

STEEL WIRE ROPES FOR ELEVATORS

CONSTRUCTION CROSS SECTION EXAMPLE	CONSTRUCTION OF ROPE		CONSTRUCTION OF STRAND			
	ITEM	QUANTITY	ITEM		QUANTITY	
	Strands	6	Wires		19 to 29	
	outer strands	6	Outer wires		9 to 14	
layers of strands	1	Layers of wires		2		
Wires in rope	114 to 174					
TYPICAL EXAMPLE		No. OF OUTER WIRES		OUTER WIRE FACTOR ¹⁾		
ROPE	STRAND	TOTAL	PER STRAND			
6X25F-FC						
6X19S	1-9-9	54	9	0,080		
6X25F	1-6-6F-12	72	12	0,064		
6X19W	1-6-6+6	72	12 6	0,073 8		
			6	0,055 6		
6X19W-FC						
Min. breaking force factor:		$K_2 = 0,330$				
Nominal length mass factor ¹⁾		$W_2 = 0,359$				
Nominal metallic cross-sectional area factor ¹⁾		$C_2 = 0,384$				
Nominal rope diameter	Apporoximate nominal length mass ¹⁾	Minimum breaking force kN				
		Dual tensile		Single tensile		
mm	kg/100m	Rope Grade 1180/1770	Rope Grade 1370/1770	Rope Grade 1150	Rope Grade 1770	
6	12,9	16,3	17,8	18,7	21,0	
6,5	15,2	19,1	20,9	21,9	24,7	
8 ²⁾	23,0	28,9	31,7	33,2	37,4	
9	29,1	36,6	40,1	42,0	47,3	
10 ²⁾	35,9	45,2	49,5	51,8	58,4	
11 ²⁾	43,4	54,7	59,9	62,7	70,7	
12	51,7	65,1	71,3	74,6	84,1	
13 ²⁾	60,7	76,4	83,7	87,6	98,7	
14	70,4	88,6	97,0	102	114	
15	80,8	102	111	117	131	
16 ²⁾	91,9	116	127	133	150	
18	116	146	160	168	189	
19 ²⁾	130	163	179	187	211	
20	144	181	198	207	234	
22 ²⁾	174	219	240	251	283	

1) Informative only

2) Preferred sizes