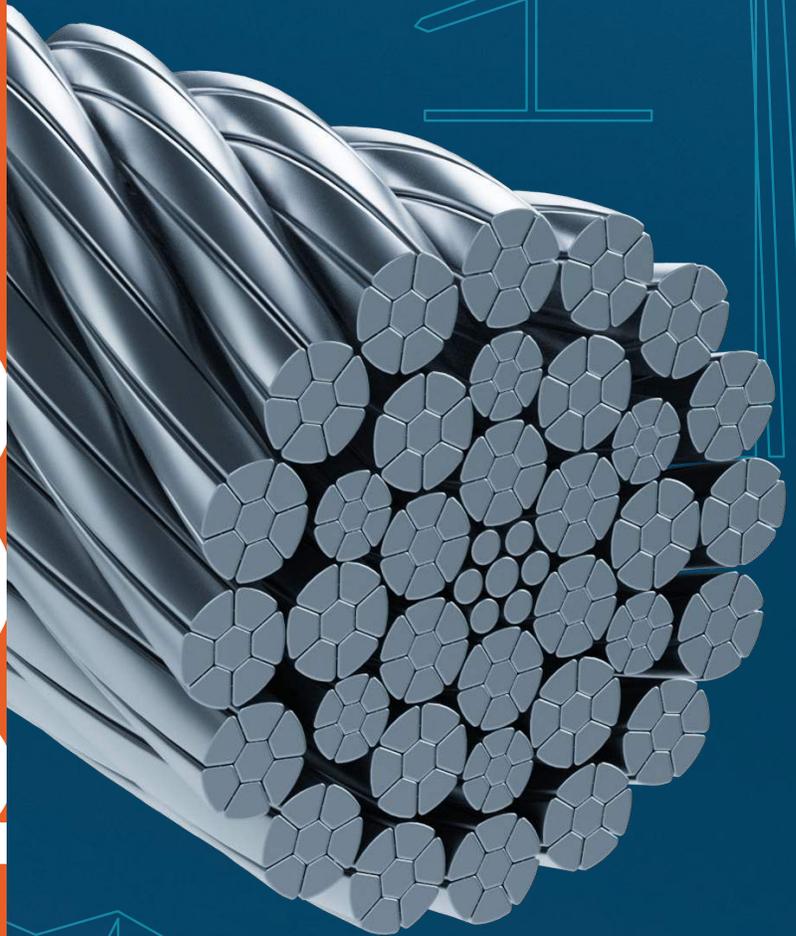


alps wire rope®

PEAK PERFORMANCE

Crane Ropes



**HIGH QUALITY
CRANE ROPES**

ROPE SELECTION
 Rope selection by rope function 04

ALPS CRANE ROPES

ROTATION RESISTANT ROPE CATEGORY 1
 DFC 34 08
Rotation-resistant rope with compacted strands and rope core

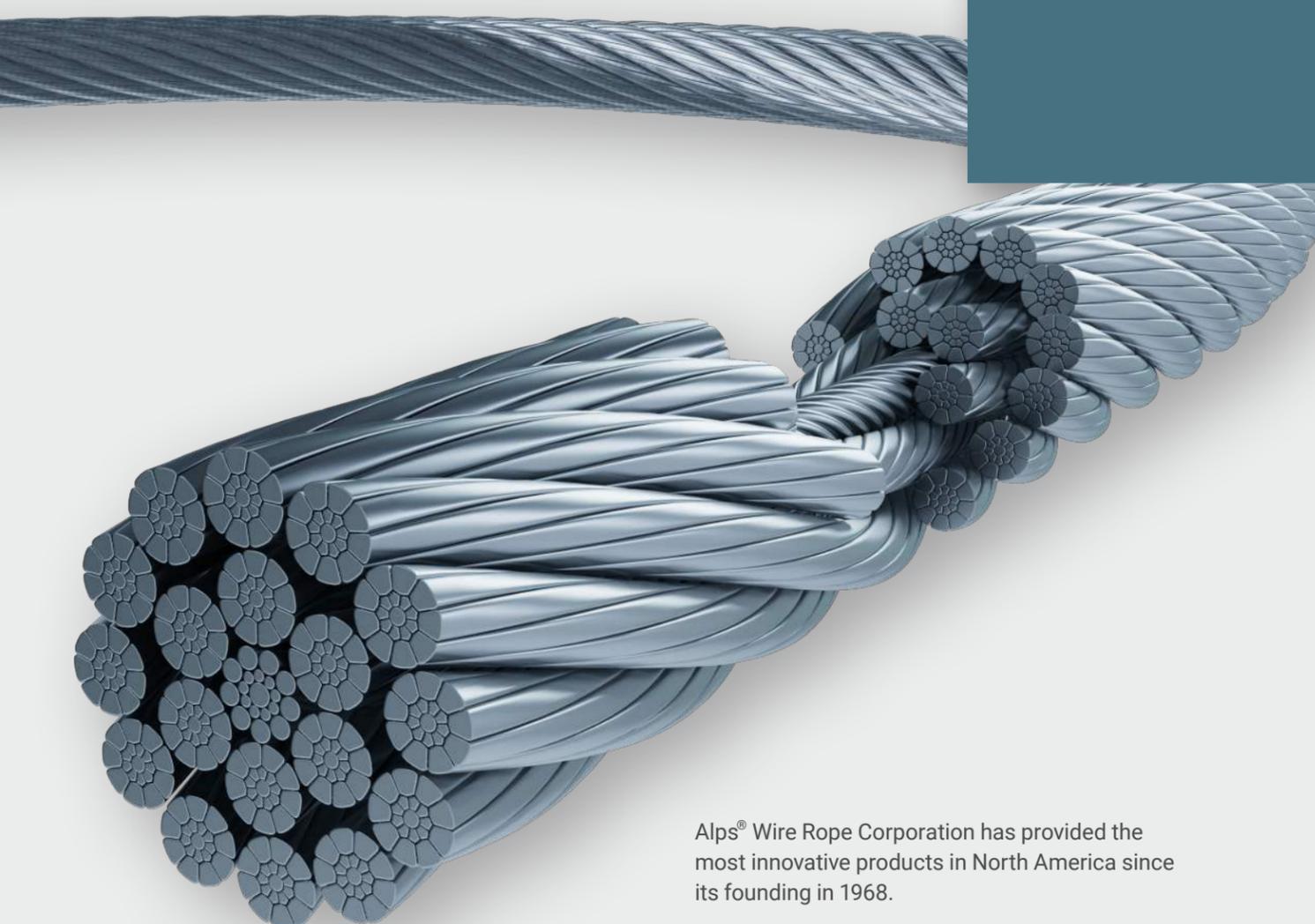
ROTATION RESISTANT ROPE CATEGORY 2
 DFC 19 12
Basic rotation-resistant rope with compacted outer strands

NON-ROTATION RESISTANT ROPE
 DFC 8P 16
8-strand non-rotation-resistant rope with compacted strands and rope core
 DFS 8 18
8-strand non-rotation-resistant rope with swaged strands and rope core
 UNIQ 8 20
Very flexible non-rotation-resistant 8-strand rope with double parallel construction with rope core

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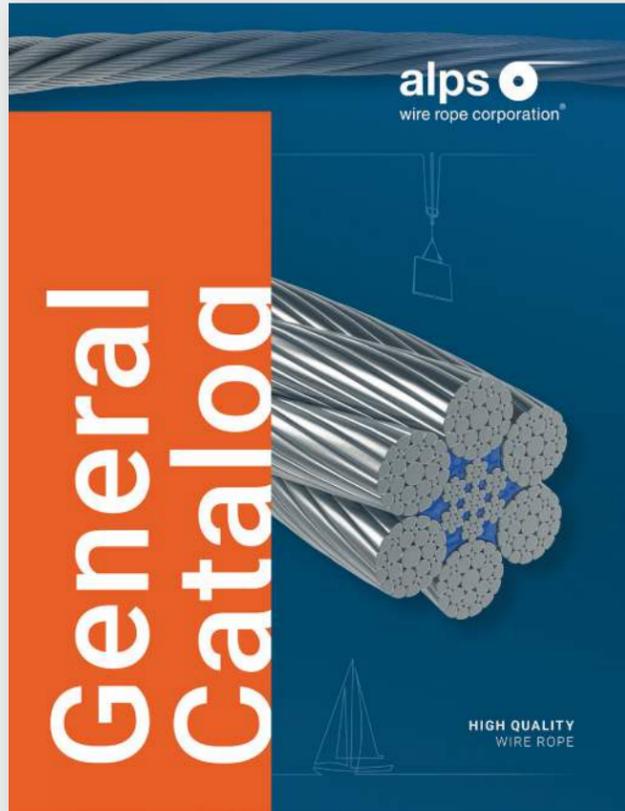


Alps® Wire Rope Corporation has provided the most innovative products in North America since its founding in 1968.

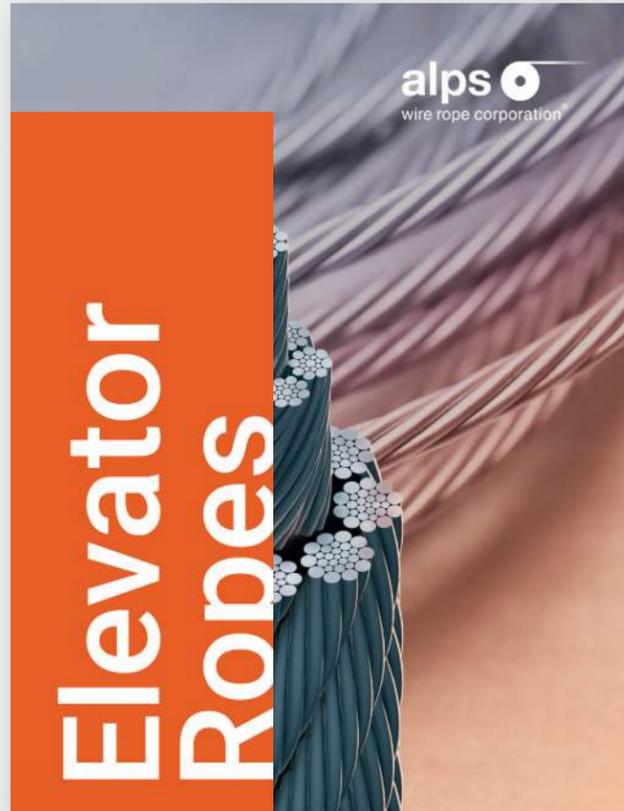
alpswirerope.com

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Alps General Catalog



Alps Elevator Ropes & Pocket Guide



further information at alpswirerope.com



ROPE SELECTION¹ BY FUNCTION

Crane Type	Crane Rope Function	Rotation Resistant Rope Category 1	Rotation Resistant Rope Category 2	Non-Rotation Resistant Rope		
		DFC 34	DFC 19	DFC 8P	DFS 8	UNIQ 8
Truck Crane	Load Hoist	•	.2			
Mobile Crane	Load Hoist	•				
	Auxiliary Load Hoist	•				
	Luffing			•	.5	
Crawler Crane	Load Hoist	•				
	Auxiliary Load Hoist	•				
	Main Boom Hoist			•		•
	Boom Pendant			•	•	•
Tower Crane	Luffing			•	•	
	Load Hoist	•	.2			
	Trolley Hoist			•		•
Luffing Crane	Boom Pendant			•		•
	Luffing			•	.5	
	Load Hoist			.3		
Gantry Crane (STS)	Trolley Hoist			•		
	Boom Pendant			•	.5	
	Load Hoist			•		
Mobile Harbor Crane	Load Hoist			•		
RTG Crane	Load Hoist			.3		
Overhead Crane	Load Hoist	.4	.24	•		•
Straddle Carrier	Load Hoist			.3		
Deck Crane	Load Hoist	• with plastic				
	Main Boom Hoist			•		•

1) All rope selection tables are intended for general guidance purposes. The final rope selection depends on detailed information about the crane, e.g. lifting height, reeving configuration and drum but also on the typical wear characteristics. If in doubt please contact us for further information.

