

**BRUGG**

**LIFTING**

Going up.

# ELEVATORROPES



**LEADING ROPE  
TECHNOLOGY**  
SINCE 1896



**GOING UP IS OUR MOTTO.**



Brugg Lifting is one of the world-wide leading producers of high-quality traction and governor ropes. For decades our ropes have proven their worth in action and have transported daily millions of passengers in a secure and comfortable way. Especially in fast and high installations Brugg Lifting elevator ropes show their excellent performance and ensure smoothness of ride, above-average lifetime and high economic efficiency.

The development of new and innovative products, the continuous improvement of already existing products as well as the optimization of production processes ensure that customers of Brugg Lifting can always rely on the consistently high product quality and that they will always get the products with the best performance.

For more flexibility and innovation we also produce our traction and governor ropes according to customer specifications.

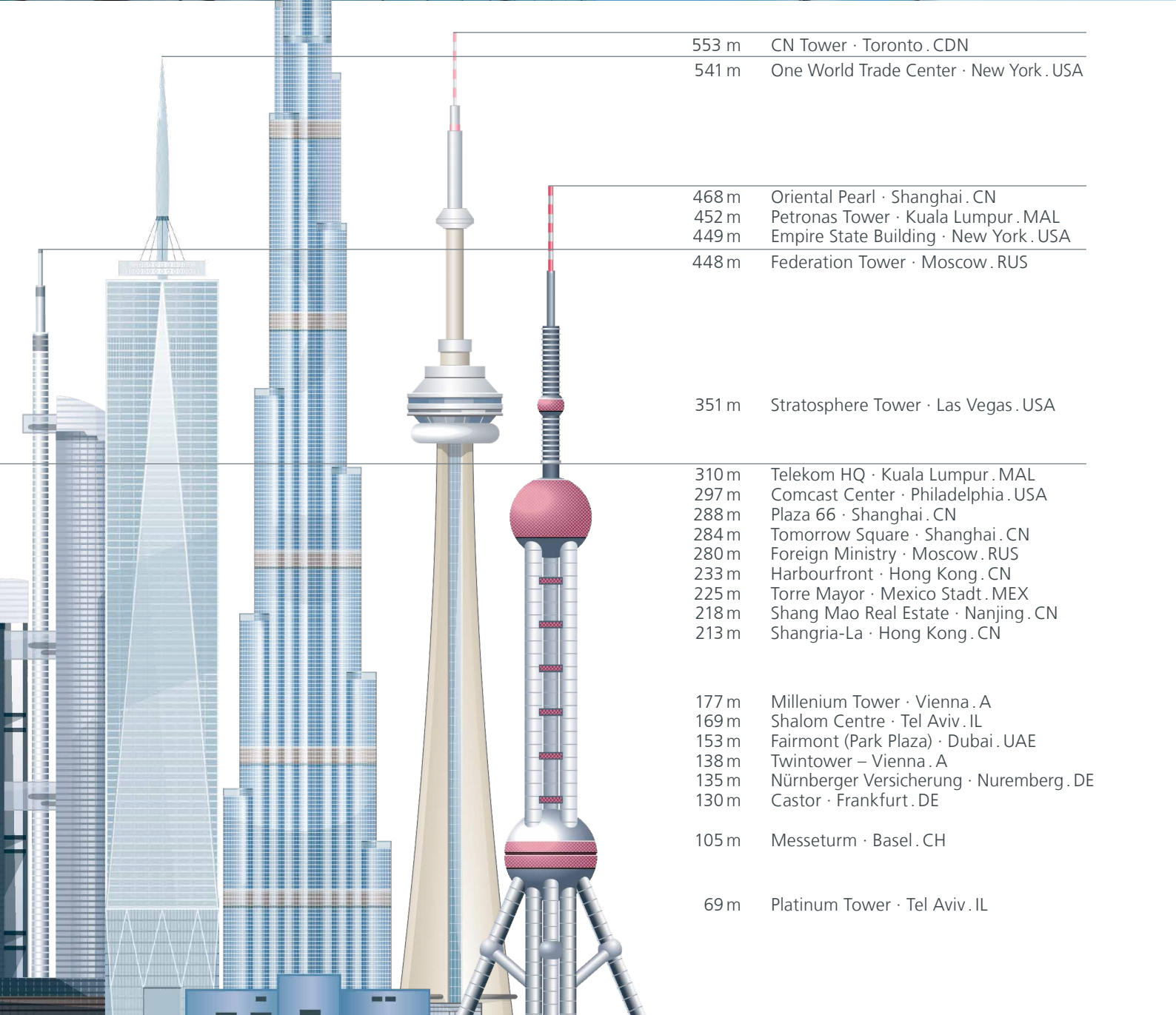
Together with our logistics and distribution partners we globally ensure that our products, correctly packaged and labeled, are available for our customers at the right place at the right time.

Our performance parameters are convincing. That is why not only international elevator engineering groups but also more and more small and medium-sized companies rely on Brugg Lifting elevator ropes.





828 m Burj Khalifa · Dubai · VAE



# TOP SERVICES



## System Provider

We are a system provider offering elevator ropes, accessories and tools in many different designs, as individual parts or pre-assembled.



## Customized

We have a wide assortment enabling us to deliver the parts required for your applications. Contact us, if you don't find a specific product in our Catalog. If you have specific product requirements, we will be glad to develop customized solutions together with you.



## Availability

We deliver all over Europe on schedule within 4 to 6 working days directly from our large warehouse to your factory or to a construction site. Please contact us for deliveries to destinations outside Europe.



## Express service

In urgent cases we provide the required materials ex works within the hour and ship it to you as quickly as possible by courier all over the world.



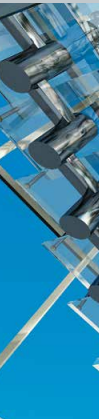
## International Standards

All of our products meet the valid international standards. Brugg Lifting is certified according to ISO 9001:2008 and ISO 14001:2004.



## Training/specialist workshops

We offer a qualified basic and advanced training for your staff around the topic of elevator ropes.





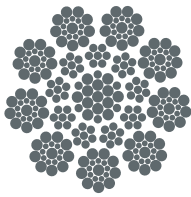
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# ROPES AT A GLANCE

## TRACTION ROPES

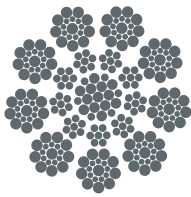
Our quality ropes are produced on the basis of high-quality raw materials and the latest production technologies, specifications, test and control procedures. The results are products for the widest range of requirements which are characterized by high breaking forces and high dimensional stability, smooth running, low elongation and a long service life.



### Steel core rope, 9 strands, parallel lay

For highest demands on breaking force, elongation and number of trips. Recommended for round grooves with an undercut angle of  $\leq 85^\circ$ .

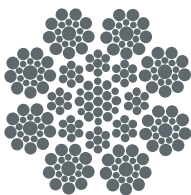
<b>HRS</b>	125.000 N/mm <sup>2</sup>	0,104 %	0,13 %	$\geq 90$ m
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### Steel core rope, 9 strands, separate lay

For highest demands on breaking force, elongation and number of trips, also under difficult installation conditions. Recommended for round grooves with an undercut angle of  $\leq 85^\circ$ .

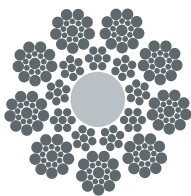
<b>SCX9</b>	120.000 N/mm <sup>2</sup>	0,108 %	0,16 %	$\geq 90$ m
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### Steel core rope, 8 strands, parallel lay

For high demands on breaking force, elongation and number of trips. Recommended for round grooves with an undercut angle of  $\leq 85^\circ$ .

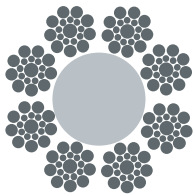
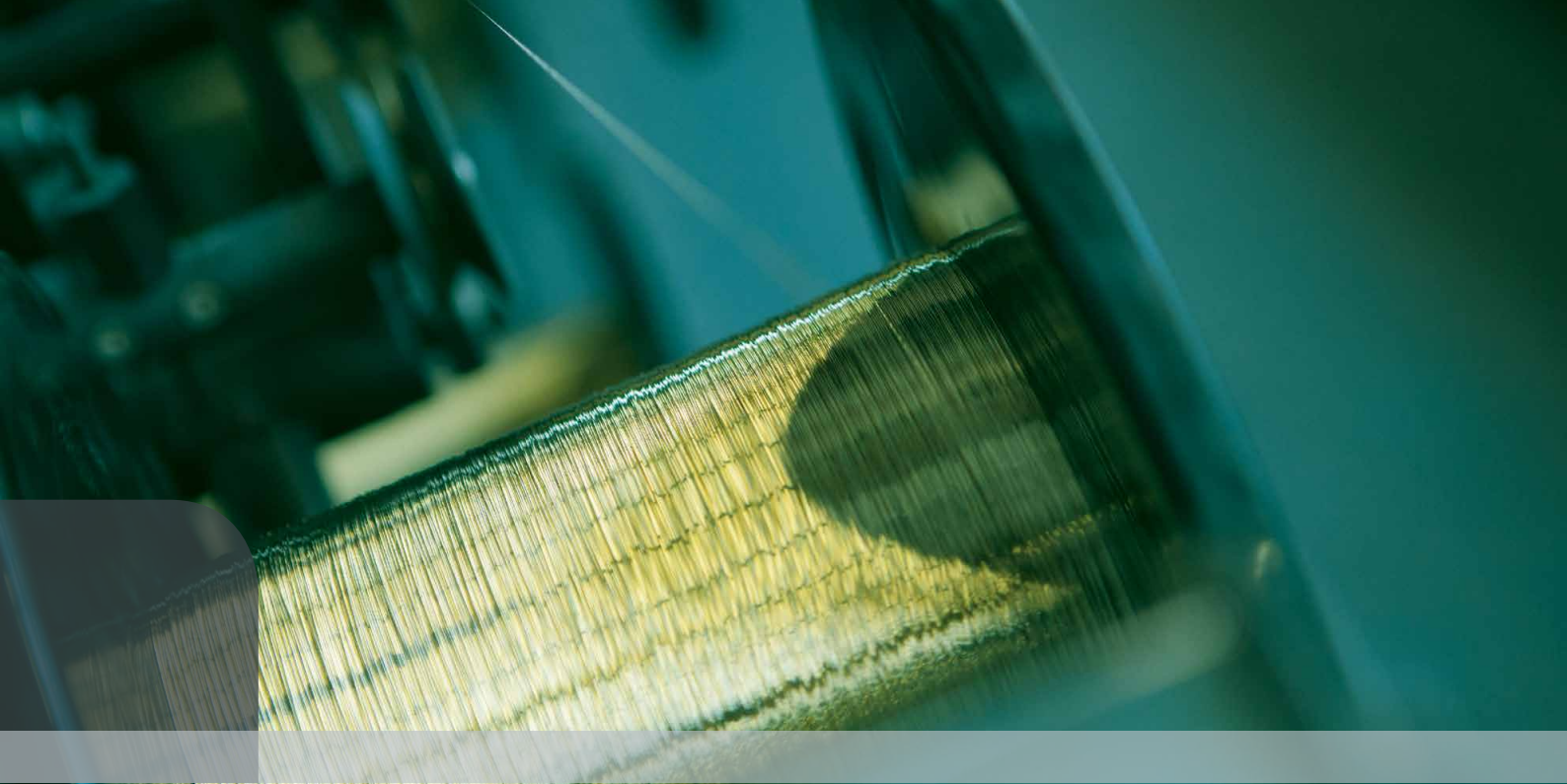
<b>SC8</b>	120.000 N/mm <sup>2</sup>	0,108 %	0,13 %	$\leq 75$ m
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### Wire rope with polypropylene fiber core, 9 strands, parallel lay

For high demands on breaking force, elongation and number of trips. Recommended for conical grooves and undercut round grooves.

