



MUNISU CABLE INDUSTRIES PVT. LTD.

**SINGLE & MULTICORE FLEXIBLES,
SOLID & STRANDED CABLES-IS : 694**



“Quality Is A Global Currency”

“Munisul” Your Quality Insurance Against Fire.



TECHNICAL CATALOGUE IS : 694

“Munisul” ANNEALED BARE COPPER CONDUCTOR PVC INSULATED UNSHEATHED 650/1100V, SINGLE CORE CABLE FOR PANEL BOARD WIRING AS PER IS : 694-1990 WITH ISI MARK.

Area	Conductor Construction	Conductor Diameter	Max. DC Resistance at 20° C	Insulation Thickness	Cable Diameter (Approx.)	Current Rating
SQ.MM		MM	OHM/KM	MM	MM	AMPS.
0.50	16/0.20	0.94	39.00	0.60	2.2	4
0.75	24/0.20	1.20	26.00	0.60	2.5	7
1.00	32/0.20	1.34	19.50	0.60	2.6	11
1.50	48/0.20	1.64	13.30	0.60	2.9	14
2.50	80/0.20	2.08	7.98	0.70	3.5	19
4	56/0.30	2.61	4.95	0.80	4.3	26
6	85/0.30	3.50	3.30	1.00	5.6	31
10	140/0.30	4.60	1.91	1.00	6.7	42
16	101/0.45	5.90	1.21	1.20	8.4	57
25	156/0.45	7.60	0.780	1.40	10.5	71
35	220/0.45	8.70	0.554	1.40	11.6	91
50	325/0.45	10.60	0.386	1.60	13.9	120
70	440/0.45	12.30	0.272	1.60	15.5	161
95	590/0.45	14.70	0.206	1.80	18.5	200
120	750/0.45	16.70	0.161	2.00	20.9	225
150	943/0.45	18.30	0.129	2.00	22.5	240
185	1150/0.45	20.00	0.106	2.20	24.6	300
240	1500/0.45	23.00	0.0801	2.20	27.6	425
300	1875/0.45	27.20	0.0641	2.40	32.0	475
400	2500/0.45	30.50	0.0486	2.60	35.7	550



“Munisul” ANNEALED BARE COPPER CONDUCTOR PVC INSULATED & SHEATHED 650/1100V, MULTI-CORE FLEXIBLE CABLE AS PER IS : 694-1990 WITH ISI MARK

Area	Conductor Construction	Conductor Diameter	Max. DC Resistance at 20° C	Insulation Thickness	Core Dia.	Sheath thickness in MM nominal			Overall Diameter in MM Approx.			Current Rating
SQ.M M.	No./Dia.	MM	Ohm/Km	MM	MM	2 Core	3 Core	4 Core	2 Core	3 Core	4 Core	AMP S.
0.50	16/0.2	0.94	39.0	0.6	2.2	0.9	0.9	0.9	6.2	6.6	7.2	4
0.75	24/0.2	1.20	26.0	0.6	2.5	0.9	0.9	0.9	6.8	7.2	7.9	7
1.00	32/0.2	1.34	19.5	0.6	2.6	0.9	0.9	0.9	7.0	7.5	8.1	11
1.50	48/0.2	1.64	13.3	0.6	2.9	0.9	0.9	1.0	7.6	8.1	9.0	14
2.50	80/0.2	2.08	7.98	0.7	3.5	1.0	1.0	1.0	9.0	9.6	10.5	19
4.00	56/0.3	2.61	4.95	0.8	4.3	1.0	1.0	1.0	10.6	11.3	12.4	26

“Munisul” ANNEALED BARE COPPER CONDUCTOR PVC INSULATED SHEATHED 650/1100V, MULTI-CORE FLEXIBLE CABLES AS PER IS : 694-1990.