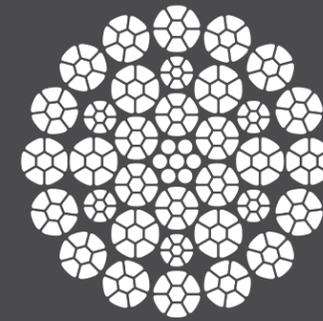
2) If the rotational behavior of the rope is suitable considering the crane design and crane utilization.

3) For load hoist operation the ropes are commonly used in pairs.

4) If rotation resistant rope is required.

5) Recommended on multi-layer drums if crushing resistance is most critical.

ROTATION RESISTANT ROPE CATEGORY 1



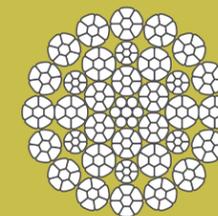
DFC 34
THE LOAD HOIST ROPE ON
YOUR MOBILE CRANE



ROTATION RESISTANCE

Wire ropes that present little or no tendency to spin or rotate per the international standard ASTM A 1023. Alps DFC 34 has 16 outer strands and is manufactured with at least 3 layers of compacted strands laid in opposition to the underlying layer, creating a counterbalancing effect. These wire ropes can be used with or without a swivel.

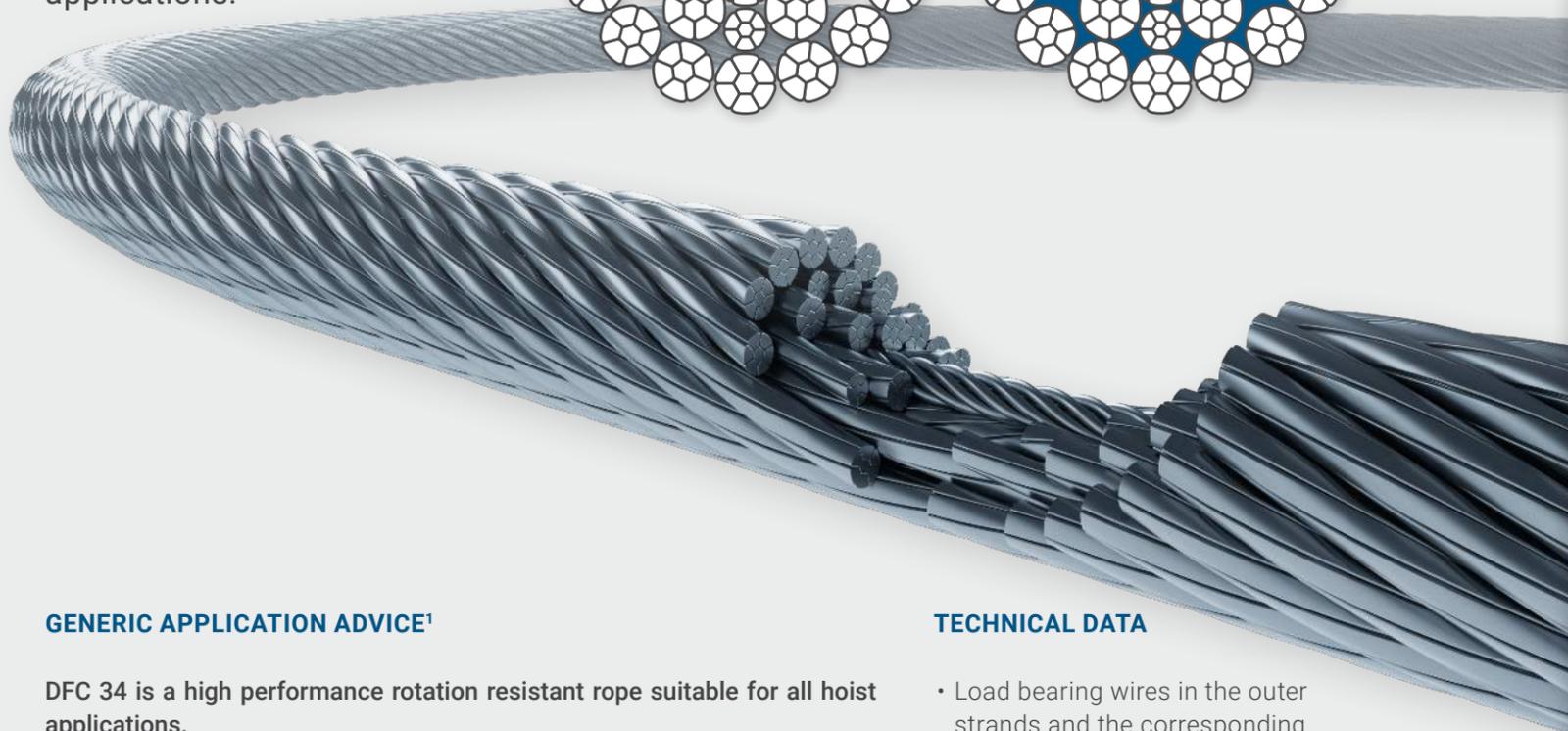
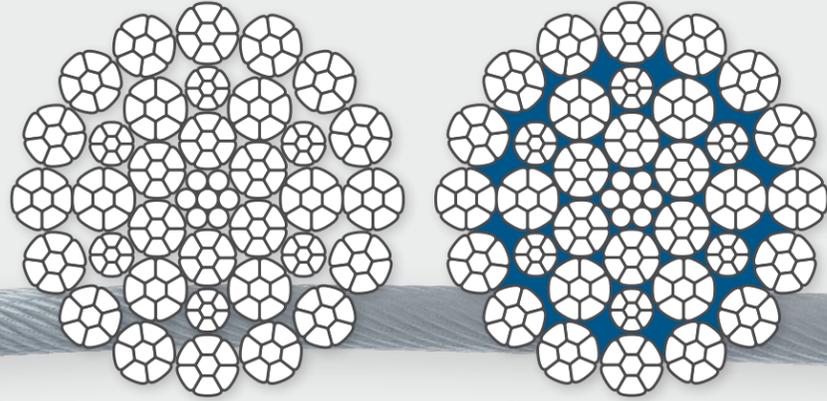
Rotation-resistant ropes are usually used in hoisting applications where the load is unguided or in high-lifting applications such as tower and mobile cranes.



DFC 34
multifunctional, compacted
rotation resistant rope with 16
outer strands.

DFC 34

Multifunctional, compacted rotation resistant rope with 16 outer strands for hoisting applications.



GENERIC APPLICATION ADVICE¹

DFC 34 is a high performance rotation resistant rope suitable for all hoist applications.

- DFC 34 is recommended for high lifting operations
- Suitable for single part and multi-part reeving
- Recommended for multilayer coiling in Lang's Lay
- Can be used both with and without swivel

MAIN PROPERTIES

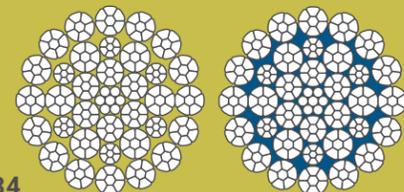
- Category 1 rotation resistant rope in accordance to ASTM A1023
- Very high breaking force
- High bending fatigue performance
- Very stable rope structure

TECHNICAL DATA

- Load bearing wires in the outer strands and the corresponding RCN (Rope Category Number) according to ISO4309 for cranes:
 - 112 wires: RCN 23-2
- Average fill factor: 0.720
- Standard tolerance on diameter: +2% to +4% (other tolerances upon request)

PRODUCT TYPES AVAILABLE

- Bright is standard (Galvanized upon request)
- Regular Lay or Lang's Lay (Lang's Lay is standard)
- Plastic coated steel core available



DFC 34

Multifunctional, compacted rotation resistant rope with 16 outer strands for hoisting applications.



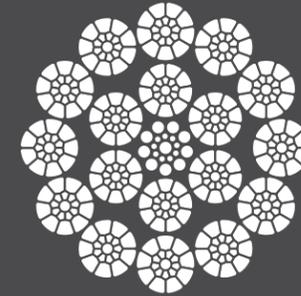
Nominal diameter		Minimum Breaking Load						Metallic area	Weight	
		1960 N/mm ²			2160 N/mm ²					
mm	in	kN	metric ton	lbs	kN	metric ton	lbs	mm ²	kg/m	ft/lb
8.0	5/16	59.1	6.03	13,290	62.6	6.38	14,070	36.0	0.31	0.21
9.0		75.3	7.68	16,930	79.5	8.11	17,870	46.0	0.39	0.26
9.5	3/8	83.9	8.56	18,860	89.3	9.11	20,080	51.3	0.43	0.29
10.0		92.7	9.45	20,840	98.5	10.04	22,140	57.0	0.48	0.32
11.0	7/16	111	11.3	24,950	117	11.9	26,320	68.8	0.60	0.40
12.0		134	13.6	30,010	141	14.3	31,590	81.5	0.71	0.48
12.7	1/2	149	15.1	33,380	157	16.0	35,180	92.0	0.80	0.54
13.0		157	16.0	35,180	165	16.8	37,070	95.6	0.83	0.56
14.0		182	18.5	40,800	192	19.6	43,250	110.9	0.97	0.65
14.3	9/16	190	19.3	42,600	201	20.5	45,160	115.7	1.01	0.68
15.0		209	21.3	46,870	220	22.5	49,550	127.3	1.11	0.75
16.0	5/8	237	24.2	53,280	250	25.5	56,290	144.9	1.26	0.85
17.0		268	27.3	60,250	281	28.7	63,240	163.6	1.42	0.96
18.0		300	30.6	67,440	317	32.3	71,220	183.4	1.60	1.07
19.0	3/4	334	34.1	75,090	353	36.0	79,290	204.3	1.78	1.20
20.0		370	37.7	83,180	391	39.9	87,850	226.4	1.97	1.33
21.0		409	41.7	91,830	432	44.0	97,050	249.6	2.17	1.46
22.0	7/8	449	45.7	100,830	474	48.3	106,560	273.9	2.39	1.60
23.0		490	50.0	110,160	517	52.7	116,250	299.4	2.61	1.75
24.0		533	54.4	119,820	563	57.4	126,520	326.0	2.84	1.91
25.0		578	58.9	129,940	611	62.3	137,290	353.7	3.08	2.07
25.4	1	598	61.0	134,430	632	64.4	142,030	365.1	3.18	2.14
26.0		626	63.8	140,730	666	67.9	149,650	382.6	3.33	2.24
27.0		675	68.8	151,740	718	73.2	161,370	412.6	3.59	2.42
28.0		725	73.9	162,980	768	78.3	172,650	443.7	3.87	2.60
28.6	1-1/8	755	77.0	169,730	799	81.5	179,620	463.0	4.04	2.71
29.0		777	79.2	174,670	821	83.8	184,660	476.0	4.15	2.79
30.0		832	84.8	187,040	880	89.7	197,830	509.4	4.44	2.98
31.0		890	90.8	200,080	939	95.8	211,090	543.9	4.74	3.18
32.0	1-1/4	948	96.7	213,120	1,002	102.2	225,260	579.6	5.05	3.39
33.0		1,008	102.8	226,610	1,065	108.6	239,420	616.3	5.37	3.61
34.0		1,070	109.1	240,540	1,130	115.2	254,030	654.3	5.70	3.83
35.0	1-3/8	1,120	114.2	251,780	1,185	120.8	266,400	689.0	6.00	4.03
36.0		1,198	122.2	269,320	1,266	129.1	284,610	733.5	6.39	4.29
38.0	1-1/2	1,336	136.2	300,340	1,408	143.6	316,530	817.3	7.12	4.78
40.0		1,481	151.0	332,940	1,560	159.1	350,700	905.6	7.89	5.30
41.3	1-5/8	1,580	161.1	355,190	1,661	169.4	373,400	965.4	8.41	5.65
42.0		1,635	166.7	367,560	1,720	175.4	386,670	998.4	8.70	5.84
44.0	1-3/4	1,790	182.5	402,400	1,885	192.2	423,760	1,096.0	9.55	6.42



