



ALUMINUM ALLOY CONDUCTORS (TYPE- AAAC 1120) AS 1531

Code	Old Code	Sectional Area (mm ²)	Stranding		Conductor Diameter (mm)	Weight (Kg/Km)	Rated Strength KN	DC Resistance @ 20°C (Ω/Km)	Current Capacity	
			No. of Aluminium Wires (No.)	Individual wire diameter (mm)					@ 75°C (Ampere)	@ 85°C (Ampere)
			Chlorine	34.36					32.8	7
Chromium	41.58	39.7	7	2.75	8.25	113.0	9.91	0.713	141	169
Fluorine	49.48	47.2	7	3.00	9	135.0	11.8	0.599	156	188
Helium	77.28	73.7	7	3.75	11.3	211.0	17.6	0.383	204	247
Hydrogen	111.3	106	7	4.50	13.5	304.0	24.3	0.266	253	308
Iodine	124	118	7	4.75	14.3	339.0	27.1	0.239	269	329
Krypton	157.6	150	19	3.25	16.3	433.0	37.4	0.189	309	380
Lutetium	182.8	173	19	3.50	17.5	503.0	41.7	0.163	337	415
Neon	209.8	199	19	3.75	18.8	576.0	47.8	0.142	365	451
Nitrogen	261.6	248	37	3.00	21	721.0	62.2	0.114	414	515





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			No. of Aluminium Wires	Individual wire diameter					@ 75°C	@ 85°C
			(mm ²)	(No.)					(mm)	(mm)
Nobelium	307	291	37	3.25	22.8	845.0	72.8	0.0973	453	567
Oxygen	336.7	320	19	4.75	23.8	924.0	73.6	0.0884	478	599
Phosphorus	408.5	387	37	3.75	26.3	1120	93.1	0.0731	532	672
Silicon	586.9	555	61	3.50	31.5	1620	127	0.0511	647	829
Selenium	506.1	478	61	3.25	29.3	1400	114	0.0592	598	761
Sulfur	673.4	636	61	3.75	33.8	1860	145	0.0444	697	898

Note: Current capacity based on referenced conductor temperature, 0.56 m/s wind, 0 m Elevation, 0.45 Emmissivity, 0.80 absorptivity, 45°C Ambient temperatures, 1045 W/m² Solar radiation.

Lumino
Industries Ltd.

