

# Connection cable

## V3-GM-BK2M-PUR-A-V31-GM

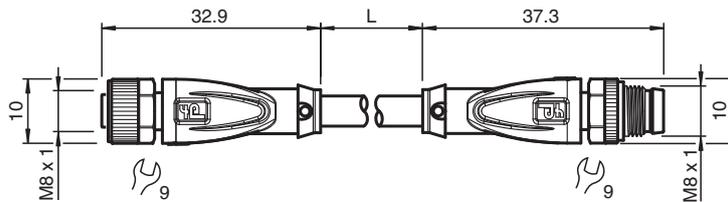


- Improved resistance to weld spatter
- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- UL listed for USA and Canada
- Halogen-free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

Cordset M8 socket straight A-coded 3-pin to M8 plug straight A-coded 4-pin, PUR cable weld spatter resistant black, UL approved, drag chain suitable, torsion resistant



### Dimensions



### Technical Data

#### General specifications

Connector 1	
Connection	socket
Construction type	M8
Style	straight
Locking	screw connection
Number of pins	3
Coding	A-coded
Connector 2	
Connection	plug
Construction type	M8
Style	straight
Locking	screw connection
Number of pins	4
Coding	A-coded

#### Electrical specifications

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

Release date: 2025-05-16 Date of issue: 2025-05-16 Filename: 320752\_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

**PF** PEPPERL+FUCHS

## Technical Data

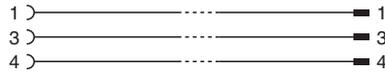
Halogen-free		DIN VDE 0472-815 IEC 60754-1
Microbial resistance		DIN EN 50525-2-21 / DIN VDE 0282-10
Hydrolysis resistance		DIN EN 50525-2-21
<b>Approvals and certificates</b>		
UL approval		AWM STYLE 20549 AWM I/II A/B 80°C 300V FT2 (cable)
UL File Number		E231213
<b>Ambient conditions</b>		
Ambient temperature		
Plug connector		-40 ... 90 °C (-40 ... 194 °F)
Cable, fixed installation		-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		IP68
Cable		
Sheath diameter		4.3 mm
Bending radius		> 10 x cable diameter, movable installation > 5 x cable diameter, fixed installation
Sheath stripping force		max. 80 N / 300 mm
Sheath color		black (similar to RAL 9005)
Number of cores		3
Core cross section		0.34 mm <sup>2</sup>
Cores color		Core 1: brown Core 3: blue Core 4: black
Core construction		42 x 0.1 mm Ø
Length	L	2 m
Cable code		Li F 9Y 11Y 3 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
Mass		57.87 g
<b>Material</b>		
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

Release date: 2025-05-16 Date of issue: 2025-05-16 Filename: 320752\_eng.pdf

**Technical Data**

Weld spatter resistance	yes
Chemical resistance	good
Oil resistance	yes
Cooling lubricant resistance	yes
Microbial resistance	yes
Hydrolysis resistance	yes
Flammability	FT2

**Connection Assignment**



Release date: 2025-05-16 Date of issue: 2025-05-16 Filename: 320752\_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