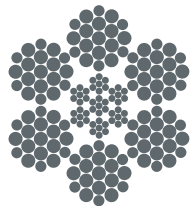
<b>DP9</b>	115.000 N/mm <sup>2</sup>	0,112 %	0,25 %	$\leq 75$ m
	E-Module	Elastic elongation	Permanent elongation	Lifting height



**Wire rope with sisal fiber core, 8 strands**

For high demands on elongation also under difficult installation conditions. Recommended for all groove shapes.

<b>8X19</b>	<b>110.000</b> N/mm <sup>2</sup>	<b>0,122</b> %	<b>0,26</b> %	<b>≤ 75</b> m
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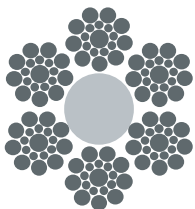


**Steel core rope, 6 strands, zinc-plated, separate lay**

For high demands on small traction sheaves. Suitable for conical grooves of ≥ 45°.

<b>TSR</b>	<b>125.000</b> N/mm <sup>2</sup>	<b>0,104</b> %	<b>0,50</b> %	<b>≤ 90</b> m
	E-Module	Elastic elongation	Permanent elongation	Lifting height

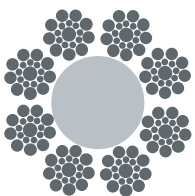
GOVERNOR ROPES



**Wire rope with polypropylene core, 6 strands, Seale**

For high demands on elongation and corrosion protection with special rope lubrication.

<b>6X19</b>	<b>105.000</b> N/mm <sup>2</sup>	<b>0,084</b> %	<b>0,22</b> %
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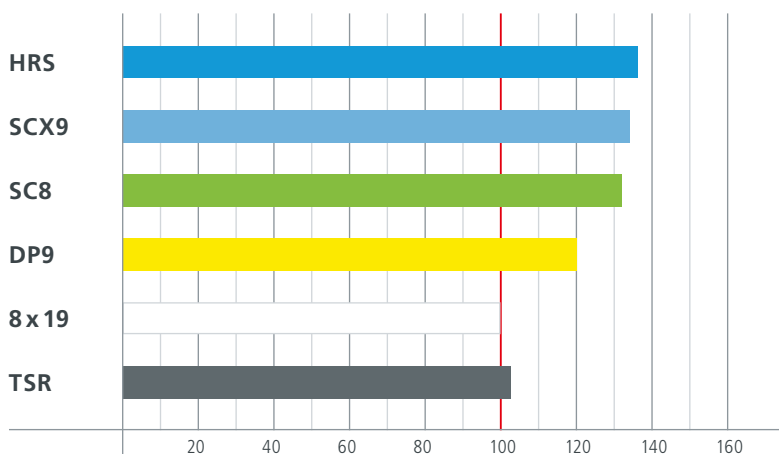
**Wire rope with polypropylene core, 8 strands, Seale**

For high demands on elongation and corrosion protection with special rope lubrication.

<b>8X19</b>	<b>110.000</b> N/mm <sup>2</sup>	<b>0,142</b> %	<b>0,22</b> %
	E-Modul	elastische Tragseildehnung	bleibende Tragseildehnung

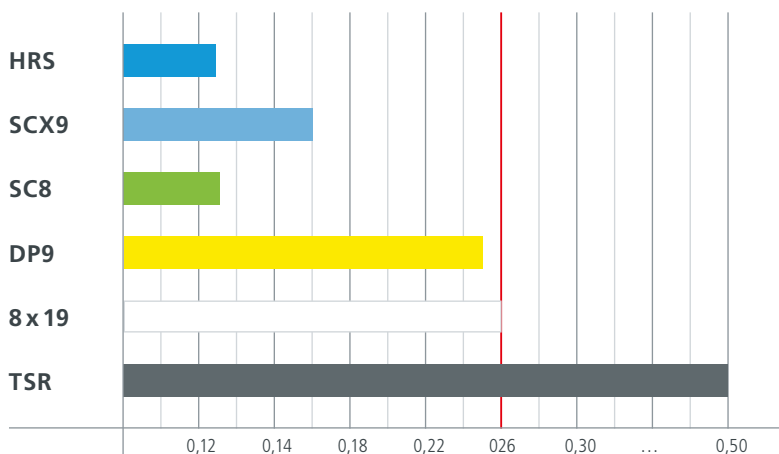
# ROPE COMPARISON

## Minimal breaking load in %



- MBL represents the minimum load that can be applied to a rope before it breaks.
- The graphic compares the minimum breaking load of the different types of suspension ropes.
- Reference: 100% = 8x19 suspension rope with natural fiber core.

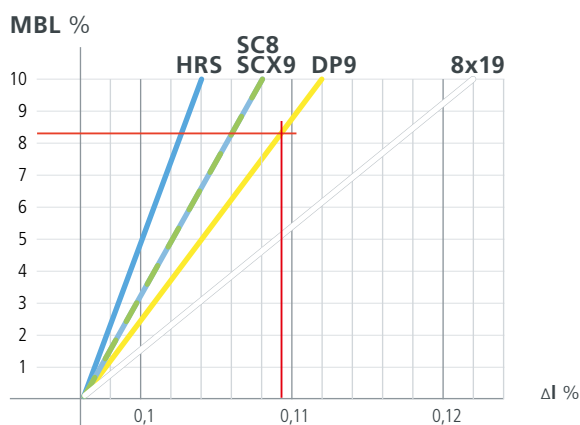
## Permanent elongation in %



- Elongation of the rope occurring until the rope has settled as a result of operation. This elongation is expected to occur at about 2% of the estimated rope service life.
- The graphic compares the permanent elongation of the different types of suspension ropes.
- Elevator ropes from Brugg are especially characterized by a very low permanent elongation.

# iLINE & COLOR CODING

## Elastic elongation



- Elongation of the rope occurring whenever a rope is loaded. When the load is removed, the rope is restored to its initial state.
- Example: With a DP9 rope, a load of 8.3 % of the minimum breaking force results in an elastic elongation of ca. 0.109 % of the length of the rope (with a length of 100m, this is equivalent to 109 mm).
- Elevator ropes from Brugg are especially characterized by a very low elastic elongation.

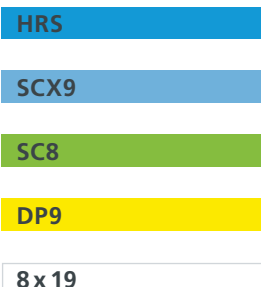
## The iLine & Color Coding

Correctly installed traction ropes increase the service life and the safety. They improve the riding comfort and avoid downtimes. Independent of the construction and the producer, every traction rope is susceptible to untwisting during the installation.

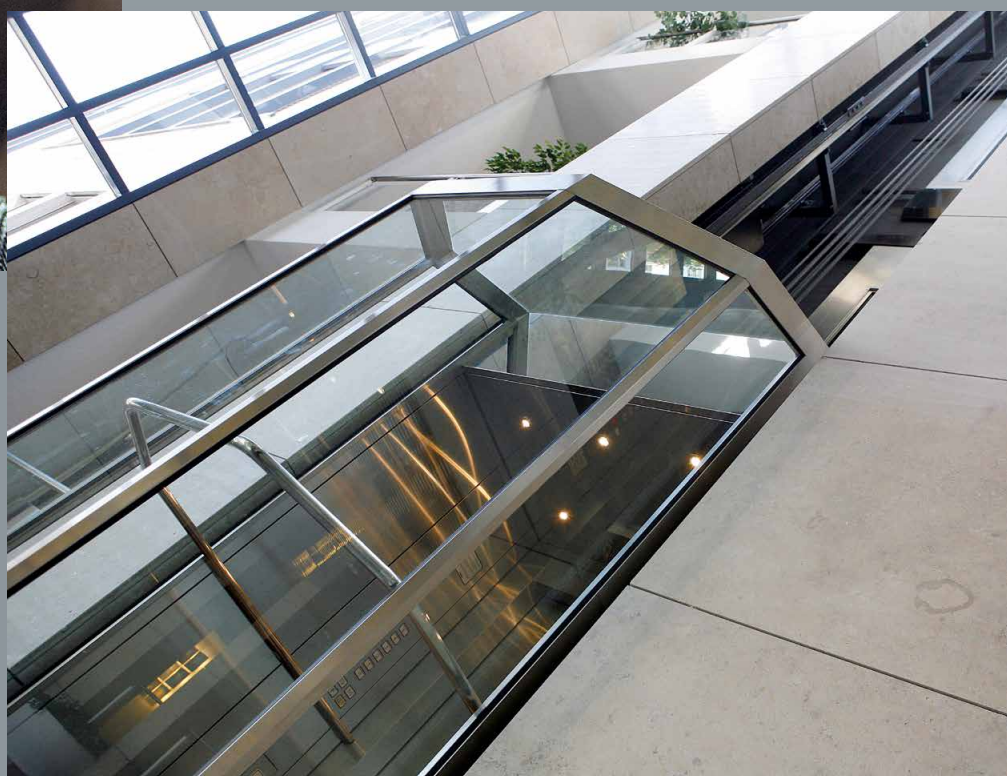
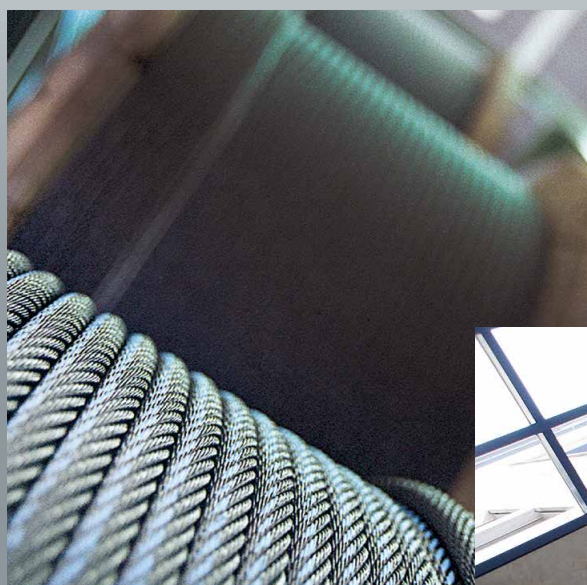
With the help of the i-LINE, which is applied to our traction ropes by BRUGG already during the production, untwisted traction ropes can be detected easily and fast, located and adjusted correctly.

