



GUY WIRE

**GALVANIZED GUY WIRE SIEMENS - MARTIN GRADE - 7 WIRES**

STRAND DIAMETER IN INCHES	WIRE SIZE INCHES	NET WEIGHT POUNDS PER 1000 FEET	MINIMUM STRENGTH IN POUNDS
1/4	.080	121	3,150
9/32	.093	164	4,250
5/16	.104	205	5,350
3/8	.120	273	6,950
7/16	.145	399	9,350
1/2	.165	517	12,100

**GALVANIZED GUY WIRE HIGH-STRENGTH GRADE - 7 WIRES**

STRAND DIAMETER IN INCHES	WIRE SIZE INCHES	NET WEIGHT POUNDS PER 1000 FEET	MINIMUM STRENGTH IN POUNDS
1/4	.080	121	4,750
9/32	.093	164	6,400
5/16	.104	205	8,000
3/8	.120	273	10,800
7/16	.145	399	14,500
1/2	.165	517	18,800

**GALVANIZED GUY WIRE EXTRA HIGH-STRENGTH GRADE - 7 WIRES**

STRAND DIAMETER IN INCHES	WIRE SIZE INCHES	NET WEIGHT POUNDS PER 1000 FEET	MINIMUM STRENGTH IN POUNDS
3/16	.062	72.9	3,990
1/4	.080	121	6,650
9/32	.093	164	8,950
5/16	.104	205	11,200
3/8	.120	273	15,400
7/16	.145	399	20,800
1/2	.165	517	26,900

**GALVANIZED GUY WIRE UTILITIES GRADE - 7 WIRES**

STRAND DIAMETER IN INCHES	WIRE SIZE INCHES	NET WEIGHT POUNDS PER 1000 FEET	MINIMUM STRENGTH IN POUNDS
3/16	.065	80.3	2,400
9/32	.093	164	4,600
5/16	.109	225	6,000
3/8	.120	273	11,500
7/16	.145	399	18,000
1/2	.165	517	25,000

**GALVANIZED GUY WIRE UTILITIES GRADE - 3 WIRES**

STRAND DIAMETER IN INCHES	WIRE SIZE INCHES	NET WEIGHT POUNDS PER 1000 FEET	MINIMUM STRENGTH IN POUNDS
1/4	.120	116.7	3,150
1/4	.120	116.7	4,500
5/16	.145	170.6	6,500
3/8	.165	220.3	8,500

## BASIC TECHNICAL DATA OF STRANDED CONDUCTORS

Moduli of Elasticity and Coefficients of Linear Expansion for Constructions of Aluminium Conductors Steel-Reinforced to IEC Publ. No. 209

Number of Wires		Final Modulus of Elasticity		Coefficient of Linear Expansion	
Al	St	Kg/mm <sup>2</sup>	lb/in <sup>2</sup>	1/°C	1/F°
6	1	81.00	11,5 x 10 <sup>6</sup>	19,1 x 10 <sup>-6</sup>	10,6 x 10 <sup>-6</sup>
6	7	77.00	11,0 x 10 <sup>6</sup>	19,8 x 10 <sup>-6</sup>	11,0 x 10 <sup>-6</sup>
12	7	107.00	15,2 x 10 <sup>6</sup>	15,3 x 10 <sup>-6</sup>	8,5 x 10 <sup>-6</sup>
18	1	67.00	9,5 x 10 <sup>6</sup>	21,2 x 10 <sup>-6</sup>	11,8 x 10 <sup>-6</sup>
24	7	74.00	10,5 x 10 <sup>6</sup>	19,6 x 10 <sup>-6</sup>	10,9 x 10 <sup>-6</sup>
26	7	77.00	10,9 x 10 <sup>6</sup>	18,9 x 10 <sup>-6</sup>	10,5 x 10 <sup>-6</sup>
28	7	79.00	11,2 x 10 <sup>6</sup>	18,4 x 10 <sup>-6</sup>	10,2 x 10 <sup>-6</sup>
30	7	82.00	11,6 x 10 <sup>6</sup>	17,8 x 10 <sup>-6</sup>	9,9 x 10 <sup>-6</sup>
30	19	80.00	11,4 x 10 <sup>6</sup>	18,0 x 10 <sup>-6</sup>	10,0 x 10 <sup>-6</sup>
32	19	82.00	11,7 x 10 <sup>6</sup>	17,5 x 10 <sup>-6</sup>	9,7 x 10 <sup>-6</sup>
54	7	70.00	9,9 x 10 <sup>6</sup>	19,3 x 10 <sup>-6</sup>	10,7 x 10 <sup>-6</sup>
54	19	68.00	9,7 x 10 <sup>6</sup>	19,4 x 10 <sup>-6</sup>	10,8 x 10 <sup>-6</sup>

### ALUMINIUM WIRES

DENSITY: Aluminium wire density at 20°C is 2.703 kg/dm

TEMPERATURE COEFFICIENT: At a temperature of 20°C. This figure is 0.00403 (°C)

RESISTIVITY: The resistivity at 20°C should not exceed 0.028264

LINEAR EXPANSIVITY: Aluminium wire linear expansivity is 23x10 (°C)

### GALVANIZED STEEL WIRES

DENSITY: Galvanized wire density at 20°C is 7.80 kg/dm

LINEAR EXPANSIVITY: The linear expansivity of galvanized steel wire used in aluminium steel cable cores is 11.5x10 (1/C)

## SPECIFICATIONS

The following were obtained From CEI Publications (Comision Electrotechnique internationale) and refer to its recommendations regarding this class of cable

Number of Wires		Final Modulus of Elasticity	Coefficient of Linear Expansion
Aluminium	Steel		
		N/mm <sup>2</sup>	1/°C
6	1	81.000	19,1 x 10 <sup>-6</sup>
6	7	77.000	19,8 x 10 <sup>-6</sup>
12	7	107.000	15,3 x 10 <sup>-6</sup>
18	1	67.000	21,2 x 10 <sup>-6</sup>
24	7	74.000	19,6 x 10 <sup>-6</sup>
26	7	77.000	18,9 x 10 <sup>-6</sup>
28	7	79.000	18,4 x 10 <sup>-6</sup>
30	7	82.000	17,8 x 10 <sup>-6</sup>
30	19	80.000	18,0 x 10 <sup>-6</sup>
32	19	82.000	17,5 x 10 <sup>-6</sup>
54	7	70.000	19,3 x 10 <sup>-6</sup>
54	19	68.000	19,4 x 10 <sup>-6</sup>

## WOODEN REELS DIMINTIONS

	Dimensions Ölçüler								mm mm
A	1000	1200	1250	1350	1450	1800	2000	2050	
B	500	600	630	630	650	900	950	950	
C	660	660	670	670	750	900	950	950	
D	2x25	2x35	2x35	2x35	2x35	2x50	2x60	2x60	
E	10	10	10	10	10	15	15	15	
F	15	25	25	25	25	30	30	30	
G	80	80	80	80	80	80	80	80	
H	60x60	60x60	60x60	90x90	90x90	90x90	90x90	90x90	
I	4	4	4	5	5	6	6	6	
J	15	15	15	15	15	15	15	20	
K	12	12	12	12	12	12	12	12	
L	4	5	6	6	6	7	8	8	
M	50	50	50	50	50	50	50	50	
N	200	200	300	300	500	500	500	500	

