



# **CABLES DE ACERO**

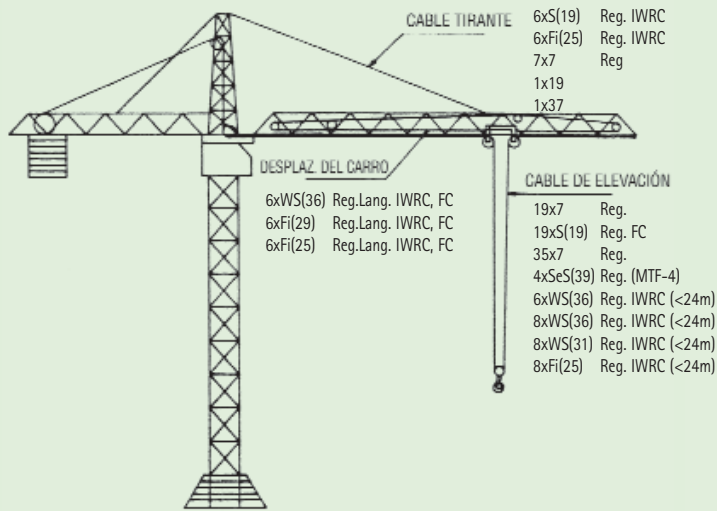
**GALVANIZADOS Y  
NO GALVANIZADOS**

**DE ASCENSOR**

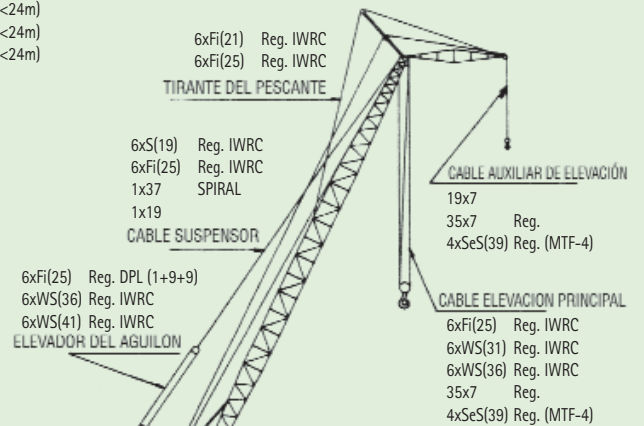
**ESPECIALES**



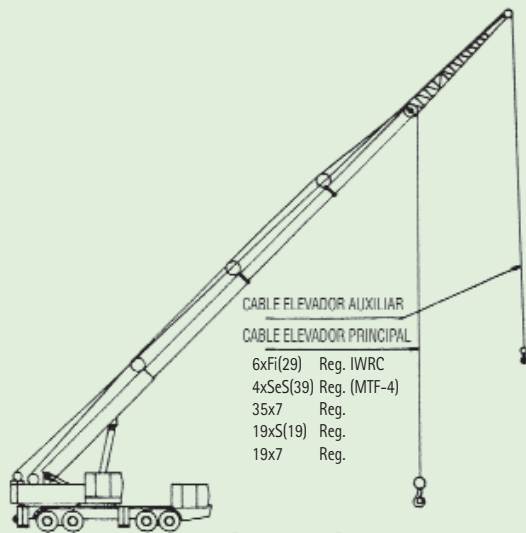
# CABLES PARA GRÚAS



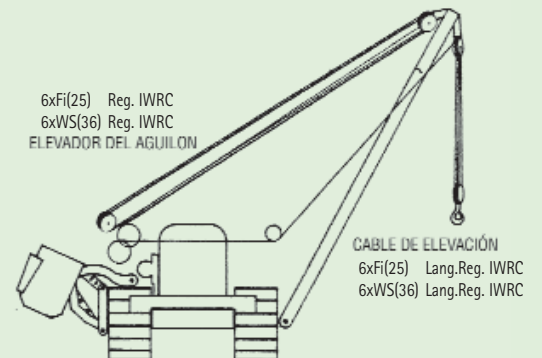
## GRÚA TORRE



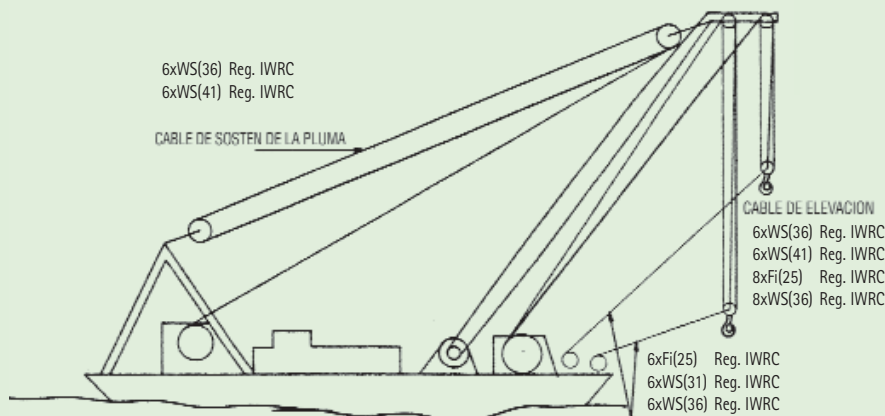
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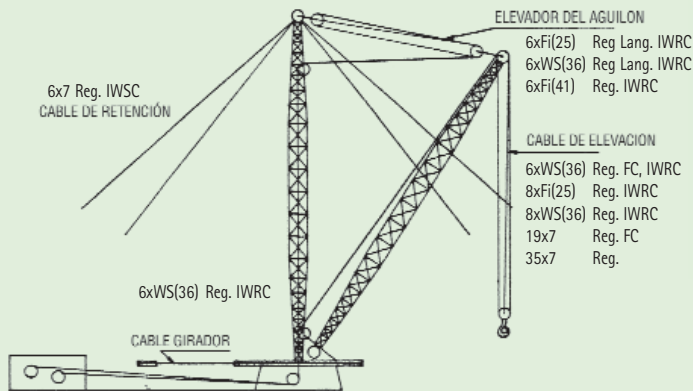
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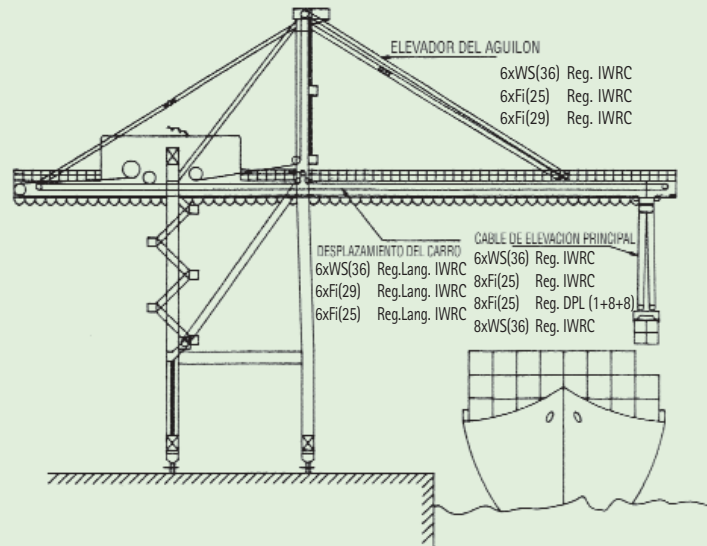
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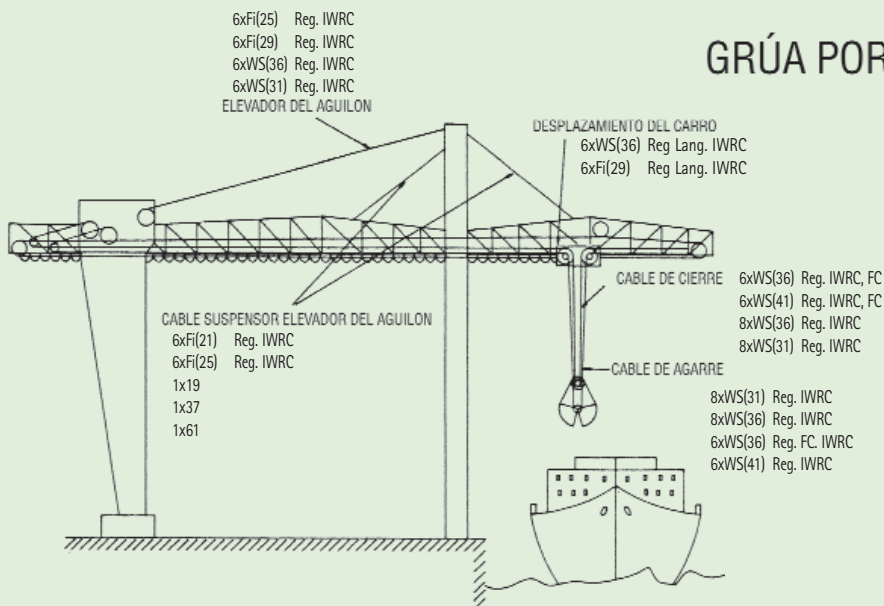
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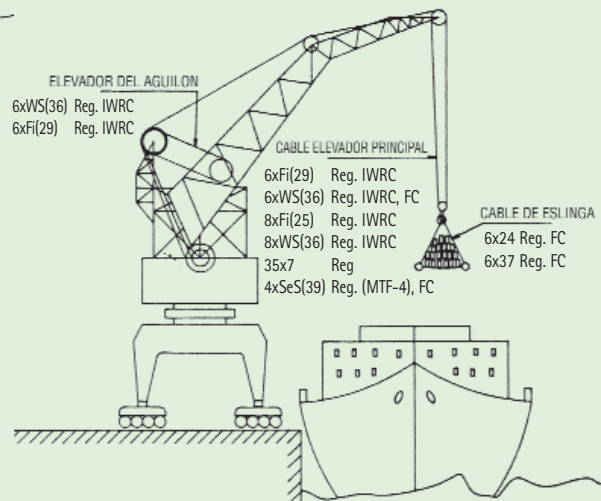
## GRÚA FIJA