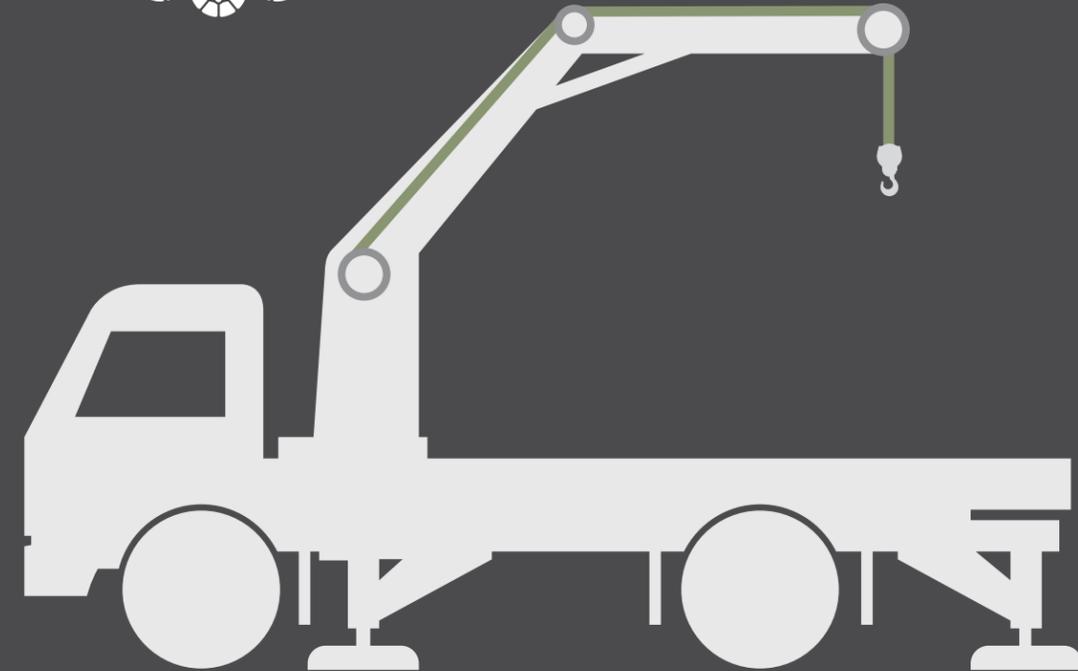
ROTATION RESISTANT ROPE 1

¹) Please ask if in doubt about choosing a rope. Alps is happy to assist. The cross section shown is just an example and may vary. Data sheet information is subject to modification without prior notice. The valid data is published on our website.

ROTATION RESISTANT ROPE CATEGORY 2

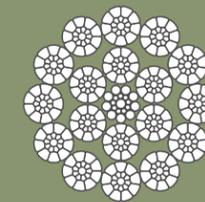


DFC 19
THE LOAD HOIST ROPE ON
YOUR TRUCK CRANE



ROTATION RESISTANCE

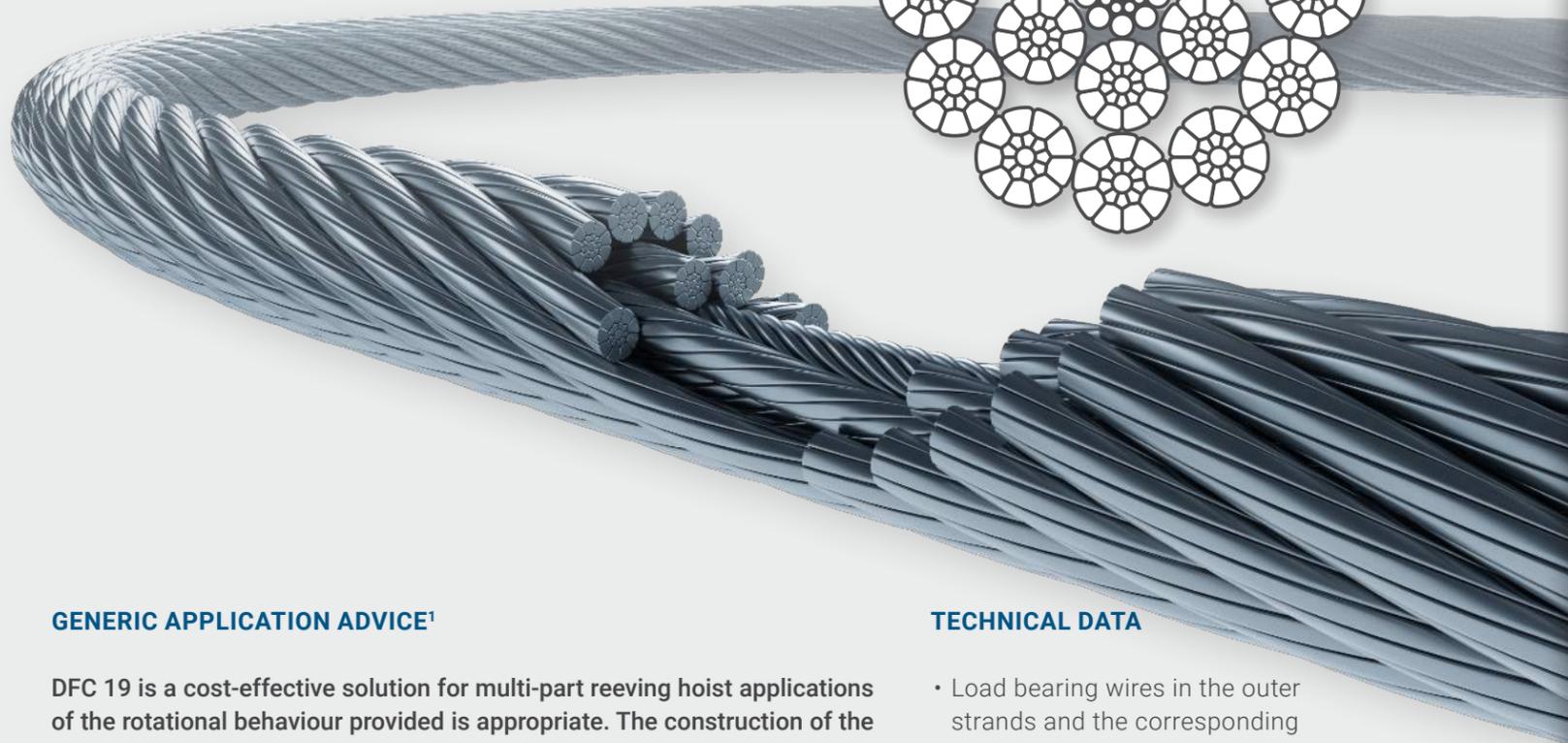
Alps DFC is a wire rope with significant resistance to rotation and is manufactured with 12 outer strands. The two layers of compacted strands are laid in the opposite direction of the inner layer. The DFC 19 is the perfect solution for less demanding applications. Please note that the DFC 34 (Category 1 rope) could replace this wire rope (but never the opposite).



DFC 19
Basic rotation resistant rope with
12 compacted outer strands.

DFC 19

Basic rotation resistant rope with 12 compacted outer strands.



GENERIC APPLICATION ADVICE¹

DFC 19 is a cost-effective solution for multi-part reeving hoist applications of the rotational behaviour provided is appropriate. The construction of the outer strands differs and consequently also the RCN to be applied.

- Suitable for multi-part reeving with unguided load but limited lifting heights
- Note: Not to be used for single fall hoist application with an unguided load
- Recommended for multilayer coiling
- Must not be used with a swivel!

MAIN PROPERTIES

- Category 2 rotation resistant rope in accordance to ASTM A1023
- High breaking force
- Flexible rope construction
- Good resistance to wear

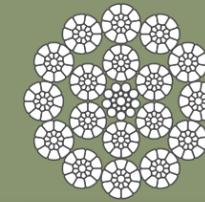
TECHNICAL DATA

- Load bearing wires in the outer strands and the corresponding RCN (Rope Category Number) according to ISO4309 for cranes:
 - 228 wires: RCN 28
- Average fill factor: 0.721
- Standard tolerance on diameter: +2% to +4% (other tolerances upon request)

PRODUCT TYPES AVAILABLE

- Bright is standard (galvanized upon request)
- Regular Lay or Lang's Lay

DFC 19



Basic rotation resistant rope with 12 compacted outer strands.



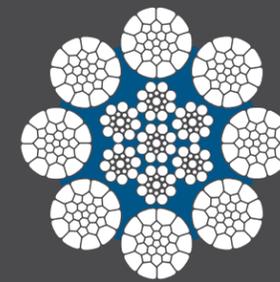
Nominal diameter		Minimum Breaking Load						Metallic area	Weight	
		1960 N/mm ²			2160 N/mm ²					
mm	in	kN	metric ton	lbs	kN	metric ton	lbs	mm ²	kg/m	ft/lb
6.0		30.7	3.13	6,900	34.0	3.47	7,640	20.5	0.18	0.12
7.0		41.7	4.25	9,360	45.0	4.59	10,120	27.9	0.24	0.16
8.0	5/16	54.4	5.55	12,230	60.0	6.12	13,490	36.4	0.31	0.21
9.0		68.9	7.02	15,480	75.0	7.65	16,860	46.1	0.39	0.26
9.5	3/8	76.7	7.82	17,250	84.2	8.59	18,930	51.4	0.44	0.29
10.0		85.0	8.67	19,110	93.3	9.51	20,970	56.9	0.49	0.33
11.0	7/16	104	10.6	23,420	114	11.7	25,690	68.9	0.59	0.40
12.0		124	12.6	27,880	136	13.9	30,570	82.0	0.70	0.47
12.7	1/2	139	14.2	31,220	152	15.5	34,240	91.8	0.78	0.53
13.0		145	14.8	32,600	160	16.3	35,880	96.2	0.82	0.55
14.0		168	17.1	37,800	185	18.9	41,610	111.6	0.95	0.64
14.3	9/16	175	17.9	39,440	193	19.7	43,420	116.4	0.99	0.67
15.0		193	19.7	43,400	213	21.7	47,770	128.1	1.09	0.73
16.0	5/8	220	22.4	49,380	242	24.7	54,350	145.8	1.24	0.84
17.0		248	25.3	55,740	273	27.8	61,360	164.6	1.40	0.94
18.0		278	28.3	62,490	306	31.2	68,790	184.5	1.58	1.06
19.0	3/4	310	31.6	69,630	341	34.8	76,650	205.6	1.75	1.18
20.0		343	35.0	77,150	378	38.5	84,930	227.8	1.94	1.31
21.0		378	38.6	85,060	417	42.5	93,630	251.1	2.14	1.44
22.0	7/8	415	42.3	93,350	457	46.6	102,760	275.6	2.35	1.58
23.0		454	46.3	102,030	500	50.9	112,320	301.2	2.57	1.73
24.0		494	50.4	111,100	544	55.5	122,290	328.0	2.80	1.88
25.0		536	54.7	120,550	590	60.2	132,700	355.9	3.04	2.04
25.4	1	554	56.4	124,440	609	62.1	136,980	367.4	3.14	2.11
26.0		580	59.1	130,390	638	65.1	143,530	384.9	3.29	2.21
27.0		625	63.8	140,610	689	70.2	154,780	415.1	3.54	2.38
28.0		673	68.6	151,220	740	75.5	166,460	446.4	3.81	2.56
28.6	1-1/8	702	71.6	157,770	773	78.8	173,670	465.8	3.98	2.67
29.0		722	73.6	162,210	794	81.0	178,560	478.9	4.09	2.75
30.0		772	78.7	173,590	850	86.7	191,090	512.5	4.38	2.94
31.0		825	84.1	185,360	908	92.6	204,040	547.2	4.67	3.14
32.0	1-1/4	879	89.6	197,510	967	98.6	217,410	583.1	4.98	3.34
33.0		934	95.3	210,050	1,029	104.9	231,210	620.1	5.29	3.56
34.0		992	101.1	222,970	1,092	111.3	245,440	658.3	5.62	3.78
35.0	1-3/8	1,051	107.2	236,280	1,157	118.0	260,090	697.6	5.95	4.00
36.0		1,110	113.2	249,540	1,220	124.4	274,260	738.0	6.30	4.23



