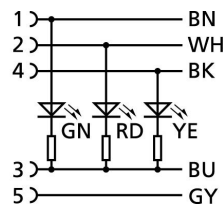
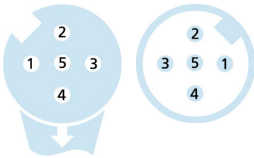
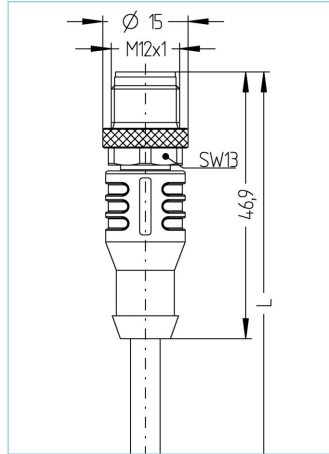
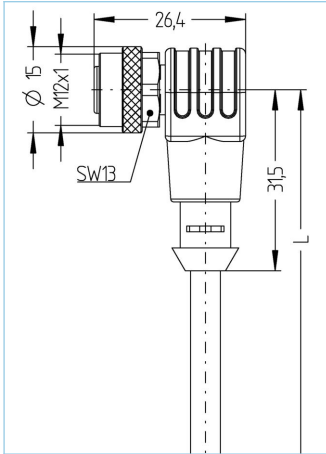


M12, female, angled, 5 poles, M12, male, straight, 5 poles, with LED, sensor-/actuator cable



Product data

| | |
|--------------------|---------------------------------|
| Item description | AL-WWAK4.5P3.1-m-AL-WAS4.5/S740 |
| Item-No. | V0009071 |
| Länge | on demand |
| Customs tariff-No. | 85444290 |
| Step-File | AL-WWAK4_5_AL-WAS4_5.stp |

| Technical data | A-side | B-side |
|--------------------------------|-------------------------------|------------------------------|
| Connector | female, angled, M12, with LED | male, straight, M12 |
| Number of pins | 5 | 5 |
| Pin assignment | 1 BN, 2 WH, 3 BU, 4 BK, 5 GY | 1 BN, 2 WH, 3 BU, 4 BK, 5 GY |
| Coding of | A | A |
| Rated voltage | 30V | 60V |
| 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, 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/RD | |
| 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, S740, welding sparks resistant, Automotive |
|------------------|--|

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 | 7.0 mm |
| Cable-jacket material | PUR |
| Jacket color | OG, similar RAL2003 |
| Wire cross-section | 5 x 0.34 mm ² |
| Wire insulation material | PP |
| Wire colors | BN, WH, BU, BK, GY |
| 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 | 3 Mio. cycles |
| Halogen-free | Yes |
| Torsion | +/-180°/m, ≥ 1 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 |

| | |
|-------------------------|---|
| Eigenschaften Automotiv | The cable meets the requirements of MgU-I-B09-41 for sensor-/ actuator cables for the body shop area. |
|-------------------------|---|

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>