## GRÚA PORTA-CONTENEDORES



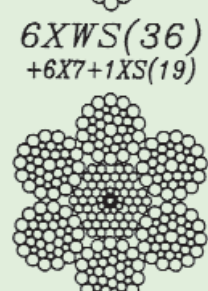
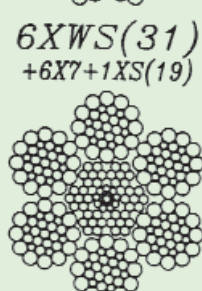
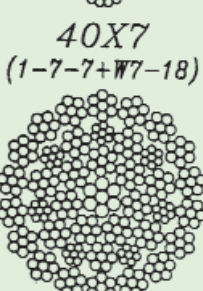
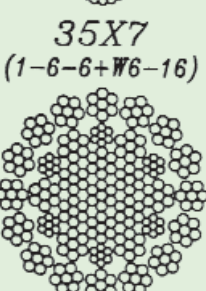
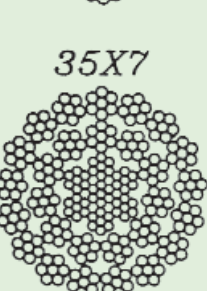
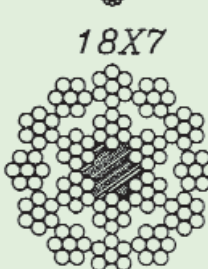
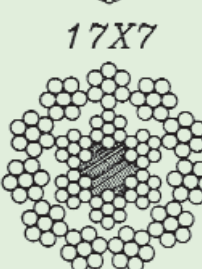
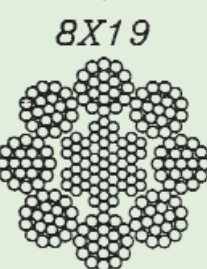
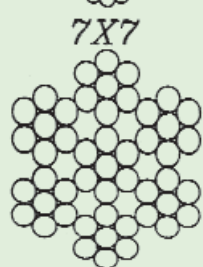
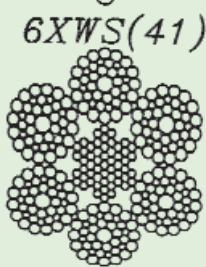
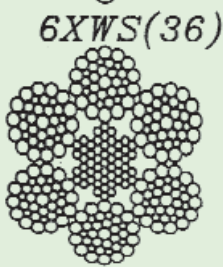
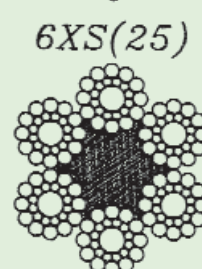
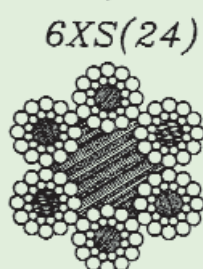
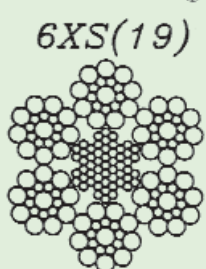
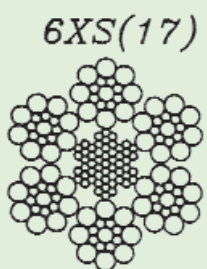
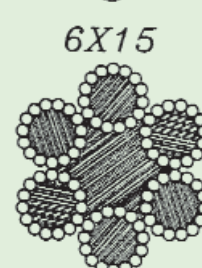
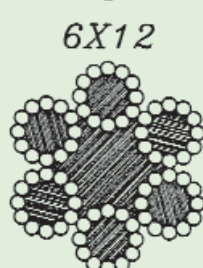
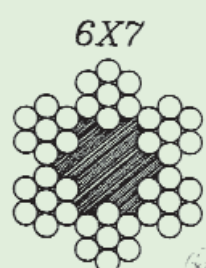
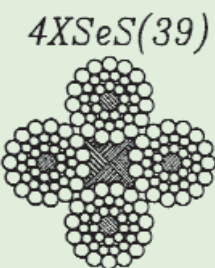
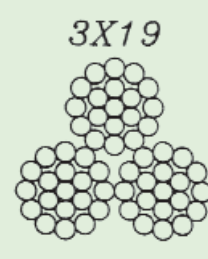
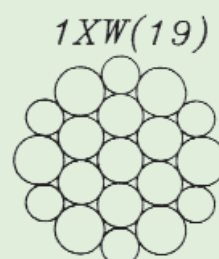
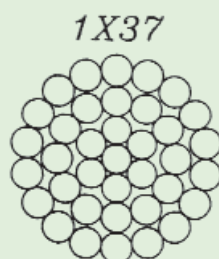
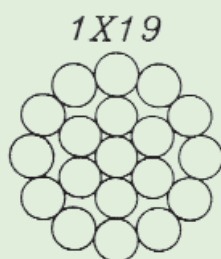
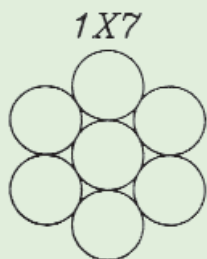
## GRÚA DE DESCARGA

