

M12, female, angled, 4 poles, M12, male, straight, 4 poles, with LED, sensor-/actuator cable



**Product data**

|                    |                             |
|--------------------|-----------------------------|
| Item description   | AL-WWAK4P3.1-5-AL-WAS4/S740 |
| Item-No.           | 8092663                     |
| Length             | 5m                          |
| Customs tariff-No. | 85444290                    |
| Step-File          | AL-WWAK4P3_1_AL-WAS4.stp    |
| EAN                | 4047106278441               |

| Technical data                 | A-side                        | B-side                     |
|--------------------------------|-------------------------------|----------------------------|
| Connector                      | female, angled, M12, with LED | male, straight, 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                  | 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                  | npn                           |                            |
| 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                          |

|                  |  |
|------------------|--|
| <b>Cable web</b> | <b>PUR, UL, S740, welding sparks resistant, Automotive</b> |
|------------------|--|

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       | 6.6 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         | 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 |

|                         |   |
|-------------------------|---|
| 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>

### Link to product

<https://www.escha.net/en/products/standard/sensoractuator-connectors/8092663>