### Advantages of the iLINE

- simple and correct installation
- safe installation aid
- optimizes product performance
- colour code for the identification of the rope type



# ELEVATOR ROPES





Brugg elevator ropes are a symbol of the highest quality.

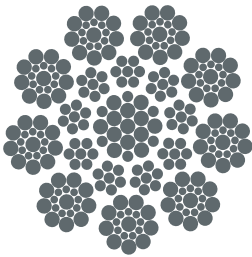
To ensure that our customers can rely on the constantly excellent quality of our products, we control all our manufacturing processes very tightly and continuously validate the quality of our products with a sophisticated system. Already the wire material is selected by us with the greatest care. We purchase our raw materials exclusively from suppliers that permanently meet our high standards. Further essential factors for the high product quality are modern production technologies and especially the experience of many years of our qualified skilled workers. In order to guarantee a complete production quality we use the most modern measuring and monitoring techniques in the production lines. After that all our products are subjected to fatigue tests and property analysis with statistical evaluation at our in-house test facility.

As a customer you benefit from the products that stand out due to the very best values concerning elongation, breaking load, smoothness of ride and service life. Thus Brugg elevator ropes symbolize the highest economic value – and a cost-performance ratio that convinces again and again.



## HRS

## TRACTION ROPES

**Steel core rope, 9 strands, parallel lay**

For highest demands on breaking force, elongation and number of trips.  
Recommended for round grooves with an undercut angle of  $\leq 85^\circ$ .

**125,000**  
N/mm<sup>2</sup>

E-Module

**0.104**  
%

Elastic  
elongation

**0.13**  
%

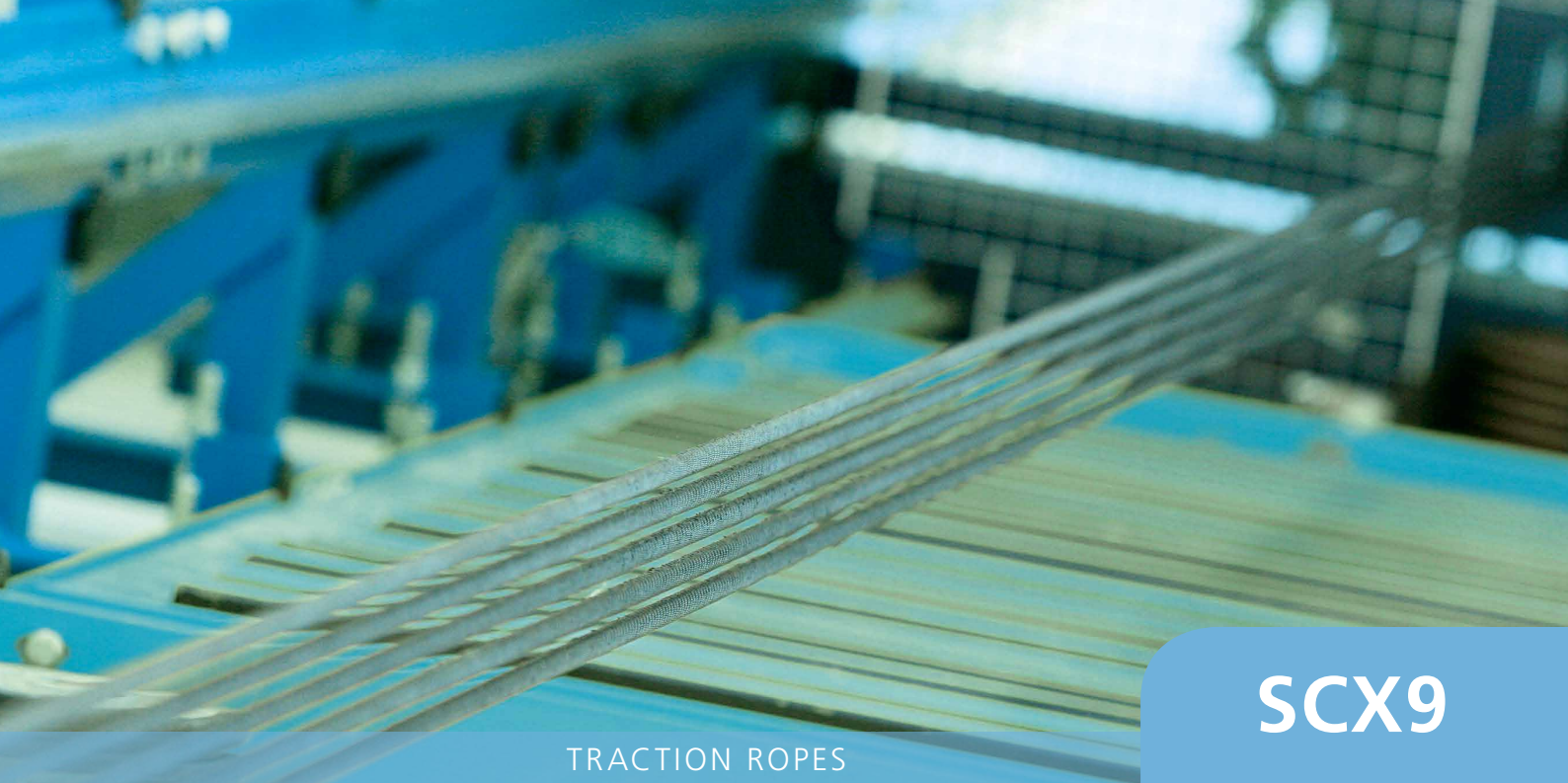
Permanent  
elongation

**$\geq 90$**   
m

Lifting height

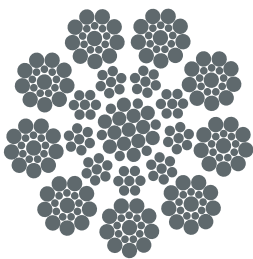
item number	rope $\varnothing$	breaking load calc.	breaking load min.	weight	construction
	mm	kN	kN	kg/100m	
10699	8.0	50.2	42.7	26.9	9x19S-PWRC 1570 U sZ (RRL)
10702	9.0	66.3	56.3	35.5	9x19S-PWRC 1570 U sZ (RRL)
10705	10.0	80.0	68.0	42.8	9x19S-PWRC 1570 U sZ (RRL)
10708	11.0	98.1	83.4	52.5	9x19S-PWRC 1570 U sZ (RRL)
73040	12.0	114.7	96.8	60.9	9x21F-PWRC 1570 U sZ (RRL)
10163	12.7	132.7	110.1	71.0	9x21F-PWRC 1570 U sZ (RRL)
10648	13.0	134.2	114.1	71.8	9x25F-PWRC 1570 U sZ (RRL)
10643	15.5	195.1	165.8	104.4	9x25F-PWRC 1570 U sZ (RRL)
78712	16.0	205.8	174.9	110.1	9x25F-PWRC 1570 U sZ (RRL)
10646	19.0	289.0	245.7	154.6	9x25F-PWRC 1570 U sZ (RRL)
10647	22.0	393.0	333.0	210.3	9x25F-PWRC 1570 U sZ (RRL)

Further nominal strengths and/or diameters (including imperial dimensions) on request.  
Rope diameter-tolerances according to EN12385-5/ISO 4344.



# SCX9

## TRACTION ROPES



### Steel core rope, 9 strands, separate lay

For highest demands on breaking force, elongation and number of trips, also under difficult installation conditions.

Recommended for round grooves with an undercut angle of  $\leq 85^\circ$ .

<b>120,000</b> N/mm <sup>2</sup>	<b>0.108</b> %	<b>0.16</b> %	<b>≥ 90</b> m
E-Module	Elastic elongation	Permanent elongation	Lifting height

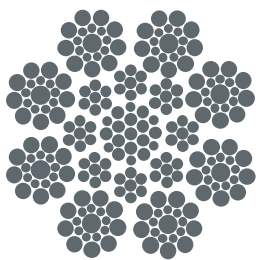
item number	rope ø	breaking load calc.	breaking load min.	weight	construction
	mm	kN	kN	kg/100 m	
11666	8.0	51.9	42.6	26.7	9x19S-IWRC 1570 U sZ (RRL)
11667	9.0	68.3	56.0	35.2	9x19S-IWRC 1570 U sZ (RRL)
11668	10.0	80.2	65.8	41.3	9x19S-IWRC 1570 U sZ (RRL)
11669	11.0	96.0	78.7	49.4	9x19S-IWRC 1570 U sZ (RRL)
11670	12.0	117.2	96.1	60.3	9x19S-IWRC 1570 U sZ (RRL)
73107	12.7	132.0	108.3	68.0	9x21F-IWRC 1570 U sZ (RRL)
11671	13.0	137.4	112.7	70.7	9x21F-IWRC 1570 U sZ (RRL)
11672	14.0	163.3	134.1	84.2	9x25F-IWRC 1570 U sZ (RRL)
11673	15.5	198.7	162.9	102.3	9x25F-IWRC 1570 U sZ (RRL)
11674	16.0	213.6	175.1	109.9	9x25F-IWRC 1570 U sZ (RRL)
11675	19.0	293.6	240.7	151.3	9x25F-IWRC 1570 U sZ (RRL)

Further nominal strengths and/or diameters (including imperial dimensions) on request.  
Rope diameter-tolerances according to EN12385-5/ISO 4344.



# SC8

## TRACTION ROPES



### Steel core rope, 8 strands, parallel lay

For high demands on breaking force, elongation and number of trips.  
Recommended for round grooves with an undercut angle of  $\leq 85^\circ$ .

<b>120,000</b> N/mm <sup>2</sup>	<b>0.108</b> %	<b>0.13</b> %	<b>≤ 75</b> m
E-Module	Elastic elongation	Permanent elongation	Lifting height

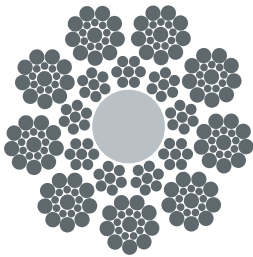
item number	rope $\varnothing$	breaking load calc.	breaking load min.	weight kg/100 m	construction
	mm	kN	kN		
10855	8.0	49.3	40.4	26.3	8x19S-PWRC 1370/1770 U sZ (RRL)
10856	9.0	62.1	50.9	33.0	8x19S-PWRC 1370/1770 U sZ (RRL)
10858	10.0	77.4	63.5	41.1	8x19S-PWRC 1370/1770 U sZ (RRL)
10859	11.0	94.4	77.4	50.4	8x19S-PWRC 1370/1770 U sZ (RRL)
10862	13.0	132.8	108.9	70.6	8x19S-PWRC 1370/1770 U sZ (RRL)

Further nominal strengths and/or diameters (including imperial dimensions) on request.  
Rope diameter-tolerances according to EN12385-5/ISO 4344.



# DP9

## TRACTION ROPES



### Wire rope with polypropylene fiber core, 9 strands, parallel lay

For high demands on breaking force, elongation and number of trips.  
Recommended for conical grooves and undercut round grooves.