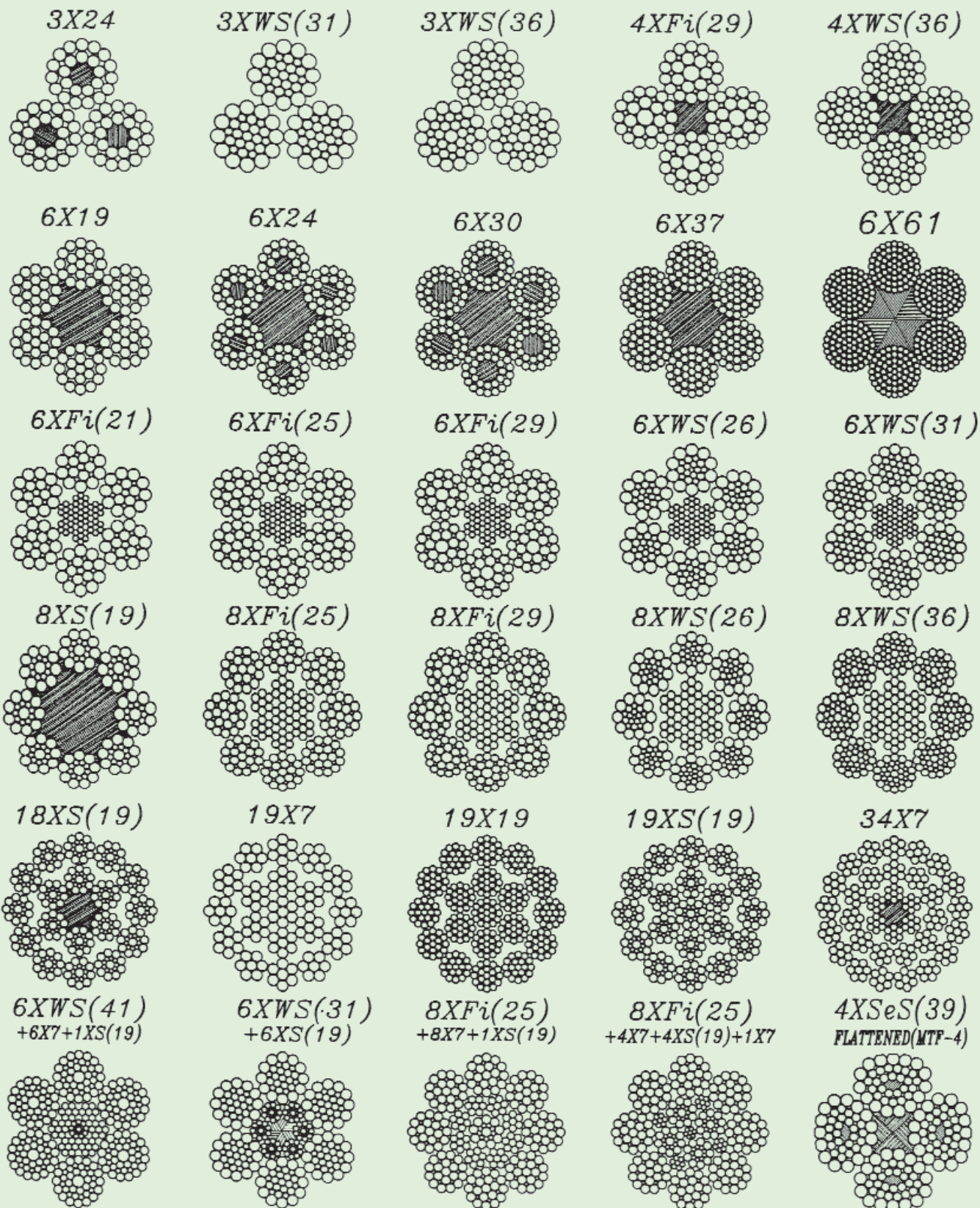


## GRÚA PORTAL



# CONSTRUCCIÓN DE CABLES





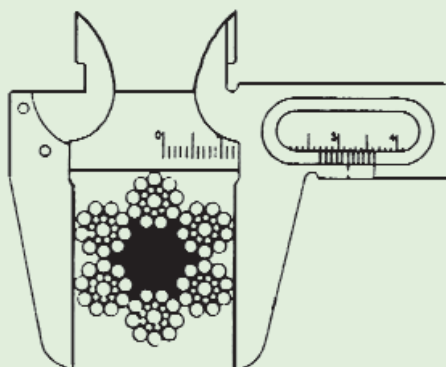
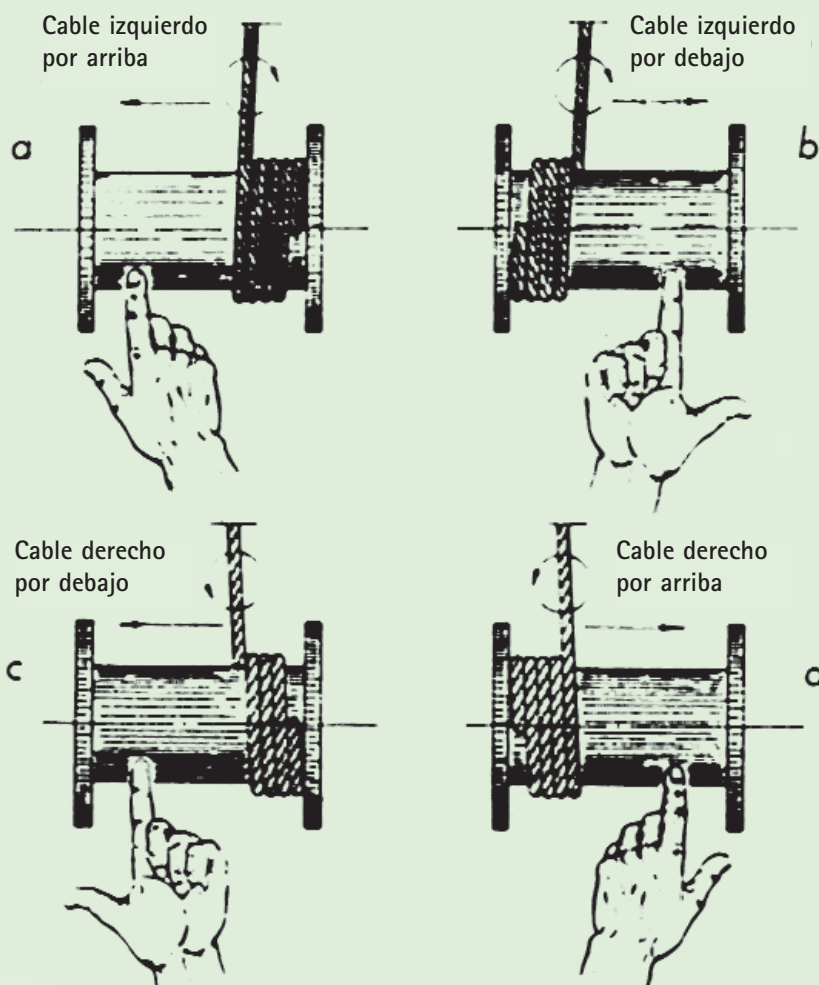


### NORMA CONVENIENTE DE ARROLLAMIENTO DE LOS CABLES EN LOS TAMBORES

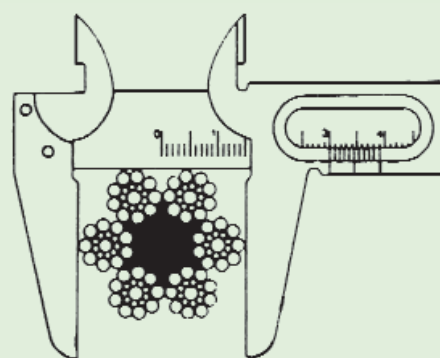
Es muy importante que estas reglas sean respetadas. Su incumplimiento implica que las adujas del cable se solapen y entrecrucen, ocasionando el aplastamiento y deformación de los cordones.

En la figura inferior reflejamos la norma a seguir: Para los cables de cableado a la derecha se emplea la mano izquierda, y para los cableados a izquierda la mano derecha. Ambas manos se colocan con la palma hacia abajo, si el cable se enrolla o desenrolla por arriba del tambor, y con la palma hacia arriba es si se enrolla o desenrolla por debajo.

El sentido de enrollamiento del cable queda señalado por el dedo pulgar de la mano que se emplee, en dirección, SIEMPRE, de dedo meñique a dedo pulgar.



**MAL CALIBRADO**



**BIEN CALIBRADO**



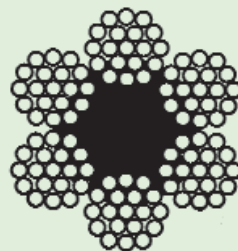
Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
1006071NGD02A	2	0,0143	239
1006071NGD03A	3	0,0322	538
1006071NGD04A	4	0,0572	957
1006071NGD05A	5	0,0894	1.500
1006071NGD06A	6	0,1290	2.150
1006071NGD07A	7	0,1750	2.930



**COMPOSICIÓN**  
**6 x 7 + 1**  
**Galvanizado**  
**(180 kg/mm<sup>2</sup>)**



Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
1006191NGD03A	3	0,0311	498
1006191NGD04A	4	0,0554	885
1006191NGD05A	5	0,0865	1.380
1006191NGD06A	6	0,1250	1.990
1006191NGD07A	7	0,1700	2.710
1006191NGD08A	8	0,2210	3.540
1006191NGD09A	9	0,2800	4.480
1006191NGD10A	10	0,3460	5.530
1006191NGD11A	11	0,4190	6.690
1006191NGD12A	12	0,4980	7.970
1006191NGD13A	13	0,5850	9.350
1006191NGD14A	14	0,6780	10.800
1006191NGD16A	16	0,8860	14.200
1006191NGD18A	18	1,1200	17.900
1006191NGD20A	20	1,3800	22.100
1006191NGD22A	22	1,6700	26.800
1006191NGD24A	24	1,9900	31.900



