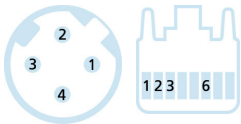
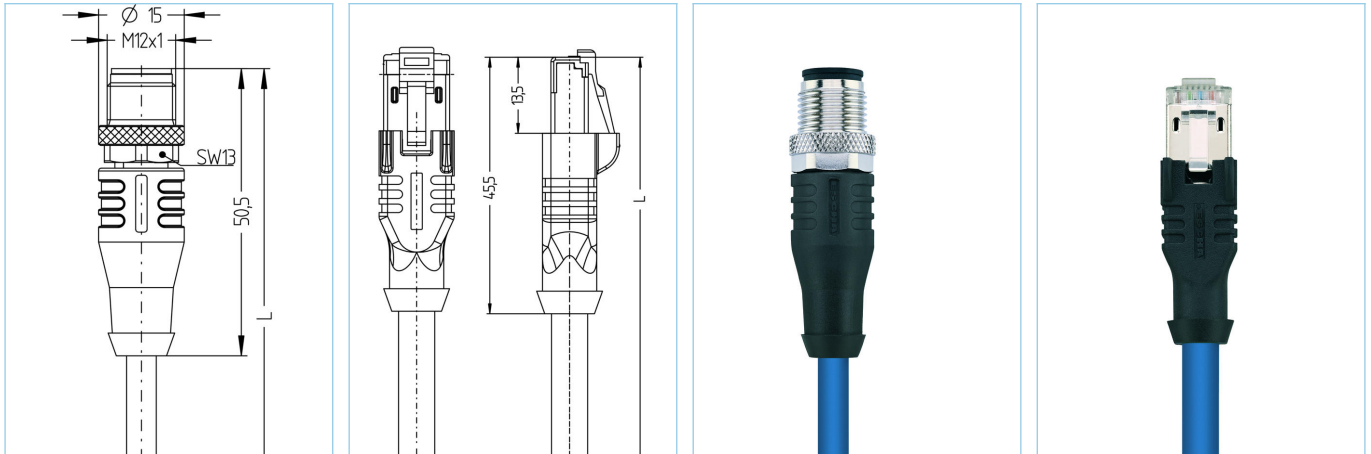


# M12, male, straight, 4 poles, D-coded, RJ45, male, straight, 4 poles, shielded, rail approved



## Product data

|                    |                                        |
|--------------------|----------------------------------------|
| Item description   | RA-WASSY4.029-m-RA-RJ45SS4.003/S5002BU |
| Item-No.           | V0008263                               |
| Länge              | on demand                              |
| Customs tariff-No. | 85444290                               |
| Step-File          | RA-WASSY4_029-L-RA-RJ45SS4_003.stp     |

## Technical data

|                               | A-side                     | B-side                     |
|-------------------------------|----------------------------|----------------------------|
| Connector                     | male, straight, M12        | male, straight, RJ45       |
| Number of pins                | 4                          | 4                          |
| Pin assignment                | 1YE, 2 WH, 3 OG, 4 BU      | 1YE, 2 OG, 3 WH, 6 BU      |
| Allocation                    |                            | Industrial                 |
| Coding of                     | D                          |                            |
| Rated voltage                 | 250V                       | 60V                        |
| Current load (at 40°C)        | 4A                         | 1A                         |
| Insulation resistance         | $\geq 10^8 \Omega$         | $\geq 10^8 \Omega$         |
| Resistance                    | $\leq 5m\Omega$            | $\leq 5m\Omega$            |
| Transmission features         | Cat5e                      | Cat5e                      |
| Contact material              | Metal, CuZn, gold-plated   | Metal, CuZn, gold-plated   |
| Contact-carrier material      | Plastic, PA, BK            | Plastic                    |
| Grip body material            | Plastic, TPU, BK           | Plastic, TPE, BK           |
| Coupling nut material         | Metal, CuZn, nickel-plated |                            |
| Shielding                     | with shielding             | with shielding             |
| Material of shielding housing |                            | Metal, CuZn, nickel-plated |
| Standards                     | IEC 61076-2-101            | IEC 60603-7-5              |
| Mechanical life-cycle         | >100 mating cycles         | >750 mating cycles         |
| Degree of pollution           | 3                          | 1                          |