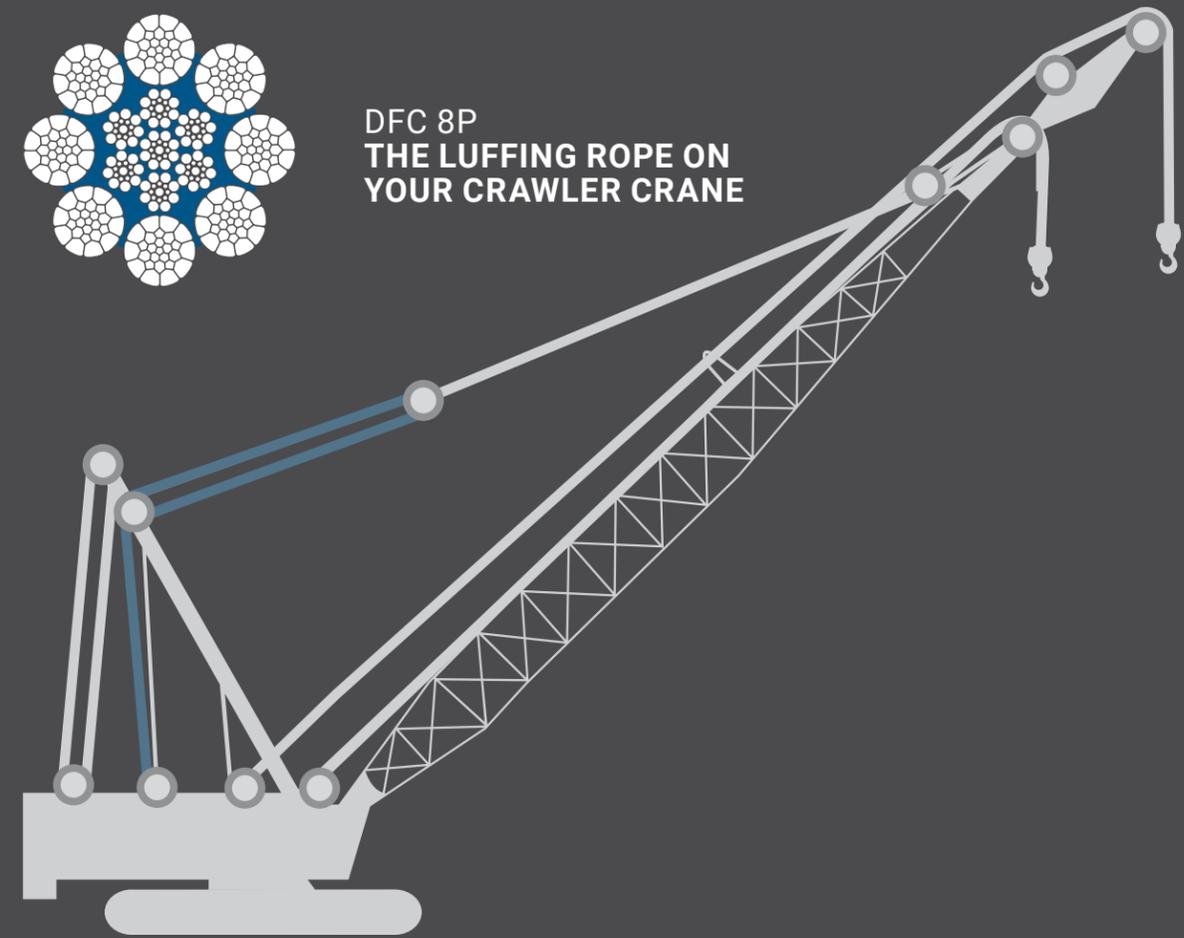
ROTATION RESISTANT ROPE 2

¹) Please ask if in doubt about choosing a rope. Alps is happy to assist. The cross section shown is just an example and may vary. Data sheet information is subject to modification without prior notice. The valid data is published on our website.

NON-ROTATION-RESISTANT ROPE

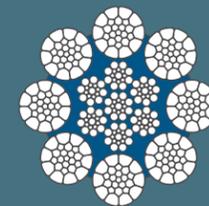


DFC 8P
THE LUFFING ROPE ON
YOUR CRAWLER CRANE

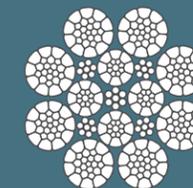


NON-ROTATION RESISTANCE

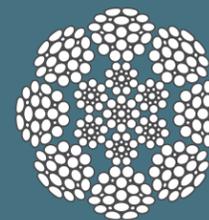
Alps 8-strand ropes (DFC 8P, DFS 8 and UNIQ 8) exhibit the highest level of bending resistance. The outer layer of strands is laid in the same direction as the inner layers. They should be used in guided load applications (i.e., where twisting is not physically possible). They are typically suitable in applications where spinning is not a concern, such as Gantry and RTG cranes.



DFC 8P
8-strand non-rotation-resistant compacted rope with rope core covered with plastic.



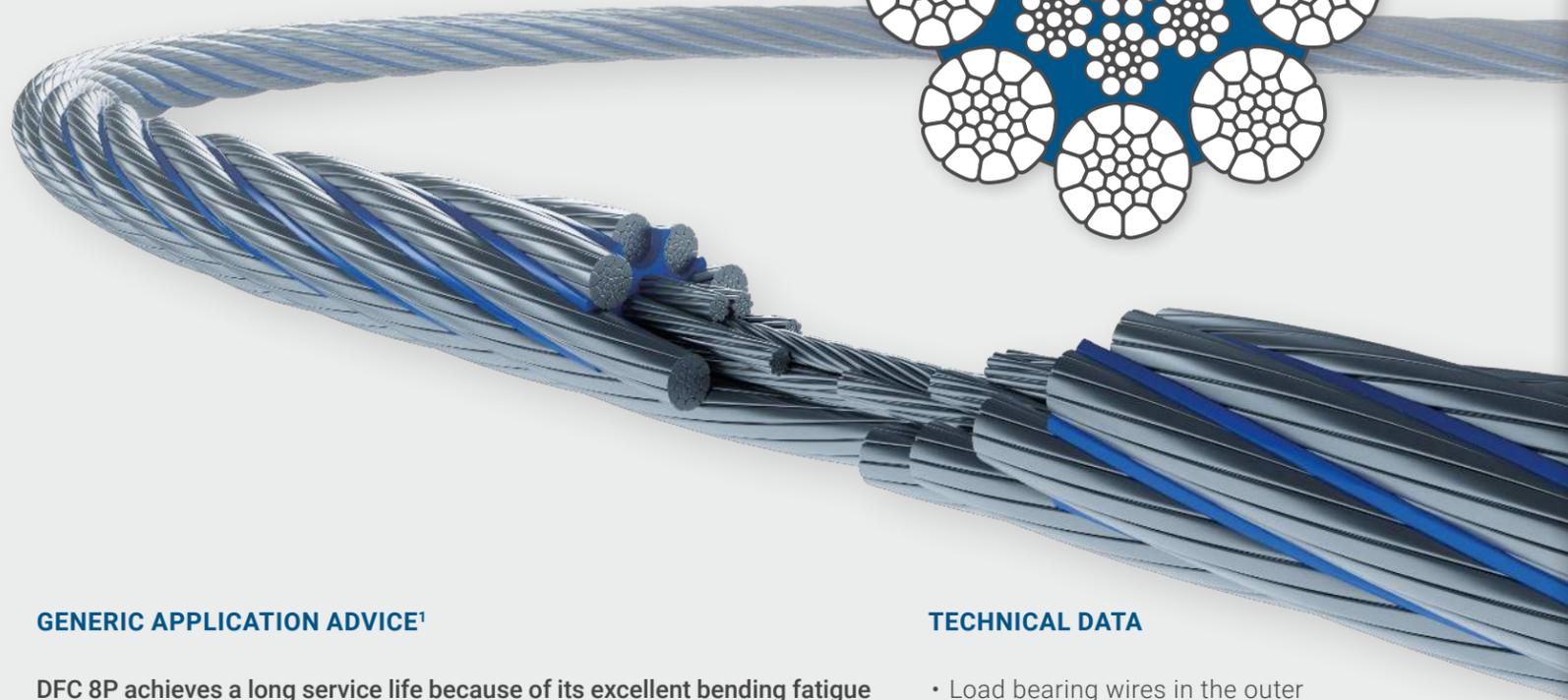
UNIQ 8
Very flexible non-rotation-resistant 8-strand rope in double parallel construction with rope core.



DFS 8
8-strand non-rotation-resistant rope with swaged strands and rope core.

DFC 8P

Multifunctional, compacted 8-strand, non-rotation resistant rope. The IWRC-steel core is made of regular strands and plastic coated.



GENERIC APPLICATION ADVICE¹

DFC 8P achieves a long service life because of its excellent bending fatigue resistance and provides a firm rope structure.

- Suitable for a variety of applications that don't require rotation resistant ropes e.g.:
 - Multi-part reeving hoist applications
 - with right-hand and left-hand ropes operating in pairs
 - limited lifting heights if one rope is used
- Luffing application
- Boom pendant rope
- Recommended for multilayer coiling in Lang's Lay
- Must not be used with a swivel! Rope ends are always secured to prevent rotation

MAIN PROPERTIES

- Non-rotation resistant rope
- Very high breaking force
- Excellent bending fatigue performance
- Crush resistant

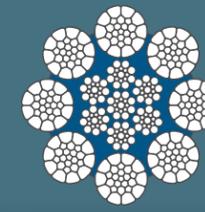
TECHNICAL DATA

- Load bearing wires in the outer strands and the corresponding RCN (Rope Category Number) according to ISO4309 for cranes.
 - 152 wires: 8-12mm RCN 04
 - 208 wires: 13-32mm RCN 09
 - 248 wires: 34-48mm RCN 11
 - 288 wires: 50-56mm RCN 13
- Average fill factor: 0.675
- Standard tolerance on diameter: +2% to +4% (other tolerances upon request)

PRODUCT TYPES AVAILABLE

- Galvanized is standard
- Regular Lay or Lang's Lay

DFC 8P



8-strand non-rotation-resistant compacted rope with rope core covered with plastic.