**COMPOSICIÓN**  
**6 x 19 + 1**  
**Galvanizado**  
**(180 kg/mm<sup>2</sup>)**



Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
1006371NGD06A	6	0,125	1.910
1006371NGD07A	7	0,170	2.600
1006371NGD08A	8	0,221	3.400
1006371NGD09A	9	0,280	4.300
1006371NGD10A	10	0,346	5.310
1006371NGD11A	11	0,419	6.420
1006371NGD12A	12	0,498	7.640
1006371NGD13A	13	0,585	8.970
1006371NGD14A	14	0,678	10.400
1006371NGD16A	16	0,886	13.600
1006371NGD18A	18	1,120	17.200
1006371NGD20A	20	1,380	21.200
1006371NGD22A	22	1,670	25.700
1006371NGD24A	24	1,990	30.600
1006371NGD26A	26	2,340	35.900
1006371NGD28A	28	2,710	41.600
1006371NGD30A	30	3,125	47.724
1006371NGD32A	32	3,540	54.300
1006371NGD34A	34	4,010	61.367
1006371NGD36A	36	4,480	68.800
1006371NGD40A	40	5,540	84.900
1006371NGD44A	44	6,700	103.000
1006371NGD48A	48	7,970	122.000
1006371NGD50A	50	8,650	133.100
1006371NGD55A	55	10,500	161.100
1006371NGD60A	60	12,500	191.700



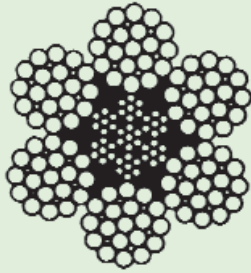
**COMPOSICIÓN**  
**6 x 37 + 1**  
**Galvanizado**  
**(180 kg/mm<sup>2</sup>)**





## COMPOSICIÓN

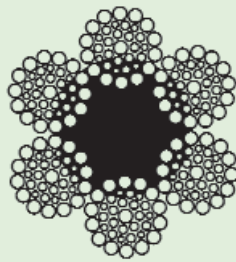
6 x 25 (7 x 7 + 0)  
Negro  
(180 kg/mm<sup>2</sup>)



Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100625MNND08A	8	0,267	4.200
100625MNND09A	9	0,339	5.310
100625MNND10A	10	0,418	6.570
100625MNND11A	11	0,506	7.950
100625MNND12A	12	0,602	9.450
100625MNND13A	13	0,707	11.100
100625MNND14A	14	0,820	12.900
100625MNND15A	15	0,941	14.800
100625MNND16A	16	1,070	16.800

## COMPOSICIÓN

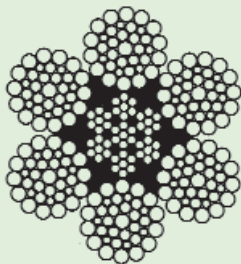
6 x 36 + 1 WS  
Negro  
(180 kg/mm<sup>2</sup>)



Código T. D.	Código T. I.	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
1006361NND20A	1006361NNI20A	20	1,520	23.800
1006361NND22A	1006361NNI22A	22	1,840	28.700
1006361NND24A	1006361NNI24A	24	2,19	34.200
1006361NND26A	1006361NNI26A	26	2,570	40.100
1006361NND28A	1006361NNI28A	28	2,980	46.600
1006361NND30A	1006361NNI30A	30	3,435	53.437
1006361NND32A	1006361NNI32A	32	3,890	60.800
1006361NND34A	1006361NNI34A	34	4,410	68.682
1006361NND36A	1006361NNI36A	36	4,930	77.000
1006361NND38A	1006361NNI38A	38	5,500	85.737
1006361NND40A	1006361NNI40A	40	6,080	95.000

## COMPOSICIÓN

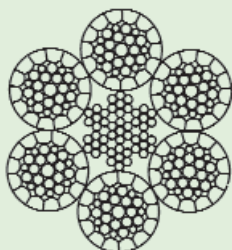
6 x 36 + (7 x 7 + 0) WS  
Negro  
(180 kg/mm<sup>2</sup>)



Código T. D.	Código T. I.	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100636MNND14A	100636MNNI14A	14	0,820	12.600
100636MNND16A	100636MNNI16A	16	1,070	16.400
100636MNND18A	100636MNNI18A	18	1,350	20.800
100636MNND20A	100636MNNI20A	20	1,670	25.600
100636MNND22A	100636MNNI22A	22	2,020	31.000
100636MNND24A	100636MNNI24A	24	2,410	36.900
100636MNND25A	100636MNNI25A	25	2,620	40.039
100636MNND26A	100636MNNI26A	26	2,830	43.300
100636MNND28A	100636MNNI28A	28	3,280	50.300
100636MNND30A	100636MNNI30A	30	3,780	57.744
100636MNND32A	100636MNNI32A	32	4,280	65.700
100636MNND34A	100636MNNI34A	34	4,850	74.169
100636MNND36A	100636MNNI36A	36	5,420	83.100
100636MNND38A	100636MNNI38A	38	6,050	92.957
100636MNND40A	100636MNNI40A	40	6,690	103.000
100636MNND45A	100636MNNI45A	45	8,470	130.300
100636MNND50A	100636MNNI50A	50	10,500	160.800
100636MNND55A	100636MNNI55A	55	12,700	194.600
100636MNND60A	100636MNNI60A	60	15,100	231.600

## COMPOSICIÓN

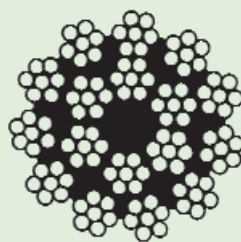
6 x 36 + (7x7+0) COMPACTO  
Negro  
(180 kg/mm<sup>2</sup>)



Código T. D.	Código T. I.	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100636MCND14A	100636MCNI14A	14	0,89	15.489
100636MCND16A	100636MCNI16A	16	1,16	19.006
100636MCND18A	100636MCNI18A	18	1,47	24.055
100636MCND20A	100636MCNI20A	20	1,82	29.695
100636MCND22A	100636MCNI22A	22	2,20	36.009
100636MCND24A	100636MCNI24A	24	2,62	42.766
100636MCND26A	100636MCNI26A	26	3,07	50.188
100636MCND28A	100636MCNI28A	28	3,56	57.378
100636MCND30A	100636MCNI30A	30	4,09	66.822
100636MCND32A	100636MCNI32A	32	4,65	76.025
100636MCND34A	100636MCNI34A	34	5,25	85.828
100636MCND36A	100636MCNI36A	36	5,89	93.895



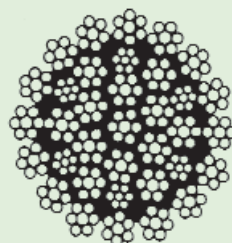
Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
1001771NNL04B	4	0,06	1.053
1001771NNL05B	5	0,10	1.645
1001771NNL06B	6	0,14	2.369
1001771NNL07B	7	0,19	3.410
1001771NNL08B	8	0,25	4.470
1001771NNL09B	9	0,32	5.640
1001771NNL10B	10	0,40	6.970
1001771NNL11B	11	0,48	7.951
1001771NNL12B	12	0,56	10.040
1001771NNL13B	13	0,66	11.111
1001771NNL14B	14	0,77	13.700
1001771NNL16B	16	1,01	17.900
1001771NNL18B	18	1,30	22.600
1001771NNL20B	20	1,59	27.900



**CABLES  
ANTIGIRATORIOS  
COMPOSICIÓN  
17 x 7 + 1 Lang  
Negro  
(200 kg/mm<sup>2</sup>)**



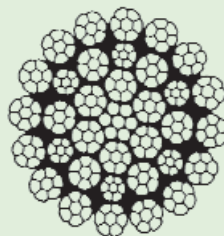
Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100357MWNL10B	10	0,45	7.990
100357MWNL12B	12	0,64	11.500
100357MWNL13B	13	0,75	12.538
100357MWNL14B	14	0,87	16.330
100357MWNL15B	15	1,00	17.329
100357MWNL16B	16	1,13	20.650
100357MWNL17B	17	1,28	22.833
100357MWNL18B	18	1,43	26.830
100357MWNL19B	19	1,59	28.236
100357MWNL20B	20	1,75	32.550
100357MWNL21B	21	1,93	34.352
100357MWNL22B	22	2,11	39.550
100357MWNL24B	24	2,51	46.670
100357MWNL26B	26	3,01	55.650
100357MWNL28B	28	3,39	63.000
100357MWNL30B	30	3,92	73.850
100357MWNL32B	32	4,41	82.720
100357MWNL34B	34	5,01	93.680
100357MWNL36B	36	5,63	105.000



