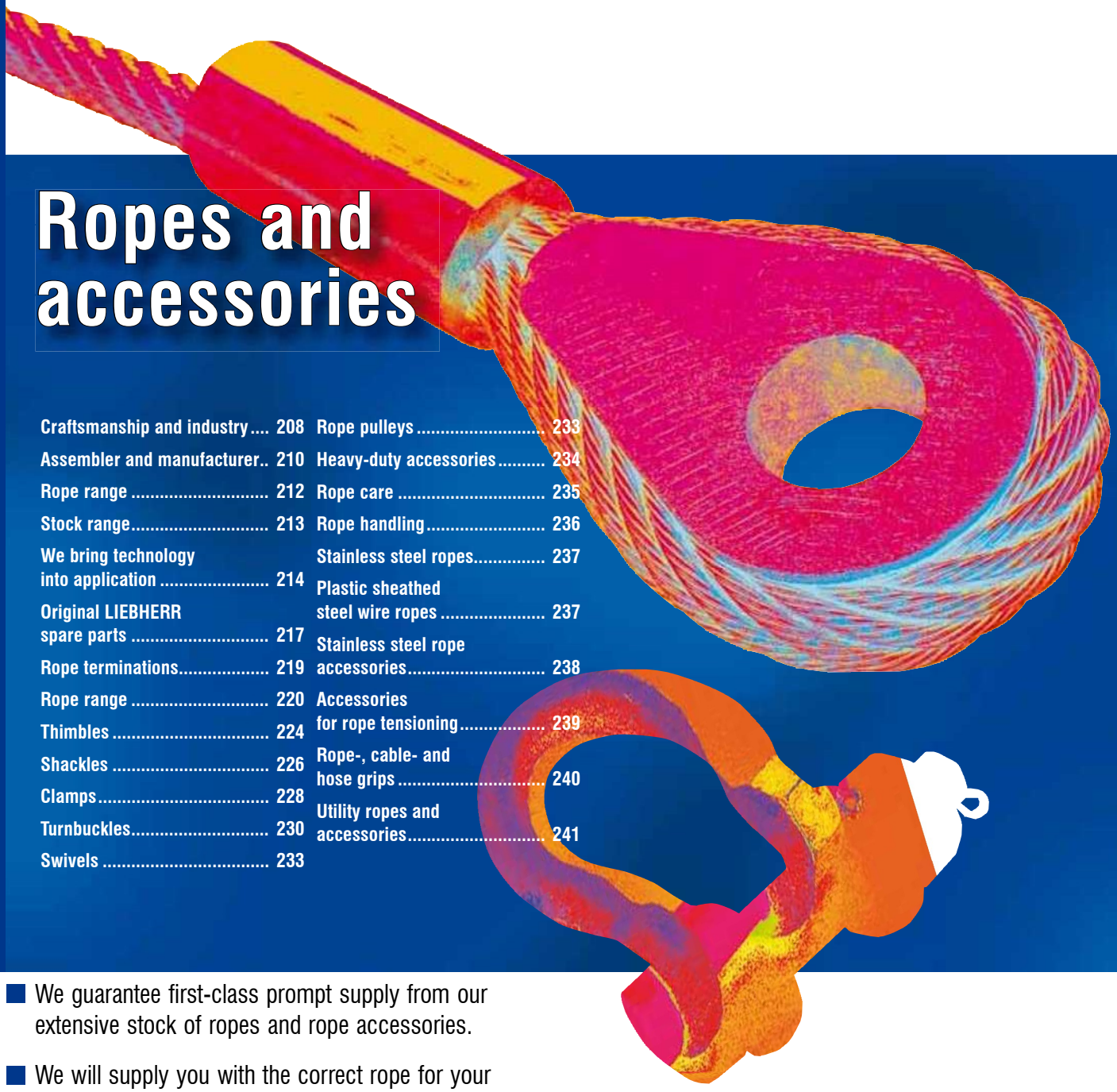
PFEIFER

Ropes and accessories



- We guarantee first-class prompt supply from our extensive stock of ropes and rope accessories.
- We will supply you with the correct rope for your application based on our experience with the most varied range of rope applications.
- You will be spending your money wisely with PFEIFER – as an assembler and manufacturer we know the rope business and can advise you accordingly.
- Top quality manufacture through the combination of manual skill and industrial production conditions.
- Our ropes can be attached to any connection as we will design a suitable rope connection for you.

Craftsmanship and industry

PFEIFER rope processing combines craftsmanship with industrial applications

Splicing in our factory

We are masters of traditional rope making and can splice eyes, Flemish eyes etc. for you.

Splicing on your site

We can also splice according to your requirements on site (e. g. in the smelting works, at the cable car, at conveyor systems, etc.).

Pouring on ropes up to 160 mm diameter

Poured rope connections attain a load transmission of 100 % of the minimum breaking load of the rope and can be the right connection method for your rope application.

Pouring ropes is a complex process which requires both manual skill and experience.

Ropes with passion!

PFEIFER – The union of traditional craftsmanship and industrial precision.

430 years experience in the rope-making trade

Ferrules on ropes up to 80 mm diameter

Using ferrules on ropes up to 80 mm diameter, we can provide you with assembly services even at the limits using state-of-the-art technology.

Manufacture within the limits of the smallest tolerances

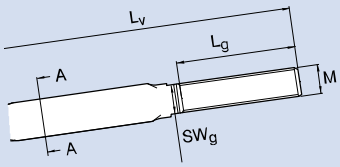
High-precision rope applications require manufacture of rope systems with the smallest tolerances. We develop the devices required for this in-house.

Industry

Wide fully automated reel store

A capacity of over 4,000 t enables ropes to be supplied within 24 hours.

This capacity enables us to select the correct rope for your application.



Design and development

We develop the right rope connection for your application.

We analyse the properties of our ropes in order to select the correct rope for your application.

Pre-stressing and distending in a range of facilities up to 3,500 kN

In order to avoid problems due to expansion effects, we can pre-stress your rope in our 240 m pre-stressing tunnel if required.

Innovative winding technology for twist-free winding

The latest, innovative winding technology guarantees a twist-free winding procedure.

Torsion stresses in the rope are avoided.

