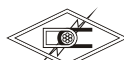


ALUMINIUM CONDUCTORS STEEL REINFORCED (ACSR) Sizes to IS 398 (Part II) / 1976

Mechanical Parameters

Sr. No.	ACSR Code	Nom. Alum Area	Stranding and Wire Diameter Alm +Steel	Sectional Area		Approximate		Rated Strength		Span	Tension				Sag		
				Alum	Total	OD	Mass	kN	Kgf		32 C	0 C			53 C	75 C	90 C
		sq m	Nos./mm	sq mm	sq mm	mm	kg/k				m	Kgf	Kgf	Kgf	Kgf	m	m
												Wind pressure kg/sq. m 50 75 100					
1	Mole	10	6+1/1.50	10.60	12.37	4.50	43	3.97	405	67	101	174	187	201	NA	0.62	NA
2	Squirrel	20	6+1/2.11	20.98	24.48	6.33	85	7.61	776	67	194	325	341	370	NA	0.65	NA
										107	194	339	360	404	NA	1.31	NA
3	Weasel	30	6+1/2.59	31.61	36.88	7.77	128	11.12	1134	67	284	475	493	514	NA	0.67	NA
										107	284	487	523	564	NA	1.34	NA
4	Rabbit	50	6+1/3.35	52.88	61.70	10.05	214	18.25	1861	67	465	774	793	818	NA	0.68	NA
										107	465	780	823	873	NA	1.37	NA
										125	465	784	838	899	NA	1.73	NA
5	Raccoon	80	6+1/4.09	78.83	91.97	12.27	319	26.91	2744	125	686	1135	1196	1267	NA	1.74	NA
6	Dog	100	6/4.72	105.00	118.50	14.15	394	32.41	3305	125	826	1389	1457	1537	NA	1.81	NA
			+7/1.57														
												Wind pressure kg/sq. m 43 45 52					
7	Leopard	130	6/5.28	131.40	148.20	15.81	492	40.70	4150	240	1034	1612	1625	1672	4.16	4.92	NA
			+7/1.75							260	1034	1597	1611	1664	4.80	5.60	NA
8	Coyote	130	26/2.54	131.70	152.20	15.89	522	46.40	4739	260	1183	1782	1795	1845	4.47	5.25	NA
			+7/1.91							275	1183	1771	1786	1839	4.94	5.75	NA
9	Wolf	150	30+7/2.5	158.10	194.90	18.13	726	67.34	6867	260	1717	2428	2441	2489	4.24	4.95	NA
										275	1717	2413	2427	2479	4.69	5.44	NA
10	Lynx	180	30+7/2.79	183.40	226.20	19.53	844	77.96	7950	300	1998	2739	2755	2815	5.52	6.31	NA
11	Panther	200	30+7/3.00	212.10	261.50	21.00	974	89.67	9144	320	2286	3095	3113	3180	6.24	7.06	NA
12	Goat	320	30+7/3.71	324.30	400.00	25.97	1488	137.00	13975	320	3494	4628	4647	4719	6.24	7.05	NA
										350	3494	4555	4576	4656	7.36	8.22	NA
13	Drake	400	26/4.44	402.60	468.00	28.11	1628	139.00	14175	350	3544	4679	4703	4794	7.93	8.44	NA
			+7/1.96							380	2264	3021	3049	3156	11.20	12.17	NA
14	Kundah	400	42/3.5	404.10	425.20	26.88	1281	88.80	9054	350	2264	3082	3110	3212	9.62	10.57	NA
			+7/1.96							380	2264	3021	3049	3156	11.20	12.17	NA
15	Zebra	420	54+7/3.18	428.90	484.50	28.62	1621	130.30	13289	350	3322	4338	4362	4454	8.35	9.24	NA
										380	3322	4265	4292	4390	9.72	10.65	NA
16	Deer	420	30+7/4.27	429.60	529.80	29.89	1979	178.40	18190	350	4548	5841	4863	5863	8.73	9.63	NA
										380	4548	5748	5772	5863	8.73	9.63	NA
17	Moose	520	54+7/3.53	528.50	597.00	31.77	1998	159.60	16275	380	4069	5155	5182	5283	9.78	10.70	NA
										400	4069	5101	5129	5234	10.76	11.70	NA
18	Morkulla	560	42/4.13	562.70	591.70	31.68	1781	120.20	12253	380	3063	3947	3977	4089	11.37	12.43	NA
			+7/2.30							400	3063	3899	3929	4044	12.52	13.59	NA
19	Bersimis	690	42/4.57	688.90	724.40	35.04	2187	146.90	14977	400	3744	4686	4717	4834	12.66	13.64	NA
			+7/2.54														



ALUMINIUM CONDUCTORS STEEL REINFORCED (ACSR) Sizes to IS 398 (Part II) / 1976

Electrical Parameters

Sr. No.	ACSR Code	Nom. Alum. Area	Stranding and Wire Diameter Alm. + Steel	DC Resistance at 20 °C	AC Resistance at in /km			Current Capacity in amperes		
		sq. mm			Nos./mm	/km	/km	/km	65 C	75 C
			amps	amps						
1.	Mole	10	6+1/1.50	2.78	3.777	3.905	NA	58	70	NA
2.	Squirrel	20	6+1/2.11	1.394	1.894	1.958	NA	89	107	NA
3.	Weasel	30	6+1/2.59	0.9291	1.262	1.305	NA	114	138	NA
4.	Rabbit	50	6+1/3.35	0.5524	0.7506	0.7761	NA	157	190	NA
5.	Raccoon	80	6+1/4.09	0.3712	0.5044	0.5216	NA	200	244	NA
6.	Dog	100	6/4.72 +7/1.57	0.2792	0.3794	0.3924	NA	239	291	NA
7.	Leopard	130	6/5.28 +7/1.75	0.2226	0.3026	0.3129	NA	274	335	NA
8.	Coyote	130	26/2.54 +7/1.91	0.2246	0.2663	0.2754	NA	292	358	NA
9.	Wolf	150	30+7/2.59	0.1871	0.2219	0.2295	NA	329	405	NA
10.	Lynx	180	30+7/2.79	0.161	0.1909	0.1974	NA	361	445	NA
11.	Panther	200	30+7/3.00	0.139	0.165	0.1706	NA	395	487	NA
12.	Goat	320	30+7/3.71	0.09106	0.1082	0.1119	NA	510	634	NA
13.	Drake	400	26/4.44 +3.45	0.07309	0.08709	0.09003	NA	578	721	NA
14.	Kundah	400	42/3.5 +7/1.96	0.07269	0.08917	0.09217	NA	566	705	NA
15.	Zebra	420	54+7/3.18	0.06869	0.08416	0.08699	NA	590	737	NA
16.	Deer	420	30+7/4.27	0.06854	0.08164	0.0844	NA	605	756	NA
17.	Moose	520	54+7/3.53	0.05596	0.06881	0.07111	NA	667	836	NA
18.	Morkulla	560	42/4.13 +7/2.30	0.05232	0.06467	0.06681	NA	688	862	NA
19.	Bersimis	690	42/4.57 +7/2.54	0.04242	0.05092	0.0524	NA	791	998	NA

Note: Current Capacity at $a = 0.5$, $e = 0.5$, $s = 985$, $v = 2200$
Ambient Temperature 40°C at sea level