**CABLES  
ANTIGIRATORIO  
COMPOSICIÓN  
35 x 7 Warrington  
Negro  
(200 kg/mm<sup>2</sup>)**



Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100357MCNL10C	10	0,515	10.000
100357MCNL12C	12	0,742	14.300
100357MCNL13C	13	0,870	16.800
100357MCNL14C	14	1,01	19.400
100357MCNL15C	15	1,16	21.300
100357MCNL16C	16	1,27	25.400
100357MCNL17C	17	1,44	28.600
100357MCNL18C	18	1,61	32.200
100357MCNL19C	19	1,79	35.800
100357MCNL20C	20	1,97	39.700
100357MCNL21C	21	2,17	43.700
100357MCNL22C	22	2,38	48.100
100357MCNL24C	24	2,82	57.200
100357MCNL25C	25	3,10	62.100
100357MCNL26C	26	3,39	67.100
100357MCNL28C	28	3,81	77.900
100357MCNL30C	30	4,41	89.400
100357MCNL32C	32	5,00	101.800
100357MCNL34C	34	5,64	114.400
100357MCNL36C	36	6,33	128.700

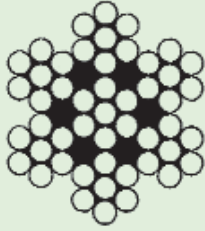


**CABLES  
ANTIGIRATORIOS  
COMPOSICIÓN  
35 x 7 Warrington  
Compacto  
Negro  
(220 kg/mm<sup>2</sup>)**



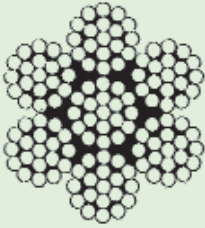


**CABLES DE ACERO  
INOXIDABLE AISI 316  
COMPOSICIÓN  
7 x 7  
(160 Kg/mm<sup>2</sup>)**



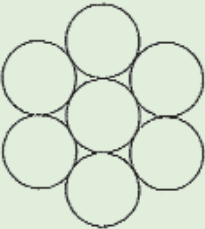
Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100077MNID02E	2	1,57	229
10077MNID025E	2,5	2,70	358
100077MNID03E	3	3,54	516
100077MNID04E	4	6,29	915
100077MNID05E	5	9,83	1.440
100077MNID06E	6	14,20	2.060
100077MNID07E	7	19,30	2.800
100077MNID08E	8	25,20	3.670

**CABLES DE ACERO  
INOXIDABLE AISI 316  
COMPOSICIÓN  
7 x 19  
(160 Kg/mm<sup>2</sup>)**



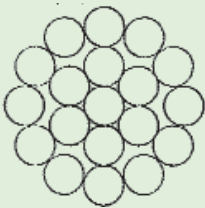
Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100719MNID03E	3	3,42	480
100719MNID04E	4	6,09	850
100719MNID05E	5	9,52	1.320
100719MNID06E	6	13,80	1.900
100719MNID08E	8	24,3	3.390
100719MNID09E	9	30,8	4.300
100719MNID10E	10	38,1	5.300
100719MNID12E	12	54,8	7.650
100719MNID13E	13	64,3	8.970
100719MNID14E	14	74,6	10.400
100719MNID16E	16	97,4	12.800
100719MNID18E	18	123	16.080

**CORDÓN DE ACERO  
INOXIDABLE AISI 316  
COMPOSICIÓN  
1 x 7  
(160 Kg/mm<sup>2</sup>)**



Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100017MNII02E	2	2,01	370
100017MNII03E	3	4,52	785
100017MNII04E	4	8,03	1.390
100017MNII05E	5	12,6	2.180
100017MNII06E	6	18,1	3.140
100017MNII07E	7	24,6	4.270
100017MNII08E	8	32,1	5.570
100017MNII09E	9	40,7	7.050
100017MNII10E	10	50,2	8.100

**CORDÓN DE ACERO  
INOXIDABLE AISI 316  
COMPOSICIÓN  
1 x 19  
(160 Kg/mm<sup>2</sup>)**



Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100119MNII02E	2	1,98	336
100119MNII03E	3	4,46	756
100119MNII04E	4	7,93	1.340
100119MNII05E	5	12,4	2.100
100119MNII06E	6	17,8	3.030
100119MNII07E	7	24,3	4.120
100119MNII08E	8	31,7	5.380
100119MNII09E	9	40,1	6.810
100119MNII10E	10	49,5	8.400
100119MNII11E	11	59,9	10.200
100119MNII12E	12	71,3	12.100
100119MNII13E	13	83,7	14.000
100119MNII14E	14	97,1	16.200
100119MNII16E	16	127,0	20.400

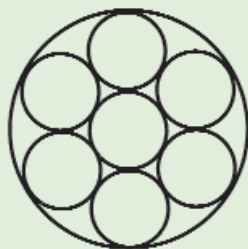


## CORDÓN

1 x 7 + 0

Galvanizado

(160 kg/mm<sup>2</sup>)



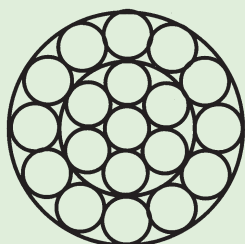
Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100017MNGD04E	4	0,0813	1.390
100017MNGD05E	5	0,1260	2.180
100017MNGD06E	6	0,1810	3.140
100017MNGD07E	7	0,2460	4.270
100017MNGD08E	8	0,3210	5.570
100017MNGD09E	9	0,4070	7.050
100017MNGD10E	10	0,5020	8.710

## CORDÓN

1 x 19 + 0

Galvanizado

(160 kg/mm<sup>2</sup>)



Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100119MNGI04E	4	0,0793	1.340
100119MNGI05E	5	0,1240	2.100
100119MNGI06E	6	0,1780	3.030
100119MNGI07E	7	0,2430	4.120
100119MNGI08E	8	0,3170	5.380
100119MNGI09E	9	0,4010	6.810
100119MNGI10E	10	0,4950	8.400
100119MNGI11E	11	0,5990	10.200
100119MNGI12E	12	0,7130	12.100
100119MNGI13E	13	0,8370	14.200
100119MNGI14E	14	0,9710	16.500
100119MNGI15E	15	1,1100	18.900
100119MNGI16E	16	1,2700	21.500

- Los diámetros más habituales son los reflejados en estas tablas. Para otras medidas rogamos consultar.
- Disponemos de otras construcciones según la aplicación o maquinaria.
- Galvanización normal, reforzada, y doble galvanizada.

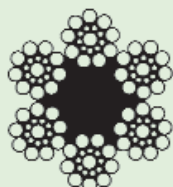
# **CABLES DE ASCENSOR**



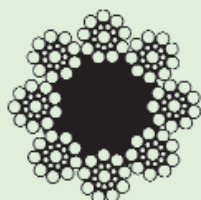


## INTRODUCCIÓN

Todos los cables ofrecidos por BEZABALA se suministran de acuerdo a las normas UNE 36-715-89 y UNE-EN 12385-5 (estas normas especifican las características de los cables de acero utilizados como elementos de suspensión de ascensores y de montacargas que se desplazan en guías verticales o guías inclinadas con un ángulo que no sea superior a 15° respecto a la vertical).