Laser-positioned rope winding

Quality Assurance

Galvanisation

We test the galvanising of our ropes and can guarantee the approved galvanisation class.

Minimum breaking loads

The minimum breaking load of a rope is a safety-related factor which must be complied with when choosing a rope.

To guarantee high quality, ropes can be broken on our tensile testing systems with up to 6,000 kN force.

Your special requirements

We are happy to meet your special requirements for product quality, e. g. we can guarantee electrostatic discharge of our products if necessary.

Assembler and manufacturer

PFEIFER – more than just an assembler.
As a manufacturer, we know what it all depends on.

PFEIFER –
430 years of experience in the rope trade

PFEIFER-DRAKO –
more than 150 years experience in rope manufacture
+ advanced rope assembly

PFEIFER – rope expertise in:
- Application technology
- Fitting technology
- Range of steel wire rope

PFEIFER –
leading suppliers to construction equipment manufacturers

PFEIFER –
Cooperation with the world's leading rope manufacturers

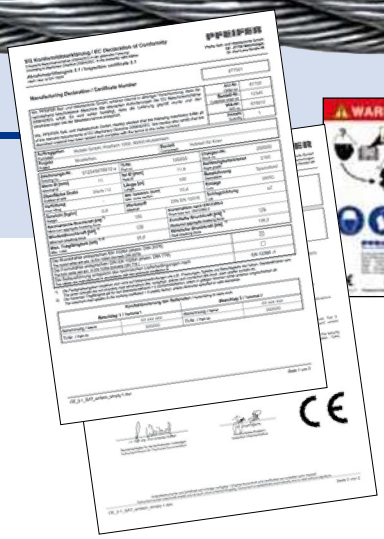
We manufacture ropes

- PFEIFER-DRAKO is a global market leader in the lifting rope sector
- We have a broad range of high performance ropes for industrial requirements and mining which meet the highest safety standards
- Now with advanced manufacturing technology and an additional 16,000 m² production area

Galvanisation

- Different applications place different demands on the corrosion protection.
- Many galvanisation qualities are available on the market that do not come up to the requirements of individual applications.
- We are one of the few suppliers who measure the galvanisation quality in our own test laboratory and can supply unusual customer requests.

Works and acceptance test certificates



- We are authorised to issue the relevant works and acceptance test certificates for all types of ropes. These certificates demonstrate that official requirements are met in accordance with the standards.
- On request, we can draw up works certificates, acceptance test certificates, Germanischer Lloyd certificates and manufacturers' declarations.

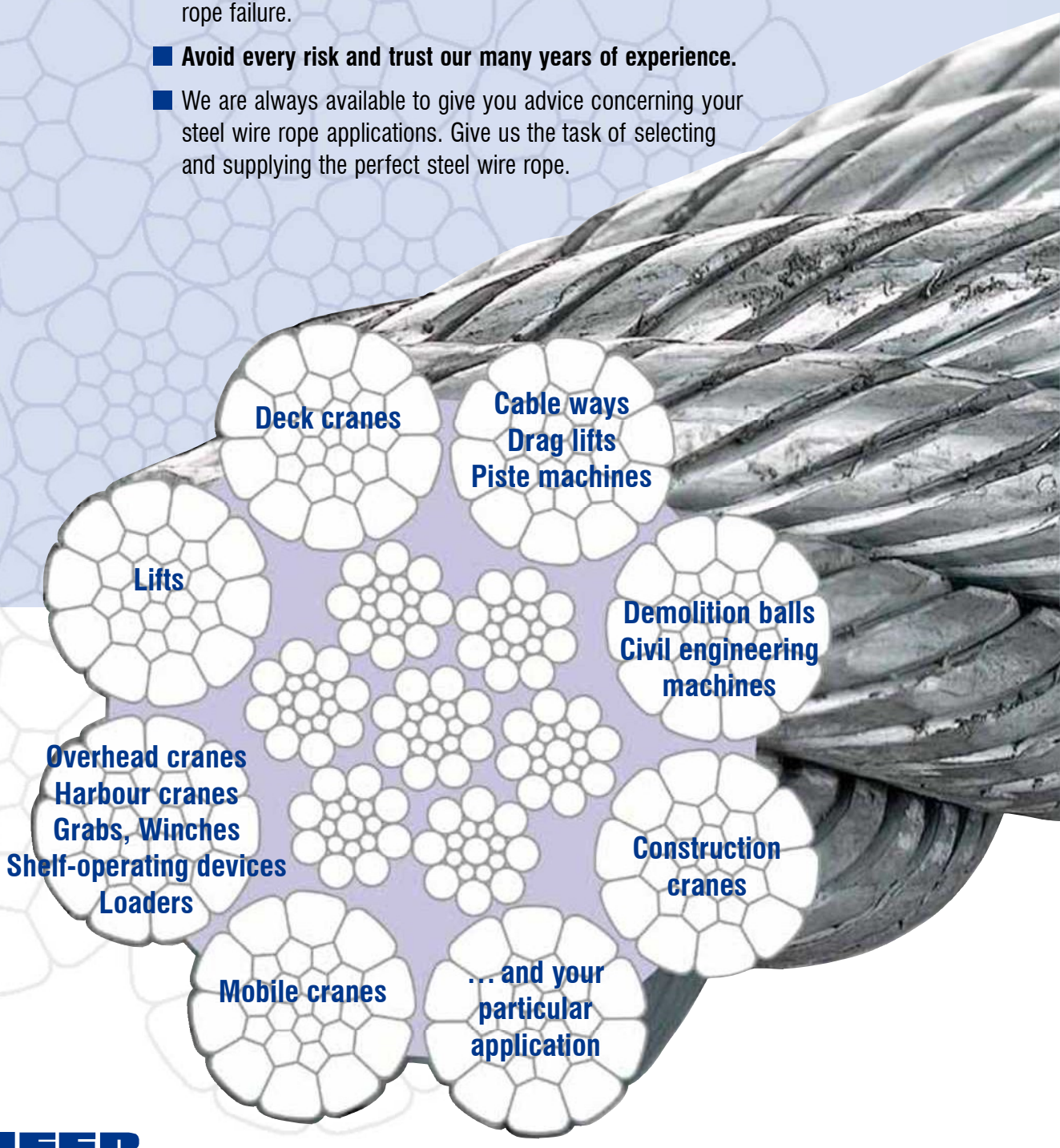
Minimum breaking loads

- The minimum breaking load of a rope is a safety-related factor which must be complied with when choosing a rope.
- To guarantee high quality, ropes can be broken on our tensile testing systems with up to 6,000 kN force.
- This equipment can also perform tests on pulsating tensile stresses.

