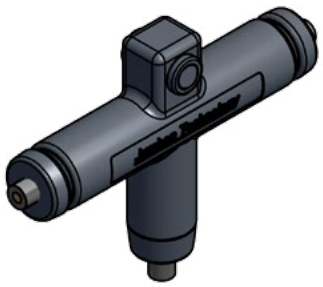
Harness cable JT SK-III 1.0

Secure & optimized yield

Jurchen Technology GmbH
Steigweg 24
97318 Kitzingen
Germany



For a secure connection

Our wiring harness is manufactured with high quality materials. This ensures a long product lifetime. Through the first moulding we achieve a max. impermeability. The second moulding ensures outstanding mechanical charachteristics and a higher temperature and UV-resistance. The pre-assembly of the harness according to customer requirements allows a faster and easier cable installation. With variable cable profiles from 2,5 to 10 mm², possible conduction losses can be minimized.

Electrical data	
Rated voltage	1000 V_{DC}
Maximum PV-System voltage	Up to 1000 V_{DC}
Rated current	Up to 98 A free in air at 60 °C ambient temperature [1]
Contact resistance at termination	≤ 0.5 mΩ [2]
Insulation resistance	> 10^9 Ω
Protection class	II
Tests	Spark test in accordance with EN 62230
	High voltage test in water in accordance with TÜV 2 PfG 1913/04.11 Section 7.3.8 b) 1h storage in water at 20°C / 5 min 6,5 kV_{AC}
	Contact resistance at termination in accordance with test 2b of EN 60512
	Insulation resistance in accordance with EN 50395 section 8.1
	Long term resistance of insulation to d.c. according to TÜV 2 PfG 1913/04.11 section 7.3.13 240h at 1.5 kV in salt water at 85 °C
Thermal data	
Ambient temperature range	from -40 °C to +90 °C (from -40 °F to +194°F)
Max. operating temperature of the conductor	120 °C without connectors
Mechanical data	
Degree of protection (IP-Code)	IP68 in accordance with IEC 60529
Termination and connection methods	According to IEC 60352-2
Moulding material	
Pre-mould material	PA RoHS - conform
Insulation material	PC RoHS – conform, UV – resistant
Flame class	5VA per UL94
PV-Connector	
Approvals	TÜV and/or UL
Manufacturer MultiContact Amphenol	**Trademark** MC4 H4 PV Connector
Other PV-Connectors on request	

[1] Without connectors, depending on the wire cross section being used and the ambient temperature (see table 1 and table 2)

[2] Measured directly at the output of the cables of the moulding of the connections

Harness cable JT SK-III 1.0

Secure & optimized yield

Jurchen Technology GmbH
Steigweg 24
97318 Kitzingen
Germany

Solar cable	
Approvals	TÜV and/or UL
Type designation	PV1-F and/or ZKLA
Cross section	2.5 mm² (14 AWG), 4 mm² (12 AWG), 6 mm² (10 AWG) and 10 mm² (8 AWG)
Sheath colour	Black
Manufacturer LEONI Studer AG	**Trademark** BETAflam® Solar 125 flex FRNC BETAflam® Solar 125 flex UL 4703
Other PV-Cables on request	

Table 1: Max. current rating for JT SK-III 1.0 PV-array-interconnection-systems without using PV-connectors:

Nominal cross section area	Current rating acc. to method of installation		
	single cable free in air	single cable on a surface	two loaded cables touching on a surface
mm²	A	A	A
2,5	41	39	33
4	55	52	44
6	70	67	57
10	98	93	79

Conversion factors for different ambient temperature	
Ambient temperature °C	Conversion factor
up to 60	1,00
70	0,92
80	0,84
90	0,75

Table 2: Electrical parameters depending on the PV-connectors being used:

Manufacturer	IP	Current rating				Rated voltage
		2,5 mm²	**4,0 mm²**	**6,0 mm²**	**10 mm²**	
Multi Contact MC 4	68	22,5 A	30 A	30 A	43 A	1000 V_{DC} 1500V_{DC} [3]
Amphenol H4	68	32 A	40 A	44 A	65 A	1500 V_{DC}

Other PV-connectors on request.

[3]for locations with restricted access

Hotline:
+ 49 (0) 9321 2680 600