



SPECIAL WIRE ROPES THE PREMIUM LINE



CASAR®

A WireCo® WorldGroup Brand

INTRODUCTION



Quality Products, Outstanding Service and Comprehensive Technical Support – It's what today's industries expect from their supplier partners. And that's what WireCo WorldGroup is all about.

WireCo WorldGroup is the global market, manufacturing and technical leader in wire and synthetic rope manufacturing, providing a consultative approach to offer customers a single, reliable source for performance matched solutions to fit their specific application and budget needs. But it doesn't stop there. WireCo WorldGroup offers clients the education and expertise needed to enhance product performance and value.

With our comprehensive range of trusted, global brands we deliver unmatched technical expertise and innovation as well as unparalleled quality assurance meeting and exceeding international quality certifications.

WireCo WorldGroup is on the ground everywhere you are - with manufacturing and distribution facilities all around the world and more than 4,500 global employees supporting these efforts. Our customers enjoy global availability for a consistent, responsive supply no matter where and when they need it.



Mission critical applications call for the best rope. The CASAR products engineered in Germany deliver according to your specific needs. Challenge us with your requirements and our specialists will fulfill.



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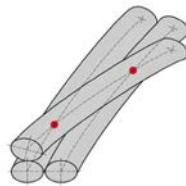
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GENERAL DEFINITIONS

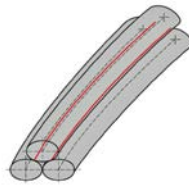
PARALLEL LAY ROPES



In a non parallel lay rope all wires and strands have different lay lengths. The high non-parallel stress concentration at the crossover point leads to an early internal failure. In a parallel lay rope all wires and strands have the same lay length. The linear contact leads to an optimal stress distribution. Furthermore the compacted parallel design leads to a higher fill factor and breaking strength.

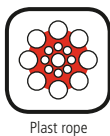


cross lay (non-parallel)
stress concentration



parallel lay
stress distribution

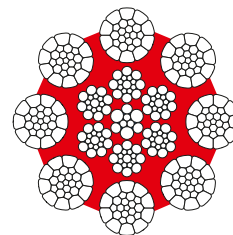
ROPES WITH PLASTIC COVERED STEEL CORE SINCE 1972



In a CASAR–plast rope, the proportion of plastic to the steel components is thoroughly harmonized in order to fulfill the aspired rope geometry. A plastic coating with a very constant thickness and quality is extruded around the steel core. A thermal aftertreatment just before the closing of the rope ensures that the outer strands are deeply implanted in the plastic jacket, thus forming plastic edges which separate the strands.

The benefit of an internal plastic layer is diversified.

- Prevents internal wire breaks
- Prevents metal-to-metal contact
- Stabilizes the rope structure during installation and operation
- Seals in lubricant. Reduces the maintenance effort
- Keeps out water and abrasive elements
- Absorbs dynamic energy
- Resistant to many chemical substances



SWIVEL USE



Rotation resistant ropes can be used with a swivel.
All other rope constructions may not be used with a swivel!

ISO 21669 – General guidance on swivel use (rotation-resistance)

- Less than or equal to 1 turn/1000d lifting a load equivalent to 20%MBF, a swivel can be used
- Greater than 1 turn but no greater than 4 turns/1000d – a swivel may be used subject to the recommendations of the rope manufacturer and/or approval of a competent person
- Greater than 4 turns/1000d – a swivel should not be used

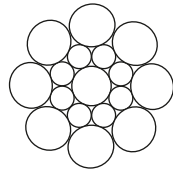


ROPES WITH COMPACTED STRANDS SINCE 1978

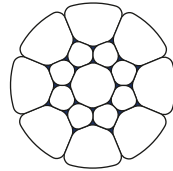


Ropes made of compacted strands have a higher breaking load, a greater flexibility and better rope-to-rope contact conditions than comparable ropes made out of conventional strands. Because of the thicker outer wires and the smaller exposed area they are more resistant to abrasion and corrosion. The formation of negative impressions is significantly impaired. The rope life time on multiple layer drums is optimized.

In order to produce a compacted strand, a conventional strand made of round wires is drawn through a compacting tool. During this procedure, the wires are plastically deformed, the strand diameter is reduced and the surface is made smooth. Resulting the contact conditions between the individual wires and the strand-to-strand contacts are improved.



conventional strand



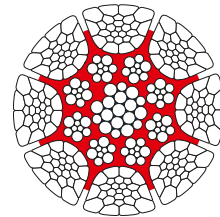
compacted strand

SWAGED ROPES SINCE 2003



Swaged ropes are designed for heavy duty applications such as multiple layers spooling or scrap metal charging cranes:

- Extremely high pressure resistance
- Reduced diameter reduction under tension
- Strongly improved crushing resistance in crossovers
- Extremely smooth surface for less indentations or pressure
- High breaking load



LUBRICATED



As a standard feature, CASAR special wire ropes receive intensive lubrication during the production process. This in-process treatment will provide the rope with ample protection against corrosion and it is meant to reduce the friction between the elements which make up the rope as well as the friction between rope and sheaves or drums. This lubrication, however, only lasts for a limited time and should be reapplied periodically.

PRODUCTION TOLERANCE

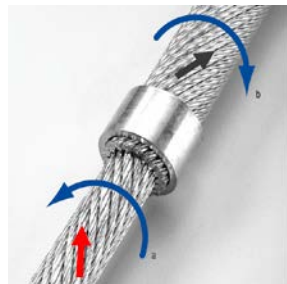


CASAR special wire ropes are produced within a tolerance range between +0% and +4%. Generally the standard production tolerance is at the upper limit of the tolerance range, between +2% and +4%. For this reason CASAR special wire ropes fulfill the requirements of famous drum manufacturers. Of course, special tolerances or limited tolerance ranges can also be covered.

GENERAL DEFINITIONS

ROTATION-RESISTANT ROPES SINCE 1949

In a conventional rope, an external load creates a moment which tries to untwist the rope. A rotation resistant steel wire rope has a steel core which is an independent rope, closed in the opposite direction to the outer strands. Under load, the core tries to twist the rope in one direction, the outer strands try to twist it in the opposite direction. The geometrical design of a rotation resistant wire rope is such that the moments in the core and the outer strands compensate each other over a wide load spectrum, so that even with great lifting heights practically no rope twist occurs.



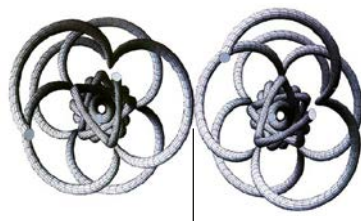
MULTIPLE LAYER SPOOLING

A drum coiling a rope in more than one layer is a multiple layer system with new demands to a wire rope.

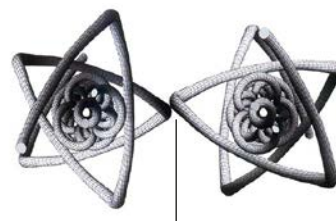
- Low diameter reduction under tension
- Crushing resistance in crossovers and layer crossovers
- Extremely smooth surface for less indentations or pressure in crossovers

The following rope properties are required for a long service life:

- Lang's lay to prevent indentations

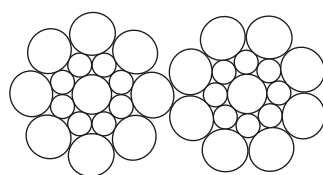


Lang's lay ropes: no indentations of outer wires

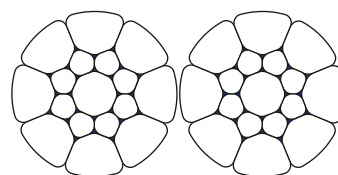


regular lay ropes: indentations of outer wires

- Compacted outer strands to prevent indentations



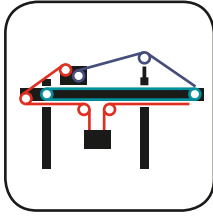
conventional strand



compacted strand

ROPE SELECTION BY APPLICATION

CONTAINER CRANE



HOIST ROPE

- CASAR **TURBOPLAST**
- CASAR **STRATOPLAST**
- CASAR **PARAPLAST**
- CASAR **SUPERPLAST8**

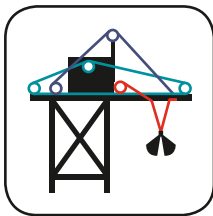
BOOM HOIST

- CASAR **TURBOPLAST**
- CASAR **STRATOPLAST**
- CASAR **PARAPLAST**

TROLLEY / CATENARY

- CASAR **STRATOPLAST**
- CASAR **TURBOPLAST**

SHIP UNLOADER



HOIST ROPE

- CASAR **TURBOPLAST**
- CASAR **STRATOPLAST**

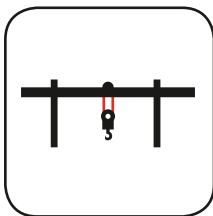
TROLLEY

- CASAR **STRATOPLAST**
- CASAR **TURBOPLAST**

BOOM HOIST

- CASAR **TURBOPLAST**
- CASAR **STRATOPLAST**

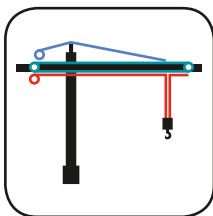
RUBBER TIRED GANTRY / RAIL MOUNTED GANTRY



HOIST ROPE

- CASAR **TURBOPLAST**
- CASAR **PARAPLAST**

TOWER CRANE



HOIST ROPE

- CASAR **EUROLIFT**
- CASAR **STARLIFT**
- CASAR **STARLIFT PRO**
- CASAR **STARLIFT XTRA**
- CASAR **STARLIFT PLUS**

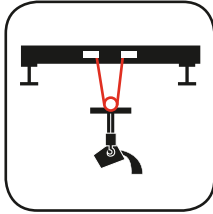
BOOM PENDANT

- CASAR **TURBOLIFT**
- CASAR **SUPERLIFT**

TROLLEY

- CASAR **STRATOPLAST**
- CASAR **ALPHALIFT**

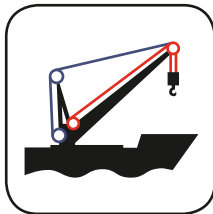
STEELWORKS LADLE



HOIST ROPE

- CASAR **TURBOPLAST**
- CASAR **STRATOPLAST**
- CASAR **TECHNOLIFT**
- CASAR **TECHNOLIFT PLUS**

DECK CRANE



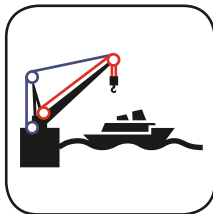
HOIST ROPE

- CASAR **POWERPLAST**
- CASAR **STARFIT**
- CASAR **QUADROLIFT**

BOOM HOIST

- CASAR **TURBOPLAST**
- CASAR **PARAFIT**

DOCKSIDE CRANE



HOIST ROPE

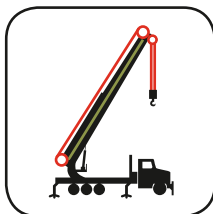
- CASAR **TURBOPLAST**
- CASAR **STRATOPLAST**
- CASAR **SUPERPLAST8**
- CASAR **SUPERPLAST10**
- CASAR **EUROLIFT**
- CASAR **STARLIFT**

BOOM HOIST

- CASAR **TURBOPLAST**
- CASAR **PARAPLAST**

Please note: The use of rotation resistant ropes depends on the lifting height and the reeving system.
Please contact your WireCo rope specialist for further advice.

TELESCOPIC MOBILE CRANE



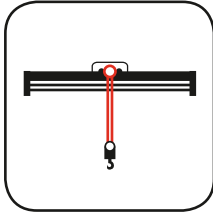
HOIST ROPE

- CASAR **EUROLIFT**
- CASAR **STARLIFT**
- CASAR **STARLIFT PLUS**

RETRACTION ROPE

- CASAR **BETALIFT**
- CASAR **TURBOLIFT**

OVERHEAD CRANE

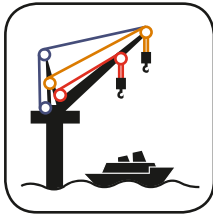


HOIST ROPE

- CASAR **TURBOPLAST**
- CASAR **STRATOPLAST**
- CASAR **PARAPLAST**
- CASAR **SUPERPLAST8**
- CASAR **SUPERPLAST10 MIX**
- CASAR **SUPERPLAST10**
- CASAR **EUROLIFT**
- CASAR **STARLIFT**
- CASAR **QUADROLIFT**

Please note: The use of rotation resistant ropes depends on the lifting height and the reeving system.
Please contact your WireCo rope specialist for further advice.

OFFSHORE PEDESTAL CRANE



HOIST ROPE

- CASAR **POWERPLAST**
- CASAR **EUROLIFT**

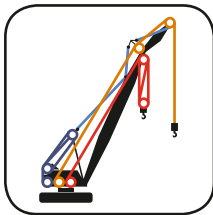
AUXILIARY HOIST

- CASAR **POWERPLAST**
- CASAR **EUROLIFT**

BOOM HOIST

- CASAR **TURBOPLAST**
- CASAR **PARAPLAST**
- CASAR **SUPERPLAST8**
- CASAR **PARAFIT**

LATTICE BOOM CRAWLER CRANE



HOIST ROPE

- CASAR **EUROLIFT**
- CASAR **STARLIFT**
- CASAR **STARLIFT PRO**
- CASAR **STARLIFT XTRA**
- CASAR **STARLIFT PLUS**

AUXILIARY HOIST

- CASAR **EUROLIFT**

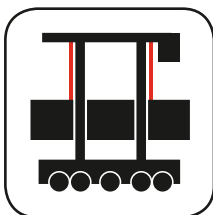
BOOM PENDANT

- CASAR **TURBOLIFT**
- CASAR **SUPERLIFT**

BOOM HOIST

- CASAR **PARAPLAST**
- CASAR **SUPERPLAST8**
- CASAR **PARAFIT**

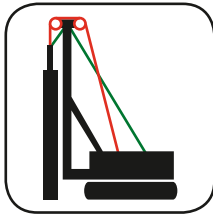
STRADDLE CARRIERS



HOIST ROPE

- CASAR **TURBOPLAST**
- CASAR **PARAPLAST**

DRILLING / PILING



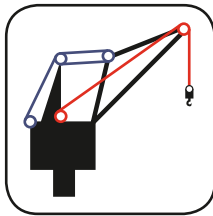
HOIST ROPE

- CASAR **POWERPLAST**
- CASAR **EUROLIFT**

FEED ROPE

- CASAR **TURBOPLAST**

HARBOR MOBILE CRANE



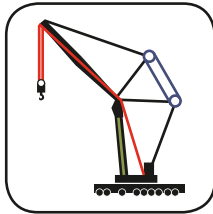
HOIST ROPE

- CASAR **TURBOPLAST**

BOOM HOIST

- CASAR **TURBOPLAST**
- CASAR **PARAPLAST**

LATTICE BOOM MOBILE CRANE



HOIST ROPE

- CASAR **EUROLIFT**
- CASAR **STARLIFT**
- CASAR **STARLIFT PRO**
- CASAR **STARLIFT XTRA**
- CASAR **STARLIFT PLUS**

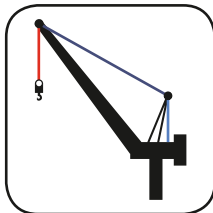
BOOM HOIST

- CASAR **PARAPLAST**
- CASAR **SUPERPLAST8**
- CASAR **PARAFIT**

RETRACTION ROPE

- CASAR **TURBOLIFT**
- CASAR **BETALIFT**
- CASAR **SUPERLIFT**

LUFFING-JIB TOWER CRANE



HOIST ROPE

- CASAR **EUROLIFT**
- CASAR **STARLIFT**
- CASAR **STARLIFT PRO**
- CASAR **STARLIFT XTRA**
- CASAR **STARLIFT PLUS**

BOOM HOIST

- CASAR **PARAPLAST**
- CASAR **SUPERPLAST8**

BOOM PENDANT

- CASAR **TURBOLIFT**

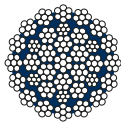
ROPE PROPERTIES

Rope type	STARLIFT	EUROLIFT	POWERPLAST	STARLIFT PLUS	STARFIT	STARLIFT PRO	STARLIFT XTRA	QUADROLIFT	STRATOPLAST	ALPHALIFT	TECHNOLIFT	DUROPLAST	TURBOPLAST	SUPERPLAST8	SUPERPLAST10 MIX	SUPERPLAST10	TECHNOLIFT PLUS	ULTRAFT	PARAPLAST	TURBOLIFT	BETALIFT	SUPERLIFT	PARAFIT
	Rotation-resistant							Semi-rotation-resistant	Non-rotation-resistant														
Rope Properties																							
Swaged ropes					X													X					X
Compacted strands		X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X
With internal plastic jacket			X						X			X	X	X	X	X		X	X				X
Parallel design										X					X	X			X	X	X	X	X
Minimum breaking load																							
Reduction of negative impressions and abrasion		+	+	+	++	+	+	+				+	+	++	++	++	+	++	+		++	+	++
Modulus of elasticity [*10 ⁵ N/mm ²]	1,10	0,95	0,94	*	*	*	*	1,10	1,06	1,18	1,00	1,02	1,02	1,07	*	*	*	*	*	1,24	*	1,07	*
Torque factor [k] M = k*F*L	tf	tf	tf	tf	tf	tf	tf	0,042	0,096	0,075	*	0,092	0,092	0,080	*	*	*	*	*	0,076	0,083	0,083	*
Spooling																							
Suitable for single layer spooling	Lang's Lay	X	X	X	X		X	X	X	X		X	X	X	X	X	X		X	X	X	X	
	Ordinary Lay	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Suitable for multiple layer spooling up to 4 layers	Lang's Lay	X	X	X	X		X	X	X	X		X	X	X	X	X	X		X	X	X	X	
	Ordinary Lay					X		X										X					X
Suitable for multiple layer spooling above 4 layers	Lang's Lay		X	X	X		X	X	X			X	X	X	X	X	X		X				
	Ordinary Lay					X		X										X					X
Right hand lay drum requires left hand lay		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Left hand lay drum requires right hand lay		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Application																							
Can be used with a swivel		X	X	X	X	X	X	X															
Suitable for single reeving and unguided load		X	X	X	X	X	X	X															
Suitable for / 2 reevings				X					X			X	X	X	X	X			X				X
Environment																							
Operation temperature with standard lubrication:	-50–80 °C	X	X		X		X	X				X	X	X	X	X		X	X				
	-50–115 °C			X		X																	X
	-50–140 °C							X		X	X						X			X	X	X	
Sea water resistant wires		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Special lubrication for sea water		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

* on request // TF = torque free

ROPE SELECTION GUIDE

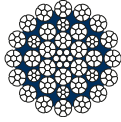
ROTATION-RESISTANT



CASAR STARLIFT

16

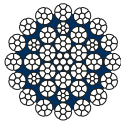
A very flexible rope with a core in a special design avoiding crossovers between the strands of core and preventing internal rope destruction. Hoist rope for mobile cranes, electrical hoists and other applications, where rotation resistant ropes are required.



CASAR STARLIFT PLUS

18

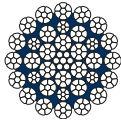
A very flexible rope with a core in a special design avoiding crossover between the strands of core and preventing internal rope destruction. Hoist rope for mobile cranes, electrical hoists and other applications, where rotation resistant ropes are required.



CASAR STARLIFT PRO

20

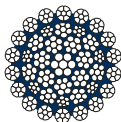
Very good resistance against drum crushing and abrasion on drums. Hoist rope for tower cranes, mobile cranes or crawler cranes: unguided load on a single fall.



CASAR STARLIFT XTRA

22

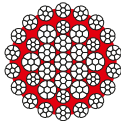
CASAR Starlift Xtra is the strongest of all ropes in the CASAR high performance rotation-resistant product line. Very good resistance against drum crushing and abrasion on drums. Hoist rope for tower cranes, mobile cranes or crawler cranes: unguided load on a single fall.



CASAR EUROLIFT

24

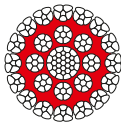
Has a core in a special design avoiding crossover between the strands of core and preventing internal rope destruction. Hoist rope for mobile cranes, electrical hoists and other applications, where rotation resistant ropes are required.



CASAR POWERPLAST

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Has a high breaking load and a good resistance against drum crushing. Hoist rope for deck cranes and offshore cranes, pull-in-riser and other applications in the marine environment, where rotation resistant ropes are required.

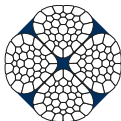


CASAR STARFIT

28

Has a high breaking load and a good resistance against drum crushing. Hoist rope for deck cranes and offshore cranes, pull-in-riser and other applications in the marine environment, where rotation resistant ropes are required.

SEMI-ROTATION

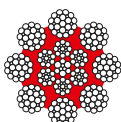


CASAR QUADROLIFT

32

Has a high breaking load and is very stable under forcible twist. Semi-rotation-resistant hoist rope for deck cranes and for electrical hoist with twin hoist systems and greater lifting height, combined hoist and erection rope for self erecting cranes, where rotation resistant ropes are required.

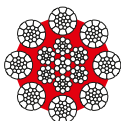
NON-ROTATION-RESISTANT



CASAR STRATOPLAST

36

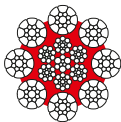
Very flexible Filler construction. Rope for a huge number of different applications, can be used as hoisting rope in multiple part reeving for smaller lifting heights as well as for twin hoist systems with left and right hand lay ropes for greater lifting heights.



CASAR TURBOPLAST

38

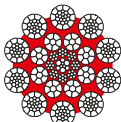
High breaking load and good resistance against crushing. Hoisting rope in multiple part reeving for smaller lifting heights as well as for twin hoist systems with left and right hand lay ropes for greater lifting heights.



CASAR DUROPLAST

40

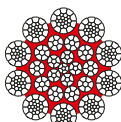
Modified Turboplast construction with a high breaking load and a very good resistance against abrasion. Various kinds of different applications whenever a high abrasion resistance is required, where rotation resistant ropes are not required.



CASAR SUPERPLAST8

42

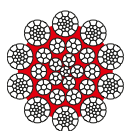
Very high breaking load and good resistance against drum crushing. Hoisting rope in multiple part reeving for smaller lifting heights as well as for twin hoist systems with left and right hand lay ropes for greater lifting heights.



CASAR SUPERPLAST10 MIX

44

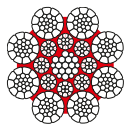
Very high bending fatigue performance and high minimum breaking load. Mainly overhead and industrial cranes, where rotation resistant ropes are not required.



CASAR SUPERPLAST10

High bending fatigue performance and very high minimum breaking load.
Mainly overhead and industrial cranes, where rotation resistant ropes are not required.

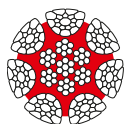
46



CASAR PARAPLAST

Very fatigue resistant and very high minimum breaking load. Hoist rope for electrical hoists and lifting devices with multiple part reeving, whereas a rotation resistant rope is not needed due to great lifting heights, low number of falls or guided loads.

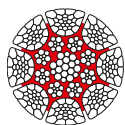
48



CASAR ULTRAFIT

Highest abrasion resistance. Especially suitable for multilayer spooling.
Boom hoist rope for mobile cranes and grabs, hoist rope for applications, where rotation resistant ropes are not required.

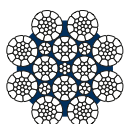
50



CASAR PARAFIT

Boom hoist rope for all kinds of crawler cranes and mobile cranes especially suited for multilayer spooling.