Rope range

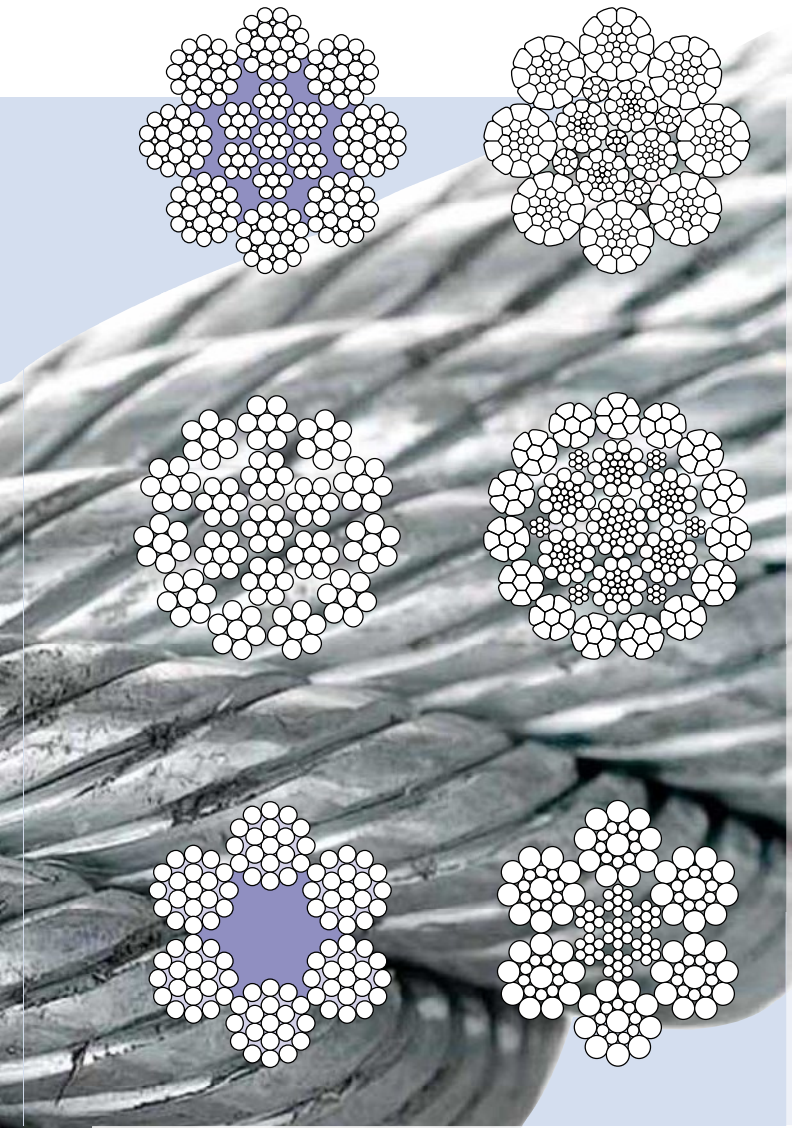
Your partner for all rope applications

- Steel wire ropes have to be selected for the most different applications and achieve the longest lifespan in the prevailing circumstances. The correct choice of a steel wire rope does not only reduce possible danger risks to the plant and its operators, but also avoids high break-down costs which incur in the case of premature steel wire rope failure.
- **Avoid every risk and trust our many years of experience.**
- We are always available to give you advice concerning your steel wire rope applications. Give us the task of selecting and supplying the perfect steel wire rope.



Stock range

We stock the largest range in the trade



We have the right rope for your application

Type of rope

- resistant to rotation or tension
- compacted or non-compacted

Type of lay and lay direction

- regular-lay or lang-lay
- right-hand or left-hand

Nominal strength

- Corresponding to your requirements in various nominal strengths from 1,570 N up to 2,160 N/mm^2

Wire surface

- ungalvanised or galvanised
- lubricated or dry
- corrosion protection according to use and requirements

Fully automated reel store

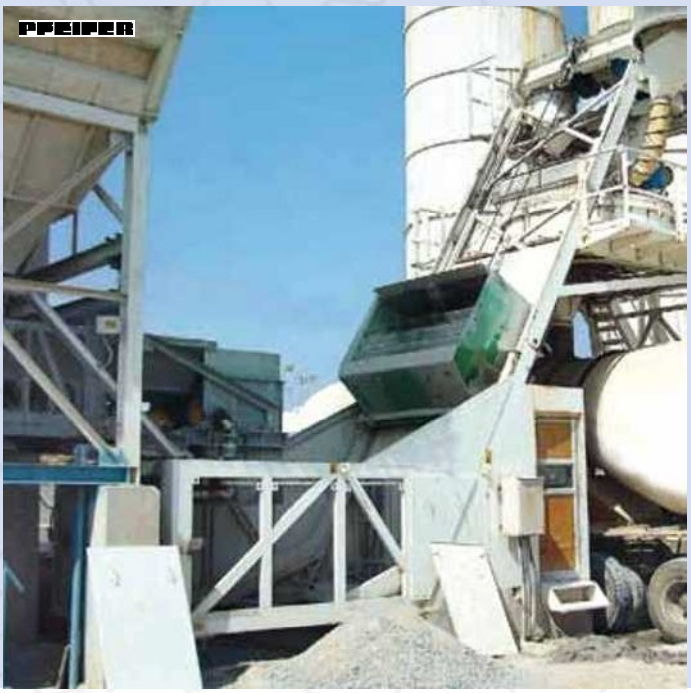
- Advanced and fully automated reel store, capacity 4,000 t, **one-of-its-kind in the wire rope sector**
- Storage and handling of rope reels up to 1.80 m diameter and an individual weight of up to 8,000 kg
- Each reel is at the final assembly workstation within 4 minutes
- One of the largest rope ranges in the sector in stock
- Ropes in stock can be delivered within 24 hours

We bring technology into application

- Wire ropes are also an important component in the machines illustrated below.
- We can also find a solution for your particular application.

