

# SUPERSTAR CABLE INDUSTRIES

## TECHNICAL DETAIL FOR 1.1 KV IS 1554-1

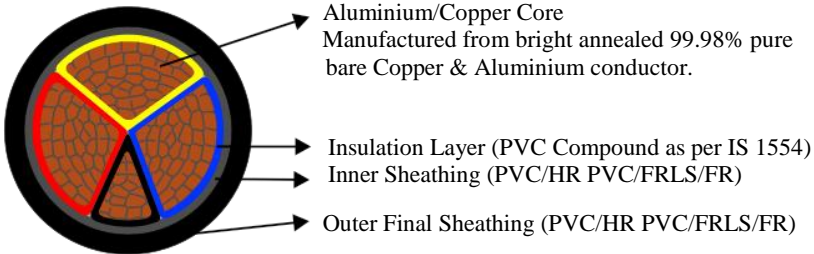
### THREE & HALF CORES, AL/COPPER COND., PVC INSULATED / SHEATHED, UN-ARMoured CABLES

#### PHYSICAL PARAMETERS

Size cross-sectional area Sq MM	Minimum nos of Strands in Conductor Phase		Nominal Thickness of Insulation Phase/Neutral	Minimum Thickness of inner sheath mm	Nominal thickness of outer sheath mm	Approx Diameter mm	Approx. Weight of cable Kg/KM	
	Al	Cu					Aluminium Conductor	Copper Conductor
3X25 16	6/6	6/6	1.20/1.00	0.30	2.00	24	700	1264
3X35 16	6/6	6/6	1.20/1.00	0.30	2.00	26	850	1600
3X50 25	6/6	6/6	1.40/1.20	0.30	2.00	29	1050	2100
3X70 35	12/6	12/6	1.40/1.20	0.40	2.20	32	1400	2900
3X95 50	15/6	15/6	1.60/1.40	0.40	2.20	36	1800	3900
3X120 70	15/12	18/12	1.60/1.40	0.50	2.40	40	2200	4850
3X150 70	15/12	18/12	1.80/1.40	0.50	2.40	44	2600	5800
3X185 95	30/15	30/15	2.00/1.60	0.50	2.60	48	3200	7200
3X240 120	30/15	34/18	2.20/1.60	0.60	3.00	54	4100	9300
3X300 150	30/15	34/18	2.40/1.80	0.60	3.20	62	5000	11500

Note : Tabulated approximate net weight of cables are guidelines for transportation, loading & unloading purpose only.

#### CONSTRUCTION OF CABLE :



#### BASIC / STANDARD ASSUMPTIONS :

1. Max. permissible temp. 70°C for PVC, 85°C for HR PVC.
2. Ground/Duct temperature at 30°C.
3. Ambient temperature - 40°C
4. Depth of laying for 1.1KV cables 750mm
5. Multicore cables installed in single circuit

#### ELECTRICAL PARAMETERS

Size Cross-sectional area Sq MM	Max Cond. D.C. resistance at 20°C in Ohm/km		Approx Cond. A.C resistance at 70oC in Ohm/km		Normal Current rating in Amps					
	Al	Cu	Al	Cu	Aluminium Cond.			Copper Cond.		
					Ground	Duct	Air	Ground	Duct	Air
3X25 16	1.20	0.727	1.44	0.87	76	63	70	99	81	90
3X35 16	0.868	0.524	1.04	0.63	92	77	86	120	99	110
3X50 25	0.641	0.387	0.769	0.464	110	95	105	145	125	135
3X70 35	0.443	0.268	0.532	0.322	135	115	130	175	150	165
3X95 50	0.320	0.193	0.384	0.232	165	140	155	210	175	200
3X120 70	0.253	0.153	0.304	0.184	185	155	180	240	195	230
3X150 70	0.206	0.1240	0.247	0.1488	210	175	205	270	225	265
3X185 95	0.164	0.0991	0.197	0.1189	235	200	240	300	255	305
3X240 120	0.125	0.0754	0.151	0.0912	275	235	280	345	295	355
3X300 150	0.100	0.0601	0.122	0.0733	305	260	315	385	335	400

Note : Normal current ratings are given in standard conditions, and may vary as per site conditions and installations.

