

Female cordset

V1-G-BK10M-PUR-R1

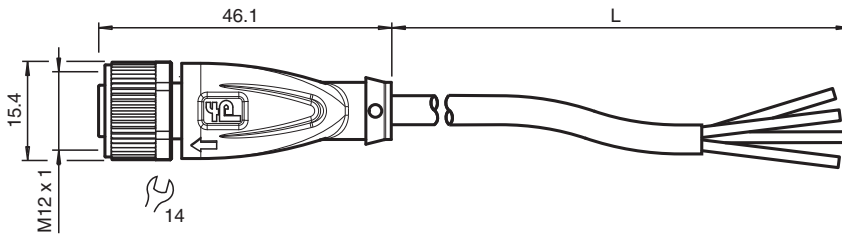


- Highly flexible - suitable for robotics
- Suitable for drag chains and abrasion resistant
- Suitable for robotic applications / torsion resistant
- Degree of protection IP68 / IP69
- Free of paint wetting interfering substances
- Resistant to microbes and hydrolysis
- Oil resistant
- Resistant to salt water
- 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, oil and salt water resistant, robotics



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 758 / 1581
Halogen-free	DIN VDE 0472-815 DIN EN 50267-2-1
Microbial resistance	DIN EN 50525-2-21 / DIN VDE 0282-10
Hydrolysis resistance	DIN EN 50525-2-21
Oil resistance	DIN EN 60811-2-1

Release date: 2023-08-30 Date of issue: 2023-08-30 Filename: 295360_eng.pdf

Technical Data

Approvals and certificates

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

Ambient conditions

Ambient temperature		
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

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. 50 N / 300 mm
Sheath color		black (similar to RAL 7021)
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	10 m
Cable code		Li 9Y 11YM 4 x 0.34
Drag chain suitability		
Drag chain cycles		min. 10000000
Motion velocity		max. 3 m/s
Traverse distance		max. 10 m
Acceleration		max. 10 m/s ²
Torsion cycles		min. 10000000
Torsional stress		± 360 °/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
Salt water resistance		yes
Oil resistance		yes
Microbial resistance		yes
Hydrolysis resistance		yes

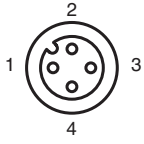
Release date: 2023-08-30 Date of issue: 2023-08-30 Filename: 295360_eng.pdf

Technical Data

Flammability








FT2

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