Grab dredgers: Ropes raise, lower and close the grabs

Mixing facilities: Ropes move the feed bucket

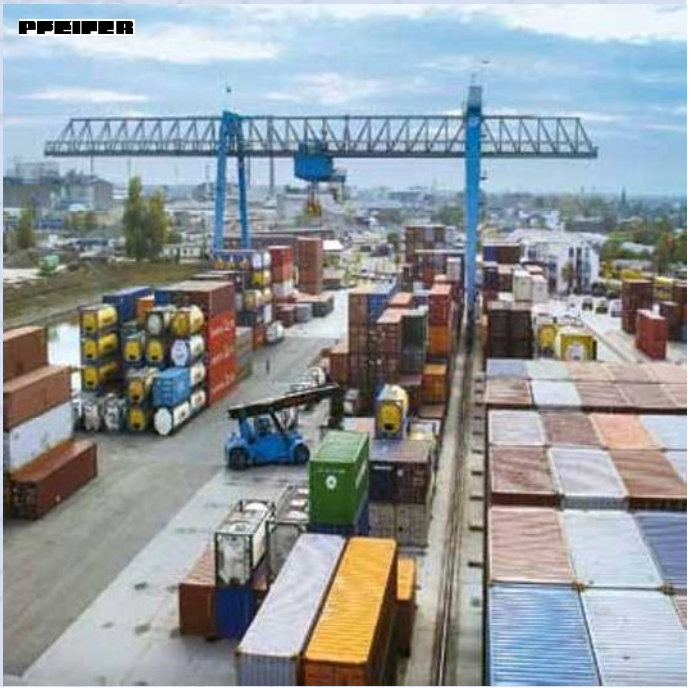


Medical engineering: Ropes in the operating mechanism

Rotary drilling rigs: Ropes raise and lower the drill rods

Lock systems: Ropes raise and lower the lock gates

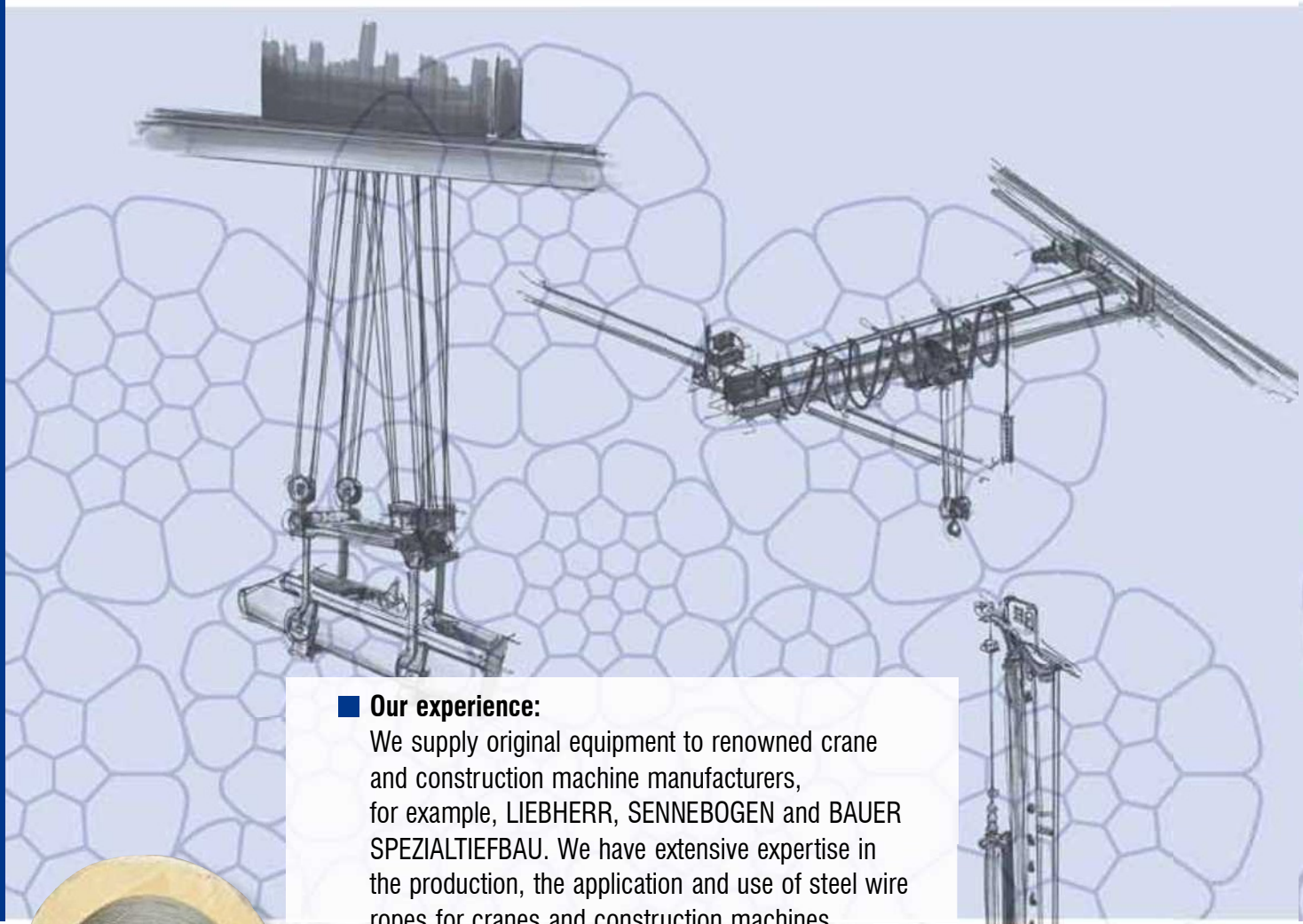
Container gantry cranes: Ropes raise and lower the spreader for transporting the containers



Open-cast mining excavator: Ropes hold and move the booms

Shelf-operating devices: Ropes raise and lower the lifting platform and the transfer unit

We are famous for:
Ready-for-use ropes for your cranes and construction machines



- **Our experience:**
  We supply original equipment to renowned crane and construction machine manufacturers, for example, LIEBHERR, SENNEBOGEN and BAUER SPEZIALTIEFBAU. We have extensive expertise in the production, the application and use of steel wire ropes for cranes and construction machines.
- **Our service:**
  Ready-for-use steel wire ropes for cranes and construction machines have been our strength for many years. We have a comprehensive range of stock of commonly used ropes for the most cranes and construction machines.
- **Your advantage:**
  Immediate availability of commonly used ropes for your cranes and construction machines ex stock. Further ready-for-use ropes can be delivered to the location of your choice at short notice.

