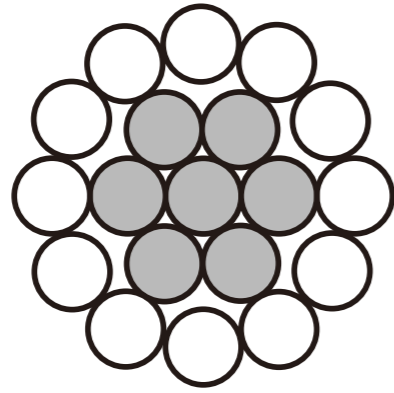


Aluminium Alloy Conductors, Galvanized Steel Reinforced (AACSR/GZ-6201)



Properties:

Aluminium conductors manufactured to AS 3607

The centre wire or wires are of galvanized steel and the outer layer or layers are of aluminium alloy 6201

Structural Parameters:

Structure		Overall diameter	Calculated area			Approx. mass of conductor	Rated strength, Min	DC resistance at 20°C	AC resistance at 50Hz, 75°C	Calculated elasticity modulus	Coefficient of linear expansion
Alloy	ST		Alloy	ST	Total						
No./mm	No./mm	mm	mm ²	mm ²	mm ²	kg/km	kN	Ω/km	Ω/km	GPa	1/°C
6/3.00	1/3.00	9.0	42.41	7.07	49.48	171	20.2	0.785	0.9404	79	19.3E-06
6/3.75	1/3.75	11.3	66.27	11.04	77.31	268	31.5	0.503	0.6026	79	19.3E-06
6/4.75	7/1.60	14.3	106.32	14.07	120.4	402	47.4	0.313	0.3752	76	20.6E-06
18/3.50	1/3.50	17.5	173.18	9.62	182.8	552	60.8	0.193	0.2315	69	21.4E-06
30/3.00	7/3.00	21.0	212.06	49.48	261.5	973	117	0.158	0.1895	82	18.4E-06
30/3.50	7/3.50	24.5	288.63	67.35	356	1320	158	0.116	0.1393	82	18.4E-06

Current Ratings:

Structure		*Current carrying capacity, A							
Alloy	ST	35°C ambient temperature				40°C ambient temperature			
		50°C operation temperature	60°C operation temperature	70°C operation temperature	75°C operation temperature	50°C operation temperature	60°C operation temperature	70°C operation temperature	75°C operation temperature
6/3.00	1/3.00	120	162	193	206	88	141	176	191
6/3.75	1/3.75	157	215	256	274	114	186	234	253
6/4.75	7/1.60	209	289	346	370	149	250	315	342
18/3.50	1/3.50	278	387	465	498	194	333	423	460
30/3.00	7/3.00	318	448	540	579	217	385	491	534
30/3.50	7/3.50	382	543	658	705	255	465	597	650

*Note: Current carrying capacity is based to the following conditions

- Frequency: 50Hz
- Solar absorption coefficient: 0.5
- Emissivity: 0.5
- Wind speed: 1.0m/s
- Solar radiation: 1000W/m²
- Current carrying capacity values calculated as per IEC 61597