**115,000**

N/mm<sup>2</sup>

E-Module

**0.112**

%

Elastic elongation

**0.25**

%

Permanent elongation

**≤ 75**

m

Lifting height

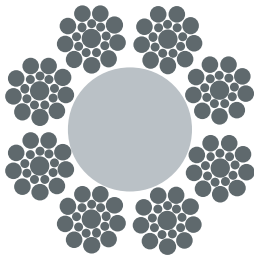
item number	rope ø	breaking load calc.	breaking load min.	weight	construction
	mm	kN	kN	kg/100m	
10681	8.0	44.8	36.7	25.0	9x19S-PWRC 1570 U sZ (RRL)
10684	9.0	59.2	48.5	33.0	9x19S-PWRC 1570 U sZ (RRL)
10687	10.0	71.5	58.6	40.0	9x19S-PWRC 1570 U sZ (RRL)
10690	11.0	87.7	71.9	49.0	9x19S-PWRC 1570 U sZ (RRL)
10693	12.0	101.9	83.5	57.0	9x19S-PWRC 1570 U sZ (RRL)
10164	12.7	116.6	95.6	64.9	9x21F-PWRC 1770/1370 U sZ (RRL)
10696	13.0	119.7	98.1	66.0	9x21F-PWRC 1570 U sZ (RRL)
78730	15.5	176.5	144.7	98.9	9x25F-PWRC 1570 U sZ (RRL)
78733	16.0	184.0	150.9	101.0	9x25F-PWRC 1570 U sZ (RRL)
78734	16.0	180.6	148.1	103.1	9x25F-PWRC 1770/1370 U sZ (RRL)

Further nominal strengths and/or diameters (including imperial dimensions) on request.  
Rope diameter-tolerances according to EN12385-5/ISO 4344.



# 8X19

## TRACTION ROPES



### Wire rope with sisal fiber core, 8 strands

For high demands on elongation also under difficult installation conditions. Recommended for all groove shapes.

<b>110,000</b> N/mm <sup>2</sup>	<b>0.122</b> %	<b>0.26</b> %	<b>≤ 75</b> m
E-Module	Elastic elongation	Permanent elongation	Lifting height

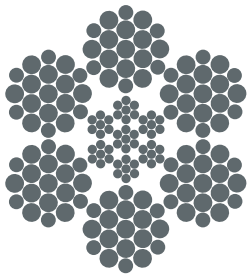
item number	rope ø	breaking load calc.	breaking load min.	weight kg/100 m	construction
	mm	kN	kN		
63999	8.0	34.20	30.48	21.7	8x19S -NFC 1370/1770 U sZ (RRL)
78748	9.0	42.90	38.20	27.0	8x19S -NFC 1370/1770 U sZ (RRL)
10884	9.5	47.80	42.53	30.3	8x19S -SFC 1370/1770 U sZ (RRL)
63977	9.5	50.10	44.60	30.3	8x19S -NFC 1570 U sZ (RRL)
63980	9.5	47.80	42.53	30.3	8x19S -NFC 1370/1770 U sZ (RRL)
78677	9.5	56.50	50.28	30.3	8x19S -NFC 1770 U zS (LRL)
60544	10.0	53.00	47.20	33.6	8x19S -NFC 1370/1770 U sZ (RRL)
63996	11.0	65.90	58.62	41.6	8x19S -NFC 1370/1770 U sZ (RRL)
62928	12.0	79.80	71.00	50.6	8x19S -NFC 1370/1770 U sZ (RRL)
61618	12.7	89.20	79.37	54.0	8x19S -NFC 1570 U sZ (RRL)
63981	12.7	85.30	75.93	54.0	8x19S -NFC 1370/1770 U sZ (RRL)
77523	12.7	89.20	79.37	54.0	8x19S -NFC 1570 U zS (LRL)
78680	12.7	100.50	89.48	54.0	8x19S -NFC 1770 U sZ (RRL)
61577	13.0	92.00	81.90	58.2	8x19S -NFC 1370/1770 U sZ (RRL)
10675	15.5	129.50	115.20	81.6	8x19S -NFC 1370/1770 U sZ (RRL)
29361	16.0	144.05	128.20	87.2	8x19S -NFC 1570 U sZ (RRL)
63978	16.0	144.00	128.22	87.2	8x19S -NFC 1570 U sZ (RRL)
63982	16.0	137.50	122.30	87.2	8x19S -NFC 1370/1770 U sZ (RRL)
77820	16.0	162.30	144.40	87.2	8x19S -NFC 1770 U sZ (RRL)
63983	17.5	165.00	147.06	107.7	8x19S -NFC 1370/1770 U sZ (RRL)

Further nominal strengths and/or diameters (including imperial dimensions) on request. Rope diameter-tolerances according to EN12385-5/ISO 4344.



# TSR

## TRACTION ROPES



### Steel core rope, 6 strands, zinc-plated, separate lay

For high demands on small traction sheaves. Suitable for conical grooves of  $\geq 45^\circ$ .

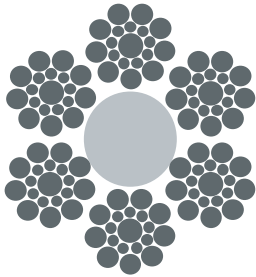
<b>125,000</b> N/mm <sup>2</sup>	<b>0.104</b> %	<b>0.50</b> %	<b>≤ 90</b> m
E-Module	Elastic elongation	Permanent elongation	Lifting height

item number	rope $\varnothing$	breaking load calc.	breaking load min.	weight	construction
	mm	kN	kN	kg/100m	
64496	6.7	44.9	31.3	19.2	6x19W-IWRC 1960 B sZ (RRL)

Further nominal strengths and/or diameters (including imperial dimensions) on request.  
Rope diameter-tolerances according to EN12385-5/ISO 4344.

# 6x19

## GOVERNOR ROPES

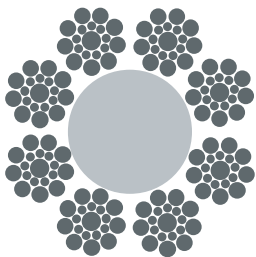


**Wire rope with polypropylene core, 6 strands, Seale**  
 For high demands on elongation and corrosion protection with special rope lubrication.

<b>105,000</b> N/mm <sup>2</sup>	<b>0.084</b> %	<b>0.22</b> %
E-Module	Elastic elongation	Permanent elongation

item number	rope ø	breaking load calc.	breaking load min.	weight	construction
	mm	kN	kN	kg/100 m	
29463	6.0	27.4	24.4	12.3	6x19S-SFC 1960 B sZ (RRL)
03901	6.5	31.6	28.2	14.4	6x19S-SFC 1960 B sZ (RRL)

# 8x19



**Wire rope with polypropylene core, 8 strands, Seale**  
 For high demands on elongation and corrosion protection with special rope lubrication.

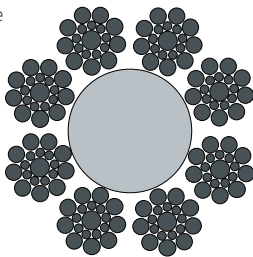
<b>110,000</b> N/mm <sup>2</sup>	<b>0.142</b> %	<b>0.22</b> %
E-Module	Elastic elongation	Permanent elongation

item number	rope ø	breaking load calc.	breaking load min.	weight	construction
	mm	kN	kN	kg/100 m	
61540	8.0	40.3	35.5	21.0	8x19S-SFC 1770 B sZ (RRL)
77513	9.5	56.5	50.3	30.3	8x19S-SFC 1770 B sZ (RRL)



## ABBREVIATED DESIGNATIONS

Example



**12 8 x 19S-NFC 1370/1770 U sZ**



Designation and classification of wire ropes (EN 12385-2 formerly ISO 17893)

### A Rope nominal diameter in mm

(See corresponding table for each)

### B Rope construction

### C Construction and lay direction

–	single lay strand example for strand construction:	7 d.h. (1-6)
S	seale parallel lay example for strand construction:	19S d.h. (1-9-9)
W	warrington parallel lay example for strand construction:	19W d.h. (1-6-6+6)
F	filler parrallel lay example for strand construction:	21F d.h. (1-5-5F-10) 25F d.h. (1-6-6F-12)
WS	combined (Warrington Seale) parallel lay example for strand construction:	31WS d.h. (1-6-6+6-12)

### D Construction of core

Single layer rope with fibre core FC

NFC natural fibre core

SFC synthetic fiber core

Single layer rope with steel core WC

WSC wire strand core

IWRC independant wire rope core

Rope with parallel lay

PWRC parallel wire rope centre

### E Nominal tensile grade of wires in N/mm<sup>2</sup>

### F Surface finish of wires

U bright

B zinc coated (class B)

### G Type and direction of lay

z right lay (strand)

s left lay (strand)

Z right lay (rope)

S left lay (rope)

sZ (RRL) regular lay, right-hand

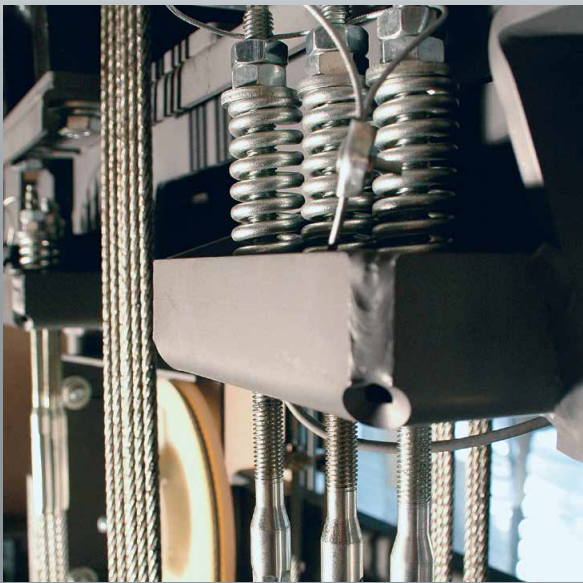
zS (RLL) regular lay, left-hand

zZ lang lay, right hand

sS lang lay, left hand



# ACCESSORIES

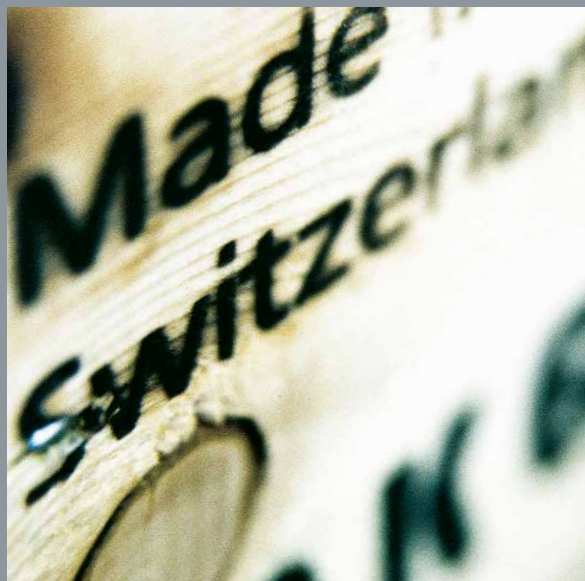




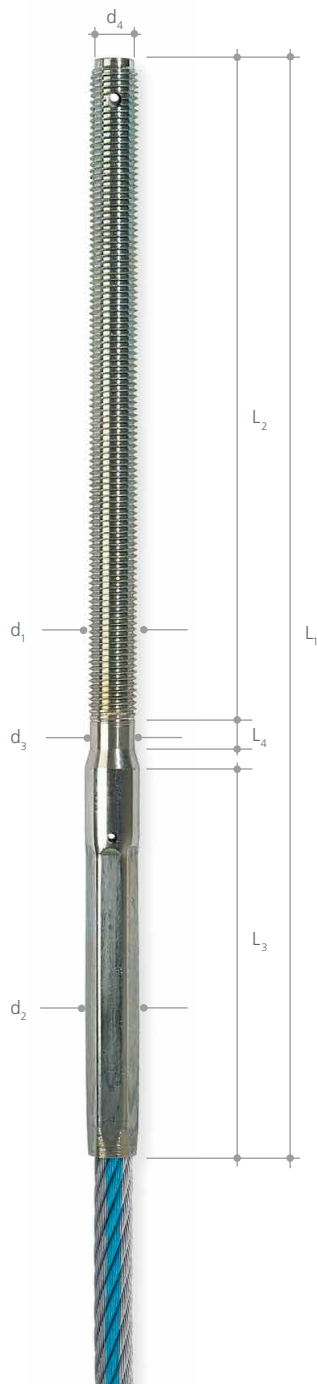
As system supplier we have in our range of products the corresponding end terminations, buffer systems and accessories for all elevator ropes.