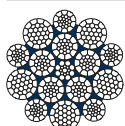
52



CASAR TURBOLIFT

Flexible construction with an extremely high breaking load. Pendant ropes for tower cranes, mobile cranes, grabs, suspended structures, when high breaking loads are required.

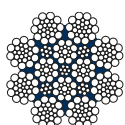
54



CASAR SUPERLIFT

Very flexible construction with an extremely high breaking load. Pendant ropes for tower cranes, mobile cranes, grabs, suspended structures, when highest breaking loads are required.

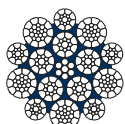
56



CASAR ALPHALIFT

Very flexible construction with a high breaking load.
Hoist rope for electrical hoist and other lifting devices, where rotation resistant ropes are not required.

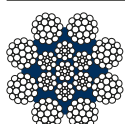
58



CASAR BETALIFT

Very flexible construction with an extremely high breaking load.
Hoist rope for electrical hoist and other lifting devices, where rotation resistant ropes are not required.

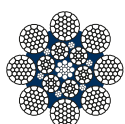
60



CASAR TECHNOLIFT

Technolift has an excellent service life due to its optimal strand-to-strand contact conditions inside.
Hoist rope for overhead cranes, preferably ladle cranes with great rope lengths working in high temperature areas.

62



CASAR TECHNOLIFT PLUS

Technolift plus has a very high breaking strength and good resistance against drum crushing.
Hoist rope for overhead cranes, preferably ladle cranes with great rope lengths working in high temperature areas.

64





ROTATION- RESISTANT ROPES

- Designed to generate reduced levels of torque and rotation when loaded.
- Designed with at least two layers of strands laid helically around a center.
- The direction of lay of the outer strands being opposite to that of the underlying layer.

NAVIGATION

// ROTATION-RESISTANT

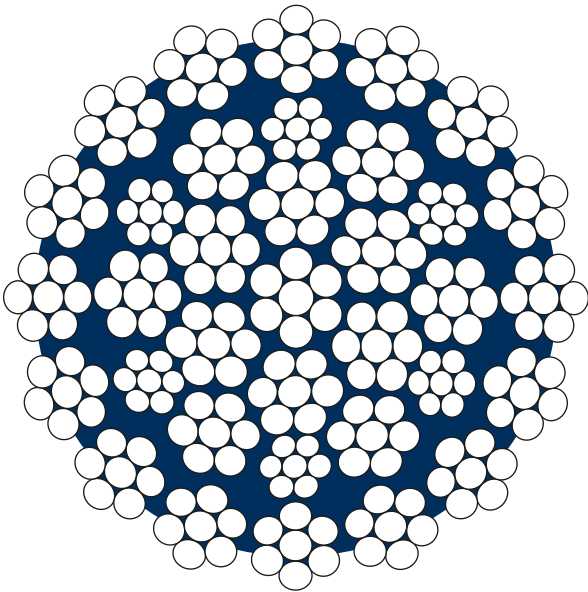
Starlift

- Starlift Plus
- Starlift Pro
- Starlift Xtra
- Eurolift
- Powerplast
- Starfit

// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

CASAR STARLIFT



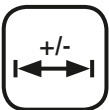
PROPERTIES



Swivel



Lubricated



Tolerance

APPLICATIONS

A very flexible rope with a core in a special design avoiding crossovers between the strands of core and preventing internal rope destruction. Hoist rope for mobile cranes, electrical hoists and other applications, where rotation resistant ropes are required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
23-2	7 – 50	16	245	112	0,653	0,90	0,76
23-2	52 – 72	16	349				

- Temperature range of use: –50°C to +75°C
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1770 N/mm²		1960 N/mm²		1770 N/mm²		1960 N/mm²	
mm	mm²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
7	25,0	0,23	44,2	4,51	49,0	4,99	34,1	3,47	37,8	3,86
8	32,8	0,30	58,1	5,92	64,3	6,56	44,5	4,53	49,3	5,03
9	40,8	0,37	72,2	7,37	80,0	8,16	55,4	5,63	61,3	6,26
10	51,7	0,47	91,5	9,33	101,3	10,33	69,2	7,04	76,6	7,82
11	62,2	0,56	110,2	11,23	122,0	12,44	83,1	8,45	92,1	9,39
12	73,9	0,67	130,9	13,34	145,0	14,78	99,9	10,16	110,7	11,29
12,7	82,8	0,75	146,5	14,94	162,2	16,54	111,7	11,36	114,1	12,62
13	86,9	0,78	153,7	15,68	170,3	17,36	117,3	11,92	129,8	13,25
14	100,4	0,90	177,8	18,13	196,8	20,07	135,9	13,83	150,5	15,36
15	116,0	1,04	205,3	20,94	227,4	23,19	156,3	15,89	173,0	17,66
16	132,3	1,19	234,1	23,87	259,3	26,44	178,1	18,11	197,2	20,12
17	147,8	1,33	261,5	26,67	289,6	29,53	200,1	20,35	221,6	22,61
18	165,5	1,49	293,0	29,88	324,4	33,08	222,6	22,64	246,5	25,15
19	186,6	1,68	330,3	33,68	365,7	37,30	250,9	25,52	277,8	28,35
20	205,0	1,85	362,9	37,00	401,8	40,98	277,7	28,24	307,5	31,38
21	226,7	2,04	401,2	40,91	444,3	45,30	306,3	31,15	339,2	34,61
22	250,0	2,25	442,5	45,12	490,0	49,96	337,0	34,27	373,2	38,08
23	271,2	2,44	480,0	48,94	531,5	54,20	366,5	37,28	405,9	41,42
24	296,0	2,66	523,8	53,42	580,1	59,15	400,5	40,73	443,5	45,26
25	319,9	2,88	566,2	57,74	627,0	63,94	431,9	43,93	478,3	48,81
26	347,0	3,12	614,2	62,63	680,2	69,36	469,2	47,71	519,5	53,01
27	372,9	3,36	660,0	67,30	730,9	74,53	508,3	51,69	562,9	57,44
28	402,1	3,62	711,7	72,57	788,1	80,36	548,8	55,81	607,7	62,01
29	432,5	3,89	765,5	78,06	847,7	86,44	585,8	59,57	648,6	66,19
30	464,7	4,18	822,6	83,88	910,9	92,89	627,1	63,77	694,4	70,85
31	493,1	4,44	872,8	89,00	966,5	98,55	665,6	67,68	736,9	75,20
32	526,4	4,74	931,7	95,00	1031,7	105,20	710,5	72,25	786,7	80,28
33	558,0	5,02	987,6	100,71	1093,6	111,52	753,1	76,59	833,9	85,10
34	591,2	5,32	1046,4	106,71	1158,8	118,16	803,9	81,75	890,2	90,84
36	661,5	5,95	1170,8	119,39	1296,5	132,21	906,1	92,15	1003,4	102,39
38	742,5	6,68	1314,2	134,01	1455,3	148,40	1005,5	102,26	1113,5	113,62
40	818,1	7,36	1448,0	147,66	1603,5	163,51	1111,9	113,08	1231,3	125,64
42	902,7	8,12	1597,8	162,93	1769,3	180,42	1234,1	125,50	1366,6	139,44
44	994,4	8,95	1760,1	179,48	1949,1	198,75	1352,7	137,56	1497,9	152,85
46	1083,6	9,75	1918,0	195,58	2124,0	216,58	1473,9	149,89	1632,1	166,54
48	1186,5	10,68	2100,1	214,15	2325,5	237,14	1608,1	163,53	1780,7	181,70
50	1286,3	11,58	2276,8	232,17	2521,2	257,09	1740,0	176,94	1926,7	196,61
52	1391,7	12,53	2463,3	251,18	2727,7	278,15	1832,5	186,35	2029,2	207,06
54	1501,4	13,51	2657,4	270,98	2942,7	300,07	1976,4	200,99	2188,5	223,32
56	1609,7	14,49	2849,1	290,53	3154,9	321,71	2141,3	217,76	2371,1	241,95
58	1726,1	15,54	3055,1	311,54	3383,1	344,98	2285,4	232,42	2530,8	258,24
60	1847,2	16,62	3269,5	333,39	3620,4	369,18	2455,9	249,75	2719,5	277,50
62	1972,4	17,75	3491,1	355,99	3865,8	394,20	2623,1	266,76	2904,7	296,40
64	2101,7	18,92	3719,9	379,33	4119,3	420,05	2799,3	284,67	3099,8	316,31
66	2235,1	20,12	3956,1	403,41	4380,7	446,71	2978,8	302,93	3298,5	336,59
68	2372,6	21,35	4199,5	428,23	4650,3	474,19	3173,9	322,77	3514,6	358,64
70	2514,2	22,63	4450,1	453,79	4927,8	502,50	3336,5	339,31	3694,7	377,01
72	2659,9	23,94	4708,0	480,09	5213,4	531,62	3545,6	360,57	3926,2	400,64

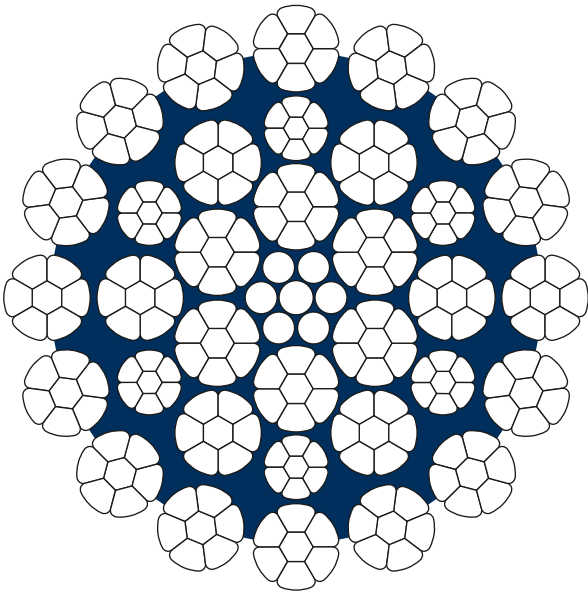
Special constructions and diameters available - please contact us directly.

NAVIGATION

- // ROTATION-RESISTANT
 - Starlift
 - Starlift Plus**
 - Starlift Pro
 - Starlift Xtra
 - Eurolift
 - Powerplast
 - Starfit

- // SEMI-ROTATION-RESISTANT
- // NON-ROTATION-RESISTANT

CASAR STARLIFT PLUS



PROPERTIES



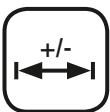
Swivel



Compacted



Lubricated



Tolerance

APPLICATIONS

A very flexible rope with a core in a special design avoiding crossover between the strands of core and preventing internal rope destruction. Hoist rope for mobile cranes, electrical hoists and other applications, where rotation resistant ropes are required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
23-2	10-56	16	245	112	0,716	0,88	0,83 (1770, 1960)* 0,82 (2160)*

- Temperature range of use: -50°C to +75°C
- Suitable for multilayer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
10	56,5	0,50	100	11,01	111	11,30	122	12,45	83	9,13	92	9,38	98	9,99
11	68,6	0,60	121	13,36	134	13,71	148	15,11	101	11,12	111	11,32	119	12,13
12	81,6	0,72	144	15,89	160	16,30	176	17,96	120	13,21	132	13,46	144	14,68
13	95,2	0,84	169	18,55	187	19,03	206	20,97	140	15,41	155	15,81	169	17,23
14	110,0	0,97	195	21,42	216	21,98	238	24,23	162	17,83	179	18,25	195	19,88
15	126,6	1,11	224	24,65	248	25,29	273	27,88	186	20,47	206	21,01	225	22,94
16	144,8	1,27	256	28,21	284	28,95	313	31,90	213	23,44	235	23,96	257	26,21
17	160,6	1,41	284	31,28	315	32,10	347	35,37	236	25,97	261	26,61	285	29,06
18	183,3	1,61	325	35,71	359	36,64	396	40,38	270	29,71	298	30,39	325	33,14
19	202,1	1,78	358	39,37	396	40,40	437	44,52	297	32,69	329	33,55	359	36,61
20	225,7	1,99	399	43,96	442	45,10	487	49,70	332	36,54	367	37,42	401	40,89
21	247,4	2,18	438	48,19	485	49,44	534	54,49	364	40,06	402	40,99	439	44,77
22	271,9	2,39	481	52,96	533	54,34	587	59,88	400	44,02	442	45,07	483	49,25
23	296,9	2,61	526	57,84	582	59,35	641	65,40	437	48,09	483	49,25	527	53,74
24	322,6	2,84	571	62,84	632	64,47	697	71,05	475	52,28	525	53,54	573	58,43
25	350,6	3,09	621	68,29	687	70,07	757	77,22	516	56,79	571	58,23	623	63,53
26	377,8	3,32	669	73,59	740	75,51	816	83,21	556	61,19	615	62,71	671	68,42
27	411,0	3,62	727	80,05	805	82,14	888	90,52	605	66,58	669	68,22	730	74,44
28	441,4	3,88	781	85,99	865	88,23	954	97,23	650	71,53	719	73,32	784	79,95
29	471,8	4,15	835	91,91	925	94,31	1019	103,93	694	76,38	768	78,32	838	85,45
30	508,2	4,47	899	98,99	996	101,57	1098	111,93	748	82,32	827	84,33	903	92,08
31	539,8	4,75	956	105,16	1058	107,90	1166	118,91	795	87,49	879	89,63	959	97,79
32	573,5	5,05	1015	111,71	1124	114,61	1239	126,31	844	92,88	934	95,24	1019	103,91
33	616,1	5,42	1091	120,01	1208	123,14	1331	135,70	907	99,82	1003	102,28	1095	111,66
34	647,2	5,70	1145	126,07	1268	129,35	1398	142,55	953	104,88	1054	107,48	1150	117,27
36	729,3	6,42	1291	142,06	1429	145,76	1575	160,63	1074	118,19	1187	121,04	1296	132,16
38	812,0	7,15	1437	158,18	1592	162,30	1754	178,86	1195	131,51	1322	134,81	1443	147,15
40	900,8	7,93	1594	175,47	1766	180,04	1946	198,41	1326	145,93	1467	149,59	1601	163,26
42	992,5	8,73	1757	193,34	1945	198,37	2144	218,62	1461	160,79	1616	164,79	1764	179,88
44	1087,1	9,57	1924	211,76	2131	217,28	2348	239,45	1600	176,08	1770	180,49	1932	197,01
46	1188,1	10,46	2103	231,43	2329	237,46	2566	261,69	1749	192,48	1935	197,32	2112	215,37
48	1298,9	11,43	2299	253,01	2546	259,60	2806	286,09	1912	210,42	2115	215,67	2309	235,45
50	1410,7	12,41	2497	274,80	2765	281,96	3047	310,73	2077	228,58	2297	234,23	2507	255,65
52	1526,3	13,43	2702	297,32	2992	305,06	3297	336,19	2247	229,13	2486	253,50	2713	276,65
54	1654,7	14,56	2929	322,32	3243	330,72	3574	364,46	2436	248,41	2695	274,82	2941	299,90
56	1767,9	15,56	3129	344,37	3465	353,34	3819	389,40	2603	265,43	2879	293,58	3142	320,40

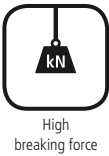
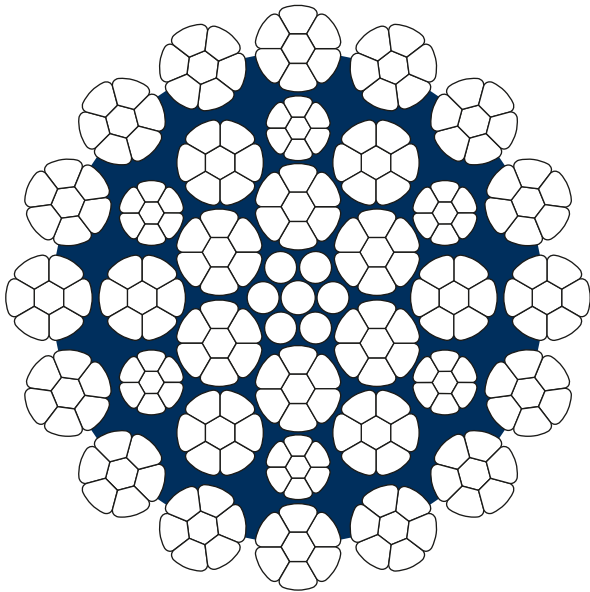
Special constructions and diameters available - please contact us directly.

NAVIGATION

- // ROTATION-RESISTANT
 - Starlift
 - Starlift Plus
 - Starlift Pro**
 - Starlift Xtra
 - Eurolift
 - Powerplast
 - Starfit

- // SEMI-ROTATION-RESISTANT
- // NON-ROTATION-RESISTANT

CASAR STARLIFT PRO



PROPERTIES



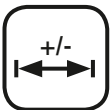
Swivel



Compacted



Lubricated



Tolerance

APPLICATIONS

Very good resistance against drum crushing and abrasion on drums. Hoist rope for tower cranes, mobile cranes or crawler cranes: unguided load on a single fall.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
23-2	12-52	16	245	112	0,734	0,87	0,86 (1960)* 0,83 (2160)*

- Temperature range of use: -50°C to +75°C
- Suitable for multilayer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1960 N/mm²		2160 N/mm²		1960 N/mm²		2160 N/mm²	
mm	mm²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
12	83,0	0,72	163	16,59	179	18,28	140	14,28	149	15,19
13	97,5	0,85	191	19,47	211	21,46	164	16,72	175	17,85
14	113,0	0,98	222	22,58	244	24,89	190	19,37	203	20,70
15	129,8	1,13	254	25,92	280	28,57	218	22,23	233	23,76
16	147,6	1,28	289	29,50	319	32,51	248	25,29	266	27,02
17	166,7	1,45	327	33,30	360	36,70	281	28,65	300	30,59
18	186,8	1,63	366	37,33	404	41,14	315	32,12	337	34,26
19	208,2	1,81	408	41,59	450	45,84	351	35,79	375	38,24
20	230,7	2,01	452	46,09	498	50,79	389	39,67	416	42,32
21	254,3	2,21	498	50,81	549	56,00	428	43,64	458	46,70
22	279,1	2,43	547	55,77	603	61,46	470	47,93	502	51,19
23	305,1	2,65	598	60,95	659	67,17	514	52,41	549	55,98
24	332,2	2,89	651	66,37	717	73,14	560	57,10	598	60,98
25	360,4	3,14	706	72,01	779	79,36	607	61,90	649	66,18
26	389,8	3,39	764	77,89	842	85,84	657	67,00	702	71,58
27	420,4	3,66	824	84,00	908	92,57	708	72,20	757	77,19
28	452,1	3,93	886	90,33	977	99,55	762	77,70	814	83,01
29	485,0	4,22	951	96,90	1048	106,79	817	83,31	873	89,02
30	519,0	4,52	1017	103,70	1121	114,28	875	89,23	935	95,34
31	554,2	4,82	1086	110,73	1197	122,03	934	95,24	998	101,77
32	590,5	5,14	1157	117,99	1276	130,03	995	101,46	1063	108,40
33	628,0	5,46	1231	125,48	1357	138,28	1059	107,99	1131	115,33
34	666,7	5,80	1307	133,20	1440	146,79	1124	114,62	1201	122,47
36	747,4	6,50	1465	149,33	1614	164,56	1260	128,49	1346	137,26
38	828,3	7,21	1623	165,49	1789	182,38	1396	142,35	1492	152,14
40	915,1	7,96	1794	182,82	1977	201,48	1543	157,34	1648	168,05
42	1009,3	8,78	1978	201,65	2180	222,22	1702	173,56	1818	185,39
44	1118,0	9,73	2191	223,37	2415	246,16	1885	192,22	2014	205,37
46	1212,1	10,55	2376	242,17	2618	266,88	2044	208,43	2183	222,61
48	1311,0	11,41	2570	261,93	2832	288,66	2210	225,36	2361	240,76
50	1428,5	12,43	2800	285,42	3086	314,54	2409	245,65	2573	262,38
52	1548,8	13,47	3036	309,44	3345	341,01	2611	266,25	2790	284,50

Special constructions and diameters available - please contact us directly.

NAVIGATION

// ROTATION-RESISTANT

Starlift
Starlift Plus
Starlift Pro

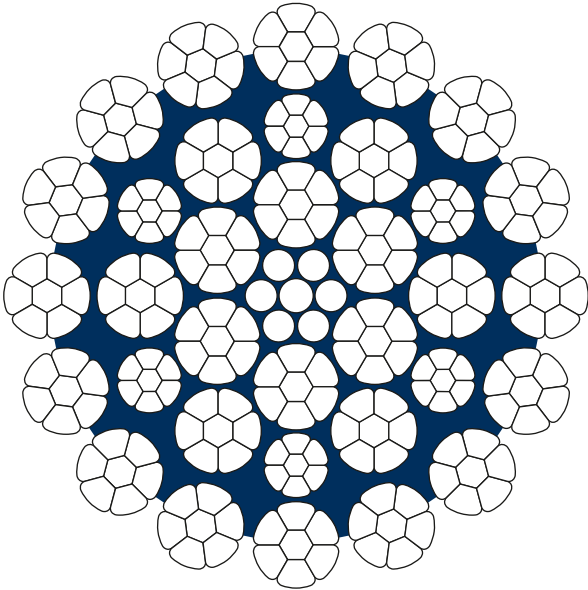
Starlift Xtra

Eurolift
Powerplast
Starfit

// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

CASAR STARLIFT XTRA



Very High
breaking force

PROPERTIES



Swivel



Compacted



Lubricated



Tolerance

APPLICATIONS

CASAR Starlift Xtra is the strongest of all ropes in the CASAR high performance rotation-resistant product line. Very good resistance against drum crushing and abrasion on drums. Hoist rope for tower cranes, mobile cranes or crawler cranes: unguided load on a single fall.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
23–2	14–22	16	245	112	0,730		
25	25,4– 28	16	471	208			
26	30	16	503	240			
30	32–36	16	567	304			

- Temperature range of use: –50°C to +75°C
- Suitable for multilayer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	minimum breaking force	
mm	mm ²	kg/m	kN	t [metric]
14	113,57	1,00	208	21,21
15	130,96	1,15	235	23,96
16	149,01	1,31	272	27,74
17	168,21	1,48	302	30,80
18	188,59	1,66	340	34,67
19	210,13	1,85	382	38,95
20	232,80	2,05	421	42,93
21	256,69	2,26	460	46,91
22	281,70	2,48	509	51,90
25,4	375,77	3,31	675	68,83
26	393,73	3,46	705	71,89
28	454,00	4,00	815	83,11
30	522,83	4,60	934	95,24
32	594,86	5,23	1085	110,64
34	671,54	5,91	1200	122,33
36	754,34	6,64	1340	136,64

Special constructions and diameters available - please contact us directly.