Area	Conductor Construction	Conductor Diameter	Max. DC Resistance at 20° C	Insulation Thickness	Core Dia.	Sheath thickness In MM nominal			Overall Diameter In MM Approx			Current Rating
SQ.M M.	No./Dia.	MM	Ohm/Km	MM	MM	2 Core	3 Core	4 Core	2 Core	3 Core	4 Core	AMP S.
6	85/0.30	3.50	3.30	0.80	5.1	1.15	1.15	1.40	12.60	13.40	15.20	31
10	140/0.30	4.60	1.91	1.00	6.6	1.40	1.40	1.40	16.00	17.00	18.80	42
16	226/0.30	6.00	1.21	1.00	8.0	1.40	1.40	1.40	18.80	20.10	22.20	57
25	355/0.30	7.60	0.780	1.20	10.0	2.00	2.00	2.00	24.00	25.60	28.20	71
35	220/0.45	8.70	0.554	1.20	11.1	2.00	2.00	2.00	26.30	28.00	31.00	91
50	325/0.45	10.60	0.386	1.40	13.4	2.00	2.00	2.00	30.90	33.00	36.50	120
70	440/0.45	12.30	0.272	1.40	15.1	2.00	2.20	2.40	34.20	37.00	41.00	160
95	590/0.45	14.70	0.206	1.60	17.9	2.20	2.20	2.40	40.20	43.50	47.80	190



“Munisul” MULTICORE ROUND FLEXIBLE CABLES (6 CORES TO 19 CORES)
GENERALLY AS PER IS : 694-1990.

Area SQ. MM		0.5	0.75	1.0	1.5	2.5	4.0
Construction No. /Dia.		16/0.2	24/0.2	32/0.2	48/0.2	80/0.2	56/0.3
Conductor Dia. in MM		0.94	1.20	1.34	1.64	2.08	2.61
Avg. Insu. Thickness in MM		0.60	0.60	0.60	0.60	0.70	0.80
Core Dia. In MM.		2.20	2.50	2.60	2.90	3.50	4.30
No. of Cores							
6	Avg. Sheath thickness MM	0.90	1.00	1.00	1.00	1.10	1.20
	App. Overall Dia. MM.	8.50	9.50	9.80	10.70	12.70	15.30
7	Avg. Sheath thickness MM	0.90	1.00	1.00	1.00	1.10	1.20
	App. Overall Dia. MM.	8.50	9.50	9.80	10.70	12.70	15.30
8	Avg. Sheath thickness MM	1.00	1.00	1.00	1.10	1.20	1.30
	App. Overall Dia. MM.	9.30	10.40	10.70	11.90	14.10	16.90
10	Avg. Sheath thickness MM	1.00	1.10	1.10	1.10	1.30	1.40
	App. Overall Dia. MM.	10.80	12.20	12.60	13.80	16.60	20.00
12	Avg. Sheath thickness MM	1.00	1.10	1.10	1.10	1.30	1.40
	App. Overall Dia. MM.	11.20	12.60	13.00	14.30	17.20	20.70
14	Avg. Sheath thickness MM	1.10	1.10	1.10	1.20	1.30	1.40
	App. Overall Dia. MM.	12.00	13.30	13.70	15.20	18.10	21.80
16	Avg. Sheath thickness MM	1.10	1.20	1.20	1.20	1.40	1.50
	App. Overall Dia. MM.	12.60	14.20	14.60	16.00	19.30	23.20
19	Avg. Sheath thickness MM	1.10	1.20	1.30	1.30	1.40	1.50
	App. Overall Dia. MM.	13.20	14.90	15.60	17.10	20.30	24.50
24	Avg. Sheath thickness MM	1.20	1.30	1.30	1.40	1.40	1.50
	App. Overall Dia. MM.	15.60	17.60	18.20	20.20	23.80	28.80
30	Avg. Sheath thickness MM	1.30	1.30	1.30	1.40	1.40	1.50
	App. Overall Dia. MM.	16.80	18.70	19.30	21.50	25.70	30.60
	Max. Conductor Resistance	39.00	26.00	19.50	13.30	7.98	4.95
	in ohm/km at 20° C.						
	Recommended Current Rating in AMP.	4	7	11	14	19	26



“Munis” SINGLE CORE BARE COPPER / ALUMINIUM CONDUCTOR, PVC INSULATED UNSHEATHED AND PVC SHEATED 650/1100 V. HOUSE SERVICE WIRES AS PER IS : 694-1990 WITH ISI MARK