Most items are available from inventory, allowing short delivery times and state of the art logistics.

We are specialized in the development and manufacture of threaded swaged end fittings and are also able to provide customized end terminations.



## APAG Threaded swaged sockets



### Product data

- APAG-end connections are TÜV tested and approved according to TRA/EN81.
- APAG-end connections transmits 80% of minimal breaking load of traction rope

### Advantages

- simple, fast and safe end terminations
- shortened installation time, since no mounting of end connections by customers
- no special tools required
- the compact type enables a very tight arrangement of ropes and parallel running ropes
- simple securing against rotation
- position of pilot hole for rope end
- quiet operation because there are no individual parts

item number	rope ø	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>
	mm	dimensions in mm							
10112	6.0	M 10	13	9.0	7	240	150	66.0	16.6
10113	6.5	M 10	13	9.0	7	240	150	71.5	11.1
77743	6.7	M 10	13	9.0	7	240	150	73.7	8.9
10114	7.0	M 12	18	10.9	9	280	180	77.0	9.7
10081	8.0	M 12	18	10.9	9	280	170	88.0	8.7
10082	8.0	M 14	18	12.7	11	280	170	88.0	12.1
10083	8.0	M 14	18	12.7	11	400	200	88.0	12.1
10084	9.0	M 14	18	12.7	11	290	170	99.0	11.1
10085	9.0	M 14	18	12.7	11	400	200	99.0	91.1
10086	9.0	M 16	18	14.7	13	340	220	99.0	14.8
10087	10.0	M 16	18	14.7	13	300	170	110.0	14.0
10088	10.0	M 16	18	14.7	13	400	250	110.0	34.0
10089	11.0	M 14	18	12.7	11	310	170	121.0	9.0
10090	11.0	M 14	18	12.7	11	420	200	121.0	89.0
10091	11.0	M 16	18	14.7	13	350	210	121.0	13.0
10092	11.0	M 16	18	14.7	13	420	280	121.0	13.0
10093	12.0	M 16	22	14.7	13	350	190	132.0	14.0
10094	12.0	M 20	22	18.4	16	400	250	132.0	11.0
10095	13.0	M 16	22	14.7	13	340	170	143.0	13.0
10096	13.0	M 16	22	14.7	13	420	250	143.0	13.0
10097	13.0	M 16	22	14.7	13	480	310	143.0	13.0
10098	13.0	M 16	22	14.7	13	540	370	143.0	13.0
10099	13.0	M 20	22	18.4	16	420	250	143.0	20.0
10100	14.0	M 20	25	18.4	16	420	250	154.0	4.0
10101	15.0	M 20	25	18.4	16	450	250	165.0	23.0
10103	15.5	M 20	27	18.4	16	450	250	170.5	13.0
10105	16.0	M 24	27	22.1	19	480	280	176.0	15.0

Other sizes available upon request.

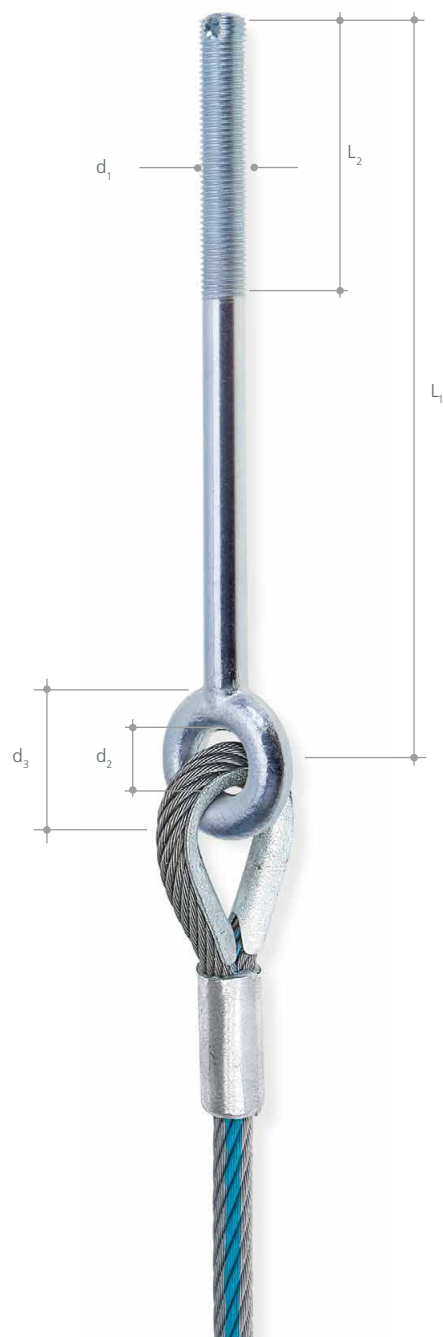
# EYLET BOLT with swaged thimble

## Product data

- eylet bolt steel St 37, zinc-plated

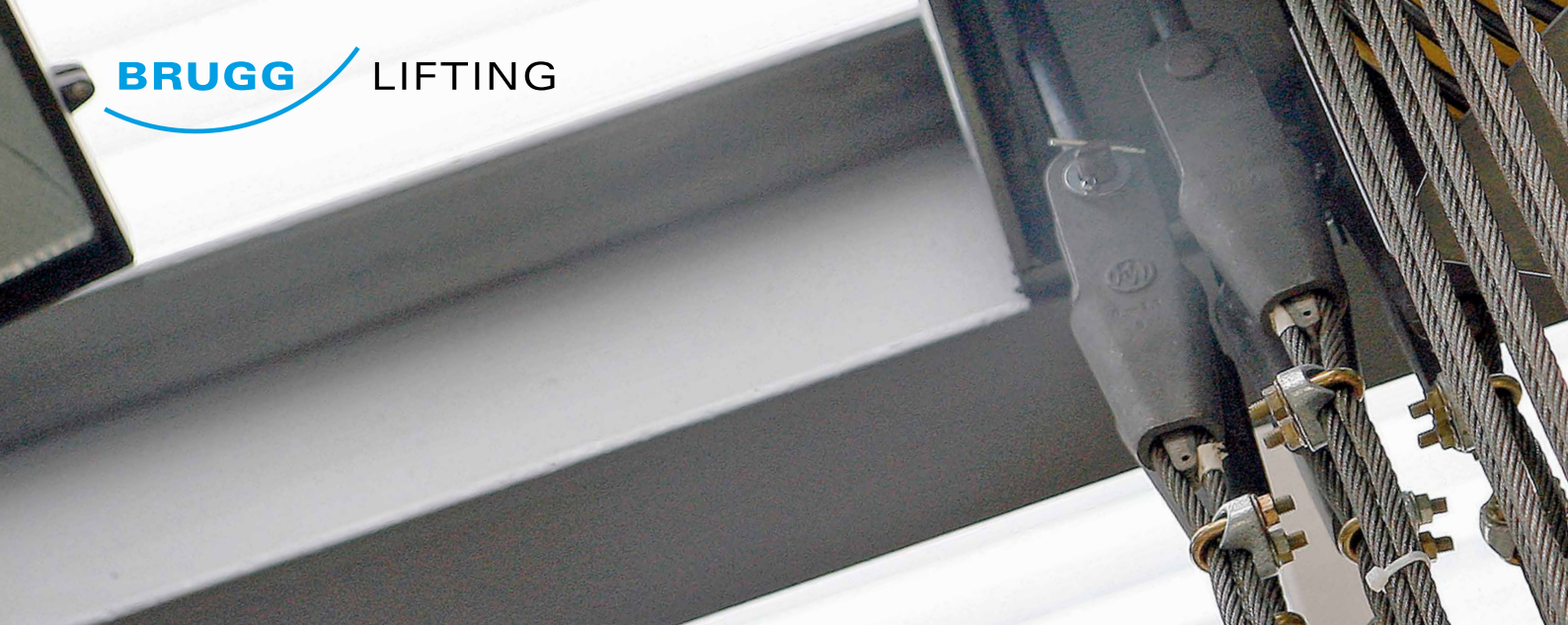
## Advantages

- simple, fast and safe end terminations
- no special tools required
- simple securing against twisting



item number	rope ø	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L <sub>1</sub>	L <sub>2</sub>	breaking load
	mm	dimensions in mm					kN
64250	6.0	M 12	26.0	50.0	260	60	33.7
64251	6.0	M 12	26.0	50.0	500	150	33.7
64252	6.5	M 12	26.0	50.0	260	60	33.7
64253	6.5	M 12	26.0	50.0	500	150	33.7
64254	8.0	M 12	26.0	50.0	260	60	33.7
64255	8.0	M 12	26.0	50.0	500	150	33.7
64256	9.0	M 16	22.0	51.4	260	120	62.8
64257	9.0	M 16	22.0	51.4	450	200	62.8
64258	10.0	M 16	22.0	51.4	260	120	62.8
64259	10.0	M 16	22.0	51.4	450	200	62.8
64260	11.0	M 16	22.0	51.4	260	120	62.8
64261	11.0	M 16	22.0	51.4	450	200	62.8
64262	12.0	M 20	27.7	67.6	290	120	98.0
64263	12.0	M 20	27.7	67.6	450	200	98.0
64264	12.0	M 20	27.7	67.6	600	200	98.0
64265	12.0	M 20	27.7	67.6	800	400	98.0
64266	13.0	M 20	27.7	67.6	290	120	98.0
64267	13.0	M 20	27.7	67.6	450	200	98.0
64268	13.0	M 20	27.7	67.6	600	200	98.0
64269	13.0	M 20	27.7	67.6	800	400	98.0
64270	15.5	M 24	27.0	65.0	400	220	141.0
64271	15.5	M 24	27.0	65.0	600	100	141.0
64272	16.0	M 24	27.0	65.0	400	220	141.0
64273	16.0	M 24	27.0	65.0	600	100	141.0
10101	15.0	M 20	25.0	18.4	450	250	165.0
10103	15.5	M 20	27.0	18.4	450	250	170.5
10105	16.0	M 24	27.0	22.1	480	280	176.0

Other sizes available upon request.