Nominal diameter		Minimum Breaking Load						Metallic area	Weight	
		1960 N/mm ²			2160 N/mm ²					
mm	in	kN	metric ton	lbs	kN	metric ton	lbs	mm ²	kg/m	ft/lb
8.0	5/16	56.4	5.75	12,680	59.2	6.04	13,310	34.0	0.29	0.19
9.0		71.5	7.29	16,070	75.1	7.66	16,880	43.0	0.37	0.25
9.5	3/8	79.6	8.12	17,890	83.6	8.52	18,790	47.9	0.41	0.28
10.0		88.3	9.00	19,850	94.2	9.61	21,180	53.0	0.46	0.31
11.0	7/16	107	10.9	24,030	114	11.6	25,540	77.7	0.56	0.38
12.0		127	13.0	28,640	133	13.6	29,990	76.0	0.66	0.44
12.7	1/2	143	14.6	32,080	151	15.4	34,040	95.4	0.74	0.50
13.0		151	15.4	33,880	159	16.2	35,740	90.0	0.78	0.52
14.0		174	17.7	39,030	184	18.8	41,430	104.0	0.90	0.61
14.3	9/16	181	18.5	40,760	192	19.6	43,190	108.5	0.94	0.63
15.0		199	20.3	44,760	212	21.6	47,590	119.0	1.04	0.70
16.0	5/8	228	23.2	51,170	240	24.5	53,950	136.0	1.18	0.79
17.0		257	26.2	57,750	271	27.6	60,860	153.5	1.33	0.90
18.0		286	29.2	64,340	305	31.1	68,660	172.0	1.49	1.00
19.0	3/4	319	32.5	71,650	340	34.7	76,430	192.0	1.66	1.12
20.0		353	36.0	79,400	381	38.8	85,560	212.0	1.84	1.24
21.0		390	39.8	87,720	418	42.6	93,970	233.7	2.03	1.36
22.0	7/8	431	43.9	96,850	458	46.7	102,920	257.0	2.23	1.50
23.0		471	48.1	105,950	500	51.0	112,360	280.9	2.43	1.63
24.0		512	52.2	115,120	545	55.6	122,520	305.0	2.65	1.78
25.0		555	56.6	124,810	588	60.0	132,210	331.0	2.88	1.94
25.4	1	573	58.4	128,840	608	62.0	136,610	341.7	2.97	2.00
26.0		605	61.6	135,900	638	65.0	143,380	358.0	3.11	2.09
27.0		652	66.4	146,480	687	70.1	154,460	386.1	3.35	2.25
28.0		694	70.8	155,990	736	75.0	165,440	416.0	3.61	2.42
28.6	1-1/8	724	73.8	162,780	767	78.2	172,450	434.0	3.76	2.53
29.0		744	75.8	167,210	788	80.3	177,130	446.2	3.87	2.60
30.0		798	81.3	179,310	858	87.4	192,770	477.0	4.14	2.78
31.0		853	86.9	191,650	915	93.3	205,630	509.3	4.42	2.97
32.0	1-1/4	915	93.3	205,770	973	99.2	218,620	543.0	4.71	3.17
33.0		972	99.1	218,400	1,033	105.4	232,270	577.5	5.01	3.37
34.0		1,036	105.7	232,970	1,098	112.0	246,860	613.0	5.32	3.57
35.0	1-3/8	1,091	111.3	245,310	1,157	118.0	260,120	679.7	5.60	3.76
36.0		1,148	117.1	258,120	1,223	124.7	274,960	687.0	5.96	4.00
38.0	1-1/2	1,282	130.7	288,250	1,371	139.8	308,120	766.0	6.64	4.46
40.0		1,416	144.4	318,300	1,504	153.3	338,040	848.0	7.36	4.94
41.3	1-5/8	1,508	153.8	339,010	1,601	163.3	360,010	904.0	7.84	5.27
42.0		1,568	159.9	352,430	1,665	169.7	374,210	935.0	8.11	5.45
44.0	1-3/4	1,722	175.6	387,070	1,825	186.1	410,320	1,026.0	8.91	5.99
46.0		1,873	191.0	421,000	1,993	203.2	447,950	1,121.0	9.73	6.54
48.0	1-7/8	2,044	208.5	459,550	2,168	221.1	487,340	1,220.0	10.6	7.1
50.0		2,148	219.0	482,790	2,331	237.7	524,070	1,323.8	11.5	7.7
50.8	2	2,221	226.5	499,390	2,390	243.7	537,290	1,366.5	11.9	8.0
52.0		2,314	236.0	520,200	2,459	250.7	552,730	1,431.8	12.4	8.4
54.0	2-1/8	2,478	252.6	556,980	2,644	269.6	594,430	1,544.1	13.4	9.0
56.0		2,651	270.3	595,890	2,794	284.9	628,110	1,660.6	14.4	9.7



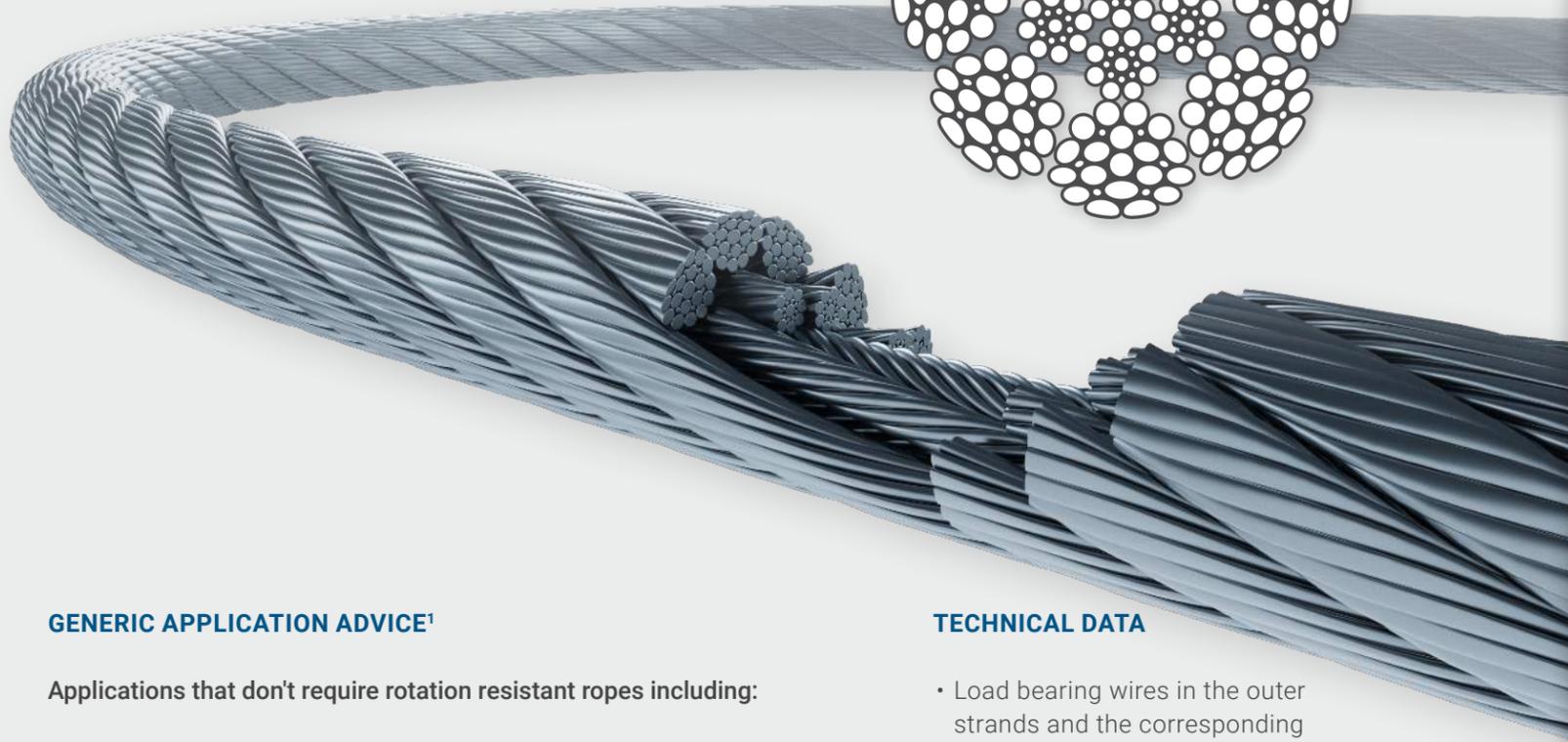
NON-ROTATION-RESISTANT ROPE

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The cross section shown is just an example and may vary. Data sheet information is subject to modification without prior notice. The valid data is published on our website.

DFS 8

8-strand non-rotation resistant rope with swaged strands and independent wire rope core.



GENERIC APPLICATION ADVICE¹

Applications that don't require rotation resistant ropes including:

- Boom Pendants
- Multilayer Applications
- Must not be used with a swivel. Only use it when rope ends are properly secured to prevent rotation

MAIN PROPERTIES

- Excellent wear resistance and shape stability
- Minimum damage to drum, sheave and roller
- High breaking strength
- More flexible than standard 6 strand ropes

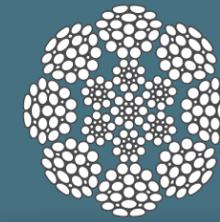
TECHNICAL DATA

- Load bearing wires in the outer strands and the corresponding RCN(RopeCategoryNumber) according to ISO4309 for cranes.
 - 152 wires: RCN 06
 - 200 wires: RCN 08
 - 208 wires: RCN 09
- Average fill factor: 0.790
- Standard tolerance on diameter: +2% to +4% (other tolerances upon agreement)

PRODUCT TYPES AVAILABLE

- Galvanized is standard
- Regular Lay or Lang's Lay

DFS 8



8-strand non-rotation-resistant rope with swaged strands and independent wire rope core.



Nominal diameter		Minimum Breaking Load						Metallic area	Weight	
		1960 N/mm ²			2160 N/mm ²					
mm	in	kN	metric ton	lbs	kN	metric ton	lbs	mm ²	kg/m	ft/lb
8.0	5/16	60.8	6.2	13,668	64.9	6.6	14,590	40.0	0.35	0.235
9.0		77.3	7.9	17,378	82.4	8.4	18,524	50.0	0.44	0.296
10.0		94.8	9.7	21,312	102	10.4	22,931	62.0	0.55	0.370
11.0	7/16	115	11.7	25,853	124	12.6	27,876	75.0	0.66	0.443
12.0		137	14.0	30,799	147	15.0	33,047	90.0	0.79	0.531
12.7	1/2	154	15.7	34,576	165	16.8	36,981	100.5	0.88	0.592
13.0		161	16.4	36,194	172	17.5	38,667	105.0	0.92	0.618
14.0		186	19.0	41,814	200	20.4	44,962	122.0	1.07	0.719
15.0		213	21.7	47,884	230	23.5	51,706	140.0	1.23	0.827
16.0	5/8	243	24.8	54,629	262	26.7	58,900	160.0	1.40	0.941
18.0		308	31.4	69,241	331	33.8	74,412	202.0	1.77	1.189
19.0	3/4	343	35.0	77,109	369	37.6	82,954	225.0	1.97	1.324
20.0		380	38.7	85,427	408	41.6	91,722	249.0	2.18	1.465
22.0	7/8	459	46.8	103,187	493	50.3	110,831	302.0	2.64	1.774
24.0		547	55.8	122,970	588	60.0	132,188	359.0	3.14	2.110
25.0		593	60.5	133,312	638	65.1	143,428	390.0	3.41	2.291
25.4	1	613	62.5	137,718	659	67.2	148,104	402.4	3.52	2.367
26.0		642	65.5	144,327	690	70.4	155,118	421.0	3.69	2.480
28.0		745	76.0	167,483	800	81.6	179,847	489.0	4.28	2.876
28.6	1-1/8	778	79.3	174,901	836	85.2	187,873	510.6	4.47	3.003
30.0		855	87.2	192,212	919	93.7	206,599	561.0	4.91	3.299
32.0	1-1/4	972	99.1	218,514	1,044	106.5	234,700	638.0	5.58	3.750
34.0		1,098	112.0	246,840	1,179	120.2	265,050	721.0	6.30	4.233
35.0	1-3/8	1,165	118.7	261,790	1,251	127.6	281,236	764.5	6.69	4.492
36.0		1,231	125.5	276,740	1,323	134.9	297,422	808.0	7.07	4.751
38.0	1-1/2	1,371	139.8	308,213	1,473	150.2	331,144	900.0	7.87	5.288
40.0		1,519	154.9	341,485	1,633	166.5	367,113	998.0	8.73	5.866

