



## Connection cable

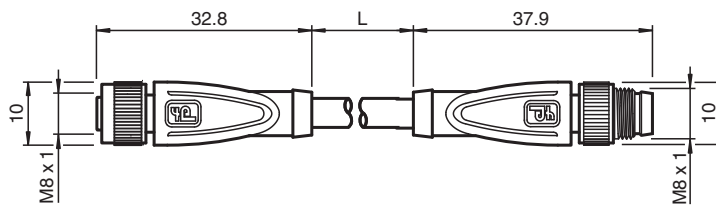
### V31-GM-BK1,5M-PUR-U-V31-GM

- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP67
- Free from substances that impair paint wetting
- Resistant to microbes and hydrolysis
- UV resistant
- cURus approval
- Halogen-free
- Knurled nut suitable for tool assembly
- Immunity to vibration, with mechanical latching

Cordset M8 socket straight to M8 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	M8
Style	straight
Locking	screw connection
Number of pins	4
Coding	A-coded
<b>Connector 2</b>	
Connection	plug
Construction type	M8
Style	straight
Locking	screw connection
Number of pins	4
Coding	A-coded
UL File Number	E231213

Release date: 2021-02-15 Date of issue: 2021-02-15 Filename: 240813-0005\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

## Technical Data

Electrical specifications		
Operating voltage	U <sub>B</sub>	max. 30 V AC/DC
Operating current	I <sub>B</sub>	max. 3 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)
Ambient conditions		
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
Mechanical specifications		
Plug connector		
Tightening torque		0.4 Nm
Loosening protection		available
Tool installation		straight knurling
Mating cycles		min. 100
Degree of protection		IP67
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	1.5 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 <sup>2</sup>
Torsion cycles		min. 1000000
Torsional stress		± 180 °/m
Material		
LABS free		yes
Halogen-free		yes
Plug connector		
Screw connection		Zinc diecast, nickel-plated
Body		TPU, black
Contact surface		Au
Flammability		V-2
Cable		

Release date: 2021-02-15 Date of issue: 2021-02-15 Filename: 240813-0005\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

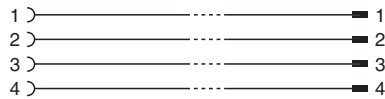
Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

 PEPPERL+FUCHS

### Technical Data

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 Assignment



Release date: 2021-02-15 Date of issue: 2021-02-15 Filename: 240813-0005\_eng.pdf

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com