

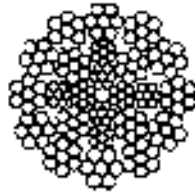
HOISTING ROPE

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I) ROPE TYPES USED



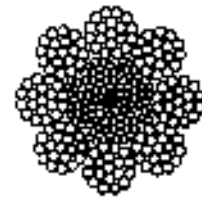
17 x 7 AGM



NRHD 24 x 7
NRHD 24 x 17



6 x 21 FC dyform
6 x 31 FC dyform



8 x 25 F - CWP

Note! The used rope types are subject to change. If the rope information is critical always check the currently used rope type case by case.

The actual rope diameter is between the tolerance of the nominal diameter as follow:

Nominal diameter (mm)	Tolerance %	
	Rope with strands exclusively of wire	Rope with fiber strand cores
6 <...< 7	+5 -1	+7 -1
> 8	+4 -1	+6 -1

II) ROPES CALCULATED BY FEM

FEM recommendations:

Hoist FEM duty group	1Bm	1Am	2m	3m	4m
Min. safety factor	3.55	4	4.5	5.6	7.1

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III) ROPE TYPE AND SAFETY FACTOR (1 Am)

Hoist	Drum	Rope ø	Rope construction	Strength of wire	Min. breaking load	Max. load / rope	safety factor
		mm		N/mm ²	kg	kg	
SM10111 4	A	6	AGM 17x7	2160	2966	500	5.93
SM10211 4							
SM10421 4							
SM10411 4							
SM20111 4	A, C	7	AGM 17x7	2160	4118	1000	4.12
SM20211 4							
SM20411 4							
SM30111 4	A, C	9	NRHD 24x7	2160	6983	1600	4.36
SM30211 4	A, C D, E	9	COMPACT 9x17	2160	7289	1600	4.46
SM30411 4							
SM30611 4							
SM30421 4	A, C	7	AGM 17x7	2160	4118	800	5.15
SM30211 4	Z	6	AGM 17x7	2160	2966	500	5.93
SM40111 4	B, D	13	NRHD 24x7	2160	14780	3200	4.61
SM40211 4SM4041 14	B, D E, F, G	13	Compact 9x17	2160	15495	3200	4.67
SM40611 4							
SM40421 4	B, D	9	COMPACT 9x17	2160	7289	1600	4.46

SM40211 4	Y	9	NRHD 24x7	2160	6983	1600	4.36
SM40211 4	V	7	AGM 17x7	2160	4118	1000	4.12
SM50111 4 SM50211 4	D, E	16	NRHD 24x17	2160	22100	4000	5.63
SM50411 4 SM50611 4	D, E F, G, H	16	6x31 FC DYFORM	2160	26198	4000	6.55
SM50421 4	D, E	13	Compact 9x17	2160	15495	2000	7.74
SM50211 4	W	13	NRHD 24x7	2160	14780	3200	4.61
SM50211 4	U	9	NRHD 24x7	2160	6983	1600	4.36
SM50211 4	T	7	AGM 17x7	2160	4118	1000	4.12
SM50421 4 SM50821 4 SM51221 4	E, G, J	10	8x19 SR DYFORM	2160	11621	2000	5.81
SM51621 4	F, H, K	10	8x19 SR DYFORM	2160	11621	2000	5.81

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III) ROPE TYPE AND SAFETY FACTOR (1 Am)

Hoist	Drum	Rope	Rope construction	Strength of wire	Min. breaking load	Max. load / rope	safety factor
		mm		N/mm ²	kg	kg	
SM60211	F, G, H	20	NRHD	2160	25994	6300	4.12

4			24x17				
SM60411 4	F,G,H	20	6 x 36 FC	1960	32416	6300	5.14
SM60421 4 SM60821 4 SM61221 4	E-N	16	6x31 FC DYFORM	1960	26198	4000	6.55
SM61621 3	E-N	14	8x25F-CWP	2160	24231	5000	4.85 (1 Bm)

Caution regarding hoist ropes:

A damaged rope may cause other components such as guide ring and/or sheaves to become damaged. A damaged sheave or rope guide may destroy or even break the new wire rope if damaged sheave or related item is not replaced. Wire rope and all related items shall be checked for excessive wear or damage. All appropriate items shall be greased on regular basis.