NAVIGATION

// ROTATION-RESISTANT

Starlift
Starlift Plus
Starlift Pro
Starlift Xtra

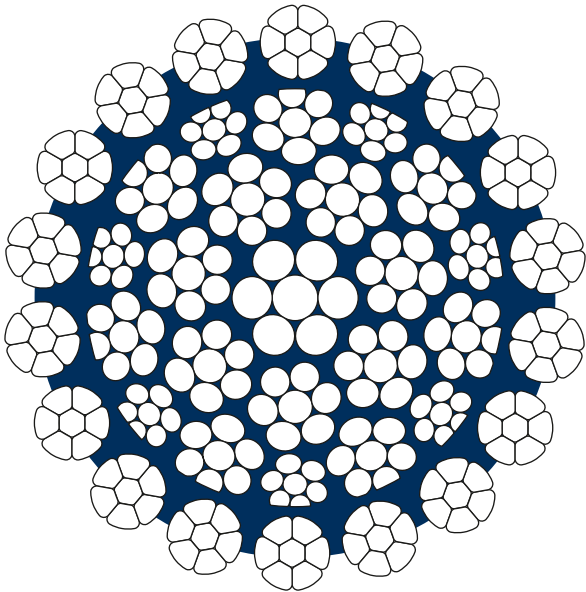
Eurolift

Powerplast
Starfit

// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

CASAR EUROLIFT



PROPERTIES



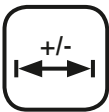
Swivel



Compacted



Lubricated



Tolerance

APPLICATIONS

Has a core in a special design avoiding crossover between the strands of core and preventing internal rope destruction. Hoist rope for mobile cranes, electrical hoists and other applications, where rotation-resistant ropes are required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
23-3	10 – 34	18	280	126	0,720	0,87	0,82 (1770, 1960)*
23-3	36 – 60	18	292				0,80 (2160)*

- Temperature range of use: –50°C to +75°C
- Suitable for multilayer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
10	56,2	0,49	99,4	10,14	110,1	11,23	121,3	12,37	81,9	8,33	89,6	9,14	97,4	9,86
11	68,7	0,60	121,5	12,39	134,6	13,72	148,3	15,12	99,5	10,12	108,8	11,11	118,4	11,98
12	82,0	0,71	145,1	14,79	160,7	16,38	177,1	18,05	118,2	12,10	130,8	13,30	139,9	14,16
12,7	90,8	0,79	160,8	16,40	178,0	18,16	196,2	20,01	132,2	13,48	146,4	14,93	161,4	16,45
13	95,2	0,83	168,5	17,18	186,6	19,02	205,6	20,96	139,0	14,14	152,7	15,60	165,4	16,73
14	110,4	0,96	195,4	19,93	216,4	22,07	238,5	24,32	161,7	16,50	179,1	18,30	190,9	19,31
15	126,3	1,10	223,5	22,79	247,5	25,24	272,7	27,81	184,5	18,80	204,0	20,80	219,5	22,21
16	145,6	1,27	257,7	26,28	285,4	29,10	314,5	32,07	209,4	21,29	230,6	23,50	249,1	25,20
17	163,3	1,42	289,1	29,48	320,1	32,64	352,8	35,97	235,9	23,99	257,9	26,32	280,6	28,39
18	183,7	1,60	325,1	33,15	360,0	36,71	396,7	40,46	266,9	27,15	293,9	30,00	317,5	32,13
19	204,0	1,78	361,1	36,82	399,8	40,77	440,6	44,93	297,1	30,30	329,0	33,50	352,8	35,70
20	227,5	1,98	402,6	41,06	445,9	45,47	491,4	50,10	329,3	33,49	362,2	36,90	391,7	39,64
21	249,0	2,17	440,7	44,93	488,0	49,76	537,8	54,84	362,3	36,84	396,1	40,20	430,9	43,60
22	273,9	2,38	484,8	49,44	536,9	54,75	591,7	60,33	398,5	40,60	441,4	45,00	472,0	47,76
23	299,6	2,61	530,2	54,07	587,1	59,87	647,0	65,98	431,5	43,88	471,8	48,14	513,2	51,94
24	326,8	2,84	578,5	58,99	640,6	65,32	706,0	71,99	474,3	48,30	524,3	53,50	564,1	57,08
25	348,8	3,04	617,4	62,96	683,7	69,72	753,5	76,84	512,8	52,30	567,9	57,90	609,4	61,67
26	377,9	3,29	668,9	68,21	740,7	75,53	816,2	83,23	555,0	56,60	614,9	62,70	657,4	66,52
27	410,5	3,57	726,5	74,08	804,5	82,03	886,6	90,41	598,3	60,85	654,2	66,75	711,7	72,02
28	442,5	3,85	783,3	79,87	867,4	88,45	955,9	97,47	643,7	65,60	712,9	72,70	765,6	77,47
29	473,4	4,12	837,9	85,44	927,8	94,61	1022,5	104,27	690,2	70,19	754,6	77,00	821,0	83,07
30	505,4	4,40	894,6	91,23	990,7	101,02	1091,7	111,33	738,1	75,30	817,4	83,40	877,9	88,84
31	539,7	4,70	955,3	97,41	1057,8	107,86	1165,7	118,87	785,3	80,08	869,7	88,68	958,4	97,73
32	579,4	5,04	1025,5	104,57	1135,5	115,79	1251,4	127,61	843,4	85,74	930,0	94,90	1002,8	101,48
33	616,1	5,36	1090,6	111,21	1207,6	123,14	1330,9	135,71	896,6	91,43	992,8	101,24	1094,1	111,57
34	652,0	5,67	1154,1	117,68	1278,0	130,32	1408,4	143,61	950,8	96,69	1045,0	106,60	1130,9	114,44
36	735,6	6,40	1302,1	132,77	1441,8	147,03	1589,0	162,03	1070,0	109,10	1185,0	120,90	1262,3	127,74
38	815,3	7,09	1443,0	147,15	1597,9	162,94	1761,0	179,57	1191,0	121,50	1319,0	134,50	1412,2	142,90
40	909,9	7,92	1610,5	164,23	1783,4	181,86	1965,4	200,42	1360,0	138,00	1462,0	149,10	1560,4	157,90
42	1000,8	8,71	1771,4	180,63	1961,5	200,02	2161,7	220,43	1455,0	147,97	1611,2	164,41	1667,4	169,83
44	1098,1	9,55	1943,6	198,19	2152,2	219,46	2371,8	241,86	1596,0	162,80	1767,0	180,20	1823,7	185,75
46	1204,8	10,48	2132,5	217,46	2361,4	240,80	2602,4	265,37	1748,0	178,30	1935,0	197,40	1989,7	202,65
48	1310,4	11,40	2319,4	236,51	2568,4	261,90	2830,5	288,63	1908,4	194,30	2113,3	215,64	2187,0	222,75
50	1414,1	12,30	2503,0	255,24	2771,7	282,64	3054,5	311,48	2052,5	209,30	2272,8	231,76	2504,7	255,41
52	1531,7	13,33	2711,2	276,46	3002,2	306,14	3308,5	337,38	2223,2	226,70	2461,8	251,03	2713,0	276,65
54	1649,6	14,35	2919,8	297,73	3233,2	329,69	3563,1	363,33	2394,2	244,14	2651,2	270,35	2921,7	297,93
56	1774,0	15,43	3140,0	320,20	3477,1	354,57	3831,9	390,75	2574,8	262,56	2851,2	290,74	3142,2	320,41
58	1903,0	16,56	3368,3	343,47	3729,9	380,34	4110,5	419,16	2762,0	281,65	3058,5	311,88	3370,6	343,71
60	2036,5	17,72	3604,6	367,57	3991,6	407,03	4398,9	448,56	2955,8	301,41	3273,1	333,76	3607,1	367,82

Special constructions and diameters available - please contact us directly.

NAVIGATION

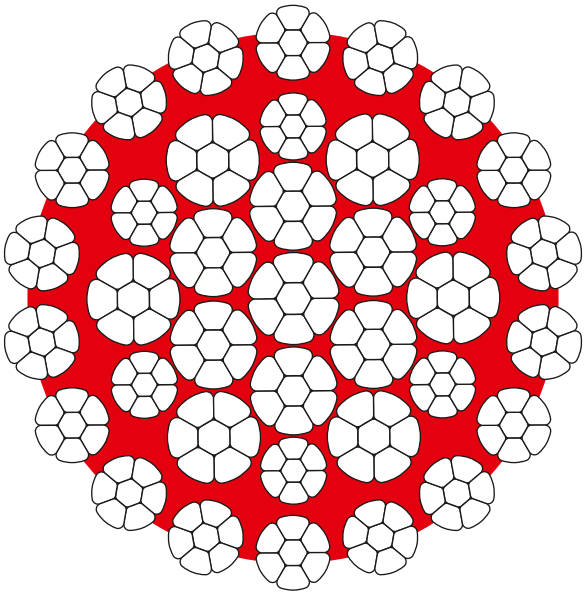
// ROTATION-RESISTANT

- Starlift
- Starlift Plus
- Starlift Pro
- Starlift Xtra
- Eurolift
- Powerplast**
- Starfit

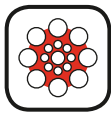
// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

CASAR POWERPLAST



PROPERTIES



Plast rope



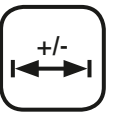
Compacted



Swivel



Lubricated



Tolerance

APPLICATIONS

Has a high breaking load and a good resistance against drum crushing. Hoist rope for deck cranes and offshore cranes, pull-in-riser and other applications in the marine environment, where rotation resistant-ropes are required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
23-3	12-56	18	259	126	0,727	0,88	0,81
28	58-72	18	593	270			0,84 (1770, 1960)* 0,81 (2160)*

- Temperature range of use: -50°C to +115°C
- Suitable for multilayer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Only available in galvanized execution

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
12	81,8	0,72	144,8	14,76	160,3	16,35	176,7	18,02	118,2	12,10	130,8	13,30	142,6	14,54
13	97,2	0,86	172,1	17,55	190,5	19,43	210,0	21,41	139,0	14,14	152,7	15,60	169,4	17,28
14	111,7	0,98	197,6	20,15	218,8	22,32	241,3	24,60	161,7	16,50	179,1	18,30	194,7	19,85
15	127,6	1,12	225,9	23,03	250,1	25,51	275,6	28,11	184,5	18,80	204,0	20,80	222,4	22,68
16	147,0	1,29	260,2	26,54	288,2	29,38	317,5	32,38	209,4	21,29	230,6	23,50	256,2	26,13
17	164,2	1,45	290,7	29,64	321,9	32,82	354,7	36,17	235,4	24,01	260,7	26,59	286,2	29,18
18	186,7	1,64	330,5	33,71	366,0	37,32	403,3	41,12	266,9	27,15	293,9	30,00	325,4	33,18
19	207,2	1,82	366,8	37,40	406,2	41,42	447,6	45,64	297,1	30,30	329,0	33,50	361,1	36,83
20	227,7	2,00	403,0	41,09	446,2	45,50	491,8	50,15	329,3	33,49	362,2	36,90	396,9	40,47
21	251,9	2,22	445,9	45,47	493,8	50,35	544,1	55,48	361,2	36,83	400,0	40,79	439,0	44,77
22	276,2	2,43	488,8	49,85	541,3	55,20	596,6	60,84	398,5	40,60	441,4	45,00	481,4	49,09
23	300,9	2,65	532,6	54,31	589,7	60,13	649,9	66,28	431,4	43,99	477,6	48,71	524,4	53,48
24	326,3	2,87	577,6	58,90	639,6	65,22	704,8	71,87	474,3	48,30	524,3	53,50	568,7	57,99
25	358,3	3,15	634,2	64,67	702,3	71,61	773,9	78,92	512,8	52,30	567,9	57,90	624,5	63,68
26	389,2	3,43	688,9	70,24	762,8	77,78	840,7	85,73	555,0	56,60	614,9	62,70	678,3	69,17
27	417,9	3,68	739,8	75,43	819,2	83,53	902,7	92,05	599,2	61,10	663,5	67,66	728,4	74,27
28	446,6	3,93	790,5	80,61	875,3	89,26	964,7	98,37	643,7	65,60	712,9	72,70	778,4	79,37
29	482,2	4,24	853,4	87,02	945,0	96,36	1041,6	106,21	691,3	70,49	765,4	78,05	840,4	85,70
30	514,4	4,53	910,5	92,84	1008,2	102,81	1111,1	113,30	738,1	75,30	817,4	83,40	896,5	91,42
31	554,2	4,88	980,0	100,03	1086,3	110,77	1197,1	122,07	794,6	81,03	879,9	89,72	965,9	98,50
32	584,9	5,15	1035,3	105,57	1146,4	116,90	1263,4	128,83	843,4	85,74	930,0	94,90	1019,4	103,95
33	624,3	5,49	1105,1	112,68	1223,7	124,78	1348,5	137,51	895,1	91,27	991,2	101,07	1088,1	110,96
34	656,9	5,78	1162,7	118,57	1287,6	131,29	1418,9	144,69	950,8	96,69	1045,0	106,60	1144,9	116,75
36	738,6	6,50	1307,3	133,31	1447,6	147,62	1595,4	162,68	1070,0	109,10	1185,0	120,90	1287,3	131,27
38	826,4	7,27	1462,8	149,16	1619,8	165,17	1785,0	182,02	1191,0	121,50	1319,0	134,50	1440,3	146,87
40	926,6	8,15	1640,1	167,24	1816,2	185,20	2001,5	204,09	1360,0	138,00	1462,0	149,10	1615,0	164,68
42	1013,4	8,92	1793,7	182,91	1986,3	202,54	2188,9	223,21	1455,0	147,97	1611,2	164,41	1766,3	180,11
44	1107,6	9,75	1960,4	199,90	2170,8	221,36	2392,4	243,96	1596,0	162,80	1767,0	180,20	1930,4	196,85
46	1220,6	10,74	2160,5	220,30	2392,4	243,95	2636,5	268,85	1748,0	178,30	1935,0	197,40	2127,4	216,94
48	1323,7	11,65	2343,0	238,92	2594,5	264,56	2859,2	291,56	1908,4	194,30	2113,3	215,64	2307,1	235,26
50	1427,1	12,56	2526,0	257,58	2797,1	285,23	3082,5	314,33	2069,0	211,10	2292,0	233,70	2487,3	253,64
52	1563,0	13,75	2766,4	282,10	3063,4	312,38	3376,1	344,27	2200,0	223,70	2436,0	248,60	2724,2	277,79
54	1662,1	14,63	2941,9	299,99	3257,7	332,19	3590,1	366,10	2377,0	241,80	2632,0	268,60	2896,9	295,40
56	1797,9	15,82	3182,2	324,50	3523,8	359,33	3883,5	396,01	2577,6	262,84	2854,3	291,06	3133,6	319,54
58	1938,7	17,06	3431,6	349,92	3799,9	387,48	4187,6	427,02	2779,5	283,44	3077,9	313,86	3379,0	344,56
60	2074,1	18,25	3671,2	374,36	4065,3	414,54	4480,1	456,84	2973,6	303,23	3292,8	335,78	3615,0	368,63
62	2154,0	18,96	3812,6	388,78	4221,8	430,51	4652,6	474,44	3202,6	326,57	3546,3	361,63	3754,2	382,83
64	2309,9	20,33	4088,6	416,92	4527,5	461,68	4989,5	508,79	3434,4	350,22	3803,1	387,81	4026,0	410,54
66	2451,7	21,58	4339,5	442,51	4805,4	490,01	5295,7	540,02	3645,2	371,71	4036,5	411,61	4273,1	435,74
68	2594,7	22,83	4592,6	468,32	5085,6	518,60	5604,6	571,51	3857,8	393,39	4271,9	435,62	4522,3	461,15
70	2730,5	24,03	4833,0	492,84	5351,8	545,74	5897,9	601,43	4059,7	413,98	4495,5	458,42	4759,0	485,29
72	2897,1	25,49	5127,9	522,91	5678,4	579,04	6257,8	638,12	4317,0	440,22	4780,4	487,47	5049,4	514,90

Special constructions and diameters available - please contact us directly.

// ROTATION-RESISTANT

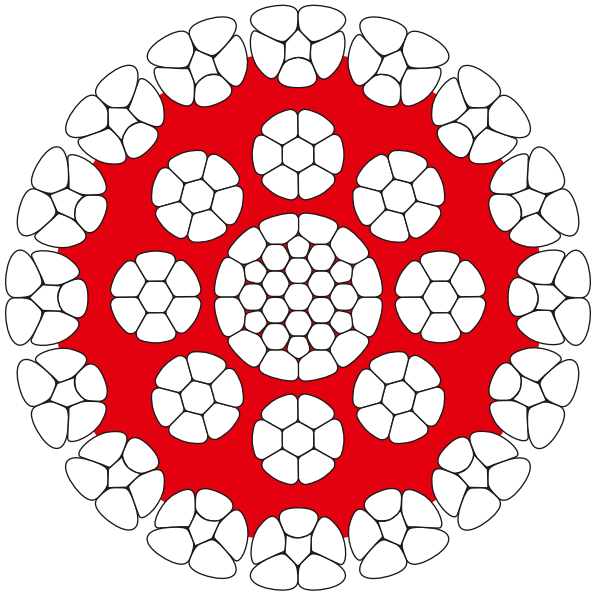
- Starlift
- Starlift Plus
- Starlift Pro
- Starlift Xtra
- Eurolift
- Powerplast

Starfit

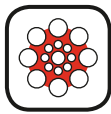
// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

CASAR STARFIT



PROPERTIES



Plast rope



Compacted



Swaged



Lubricated



Swivel



Tolerance

APPLICATIONS

Has a high breaking load and a good resistance against drum crushing. Hoist rope for deck cranes and offshore cranes, pull-in-riser and other applications in the marine environment, where rotation resistant-ropes are required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
23-1	11-50	16	183	96	0,732	0,87	0,84 (1960)* 0,83 (2160)*

- Temperature range of use: -50°C to +115°C
- Suitable for multi-layer spooling
- Only available in ordinary lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1960 N/mm²		2160 N/mm²		1960 N/mm²		2160 N/mm²	
mm	mm²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
11	68,1	0,59	133,5	13,62	147,2	15,01	111,6	11,38	123,0	12,55
12	82,9	0,72	162,5	16,57	179,1	18,26	135,9	13,85	149,7	15,27
13	96,6	0,84	189,3	19,30	208,6	21,27	158,2	16,13	174,4	17,78
14	113,9	0,99	223,2	22,76	246,0	25,08	186,6	19,03	205,6	20,97
15	128,0	1,11	250,9	25,59	276,5	28,20	209,8	21,39	231,2	23,57
16	147,8	1,28	289,6	29,53	319,1	32,54	242,1	24,69	266,8	27,21
17	165,6	1,44	324,5	33,09	357,6	36,47	271,3	27,66	299,0	30,49
18	187,9	1,63	368,3	37,55	405,9	41,39	307,9	31,40	339,3	34,60
19	206,4	1,79	404,5	41,25	445,8	45,46	338,2	34,49	372,7	38,00
20	227,3	1,97	445,5	45,43	490,9	50,06	372,4	37,98	410,4	41,85
21	253,6	2,20	497,1	50,69	547,8	55,86	415,6	42,38	458,0	46,70
22	273,3	2,37	535,7	54,63	590,4	60,20	447,9	45,67	493,6	50,33
23	309,4	2,68	606,3	61,83	668,2	68,14	506,9	51,69	558,6	56,96
24	332,0	2,88	650,7	66,35	717,1	73,12	544,0	55,47	599,5	61,13
25	354,5	3,07	694,7	70,84	765,6	78,07	580,8	59,23	640,1	65,27
26	385,5	3,34	755,6	77,05	832,7	84,91	631,7	64,41	696,1	70,99
27	421,6	3,66	826,3	84,26	910,6	92,86	690,8	70,44	761,3	77,63
28	455,5	3,95	892,8	91,04	983,9	100,33	746,4	76,11	822,6	83,88
29	483,5	4,19	947,7	96,64	1044,4	106,50	792,3	80,79	873,2	89,04
30	511,9	4,44	1003,4	102,32	1105,8	112,76	838,8	85,54	924,4	94,27
31	559,5	4,85	1096,6	111,83	1208,5	123,24	916,8	93,49	1010,3	103,03
32	590,5	5,12	1157,4	118,03	1275,5	130,07	967,6	98,67	1066,4	108,74
33	630,4	5,47	1235,6	126,00	1361,7	138,86	1033,0	105,34	1138,4	116,09
34	662,3	5,74	1298,1	132,37	1430,5	145,87	1085,2	110,66	1195,9	121,95
35	709,3	6,15	1390,2	141,76	1532,0	156,22	1162,2	118,51	1280,8	130,60
36	751,8	6,52	1473,4	150,25	1623,8	165,58	1231,8	125,61	1357,5	138,43
37	790,0	6,85	1548,3	157,88	1706,3	173,99	1294,4	131,99	1426,5	145,46
38	825,6	7,16	1618,1	165,00	1783,3	181,84	1352,8	137,94	1490,8	152,02
40	925,8	8,03	1814,6	185,04	1999,8	203,92	1517,0	154,69	1671,8	170,48
42	1014,5	8,80	1988,4	202,76	2191,3	223,45	1662,3	169,51	1832,0	186,81
44	1125,5	9,76	2206,0	224,95	2431,1	247,91	1844,2	188,06	2032,4	207,25
46	1220,1	10,58	2391,3	243,84	2635,3	268,73	1999,1	203,85	2203,1	224,66
48	1332,3	11,55	2611,2	266,27	2877,7	293,44	2183,0	222,60	2405,7	245,32
50	1438,4	12,47	2819,3	287,49	3107,0	316,83	2357,0	240,34	2597,5	264,87
52	1569,9	13,66	3076,9	313,65	3390,9	345,66	2572,3	262,21	2834,8	288,97
54	1684,7	14,66	3302,1	336,61	3639,0	370,95	2760,5	281,40	3042,2	310,11

Special constructions and diameters available - please contact us directly.



SEMI-ROTATION- RESISTANT ROPES

- Designed to generate only small levels of torque and rotation when loaded.
- Designed without any rope core.
- The outer strands have an extremely long lay length and therefore almost no tendency to start to rotate under load.



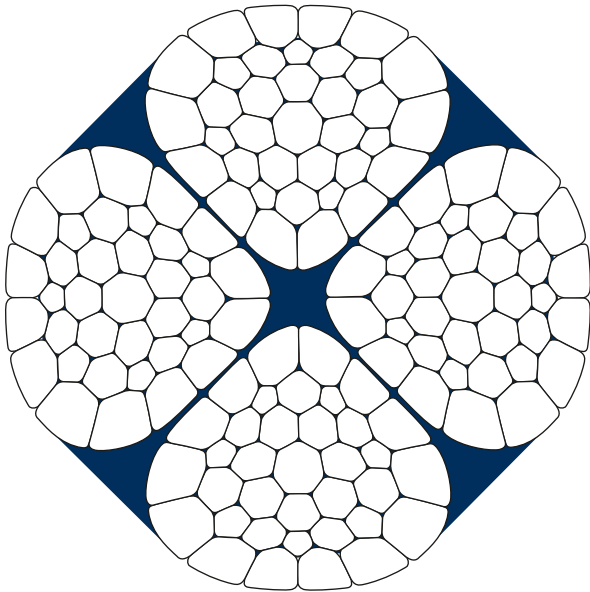
NAVIGATION

// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT
Quadrolift

// NON-ROTATION-RESISTANT

CASAR QUADROLIFT



PROPERTIES



Compacted



Lubricated



No Swivel



Tolerance

APPLICATIONS

Has a high breaking load and is very stable under forcible twist. Semi-rotation-resistant hoist rope for deck cranes and for electrical hoist with twin hoist systems and greater lifting height, combined hoist and erection rope for self erecting cranes, where rotation resistant ropes are required.

