

M12, female, angled, 4+PE, M12, male, angled, 4+PE, sensor-/actuator cable



| Product data | | |
|--------------------------------|--------------------------------|--------------------------------|
| Item description | AL-WWAK5-2-AL-WWAS5/S370GY | |
| Item-No. | 8059023 | |
| Length | 2m | |
| Customs tariff-No. | 85444290 | |
| Step-File | AL-WWAK5_AL-WWAS5.stp | |
| EAN | 4047106145439 | |
| Label-carrier | 2 pieces | |
| Technical data | A-side | B-side |
| Connector | female, angled, M12 | male, angled, M12 |
| Number of pins | 4+PE | 4+PE |
| Pin assignment | 1 BN, 2 WH, 3 BU, 4 BK, 5 GNYE | 1 BN, 2 WH, 3 BU, 4 BK, 5 GNYE |
| Coding of | A | A |
| Rated voltage | 60V | 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, 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 |

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| Cable | PUR, UL, S370GY |
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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.

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| Outer diameter of jacket | 5.20 mm |
| Cable-jacket material | PUR |
| Jacket color | GY, similar RAL7040 |
| Wire cross-section | 5 x 0.34 mm ² |
| Wire insulation material | PP |
| Wire colors | BN, WH, BU, BK, GNYE |
| 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, seawater resistant, recyclable, LABS free, RoHs compliant, acid- and alkali resistant, ozone resistant, UV resistant, hydrolysis proof, drag chain-adapted, torsion resistant, welding sparks resistant, halogen free, silicone free, oil resistant |

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| Classification | |
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| 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 |

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| Accessories |
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Mounting-set, M12
<https://www.escha.net/en/products/standard/accessories-for-connectivity/8047664>

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>

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|------------------------|
| Link to product |
|------------------------|

<https://www.escha.net/en/products/standard/sensoractuator-connectors/8059023>