#### Advanced technical data rail approved

|                                |                                                         |
|--------------------------------|---------------------------------------------------------|
| Standards                      | DIN EN 50155, DIN EN 45545-2                            |
| Shock & vibration              | Class 1, Category B (DIN EN 61373)                      |
| Degree of protection (mounted) | IP67 (-30°C...+90°C), IP65 (-40°C...+90°C), IP20 (RJ45) |
| Temperature range              | M12: Tx (-40°C...+90°C), RJ45 (-40°C...+70°C)           |
| Fire prevention according to   | DIN EN 45545-2 HL1-3, does not apply for RJ45           |

#### Cable web

Cat5, BETAtrans®, RW, 1x4xAWG22, S5002BU

Halogen-free, electron-beam cross-linked Cat5-cable with improved fire performance. This cable can be used for fixed and protected installation inside of rail vehicles and busses and fulfills the requirements according to EN 45545-2 (HL1 - HL3). It is optimally suited for all Ethernet applications of classes D (ECN) according to IEEE 802.3. For installation the guidelines of EN 50355 and EN 50343 must be considered. Due to its thin diameter, this cable is predestined for applications in which overmolded RJ45-connectors are used. BETAtrans® is a registered trademark of LEONI Studer AG, Switzerland.

|                              |                                                                                                                                                       |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outer diameter of jacket     | 6.60 mm                                                                                                                                               |
| Cable-jacket material        | BETAtrans® Polyolefin Copolymer                                                                                                                       |
| Jacket color                 | BU                                                                                                                                                    |
| Wire cross-section           | 1 x 4 x AWG22, star quad                                                                                                                              |
| Wire insulation material     | BETAtrans® Cell PE                                                                                                                                    |
| Wire colors                  | WH, BU, OG, YE                                                                                                                                        |
| Wire structure               | 7 x 0.254 mm                                                                                                                                          |
| Bending radius (fixed)       | 5xØ cable                                                                                                                                             |
| Bending radius (repeated)    | 6xØ cable                                                                                                                                             |
| Temperature range (fixed)    | -40°C...+85°C                                                                                                                                         |
| Fire prevention according to | DIN EN 45545-2 HL1-3, DIN 5510 fire prevention-levels 1-4, NF F16-101 category A1, A2, B, UNI CEI 11170, danger level LR1-LR4, NFPA 130, UN ECE R 118 |
| Shielding                    | Yes                                                                                                                                                   |
| Halogen-free                 | Yes                                                                                                                                                   |
| Transmission features        | Cat5e                                                                                                                                                 |
| Special features             | increased thermal load, flame retardant, low emission of smoke, halogen free, LABS free, oil- and fuel resistant, RoHs compliant, UN ECE R 118        |

#### Classification

|            |          |
|------------|----------|
| eCl@ss 6.0 | 27060307 |
| eCl@ss 7.0 | 27060307 |
| eCl@ss 8.0 | 27060307 |
| eCl@ss 9.0 | 27060307 |
| ETIM 5.0   | EC000830 |
| ETIM 6.0   | EC000830 |

#### Accessories

##### Torque-wrench set

<https://www.escha.net/en/products/standard/accessories-for-connectivity/8055431>

##### Unlocking clip for RJ45

<https://www.escha.net/en/products/standard/accessories-for-connectivity?p=1&o=3&n=15&f=807>

##### Marking rings Ø 9mm

<https://www.escha.net/en/products/standard/accessories-for-connectivity?p=1&o=3&n=15&f=809>

##### Screw cap, M12

<https://www.escha.net/en/products/standard/accessories-for-connectivity?p=1&o=3&n=15&f=811>

##### Mounting-clip, M12

<https://www.escha.net/en/products/standard/accessories-for-connectivity/8047660>

##### Safety-clip, M12