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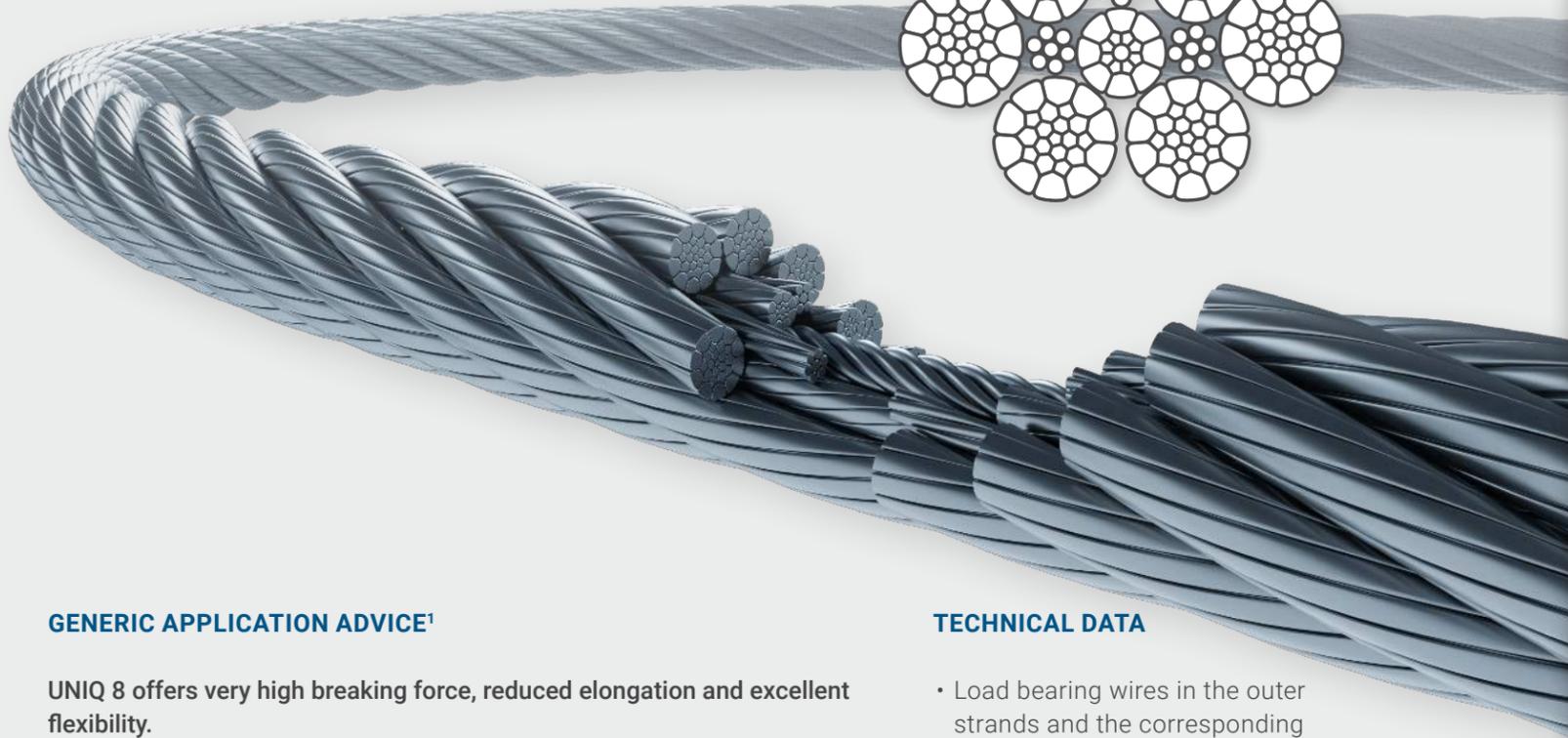
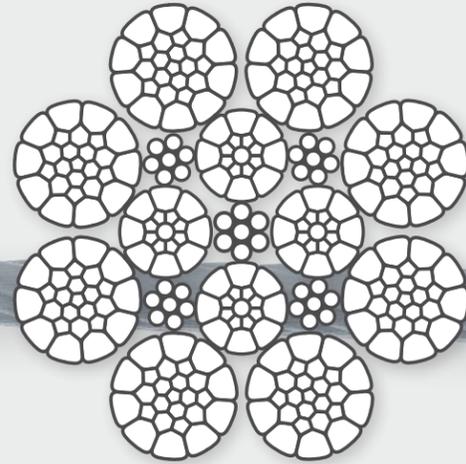


NON-ROTATION-RESISTANT ROPE

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UNIQ 8

Compacted non-rotation resistant 8-strand double parallel lay rope (PWRC).



GENERIC APPLICATION ADVICE¹

UNIQ 8 offers very high breaking force, reduced elongation and excellent flexibility.

- Suitable for applications that don't require rotation resistant ropes but high breaking forces e.g.:
 - Stationary ropes such as boom pendants
- Must not be used with a swivel! Rope ends are always secured to prevent rotation

MAIN PROPERTIES

- Non-rotation resistant rope
- Very high breaking force
- Good resistance to wear
- Very flexible rope construction
- Reduced elongation

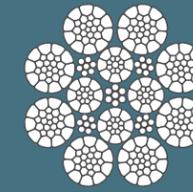
TECHNICAL DATA

- Load bearing wires in the outer strands and the corresponding
- RCN(RopeCategoryNumber) according to ISO4309 for cranes.
 - 152 wires: 8-12mm RCN 04
 - 208 wires: 13-28mm RCN 09
- Average fill factor :0.720
- Standard tolerance on diameter: +2% to+4% (other tolerances upon agreement)

PRODUCT TYPES AVAILABLE

- Bright is standard (galvanized upon request)
- Regular Lay exclusively

UNIQ 8



Compacted non-rotation resistant 8-strand double parallel lay rope (PWRC).



Nominal diameter		Minimum Breaking Load						Metallic area	Weight	
		1960 N/mm ²			2160 N/mm ²					
mm	in	kN	metric ton	lbs	kN	metric ton	lbs	mm ²	kg/m	ft/lb
8.0	5/16	58.0	5.91	13,040	64.0	6.53	14,390	36.0	0.31	0.21
8.5		66.0	6.73	14,840	72.0	7.34	16,190	40.7	0.35	0.24
9.0		73.0	7.44	16,410	81.0	8.26	18,210	45.6	0.39	0.26
9.5	3/8	81.3	8.29	18,280	90.3	9.20	20,290	50.8	0.43	0.29
10.0		91.0	9.28	20,460	100	10.2	22,480	56.3	0.48	0.32
11.0	7/16	110	11.2	24,750	121	12.3	27,200	68.1	0.58	0.39
12.0		131	13.4	29,460	144	14.7	32,370	81.1	0.69	0.46
12.7	1/2	146	14.9	32,820	161	16.4	36,190	91.0	0.77	0.52
13.0		154	15.7	34,570	169	17.2	37,990	95.1	0.81	0.55
14.0		178	18.2	40,100	196	20.0	44,060	110.3	0.94	0.63
14.3	9/16	186	19.0	41,830	204	20.9	45,970	115.1	0.98	0.66
15.0		205	20.9	46,030	225	22.9	50,580	126.7	1.08	0.73
16.0	5/8	233	23.8	52,370	256	26.1	57,550	144.1	1.23	0.83
17.0		263	26.8	59,120	289	29.5	64,970	162.7	1.39	0.93
18.0		295	30.1	66,280	324	33.0	72,840	182.4	1.56	1.05
19.0	3/4	329	33.5	73,850	361	36.8	81,160	203.2	1.73	1.16
20.0		364	37.1	81,830	400	40.8	89,920	225.2	1.92	1.29
21.0		401	40.9	90,220	441	45.0	99,140	248.3	2.12	1.42
22.0	7/8	440	44.9	99,010	484	49.4	108,810	272.5	2.32	1.56
23.0		480	48.9	107,910	528	53.8	118,700	297.0	2.54	1.71
24.0		524	53.4	117,830	576	58.7	129,490	324.3	2.76	1.86
25.0		569	58.0	127,860	625	63.7	140,500	351.9	3.00	2.02
25.4	1	587	59.9	131,980	645	65.8	145,040	363.2	3.10	2.08
26.0		615	62.7	138,290	676	68.9	151,970	380.6	3.24	2.18
27.0		663	67.6	149,130	729	74.3	163,880	410.4	3.50	2.35
28.0		713	72.8	160,390	784	79.9	176,250	441.4	3.76	2.53

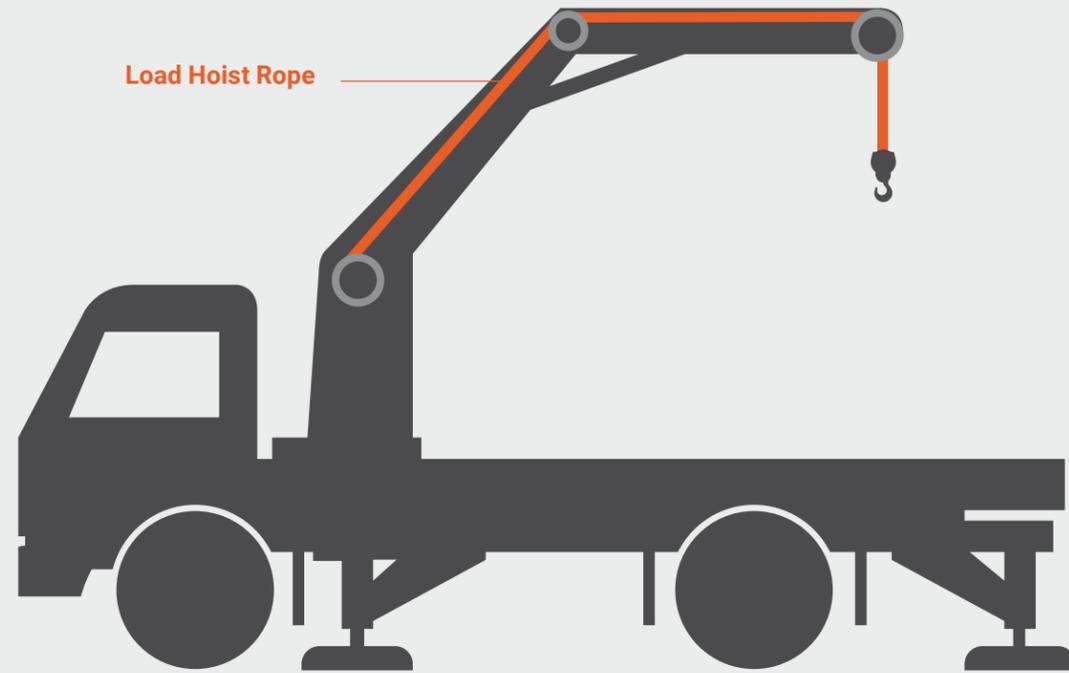


NON-ROTATION-RESISTANT ROPE

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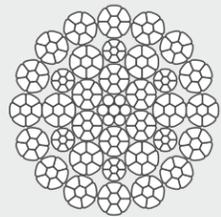
The cross section shown is just an example and may vary. Data sheet information is subject to modification without prior notice. The valid data is published on our website.

TRUCK CRANE

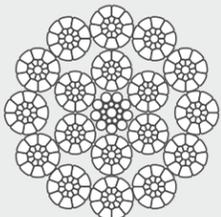


ROTATION RESISTANT WIRE ROPES

NON-ROTATION RESISTANT WIRE ROPES

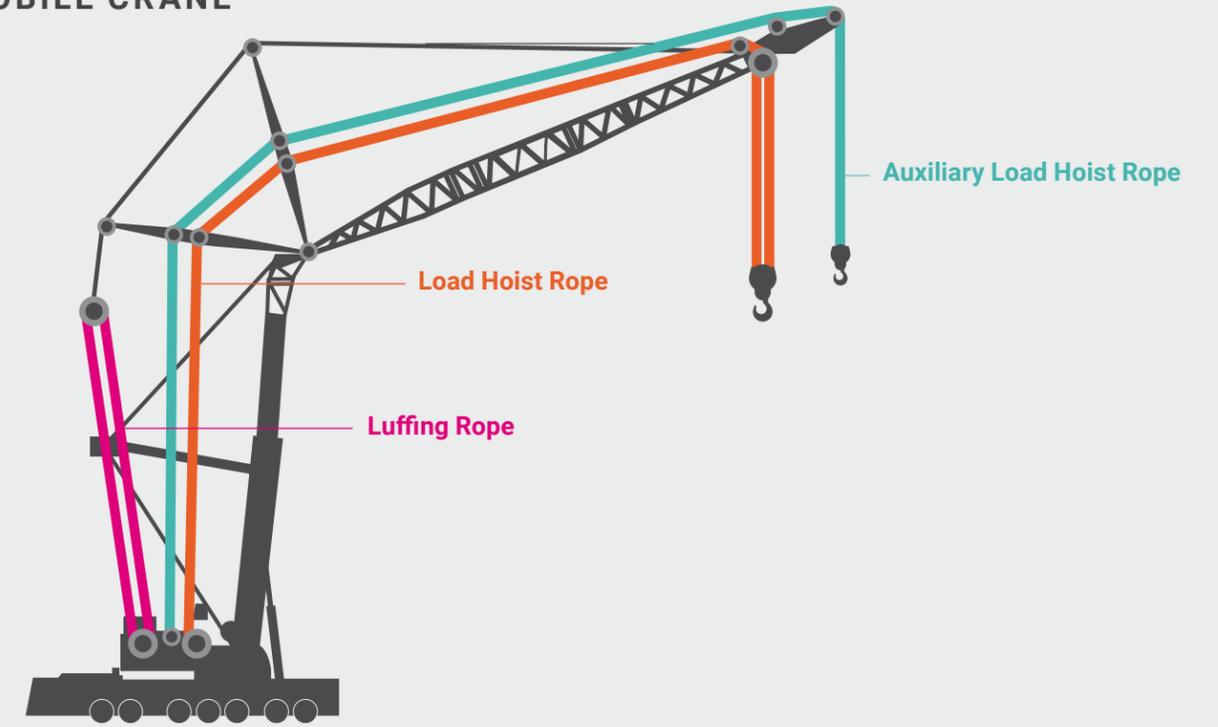


DFC 34 ● multifunctional, compacted rotation resistant rope with 16 outer strands.