Codigo T.D.	Codigo T.I.	Díámetro nominal mm	6 x 19 Alma textil Resistencia 1370/1770
1006191SND08D	1006191SNI08D	8	31,7
1006191SND09D	1006191SNI09D	9	40,1
1006191SND10D	1006191SNI10D	10	49,5
1006191SND11D	1006191SNI11D	11	59,9
1006191SND12D	1006191SNI12D	12	71,3
1006191SND13D	1006191SNI13D	13	83,7
1006191SND14D	1006191SNI14D	14	97,1
1006191SND16D	1006191SNI16D	16	127,0



Codigo T.D.	Codigo T.I.	Díámetro nominal mm	8 x 19 Alma textil Resistencia 1370/1770
1008191SND08D	1008191SNI08D	8	28,1
1008191SND09D	1008191SNI09D	9	35,6
1008191SND10D	1008191SNI10D	10	44
1008191SND11D	1008191SNI11D	11	53,2
1008191SND12D	1008191SNI12D	12	63,3
1008191SND13D	1008191SNI13D	13	74,3
1008191SND14D	1008191SNI14D	14	86,1
1008191SND16D	1008191SNI16D	16	113,0

## CÓMO REALIZAR UN PEDIDO

Cuando se consulta o se pide un cable, éste deberá estar definido con exactitud, detallando la siguiente información:

- Construcción del cable
- Díámetro
- Sentido y tipo de torsión
- Lubricación
- Carga de rotura específica
- Embalaje
- Uso del cable (tracción, regulador, compensación)
- Normas de fabricación



### CUERDA POLYESTIL PARA COMPENSACIÓN

#### Características:

- Cuerda 20 mm de diámetro. Peso: 1 kg/metro
- Cuerda 30 mm de diámetro. Peso: 2 kg/metro
- Cuerda 34 mm de diámetro. Peso: 3 kg/metro



### RECOMENDACIONES

- Los cables de ascensor se suministran preformados y en acabado gris brillante o galvanizado.
- Según cada aplicación se recomiendan cables de 6 u 8 cordones tipos SL (19), WA (19) ó FI (25) y alma textil.
- Para cables con el mismo diámetro y el mismo tipo de cordón, los alambres en los cables de 6 cordones tienen mayor diámetro que los alambres en cable de 8 cordones, por este motivo los cables de 6 cordones tienen mayor resistencia contra acuñaduras.

Sin embargo son menos flexibles y por esto requieren poleas y tambores de mayor diámetro y no son adecuados para utilizar en ascensores de alta velocidad o donde se requieran plegados invertidos.

- Si el acuñamiento es menor, pueden usarse cables de 8 cordones que son más resistentes a la fatiga por flexión.
- Los cables de 8 cordones tienen mayor superficie de contacto con las poleas que los cables de 6 cordones.
- Al cambiar un cable de ascensor debe cambiarse el juego completo al mismo tiempo. Si se instalan cables nuevos no deben mezclarse con usados ya que el alargamiento sería diferente con lo que tendríamos una diferente distribución de cargas en los cables.

# **CABLES ESPECIALES**

**NO ANTIGIRATORIOS  
ANTIGIRATORIOS**

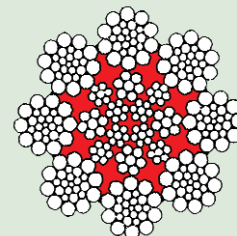




Resistencia Construcción			200 Kg/ mm <sup>2</sup>	220 Kg/ mm <sup>2</sup>	
Diámetro (mm)	Peso (kg/m)	Código	Carga de rot. mín.(kg)	Carga de rot. mín. (kg)	Código
12	0,62	100Q810VGD12B	11.315	12.470	100Q810VGD12C
13	0,73	100Q810VGD13B	13.150	14.492	100Q810VGD13C
14	0,82	100Q810VGD14B	14.883	16.401	100Q810VGD14C
15	0,94	100Q810VGD15B	17.125	18.873	100Q810VGD15C
16	1,1	100Q810VGD16B	19.878	21.906	100Q810VGD16C
17	1,22	100Q810VGD17B	22.120	24.377	100Q810VGD17C
18	1,37	100Q810VGD18B	24.771	27.298	100Q810VGD18C
19	1,55	100Q810VGD19B	28.236	31.118	100Q810VGD19C
20	1,7	100Q810VGD20B	30.887	34.039	100Q810VGD20C
21	1,87	100Q810VGD21B	33.945	37.409	100Q810VGD21C
22	2,04	100Q810VGD22B	37.003	40.779	100Q810VGD22C
24	2,45	100Q810VGD24B	44.343	48.867	100Q810VGD24C
26	2,86	100Q810VGD26B	51.886	57.180	100Q810VGD26C
28	3,32	100Q810VGD28B	60.347	66.504	100Q810VGD28C
30	3,82	100Q810VGD30B	69.215	76.278	100Q810VGD30C
32	4,4	100Q810VGD32B	79.715	87.849	100Q810VGD32C
34	4,91	100Q810VGD34B	88.991	98.072	100Q810VGD34C
36	5,51	100Q810VGD36B	100.000		
38	6,07	100Q810VGD38B	110.092		
40	6,8	100Q810VGD40B	123.445		
42	7,69	100Q810VGD42B	135.882		
44	8,5	100Q810VGD44B	149.032		
46	9,28	100Q810VGD46B	162.793		
48	10,1	100Q810VGD48B	178.695		
50	10,92	100Q810VGD50B	192.762		
52	11,7	100Q810VGD52B	207.747		

## CABLE ESPECIAL Q810 V

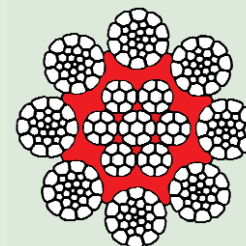
8 Cordones  
Alma plastificada  
Cruzado normal  
Galvanizado



Resistencia Construcción			180 Kg/ mm <sup>2</sup>	200 Kg/ mm <sup>2</sup>	
Diámetro (mm)	Peso (kg/m)	Código	Carga de rot. mín.(kg)	Carga de rot. mín. (kg)	Código
10	0,46	10QS816VGD10A	8.257	9.143	10QS816VGD10B
11	0,55	10QS816VGD11A	9.888	10.949	10QS816VGD11B
12	0,69	10QS816VGD12A	11.927	13.207	10QS816VGD12B
13	0,81	10QS816VGD13A	14.373	15.916	10QS816VGD13B
14	0,93	10QS816VGD14A	16.514	18.286	10QS816VGD14B
15	1,06	10QS816VGD15A	18.858	20.883	10QS816VGD15B
16	1,20	10QS816VGD16A	21.407	23.705	10QS816VGD16B
17	1,35	10QS816VGD17A	23.955	26.527	10QS816VGD17B
18	1,55	10QS816VGD18A	26.809	29.687	10QS816VGD18B
19	1,71	10QS816VGD19A	30.785	34.090	10QS816VGD19B
20	1,89	10QS816VGD20A	33.639	37.250	10QS816VGD20B
21	2,15	10QS816VGD21A	38.124	42.217	10QS816VGD21B
22	2,34	10QS816VGD22A	41.590	46.055	10QS816VGD22B
23	2,54	10QS816VGD23A	45.362	50.231	10QS816VGD23B
24	2,75	10QS816VGD24A	47.604	52.715	10QS816VGD24B
25	2,97	10QS816VGD25A	52.803	58.471	10QS816VGD25B
26	3,19	10QS816VGD26A	56.575	62.648	10QS816VGD26B
27	3,51	10QS816VGD27A	60.652	67.163	10QS816VGD27B
28	3,77	10QS816VGD28A	66.871	74.049	10QS816VGD28B
29	3,98	10QS816VGD29A	70.744	78.338	10QS816VGD29B
30	4,37	10QS816VGD30A	77.880	86.240	10QS816VGD30B
31	4,62	10QS816VGD31A	79.307	87.820	10QS816VGD31B
32	4,96	10QS816VGD32A	88.073	97.528	10QS816VGD32B
33	5,15	10QS816VGD33A	91.030	100.801	10QS816VGD33B
34	5,59	10QS816VGD34A	96.330	106.671	10QS816VGD34B
36	6,36	10QS816VGD36A	109.174	120.894	10QS816VGD36B
38	7,03	10QS816VGD38A	124.567	137.938	10QS816VGD38B
40	7,81	10QS816VGD40A	136.799	151.484	10QS816VGD40B
42	8,60	10QS816VGD42A	151.070	167.287	10QS816VGD42B
44	9,24	10QS816VGD44A	162.691	180.155	10QS816VGD44B
46	10,21	10QS816VGD46A	179.409	198.667	10QS816VGD46B
48	10,78	10QS816VGD48A	188.379	208.601	10QS816VGD48B

## CABLE ESPECIAL QS816 V

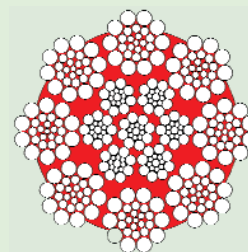
8 Cordones  
Alma plastificada  
Cruzado normal  
Compactado  
Galvanizado