OVERVIEW

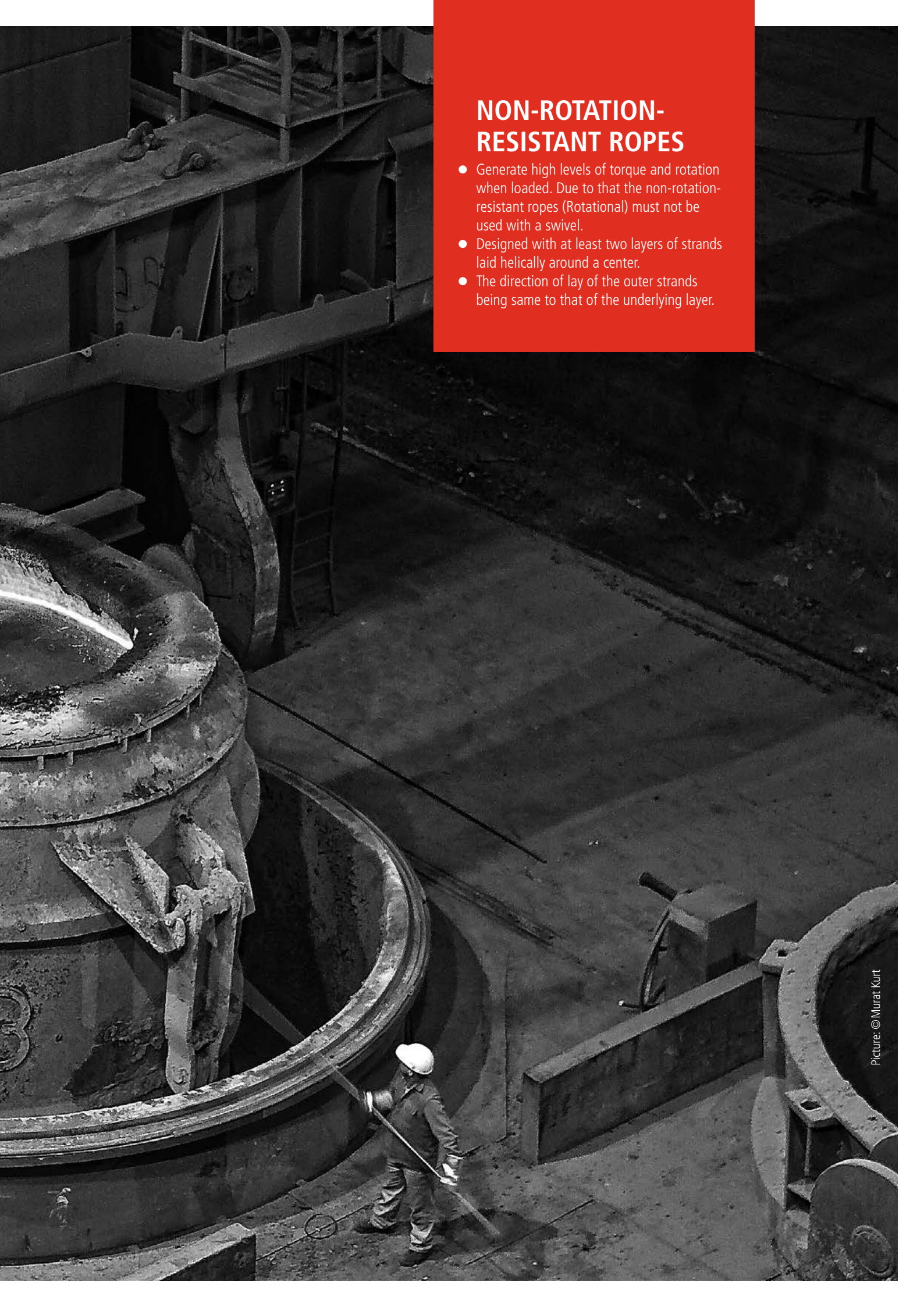
RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor *N/mm²
22	6–23	4	140	140	0,663	0,83	0,87
22	24–40	4	172	172			(1770, 1960)*
							0,85 (2160)*

- Temperature range of use: –50°C to +140°C
- Only available in ordinary lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
6	18,4	0,15	32,5	3,32	36,0	3,67	39,7	4,05	28,8	2,93	31,9	3,26	34,4	3,50
7	25,5	0,21	45,1	4,60	50,0	5,09	55,1	5,61	39,3	3,99	43,5	4,44	46,8	4,76
8	33,2	0,28	58,8	6,00	65,1	6,64	71,8	7,32	50,7	5,16	56,1	5,73	60,4	6,15
9	42,3	0,35	75,0	7,64	83,0	8,46	91,5	9,33	64,4	6,55	71,3	7,27	76,7	7,81
10	51,3	0,43	90,9	9,27	100,6	10,26	110,9	11,31	79,4	8,07	87,9	8,97	94,6	9,63
11	62,5	0,52	110,7	11,29	122,6	12,50	135,1	13,78	96,3	9,80	106,7	10,89	114,8	11,69
12	76,0	0,63	134,6	13,72	149,0	15,20	164,2	16,75	114,8	11,67	127,1	12,97	136,7	13,93
12,7	83,7	0,70	148,1	15,11	164,1	16,73	180,8	18,44	128,7	13,12	142,6	14,54	153,4	15,64
13	87,7	0,73	155,3	15,84	172,0	17,54	189,5	19,32	134,6	13,68	149,0	15,20	160,3	16,33
14	102,9	0,85	182,2	18,58	201,7	20,57	222,3	22,67	156,3	15,89	173,0	17,66	186,2	18,96
15	117,4	0,98	207,9	21,20	230,2	23,47	253,7	25,87	179,2	18,22	198,4	20,24	213,4	21,74
16	133,1	1,11	235,6	24,03	260,9	26,60	287,5	29,32	206,2	20,97	228,4	23,30	245,7	25,02
17	152,3	1,26	269,6	27,49	298,5	30,44	329,0	33,55	229,6	23,35	254,2	25,94	273,5	27,85
18	168,0	1,40	297,4	30,33	329,3	33,58	362,9	37,01	258,9	26,32	286,6	29,25	308,4	31,41
19	188,2	1,56	333,2	33,98	369,0	37,62	406,6	41,46	289,3	29,42	320,4	32,69	344,7	35,11
20	208,3	1,73	368,7	37,60	408,3	41,64	450,0	45,89	317,7	32,31	351,8	35,90	378,5	38,55
21	228,6	1,90	404,7	41,27	448,2	45,70	493,9	50,36	348,8	35,47	386,2	39,41	415,5	42,32
22	250,2	2,08	442,8	45,16	490,4	50,01	540,4	55,11	383,4	38,99	424,6	43,33	456,8	46,53
23	277,8	2,31	491,7	50,13	544,4	55,52	600,0	61,18	424,5	43,17	470,0	47,96	505,7	51,50
24	299,2	2,48	529,6	54,00	586,4	59,80	646,3	65,90	463,0	47,08	512,7	52,32	551,6	56,18
25	326,6	2,71	578,1	58,95	640,1	65,27	705,4	71,93	495,7	50,41	548,9	56,01	590,5	60,15
26	353,7	2,94	626,1	63,84	693,3	70,69	764,0	77,91	542,8	55,20	601,1	61,34	646,7	65,86
27	380,3	3,16	673,2	68,64	745,4	76,01	821,5	83,77	586,2	59,62	649,2	66,24	698,4	71,13
28	408,5	3,39	723,1	73,73	800,7	81,65	882,4	89,98	622,8	63,34	689,7	70,38	742,0	75,57
29	437,9	3,63	775,0	79,03	858,2	87,52	945,8	96,45	675,0	68,64	747,5	76,27	804,1	81,90
30	468,6	3,89	829,3	84,57	918,4	93,65	1012,1	103,20	722,1	73,44	799,7	81,60	860,3	87,62
31	499,7	4,13	884,5	90,19	979,5	99,88	1079,4	110,07	766,9	78,20	849,5	86,63	913,9	93,19
32	532,5	4,40	942,5	96,11	1043,7	106,42	1150,2	117,28	817,6	83,14	905,4	92,38	974,0	99,20
33	566,3	4,68	1002,3	102,21	1109,9	113,18	1223,2	124,73	869,0	88,62	962,7	98,17	1035,6	105,61
34	601,1	4,97	1064,0	108,50	1178,2	120,14	1298,4	132,40	929,1	94,48	1028,8	104,98	1106,8	112,73
36	673,9	5,57	1192,8	121,64	1320,9	134,69	1455,7	148,44	1037,0	105,46	1148,4	117,18	1235,4	125,83
38	750,9	6,21	1329,1	135,53	1471,7	150,07	1621,9	165,39	1154,1	117,36	1277,9	130,40	1374,8	140,03
40	832,0	6,88	1472,6	150,17	1630,7	166,29	1797,1	183,26	1270,8	129,23	1407,2	143,59	1513,8	154,19

Special constructions and diameters available - please contact us directly.





NON-ROTATION-RESISTANT ROPES

- Generate high levels of torque and rotation when loaded. Due to that the non-rotation-resistant ropes (Rotational) must not be used with a swivel.
- Designed with at least two layers of strands laid helically around a center.
- The direction of lay of the outer strands being same to that of the underlying layer.

NAVIGATION

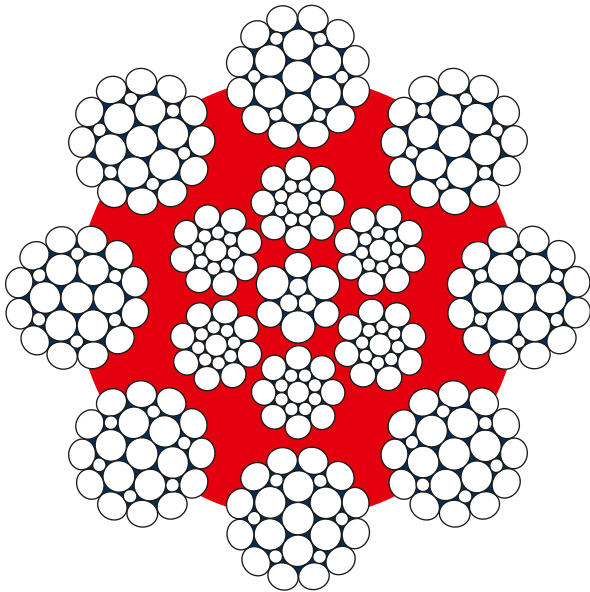
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

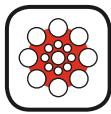
// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast
- Duroplast
- Superplast8
- Superplast10 Mix
- Superplast10
- Paraplast
- Ultrafit
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR STRATOPLAST



PROPERTIES



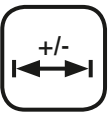
Plast rope



Lubricated



No Swivel



Tolerance

APPLICATIONS

Very flexible Filler construction. Rope for a huge number of different applications, can be used as hoisting rope in multiple part reeving for smaller lifting heights as well as for twin hoist systems with left and right hand lay ropes for greater lifting heights.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
06	8	8	203	152	0,618	0,89	0,86
06	9–13	8	263	152			
06	14–24	8	263	152			
06	25–72	8	271	152			

- Temperature range of use: –50°C to +115°C
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1770 N/mm ²		1960 N/mm ²		1770 N/mm ²		1960 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
8	30,6	0,27	54,2	5,53	60,1	6,12	47,2	4,80	52,3	5,34
9	38,8	0,35	68,6	7,00	76,0	7,75	60,0	6,10	66,4	6,78
10	48,8	0,43	86,4	8,81	95,6	9,75	74,0	7,53	82,0	8,37
11	59,6	0,53	105,4	10,75	116,8	11,91	88,5	9,00	98,0	10,00
12	68,3	0,61	120,8	12,32	133,8	13,64	106,6	10,84	118,0	12,05
12,7	78,0	0,69	138,0	14,07	152,8	15,58	119,4	12,17	132,2	13,48
13	81,7	0,73	144,6	14,74	160,1	16,33	125,5	12,76	138,9	14,18
14	95,1	0,85	168,3	17,17	186,4	19,01	144,6	14,71	160,1	16,34
15	110,8	0,99	196,1	20,00	217,2	22,15	166,3	16,91	184,1	18,79
16	125,4	1,12	222,0	22,63	245,8	25,06	189,0	19,22	209,3	21,36
17	140,3	1,25	248,2	25,31	274,9	28,03	211,5	21,51	234,2	23,90
18	157,7	1,40	279,2	28,47	309,2	31,53	239,8	24,38	265,5	27,09
19	178,6	1,59	316,1	32,23	350,0	35,70	264,5	26,90	292,9	29,89
20	198,2	1,76	350,7	35,77	388,4	39,61	295,3	30,03	327,0	33,36
21	217,1	1,93	384,3	39,18	425,5	43,39	324,2	32,97	359,0	36,63
22	245,4	2,18	434,4	44,29	481,0	49,05	356,2	36,23	394,5	40,25
23	258,1	2,30	456,8	46,58	505,9	51,58	386,8	39,34	428,3	43,71
24	280,0	2,49	495,6	50,54	548,8	55,97	423,4	43,06	468,9	47,84
25	302,0	2,69	534,5	54,51	591,9	60,36	464,3	47,22	514,2	52,47
26	326,8	2,91	578,4	58,98	640,4	65,31	504,7	51,32	558,8	57,03
27	353,2	3,14	625,1	63,75	692,3	70,59	535,8	54,49	593,3	60,54
28	375,2	3,34	664,1	67,72	735,4	74,99	576,2	58,59	638,0	65,10
29	407,7	3,63	721,6	73,59	799,1	81,48	618,0	62,85	684,3	69,83
30	435,8	3,88	771,4	78,66	854,2	87,10	666,3	67,76	737,8	75,28
31	464,3	4,13	821,8	83,80	910,0	92,79	708,3	72,03	784,3	80,03
32	495,4	4,41	876,9	89,42	971,1	99,02	756,7	76,95	837,9	85,50
33	526,4	4,69	931,7	95,01	1031,7	105,21	809,6	82,33	896,5	91,48
34	556,8	4,96	985,6	100,50	1091,3	111,29	853,7	86,82	945,3	96,46
36	626,5	5,58	1108,9	113,08	1227,9	125,22	952,4	96,86	1054,7	107,62
38	705,1	6,28	1248,0	127,26	1382,0	140,92	1071,1	108,92	1186,0	121,02
40	770,1	6,85	1363,0	138,99	1509,3	153,91	1181,1	120,11	1307,9	133,46
42	859,3	7,65	1521,0	155,10	1684,3	171,75	1308,5	133,06	1448,9	147,85
44	942,5	8,39	1668,2	170,11	1847,3	188,37	1430,1	145,44	1583,7	161,60
46	1031,6	9,18	1825,8	186,18	2021,8	206,17	1556,7	158,31	1723,8	175,90
48	1123,1	10,00	1987,9	202,71	2201,3	224,47	1692,8	172,15	1874,5	191,27
50	1212,7	10,79	2146,5	218,88	2376,9	242,38	1850,7	188,21	2049,4	209,12
52	1309,7	11,66	2318,2	236,39	2567,0	261,76	2013,7	204,78	2229,9	227,54
54	1410,5	12,55	2496,7	254,59	2764,7	281,92	2175,3	221,22	2408,8	245,80
56	1508,1	13,42	2669,3	272,19	2955,9	301,41	2344,8	238,45	2596,5	264,94
58	1627,5	14,48	2880,6	293,74	3189,8	325,27	2508,9	255,14	2778,2	283,49
60	1730,0	15,40	3062,1	312,24	3390,8	345,76	2621,5	266,59	2902,9	296,21
62	1847,2	16,44	3269,6	333,41	3620,6	369,20	2815,8	286,35	3118,0	318,17
64	1968,3	17,52	3484,0	355,27	3857,9	393,40	3000,1	305,10	3322,1	338,99
66	2093,3	18,63	3705,1	377,82	4102,8	418,37	3198,3	325,25	3541,6	361,39
68	2222,1	19,78	3933,1	401,06	4355,3	444,11	3357,6	341,45	3718,0	379,39
70	2354,7	20,96	4167,8	425,00	4615,2	470,62	3552,7	361,29	3934,1	401,44
72	2491,2	22,17	4409,4	449,63	4882,7	497,90	3751,7	381,53	4154,4	423,92

Special constructions and diameters available - please contact us directly.

NAVIGATION

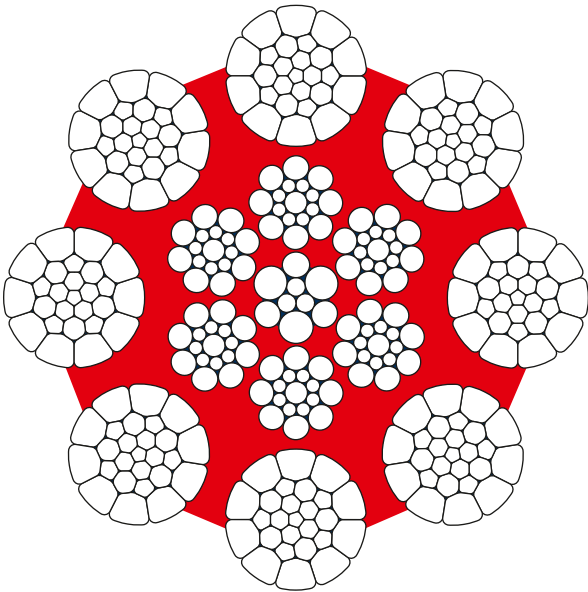
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

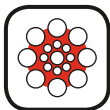
// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast**
- Duroplast
- Superplast8
- Superplast10 Mix
- Superplast10
- Paraplast
- Ultrafit
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR TURBOPLAST



PROPERTIES



Plast rope



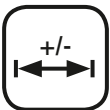
Compacted



Lubricated



No Swivel



Tolerance

APPLICATIONS

High breaking load and good resistance against crushing. Hoisting rope in multiple part reeving for smaller lifting heights as well as for twin hoist systems with left and right hand lay ropes for greater lifting heights.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
09	8	8	259	208	0,664	0,87	0,87 (1770)* 0,86 (1960, 2160)*
09	9–24	8	319	208			
09	25–48	8	327	208			
11	50–72	8	367	248			

- Temperature range of use: –50°C to +115°C
- Suitable for multi-layer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
8	33,4	0,29	59,1	6,02	65,4	6,67	72,1	7,35	51,1	5,20	56,6	5,77	63,5	6,47
9	42,8	0,37	75,7	7,72	83,9	8,55	92,4	9,42	66,0	6,71	73,0	7,46	81,4	8,29
10	53,0	0,46	93,7	9,56	103,8	10,58	114,5	11,67	80,2	8,15	88,7	9,06	101,0	10,30
11	63,8	0,56	112,8	11,51	124,0	12,74	137,8	14,05	97,1	9,87	107,5	10,98	121,0	12,40
12	75,7	0,66	134,0	13,66	148,3	15,13	163,5	16,67	115,1	11,70	127,4	13,01	144,0	14,70
12,7	84,9	0,74	150,3	15,33	166,5	16,97	183,4	18,69	129,6	13,21	143,5	14,63	161,0	16,50
13	89,5	0,78	158,3	16,15	175,3	17,88	193,3	19,71	136,6	13,89	151,3	15,43	170,0	17,30
14	103,1	0,90	182,5	18,61	202,1	20,61	222,7	22,70	157,9	16,05	174,8	17,84	196,0	20,00
15	119,0	1,04	210,6	21,47	233,2	23,78	257,0	26,20	183,1	18,62	202,7	20,69	226,0	23,10
16	135,5	1,18	239,9	24,46	265,6	27,09	292,7	29,83	207,2	21,06	229,4	23,41	252,0	25,70
17	152,4	1,33	269,7	27,50	298,7	30,46	329,2	33,56	230,6	23,46	255,4	26,06	283,0	28,90
18	168,9	1,47	299,0	30,49	331,1	33,76	364,8	37,19	260,2	26,46	288,2	29,41	314,0	32,00
19	189,0	1,64	334,5	34,11	370,4	37,77	408,2	41,61	292,1	29,71	323,5	33,02	351,0	35,80
20	210,7	1,83	372,9	38,02	412,9	42,11	455,1	46,39	321,0	32,64	355,5	36,27	391,0	39,90
21	226,9	1,97	401,6	40,96	444,8	45,35	490,1	49,96	350,8	35,68	388,5	39,64	421,0	43,00
22	251,9	2,19	445,8	45,46	493,7	50,34	544,1	55,46	391,7	39,83	433,7	44,26	468,0	47,70
23	275,1	2,39	486,9	49,65	539,2	54,98	594,2	60,57	425,7	43,30	471,4	48,10	511,0	52,10
24	299,5	2,61	530,1	54,05	587,0	59,86	646,9	65,94	464,5	47,24	514,3	52,48	556,0	56,70
25	324,2	2,82	573,8	58,51	635,4	64,79	700,3	71,38	504,2	51,28	558,2	56,97	602,0	61,40
26	352,4	3,07	623,8	63,61	690,7	70,43	761,2	77,59	548,9	55,82	607,8	62,03	655,0	66,70
27	380,3	3,31	673,1	68,64	745,4	76,01	821,4	83,74	584,9	59,49	647,7	66,10	702,0	71,60
28	405,2	3,53	717,2	73,13	794,2	80,98	875,2	89,22	629,6	64,04	697,3	71,15	748,0	76,30
29	436,0	3,79	771,6	78,68	854,5	87,13	941,8	96,00	678,8	69,03	736,9	75,20	800,0	81,60
30	470,8	4,10	833,2	84,97	922,7	94,09	1016,9	103,66	727,1	73,94	789,3	80,54	864,0	88,10
31	502,3	4,37	889,1	90,67	984,6	100,40	1085,0	110,60	776,8	79,00	843,3	86,06	911,0	92,90
32	533,7	4,64	944,6	96,32	1046,0	106,66	1152,8	117,51	828,0	84,21	911,0	92,95	968,0	98,70
33	571,8	4,98	1012,1	103,20	1120,7	114,28	1235,1	125,90	875,2	89,00	950,1	96,95	1037,0	106,00
34	601,4	5,23	1064,4	108,54	1178,7	120,19	1299,0	132,42	936,4	95,23	1024,9	104,58	1091,0	111,00
36	670,5	5,83	1186,8	121,02	1314,2	134,02	1448,3	147,63	1040,1	105,77	1129,2	115,22	1217,0	124,00
38	753,1	6,55	1333,0	135,92	1476,0	150,51	1626,7	165,82	1163,0	118,27	1262,6	128,84	1366,0	139,00
40	837,9	7,29	1483,1	151,23	1642,3	167,47	1809,9	184,49	1285,5	130,72	1395,5	142,40	1520,0	155,00
42	914,7	7,96	1619,1	165,00	1792,9	182,82	1975,8	201,40	1422,0	144,61	1543,8	157,53	1660,0	169,00
44	1010,7	8,79	1788,9	182,41	1980,9	201,99	2183,1	222,54	1554,3	158,06	1687,4	172,18	1834,0	187,00
46	1102,4	9,59	1951,3	198,98	2160,7	220,33	2381,2	242,73	1713,0	174,21	1859,7	189,77	2000,0	204,00
48	1201,1	10,45	2125,9	216,78	2354,1	240,05	2594,4	264,46	1858,8	189,03	2018,0	205,92	2179,0	222,00
50	1303,7	10,95	2307,6	235,31	2555,3	260,57	2816,0	287,16	1986,0	202,52	2199,2	224,26	2423,6	247,14
52	1409,4	11,84	2494,6	254,38	2762,4	281,69	3044,3	310,43	2147,0	218,94	2377,4	242,43	2620,0	267,17
54	1520,0	12,77	2690,4	274,35	2979,2	303,80	3283,2	334,80	2316,2	236,19	2564,9	261,55	2826,0	288,17
56	1628,1	13,68	2881,7	293,86	3191,1	325,40	3516,7	358,60	2480,1	252,90	2746,4	280,06	3026,6	308,63
58	1739,3	14,61	3078,5	313,93	3409,0	347,62	3756,8	383,10	2649,5	270,18	2933,9	299,18	3233,3	329,71
60	1865,9	15,67	3302,6	336,78	3657,1	372,93	4030,3	410,98	2842,4	289,85	3147,5	320,96	3468,7	353,71
62	1994,2	16,75	3529,7	359,94	3908,6	398,57	4307,5	439,24	3037,9	309,78	3364,0	343,04	3707,2	378,03
64	2132,4	17,91	3774,3	384,87	4179,4	426,19	4605,9	469,68	3248,3	331,24	3597,0	366,80	3964,1	404,23
66	2272,3	19,09	4021,9	410,12	4453,6	454,15	4908,1	500,49	3461,4	352,97	3833,0	390,86	4224,1	430,74
68	2403,4	20,19	4254,0	433,79	4710,7	480,36	5191,3	529,38	3661,2	373,34	4054,2	413,42	4467,9	455,60
70	2537,6	21,32	4491,6	458,02	4973,8	507,19	5481,3	558,94	3865,7	394,20	4280,7	436,51	4717,5	481,06
72	2689,8	22,60	4761,0	485,49	5272,1	537,61	5810,1	592,47	4097,6	417,84	4537,4	462,69	5000,4	509,90

Special constructions and diameters available - please contact us directly.