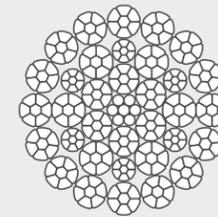
DFC 19 ● basic rotation resistant rope with compacted outer strands.

MOBILE CRANE

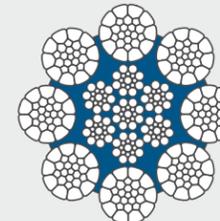


ROTATION RESISTANT WIRE ROPES

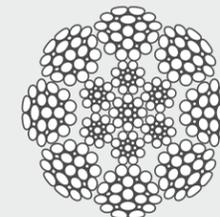
NON-ROTATION RESISTANT WIRE ROPES



DFC 34 ● multifunctional, compacted rotation resistant rope with 16 outer strands.

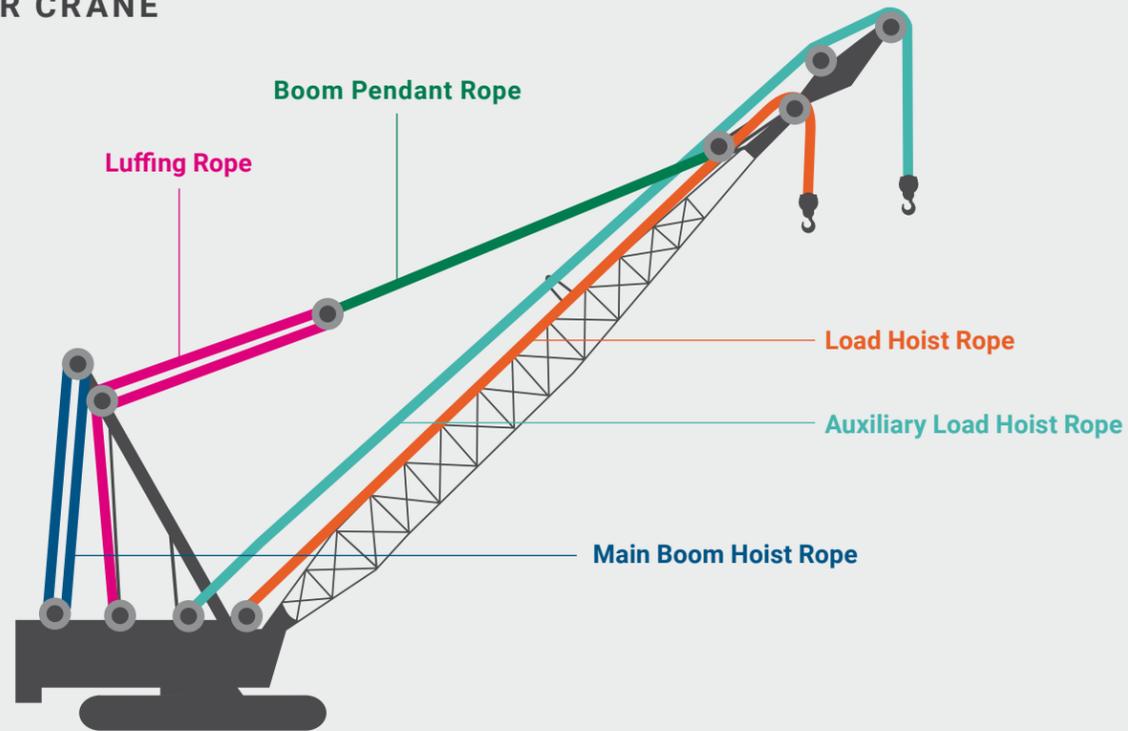


DFC 8P ● 8-strand non-rotation-resistant compacted rope with compacted outer strands and plastic impregnated core.

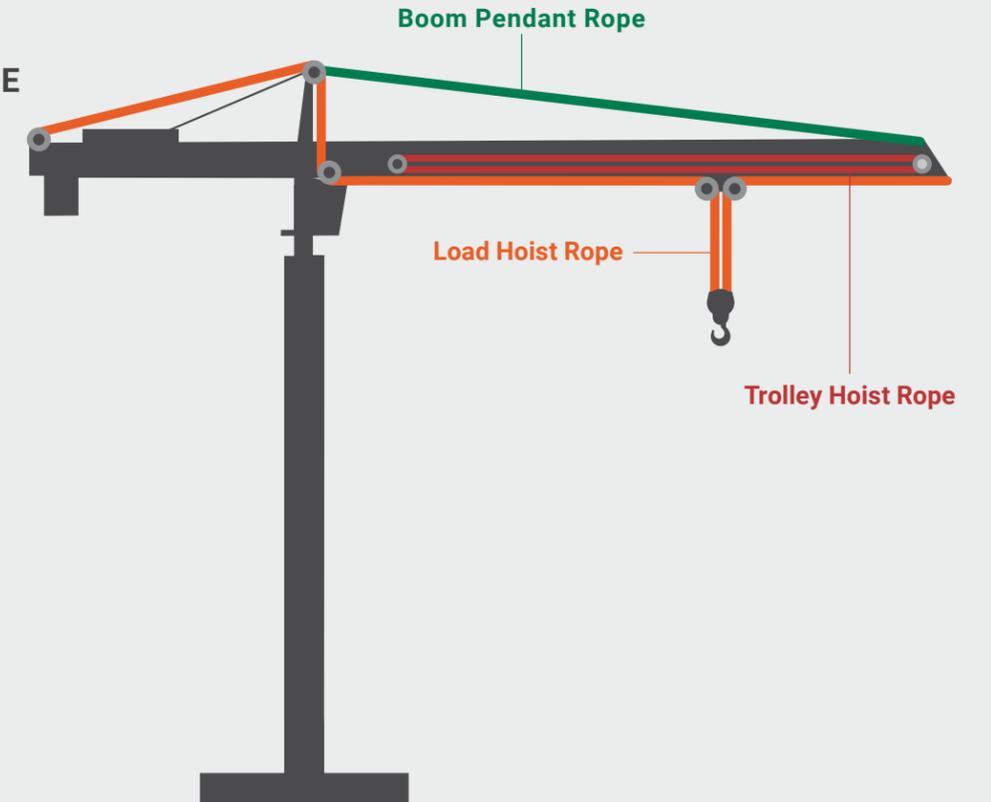


DFS 8 ● 8-strand non-rotation-resistant rope with swaged strands.

CRAWLER CRANE



TOWER CRANE

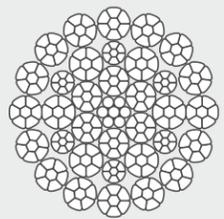


ROTATION RESISTANT WIRE ROPES

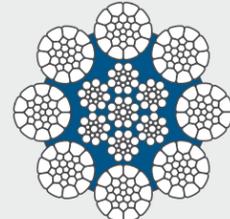
NON-ROTATION RESISTANT WIRE ROPES

ROTATION RESISTANT WIRE ROPES

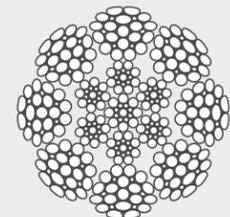
NON-ROTATION RESISTANT WIRE ROPES



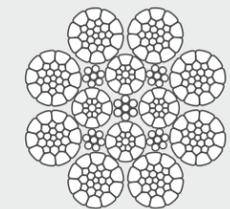
DFC 34 ● ●
multifunctional, compacted rotation resistant rope with 16 outer strands.



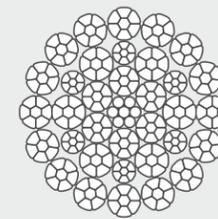
DFC 8P ● ● ●
8-strand non-rotation-resistant compacted rope with rope core covered with plastic.



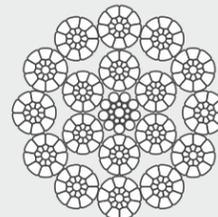
DFS 8 ● ●
8-strand non-rotation-resistant rope with swaged strands and rope core.



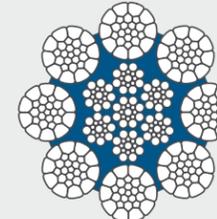
UNIQ 8 ● ●
very flexible non-rotation-resistant 8-strand rope in double parallel construction with rope core.



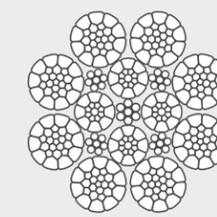
DFC 34 ●
multifunctional, compacted rotation resistant rope with 16 outer strands.



DFC 19 ●
basic rotation resistant rope with compacted outer strands.

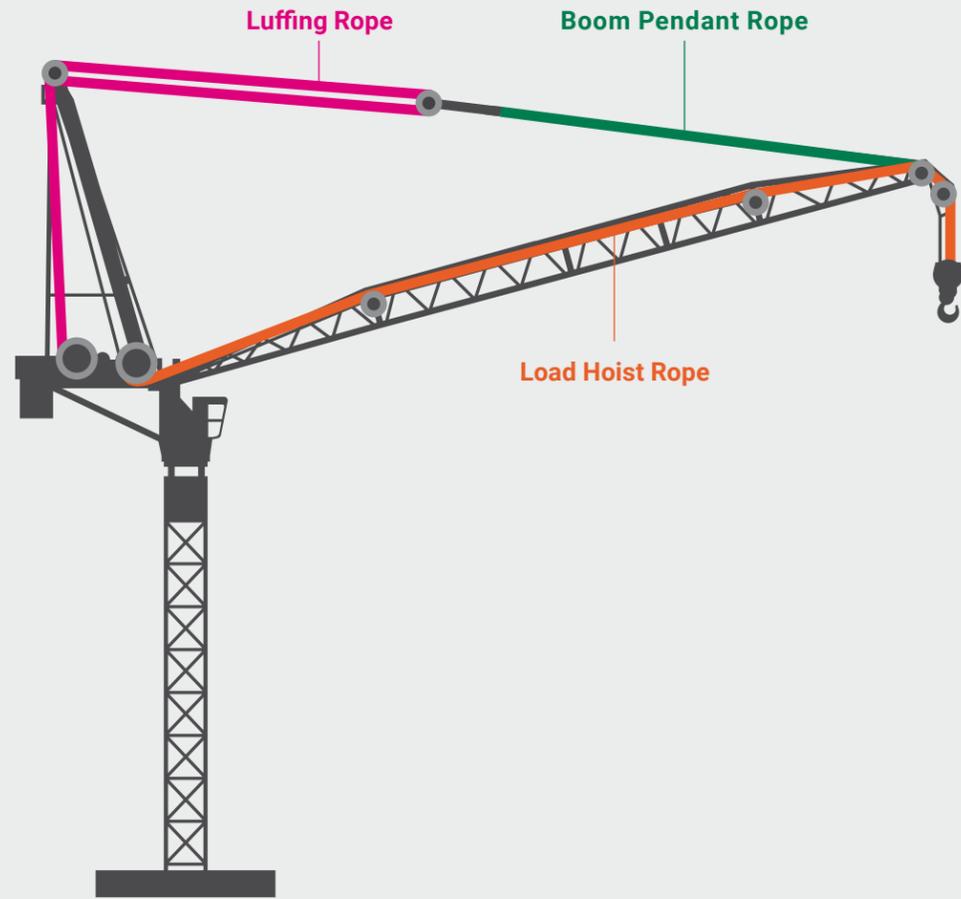


DFC 8P ● ●
8-strand non-rotation-resistant compacted rope with rope core covered with plastic.

