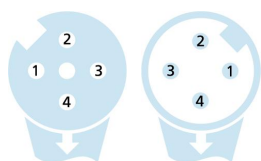
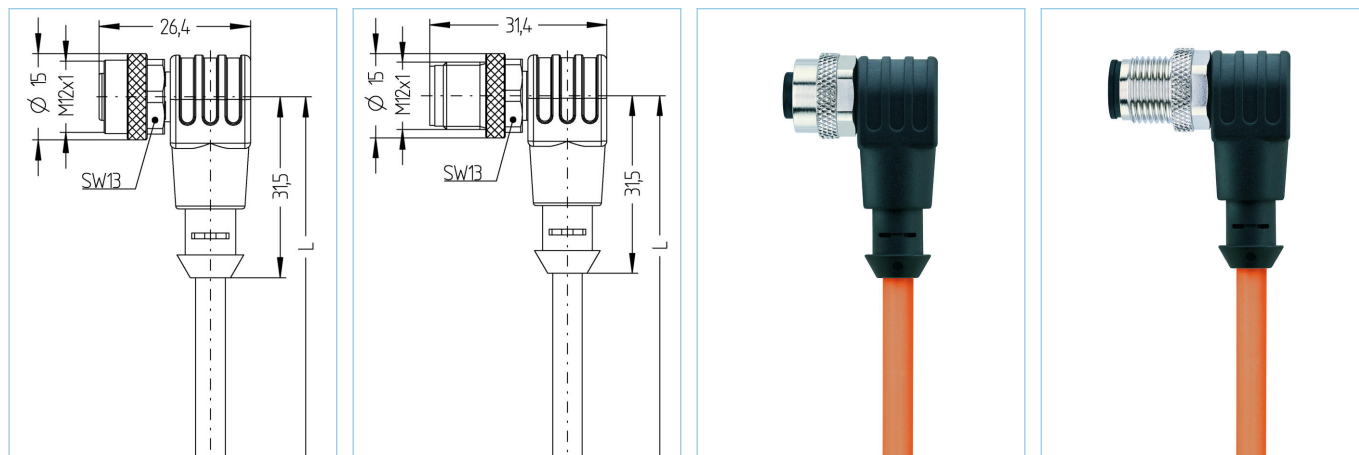


# M12, female, angled, 4 poles, M12, male, angled, 4 poles, sensor/actuator cable



## Product data

|                    |                           |
|--------------------|---------------------------|
| Item description   | AL-WWAK4-m-AL-WWAS4/S7400 |
| Item-No.           | V0004945                  |
| Länge              | on demand                 |
| Customs tariff-No. | 85444290                  |
| Step-File          | AL-WWAK4_AL-WWAS4.stp     |

| Technical data                 | A-side                     | B-side                     |
|--------------------------------|----------------------------|----------------------------|
| Connector                      | female, angled, M12        | male, angled, M12          |
| Number of pins                 | 4                          | 4                          |
| Pin assignment                 | 1 BN, 2 WH, 3 BU, 4 BK     | 1 BN, 2 WH, 3 BU, 4 BK     |
| Coding of                      | A                          | A                          |
| Rated voltage                  | 250V                       | 250V                       |
| Current load (at 40°C)         | 4A                         | 4A                         |
| 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, CuSn, gold-plated   | Metal, CuSn, 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, S7400, robotic

Flexible, silicone- and halogen free control cable with high mechanical strength. Due to its outstanding properties in drag-chain adaption, torsionresistance and weld-field immunity, it is very well suited for the flexible applications in robotics, handling- and assembly technology as well as machine tools. The cable meets the UL and CSA (UL10493/20549; cULus) requirements.

|                                |                                                                                                                                                                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outer diameter of jacket       | 5.20 mm                                                                                                                                                                                                                                                              |
| Cable-jacket material          | PUR                                                                                                                                                                                                                                                                  |
| Jacket color                   | OG, similar RAL2003                                                                                                                                                                                                                                                  |
| Wire cross-section             | 4 x 0.34 mm <sup>2</sup>                                                                                                                                                                                                                                             |
| Wire insulation material       | PP                                                                                                                                                                                                                                                                   |
| Wire colors                    | BN, WH, BU, BK                                                                                                                                                                                                                                                       |
| Wire structure                 | 42 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         | ≥ 10 Mio. cycles                                                                                                                                                                                                                                                     |
| Halogen-free                   | Yes                                                                                                                                                                                                                                                                  |
| Torsion                        | +/-360°/m, ≥ 10 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>