Original LIEBHERR spare parts

- As a supplier of original equipment for LIEBHERR cranes, we supply the original spare parts. **These are the only ropes which LIEBHERR approves for use!**
- Recognisable due to yellow label

LIEBHERR original replacement ropes guarantee decisive advantages:

- High operational safety
- Reliable crane operations and improved economic efficiency due to less downtime and fewer exchanging processes as the rope and crane are consistently being matched to each other.
- LIEBHERR original replacement ropes are ready-for-use ropes with all fittings and terminations – unmistakably marked by the LIEBHERR identity number and the crane type (detailed specifications about rope construction, swaged ferrules etc. are no longer necessary).

PFEIFER
DRAKO

Demanding applications – worldwide references


Eiffel Tower, Paris


Burj Khalifa, Dubai


Petronas Towers, Kuala Lumpur


Commerzbank, Frankfurt

- We are Germany's market leaders in the production of lift ropes. We are among the top producers in the world.
- Benefit from our many years of experience in cooperation with the largest, worldwide operative lift manufacturers and midsized companies from the lift industry.

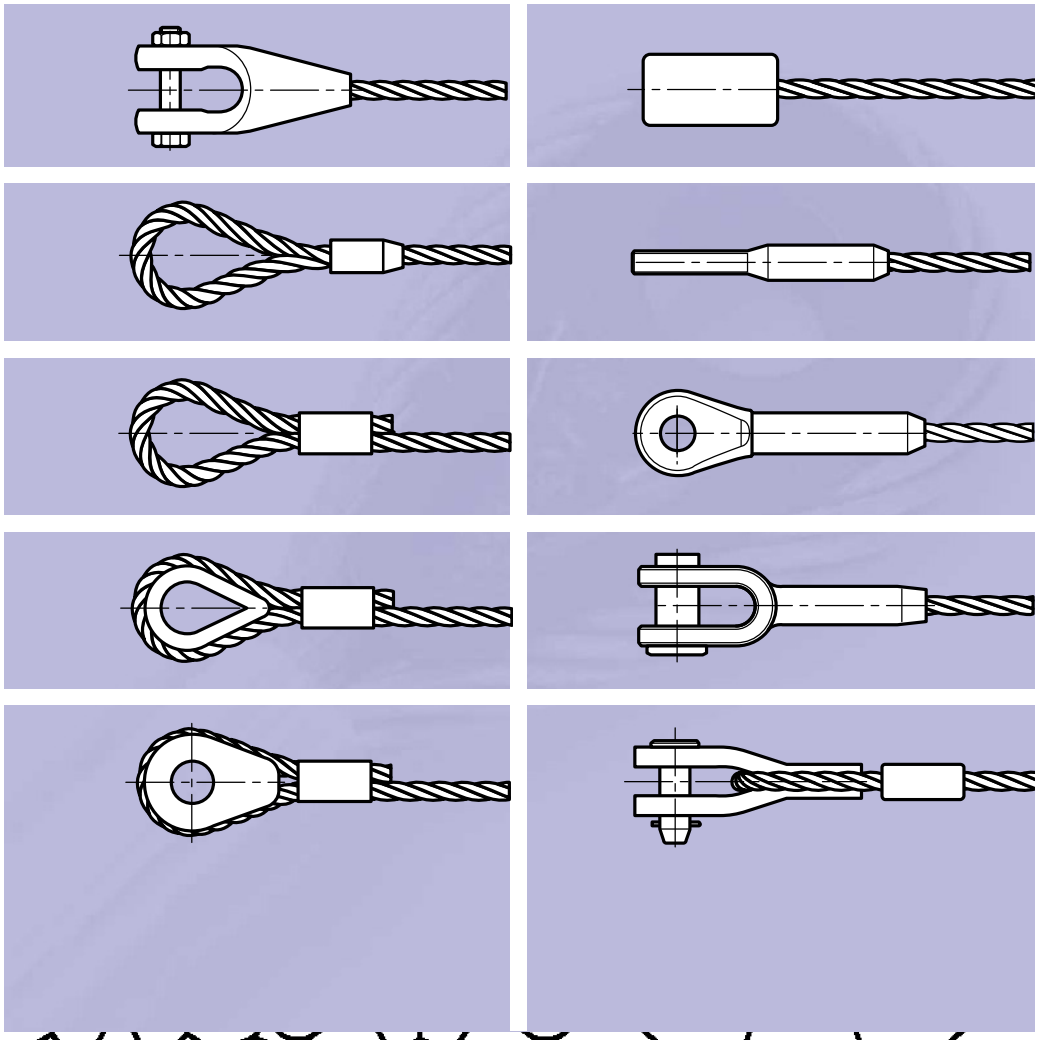
our direct line to
ift technology

PFEIFER DRAKO
DRAHTSEILWERK GMBH & CO. KG

RHEINSTRASSE 19–23
D-45478 MÜLHEIM AN DER RUHR
PHONE +49 (0) 208 - 4 29 01 - 0
FAX +49 (0) 208 - 4 29 01 - 43
E-MAIL aufzugtechnik@drako.de
INTERNET www.drako.de

Rope terminations –
Standard or tailor-made

- We match the rope to your applications with special fittings
- Here are the most commonly used rope end terminations:



Please note

Most rope terminations cause the minimum breaking force of the rope to be reduced. If the remaining minimum breaking force is taken into account you can calculate the necessary rope diameter for your application.