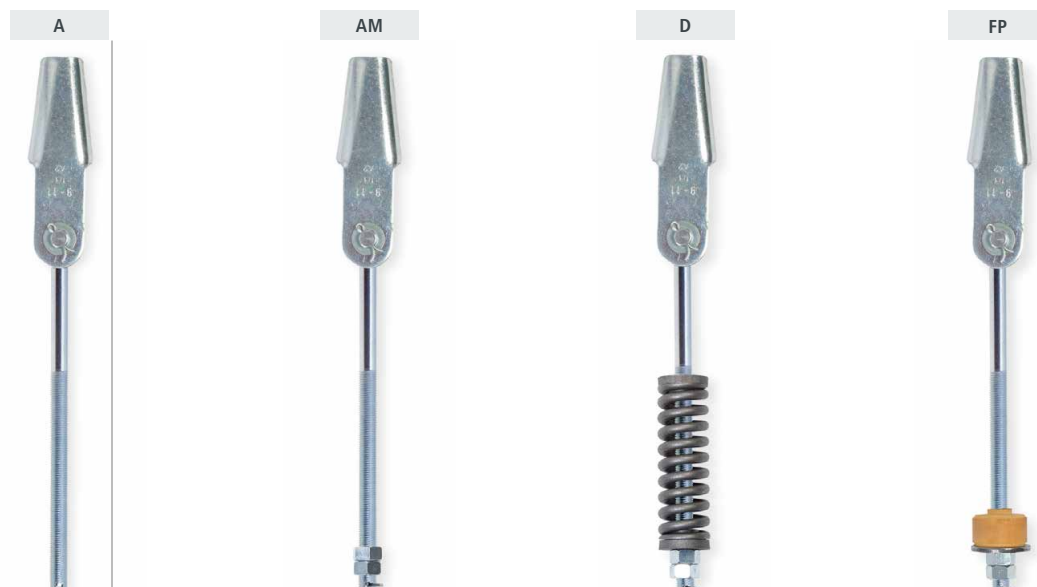
## WEDGE SOCKET symmetrical [EN 13411-7] with eyelet bolt [DIN 444]

### Product data

- wedge socket welded, steel zinc-plated
- incl. wedge, bolt and safety pins pre-assembled
- wedge socket transmits 80% of minimal breaking load of traction rope or governor rope
- eyelet bolt welded, steel zinc-plated
- in connection with the wedge socket the eyelet bolt transmits 80% of the minimal breaking load of the elevator rope
- for mounting and operation the explanations in appendix B of the norm EN 13411-7 are valid

### Advantages

- can be assembled safely and simply on-site
- springs, buffers and other accessories can be mounted individually





item number	rope ø	d	d <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>
<b>A</b>		mm				
64109	5,0 - 6,5	M10		265	180	
64110	6,0 - 8,0	M12		450	320	
64111	9,0 - 11,0	M16		484	320	
64112	12,0 - 14,0	M20		598	400	
64113	15,0 - 17,0	M24		674	450	
64114	18,0 - 20,0	M27		760	500	
<b>AM</b>						
64140	5,0 - 6,5	M10		265	180	
64141	6,0 - 8,0	M12		450	320	
64142	9,0 - 11,0	M16		484	320	
64143	12,0 - 14,0	M20		598	400	
64144	15,0 - 17,0	M24		674	450	
64145	18,0 - 20,0	M27		760	500	
<b>D</b>						
64115	5,0 - 6,5	M10	23	265	180	85,5
64116	6,0 - 8,0	M12	44	450	320	167,0
64117	9,0 - 11,0	M16	44	484	320	173,0
64118	12,0 - 14,0	M20	53	598	400	202,0
64119	15,0 - 17,0	M24	65	674	450	248,0
64120	18,0 - 20,0	M27	65	760	500	254,0
<b>FP</b>						
64121	6,0 - 8,0	M12	50	450	320	51,0
64122	9,0 - 11,0	M16	58	484	320	59,0
64123	12,0 - 14,0	M20	68	598	400	65,0
64124	15,0 - 17,0	M24	80	674	450	74,0
<b>FP2</b>						
64125	6,0 - 8,0	M12	50	450	320	79,0
64126	9,0 - 11,0	M16	58	484	320	87,0
64127	12,0 - 14,0	M20	68	598	400	93,0
64128	15,0 - 17,0	M24	80	674	450	102,0
<b>FP3</b>						
64129	6,0 - 8,0	M12	50	450	320	107,0
64130	9,0 - 11,0	M16	58	484	320	115,0
64131	12,0 - 14,0	M20	68	598	400	121,0
64132	15,0 - 17,0	M24	80	674	450	130,0

FP2



FP3



Other sizes available upon request.

You will find the item numbers for all combination possibilities in the price list.



## WEDGE SOCKET asymmetrical [EN 13411-6] with eyelet bolt [DIN 444]

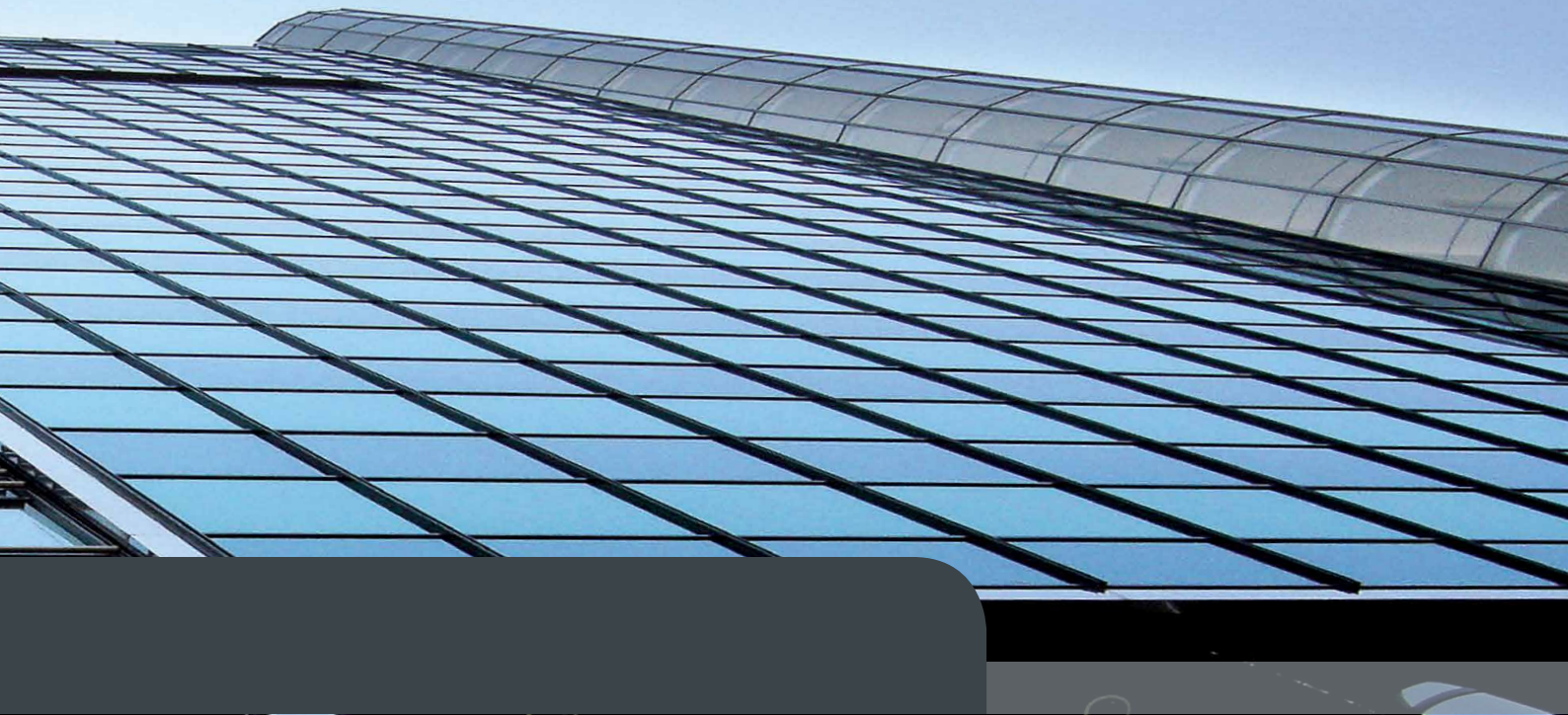
### Product data

- wedge socket cast, steel zinc-plated
- incl. wedge, bolt and security pins pre-assembled
- eyelet bolt welded, steel zinc-plated
- in connection with the wedge socket the eyelet bolt transmits 80% of the minimal breaking load of the traction – or governor rope

### Advantages

- can be assembled safely and simply on-site
- springs, buffers and other accessories can be mounted individually
- for mounting and operation the explanations in appendix B of the norm EN 13411-6 are valid





item number	rope ø	d	d <sub>1</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>
<b>A</b>						
mm						
64302	6 - 7	M12 *		430	300	
64303	8	M12 *		430	300	
64304	9 - 12	M12 *		430	300	
64305	10 - 12	M16		440	300	
64306	12 - 14	M16		440	300	
64307	12 - 15	M20 *		590	400	
<b>AM</b>						
64334	6 - 7	M12 *		430	300	
64335	8	M12 *		430	300	
64336	9 - 12	M12 *		430	300	
64337	10 - 12	M16		440	300	
64338	12 - 14	M16		440	300	
64339	12 - 15	M20 *		590	400	
<b>D</b>						
64309	6 - 7	M12 *	44	430	300	167.0
64310	8	M12 *	44	430	300	167.0
64311	9 - 12	M12 *	44	430	300	167.0
64312	10 - 12	M16	44	440	300	173.0
64313	12 - 14	M16	44	440	300	173.0
64314	12 - 15	M20 *	50	590	400	201.5
<b>FP</b>						
64316	6 - 7	M12 *	50	430	300	51
64317	8	M12 *	50	430	300	51
64318	9 - 12	M12 *	50	430	300	51
64319	10 - 12	M16	57	440	300	59
64320	12 - 14	M16	57	440	300	59
64321	12 - 15	M20 *	68	590	400	65
<b>FP2</b>						
64322	6 - 7	M12 *	50	430	300	79
64323	8	M12 *	50	430	300	79
64324	9 - 12	M12 *	50	430	300	79
64325	10 - 12	M16	57	440	300	87
64326	12 - 14	M16	57	440	300	87
64327	12 - 15	M20 *	68	590	400	93
<b>FP3</b>						
64328	6 - 7	M12 *	50	430	300	107
64329	8	M12 *	50	430	300	107
64330	9 - 12	M12 *	50	430	300	107
64331	10 - 12	M16	57	440	300	115
64332	12 - 14	M16	57	440	300	115
64333	12 - 15	M20 *	68	590	400	121

FP2



FP3



\* The head of the screw is not according to DIN 444. Other sizes available upon request. You will find the item numbers for all combination possibilities in the price list.

