

## Cable connector

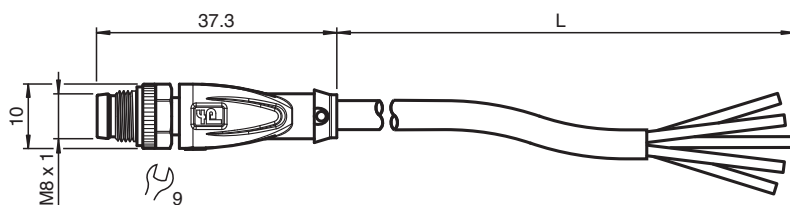
### V311S-GM-BK3M-PUR-U

- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP67
- 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

Male cordset single-ended M8 straight B-coded, 5-pin, PUR cable black, UL-approved, drag chain suitable, torsion resistant



## Dimensions



## Technical Data

### General specifications

Connector 1	
Connection	plug
Construction type	M8
Style	straight
Locking	screw connection
Number of pins	5
Coding	B-coded
Connector 2	
Connection	cable end

### Electrical specifications

Operating voltage	$U_B$	max. 48 V AC / 60 V DC
Operating current	$I_B$	max. 4 A

### Conformity

Degree of protection	EN 60529
Plug connection	connector M8 x 1 : IEC 61076-2-104
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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## Technical Data






Plug connector		-40 ... 90 °C (-40 ... 194 °F)
Cable, fixed		-40 ... 80 °C (-40 ... 176 °F)
Cable, flexing		-25 ... 80 °C (-13 ... 176 °F)
Pollution degree		3
<b>Mechanical specifications</b>		
Plug connector		
Tightening torque		0.4 Nm
Loosening protection		available
Tool installation		straight knurling and hexagon nut SW = 9 mm
Mating cycles		min. 100
Degree of protection		IP67
Cable		according to IEC/EN 60228 (DIN VDE 0295) class 6
Sheath diameter		4.8 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		5
Core cross section		0.34 mm <sup>2</sup>
Cores color		Core 1: brown Core 2: white Core 3: blue Core 4: black Core 5: grey
Core construction		42 x 0.1 mm Ø
Length	L	3 m
Cable code		Li F 9Y 11Y 5 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, black
Contact surface		Au
Flammability		V-2
<b>Cable</b>		
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



1	—	BN
2	—	WH
3	—	BU
4	—	BK
5	—	GY

## Accessories

	<b>MH V3-SCREWDRIVER</b>	Torque screwdriver (0.4 Nm)
	<b>MH V3-BIT M8</b>	plug-in cap for M8
	<b>V1/V3-LABELHOLDER</b>	Label holder
	<b>V1/V3-LABEL</b>	Label plate
	<b>MH V3-Holder</b>	Modular universal holder for M8 connectors