

Female cordset

V1-G-BK20M-PUR-U

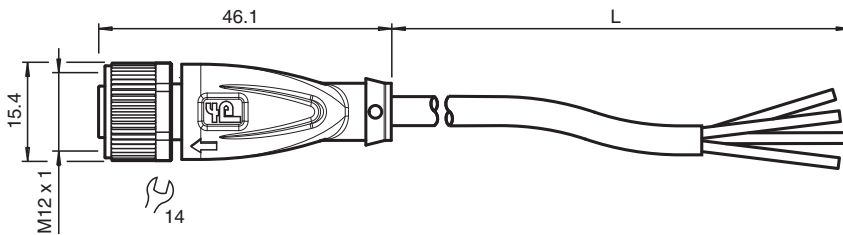


- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UV resistant
- UL listed for USA and Canada
- Halogen-free
- Specific design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

Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable black, UL approved, drag chain suitable, torsion resistant



Dimensions



Technical Data

General specifications

Connector 1	
Connection	socket
Construction type	M12
Style	straight
Locking	screw connection
Number of pins	4
Coding	A-coded
Connector 2	
Connection	cable end

Electrical specifications

Operating voltage	U_B	max. 250 V AC/DC
Operating current	I_B	max. 4 A

Conformity

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

Approvals and certificates

UL approval	AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable)
UL File Number	E231213

Ambient conditions

Ambient temperature	
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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

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
Mechanical specifications		
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 ²
Cores color		Core 1: brown Core 2: white Core 3: blue Core 4: black
Core construction		42 x 0.1 mm Ø
Length	L	20 m
Cable code		Li 9Y 11Y 4 x 0.34
Drag chain suitability		
Drag chain cycles		min. 5000000
Motion velocity		max. 3.3 m/s
Traverse distance		max. 5 m
Acceleration		max. 5 m/s ²
Torsion cycles		min. 1000000
Torsional stress		± 180 °/m
Material		
PWIS free		yes
Halogen-free		yes
Plug connector		
Screw connection		Zinc diecast, nickel-plated
Body		TPU, black
Seal		FKM
Contact surface		gold plated (Au)
Flammability		V-2
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

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Connection



- 1) _____ BN
- 2) _____ WH
- 3) _____ BU
- 4) _____ BK

Accessories

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

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