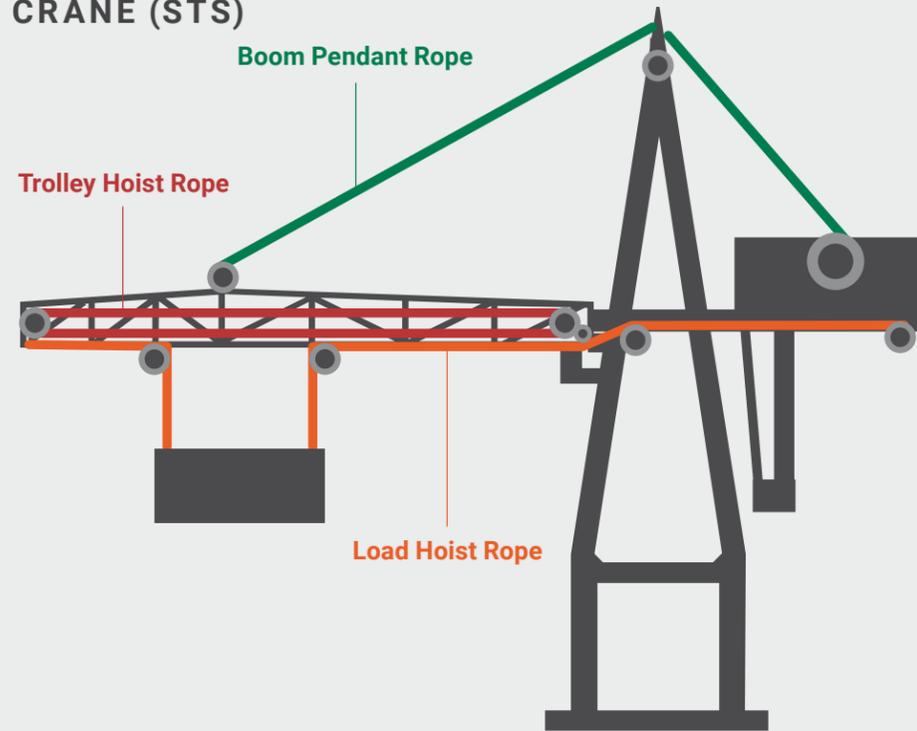


UNIQ 8 ● ●
very flexible non-rotation-resistant 8-strand rope in double parallel construction with rope core.

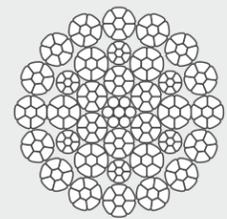
LUFFING CRANE



GANTRY CRANE (STS)

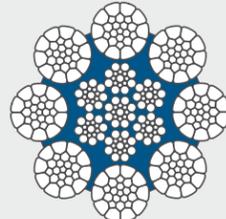


ROTATION RESISTANT WIRE ROPES

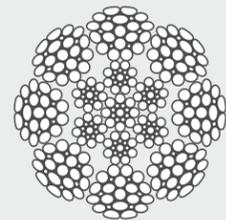


DFC 34 ●
multifunctional, compacted rotation resistant rope with 16 outer strands.

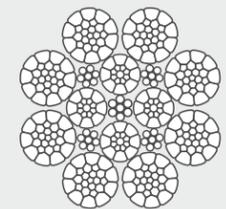
NON-ROTATION RESISTANT WIRE ROPES



DFC 8P ● ●
8-strand non-rotation-resistant compacted rope with rope core covered with plastic.



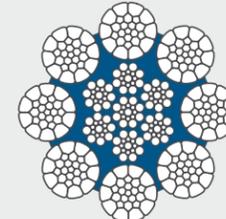
DFS 8 ●
8-strand non-rotation-resistant rope with swaged strands and rope core.



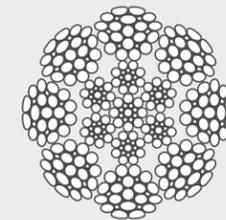
UNIQ 8 ●
very flexible non-rotation-resistant 8-strand rope in double parallel construction with rope core.

ROTATION RESISTANT WIRE ROPES

NON-ROTATION RESISTANT WIRE ROPES

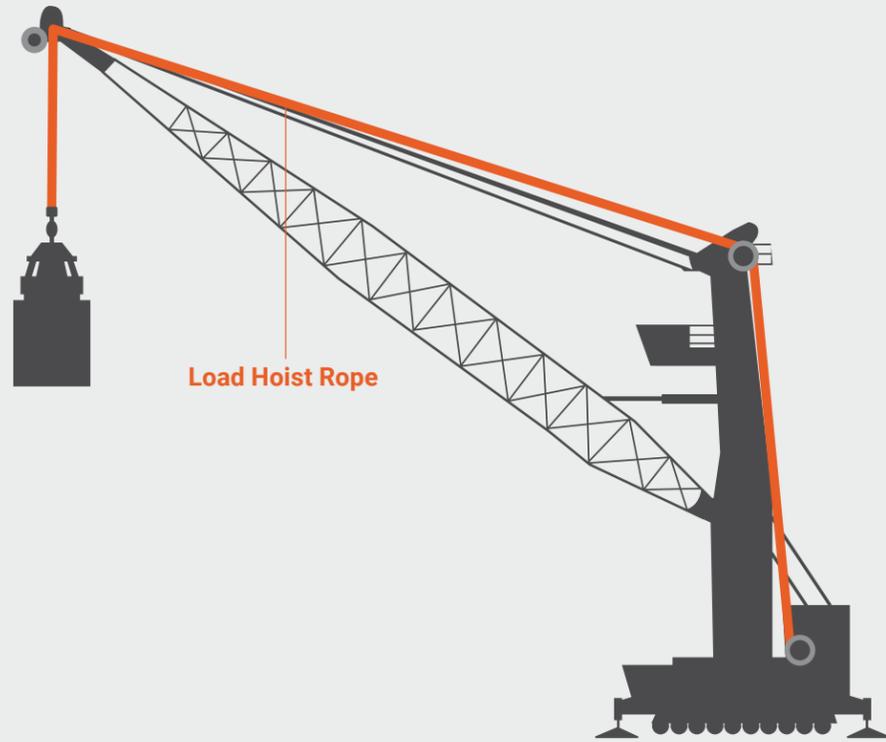


DFC 8P ● ● ●
8-strand non-rotation-resistant compacted rope with rope core covered with plastic.



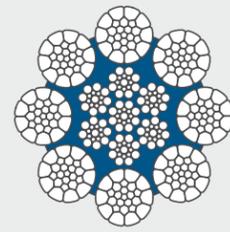
DFS 8 ●
8-strand non-rotation-resistant rope with swaged strands and rope core.

MOBILE HARBOR CRANE



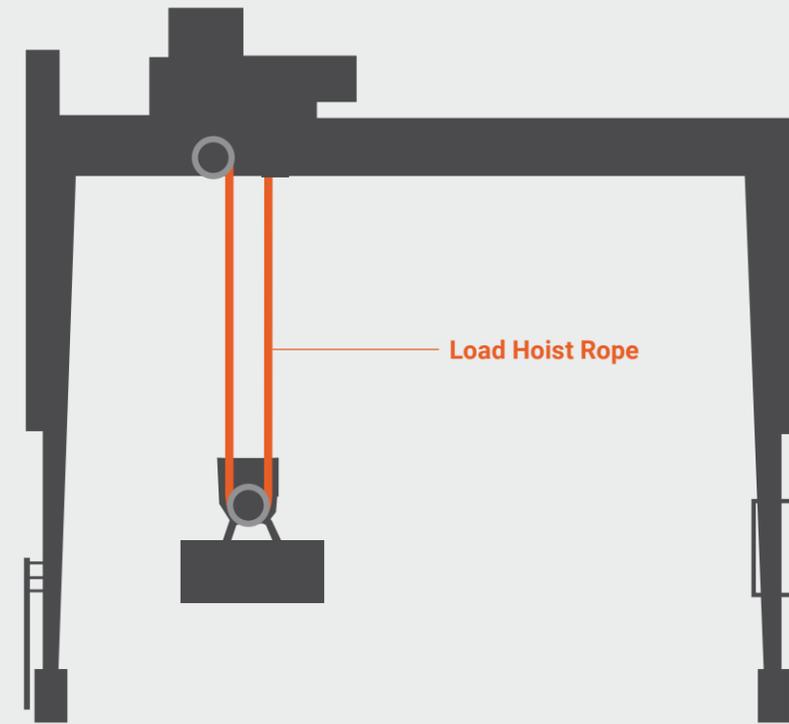
ROTATION RESISTANT WIRE ROPES

NON-ROTATION RESISTANT WIRE ROPES



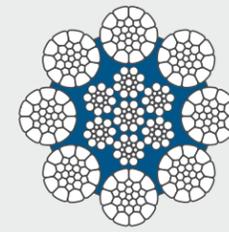
DFC 8P ●
 8-strand non-rotation resistant rope
 used in pairs (Right and Left Lays).

RTG CRANE



ROTATION RESISTANT WIRE ROPES

NON-ROTATION RESISTANT WIRE ROPES



DFC 8P ●
 8-strand non-rotation-resistant
 compacted rope with rope core
 covered with plastic.

DISCARD CRITERIA

A frequently used discard criteria is based on visible broken wires per the International Standard, ISO 4309. Please note that the RCN might change with the diameter of the rope. The RCN might also depend on the construction,

the crane type (classification) and the whether it is a single or multi-layer drum. For further information, please contact your Alps representative.

NON-ROTATION RESISTANT WIRE ROPES

Alps Specialty Wire Rope	Number of outer strand and total number of load-bearing wires in the outer layers of strands in the rope (n)	Rope Category Number (RCN)	Number of visible broken outer wires ^a (ISO 4309)					
			Sections of rope working in steel sheaves and/or spooling on a single-layer drum (wire breaks randomly distributed)				Sections of rope spooling on a multi-layer drum ^b	
			Classed M1 to M4 or class unknown ^c				All classes	
			Ordinary Lay		Lang Lay		Ordinary Lay	Lang Lay
			Over a length of 6d ^d	Over a length of 30d ^d	Over a length of 6d ^d	Over a length of 30d ^d	Over a length of 6d ^d	Over a length of 30d ^d
DFC 8P	152	04	5	10	2	5	10	20
DFC 8	208	09	9	18	4	9	18	36
DFS 8	248	11	10	21	5	10	20	42
UNIQ 8	288	13	12	24	6	12	24	48

ROTATION-RESISTANT WIRE ROPES

Alps Specialty Wire Rope	Number of outer strand and total number of load-bearing wires in the outer layers of strands in the rope (n)	Rope Category Number (RCN)	Number of visible broken outer wires ^a (ISO 4309)			
			Sections of rope working in steel sheaves and/or spooling on a single-layer drum (wire breaks randomly distributed)		Sections of rope spooling on a multi-layer drum ^b	
			Over a length of 6d ^d	Over a length of 30d ^d	Over a length of 6d ^d	Over a length of 30d ^d
DFC 19	84	23-1	2	4	4	8
	228	28	5	10	10	19
DFC 34	112	23-2	3	5	5	10

a) A broken wire has two ends
 b) The values apply to deterioration that occurs at the cross-over zones and interference between wraps due to fleet angle effect (and not to those sections of rope that only work in sheaves and do not spool on the drum).
 c) Twice the number of broken wires listed may be applied to ropes on mechanisms whose classification is known to be M5 to M8.
 d) d = nominal diameter of the rope

SAFETY INFORMATION

Wire rope must be properly transported, stored, installed, and maintained. Always inspect wire rope and rope terminations for wear, damage, or abuse before using them. Never overload or shock load a wire rope.

WARNING 

WIRE ROPE WILL FAIL IF WORN OUT, SHOCK LOADED, OVERLOADED, MISUSED, DAMAGED, IMPROPERLY MAINTAINED, OR ABUSED.

Failure of wire rope may cause serious injury or death!

Protect yourself and others:

- Always inspect wire rope for wear, damage, or abuse before use
- Never use wire rope that is worn-out, damaged, or abused
- Never overload or shock load a wire rope
- Inform yourself: Read and understand the guidance on product safety given in this catalog or "Alps Handling Brochure."
- Refer to applicable regulations, standards, and codes concerning inspection, examination, and rope removal criteria

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