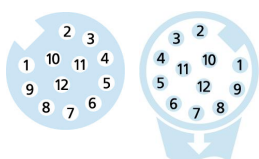
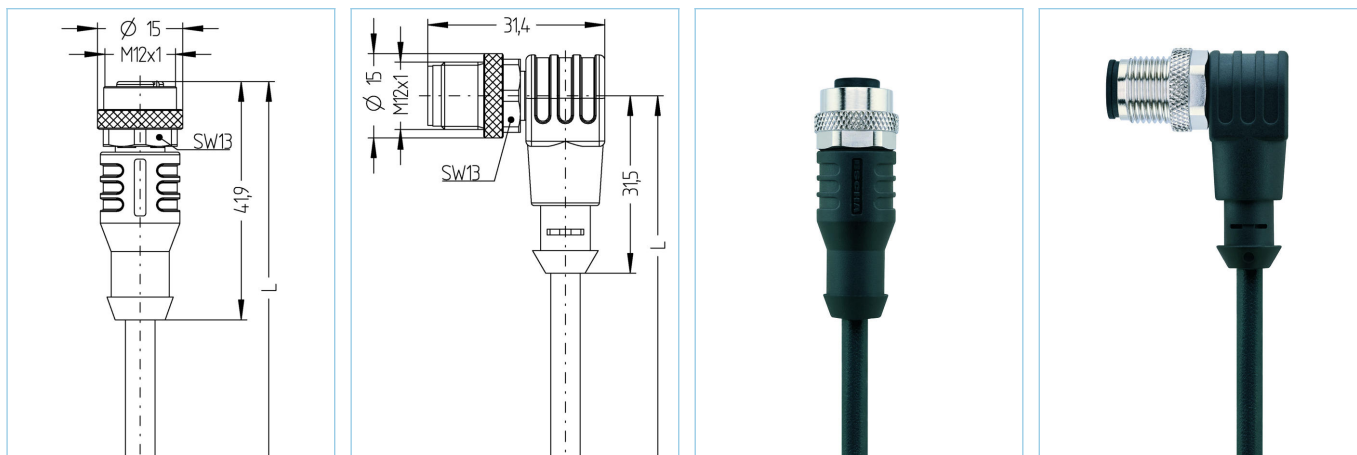


# M12, female, straight, 12 poles, M12, male, angled, 12 poles, sensor-/actuator cable



| Product data                   |                                                                               |                                                                               |
|--------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Item description               | AL-WAK12-2-AL-WWAS12/S370                                                     |                                                                               |
| Item-No.                       | 8046950                                                                       |                                                                               |
| Length                         | 2m                                                                            |                                                                               |
| Customs tariff-No.             | 85444290                                                                      |                                                                               |
| Step-File                      | AL-WAK12-m-WWAS12.stp                                                         |                                                                               |
| EAN                            | 4047106006372                                                                 |                                                                               |
| Technical data                 | A-side                                                                        | B-side                                                                        |
| Connector                      | female, straight, M12                                                         | male, angled, M12                                                             |
| Number of pins                 | 12                                                                            | 12                                                                            |
| Pin assignment                 | 1 BN, 2 BU, 3 WH, 4 GN, 5 PK, 6 YE, 7 BK, 8 GY, 9 RD, 10 VT, 11 GYPK, 12 RDBU | 1 BN, 2 BU, 3 WH, 4 GN, 5 PK, 6 YE, 7 BK, 8 GY, 9 RD, 10 VT, 11 GYPK, 12 RDBU |
| Coding of                      | A                                                                             | A                                                                             |
| Rated voltage                  | 30V                                                                           | 30V                                                                           |
| Current load (at 40°C)         | 1.5A                                                                          | 1.5A                                                                          |
| Insulation resistance          | $\geq 10^9 \Omega$                                                            | $\geq 10^9 \Omega$                                                            |
| Resistance                     | $\leq 5 m\Omega$                                                              | $\leq 5 m\Omega$                                                              |
| Ambient temperature product    | -30°C...+90°C                                                                 | -30°C...+90°C                                                                 |
| Contact material               | Metal, CuZn, gold-plated                                                      | Metal, CuZn, gold-plated                                                      |
| Contact-carrier material       | Plastic, TPU, BK                                                              | Plastic, TPU, BK                                                              |
| Grip body material             | Plastic, TPU, BK                                                              | Plastic, TPU, BK                                                              |
| Coupling nut material          | Metal, CuZn, nickel-plated                                                    | Metal, CuZn, nickel-plated                                                    |
| Sealing (female) material      | FPM/FKM                                                                       |                                                                               |
| Standards                      | IEC 61076-2-101                                                               | IEC 61076-2-101                                                               |
| Degree of protection (mounted) | IP65, IP67, IP68                                                              | IP65, IP67, IP68                                                              |
| Mechanical life-cycle          | >100 mating cycles                                                            | >100 mating cycles                                                            |
| Degree of pollution            | 3                                                                             | 3                                                                             |