Resistencia Construcción		200 Kg/ mm <sup>2</sup>	
Diámetro (mm)	Peso (kg/m)	Código	Carga de rot. mín.(kg)
12	59	100826MNP12B	11.000
14	80	100826MNP14B	15.000
16	104	100826MNP16B	19.500
18	132	100826MNP18B	24.700
19	147	100826MNP19B	27.500
20	167	100826MNP20B	30.500
22	202	100826MNP22B	36.900
24	240	100826MNP24B	44.000
25	261	100826MNP25B	47.700
26	282	100826MNP26B	51.600
28	327	100826MNP28B	59.800
30	375	100826MNP30B	68.700
32	427	100826MNP32B	78.200
34	482	100826MNP34B	85.500
35	511	100826MNP35B	90.700
36	540	100826MNP36B	95.900
38	602	100826MNP38B	106.900
42	735	100826MNP42B	130.600
48	960	100826MNP48B	170.600

## CABLE ESPECIAL HYFIL R8

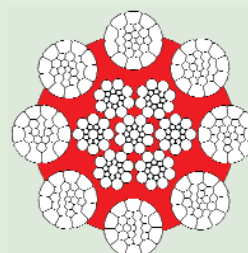
8 Cordones  
Alma plastificada  
Negro



Resistencia Construcción			200 Kg/ mm <sup>2</sup>	220 Kg/ mm <sup>2</sup>	
Diámetro (mm)	Peso (kg/m)	Código	Carga de rot. mín.(kg)	Carga de rot. mín. (kg)	Código
12	64	100826MCPD12B	12.200	13.500	100826MCPD12C
14	87	100826MCPD14B	16.600	18.400	100826MCPD14C
16	114	100826MCPD16B	21.700	24.100	100826MCPD16C
18	144	100826MCPD18B	27.400	30.500	100826MCPD18C
19	161	100826MCPD19B	30.900	33.900	100826MCPD19C
20	178	100826MCPD20B	34.200	37.600	100826MCPD20C
22	216	100826MCPD22B	41.000	45.500	100826MCPD22C
24	257	100826MCPD24B	48.800	54.200	100826MCPD24C
25	279	100826MCPD25B	52.900	58.800	100826MCPD25C
26	301	100826MCPD26B	57.300	63.600	100826MCPD26C
28	349	100826MCPD28B	66.400	73.800	100826MCPD28C
30	401	100826MCPD30B	76.200	84.700	100826MCPD30C
32	456	100826MCPD32B	86.700	96.400	100826MCPD32C
34	515	100826MCPD34B	97.900	109.000	100826MCPD34C
35	546	100826MCPD35B	104.000	115.000	100826MCPD35C
36	577	100826MCPD36B	110.000	122.000	100826MCPD36C
38	640	100826MCPD38B	122.000	136.000	100826MCPD38C
40	705	100826MCPD40B	136.000	151.000	100826MCPD40C
42	777	100826MCPD42B	142.000	166.000	100826MCPD42C
48	1.020	100826MCPD48B	195.000	217.000	100826MCPD48C

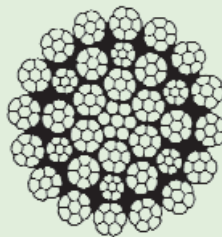
## CABLE ESPECIAL HYFIL C8

8 Cordones  
Alma plastificada  
Compactado  
Negro





Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100357MCNL10C	10	0,515	10.000
100357MCNL12C	12	0,742	14.300
100357MCNL13C	13	0,870	16.800
100357MCNL14C	14	1,01	19.400
100357MCNL15C	15	1,16	21.300
100357MCNL16C	16	1,27	25.400
100357MCNL17C	17	1,44	28.600
100357MCNL18C	18	1,61	32.200
100357MCNL19C	19	1,79	35.800
100357MCNL20C	20	1,97	39.700
100357MCNL21C	21	2,17	43.700
100357MCNL22C	22	2,38	48.100
100357MCNL24C	24	2,82	57.200
100357MCNL25C	25	3,10	62.100
100357MCNL26C	26	3,39	67.100
100357MCNL28C	28	3,81	77.900
100357MCNL30C	30	4,41	89.400
100357MCNL32C	32	5,00	101.800
100357MCNL34C	34	5,64	114.400
100357MCNL36C	36	6,33	128.700

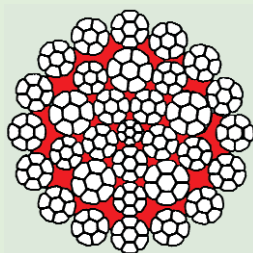


**CABLES  
ANTIGIRATORIOS**  
35 x 7 Warrington  
Compacto  
(220 kg/mm<sup>2</sup>)



## CABLE ESPECIAL TK 16

Antigiratorio  
Alma plastificada  
Cruzado normal  
Compactado  
Galvanizado



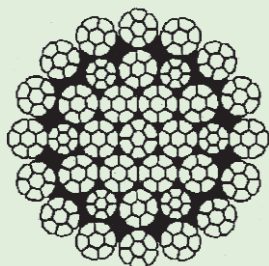
Resistencia Construcción			200 Kg/ mm <sup>2</sup>	220 Kg/ mm <sup>2</sup>	
Diámetro (mm)	Peso (kg/m)	Código	Carga de rot. mín.(kg)	Carga de rot. mín. (kg)	Código
8	0,34	100TK16CGD08B	5.770	6.218	100TK16CGD08C
9	0,42	100TK16CGD09B	7.329	7.951	100TK16CGD09C
10	0,53	100TK16CGD10B	9.225	9.684	100TK16CGD10C
11	0,63	100TK16CGD11B	10.907	12.029	100TK16CGD11C
12	0,76	100TK16CGD12B	12.946	14.067	100TK16CGD12C
13	0,89	100TK16CGD13B	15.596	16.412	100TK16CGD13C
14	1,02	100TK16CGD14B	17.431	18.960	100TK16CGD14C
15	1,25	100TK16CGD15B	20.489	22.120	100TK16CGD15C
16	1,41	100TK16CGD16B	23.140	25.178	100TK16CGD16C
17	1,59	100TK16CGD17B	26.198	28.440	100TK16CGD17C
18	1,75	100TK16CGD18B	30.173	32.212	100TK16CGD18C
19	1,97	100TK16CGD19B	33.231	35.882	100TK16CGD19C
20	2,18	100TK16CGD20B	36.493	39.959	100TK16CGD20C
21	2,36	100TK16CGD21B	40.367	43.833	100TK16CGD21C
22	2,69	100TK16CGD22B	44.241	47.910	100TK16CGD22C
23	2,92	100TK16CGD23B	48.318	51.784	100TK16CGD23C
24	3,05	100TK16CGD24B	52.192	57.187	100TK16CGD24C
25	3,37	100TK16CGD25B	56.881	61.978	100TK16CGD25C
26	3,54	100TK16CGD26B	61.570	66.871	100TK16CGD26C
27	3,81	100TK16CGD27B	66.565	72.171	100TK16CGD27C
28	4,21	100TK16CGD28B	71.560	78.084	100TK16CGD28C
29	4,49	100TK16CGD29B	76.860	83.486	100TK16CGD29C
30	4,76	100TK16CGD30B	82.569	89.093	100TK16CGD30C
32	5,40	100TK16CGD32B	93.374	101.427	100TK16CGD32C
34	6,08	100TK16CGD34B	105.097	114.985	100TK16CGD34C
36	6,77	100TK16CGD36B	118.145	128.338	100TK16CGD36C
38	7,67	100TK16CGD38B	132.314	143.731	100TK16CGD38C
40	8,43	100TK16CGD40B	139.144	152.396	100TK16CGD40C
42	9,28	100TK16CGD42B	153.415	167.890	100TK16CGD42C
44	10,17	100TK16CGD44B	167.992	183.894	100TK16CGD44C
46	11,03	100TK16CGD46B	182.263	199.490	100TK16CGD46C
48	12,02	100TK16CGD48B	198.471	217.227	100TK16CGD48C