NAVIGATION

// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

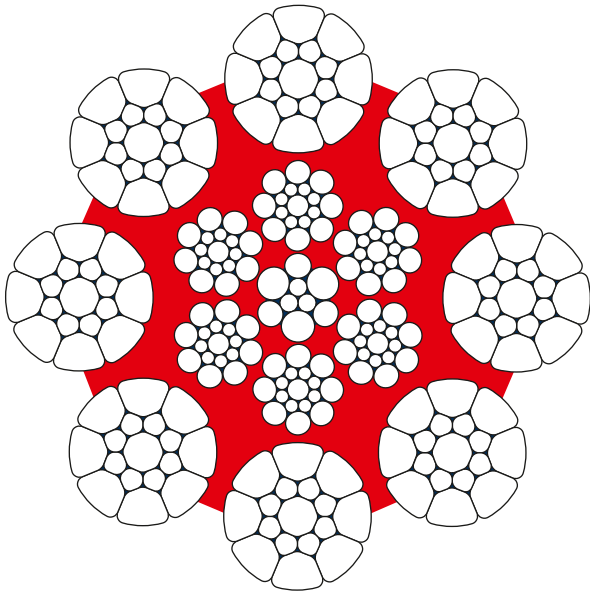
// NON-ROTATION-RESISTANT

Stratoplast
Turboplast

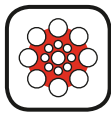
Duroplast

Superplast8
Superplast10 Mix
Superplast10
Paraplast
Ultrafit
Parafit
Turbolift
Superlift
Alphalift
Betlift
Technolift
Technolift Plus

CASAR DUROPLAST



PROPERTIES



Plast rope



Compacted



Lubricated



No Swivel



Tolerance

APPLICATIONS

Modified Turboplast construction with a high breaking load and a very good resistance against abrasion. Various kinds of different applications whenever a high abrasion resistance is required where rotation resistant ropes are not required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
03	8	8	187	136			
03	9–24	8	247	136	0,651	0,87	0,87
03	25–50	8	255	136			

- Temperature range of use: –50°C to +115°C
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1770 N/mm ²		1960 N/mm ²		1770 N/mm ²		1960 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
8	32,7	0,29	57,9	5,91	64,2	6,54	50,3	5,13	55,7	5,67
9	41,3	0,36	73,1	7,45	80,9	8,25	63,9	6,51	70,7	7,21
10	50,9	0,44	90,1	9,18	99,7	10,17	79,3	8,09	87,8	8,96
11	62,1	0,54	109,9	11,20	121,7	12,41	96,2	9,80	106,5	10,85
12	73,7	0,64	130,5	13,31	144,5	14,74	114,6	11,69	127,0	12,94
12,7	82,2	0,72	145,5	14,84	161,1	16,43	127,3	12,98	140,9	14,37
13	86,1	0,75	152,5	15,55	168,8	17,22	133,7	13,64	148,1	15,10
14	100,2	0,87	177,4	18,09	196,4	20,03	155,0	15,81	171,8	17,52
15	115,4	1,00	204,2	20,83	226,2	23,06	178,0	18,16	197,2	20,11
16	132,0	1,15	233,6	23,82	258,7	26,38	202,7	20,67	224,4	22,89
17	144,9	1,26	256,5	26,16	284,0	28,96	224,2	22,87	248,3	25,32
18	165,4	1,44	292,8	29,86	324,3	33,07	257,4	26,25	285,1	29,07
19	182,2	1,59	322,5	32,89	357,1	36,42	283,1	28,86	313,4	31,96
20	204,8	1,78	362,5	36,96	401,4	40,93	316,5	32,27	350,5	35,74
21	221,7	1,93	392,5	40,02	434,6	44,32	343,1	34,99	380,0	38,74
22	247,1	2,15	437,4	44,60	484,3	49,39	381,4	38,88	422,3	43,05
23	266,7	2,32	472,1	48,14	522,8	53,31	414,9	42,31	459,5	46,86
24	293,7	2,56	519,8	53,01	575,6	58,70	455,3	46,43	504,2	51,41
25	315,3	2,74	558,0	56,90	617,9	63,01	488,7	49,83	541,2	55,18
26	347,2	3,02	614,6	62,67	680,5	69,39	536,5	54,71	594,0	60,58
27	379,4	3,30	671,5	68,48	743,6	75,83	584,4	59,59	647,1	65,98
28	401,7	3,50	711,0	72,50	787,4	80,29	621,2	63,34	687,9	70,15
29	425,7	3,70	753,5	76,84	834,4	85,09	645,1	65,79	714,4	72,85
30	461,3	4,01	816,4	83,25	904,1	92,19	698,1	71,19	773,1	78,83
31	499,5	4,35	884,1	90,15	979,0	99,83	754,5	76,94	835,5	85,20
32	527,7	4,59	933,9	95,24	1034,2	105,46	794,9	81,05	880,2	89,75
33	570,5	4,96	1009,8	102,97	1118,2	114,02	839,3	85,59	929,4	94,77
34	592,2	5,15	1048,3	106,89	1160,8	118,37	890,8	90,83	986,4	100,58
36	664,9	5,79	1176,9	120,01	1303,2	132,89	1010,2	103,01	1118,6	114,07
38	736,5	6,41	1303,6	132,93	1443,6	147,20	1115,8	113,78	1235,6	126,00
40	820,5	7,14	1452,3	148,09	1608,2	163,99	1241,2	126,56	1374,4	140,15
42	905,9	7,88	1603,4	163,50	1775,5	181,05	1371,8	139,88	1519,0	154,90
44	991,2	8,62	1754,4	178,90	1942,8	198,11	1499,1	152,87	1660,0	169,28
46	1085,4	9,44	1921,2	195,91	2127,4	216,94	1638,9	167,12	1814,9	185,07
48	1189,0	10,35	2104,6	214,61	2330,5	237,65	1790,6	182,59	1982,8	202,19
50	1281,3	11,15	2267,8	231,26	2511,3	256,08	1933,5	197,17	2141,1	218,33

Special constructions and diameters available - please contact us directly.

NAVIGATION

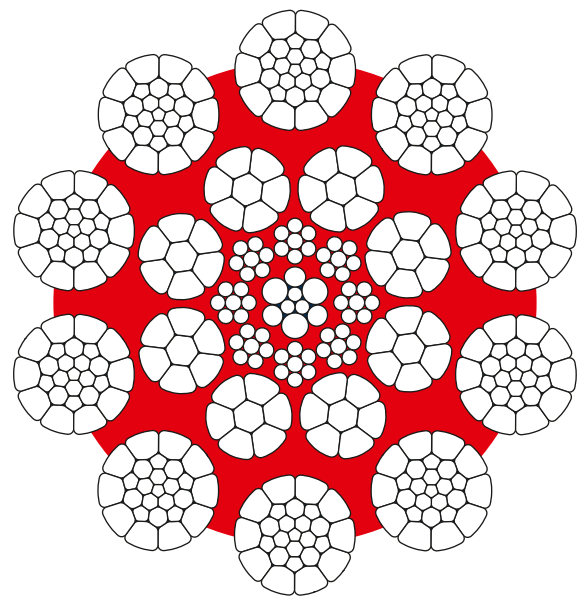
// ROTATION-
RESISTANT

// SEMI-ROTATION-
RESISTANT

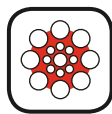
// NON-ROTATION-
RESISTANT

- Stratoplast
- Turboplast
- Duroplast
- Superplast8**
- Superplast10 Mix
- Superplast10
- Paraplast
- Ultrafit
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR **SUPERPLAST8**



PROPERTIES



Plast rope



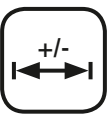
Compacted



Lubricated



No Swivel



Tolerance

APPLICATIONS

Very high breaking load and good resistance against drum crushing. Hoisting rope in multiple part reeving for smaller lifting heights as well as for twin hoist systems with left and right hand lay ropes for greater lifting heights.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm²
11	10–67	10	381	260	0,686	0,86	0,85 (1770, 1960)*
>13	68–76	10	519	310			0,84 (2160)*

- Temperature range of use: –50°C to +115°C
- Suitable for multi-layer spooling
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
10	54,6	0,47	96,6	9,85	107,0	10,91	117,9	12,02	82,6	8,42	90,9	9,27	99,6	10,15
11	65,9	0,57	116,6	11,89	129,2	13,17	142,3	14,52	98,9	10,09	108,9	11,10	119,3	12,16
12	77,0	0,66	136,3	13,90	151,0	15,40	166,4	16,97	115,6	11,79	127,2	12,97	139,4	14,21
12,7	86,9	0,75	153,8	15,68	170,3	17,36	187,6	19,13	131,0	13,36	144,2	14,71	158,0	16,11
13	90,9	0,78	160,9	16,41	178,2	18,17	196,4	20,03	137,9	14,06	151,8	15,47	166,2	16,95
14	103,9	0,89	183,9	18,75	203,6	20,76	224,4	22,88	157,9	16,10	173,8	17,72	190,4	19,42
15	119,8	1,03	212,0	21,62	234,7	23,94	258,7	26,38	181,5	18,51	199,8	20,37	218,9	22,32
16	137,0	1,18	242,5	24,73	268,6	27,39	296,0	30,18	205,7	20,98	226,5	23,09	248,1	25,30
17	156,6	1,35	277,2	28,27	307,0	31,30	338,3	34,50	236,2	24,08	260,0	26,51	284,8	29,04
18	176,0	1,51	311,6	31,77	345,0	35,18	380,2	38,77	266,0	27,12	292,8	29,86	320,8	32,71
19	194,0	1,67	343,4	35,01	380,2	38,77	419,0	42,73	291,0	29,68	320,4	32,67	351,0	35,79
20	215,4	1,85	381,3	38,88	422,2	43,05	465,3	47,45	326,5	33,29	358,2	36,65	394,8	40,15
21	237,7	2,04	420,7	42,90	465,8	47,50	513,4	52,35	360,4	36,75	396,8	40,46	434,7	44,32
22	260,0	2,24	460,3	46,93	509,7	51,97	561,7	57,27	392,6	40,04	432,2	44,07	473,5	48,28
23	286,4	2,46	507,0	51,70	561,4	57,24	618,7	63,09	429,7	43,82	473,0	48,23	518,2	52,84
24	312,2	2,69	552,5	56,34	611,8	62,39	674,3	68,76	470,0	47,93	517,4	52,76	566,9	57,80
25	336,5	2,89	595,6	60,73	659,5	67,25	726,8	74,11	505,4	51,53	559,6	57,06	613,4	62,55
26	363,7	3,13	643,8	65,65	712,9	72,69	785,6	80,11	549,5	56,04	604,9	61,69	662,7	67,58
27	390,7	3,36	691,5	70,52	765,8	78,09	843,9	86,06	587,6	59,92	646,8	65,96	708,6	72,26
28	420,3	3,61	743,8	75,85	823,7	83,99	907,7	92,56	631,1	66,52	698,9	71,27	762,0	77,70
29	445,8	3,83	789,1	80,46	873,8	89,10	962,9	98,19	670,2	68,34	737,8	75,23	808,3	82,42
30	480,5	4,13	850,5	86,72	941,7	96,03	1037,8	105,83	723,8	73,81	796,8	81,25	872,9	89,01
31	509,3	4,38	901,5	91,93	998,3	101,80	1100,2	112,19	769,1	78,43	846,7	86,34	927,5	94,58
32	560,3	4,82	991,7	101,12	1098,1	111,98	1210,2	123,40	841,0	85,76	925,9	94,41	1014,3	103,43
33	585,1	5,03	1035,6	105,60	1146,8	116,94	1263,8	128,87	879,7	89,71	968,4	98,75	1060,9	108,19
34	630,2	5,42	1115,4	113,74	1235,2	125,95	1361,2	138,80	950,2	96,89	1046,0	106,66	1145,9	116,85
36	704,1	6,06	1246,2	127,08	1380,0	140,72	1520,8	155,08	1065,1	108,61	1172,5	119,56	1284,5	130,98
38	774,3	6,66	1370,6	139,76	1517,7	154,76	1672,5	170,55	1165,1	118,80	1282,5	130,78	1405,0	143,27
40	861,9	7,41	1525,5	155,56	1689,3	172,26	1861,7	189,84	1298,3	132,39	1429,3	145,74	1565,8	159,67
42	949,8	8,17	1681,2	171,43	1861,6	189,83	2051,6	209,20	1436,7	146,50	1581,5	161,27	1732,6	176,67
44	1038,3	8,93	1837,7	187,40	2035,0	207,51	2242,7	228,69	1567,8	159,87	1725,8	175,99	1890,7	192,80
46	1150,9	9,90	2037,2	207,73	2255,8	230,03	2486,0	253,51	1725,3	175,93	1899,3	193,67	2080,7	212,17
48	1249,9	10,75	2212,4	225,60	2449,9	249,82	2699,9	275,31	1879,4	191,65	2068,9	210,97	2266,6	231,13
50	1342,9	11,55	2377,0	242,39	2632,2	268,41	2900,8	295,80	2027,8	206,78	2232,3	227,63	2445,5	249,38
52	1455,2	12,51	2575,6	262,64	2852,1	290,83	3143,1	320,51	2199,5	224,29	2421,3	246,91	2652,6	270,49
54	1582,1	13,61	2800,4	285,56	3100,0	316,21	3417,4	348,48	2386,0	243,30	2626,5	267,83	2877,4	293,42
56	1713,1	14,73	3032,1	309,19	3357,6	342,38	3700,2	377,32	2592,1	264,32	2853,4	290,97	3126,0	318,76
58	1812,2	15,59	3207,6	327,09	3551,9	362,20	3914,4	399,16	2729,1	278,30	3004,3	306,36	3291,3	335,62
60	1952,4	16,79	3455,8	352,39	3826,8	390,22	4217,3	430,04	2947,8	300,59	3245,0	330,90	3555,0	362,51
62	2070,4	17,81	3664,6	373,68	4057,9	413,79	4472,0	456,02	3117,7	317,92	3432,1	349,98	3759,9	383,41
64	2189,3	18,83	3875,0	395,14	4291,0	437,56	4728,8	482,21	3312,7	337,80	3646,8	371,87	3995,1	407,39
66	2346,1	20,18	4152,7	423,45	4598,4	468,91	5067,7	516,76	3521,7	359,11	3876,8	395,32	4247,1	433,08
68	2474,6	21,53	4380,0	446,64	4850,2	494,59	5345,1	545,06	3769,7	384,41	4147,3	422,91	4600,3	469,10
70	2645,4	23,02	4682,3	477,46	5184,9	528,72	5714,0	582,67	4029,8	410,93	4462,4	455,04	4917,7	501,47
72	2793,9	24,31	4945,2	504,28	5476,1	558,41	6034,9	615,39	4256,1	434,01	4713,0	480,60	5193,9	529,64
74	2952,6	25,69	5226,1	532,92	5787,1	590,12	6377,6	650,34	4497,8	458,65	4980,6	507,89	5488,9	559,72
76	3098,2	26,95	5483,8	559,20	6072,5	619,23	6692,2	682,42	4719,7	481,28	5226,3	532,94	5759,6	587,32

Special constructions and diameters available - please contact us directly.

NAVIGATION

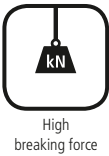
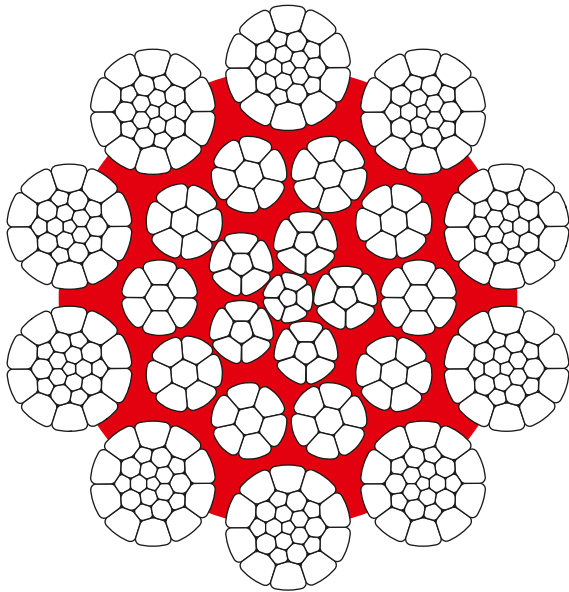
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// SEMI-ROTATION-RESISTANT

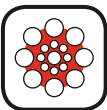
// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast
- Duroplast
- Superplast8
- Superplast10 Mix**
- Superplast10
- Paraplast
- Ultrafit
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR SUPERPLAST10 MIX



PROPERTIES



Plast rope



Compacted



Parallel Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

Very high bending fatigue performance and high minimum breaking load. Mainly overhead and industrial cranes where rotation resistant ropes are not required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
11	10–56	10	366	260	0,700	0,87	0,87 (1960)* 0,85 (2160)*

- Temperature range of use: –50°C to +115°C
- Suitable for multi-layer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1960 N/mm ²		2160 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
10	55,7	0,48	108	11,01	119	12,13	94	9,59	103	10,51
11	68,5	0,60	133	13,56	147	14,99	116	11,83	125	12,75
12	80,2	0,70	156	15,91	172	17,54	136	13,87	148	15,09
13	94,6	0,82	184	18,76	203	20,70	160	16,32	175	17,84
14	108,3	0,94	211	21,52	232	23,66	183	18,66	198	20,19
15	124,7	1,08	243	24,78	268	27,33	211	21,52	230	23,45
16	139,9	1,22	273	27,84	301	30,69	237	24,17	259	26,41
17	159,2	1,38	310	31,61	342	34,87	270	27,53	291	29,67
18	177,4	1,54	346	35,28	381	38,85	301	30,69	328	33,45
19	202,6	1,76	395	40,28	436	44,46	344	35,08	375	38,24
20	222,0	1,93	433	44,15	477	48,64	377	38,44	406	41,40
21	242,9	2,11	474	48,34	522	53,23	412	42,01	449	45,79
22	274,1	2,39	535	54,56	589	60,06	465	47,42	507	51,70
23	298,9	2,60	583	59,45	643	65,57	507	51,70	546	55,68
24	325,8	2,83	635	64,75	701	71,48	553	56,39	602	61,39
25	350,0	3,05	683	69,65	753	76,79	594	60,57	647	65,98
26	380,0	3,31	741	75,56	817	83,31	645	65,77	695	70,87
27	407,5	3,55	795	81,07	876	89,33	692	70,57	754	76,89
28	445,9	3,88	870	88,72	959	97,79	757	77,19	825	84,13
29	476,3	4,14	929	94,73	1024	104,42	808	82,39	871	88,82
30	498,9	4,34	974	99,32	1073	109,42	847	86,37	923	94,12
31	537,6	4,68	1049	106,97	1156	117,88	913	93,10	994	101,36
32	578,2	5,03	1128	115,03	1244	126,85	982	100,14	1057	107,79
33	610,5	5,31	1191	121,45	1313	133,89	1036	105,64	1129	115,13
34	651,5	5,67	1271	129,61	1401	142,86	1106	112,78	1205	122,88
36	727,5	6,33	1420	144,80	1565	159,59	1235	125,94	1330	135,62
38	806,5	7,02	1574	160,50	1735	176,92	1369	139,60	1492	152,14
40	891,5	7,76	1740	177,43	1918	195,58	1496	152,55	1621	165,30
42	985,5	8,57	1924	196,20	2120	216,18	1654	168,66	1792	182,74
44	1084,6	9,44	2117	215,88	2333	237,90	1820	185,59	1972	201,09
46	1182,5	10,29	2308	235,35	2544	259,42	1985	202,42	2150	219,24
48	1296,1	11,28	2530	257,99	2789	284,40	2176	221,90	2356	240,25
50	1400,3	12,18	2733	278,69	3013	307,24	2350	239,64	2546	259,62
52	1493,8	13,00	2916	297,35	3214	327,74	2508	255,75	2716	276,96
54	1631,8	14,20	3185	324,78	3511	358,03	2793	284,81	2967	302,55
56	1745,8	15,19	3408	347,52	3756	383,01	2931	298,88	3174	323,66

Special constructions and diameters available - please contact us directly.