We will be only too pleased to advise you:

Phone +49 (0) 8331/937-112
Fax +49 (0) 8331/937-380
E-Mail complete@pfeifer.de

Rope range

A selection from our rope range

Rope application

Rope structure

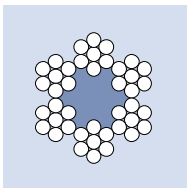
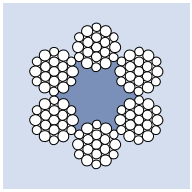
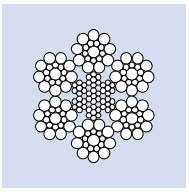
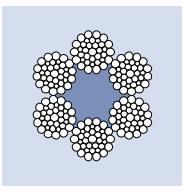
	Hauling rope									
P125		✓								
6x36 Warrington-	✓	✓	✓						✓	
	✓	✓						✓	✓	
				✓						
	✓	✓							✓	
				✓	✓	✓	✓			
	✓									
		✓								
			✓							
		✓								
				✓	✓		✓			
6x19 Seale WC	✓									
		✓								
	✓									

	Rope application									
			Tower crane Trolley rope	Tower crane Bracing rope	Hoisting rope	Holding rope		Feeder rope	Scraper Hoisting rope	
				✓		✓				
	✓									
		✓			✓					
	✓									
		✓								
		✓								

The more specialised your application, the more critical is the choice of rope – let us advise you!

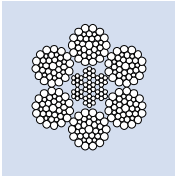
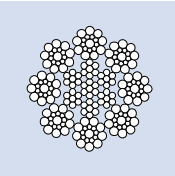
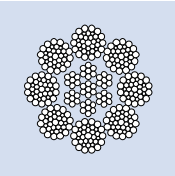
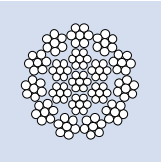
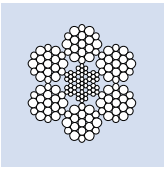
Our core competence is to select the right rope for the application

Technical data taken from our rope range

Nominal rope diameter [mm]	Rope structure								
	 6x7 standard with fibre core* Nominal strength 1,960 N/mm² ordinary lay		 6x19 standard with fibre core* Nominal strength 1,960 N/mm² ordinary lay		 6x19 Seale with steel core* Nominal strength 1,960 N/mm² ordinary lay		 6x36 Warrington-Seale with fibre core* Nominal strength 1,960 N/mm² ordinary lay	
	Minimum breaking load kN	Weight per unit length approx. kg/m	Minimum breaking load kN	Weight per unit length approx. kg/m	Minimum breaking load kN	Weight per unit length approx. kg/m	Minimum breaking load kN	Weight per unit length approx. kg/m
2	2.60	0.0138						
3	5.86	0.0311	5.42	0.031				
4	10.40	0.0552	9.63	0.055				
5	16.3	0.0863	15.0	0.086				
6	23.4	0.124	21.7	0.125	25.1	0.144		
7	31.9	0.169	29.5	0.170	34.2	0.196		
8	41.6	0.221	38.5	0.221	44.7	0.256	41.4	0.235
9	52.7	0.279			56.5	0.324	52.4	0.297
10	65.1	0.345			69.8	0.400	64.7	0.367
11	78.7	0.417			84.4	0.484	78.3	0.444
12	93.7	0.497			100.0	0.576	93.1	0.528
13	110	0.583			118.0	0.676	109.0	0.620
14	128	0.676			137.0	0.784	127.0	0.719
16	167	0.883			179.0	1.02	166.0	0.940
18	211	0.112			226.0	1.30	210.0	1.190
20	260	0.138			279.0	1.60	259.0	1.470
22	315	0.167			338.0	1.94	313.0	1.780
24	375	0.199			402.0	2.30	373.0	2.110
26	440	0.233			472.0	2.70	437.0	2.480
28	510	0.270			547.0	3.14	507.0	2.880
32	666	0.353			715.0	4.10	662.0	3.760
36	843	0.447			904.0	5.18	838.0	4.760
40	1040	0.552			1120.0	6.40	1040.0	5.870
44					1350.0	7.74	1250.0	7.110
48					1610.0	9.22	1490.0	8.460
52					1890.0	10.80	1750.0	9.920
56					2190.0	12.50	2030.0	11.50
60					2510	14.40	2330.0	13.20

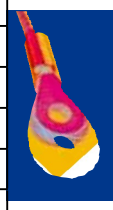
Please enquire about plain or galvanised versions or for other nominal strengths.

***WARNING!** Do not use swivels!
Otherwise severe injury to persons and material damage may occur.

	Rope structure									
	 6x36 Warrington-Seale with steel core* Nominal strength 1,960 N/mm² ordinary lay		 8x19 Seale with steel core* Nominal strength 1,960 N/mm² ordinary lay		 8x36 Warrington-Seale with steel core* Nominal strength 1,960 N/mm² ordinary lay		 17x7 steel core* Nominal strength 1,960 N/mm² ordinary lay		 High performance rope PN116/7* Nominal strength 1,960 N/mm²	
	Minimum breaking load kN	Weight per unit length approx. kg/m	Minimum breaking load kN	Weight per unit length approx. kg/m	Minimum breaking load kN	Weight per unit length approx. kg/m	Minimum breaking load kN	Weight per unit length approx. kg/m	Minimum breaking load kN	Weight per unit length approx. kg/m
									17.5	0.103
							23.1	0.144	25.3	0.147
							31.5	0.196	34.5	0.201
	44.7	0.262	44.7	0.260			41.1	0.257	45.0	0.263
	56.5	0.331	56.5	0.330			52.1	0.325	56.9	0.332
	69.8	0.409	69.8	0.407			64.3	0.401	70.3	0.410
	84.4	0.495	84.4	0.492			77.8	0.485	85.0	0.496
	100.0	0.589	100.0	0.586			92.6	0.577	101.2	0.591
	118.0	0.691	118.0	0.688			109	0.678	118.8	0.693
	137.0	0.802	137.0	0.798			126	0.786		
	179.0	1.050	179.0	1.040	179	1.07	165	1.03	179.0	1.020
	226.0	1.330	226.0	1.320	226	1.35	208	1.30		
	279.0	1.640	279.0	1.630	279	1.67	257	1.60		
	338.0	1.980	338.0	1.970	338	2.02	311	1.94		
	402.0	2.360	402.0	2.340	402	2.40	370	2.31		
	472.0	2.760	472.0	2.750	472	2.82	435	2.71		
	547.0	3.210	547.0	3.190	547	3.27	504	3.14		
	715.0	4.190	715.0	4.170	715	4.27				
	904.0	5.300	904.0	5.270	904	5.40				
	1120.0	6.540	1120.0	6.510	1120	6.67				
	1350.0	7.920	1350.0	7.880	1350.0	8.07				
	1610.0	9.420	1610.0	9.380	1610.0	9.61				
	1890.0	11.110	1890.0	11.000	1890.0	11.30				
	2190.0	12.800	2190.0	12.800	2190.0	13.10				
	2510.0	14.700	2510.0	14.700	2510.0	15.00				