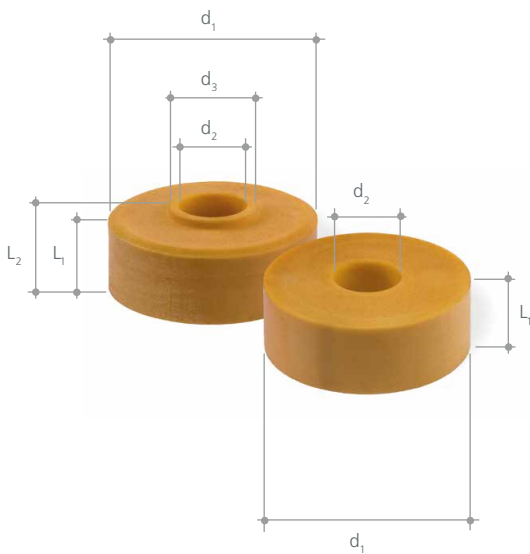
## ELASTOMER BUFFERS for rope attachment

### Product data

- polyurethane elastomer with cells
- suitable for APAG, eyelet bolt, wedge socket symmetrical and asymmetrical

### Advantages

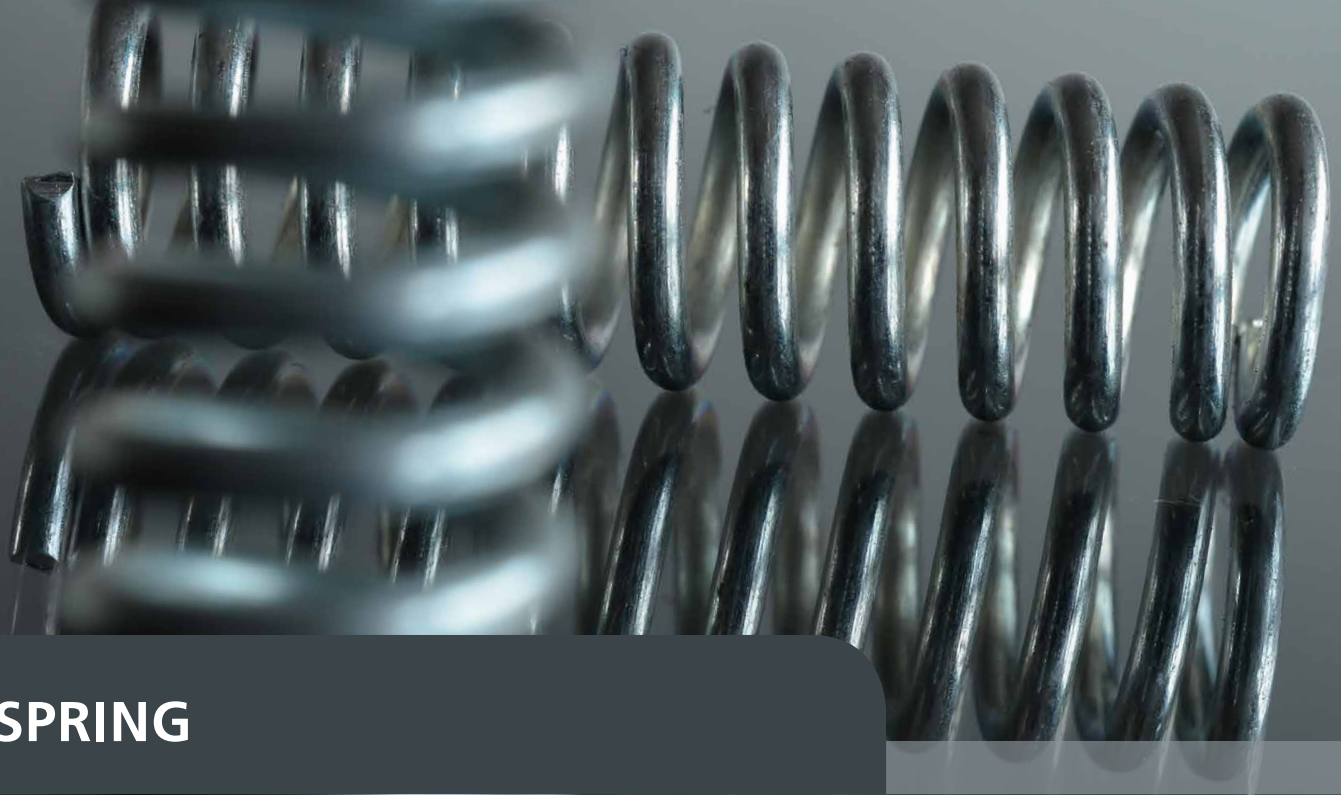
- excellent buffer properties
- long distance of spring deflection in case of small overall height
- transverse elongation
- also applicable on the counterweight side as rope length compensation
- grease- and oilresistant



item number	for tread	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L <sub>1</sub>	L <sub>2</sub>	max. pressure force
							kN
		mm					
77658 *	M12	50	13	22	28	33	6,867
77659	M12	50	13		28		6,867
77660 *	M16	50	17	22	28	33	6,867
77661	M16	50	17		28		6,867
77662 *	M20	65	21	27	28	33	11,772
77663	M20	65	21		28		11,772
77664 *	M24	80	25	27	28	33	11,772
77665	M24	80	25		28		11,772

\* with collar. If not expressly desired differently, we supply rope attachments with a buffer always with a collar, in case of several buffers always the top one with collar.

# SPRING



## Product data

- steel spring, bright
- cylindrical type
- suitable for APAG, eyelet bolt, wedge socket symmetrical and asymmetrical

## Advantages

- improved riding comfort
- according to the strength of the chosen spring or of the number of elastomer buffers (up to 3) the result can be influenced individually



item number	for tread	d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	L <sub>1</sub>	spring rate	spring force
	mm	dimensions in mm				N/mm <sup>2</sup>	kN
64468	M10	23,5	4,5	14,5	61,5	81,0	31,703
64469	M12	43,0	7,5	28,0	135,0	71,0	3,382
64470	M16	46,0	9,0	28,0	135,0	146,0	5,930
64471	M20	53,0	11,0	31,0	157,5	223,0	9,383
64472	M24	65,0	15,0	35,0	190,0	458,0	14,880
64472	M27	65,0	15,0	35,0	190,0	458,0	14,880
auf Anfrage	M30	80,0	18,0	44,0	155,0	908,3	24,525
substitute for 64469 od 64470							
10822	M12	31,0	7,0	17,0	148,0	124,5	2,500
77746	M16	33,0	8,0	17,0	122,0	114,7	2,740



## DOOR CLOSING ROPE SETS



TSS



SMZ



### TSS - rope set

- 1 FLEX door closing rope, 3500 mm length, with one-sided pressed APAG - external thread to adjust the correct rope tension
- 1 clamping ring to fasten a rope end at a fixed point
- 1 rope clamp and 1 thimble to mount the loose rope end

One packaging unit contains 5 rope sets each..

item number	rope Ø
	mm
77720	3,0
77721	4,0

### SMZ - rope set

- 1 thread for easy installation DO-IT-LINE to adjust the correct rope tension
- 1 clamping ring to fasten a rope end at a fixed point
- 1 rope clamp and thimble to mount a loose rope end

One packaging unit contains 5 rope sets each.

The SMZ–rope set does not contain a door closing rope. This can be ordered separately.

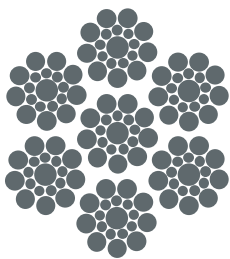
### Advantages

- fast and simple installation
- suitable for most elevator door-closing systems
- reduces downtimes
- complete set – all parts are included
- not much warehousing required

item number	rope Ø
	mm
77744	3,0
77745	4,0



# DOOR CLOSING ROPE FLEX . ROPE CLAMP



## Steel core rope, 6 strands, separate lay

Especially for door drives. Due to very fine strands especially suitable for deflector sheaves. Excellent service life with regard to high bending load.

**110,000**

N/mm<sup>2</sup>

E-Module

**0.138**

%

Elastic elongation

**0.25**

%

Permanent elongation

item number	rope Ø	breaking load calc.	breaking load min.	weight	construction
	mm	kN	kN	kg/100m	
04132	3.0	8.2	6.7	3.6	6x19S-WSC 1960 B sZ (RRL)
03895	4.0	14.4	11.0	6.0	6x19S-WSC 1960 B sZ (RRL)
03899	5.0	21.6	16.0	8.7	6x19S-WSC 1960 B sZ (RRL)

## Rope Clamp

- zinc coated
- transmit 80% of the minimal breaking load of the traction rope or governor rope
- for mounting and operation the explanations of the norm EN 13411-5 are valid

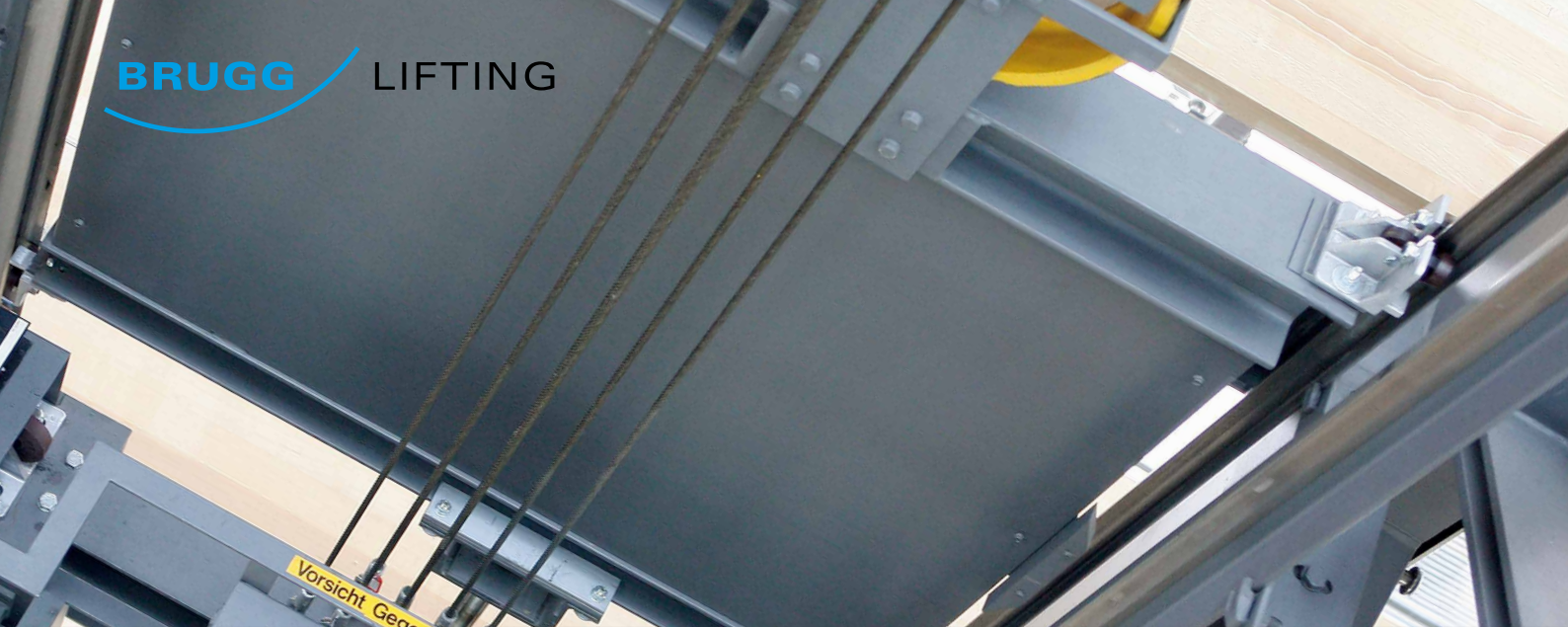
## Advantages

- can be assembled safely and simply on-site



item number	rope Ø	d	L <sub>1</sub>	L <sub>2</sub>	required torque	rope clamp/loop
	mm		dimensions in mm		Nm	Stk
49459	5.0	M5	25	12	2.0	3
01946	6.5	M6	32	14	3.5	3
01947	8.0	M8	41	18	6.0	4
01948	10.0	M8	46	20	9.0	4
01950	12.0	M10	56	24	20.0	4
78144	13.0	M12	64	27	33.0	4
78145	14.0	M12	66	28	33.0	4
01951	16.0	M14	76	32	49.0	4
01952	19.0	M14	83	36	68.0	4
01953	22.0	M16	96	40	107.0	5

\* Corresponds to the maximum nominal rope diameter.  
For interim sizes of the nominal rope diameter the next-largest clamp size is to be used.



