

		2. FOR EPC CONTRACTS ONLY	
		EPC works only	
SR. NO.	PARTICULARS		3.5 C X 95
	Description	Unit	Confirmation/Commitement by the Supplier/Bidder
1	Name of Manufacturer.		CHANDRESH CABLES LTD(BRAND NAME-AVOCAB)
2	Applicable Standard.		IS : 1554 (PART-1) 1988
3	Voltage Grade.	Volts	1100
4	Permission variation in a)Voltage	%	±10
	b)Frequency	%	±5
	c) Combined	%	±10
5	Wheather Suitable for Earthed or Unearthed System		Both
6	SIZE	SQ.MM	3.5 C X 95
7	Type.		AYFY (FRLS & C2 TYPE)
8	Conductor :		
a.	Material		H2 GRADE ALUMINIUM AS PER IS 8130 : 2013
b.	Nominal Size (Phase / Neutral)	SQ.MM	95 / 50
c.	Number of wires in each conductor (Phase/Neutral)	Nos.	19/7"
d.	Diameter of Each Wire (Phase/Neutral) (Before Stranding) Minimum	mm	2.54 / 3.02
e.	Shape of conductor		STRANDED SECTOR SHAPE
f.	Direction of lay of Conductor		RIGHT HAND LAY
g.	DC Resistance at 20°C (MAX.) PHASE/NEUTRAL	Ohms/Km	0.320 / 0.641
h.	AC Resistance at 90°C (MAX.) PHASE/NEUTRAL	Ohms/Km	0.410 /0.820
9	Insulation		
a.	Material.		EXTRUDED PVC TYPE A
b.	IS Reference		IS :1554 (PART-1) 1988
c.	Nominal Thickness. (Phase / Neutral)	mm	1.60 / 1.40
d.	Cores identification		RED , YELLOW , BLUE & BLACK
f.	Cores identification		Confirming to : IS 1554
g.	Min. fictitious diameter under inner sheath	mm	32.3

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10	Inner Sheath		
a.	Material.		EXTRUDED PVC TYPE ST-1
b.	IS Reference		IS : 5831 - 1984
c.	Minimum Thickness	mm	0.4
d.	Mimumum Fictitious Diameter over Inner Sheath	mm	33.1
e.	Colour of inner sheath		Black
11	Armouring		
a.	Material & Type		GALVANIZED STEEL STRIP
b.	Extruded OR Wrapped		Wrapped
c.	IS Reference		IS: 3975/1999
d.	Nominal Diameter	mm	4 X 0.80
e.	Mimumum Fictitious Diameter over Armour	mm	34.7
f.	Direction of lay of armour		LEFT HAND LAY
g.	Min. coverage of armour		Up to 90%
h.	DC Resistance of armour (Max)	ohm/km	2.39
12	Outer Sheath		
a.	Material.		EXTRUDED PVC
b.	Type.		ST-1 WITH FRLS PROPERTIES
c.	IS Reference		IS : 5831 - 1984
d.	Minimum Thickness	mm	1.56
e.	Colour		BLACK
f.	Mimumum Fictitious Diameter of Cable	mm	37.8
13	FRLS PROPERTIES		
a.	Oxygen Index Minimum	%	29
b.	Temperature Index Min	Deg C	250
c.	Smoke Density Max.	%	60
d.	Acid Gas Generation (HCL%) Max.	%	20
e.	Flammibility Test a. Unefected Portion (min)	mm	50
	b. Flame Duration (Max.)	sec.	60
14	Insulation Test		
	a) Minimum volume resistivity at (ohm-cm)		
	(i) 27 deg. C.		1×10^{13}
	(ii) 70 deg. C.		1×10^{10}

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15	(i) Minimum tensile - strength of insulation	N/mm ²	12.5(min)as per IS 5831:1984
	(ii) Minimum elongation at break	%	150(min)as per IS 5831:1984
16	(i) Minimum tensile - strength of sheath	N/mm ²	12.5(min)as per IS 5831:1984
	(ii) Minimum elongation at break	%	150(min)as per IS 5831:1984
17	(i) Minimum tensile - strength of armour	Mpa	300-500 as per IS 3975:1999
	(ii) Minimum elongation at break	%	10(min) as per IS 3975:1999
18	PVC Cable		
	a) High voltage test		3KV(rms) for 5mint as per IS 1554(part-1):1988
	c) Short circuit current rating for armour		KA/Vt (K-0.05 Amp) (where A = Area of Armour in mm ² & t = time in seconds)
19	a)Current carrying capacity in air and corresponding assumptions/conditions of installation		As per IS: 1255
21	ELECTRICAL CHARACTERISTICS		
a.	laying up of cable is accordance with		Confirming to IS 1255
b.	Short Circuit Rating for 1 Sec. Duration	KA	7.22
c.	Wheather Suitable for Earthed or Uearthed System		70
d.	Conductor Temperature allowed for the short circuit condition (Max.)	°C	160
22	GENERAL		
a.	Standard drum length	Mts	500/1000 (±5 %) OR ACTUAL
b.	Cable - Drum		Shall confirm to IS 10418 only
c.	Recommended min. Bending radius of cable	mm	12 X OVERALL DIA OF A CABLE
d.	Recommended Max. Safe pulling force		
	i) When Cable Pulled by pulling eye	N	10050
e.	Packing Material		NON RETURNABLE WOODEN DRUM
f.	Embossing on Cable		PROVIDE AS PER IS-1554 (PART-1)1988, Name of Customer, Year of manufacturing,FRLSH,APTRANSCO
g.	Cable should be ISI Marked		Yes , All cable furnish with ISI - Marked only
h.	Sequential marking of length (Printing)		PROVIDE EVERY METER
i	End cap		Provided both end of cable
PREPARED BY			REVIEWED BY
KAJAL PATEL			PIYUSH PATEL
NOTE: THE DATA SPECIFIED ABOVE ARE BASED ON RELEVANT IS STANDARDS. AND INCASE OF ANY DESCREPCANCY OR TYPOGRAPHICAL ERROR, RELEVANT IS STANDARD SHALL BE PREVAILED.			

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