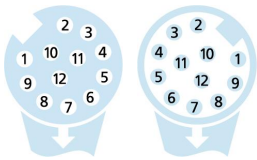
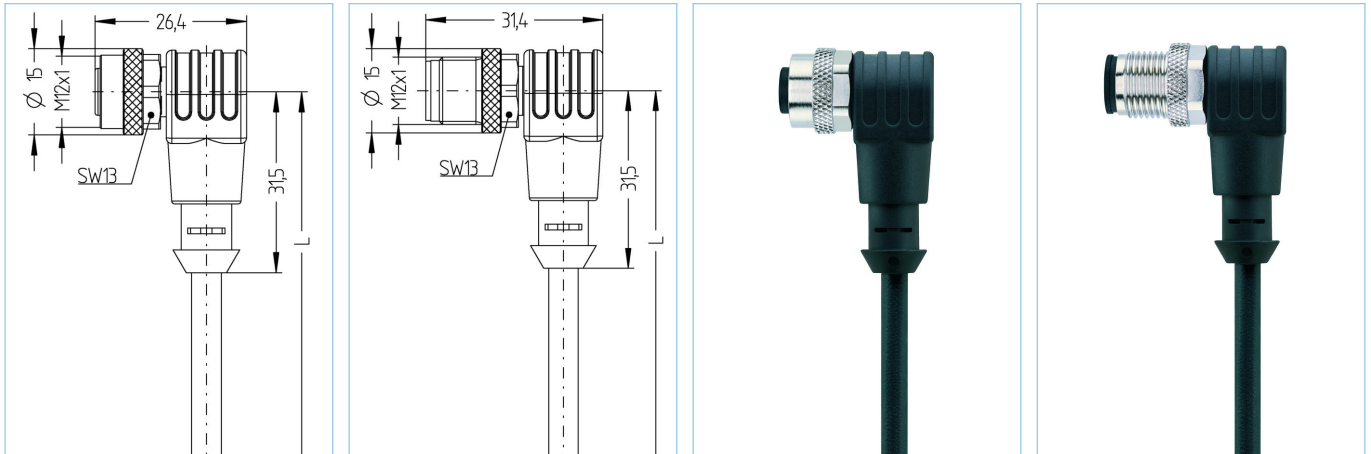


M12, female, angled, 12 poles, M12, male, angled, 12 poles, sensor-/actuator cable



Product data		
Item description	AL-WWAK12-3-AL-WWAS12/S370	
Item-No.	8102011	
Length	3m	
Customs tariff-No.	85444290	
Step-File	AL-WWAK12-m-AL-WWAS12.stp	
EAN	4047106285982	
Technical data	A-side	B-side
Connector	female, angled, M12	male, angled, M12
Number of pins	12	12
Pin assignment	1 BN, 2 BU, 3 WH, 4 GN, 5 PK, 6 YE, 7 BK, 8 GY, 9 RD, 10 VT, 11 GYPK, 12 RDBU	1 BN, 2 BU, 3 WH, 4 GN, 5 PK, 6 YE, 7 BK, 8 GY, 9 RD, 10 VT, 11 GYPK, 12 RDBU
Coding of	A	A
Rated voltage	30V	30V
Current load (at 40°C)	1.5A	1.5A
Insulation resistance	$\geq 10^9 \Omega$	$\geq 10^9 \Omega$
Resistance	$\leq 5m\Omega$	$\leq 5m\Omega$
Ambient temperature product	-30°C...+90°C	-30°C...+90°C
Contact material	Metal, CuZn, gold-plated	Metal, CuZn, 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, S370
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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.

Outer diameter of jacket	5.60 mm
Cable-jacket material	PUR
Jacket color	BK, similar RAL9005
Wire cross-section	12 x 0.14 mm ²
Wire insulation material	PP
Wire colors	BN, BU, WH, GN, PK, YE, BK, GY, RD, VT, GYPK, RDBU
Wire structure	18 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	≥2 Mio. cycles
Halogen-free	Yes
Torsion	+/-180°/m, ≥ 0.5 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	
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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

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>