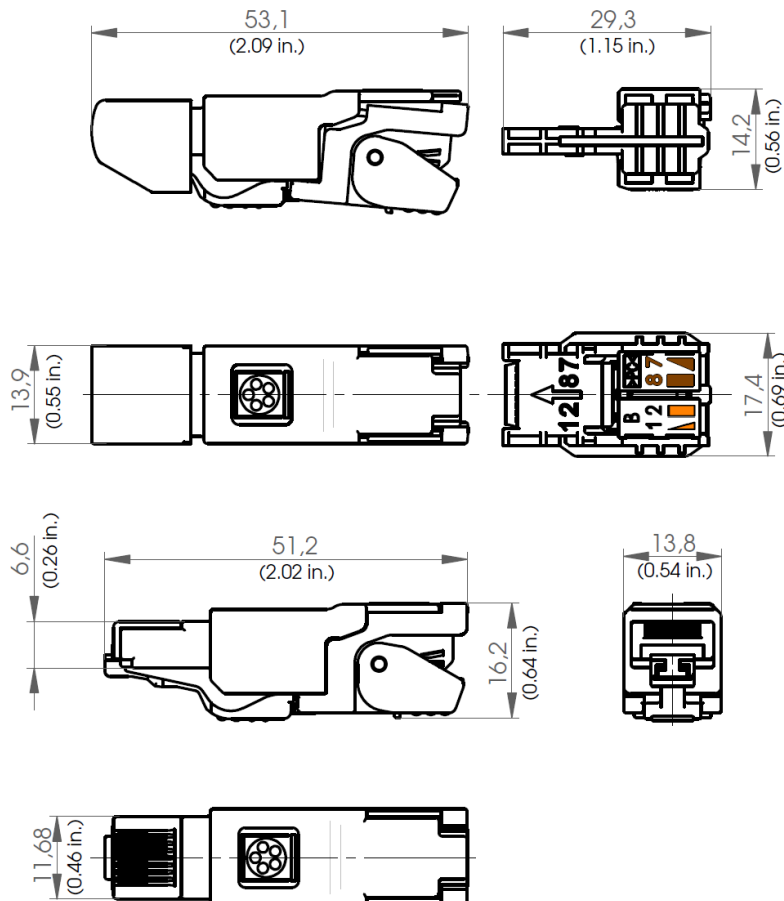
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## Approvals

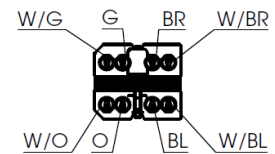
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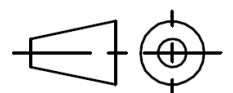
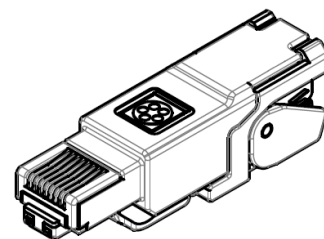
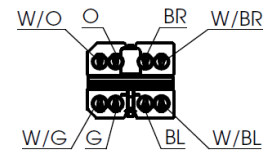
## Drawings



Anschlussbelegung / PIN assignment T568A  
nach / according to TIA/EIA 568-C.2



Anschlussbelegung / PIN assignment T568B  
nach / according to TIA/EIA 568-C.2



## Application range

Automation, industrial machinery and plant engineering

## Note

Photographs are not true to scale and do not represent detailed images of the respective products.

|                                           |                                       |             |
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