Area	Cond. Const.	Max. DC Conductor Resistance at 20° C		Unsheathed Cable		Sheathed Cable			Current Rating Amp.	
				Insulation Thickness Nominal	Overall Dia. Approx .	Insulation Thickness Nominal	Insulation thickness nominal	Overall Dia. Approx .	Copper	Aluminium
SQ. MM.		Copper OHM/KM	Aluminium OHM/KM	MM.	MM.	MM.	MM.	MM.		
1.0	1/1.12	18.10	--	0.7	2.60	0.6	0.8	4.10	10	8
1.5	1/1.38	12.10	18.10	0.7	2.90	0.6	0.8	4.40	13	10
2.5	1/1.78	7.41	12.10	0.8	3.50	0.7	0.8	5.00	20	15
4	1/2.24	4.61	7.41	0.8	4.00	0.8	0.9	5.85	26	20
6	1/2.76	3.08	4.61	0.8	4.50	0.8	0.9	6.50	35	27
10	1/3.55 AL.	--	3.08	1.0	5.70	1.0	0.9	7.55	44	34
--	7/1.35 CU.	1.83	--	--	6.20	--	--	--	--	--
16	7/1.70	1.15	1.91	1.0	7.20	1.0	1.0	9.30	55	43
25	7/2.14	0.727	1.20	1.2	8.90	1.2	1.1	11.20	75	58
35	7/2.50	0.524	0.868	1.2	10.00	1.2	1.1	12.30	90	70
50	7/3.0	0.387	0.641	1.4	11.90	1.4	1.2	14.40	120	92
--	19/1.78	--	--	--	11.90	1.4	1.2	14.40	120	92
70	19/2.14	0.268	0.443	1.4	13.60	--	--	--	150	116
95	19/2.50	0.193	0.320	1.6	15.80	--	--	--	175	135
120	37/2.03	0.153	0.253	1.6	17.50	--	--	--	200	155
150	37/2.24	0.124	0.206	1.8	19.40	--	--	--	230	175
185	37/2.50	0.0991	0.164	2.0	21.70	--	--	--	265	205
240	61/2.24	0.0754	0.125	2.2	24.80	--	--	--	315	245
300	61/2.50	0.0601	0.100	2.4	27.50	--	--	--	370	285
400	61/2.85	0.0470	0.0778	2.6	31.10	--	--	--	450	350
500	61/3.20	0.0366	0.0605	2.8	34.60	--	--	--	530	410
630	91/3.00	0.0283	0.0469	2.8	38.80	--	--	--	590	455

ESTIMATED FULL LOAD CURRENTS FOR MOTORS



MUNISU CABLE INDUSTRIES PVT. LTD.



H.P.	KW	Single Phase Amp	Three Phase Amp	Recommended Cable Size Sq.mm.	
0.5	0.37	3.7	1.0	1.5	- Copper
0.75	0.55	5.0	1.3	1.5	- Copper
1.00	0.75	6.5	1.9	1.5	- Copper
1.50	1.10	11.5	2.6	1.5	- Copper
2.00	1.50	--	3.7	1.5	- Copper
3.0	2.20	--	4.8	1.5	- Copper
5.0	3.70	--	7.8	1.5	- Copper
7.5	5.50	--	11.2	1.5	- Copper
10.0	7.50	--	15.5	2.5	- Copper
12.5	9.30	--	19.0	2.5	- Copper
15.0	11.00	--	22.0	6	- Aluminium
20.0	15.00	--	29.0	10	- Aluminium
25.0	18.50	--	35.0	16	- Aluminium
30.0	22.00	--	40.0	16	- Aluminium
35.0	26.00	--	47.0	25	- Aluminium
40.0	30.00	--	53.0	25	- Aluminium
50.0	37.00	--	65.0	35	- Aluminium
60.0	45.00	--	80.0	50	- Aluminium
75.0	55.00	--	94.0	70	- Aluminium
100.0	75.00	--	127.0	95	- Aluminium
125.0	90.00	--	152.0	150	- Aluminium

In place of Aluminium Cable if Copper cables are to be used take one size lower than size recommended for Aluminium Cable. i.e. for 75 H.P. 70 sq.mm.

cable. i.e. for 75 H.P. 70 sq.mm. Aluminium Cable is recommended. If you desire to use Copper Cable then use 50 sq.mm. Copper Cable for 75 H.P. Motor.

THE ABOVE DATA IS INDICATIVE AND MAY BE REVISED WITHOUT PRIOR INFORMATION
MUNISU CABLE INDUSTRIES PVT. LTD. WILL NOT BE LIABLE FOR ANY DAMAGES ARISING
OUT OF INCORRECT APPLICATION.

MUNISU CABLE INDUSTRIES PVT. LTD.

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