

Technical DataSheet of Solar Cable (Type 1)

CUSTOMER : Cosmo Electricals

Sr.I	No.	Description	Unit	1C x 2.5	1C x 2.5	1C x 4	1C x 4	1C x 6	1C x 6	
				Sq.mm	Sq.mm	Sq.mm	Sq.mm	Sq.mm	Sq.mm	
1		Manufacturer Name		Polycab India Limited						
2	Brand Name POLYCAB									
3		Rated a.c. Voltage		0.6/1 kV		0.6/1 kV		0.6/1 kV		
		Max d.c. Voltage		1.8 kV		1.8 kV		1.8 kV		
4		CONDUCTOR								
	/	Material		Annealed Tinned Flexible copper conductor as per Class 5 of IEC-60228 / DIN VDE 0295						
	b)	Conductor Size	Sq.mm	2.5	2.5	4	4	6	6	
	c)	Max. D.C Cond. Resistance at 20 Deg. C.	Ohm/km	8.21	8.21	5.09	5.09	3.39	3.39	
5		INSULATION								
	a)	Material		EB XLPO Insulation (Cross Linkable Halogen Free Fire Retardant Compound)						
	b)	Minimum Thickness	mm	0.5	0.5	0.5	0.5	0.5	0.5	
	c)	Colour of insulation		Black	Red	Black	Red	Black	Red	
6		Sheath								
	a)	Material		EB XLPO Insulation (Cross Linkable Halogen Free Fire Retardant Compound)						
	b)	Minimum Thickness	mm	0.5	0.5	0.5	0.5	0.5	0.5	
	c)	Colour of outer sheath		Black	Black with Red strips	Black	Black with Red strips	Black	Black with Red strips	
7		Overall Diameter (Approx)	mm	4.1 ± 0.5 mm	4.1 ± 0.5 mm	5.1 ± 0.5 mm	5.1 ± 0.5 mm	6.1 ± 0.5 mm	6.1 ± 0.5 mm	
8		Current rating (Upto 60°C) at 2 Adjacent cables on Surface		44	44	44	44	44	44	
9	a)	Lower ambient temperature	°C	- 40°C		- 4	0°C	- 40°C		
		Upper ambient temperature	°C	+ 90°C		+ 90°C		+ 90°C		
10		Max. conductor temp. under normal operating conditions	°C	120°C		120°C		120°C		
11		Max. conductor temp at the termination of short circuit	°C	200°C for 5seconds		200°C for 5seconds		200°C for 5seconds		
12		Standards to which the cables confirm		Specification-2 Pfg 1169/08.2007		Specification-2 Pfg 1169/08.2007		Specification-2 Pfg 1169/08.2007		
13		Recommended minimum bending radius in mm		8 - 10 times the overall diameter of the cable		8 - 10 times the overall diameter of the cable		8 - 10 times the overall diameter of the cable		
14		Printing		YEAR of mfg. "PV1-F" POLYCAB SOLAR DC CABLE 1CORE x SQ.MM			PV1-F" POLYCAB E 1CORE x SQ.MM	YEAR of mfg. "PV1-F" POLYCAB SOLAR DC CABLE 1CORE x SQ.MM		

Note:- 1) The values given above are subject to tolerances as per the relevant standards.

2) TUV Spec - 2 Pfg 1169/08.2007 is replace with EN 50618. Hence "TUV" marking is applicable in Marking.

TDS.No.-190105 - 10042

Ravinder



Technical DataSheet of Solar Cable (Type 3)

CUSTOMER : Cosmo Electricals

Sr.	No.	Description	Unit	1C x 2.5	1C x 2.5	1C x 4	1C x 4	1C x 6	1C x 6		
				Sq.mm	Sq.mm	Sq.mm	Sq.mm	Sq.mm	Sq.mm		
1		Manufacturer Name		Polycab India Limited							
2		Brand Name		POLYCAB							
3		Rated a.c. Voltage		1100 V							
		Rated d.c. Voltage				150	00 V) V			
4		CONDUCTOR									
	/	Material		Annealed Tinned Flexible copper conductor as per Class 5 of IS 8130/2013							
	b)	Conductor Size	Sq.mm	2.5	2.5	4	4	6	6		
	c)	Max. D.C Cond. Resistance at 20 Deg. C.	Ohm/km	8.21	8.21	5.09	5.09	3.39	3.39		
5		INSULATION									
	,	Material			XL	PE Insulation a	s per IS 7098-1/88				
	b)	Nominal Thickness	mm	0.7	0.7	0.7	0.7	0.7	0.7		
	c)	Colour of insulation		Black	Red	Red	Red	Black	Red		
6		Sheath									
	a)	Material		UV Resistant - PVC Type ST2 Sheath							
	b)	Nominal Thickness	mm	0.9	0.9	0.9	0.9	0.9	0.9		
	c)	Colour of outer sheath		Black	Black with Red strips	Black	Black with Red strips	Black	Black with Red strips		
7		Overall Diameter (Approx)	mm	$5.5 \pm 0.5 \text{ mm}$	$5.5 \pm 0.5 \text{ mm}$	$6.0 \pm 0.5 \text{ mm}$	$6.0 \pm 0.5 \text{ mm}$	$6.5 \pm 0.5 \text{ mm}$	$6.5 \pm 0.5 \text{ mm}$		
8		Current rating (Upto 60°C) at 2 Adjacent cables on Surface		36	36	36	36	46	46		
9		Max. conductor temp. under normal operating conditions	°C	90°C							
10		Max. conductor temp at the termination of short circuit	°C	250°C							
11		Standards to which the cables confirm		Generally as per IS 7098-1/88, IS 5831 & IS 8130/2013							
12		Recommended minimum bending radius in mm		8 - 10 times the overall diameter of the cable							
13		Printing		YEAR of mfg. POLYCAB SOLAR DC CABLE 1CORE x SQ.MM							

Note:-The values given above are subject to tolerances as per the relevant standards.

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