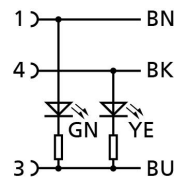
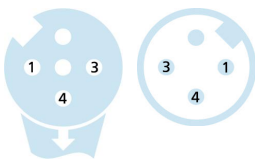
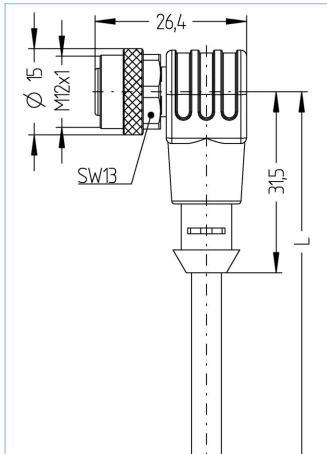


**M12, female, angled, 3 poles, M12, male, straight, 3 poles, with LED, sensor-/actuator cable**



**Product data**

|                    |                           |
|--------------------|---------------------------|
| Item description   | AL-WWAK3P2-4-AL-WAS3/S370 |
| Item-No.           | 8049891                   |
| Length             | 4m                        |
| Customs tariff-No. | 85444290                  |
| Step-File          | AL-WWAK3P2_AL-WAS3.stp    |
| EAN                | 4047106199968             |

| Technical data                 | A-side                        | B-side                     |
|--------------------------------|-------------------------------|----------------------------|
| Connector                      | female, angled, M12, with LED | male, straight, M12        |
| Number of pins                 | 3                             | 3                          |
| Pin assignment                 | 1 BN, 3 BU, 4 BK              | 1 BN, 3 BU, 4 BK           |
| Coding of                      | A                             | A                          |
| Rated voltage                  | 30V                           | 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, CuZn, gold-plated      | Metal, CuSn, gold-plated   |
| Contact-carrier material       | Plastic, TPU, BK              | Plastic, TPU, BK           |
| Grip body material             | Plastic, TPU, transparent     | Plastic, TPU, BK           |
| Coupling nut material          | Metal, CuZn, nickel-plated    | Metal, CuZn, nickel-plated |
| Sealing (female) material      | FPM/FKM                       |                            |
| Circuit logic                  | pnp                           |                            |
| Signal status-indicator        | LED YE                        |                            |
| Operating voltage-indicator    | LED GN                        |                            |
| 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       | 4.30 mm                                                                                                                                                                                                                                                              |
| Cable-jacket material          | PUR                                                                                                                                                                                                                                                                  |
| Jacket color                   | BK, similar RAL9005                                                                                                                                                                                                                                                  |
| Wire cross-section             | 3 x 0.34 mm <sup>2</sup>                                                                                                                                                                                                                                             |
| Wire insulation material       | PP                                                                                                                                                                                                                                                                   |
| Wire colors                    | BN, 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         | 5 Mio. cycles                                                                                                                                                                                                                                                        |
| Halogen-free                   | Yes                                                                                                                                                                                                                                                                  |
| Torsion                        | +/-360°/m, ≥ 2 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>