The usual galvanisation class on the market is “D”. This is also supplied by us as a standard.

Other qualities are available if required.

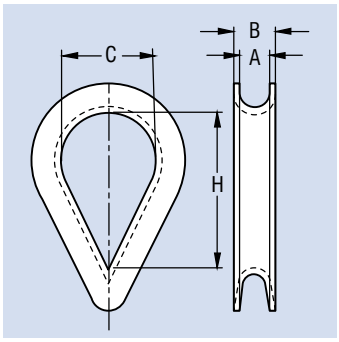


Thimbles

Thimbles similar to DIN 6899, shape BF

Galvanised version

Thimbles protect rope suspension gears against excessive stresses, thereby considerably extending their service life.



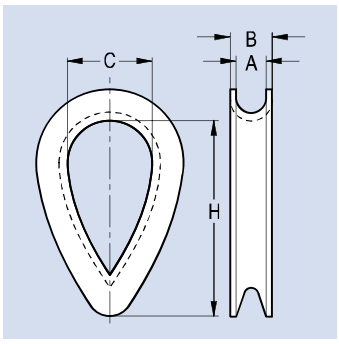
Nominal size for max. nominal rope Ø mm	Weight approx. kg	Dimensions in mm				Reference no.
		A	B	C	H	
2.5	0.005	3	4.5	12	19	**204993**
3.5	0.008	4	5.5	13	21	**204994**
4	0.010	5	6.5	14	23	**204995**
5	0.016	6	7.5	16	25	**204996**
6	0.019	7	8.5	18	28	**204998**
7	0.030	8	10.0	20	32	**204999**
9	0.047	10	12.5	24	38	**205000**
11	0.068	12	15.0	28	45	**205001**
14	0.100	14	17.5	32	51	**205003**
15	0.145	16	20.0	36	58	**205005**
16	0.190	18	22.0	40	64	**205006**
18	0.290	20	24.5	45	72	**205007**
20	0.320	22	27.0	50	80	**205008**
22	0.500	24	30.0	56	90	**205009**
24	0.590	26	33.0	62	99	**205010**
26	0.820	28	36.0	70	112	**213750**
28	1.000	30	37.0	75	120	**213751**
30	1.300	32	39.0	80	128	**213752**
32	1.600	34	41.0	95	152	**213753**
34	1.700	36	43.0	100	160	**213754**
36	1.800	38	45.0	110	176	**213755**
38	2.750	40	48.0	115	184	**213756**
40	3.000	42	50.0	120	192	**213757**

Thimbles DIN 3090

- **more stable due to greater sheet metal thickness**
- **rounder shape gives ideal rope guidance and greater prevention of accidental rope damage**

Galvanised version

Thimbles protect rope suspension gears against excessive stresses, thereby considerably extending their service life.

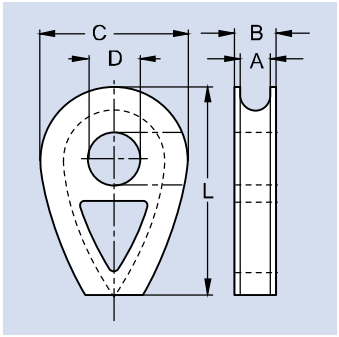


Nominal size for max. nominal rope Ø mm	Weight approx. kg	Dimensions in mm				Reference no.
		A	B	C	H	
4	0.014	5	8	10	29	**111388**
6	0.030	7	10	15	42	**111389**
8	0.078	9	13	20	56	**111390**
10	0.160	11	15	25	70	**111391**
12	0.237	13	19	30	85	**111392**
14	0.335	16	22	35	102	**111393**
16	0.480	18	25	40	113	**111394**
18	0.650	20	27	45	127	**111395**
20	0.950	22	30	50	141	**111396**
22	1.080	24	33	55	153	**111397**
24	1.320	26	35	60	165	**111398**
26	2.180	29	45	65	181	**111399**
28	2.600	31	48	70	193	**111400**
32	3.890	35	50	80	223	**111401**
36	4.470	40	55	90	247	**111402**
40	7.300	44	60	100	281	**111403**
44	8.680	48	68	110	305	**111405**

Full thimbles DIN 3091

Rough version
Hole unmachined (rough size)

[1] Unless specified otherwise in the order, full thimbles will be supplied with the rough size hole (unmachined).
[2] The hole can be drilled out to this diameter



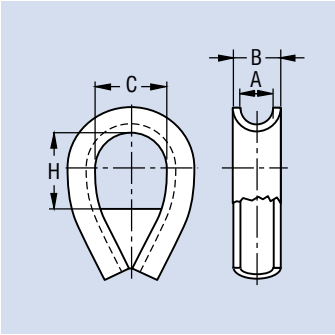
Nominal size for max. rope Ø mm	Weight approx. kg	Dimensions mm rough dimension						Reference no.
		A	B	C	D[1]	D max[2]	L	
8	0,18	9	15,0	40	14	20	66	**111409**
10	0,32	11	17,5	50	18	25	82	**111412**
12	0,52	13	20,0	60	21	30	98	**111419**
14	0,80	16	23,5	70	25	35	114	**111424**
16	0,90	18	26,0	80	28	40	130	**111426**
18	1,21	20	28,5	90	31	45	145	**111434**
20	1,61	22	31,0	100	35	50	161	**111440**
22	2,11	24	33,5	110	38	55	177	**111445**
24	2,30	26	36,0	120	41	60	193	**111451**
26	3,55	29	39,5	130	44	65	209	**111456**
28	4,20	31	42,0	140	47	70	224	**111460**
32	6,30	35	47,0	160	53	80	256	**111467**
36	8,84	40	53,0	180	59	90	288	**111474**
40	11,00	44	58,0	200	65	100	320	**111483**

new!