## CABLE ESPECIAL

### TK 17

**Antigiratorio  
Compactado  
Torsión Lang  
Galvanizado**



Resistencia Construcción			200 Kg/ mm <sup>2</sup>	220 Kg/ mm <sup>2</sup>	
Diámetro (mm)	Peso (kg/m)	Código	Carga de rot. mín.(kg)	Carga de rot. mín. (kg)	Código
9	0,42	100TK17CGD09B	7.034	7.747	100TK17CGD09C
10	0,54	100TK17CGD10B	8.665	9.888	100TK17CGD10C
11	0,65	100TK17CGD11B	10.907	11.927	100TK17CGD11C
12	0,75	100TK17CGD12B	12.844	13.761	100TK17CGD12C
13	0,91	100TK17CGD13B	14.985	16.718	100TK17CGD13C
14	1,04	100TK17CGD14B	17.125	19.164	100TK17CGD14C
15	1,21	100TK17CGD15B	20.285	22.324	100TK17CGD15C
16	1,36	100TK17CGD16B	23.344	24.975	100TK17CGD16C
17	1,53	100TK17CGD17B	25.994	28.236	100TK17CGD17C
18	1,71	100TK17CGD18B	29.358	31.498	100TK17CGD18C
19	1,90	100TK17CGD19B	32.416	35.066	100TK17CGD19C
20	2,06	100TK17CGD20B	35.576	38.124	100TK17CGD20C
21	2,26	100TK17CGD21B	38.838	41.590	100TK17CGD21C
22	2,53	100TK17CGD22B	43.017	46.687	100TK17CGD22C
23	2,75	100TK17CGD23B	47.197	50.765	100TK17CGD23C
24	3,06	100TK17CGD24B	52.701	56.473	100TK17CGD24C
25	3,32	100TK17CGD25B	56.575	61.264	100TK17CGD25C
26	3,56	100TK17CGD26B	60.958	65.647	100TK17CGD26C
27	3,84	100TK17CGD27B	65.341	70.846	100TK17CGD27C
28	4,14	100TK17CGD28B	69.623	76.351	100TK17CGD28C
29	4,39	100TK17CGD29B	74.924	81.040	100TK17CGD29C
30	4,69	100TK17CGD30B	80.632	86.544	100TK17CGD30C
32	5,31	100TK17CGD32B	91.233	97.961	100TK17CGD32C

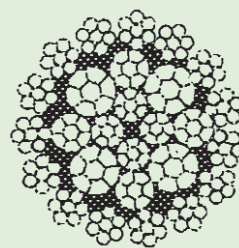
Código	Ø (mm)	Peso (kg/m)	Carga de rotura mín. (kg)
100TK123CY07B	7	0,37	3.812
100TK123CY08B	8	0,40	4.985
100TK123CY09B	9	0,45	6.228
100TK123CY10B	10	0,50	7.717
100TK123CY11B	11	0,55	9.297
100TK123CY12B	12	0,60	11.213
100TK123CY13B	13	0,65	13.354
100TK123CY14B	14	0,70	15.392
100TK123CY15B	15	0,80	17.941
100TK123CY16B	16	0,85	20.082
100TK123CY17B	17	0,90	23.038
100TK123CY18B	18	0,95	25.688
100TK123CY19B	19	1,00	28.644
100TK123CY20B	20	1,05	31.702
100TK123CY21B	21	1,10	34.659
100TK123CY22B	22	1,15	38.124
100TK123CY23B	23	1,20	41.386
100TK123CY24B	24	1,25	45.260
100TK123CY25B	25	1,30	49.337
100TK123CY26B	26	1,35	52.803
100TK123CY27B	27	1,40	57.390
100TK123CY28B	28	1,45	61.774
100TK123CY29B	29	1,50	65.647
100TK123CY30B	30	1,55	70.438
100TK123CY32B	32	1,65	79.409
100TK123CY34B	34	1,75	89.908
100TK123CY35B	35	1,80	93.986
100TK123CY36B	36	1,85	101.223
100TK123CY38B	38	1,95	112.946
100TK123CY40B	40	2,05	124.057
100TK123CY42B	42	2,15	137.411
100TK123CY44B	44	2,25	150.561
100TK123CY46B	46	2,40	165.036
100TK123CY48B	48	2,30	180.224

## CABLE ESPECIAL

### TK 12

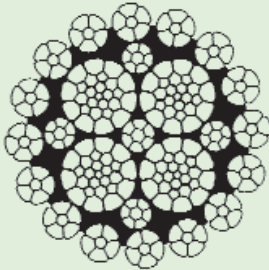
**(200 kg/mm<sup>2</sup>)**

**Antigiratorio  
Cruzado normal o Lang  
Cordones interior compactado  
Galvanizado**



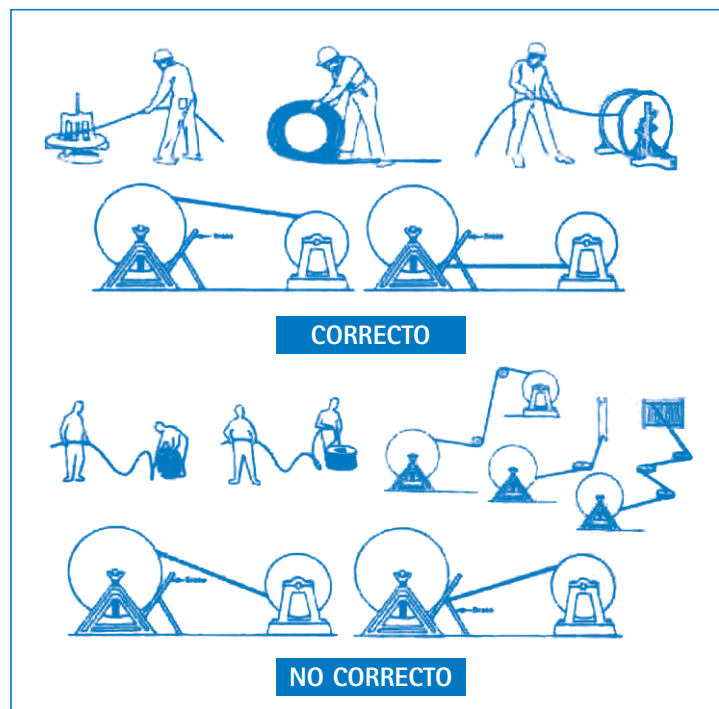


## CABLE ESPECIAL TK 16 EVOLUTION Antigiratorio



Teufelberger

Resistencia Construcción			200 Kg/ mm <sup>2</sup>	220 Kg/ mm <sup>2</sup>	
Diámetro (mm)	Peso (kg/m)	Código	Carga de rot. mín.(kg)	Carga de rot. mín. (kg)	Código
12	0,74	100TK16EVO12B	13.570	14.690	100TK16EVO12C
13	0,87	100TK16EVO13B	15.900	17.340	100TK16EVO13C
14	1,02	100TK16EVO14B	18.460	20.100	100TK16EVO14C
15	1,17	100TK16EVO15B	21.930	23.570	100TK16EVO15C
16	1,34	100TK16EVO16B	24.890	26.830	100TK16EVO16C
17	1,50	100TK16EVO17B	27.240	29.590	100TK16EVO17C
18	1,68	100TK16EVO18B	31.520	33.970	100TK16EVO18C
19	1,86	100TK16EVO19B	34.080	36.930	100TK16EVO19C
20	2,07	100TK16EVO20B	38.160	40.910	100TK16EVO20C
21	2,25	100TK16EVO21B	42.140	45.300	100TK16EVO21C
22	2,50	100TK16EVO22B	46.120	49.690	100TK16EVO22C
23	2,75	100TK16EVO23B	50.300	54.380	100TK16EVO23C
24	2,97	100TK16EVO24B	54.590	59.180	100TK16EVO24C
25	3,25	100TK16EVO25B	60.710	65.200	100TK16EVO25C
25,4	3,30	100TK16EV254B	61.120	65.710	100TK16EV254C
26	3,50	100TK16EVO26B	63.970	68.870	100TK16EVO26C
27	3,78	100TK16EVO27B	68.770	73.970	100TK16EVO47C
28	4,07	100TK16EVO28B	73.970	79.590	100TK16EVO28C
28,57	4,09	100TK16EV285B	74.480	80.100	100TK16EV285C
29	4,27	100TK16EVO29B	79.280	85.200	100TK16EVO29C
30	4,57	100TK16EVO30B	84.690	91.120	100TK16EVO30C
32	5,20	100TK16EVO32B	96.325	103.670	100TK16EVO32C
34	5,88	100TK16EVO34B	108.260	116.420	100TK16EVO34C
36	6,59	100TK16EVO36B	121.120	130.300	100TK16EVO36C
38	7,34	100TK16EVO38B	139.690	150.200	100TK16EVO38C
40	8,13	100TK16EVO40B	148.770	160.000	100TK16EVO40C
42	8,97	100TK16EVO42B	164.080	176.420	100TK16EVO42C



### ATENCIÓN:

Cable con vicio  
(coca) debido a  
una mala acción  
de desenrollar.

