

# VS-08-RJ45-5-Q/IP20 BK - RJ45 connector



1658008

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RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5, material: Plastic, connection method: Insulation displacement connection, connection cross section: AWG 26- 23, cable outlet: straight, color: black, Ethernet

## Your advantages

- Easy and time-saving assembly with IDC fast connection technology
- Can be used internationally due to EAC, UL 1863, and CAN/CSA C22.2
- Ideal companion for servicing or repairs in the field: no special tools required for mounting

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1658008       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | AB10          |
| Product key                          | ABNAAD        |
| GTIN                                 | 4046356138536 |
| Weight per piece (including packing) | 10.38 g       |
| Weight per piece (excluding packing) | 9.012 g       |
| Customs tariff number                | 85366990      |
| Country of origin                    | CH            |

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## Technical data

### Product properties

|                      |                             |
|----------------------|-----------------------------|
| Product type         | Data connector (cable side) |
| Type                 | RJ45                        |
| Sensor type          | Ethernet                    |
| Number of positions  | 8                           |
| Connection profile   | RJ45                        |
| No. of cable outlets | 1                           |
| Shielded             | yes                         |
| Cable outlet         | straight                    |
| Positions/contacts   | 8P8C                        |

### Insulation characteristics

|                      |   |
|----------------------|---|
| Overvoltage category | I |
| Degree of pollution  | 2 |

### Electrical properties

|   |  |
|---|--|
| Rated voltage (III/3)                   | 72 V (DC)  |
| Rated surge voltage                     | 330 kV   |
| Rated current                           | 1.75 A   |
| Contact resistance                      | < 20 mΩ (Contact)<br>< 100 mΩ (shield)             |
| Frequency range                         | 100 MHz  |
| Insulation resistance                   | > 500 MΩ   |
| Nominal voltage $U_N$                   | 48 V   |
| Nominal current $I_N$                   | 1.75 A   |
| Contact resistance per contact pair     | < 20 Ω   |
| Contact resistance                      | > 10 mΩ (Wire – IDC)<br>0.005 Ω (Litz wires – IDC) |
| Transmission medium                     | Copper   |
| Transmission speed                      | 1 Gbps   |
| Transmission characteristics (category) | CAT5   |
| Transmission speed                      | 1 Gbps   |
| Power transmission                      | PoE++ in accordance with: IEEE 802.3bt             |

### Connection data

#### Connection technology

|                              |   |
|------------------------------|---|
| Connection method            | Insulation displacement connection  |
| Connection cross section AWG | 26 ... 23 (solid)<br>26 ... 23 (flexible)   |
| Conductor cross-section      | 0.14 mm <sup>2</sup> ... 0.25 mm <sup>2</sup> (solid)<br>0.14 mm <sup>2</sup> ... 0.25 mm <sup>2</sup> (flexible) |

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|                                  |                                  |
|----------------------------------|----------------------------------|
| Connection in acc. with standard | in accordance with IEC 60603-7-1 |
| Cable outlet, angle              | 180                              |

## Dimensions

|        |          |
|--------|----------|
| Width  | 14 mm    |
| Height | 14.6 mm  |
| Length | 55.85 mm |

## Material specifications

|  |         |
|--|---------|
| Color                                  | black   |
| Material                               | Plastic |
| Flammability rating according to UL 94 | V0      |
| Housing material                       | Plastic |
| Cable seal material                    | NBR     |
| Contact material                       | CuSn    |
| Contact surface material               | Au/Ni   |
| Contact carrier material               | PC      |
| O-ring material                        | FPM     |
| Locking latch material                 | PC      |
| Material for screw connection          | PA      |

## Cable/line

|                          |                      |
|--------------------------|----------------------|
| External cable diameter  | 4.5 mm ... 8 mm      |
| External cable diameter  | 4.5 mm ... 8 mm      |
| Cable cross section      | 0.14 mm <sup>2</sup> |
| Test voltage Core/Core   | 1000 V               |
| Test voltage Core/Shield | 1500.00 V            |
| Halogen-free             | no                   |

## Mechanical properties

### Mechanical data

|                                     |           |
|-------------------------------------|-----------|
| Insertion/withdrawal cycles         | ≥ 1000    |
| Insertion force per signal contact  | < 20.00 N |
| Extraction force per signal contact | < 20 N    |

## Environmental and real-life conditions

### Test specification

|               |                        |
|---------------|------------------------|
| Type of test  | Vibration test         |
| Specification | IEC 60068-2-6          |
| Frequency     | 10-500 Hz              |
| Sweep speed   | 1 octave/min           |
| Amplitude     | 0.35 mm                |
| Acceleration  | 50.00 m/s <sup>2</sup> |
| Test duration | 20.00 s                |

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## Mounting

Mounting type

For field assembly

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## Drawings

Schematic diagram



Connector pin assignment

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## Approvals

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**UL Listed**

Approval ID: FILE E 335024



**cUL Listed**

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27440114 |
| ECLASS-15.0 | 27440114 |

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC002636 |
|-----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

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## Environmental product compliance

### EU RoHS

|   |                    |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

### China RoHS

|  |  |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|  | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |  |
|-------------------------------------|--|
| REACH candidate substance (CAS No.) | 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9) |
| SCIP                                | 14622286-2cb4-46e5-9715-6fce15f91571   |

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