## Cable web

PUR, UL, S370

Flexible, silicone- and halogen-free control line with high mechanical strength. The cable is chemicals, hydrolysis-, and microbes- resistant. The drag-chain application is possible at a bending radius of minimum 10 x d. Due to its weld-field immunity, the cable is very well suited for the flexible application in robotics, machine-tool, and metal-cutting production. The cables meet the UL and CSA (UL10493/20549; cULus) requirements.

|                                |                                                                                                                                                                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outer diameter of jacket       | 5.60 mm                                                                                                                                                                                                                                                              |
| Cable-jacket material          | PUR                                                                                                                                                                                                                                                                  |
| Jacket color                   | BK, similar RAL9005                                                                                                                                                                                                                                                  |
| Wire cross-section             | 12 x 0.14 mm <sup>2</sup>                                                                                                                                                                                                                                            |
| Wire insulation material       | PP                                                                                                                                                                                                                                                                   |
| Wire colors                    | BN, BU, WH, GN, PK, YE, BK, GY, RD, VT, GYPK, RDBU                                                                                                                                                                                                                   |
| Wire structure                 | 18 x 0.10 mm                                                                                                                                                                                                                                                         |
| Bending radius (fixed)         | 5 x Ø-cable                                                                                                                                                                                                                                                          |
| Bending radius (repeated)      | 10 x Ø-cable                                                                                                                                                                                                                                                         |
| Temperature range (repeated)   | -30°C...+90°C                                                                                                                                                                                                                                                        |
| Temperature range (fixed)      | -40°C...+90°C                                                                                                                                                                                                                                                        |
| Temperature range (drag chain) | -25°C...+60°C                                                                                                                                                                                                                                                        |
| Drag chain-application         | ≥2 Mio. cycles                                                                                                                                                                                                                                                       |
| Halogen-free                   | Yes                                                                                                                                                                                                                                                                  |
| Torsion                        | +/-180°/m, ≥ 0.5 Mio. cycles                                                                                                                                                                                                                                         |
| Rated voltage cable            | ≤300 V                                                                                                                                                                                                                                                               |
| Special features               | flame retardant, halogen free, hydrolysis proof, LABS free, oil resistant, ozone resistant, recyclable, RoHs compliant, acid- and alkali resistant, drag chain-adapted, welding sparks resistant, seawater resistant, silicone free, torsion resistant, UV resistant |

## Classification

|            |          |
|------------|----------|
| eCl@ss 6.0 | 27279218 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |
| ETIM 5.0   | EC001855 |
| ETIM 6.0   | EC001855 |

## Accessories

### Mounting-clip, M12

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

### Torque-wrench set

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

### Marking rings Ø 9mm

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

### Screw plug, M12

<https://www.escha.net/en/products/standard/accessories-for-connectivity?p=1&o=3&n=15&f=812>

### Screw cap, M12

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

## Link to product

<https://www.escha.net/en/products/standard/sensoractuator-connectors/8046950>