DeltaFlex cables	TECHNICAL DATASHEET	Doc No.: S15102001
		Rev: 0
	PV1-F Cable 0.6/1kV	Date: 10/20/2015
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SIGN OFF TABLE	Name	Signature	Date
Designed by	Wang Lu	Wang Lu	10/20/2015
Reviewed by	Zhang Wei	Zhang Wei	10/20/2015
Approved by	Cao Yonggang		10/20/2015
For customer/client			

1. This datasheet is provided for installation and operation information. The design, quotation, manufacture of cables is based on this datasheet as the technical part of contract.

2. Type and size from purchaser order as listed below.

Voltage	Size	Description
0.6/1kV	1C6	PV1-F

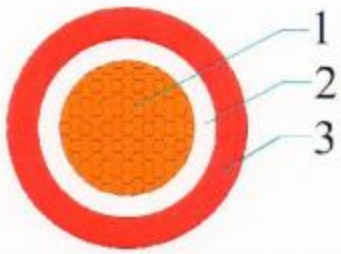
3. Standards applied/referenced as listed below.

Item	Standard	Requirement
Design guidelines	2PfG 1169	----
Conductor	AS/NZS 1125	Class 5, tinned annealed copper conductor
Insulation and sheath material	2PfG 1169	----
Flame retardant	2PfG 1169	----

4. Application.

Max. permissible operating temperature at conductor	120 ℃
Min. permissible ambient temperature	-40 ℃
Max. conductor temperature during short circuit	200 ℃

5. Construction.



1	Conductor	Class 5, tinned annealed circular copper
2	Insulation	125 ℃ low smoke halogen free cross-linked polyolefin/White
3	Outer sheath	125 ℃ low smoke halogen free cross-linked polyolefin/Black or Red as ordered.

6. Marking on sheath as listed below, or as purchase order contract.

Mark on outer sheath: by printing
Deltaflex" year of manufacture" PV1-F PV1000-F 1x 6 mm² 0.6/1kV Photovoltaic "Eltech order number" XXXXM

7. Construction particulars.

Number of cores and nominal area	Diameter of conductor	Min. thickness insulation	Min. thickness of outer Sheath	Max. cable diameter	Approx. weight of cable
	mm	mm	mm	mm	kg/km
1C6	3.17	0.5	0.5	7.1	90

8. Electrical and Mechanical particulars.

Number of cores and nominal area	Max. DC resistance of conductor at 20°C	Current rating (in free air 45°C)	Voltage test	Min. bending radius
	Ω/km	A	kV/5min	mm
1C6	3.39	84	AC 6.5kV; DC 15kV	28

9. Test passed in TUV certificate.

Test items	Standards requirements	Test result
Damp heat test (90°C 1000h)	Variation of tensile strength ≤-30%	Insulation -7%; Sheath -8%
	Variation of elongation at break ≤-30%	Insulation -8%; Sheath -7%
Resistance against acid and alkaline solution (23°C 168h)	Variation of tensile strength ≤±30%	Acid: Insulation -7%; Sheath -8%
		Alkaline: Insulation -6%; Sheath -8%
	Variation of elongation at break ≥ 100%	Acid: Insulation 250%; Sheath260%
		Alkaline: Insulation 240%; Sheath260%
Cold impact test (-40°C, 16h)	No cracks	Pass
Ozone resistance of complete cable	40°C, Relative humidity: 55%,	Pass
	Ozone concentration (by volume): 250x10-6%, 72h	
	Requirements : No cracks	
Weathering/UV resistance	63°C, Relative humidity :65%, Spray cycle:18min, Drying with xenon arc lamp: 102min, Power at wavelength of 300 —400nm: 60W/m², 720h	Pass
	Requirements : No cracks	
Vertical flame propagation	The Min. distance between the lower edge of the top support and the onset of charring ≥50mm;	Pass

Test items	Standards requirements	Test result
	The Max. distance between the charring extends downwards and the lower edge of the top support ≤540mm;	
Determination of halogens	PH value (Min.): 4.3; Conductivity (Max.) μs/mm: 10;	Pass
	Chlorine and Bromine content (expressed in HCL, Max.)%: 0.5;	
	Fluoride content (Max.)%: 0.1	
Thermal life test	TI120 25 years	Pass