

Submersible 3 Core Flat Cables

3 CORE FLAT CABLES FOR SUBMERSIBLE PUMPS & MOTORS.

Zenium 3 Core Flat Cables provides the energy to submersible pumps & motors. They have been manufactured keeping in mind the difficult conditions, they are expected to work efficiently. Each Conductor of bright annealed electrolytic copper are drawn, annealed and bunch together to ensure proper flexibility and uniform resistance. All three conductors are insulated with a special PVC Compound. The cores are laid up in flat parallel position and being insulated again by special PVC.

TABLE 3.1

**TECHNICAL DATA:
3 CORE FLAT CABLES AS PER IS-694:2010**

Nominal area of Conductor	No./Dia of Strands	Insulation Thickness (Nominal)	Sheath Thickness (Nominal)	SHEATH		Max Conductor Resistance @ 20°C (Max)	Current Carrying Capacity At 40°C
				Approx Overall Dimension			
				Width (W)	Height (H)		
Sq.mm	mm	mm	mm	mm	Ohm/Km	Amps	
1.5**	22/0.3	0.6	0.9	10.1	4.7	12.1	13
2.5**	36/0.3	0.7	1.0	12.2	5.5	7.41	18
4	56/0.3	0.8	1.0	14.6	6.5	4.95	24
6	84/0.3	1.0	1.1	16.2	7	3.3	31
10	140/0.3	1.0	1.4	20.2	8.5	1.91	42
16	126/0.4	1.0	1.4	23.4	9.7	1.21	57
25	196/0.4	1.2	2	28.5	11.7	0.78	72
35	276/0.4	1.2	2	32.1	13	0.554	90
50	396/0.4	1.4	2.2	38.8	15.5	0.386	115
70	360/0.5	1.4	2.2	43.4	17	0.272	143
95	475/0.5	1.6	2.4	49.6	19.1	0.206	165

The strand diameter is nominal, however the construction of conductor is as per the requirement of conductor resistance as per IS 8130; 1984.

TABLE 3.2

HP Vs Current : The full load current for submersible pump motors, 3 phase, 50 Cycles, 415-425 V

HP	5	7.5	10	12.5	15.5	17.5	20	25
Amp	7.5	11	14.9	18.9	25.2	25.2	28.4	35.6
HP	30	35	40	45	50	55	60	65
AMP	42.3	50.4	58.1	62.1	67.5	73.8	81	87.3

The above data is approximate and subject to manufacturing tolerance

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