

# Connection cable

## V1-W-A2-BK10M-PUR-U-V1-G



- Built-in LED, as operating and function indicator
- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design protects against loosening and inaccurate installation

Cordset M12 socket angled A-coded LED 4-pin to M12 plug straight A-coded 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant



### Dimensions



### Technical Data

General specifications	
<b>Connector 1</b>	
Connection	socket
Construction type	M12
Style	angled
Locking	screw connection
Number of pins	4
Coding	A-coded
<b>Connector 2</b>	
Connection	plug
Construction type	M12
Style	straight
Locking	screw connection
Number of pins	4
Coding	A-coded
<b>Indicators/operating means</b>	
LED green	Operating display
LED yellow	Functional display pin 4
<b>Electrical specifications</b>	

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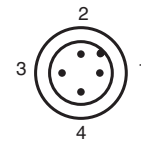
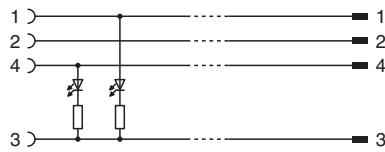
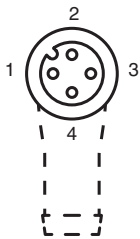
## Technical Data

Operating voltage	U <sub>B</sub>	max. 24 V DC -20 % / +25 %
Operating current	I <sub>B</sub>	max. 4 A
<b>Conformity</b>		
Degree of protection		EN 60529
Plug connection		connector M12 x 1 : IEC 61076-2-101
Flammability		UL 1581; DIN EN 60332-2-2
Halogen-free		IEC 60754-1
<b>Approvals and certificates</b>		
UL approval		AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable)
UL File Number		E231213
<b>Ambient conditions</b>		
Ambient temperature		
Plug connector		-40 ... 90 °C (-40 ... 194 °F)
Cable, fixed		-40 ... 80 °C (-40 ... 176 °F)
Cable, flexing		-20 ... 80 °C (-4 ... 176 °F)
Pollution degree		3
<b>Mechanical specifications</b>		
Plug connector		
Tightening torque		0.6 Nm
Loosening protection		available
Tool installation		straight knurling and hexagon nut SW = 14 mm
Mating cycles		min. 100
Degree of protection		IP68 / IP69
Cable		according to IEC/EN 60228 (DIN VDE 0295) class 6
Sheath diameter		4.3 mm
Bending radius		> 10 x cable diameter, moving > 5 x cable diameter, fixed
Sheath stripping force		max. 80 N / 300 mm
Sheath color		black (similar to RAL 9005)
Number of cores		4
Core cross section		0.34 mm <sup>2</sup>
Cores color		Core 1: brown Core 2: white Core 3: blue Core 4: black
Core construction		42 x 0.1 mm Ø
Length	L	10 m
Cable code		Li 9Y 11Y 4 x 0.34
<b>Drag chain suitability</b>		
Drag chain cycles		min. 5000000
Motion velocity		max. 3.3 m/s
Traverse distance		max. 5 m
Acceleration		max. 5 m/s <sup>2</sup>
Torsion cycles		min. 1000000
Torsional stress		± 180 °/m
<b>Material</b>		
PWIS free		yes
Halogen-free		yes
<b>Plug connector</b>		
Screw connection		Zinc diecast, nickel-plated
Body		TPU, transparent/black
Seal		FKM
Contact surface		gold plated (Au)
Flammability		V-2








## Technical Data

Cable		
Sheathing		PUR based on polyether
Core insulation		PP
UV resistance		yes
Chemical resistance		good
Oil resistance		yes
Cooling lubricant resistance		yes
Microbial resistance		yes
Hydrolysis resistance		yes
Flammability		FT2

## Connection



## Accessories

	<b>MH V1-SCREWDRIVER</b>	Torque screwdriver (0.6 Nm)
	<b>MH V1-BIT M12</b>	plug-in cap M12
	<b>V1/V3-LABELHOLDER</b>	Label holder
	<b>V1/V3-LABEL</b>	Label plate
	<b>MH V1-Holder</b>	Modular universal holder for M12 connectors
	<b>V1-CLIP</b>	Unlocking protector for M12 connector
	<b>V1-MARKING-RING-COLOR</b>	Marking rings for M12 connectors, various colors