#### SAFETY/HANDLING INSTRUCTIONS :

1. Cable should not be dragged along the earth surface, but should be rolled in direction of arrow marked on the drum.
2. Cable ends should always be sealed by means of suitable end sealing materials to prevent moisturisation of cores and armour.
3. For laying of cables special cares to be taken to prevent sharp bending, kinking, twisting. Cable should be unwound from drum by proper mounting the cable drum on a cable wheel making sure the spindle is strong enough to carry the weight without bending and that it is lying horizontally in the bearings so as to prevent the drum creeping to one side or the other while it is rotating.
4. Cables should be stored in a dry covered place to prevents exposure to climatic conditions and wear and tear of wooden drums and it should preferably on a concrete surface/firm surface which will not cause the drums to sink and thus lead to flange rot and extreme difficulty in moving the drums.

**Corporate Office** :: 403, B.K. House, Opp. State Bank of Saurashtra, C.G. Road, Navrangpura, Ahmedabad INDIA – 380009.

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**Website** : www.superstarcable.com

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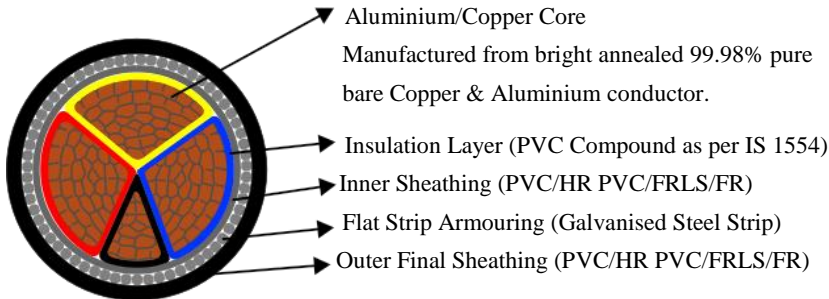
THREE AND HALF CORES, AL/CU COND., PVC INSULATED, GALVANIZED STEEL WIRE/STRIP ARMoured CABLES

## PHYSICAL PARAMETERS

Size Cross-sectional area Sq mm	Minimum no of Strands in Conductor Phase/ Neutral		Nominal Thickness of Insulation Phase/Neutral	Minimum Thickness of inner Sh. mm	Armouring with Galvanized Flat Steel Strip				
					Nominal Thickness Strip mm	Minimum Thickness of outer sheath mm	Approx. Overall Diameter mm	Approx. Weight of cable Kg/KM	
								Al Cond.	Copper Cond.
3X25 16	6/6	6/6	1.20/1.00	0.30	0.80	1.40	24	1000	1550
3X35 16	6/6	6/6	1.20/1.00	0.30	0.80	1.40	26	1200	1950
3X50 25	6/6	6/6	1.40/1.20	0.30	0.80	1.56	30	1500	2600
3X70 35	12/6	12/6	1.40/1.20	0.40	0.80	1.56	34	1800	3300
3X95 50	15/6	15/6	1.60/1.40	0.40	0.80	1.56	37	2300	4350
3X120 70	15/12	18/12	1.60/1.40	0.50	0.80	1.72	41	2800	5450
3X150 70	15/12	18/12	1.80/1.40	0.50	0.8	1.88	45	3200	6400
3X185 95	30/15	30/15	2.00/1.60	0.50	0.80	2.04	49	3900	7900
3X240 120	30/15	34/18	2.20/1.60	0.60	0.80	2.20	55	4800	10000
3X300 150	30/15	34/18	2.40/1.80	0.60	0.80	2.36	61	5800	12300

Note : Tabulated approximate net wt. of cables are only guidelines for transportation, loading & unloading purpose only.

## CONSTRUCTION OF CABLE :



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