NAVIGATION

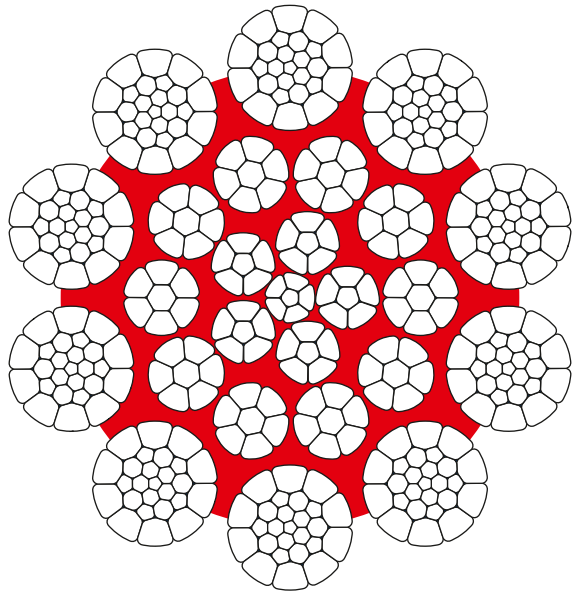
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

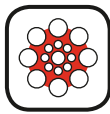
// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast
- Duroplast
- Superplast8
- Superplast10 Mix
- Superplast10**
- Paraplast
- Ultrafit
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR SUPERPLAST10



PROPERTIES



Plast rope



Compacted



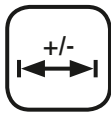
Parallel Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

High bending fatigue performance and very high minimum breaking load. Mainly overhead and industrial cranes where rotation resistant ropes are not required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
11	10–56	10	366	260	0,700	0,87	0,87 (1960)* 0,86 (2160)*

- Temperature range of use: –50°C to +115°C
- Suitable for multi-layer spooling
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1960 N/mm ²		2160 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
10	55,7	0,48	109	11,12	120	12,26	94	9,59	103	10,50
11	68,5	0,60	134	13,69	148	15,09	116	11,83	127	12,95
12	80,2	0,70	157	16,02	173	17,65	136	13,87	148	15,09
13	94,6	0,82	185	18,90	204	20,83	161	16,42	175	17,85
14	108,3	0,94	212	21,64	234	23,84	184	18,76	201	20,50
15	124,7	1,08	244	24,91	269	27,46	212	21,62	231	23,56
16	139,9	1,22	274	27,97	302	30,82	238	24,27	260	26,51
17	159,2	1,38	312	31,81	344	35,06	271	27,63	295	30,08
18	177,4	1,54	348	35,46	383	39,07	302	30,80	329	33,55
19	202,6	1,76	397	40,49	438	44,63	345	35,18	376	38,34
20	222,0	1,93	435	44,37	479	48,89	378	38,55	412	42,01
21	242,9	2,11	476	48,54	525	53,49	414	42,22	451	45,99
22	274,1	2,39	537	54,79	592	60,38	467	47,62	509	51,90
23	298,9	2,60	586	59,73	646	65,83	509	51,90	555	56,59
24	325,8	2,83	638	65,11	704	71,75	555	56,59	605	61,69
25	350,0	3,05	686	69,95	756	77,09	596	60,78	650	66,28
26	380,0	3,31	745	75,94	821	83,69	647	65,98	705	71,89
27	407,5	3,55	799	81,45	880	89,76	694	70,77	757	77,19
28	445,9	3,88	874	89,13	963	98,22	760	77,50	828	84,43
29	476,3	4,14	933	95,19	1029	104,90	812	82,80	884	90,14
30	498,9	4,34	978	99,71	1078	109,88	850	86,68	926	94,43
31	537,6	4,68	1054	107,44	1161	118,41	916	93,41	998	101,77
32	578,2	5,03	1133	115,57	1249	127,36	986	100,54	1074	109,52
33	610,5	5,31	1196	122,01	1319	134,46	1040	106,05	1134	115,64
34	651,5	5,67	1277	130,22	1407	143,50	1111	113,29	1210	123,39
36	727,5	6,33	1426	145,40	1571	160,24	1240	126,45	1351	137,77
38	806,5	7,02	1581	161,19	1742	177,64	1375	140,21	1498	152,76
40	891,5	7,76	1747	178,18	1926	196,36	1502	153,16	1627	165,91
42	985,5	8,57	1932	196,97	2129	217,07	1661	169,38	1798	183,35
44	1084,6	9,44	2126	216,77	2343	238,89	1828	186,41	1979	201,80
46	1182,5	10,29	2318	236,34	2554	260,45	1993	203,23	2158	220,06
48	1296,1	11,28	2540	259,05	2800	285,48	2184	222,71	2365	241,17
50	1400,3	12,18	2745	279,86	3025	308,42	2360	240,66	2555	260,54
52	1493,8	13,00	2928	298,56	3227	329,03	2518	256,76	2726	277,98
54	1631,8	14,20	3198	326,15	3525	359,43	2750	280,42	2978	303,67
56	1745,8	15,19	3422	348,93	3771	384,54	2942	300,00	3186	324,88

Special constructions and diameters available - please contact us directly.

NAVIGATION

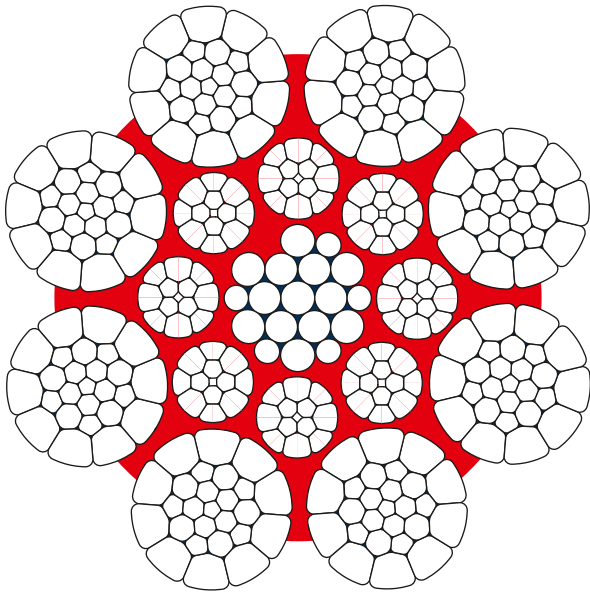
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// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

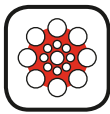
- Stratoplast
- Turboplast
- Duroplast
- Superplast8
- Superplast10 Mix
- Superplast10
- Paraplast**
- Ultrafit
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR **PARAPLAST**



Very High
breaking force

PROPERTIES



Plast rope



Compacted



Parallel
Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

Very fatigue resistant and very high minimum breaking load. Hoist rope for electrical hoists and lifting devices with multiple part reeving, whereas a rotation resistant rope is not needed due to great lifting heights, low number of falls or guided loads.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
09	6–32	8	323	208	0,709	0,85	0,88 (1770)*
09	33–50	8	363	208			0,87 (1960)* 0,86 (2160)*

- Temperature range of use: –50°C to +115°C
- Suitable for multi-layer spooling
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
6	19,0	0,16	33,6	3,42	37,2	3,79	41,0	4,18	29,5	3,01	32,7	3,34	35,2	3,59
7	26,3	0,22	46,6	4,75	51,5	5,26	56,8	5,79	41,0	4,18	45,4	4,63	48,9	4,98
8	34,8	0,30	61,6	6,28	68,2	6,95	75,1	7,66	54,2	5,52	60,0	6,12	64,6	6,59
9	44,1	0,37	78,0	7,95	86,3	8,80	95,1	9,70	68,6	7,00	76,0	7,75	81,8	8,34
10	54,2	0,46	96,0	9,79	106,3	10,84	117,1	11,94	84,5	8,61	93,5	9,54	100,7	10,27
11	65,7	0,56	116,3	11,86	128,8	13,14	142,0	14,48	102,4	10,44	113,4	11,56	122,1	12,45
12	79,6	0,68	140,8	14,36	155,9	15,90	171,8	17,52	123,9	12,64	137,2	13,99	147,8	15,07
12,7	88,4	0,75	156,4	15,95	173,2	17,66	190,9	19,46	137,6	14,04	152,4	15,54	164,1	16,74
13	92,6	0,79	163,9	16,71	181,5	18,51	200,0	20,39	144,2	14,71	159,7	16,28	172,0	17,54
14	107,1	0,91	189,6	19,34	210,0	21,41	231,4	23,60	166,9	17,02	184,8	18,84	199,0	20,29
15	123,1	1,05	217,8	22,21	241,2	24,60	265,8	27,11	191,7	19,55	212,3	21,64	228,6	23,31
16	139,4	1,19	246,7	25,16	273,2	27,86	301,1	30,70	217,1	22,14	240,4	24,52	258,9	26,40
17	158,5	1,35	280,5	28,60	310,6	31,67	342,3	34,90	246,8	25,17	273,3	27,87	294,4	30,02
18	176,4	1,50	312,3	31,84	345,8	35,26	381,1	38,86	274,8	28,02	304,3	31,03	327,7	33,42
19	198,3	1,69	351,0	35,79	388,7	39,64	428,3	43,68	308,9	31,50	342,0	34,88	368,4	37,56
20	220,1	1,87	389,6	39,73	431,4	43,99	475,5	48,48	342,9	34,96	379,7	38,71	408,9	41,70
21	240,4	2,04	425,5	43,39	471,2	48,05	519,3	52,95	374,5	38,18	414,7	42,28	446,6	45,54
22	264,8	2,25	468,7	47,80	519,1	52,93	572,0	58,33	412,5	42,06	456,8	46,58	491,9	50,16
23	299,8	2,55	530,7	54,11	587,6	59,92	647,6	66,04	467,0	47,62	517,1	52,73	556,9	56,79
24	325,7	2,77	576,5	58,79	638,4	65,10	703,5	71,74	507,3	51,73	561,8	57,29	605,0	61,70
25	353,1	3,00	625,0	63,73	692,1	70,57	762,7	77,77	550,0	56,08	609,0	62,10	655,9	66,89
26	383,9	3,26	679,5	69,29	752,4	76,73	829,2	84,56	598,0	60,98	662,2	67,52	713,1	72,72
27	412,3	3,50	729,7	74,41	808,0	82,39	890,6	90,80	642,1	65,48	711,0	72,51	765,8	78,09
28	441,0	3,75	780,5	79,59	864,3	88,13	952,5	97,12	686,8	70,04	760,6	77,55	819,1	83,53
29	475,6	4,04	841,8	85,84	932,2	95,06	1027,3	104,76	740,8	75,54	820,3	83,65	883,5	90,09
30	512,5	4,36	907,1	92,50	1004,5	102,43	1107,0	112,88	798,3	81,40	884,0	90,14	952,0	97,08
31	546,6	4,65	967,5	98,66	1071,4	109,25	1180,7	120,40	841,7	85,83	921,4	93,95	1003,6	102,34
32	580,4	4,93	1027,3	104,75	1137,5	116,00	1253,6	127,83	893,7	91,13	978,3	99,76	1065,6	108,66
33	618,5	5,26	1094,7	111,63	1212,3	123,62	1336,0	136,23	952,4	97,12	1042,5	106,31	1135,6	115,80
34	650,8	5,53	1151,9	117,46	1275,6	130,07	1405,7	143,34	1002,2	102,19	1097,0	111,86	1194,9	121,84
35	690,5	5,87	1222,1	124,62	1353,3	138,00	1491,4	152,08	1063,3	108,42	1163,9	118,68	1267,7	129,27
36	732,0	6,22	1295,6	132,12	1434,7	146,30	1581,1	161,23	1127,2	114,94	1233,8	125,82	1343,9	137,04
37	770,8	6,55	1364,3	139,12	1510,7	154,05	1664,9	169,77	1186,9	121,03	1299,2	132,49	1415,2	144,31
38	817,0	6,95	1446,1	147,47	1601,4	163,30	1764,8	179,96	1258,1	128,30	1377,2	140,43	1500,1	152,96
39	851,5	7,24	1507,2	153,69	1669,0	170,19	1839,3	187,56	1311,3	133,71	1435,3	146,36	1563,4	159,42
40	909,7	7,73	1610,2	164,20	1783,1	181,82	1965,0	200,38	1400,9	142,85	1533,5	156,37	1670,3	170,32
42	996,8	8,47	1764,3	179,90	1953,6	199,22	2153,0	219,55	1534,9	156,52	1680,1	171,33	1830,1	186,61
44	1098,4	9,34	1944,1	198,24	2152,8	219,53	2372,5	241,93	1691,4	172,47	1851,4	188,79	2016,6	205,64
46	1200,0	10,20	2124,1	216,59	2352,1	239,84	2592,1	264,32	1847,9	188,44	2022,8	206,27	2203,3	224,67
48	1306,4	11,10	2312,3	235,79	2560,5	261,10	2821,8	287,74	2011,7	205,13	2202,0	224,54	2398,5	244,58
50	1403,3	11,93	2483,8	253,27	2750,4	280,46	3031,0	309,08	2160,9	220,35	2365,3	241,20	2576,4	262,72

Special constructions and diameters available - please contact us directly.

NAVIGATION

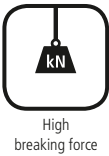
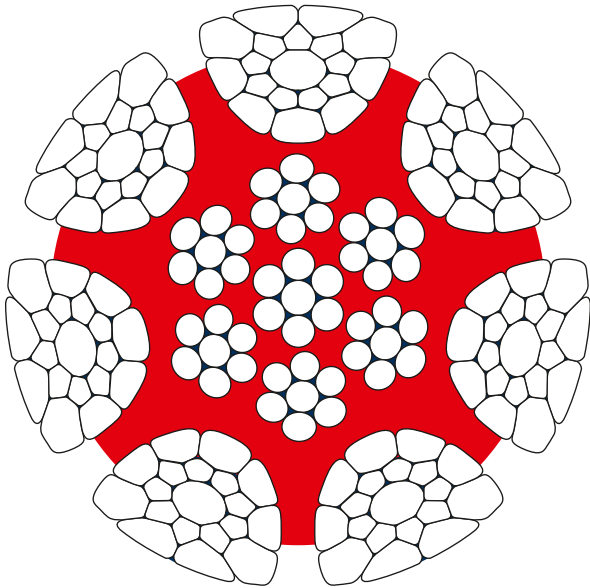
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

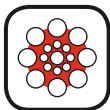
// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast
- Duroplast
- Superplast8
- Superplast10 Mix
- Superplast10
- Paraplast
- Ultrafit**
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR **ULTRAFIT**



PROPERTIES



Plast rope



Compacted



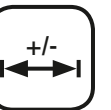
Swaged



Lubricated



No Swivel



Tolerance

APPLICATIONS

Highest abrasion resistance. Especially suitable for multi-layer spooling. Boom hoist rope for mobile cranes and grabs, hoist rope for applications where rotation resistant ropes are not required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
05	8	7	184	133			
05	9–10	7	244	133	0,702	0,88	0,85 (1960)* 0,84 (2160)*
05	11–50	7	182	133			

- Temperature range of use: –50°C to +115°C
- Suitable for multi-layer spooling
- Only available in ordinary lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1960 N/mm ²		2160 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
8	34,2	0,30	67,1	6,84	73,9	7,54	57,0	5,81	62,1	6,33
9	45,8	0,40	89,8	9,16	99,0	10,09	76,3	7,78	83,1	8,48
10	56,7	0,50	111,2	11,33	122,5	12,49	94,5	9,63	102,9	10,49
11	67,1	0,59	131,4	13,40	144,8	14,77	111,7	11,39	121,7	12,41
12	78,1	0,69	153,1	15,61	168,7	17,20	130,1	13,27	141,7	14,45
13	93,5	0,82	183,2	18,68	201,9	20,59	155,7	15,88	169,6	17,30
14	107,7	0,95	211,1	21,52	232,6	23,72	179,4	18,29	195,4	19,92
15	123,6	1,09	242,2	24,70	267,0	27,22	205,9	21,00	224,2	22,87
16	144,2	1,27	282,6	28,81	311,4	31,75	240,2	24,49	261,6	26,67
17	160,6	1,41	314,8	32,10	346,9	35,38	267,6	27,29	291,4	29,72
18	180,8	1,59	354,4	36,14	390,5	39,82	301,2	30,72	328,1	33,45
19	198,3	1,75	388,7	39,63	428,3	43,68	330,4	33,69	359,8	36,69
20	223,5	1,97	438,1	44,67	482,8	49,23	372,4	37,97	405,5	41,35
21	241,6	2,13	473,5	48,28	521,8	53,21	402,5	41,04	438,8	44,70
22	267,3	2,35	523,9	53,42	577,3	58,87	445,3	45,41	485,0	49,45
23	291,9	2,57	572,2	58,35	630,6	64,30	486,4	49,60	529,7	54,01
24	322,5	2,84	632,0	64,45	696,5	71,02	537,2	54,78	585,1	59,66
25	354,4	3,12	694,6	70,83	765,5	78,06	590,4	60,20	643,0	65,57
26	373,9	3,29	732,8	74,73	807,6	82,35	622,9	63,52	678,4	69,18
27	399,5	3,52	783,1	79,85	863,0	88,00	665,6	67,87	724,9	73,92
28	430,6	3,79	844,0	86,06	930,1	94,85	717,4	73,15	781,3	79,67
29	456,5	4,02	894,8	91,25	986,1	100,56	760,6	77,56	828,3	84,47
30	494,4	4,35	969,0	98,81	1067,8	108,89	823,6	83,99	897,0	91,47
32	564,4	4,97	1106,3	112,81	1219,1	124,32	940,3	95,89	1024,1	104,43
34	655,3	5,77	1284,3	130,97	1415,4	144,33	1091,7	111,32	1188,9	121,24
36	709,6	6,24	1390,7	141,81	1532,6	156,28	1182,1	120,54	1287,4	131,28
38	791,9	6,97	1552,1	158,27	1710,4	174,42	1319,3	134,53	1436,8	146,51
40	876,9	7,72	1718,6	175,25	1894,0	193,14	1460,8	148,97	1591,0	162,23
42	964,5	8,49	1890,5	192,77	2083,4	212,44	1606,9	163,86	1750,0	178,45
44	1059,1	9,32	2075,7	211,67	2287,5	233,26	1764,4	179,92	1921,5	195,94
46	1158,1	10,19	2269,8	231,46	2501,5	255,08	1929,4	196,74	2101,2	214,26
48	1261,5	11,10	2472,5	252,13	2724,8	277,86	2101,7	214,31	2288,9	233,40
50	1358,4	11,95	2662,4	271,49	2934,1	299,20	2263,1	230,77	2464,7	251,33

Special constructions and diameters available - please contact us directly.

NAVIGATION

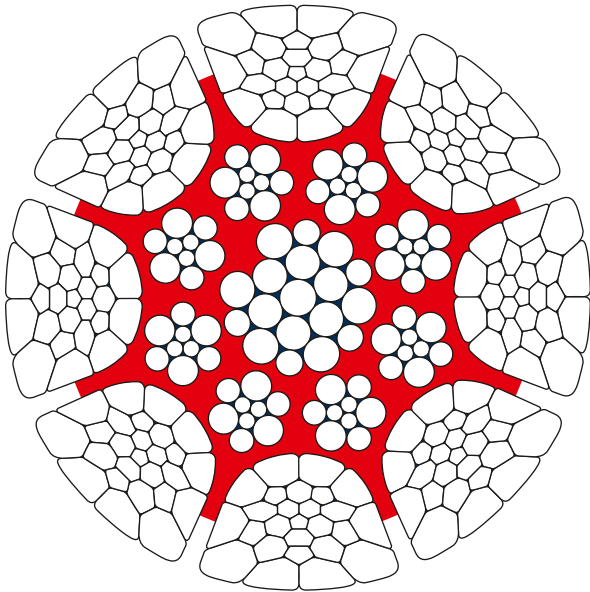
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

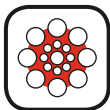
// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast
- Duroplast
- Superplast8
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- Paraplast
- Ultrafit
- Parafit**
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- Technolift Plus

CASAR PARAFIT



PROPERTIES



Plast rope



Compacted



Swaged



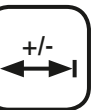
Parallel Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

Boom hoist rope for all kind of crawler cranes and mobile cranes especially suited for multi-layer spooling.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor * N/mm ²
09	8–50	8	298	208	0,744	0,85	0,87 (1960)* 0,86 (2160)*

- Temperature range of use: –50°C to +115°C
- Suitable for multi-layer spooling
- Only available in ordinary lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force				minimum breaking force			
			1960 N/mm²		2160 N/mm²		1960 N/mm²		2160 N/mm²	
mm	mm²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
8	37,0	0,31	72,5	7,39	79,9	8,14	63,1	6,43	68,7	7,00
9	46,6	0,40	91,3	9,31	100,6	10,26	79,4	8,10	86,5	8,82
10	57,1	0,49	111,9	11,41	123,3	12,57	97,3	9,93	106,0	10,81
11	71,2	0,61	139,6	14,24	153,9	15,69	121,5	12,39	132,4	13,50
12	82,7	0,70	162,0	16,52	178,6	18,21	141,0	14,37	153,6	15,66
13	97,9	0,83	191,9	19,56	211,4	21,56	166,9	17,02	181,8	18,54
14	114,9	0,98	225,1	22,95	248,1	25,30	195,8	19,97	213,4	21,76
15	130,9	1,11	256,5	26,16	282,7	28,83	223,2	22,76	243,1	24,79
16	149,6	1,27	293,2	29,89	323,1	32,95	255,1	26,01	277,9	28,33
17	171,1	1,45	335,3	34,20	369,6	37,68	291,8	29,75	317,8	32,41
18	189,2	1,61	370,9	37,82	408,7	41,68	322,7	32,90	351,5	35,84
19	213,7	1,82	418,9	42,71	461,6	47,07	364,4	37,16	397,0	40,48
20	233,7	1,99	458,0	46,70	504,7	51,47	398,5	40,63	434,1	44,26
21	256,5	2,18	502,8	51,27	554,1	56,50	437,5	44,61	476,5	48,59
22	284,5	2,42	557,6	56,86	614,5	62,67	485,2	49,47	528,5	53,89
23	309,8	2,63	607,2	61,92	669,2	68,24	528,3	53,87	575,5	58,69
24	337,9	2,87	662,2	67,53	729,8	74,42	576,1	58,75	627,6	64,00
25	366,2	3,11	717,7	73,19	790,9	80,65	624,4	63,67	680,2	69,36
26	393,9	3,35	772,1	78,73	850,9	86,76	671,7	68,50	731,7	74,62
27	426,5	3,63	835,9	85,24	921,2	93,93	727,2	74,15	792,2	80,78
28	459,1	3,90	899,8	91,75	991,6	101,11	782,8	79,82	852,7	86,96
29	491,5	4,18	963,3	98,23	1061,6	108,25	838,0	85,46	912,9	93,09
30	529,1	4,50	1037,1	105,75	1142,9	116,54	902,2	92,00	982,9	100,23
32	597,5	5,08	1171,2	119,43	1290,7	131,61	1018,9	103,90	1110,0	113,19
34	678,7	5,77	1330,2	135,65	1466,0	149,49	1157,3	118,01	1260,7	128,56
36	757,5	6,44	1484,6	151,39	1636,1	166,84	1291,6	131,71	1407,0	143,48
38	848,2	7,21	1662,5	169,52	1832,1	186,82	1446,4	147,49	1575,6	160,67
40	934,7	7,95	1832,0	186,81	2018,9	205,87	1593,8	162,53	1736,3	177,05
42	1031,0	8,76	2019,8	205,96	2225,9	226,97	1757,2	179,18	1914,2	195,20
44	1138,0	9,67	2229,7	227,36	2457,2	250,56	1939,8	197,81	2113,2	215,49
46	1241,0	10,55	2431,9	247,99	2680,1	273,29	2115,8	215,75	2304,9	235,03
48	1351,0	11,49	2648,5	270,07	2918,7	297,63	2304,2	234,96	2510,1	255,96
50	1455,0	12,36	2850,9	290,71	3141,8	320,38	2480,3	252,92	2702,0	275,52

Special constructions and diameter available - please contact us directly.