## RPM Rope performance measurement device

### Keep the tension under control

Only the even tension within an elevator rope set can guarantee a wear- and maintenance low operation and secures a high economic efficiency and competitiveness.





The RPM Rope performance measurement device makes it easier for you to check the rope tension during the installation, the inspection and the maintenance of elevators.

### Advantages

- quick, easy and precise determination of rope diameter and tension
- comparison and measurement of the rope tensions e.g. within a rope set
- determination of the weight of cabin, counterweights, loudspeakers, lighting installations, etc.
- easy documentation, query and comparison of the last 20 measuring results through storage in the device
- high precision of rope tension measurement of  $\pm 5\%$  and diameter measurement of  $\pm 1\%$
- versatile through battery-supplied operation (1 x 9 V battery)
- handy device: just 330 x 230 x 50 mm (12.9 x 9.1 x 2.0 in), weight only 2.6 kg (5,73 lb)





# VT-LUBE rope care lubricant . PULLING GRIP



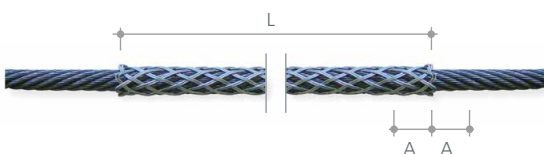
### VT-LUBE

This rope care lubricant was especially developed for the relubrication of elevator ropes.

### Advantages

- excellent penetration quality causes optimum friction reduction in the rope
- excellent creep quality enables even lubricant distribution on and in the rope
- excellent corrosion protection
- suitable for high rope speed through very good adhesive quality
- neutral quality towards synthetic materials (no swelling of plastic parts)

item number	VT-Lube
	liter
77738	5



A = cutting length (4x rope diameter)  
cut with self-adhesive tape supported with wires or textiles

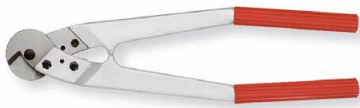
### Pulling grip

- zinc coated, for installing elevator ropes

item number	for rope ø	weight	length L	load carrying capacity with 3-fold security
	mm	kg	mm	kp
04647	8-15	0.06	800-1000	250
04646	15-20	0.16	1000-1200	250
04645	20-30	0.40	1000-1500	370



# ROPE CUTTERS



## Rope cutters

item number	rope ø	weight	length cutters
	mm	kg	mm
07534	bis 12	1,5	500
07535	bis 16	2,3	600



## Hydraulic rope cutters

item number	rope ø	weight	length cutters
	mm	kg	mm
77790	8-20	2,7	370



## PACKAGING



When selecting the packaging, Brugg pays attention to the best transport protection possible. Our ropes are protected in the best possible way during the transport with special packaging materials against corrosion and mechanical damaging.

Brugg Lifting is committed to handle resources with great care. That is why our ropes, whenever possible, are delivered on sturdy returnable reels and drums that can be reused.

- A Cross drums**  
capacity according to rope diameter  
from 100 m ( $\varnothing$  16 mm) to 400 m ( $\varnothing$  6,5 mm)
- B Round reels**  
 $\varnothing$ /width: 300-600 mm / 320-530 mm
- C Coils**  
up to 50 m or 30 kg
- D Wooden reels XJ-wooden reels  $\varnothing$  100 x 65 cm**  
capacity according to rope diameter  
from 1000 m HRS ( $\varnothing$  16 mm) or 1132 kg reel weight  
up to 4100 m HRS ( $\varnothing$  8 mm) or 1118 kg reel weight
- E System deliveries on pallets**  
consisting of rope/end terminations/accessories/  
mounting material
- F System deliveries in sturdy cardboard box**  
L/W/H: 80x60x80 cm / 120x60x80 cm

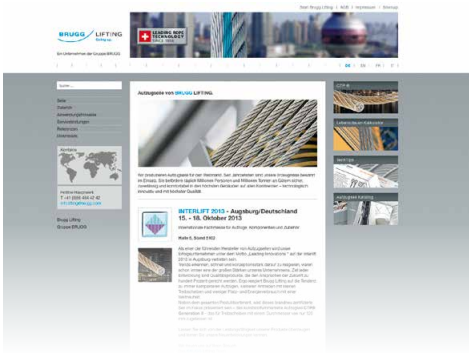


## NOTES

A large area of the page is covered by a light gray grid pattern, intended for taking notes.



**WE SUPPORT YOU. WORLDWIDE.**



**brugglifting.com** . The compact informative Homepage

Our Homepage provides you with vivid depictions of our entire product range. You can intuitively make preselections meeting your individual requirements and find your Brugg contacts all over the world with just a click. For the latest information, just visit our start page.

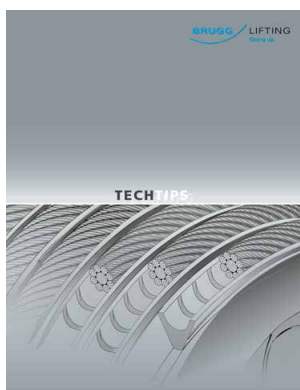
**RLP** . Calculate the service life of your ropes

Log in on our service life calculator on our Homepage, which calculates the service life of your ropes based on the rope data entered by you.



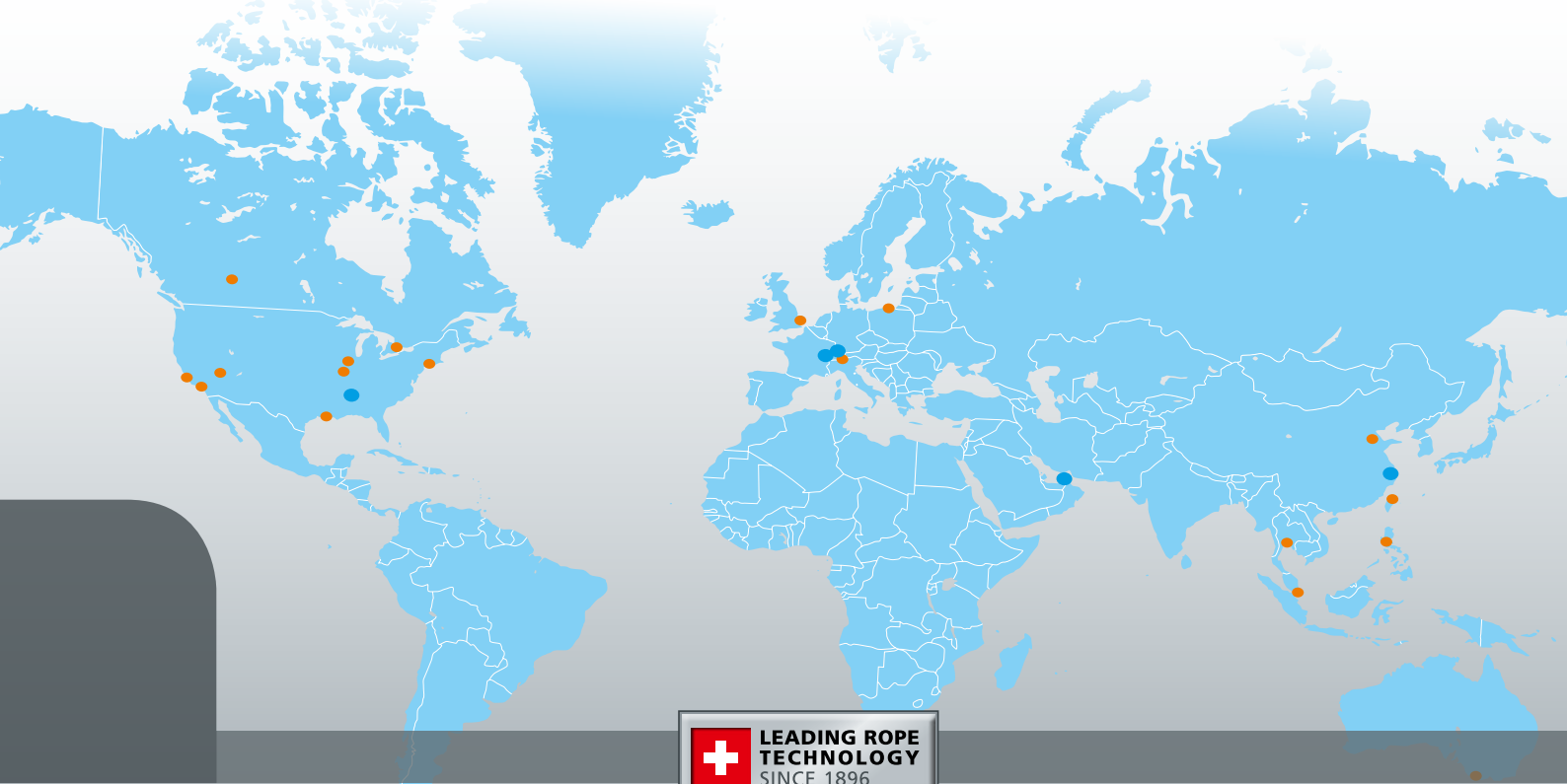
**Instructions for Use** . Important tips for the handling of ropes

Every rope delivered by us to you is accompanied by our illustrated application instructions for the correct handling of ropes. From transport to monitoring of ropes, you will see all useful information at a glance.



**TECHTIPS** . The all-round information on the handling of ropes

Make use of our comprehensive know-how on the handling of ropes. A quick link on our Homepage takes you to our Online Catalog, which does not only provide comprehensive, technical details and tips, but also enables you to retrieve the requested (alternatively: relevant) information using a full text search. All data selected can be stored by you in a PDF file.



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