NAVIGATION

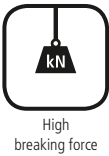
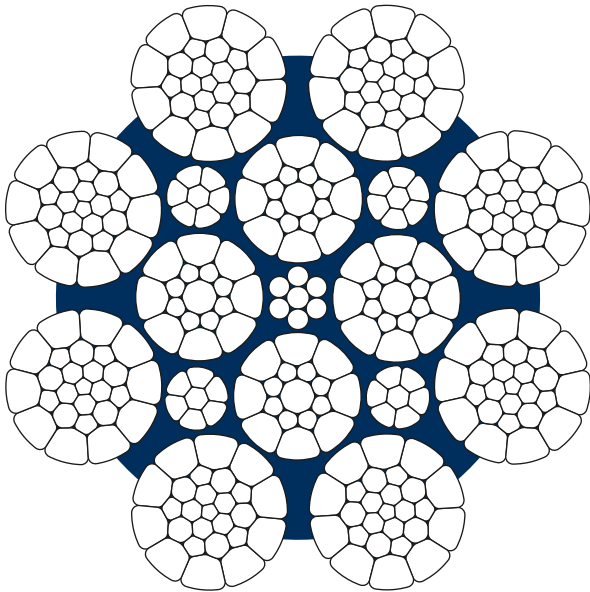
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast
- Duroplast
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- Superplast10 Mix
- Superplast10
- Paraplast
- Ultrafit
- Parafit
- Turbolift**
- Superlift
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR TURBOLIFT



PROPERTIES



Compacted



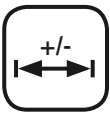
Parallel Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

Flexible construction with a high breaking load. Pendant ropes for tower cranes, mobile cranes, grabs, suspended structures , when high breaking loads are required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
09	10–56	8	311	208	0,734	0,84	0,83
11	58–72	8	351	248			

- Temperature range of use: –50°C to +140°C
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm²		1960 N/mm²		2160 N/mm²		1770 N/mm²		1960 N/mm²		2160 N/mm²	
mm	mm²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
10	56,9	0,48	100,8	10,28	111,6	11,38	123,0	12,54	84,9	8,63	94,0	9,59	103,6	10,55
11	69,1	0,58	122,3	12,47	135,4	13,80	149,2	15,21	102,6	10,43	113,6	11,59	125,2	12,75
12	82,5	0,69	146,1	14,89	161,7	16,49	178,2	18,18	122,4	12,44	135,5	13,83	149,3	15,21
12,7	92,7	0,78	164,1	16,73	181,7	18,53	200,2	20,42	136,5	13,92	151,2	15,42	166,5	16,98
13	97,1	0,82	171,9	17,53	190,4	19,41	209,8	21,39	143,0	14,55	158,4	16,16	174,5	17,78
14	112,6	0,95	199,4	20,33	220,8	22,51	243,3	24,81	166,2	16,90	184,1	18,78	202,8	20,66
15	129,4	1,09	229,1	23,36	253,7	25,87	279,6	28,51	191,8	19,50	212,4	21,67	234,1	23,84
16	147,2	1,24	260,6	26,58	288,6	29,43	318,1	32,43	218,4	22,21	241,9	24,68	266,5	27,15
17	166,1	1,40	294,1	29,99	325,7	33,21	358,9	36,60	248,1	25,24	274,8	28,04	302,8	30,84
18	185,3	1,56	328,0	33,45	363,2	37,04	400,3	40,82	278,5	28,32	308,4	31,47	339,8	34,61
19	207,5	1,74	367,2	37,45	406,7	41,47	448,2	45,70	307,3	31,25	340,3	34,73	375,0	38,20
20	229,6	1,93	406,5	41,45	450,1	45,90	496,0	50,58	342,3	34,81	379,0	38,67	417,7	42,54
21	251,1	2,11	444,5	45,33	492,2	50,19	542,5	55,32	375,0	38,13	415,2	42,37	457,6	46,61
22	278,4	2,34	492,8	50,25	545,7	55,64	601,4	61,32	414,4	42,14	458,9	46,82	505,7	51,50
23	304,2	2,56	538,4	54,90	596,2	60,79	657,0	67,00	453,0	46,07	501,7	51,19	552,8	56,31
24	330,5	2,78	585,0	59,65	647,8	66,05	713,9	72,79	490,2	49,85	542,8	55,39	598,2	60,93
25	357,3	3,00	632,4	64,49	700,3	71,41	771,8	78,70	532,7	54,17	589,9	60,19	650,1	66,21
26	391,6	3,29	693,1	70,68	767,5	78,26	845,8	86,25	574,4	58,41	636,0	64,90	700,9	71,39
27	424,1	3,56	750,6	76,54	831,2	84,75	916,0	93,40	624,8	63,53	691,8	70,59	762,4	77,65
28	452,1	3,80	800,3	81,60	886,2	90,36	976,6	99,59	670,4	68,18	742,4	75,75	818,1	83,33
29	486,5	4,09	861,1	87,80	953,5	97,23	1050,8	107,15	721,5	73,38	799,0	81,53	880,5	89,68
30	519,5	4,36	919,6	93,77	1018,3	103,83	1122,2	114,43	772,4	78,55	855,3	87,28	942,6	96,00
31	560,0	4,70	991,2	101,07	1097,6	111,92	1209,6	123,34	822,9	83,69	911,3	92,99	1004,3	102,29
32	593,4	4,98	1050,3	107,10	1163,0	118,59	1281,7	130,69	874,4	88,92	968,2	98,80	1067,0	108,68
33	634,1	5,33	1122,3	114,45	1242,8	126,73	1369,6	139,66	930,3	94,61	1030,2	105,12	1135,3	115,63
34	666,8	5,60	1180,3	120,36	1307,0	133,28	1440,4	146,88	988,9	100,56	1095,0	111,74	1206,8	122,91
36	747,4	6,28	1323,0	134,90	1465,0	149,38	1614,4	164,63	1101,7	112,04	1220,0	124,49	1344,5	136,94
38	836,5	7,03	1480,6	150,98	1639,6	167,19	1806,9	184,25	1230,3	125,12	1362,4	139,02	1501,4	152,92
40	931,7	7,83	1649,1	168,16	1826,1	186,21	2012,5	205,22	1367,7	139,09	1514,5	154,54	1669,1	170,00
42	1021,7	8,58	1808,5	184,41	2002,6	204,21	2207,0	225,05	1513,7	153,94	1676,2	171,04	1847,2	188,14
44	1126,3	9,46	1993,6	203,29	2207,6	225,11	2432,8	248,08	1653,3	168,13	1830,8	186,82	2017,6	205,50
46	1230,3	10,33	2177,6	222,05	2411,3	245,89	2657,4	270,98	1807,2	183,78	2001,2	204,20	2205,4	224,62
48	1331,8	11,19	2357,3	240,38	2610,4	266,19	2876,8	293,35	1960,8	199,40	2171,3	221,56	2392,8	243,71
50	1436,7	12,07	2542,9	259,30	2815,8	287,14	3103,2	316,43	2136,4	217,26	2365,7	241,40	2607,1	265,54
52	1557,5	13,08	2756,8	281,11	3052,7	311,29	3364,2	343,05	2293,4	233,23	2539,6	259,14	2798,7	285,05
54	1679,6	14,11	2972,9	303,15	3292,0	335,70	3628,0	369,95	2485,9	252,81	2752,8	280,90	3033,7	308,99
56	1824,7	15,33	3229,7	329,34	3576,4	364,69	3941,4	401,91	2659,3	270,44	2944,8	300,48	3245,2	330,53
58	1937,7	16,28	3429,7	349,73	3797,8	387,27	4185,4	426,79	2855,3	290,36	3161,7	322,63	3484,4	354,89
60	2073,6	17,42	3670,3	374,26	4064,3	414,44	4479,0	456,73	3052,1	310,38	3379,7	344,87	3724,6	379,36
62	2256,0	18,95	3993,0	407,18	4421,7	450,89	4872,9	496,89	3214,1	326,86	3559,1	363,18	3922,3	399,50
64	2359,3	19,82	4176,0	425,83	4624,2	471,54	5096,1	519,66	3398,0	345,56	3762,8	383,96	4146,7	422,35
66	2509,1	21,08	4441,0	452,86	4917,7	501,47	5419,6	552,64	3629,1	369,06	4018,6	410,07	4428,7	451,07
68	2663,4	22,37	4714,3	480,72	5220,3	532,32	5753,0	586,64	3833,6	389,86	4245,1	433,17	4678,3	476,49
70	2822,4	23,71	4995,6	509,41	5531,9	564,10	6096,4	621,66	4043,7	411,23	4477,8	456,92	4934,7	502,61
72	2986,0	25,08	5285,2	538,94	5852,5	596,79	6449,7	657,69	4277,4	434,99	4736,6	483,32	5219,9	531,66

Special constructions and diameters available - please contact us directly.

NAVIGATION

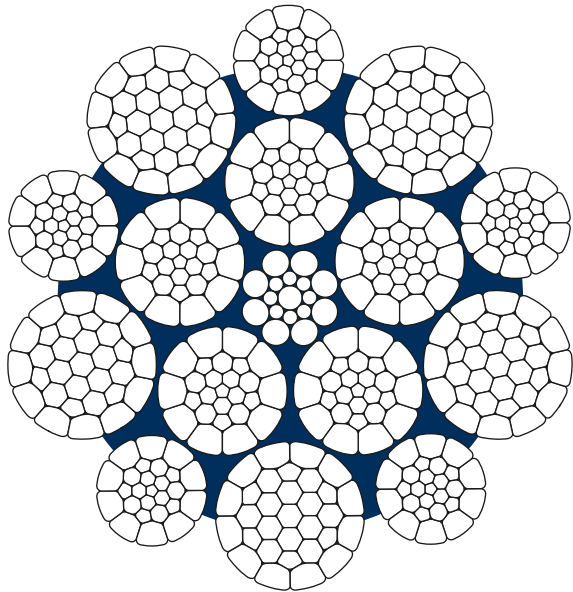
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

- Stratoplast
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- Ultrafit
- Parafit
- Turbolift
- Superlift**
- Alphalift
- Betalift
- Technolift
- Technolift Plus

CASAR SUPERLIFT



Very High breaking force

PROPERTIES



Compacted



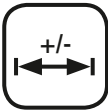
Parallel Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

Very flexible construction with an extremely high breaking load. Pendant ropes for tower cranes, mobile cranes, grabs, suspended structures, when highest breaking loads are required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
09	28–40	10	356	210			
10	42–64	10	381	235	0,736	0,87	0,86
11	66–80	10	406	260			

- Temperature range of use: –50°C to +140°C
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
28	453,2	3,94	802,2	81,80	888,3	90,58	978,9	99,82	693,9	70,57	768,4	78,41	846,8	86,25
29	486,1	4,23	860,4	87,74	952,8	97,15	1050,0	107,07	746,4	75,90	826,5	84,34	910,8	92,77
30	520,2	4,53	920,8	93,89	1019,6	103,97	1123,6	114,58	791,6	80,50	876,5	89,44	966,0	98,39
31	555,5	4,83	983,2	100,26	1088,8	111,02	1199,9	122,35	851,6	86,61	943,1	96,23	1039,3	105,85
32	591,9	5,15	1047,7	106,83	1160,1	118,30	1278,5	130,37	904,7	92,01	1001,8	102,23	1104,1	112,45
33	629,4	5,48	1114,0	113,60	1233,6	125,79	1359,5	138,63	961,2	97,75	1064,4	108,61	1173,0	119,47
34	668,2	5,81	1182,7	120,60	1309,7	133,55	1443,3	147,18	1018,6	103,59	1127,9	115,10	1234,0	126,61
36	749,1	6,52	1325,9	135,20	1468,2	149,72	1618,1	165,00	1144,4	116,38	1267,2	129,31	1396,5	142,24
38	834,6	7,26	1477,2	150,64	1635,8	166,81	1802,7	183,83	1274,5	129,61	1411,3	144,01	1555,3	158,41
40	924,8	8,05	1636,9	166,92	1812,6	184,83	1997,6	203,70	1424,2	144,83	1577,1	160,93	1738,0	177,02
42	1019,6	8,87	1804,7	184,03	1998,4	203,78	2202,3	224,58	1553,7	158,00	1720,5	175,56	1896,0	193,12
44	1119,0	9,74	1980,6	201,97	2193,2	223,65	2417,0	246,47	1706,7	173,56	1889,9	192,85	2082,7	212,13
46	1223,0	10,64	2164,7	220,74	2397,1	244,43	2641,7	269,38	1873,1	190,48	2074,1	211,65	2285,8	232,81
48	1331,7	11,59	2357,1	240,36	2610,1	266,16	2876,5	293,32	2045,1	207,98	2264,6	231,08	2495,7	254,19
50	1445,0	12,57	2557,7	260,81	2832,2	288,80	3121,2	318,27	2202,1	223,94	2438,5	248,82	2687,3	273,71
52	1562,9	13,60	2766,3	282,09	3063,3	312,37	3375,9	344,24	2401,2	244,19	2658,9	271,32	2930,3	298,45
54	1685,4	14,66	2983,2	304,20	3303,4	336,85	3640,5	371,22	2578,9	262,26	2855,7	291,40	3147,1	320,54
56	1812,6	15,77	3208,3	327,16	3552,7	362,27	3915,2	399,24	2779,9	282,70	3078,3	314,11	3392,4	345,52
58	1944,4	16,92	3441,6	350,94	3811,0	388,62	4199,9	428,27	2982,8	303,34	3303,0	337,04	3640,0	370,75
60	2080,8	18,10	3683,0	375,56	4078,4	415,88	4494,5	458,31	3194,4	324,85	3537,3	360,95	3898,2	397,04
62	2221,8	19,33	3932,6	401,01	4354,7	444,06	4799,1	489,37	3385,7	344,31	3749,2	382,57	4131,8	420,83
64	2367,5	20,60	4190,5	427,31	4640,3	473,18	5113,8	521,46	3613,7	367,49	4001,6	408,32	4409,9	449,16
66	2517,8	21,91	4456,5	454,44	4934,9	503,22	5438,4	554,57	3824,0	388,89	4234,5	432,10	4666,6	475,31
68	2672,7	23,25	4730,7	482,40	5238,5	534,18	5773,0	588,69	4060,5	412,93	4496,3	458,81	4955,1	504,69
70	2832,2	24,64	5013,0	511,18	5551,1	566,06	6117,6	623,82	4302,8	437,57	4764,7	486,19	5250,9	534,81
72	2996,4	26,07	5303,6	540,82	5872,9	598,87	6472,2	659,98	4551,1	462,82	5039,6	514,25	5553,9	565,67
74	3165,1	27,54	5602,2	571,27	6203,6	632,59	6836,6	697,14	4806,8	488,83	5322,8	543,14	5866,0	597,46
76	3338,5	29,05	5909,1	602,57	6543,5	667,25	7211,2	735,33	5070,0	515,59	5614,2	572,88	6187,1	630,17
78	3516,6	30,59	6224,4	634,71	6892,5	702,84	7595,9	774,56	5340,6	543,11	5913,9	603,46	6517,3	663,80
80	3699,2	32,18	6547,6	667,67	7250,4	739,34	7990,3	814,78	5618,6	571,38	6221,7	634,87	6856,6	698,36

Special constructions and diameters available - please contact us directly.

NAVIGATION

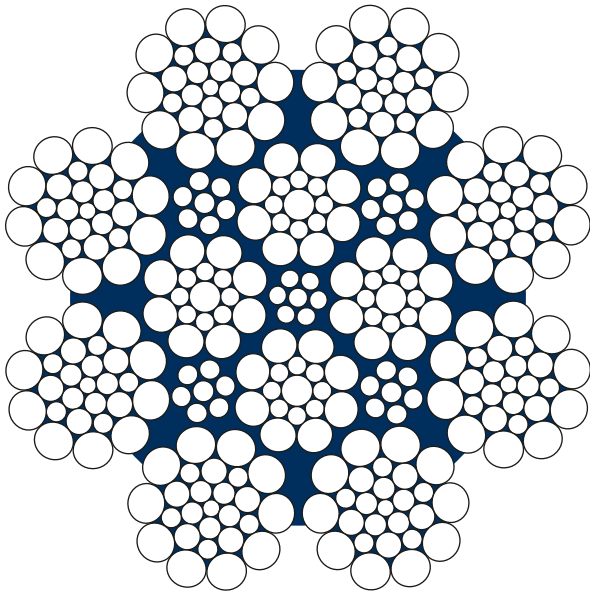
// ROTATION-RESISTANT

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- Technolift Plus

CASAR ALPHALIFT



PROPERTIES



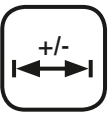
Parallel Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

Very flexible construction with a high breaking load. Hoist rope for electrical hoist and other lifting devices, where rotation resistant ropes are not required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
02	4–5	8	99	56	0,655	0,86	0,86
07	5,5–6,5	8	211	168			
07	7–9	8	243	168			
06	10–28	8	255	152			

- Temperature range of use: –50°C to +140°C
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force			minimum breaking force		
			1770 N/mm ²	1960 N/mm ²	2160 N/mm ²	1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
mm	mm ²	kg/m	kN t [metric]	kN t [metric]	kN t [metric]	kN t [metric]	kN t [metric]	kN t [metric]
4	8,0	0,07	14,1 1,44	15,6 1,59	17,2 1,75	11,7 1,19	13,0 1,32	14,3 1,46
4,5	10,0	0,09	17,7 1,80	19,6 2,00	21,6 2,20	15,1 1,53	16,7 1,70	18,4 1,87
5	12,3	0,11	21,8 2,22	24,1 2,46	26,6 2,71	19,0 1,94	21,1 2,15	23,2 2,37
5,5	14,8	0,13	26,3 2,68	29,1 2,97	32,1 3,27	23,6 2,40	26,1 2,67	28,8 2,93
6	18,2	0,16	32,3 3,29	35,7 3,64	39,4 4,02	28,5 2,89	31,5 3,22	34,7 3,54
6,5	22,4	0,19	39,7 4,04	43,9 4,48	48,4 4,94	34,2 3,48	37,9 3,87	41,8 4,26
7	24,9	0,21	44,1 4,49	48,8 4,98	53,8 5,48	38,5 3,92	42,6 4,35	47,0 4,79
7,5	28,5	0,25	50,4 5,14	55,8 5,69	61,5 6,27	44,8 4,55	49,6 5,06	54,6 5,56
8	33,0	0,28	58,5 5,96	64,7 6,60	71,3 7,27	49,6 5,05	55,0 5,61	60,6 6,17
8,5	37,1	0,32	65,7 6,70	72,7 7,41	80,1 8,17	53,0 5,39	58,7 5,99	64,6 6,58
9	41,4	0,36	73,3 7,48	81,2 8,28	89,5 9,12	65,0 6,61	72,0 7,34	79,3 8,08
10	50,2	0,43	88,8 9,06	98,4 10,03	108,4 11,05	78,8 7,71	87,3 8,57	92,5 9,43
11	63,6	0,55	112,6 11,48	124,6 12,71	137,4 14,01	96,8 9,85	107,2 10,94	117,0 11,94
12	74,9	0,64	132,6 13,52	146,8 14,97	161,8 16,50	114,0 11,59	126,3 12,88	137,8 14,05
12,7	83,1	0,71	147,0 14,99	162,8 16,60	179,5 18,30	126,4 12,86	139,9 14,28	152,6 15,58
13	87,0	0,75	154,1 15,71	170,6 17,40	187,9 19,16	132,4 13,47	146,6 14,96	159,9 16,32
14	100,2	0,86	177,3 18,08	196,3 20,02	216,4 22,07	152,4 15,50	168,7 17,22	184,1 18,79
15	116,9	1,01	207,0 21,11	229,2 23,37	252,5 25,75	177,9 18,10	197,0 20,11	214,9 21,94
16	132,0	1,14	233,6 23,82	258,7 26,38	285,1 29,07	200,9 20,43	222,5 22,70	242,8 24,77
17	148,5	1,28	262,8 26,80	291,1 29,68	320,8 32,71	226,0 22,99	250,3 25,54	273,1 27,86
18	167,9	1,44	297,1 30,30	329,0 33,55	362,7 36,98	255,4 25,98	282,8 28,86	308,5 31,49
19	189,8	1,63	336,0 34,26	372,1 37,94	410,0 41,81	288,9 29,38	319,9 32,65	349,0 35,62
20	208,9	1,80	369,7 37,70	409,4 41,74	451,2 46,01	317,8 32,32	352,0 35,91	384,0 39,18
21	232,4	2,00	411,3 41,94	455,4 46,44	502,0 51,19	353,6 35,96	391,6 39,96	427,2 43,60
22	255,3	2,20	451,9 46,08	500,4 51,02	551,4 56,23	388,5 39,50	430,2 43,89	469,4 47,88
23	277,3	2,39	490,9 50,06	543,6 55,43	599,0 61,08	422,1 42,93	467,4 47,70	509,9 52,04
24	299,4	2,58	530,0 54,04	586,9 59,84	646,7 65,95	455,7 46,35	504,7 51,50	550,6 56,19
25	323,5	2,78	572,6 58,39	634,1 64,66	698,8 71,25	492,4 50,08	545,3 55,64	594,9 60,70
26	349,3	3,00	618,3 63,05	684,6 69,81	754,5 76,94	531,7 54,07	588,8 60,08	642,4 65,55
27	377,1	3,24	667,4 68,06	739,1 75,37	814,5 83,06	573,9 58,36	635,5 64,84	693,3 70,74
28	405,0	3,48	716,8 73,09	793,7 80,94	874,8 89,21	616,3 62,68	682,5 69,64	744,6 75,98

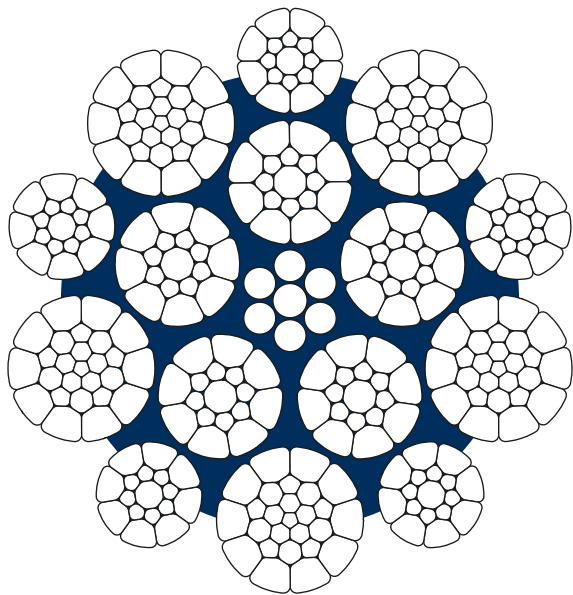
Special constructions and diameters available - please contact us directly.

NAVIGATION

- // ROTATION-RESISTANT
- // SEMI-ROTATION-RESISTANT
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- Technolift Plus

CASAR BETALIFT



Very High breaking force

PROPERTIES



Compacted



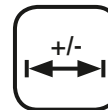
Parallel Construction



Lubricated



No Swivel



Tolerance

APPLICATIONS

Very flexible construction with an extremely high breaking load. Hoist rope for electrical hoist and other lifting devices, where rotation resistant ropes are not required.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
09	8–27	10	307	205	0,754	0,85	0,84

- Temperature range of use: –50°C to +140°C
- Suitable for multi-layer spooling in Lang’s lay
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
8	36,9	0,31	65,4	6,67	72,4	7,38	79,8	8,13	56,1	5,70	62,1	6,33	68,4	6,97
9	47,3	0,40	83,7	8,53	92,7	9,45	102,1	10,41	71,8	7,30	79,5	8,11	87,6	8,93
10	57,3	0,49	101,4	10,34	112,3	11,45	123,8	12,62	87,9	8,94	97,3	9,93	107,2	10,92
11	68,6	0,58	121,5	12,39	134,5	13,71	148,3	15,12	106,9	10,87	118,4	12,08	130,5	13,29
12	83,7	0,71	148,2	15,11	164,1	16,73	180,8	18,43	126,5	12,87	140,1	14,30	154,4	15,73
13	97,4	0,83	172,4	17,57	190,9	19,46	210,4	21,45	148,7	15,12	164,6	16,80	181,4	18,48
14	113,2	0,96	200,3	20,42	221,8	22,61	244,4	24,91	172,3	17,52	190,8	19,47	210,3	21,42
15	130,1	1,11	230,2	23,47	254,9	25,98	280,9	28,63	197,9	20,12	219,1	22,36	241,5	24,60
16	147,7	1,26	261,5	26,66	289,6	29,52	319,1	32,53	226,3	23,01	250,6	25,57	276,2	28,13
17	167,7	1,43	296,7	30,24	328,6	33,50	362,1	36,91	253,4	25,76	280,5	28,63	309,2	31,49
18	187,3	1,59	331,6	33,80	367,1	37,42	404,6	41,24	286,4	29,12	317,1	32,36	349,5	35,59
19	206,9	1,76	366,2	37,33	405,5	41,34	446,9	45,56	318,5	32,39	352,7	35,99	388,6	39,58
20	233,8	1,99	413,8	42,18	458,3	46,72	505,0	51,48	351,6	35,76	389,4	39,73	429,1	43,71
21	254,3	2,16	450,1	45,88	498,4	50,81	549,3	55,99	390,1	39,67	432,0	44,08	476,1	48,49
22	275,9	2,35	488,3	49,78	540,8	55,13	595,9	60,74	426,3	43,35	472,0	48,17	520,2	52,98
23	302,9	2,58	536,2	54,66	593,8	60,53	654,3	66,70	465,2	47,31	515,2	52,57	567,7	57,82
24	333,6	2,84	590,4	60,18	653,8	66,65	720,5	73,45	507,3	51,59	561,8	57,32	619,1	63,05
25	362,3	3,08	641,2	65,36	710,1	72,39	782,5	79,77	549,1	55,84	608,0	62,04	670,1	68,25
26	387,7	3,30	686,2	69,95	759,9	77,46	837,4	85,36	596,2	60,63	660,2	67,37	727,6	74,10
27	416,3	3,54	736,8	75,11	815,9	83,17	899,1	91,65	643,0	65,39	712,1	72,66	784,7	79,93

Special constructions and diameters available - please contact us directly.

NAVIGATION

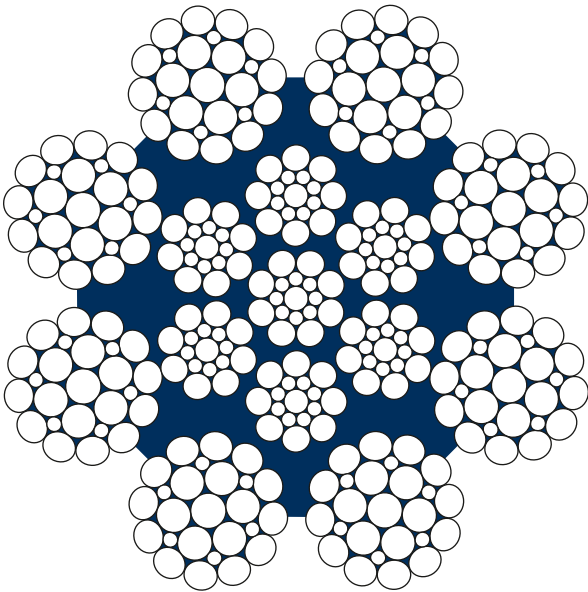
// ROTATION-RESISTANT

// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

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CASAR TECHNOLIFT



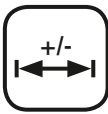
PROPERTIES



Lubricated



No Swivel



Tolerance

APPLICATIONS

Technolift has an excellent service life due to its optimal strand-to-strand contact conditions inside. Hoist rope for overhead cranes, preferably ladle cranes with great rope lengths working in high temperature areas.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
06	20–60	8	319	152	0,624	0,88	0,81

- Temperature range of use: –50°C to +140°C
- Only available in ordinary lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force		minimum breaking force	
			1770 N/mm ²		1770 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]
20	196,0	1,73	346,9	35,38	277,5	28,30
21	216,1	1,90	382,5	39,00	306,0	31,20
22	237,2	2,09	419,8	42,80	335,8	34,24
23	259,2	2,28	458,8	46,78	367,0	37,43
24	282,2	2,48	499,6	50,94	399,7	40,75
25	306,3	2,70	542,1	55,27	433,7	44,22
26	331,2	2,92	586,3	59,79	469,0	47,83
27	356,6	3,14	631,2	64,36	504,9	51,49
28	381,7	3,36	675,6	68,89	540,5	55,11
29	414,8	3,65	734,2	74,87	587,4	59,89
30	441,7	3,89	781,9	79,73	630,3	64,09
31	471,3	4,15	834,1	85,06	675,0	68,64
32	498,5	4,39	882,3	89,97	714,8	72,69
33	529,8	4,66	937,8	95,63	761,8	77,47
34	561,8	4,94	994,4	101,40	822,9	83,69
36	634,0	5,58	1122,2	114,43	924,4	94,01
38	713,1	6,28	1262,1	128,70	1052,1	107,00
40	789,6	6,95	1397,6	142,51	1161,6	118,12
42	868,4	7,64	1537,1	156,74	1276,9	129,86
44	951,5	8,37	1684,1	171,73	1408,0	143,19
46	1044,5	9,19	1848,7	188,52	1533,7	155,97
48	1136,0	10,00	2010,7	205,03	1669,5	169,78
50	1223,7	10,77	2165,9	220,86	1793,6	182,40
52	1325,0	11,66	2345,2	239,14	1871,4	190,32
54	1428,8	12,57	2529,0	257,89	2023,0	205,72
56	1536,6	13,52	2719,9	277,35	2192,5	222,96
58	1648,4	14,51	2917,6	297,51	2350,7	239,05
60	1764,0	15,52	3122,3	318,38	2520,1	256,28

Special constructions and diameters available - please contact us directly.

NAVIGATION

// ROTATION-RESISTANT

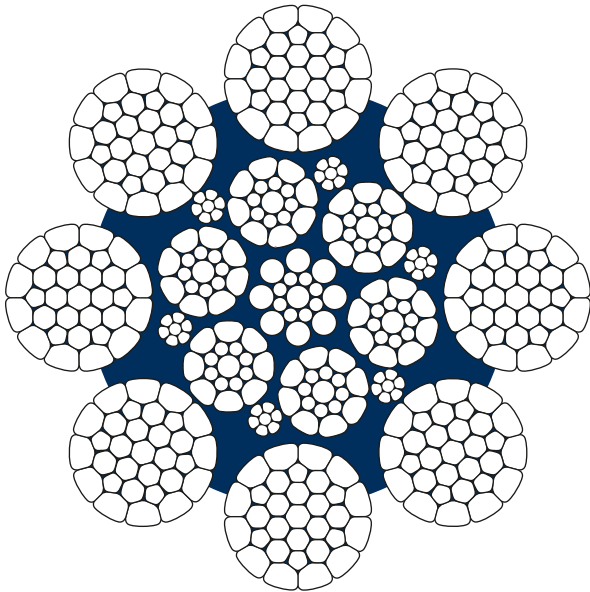
// SEMI-ROTATION-RESISTANT

// NON-ROTATION-RESISTANT

- Stratoplast
- Turboplast
- Duroplast
- Superplast8
- Superplast10 Mix
- Superplast10
- Paraplast
- Ultrafit
- Parafit
- Turbolift
- Superlift
- Alphalift
- Betalift
- Technolift

Technolift Plus

CASAR TECHNOLIFT PLUS



High breaking force

PROPERTIES



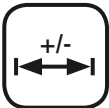
Compacted



Lubricated



No Swivel



Tolerance

APPLICATIONS

Technolift plus has a very high breaking strength and good resistance against drum crushing. Hoist rope for overhead cranes, preferably ladle cranes with great rope lengths working in high temperature areas.

OVERVIEW

RCN	Diameter range [mm]	Number of outer strands	Number of wires	Number of outer load bearing wires	Average fill factor	Average weight factor	Average spin factor
11	28–40	8	409	248	0,730	0,82	0,84

- Temperature range of use: –50°C to +140°C
- Available in ordinary lay and Lang’s lay
- Available in right hand and left hand
- Available in galvanized and ungalvanized

nominal diameter	metallic area	weight	calculated aggregate breaking force						minimum breaking force					
			1770 N/mm ²		1960 N/mm ²		2160 N/mm ²		1770 N/mm ²		1960 N/mm ²		2160 N/mm ²	
mm	mm ²	kg/m	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]	kN	t [metric]
28	449,9	3,78	796,4	81,18	881,8	89,89	971,8	99,06	668,8	68,18	741,0	75,54	816,2	83,20
30	516,2	4,22	913,7	93,14	1011,8	103,13	1115,0	113,66	767,8	78,27	850,2	86,67	937,0	95,51
32	587,3	4,93	1039,5	105,97	1151,1	117,34	1268,6	129,31	873,6	89,05	967,3	98,60	1066,0	108,66
34	663,0	5,36	1173,5	119,62	1299,5	132,46	1432,1	145,98	986,2	100,53	1092,0	111,31	1203,5	122,68
36	743,3	6,05	1315,6	134,11	1456,9	148,51	1605,5	163,66	1105,6	112,70	1224,3	124,80	1349,3	137,54
38	828,2	6,81	1465,9	149,43	1623,3	165,47	1788,9	182,36	1231,9	125,58	1364,1	139,05	1503,3	153,24
40	917,7	7,54	1624,3	165,58	1798,7	183,35	1982,2	202,06	1365,0	139,14	1511,5	154,08	1665,7	169,80

Special constructions and diameters available - please contact us directly.

CONVERSION TABLE

LENGTH

1 m	3,28083	ft
1 m	39,36997	inch
1 km	0,621371	miles
1 ft	0,3048	m
1 mile	1,609344	km
1 inch	0,0254	m

TENSILE

1 N/mm ²	0,101972	kp/mm ²
1 N/mm ²	145,037719	psi
1 N/mm ²	10	bar
1 N/mm ²	1	Mpa

FORCE

1 kN	101,9716	kp
1 kN	0,1019716	metric tnf
1 kN	224,8089	lbf

AREA

1 mm ²	0,001550	in ²
1 m ²	10,76391	ft ²
1 ft ²	0,092903	m ²
1 in ²	645,16	mm ²
1 m ²	1,19599	yard ²
1 yard ²	0,836128	m ²

MASS

1 metric t	1000	kg
1 metric t	1,102311	short t
1 metric t	0,984207	long t
1 metric t	2204,623	lbs
1 lbs	0,453529	kg
1 long t	1,016047	metric t
1 short t	0,907185	metric t

LENGTH MASS

1 kg/m	0,671970	lbs/ft
1 lbs/ft	1,488164	kg/m

TECHNICAL SERVICES

OUR PROMISE

We listen closely to your application needs and will find the best rope solution for it. Besides the standard ropes special developments are available and we will find your tailor-made rope for your specific application.

QUICK SUPPORT ON THE JOBSITE

Our experienced engineering specialists bring decades of knowledge in order to improve the performance of your equipment or to help you finding out what causes trouble. Our consulting service includes training, support on the installation, maintenance and inspection of our ropes as well as on-site non-destructive inspection and other ways to investigate in rope damages.



SOPHISTICATED INDOOR SERVICE

With our modern analyzing equipment we can perform in-depth analysis of your rope along with a detailed inspection report. This includes magnetic and microscopic analysis as well as bending fatigue, tensile and other dynamic and static tests. Our deep knowledge in ropes is the foundation to interpret the data in a way that a solid solution to your problem can be determined.

CHALLENGE US

Our team is ready to support you, with extensive experience in rope design, production, research & development and all types of rope applications.

Please contact us for any support from our engineers at:
supporteurope@wirecworldgroup.com

ENGINEERING

CASAR – ENGINEERING EXCELLENCE FOR OUTSTANDING PRODUCTS

WireCo's European facilities and brands have a long history in rope design and especially Casar is known worldwide for excellent rope performance and quality in various applications, thanks to a highly skilled engineering team in Kirkel and the close collaboration within the global WireCo WorldGroup team of over 100 engineers.

Dr. Oliver Fries leads the global engineering team and directly manages our R&D team in Kirkel. He has over 20 years of experience in design of mobile cranes and in all kinds of crane applications of steel wire ropes. In the engineering center in Kirkel/Germany the three main functions are working closely together: Product Management, Technical Service and R&D. This is the basis to understand the customer needs and incorporate field experience into the design. We have the experts that know rope design and know your application. Only the combination of both provides you the optimized solution for your particular application.



To develop a high quality rope also means to work closely together with the quality and manufacturing team. As an engineer you always have to see how the rope is produced to be able to make adjustments. All engineering groups in Kirkel sit on one floor with direct access to the rope prototype build and serial production. This closeness is a big advantage for the quality of our products. During each development phase we are working closely together with the crane manufacturers as well as with universities and our suppliers for wire, grease and plastic. We follow our internal stage gate process to ensure quality in all steps of a rope development.



Our Technical Service is well known in the rope industry. Günter Knerr has over 30 years of field experience all over the world. His team has detailed rope and application knowledge and supports you on the job site whenever you need us. We have modern laboratories to analyze all kind of failures and we propose corrective actions. The team also supports you with rope installation and regular inspections.



Our Product Management is led by Christian Schorr-Golsong. He has a long history of product management experience with your crane and mining applications. This is the basis to identify your customer needs for all kinds of cranes. His team provides technical support and training worldwide. The direct interaction with the customers and the collected information is the groundwork for improved products and services.

The focus of all our efforts is to provide you as our customer the most valuable high quality rope with the longest service life for your application. This is our customer promise!

ROPE TERMINATIONS

WIRECO WORLDGROUP SERVES YOU WITH A BROAD VARIETY OF END TERMINATIONS AND SERVICES:

- Socketing of ropes with hot metal or resin
- Casting of multi-strand or retraction ropes with high demands on the exact length of each rope
- Loops with pressed aluminum ferrules
- Spliced loops
- Flemish eyes
- Pressed thimbles
- Special designed steel pressings that fulfill a multitude of special specifications
- Becket loops
- Special mounting eyes

Our team has also developed special Resin Spelter Buttons for replacements of hoist ropes on Terex and Liebherr cranes. The speciality of these Resin Spelter Buttons is that they can also be used directly on site if necessary and cast by our well trained experts.



As end terminations are a very sensitive part of wire rope, our development team attaches great importance to the reliability in service. The end terminations that are used at WireCo must go through a number of inspections such as:

- Dimensional accuracy according to the drawings
- Certificate Documentation
- Visual inspection of surface quality (blow hole, cavities, etc...)
- Magnetic crack testing
- Destructive tests for new end terminations

Our experience as an OEM supplier to well-known crane manufacturers is reflected in our exceptional expertise with end terminations.

DISCARD CRITERIA

DISCARD CRITERIA ACCORDING TO ISO 4309:2010

Wire ropes should be visually inspected at frequent intervals by a competent person to make sure that the rope is in a safe condition and has not reached one of the following criteria:

- 1) Visible broken wires (see the following tables)
- 2) Reduction in rope diameter
- 3) Fracture of strands
- 4) Corrosion
- 5) Deformation and damage

SINGLE-LAYER AND PARALLEL-CLOSED ROPES

Number of visible broken wires for ropes working in steel sheaves.

NOTE: Ropes having outer strands of Seale construction where the number of wires in each strand is 19 or less (e.g. 6 × 19 Seale) are placed in this table two rows above that row in which the construction would normally be placed based on the number of load bearing wires in the outer layer of strands.

		Number of visible broken outer wires ²⁾					
		Rope working (single-layer drum)				Rope spooling (multi-layer drum) ³⁾	
		Sections of rop working in steel sheaves and/or spooling on a single-layer drum				Sections of rope spooling on a multi-layer drum	
		Classes M1 to M4 or class unknown ⁴⁾				All classes	
		Ordinary lay (sZ, zS)		Lang lay (sS, zZ)		Ordinary and Lang lay	
RCN	Number of load-bearing wires in the outer strands of the rope ¹⁾ n	Over a length of 6d ⁵⁾	Over a length of 30d ⁵⁾	Over a length of 6d ⁵⁾	Over a length of 30d ⁵⁾	Over a length of 6d ⁵⁾	Over a length of 30d ⁵⁾
01	n ≤ 50	2	4	1	2	4	8
02	51 ≤ n ≤ 75	3	6	2	3	6	12
03	76 ≤ n ≤ 100	4	8	2	4	8	16
04	101 ≤ n ≤ 120	5	10	2	5	10	20
05	121 ≤ n ≤ 140	6	11	3	6	12	22
06	141 ≤ n ≤ 160	6	13	3	6	12	26
07	161 ≤ n ≤ 180	7	14	4	7	14	28
08	181 ≤ n ≤ 200	8	16	4	8	16	32
09	201 ≤ n ≤ 220	9	18	4	9	18	36
10	221 ≤ n ≤ 240	10	19	5	10	20	38
11	241 ≤ n ≤ 260	10	21	5	10	20	42
12	261 ≤ n ≤ 280	11	22	6	11	22	44
13	281 ≤ n ≤ 300	12	24	6	12	24	48
	n > 300	0,04 × n	0,08 × n	0,02 × n	0,04 × n	0,08 × n	0,16 × n

- 1) For the purposes of this International Standard, Filler wires are not regarded as load-bearing wires and are not included in the values of n.
- 2) A broken wire has two ends (counted as one wire).
- 3) The values apply to deterioration that occurs at the cross-over zones and interference between wraps due to fleet angle effects (and not to those sections of rope which only work in sheaves and do not spool on the drum).
- 4) Twice the number of broken wires listed may be applied to ropes on mechanisms whose classification is known to be M5 to M8.
- 5) d = nominal diameter of rope.

Classes M1 to M4 equates to mechanism group 1E_m to 1A_m | Classes M5 to M8 equates to mechanism group 2_m to 5_m
Please pay attention to the country- / application-specific standards.

ROTATION-RESISTANT ROPES

Number of visible broken wires for ropes working in steel sheaves.

NOTE: Ropes having outer strands of Seale construction where the number of wires in each strand is 19 or less (e.g. 18 × 19 Seale–WSC) are placed in this table two rows above that row in which the construction would normally be placed based on the number of wires in the outer layer of strands.

RCN	Number of outer strands or number of load-bearing wires in the outer strands of the rope ¹⁾ n	Number of visible broken outer wires ²⁾			
		Rope working on a single-layer drum		Rope spooling on a multi-layer drum ³⁾	
		Sections of rop working in steel sheaves and/or spooling on a single-layer drum		Sections of rope spooling on a multi-layer drum	
		Over a length of $6d$ ⁴⁾	Over a length of $30d$ ⁴⁾	Over a length of $6d$ ⁴⁾	Over a length of $30d$ ⁴⁾
21	4 strands $n \leq 100$	2	4	2	4
22	3 or 4 strands $n \geq 100$	2	4	4	8
11 or more outer strands					
23–1	$71 \leq n \leq 100$	2	4	4	8
23–2	$101 \leq n \leq 120$	3	5	5	10
23–3	$121 \leq n \leq 140$	3	5	6	11
24	$141 \leq n \leq 160$	3	6	6	13
25	$161 \leq n \leq 180$	4	7	7	14
26	$181 \leq n \leq 200$	4	8	8	16
27	$201 \leq n \leq 220$	4	9	9	18
28	$221 \leq n \leq 240$	5	10	10	19
29	$241 \leq n \leq 260$	5	10	10	21
30	$261 \leq n \leq 280$	6	11	11	22
31	$281 \leq n \leq 300$	6	12	12	24
	$n > 300$	6	12	12	24

1) For the purposes of this International Standard, Filler wires are not regarded as load-bearing wires and are not included in the values of n .

2) A broken wire has two ends.

3) The values apply to deterioration that occurs at the cross-over zones and interference between wraps due to fleet angle effects (and not to those sections of rope that only work in sheaves and do not spool on the drum).

4) d = nominal diameter of rope.

Please pay attention to the country- / application-specific standards.

QUALITY IN EVERYTHING WE DO

Our reputation for quality is international.

WireCo WorldGroup and all their brands focus on delivering you a product with highest quality standards. Our focus on quality starts with the people we employ. In order to fulfill this promise, we have professional engineers work in every aspect of our business – from metallurgists in manufacturing and purchasing to licensed engineers in quality control and product development. The depth and breadth of technical expertise throughout our company is a value-added benefit for our customers.

Our quality processes then drive consistent results, from product engineering to each meticulous step of actual production. Using global best practices, advanced metallurgical and fiber technology, sound engineering, and client feedback, WireCo WorldGroup produces mission critical wire rope, specialized synthetic fiber rope and cable products for diverse industries from marine to aerospace.

For any company, the litmus test of quality is the global recognition of excellence and consistent compliance with top quality standards. WireCo WorldGroup products and processes are certified to key international quality standards. In fact, we are the only wire rope manufacturer worldwide that is QPL qualified, API certified, and registered to ISO 9001, Lloyd's Registry and AS-9100 Quality Systems.

QUALITY PROCESSES

Attention to quality permeates every step of our operations.

It starts with our raw materials - We use only suppliers that meet our ISO-controlled qualification process.

In our day-to-day manufacturing process, our written procedures clearly document how we produce each product. Each person measures and monitors product compliance with specifications at each step in the process. Written sign-offs and random audits ensure accountability. If a product ever fails to meet specifications, a quality-hold process halts production until an engineer decides if the product must be scrapped or recycled.

On an ongoing basis, our quality department works with plant managers to set and attain quality-related goals. We identify best practices in each plant and share them from plant to plant. We monitor and measure quality performance constantly and report it widely throughout the corporation. From random audits of machines and workers, we "grade" operators, supervisors, and plants and track results over time for improvement. Each month, the company publishes a quality scorecard that guides our continuous improvement program.

In the field, we measure and monitor the product itself through observation and sophisticated testing. The results, along with customer feedback, enable our engineers to design new or improved products.

The result: WireCo WorldGroup's products and processes hold more global quality certifications than any other industry supplier.

INTERNATIONAL QUALITY CERTIFICATIONS

Global and industry-specific quality certification allows us to serve many industries worldwide.

WireCo WorldGroup is the only producer in its industry whose products and practices meet the global standards of our customers across a variety of industries. Our quality certifications include:

- The International Standards Organization (ISO 9001:2008)
- The U.S. Government's Qualified Producers' List (QPL) from the U.S. Defense Logistics Agency
- The Aerospace Industry (AS-9100 Quality Systems)
- The American Petroleum Institute (API)
- Center for Engineering (CFE)
- PEMEX
- Bureau Veritas
- Germanischer Lloyd
- Korean Register
- Lloyd's Register
- Russian Maritime Register of Shipping

Certification to standards is not just an achievement, but a smart way of doing business at WireCo WorldGroup. Our customers depend on uncompromising quality; our success depends on never disappointing them.



Certificate Number: 9A-0087



Certificate Number: 0894594



Certificate Number: 10.07002.250



Certificate Number: QS-126 HH

QUOTATION

WE WOULD LIKE TO GIVE YOU A SUITABLE QUOTATION TO YOUR REQUEST.

To be able to provide you our recommendation and to save your valuable time, it would be very helpful if you sent the following information together with your request:

Necessary:

- Which diameter is required?
- What is the required length?
- Which lay of rope is requested? (Lang's lay or ordinary lay)
- Which lay direction is needed?
- What is the minimum breaking force required?
- What finish is required?

Optional:

- What is your application?
- Which rope construction was used previously?
- Is there a given tensile strength?
- Are there any end terminations required?

Our European Sales team is at your disposal, and they will be happy to assist you with any enquiries.

CONTACTS

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Phone: +49 6841 8091 333

TECHNICAL SERVICE

E-Mail: casar.service@wirecoworldgroup.com
Phone: +49 6841 8091 460

Product specifications are subject to change without notice or obligation. The shown photographs, drawings or cross sections are only for illustrative purposes, the images can vary depending on requested diameter and current status of technical development.

The information supplied in this brochure is only a guideline for rope selection. Please contact us for any information or advice on the use of our ropes or if you have any doubt in selecting a rope for a specific application.

Any warranty, expressed or implied as to quality, performance or fitness for use of WireCo WorldGroup products is always premised on the condition that the published strengths apply only to new, unused products, that the mechanical equipment on which such products are used is properly designed and maintained, that such products are properly stored, handled, used and maintained, and properly inspected on a regular basis during the period of use.

Seller shall not be liable under any circumstances for consequential or incidental damages or secondary charges including but not limited to personal injury, labor costs, a loss of profits resulting from the use of said products or from said products being incorporated in or becoming a component of any other product.

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