Heavy duty thimbles

hot-dip galvanised
with welded-in cross-piece

Thimbles for heavy loads are now shown on page 234

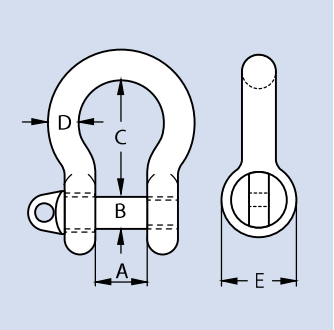


Shackles

High-tensile shackle with stud bolt, curved shape

6:1 factor of safety
Stirrup hot-dip galvanised, bolt painted in accordance with US Federal specification RR-C-271
Certificate to BS EN 10204 3.1 B can be provided
Without certificate of origin

Shackle with preferential origin on enquiry

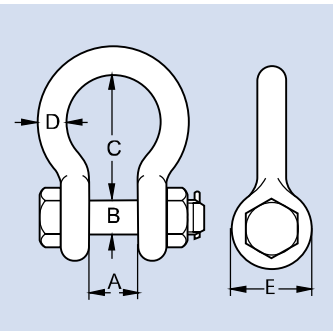


WLL kg	Weight approx. kg	Dimensions in mm					Reference no.
		A	B	C	D	E	
500	0.050	12	8	28	6	17	**181568**
750	0.080	13	10	31	8	21	**181598**
1000	0.140	16	12	36	10	26	**181599**
1500	0.220	18	14	42	11	28	**181601**
2000	0.400	21	16	48	13	30	**181602**
3250	0.650	27	20	60	16	42	**181603**
4750	1.064	32	22	71	19	48	**181605**
6500	1.680	36	27	84	22	57	**181607**
8500	2.390	43	30	95	25	62	**181608**
9500	3.150	46	33	103	29	69	**181610**
12000	4.320	52	36	119	32	78	**181611**
13500	5.670	57	39	133	35	86	**181612**
17000	7.790	60	42	146	38	94	**181613**
25000	13.400	73	52	178	44	112	**181614**
35000	18.500	83	60	197	51	135	**181615**
55000	38.900	105	70	267	63	158	**181718**

High-tensile shackle with bolt, curved shape

Bolt with nut and split pin.
6:1 factor of safety
Stirrup hot-dip galvanised, bolt painted in accordance with US Federal specification RR-C-271
Certificate to BS EN 10204 3.1 B can be provided
Without certificate of origin

Shackle with preferential origin on enquiry

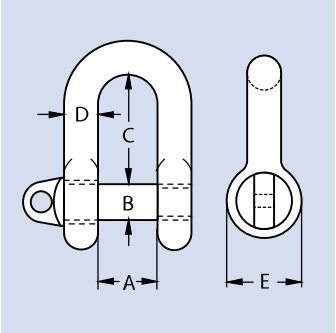


WLL kg	Weight approx. kg	Dimensions in mm					Reference no.
		A	B	C	D	E	
500	0.06	12	8	28	6	17	**181504**
750	0.10	13	10	31	8	21	**181514**
1000	0.15	16	12	36	10	26	**181518**
1500	0.22	18	14	42	11	28	**181520**
2000	0.34	21	16	48	13	30	**181523**
3250	0.70	27	20	60	16	42	**181524**
4750	1.18	32	22	71	19	48	**181526**
6500	1.74	36	27	84	22	57	**181528**
8500	2.41	43	30	95	25	62	**181529**
9500	3.27	46	33	103	29	69	**181531**
12000	4.59	52	36	119	32	78	**181534**
13500	6.60	57	39	133	35	86	**181537**
17000	6.00	60	42	146	38	94	**181538**
25000	14.70	73	52	178	44	112	**181540**
35000	18.50	83	60	197	51	135	**181542**
55000	42.30	106	72	267	65	145	**181544**

High-strength shackle with stud bolt, straight design

6:1 factor of safety
Stirrup hot-dip galvanised, bolt painted in accordance with US Federal specification RR-C-271
Without certificate of origin

Shackle with bolt, nut and split pin on enquiry
Shackle with preferential origin on enquiry

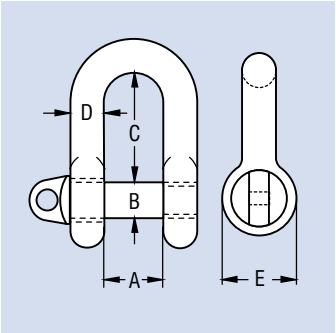


WLL kg	Weight approx. kg	Dimensions in mm					Reference no.
		A	B	C	D	E	
500	0.05	12	8	22	6	17	**181476**
750	0.08	13	10	26	8	21	**181477**
1000	0.13	16	12	31	10	26	**181482**
1500	0.19	18	14	36	11	28	**181483**
2000	0.31	21	16	41	13	30	**181484**
3250	0.55	27	20	51	16	42	**181485**
4750	0.96	32	22	60	19	48	**181486**
6500	1.41	36	27	71	22	57	**181489**
8500	2.03	43	30	81	25	62	**181492**
9500	2.97	46	33	90	29	69	**181493**
12000	4.01	52	36	100	32	78	**181495**
13500	5.40	57	39	113	35	86	**181497**
17000	7.29	60	42	124	38	94	**181498**
25000	11.25	73	52	146	44	112	**181500**
35000	16.20	83	60	171	51	135	**181503**
55000	33.30	106	72	203	63	158	**181719**

Shackle with stud bolt, similar to DIN 82101, shape A

Galvanised version
Without certificate of origin

Shackle with bolt, nut and split pin on enquiry
Shackle with preferential origin on enquiry



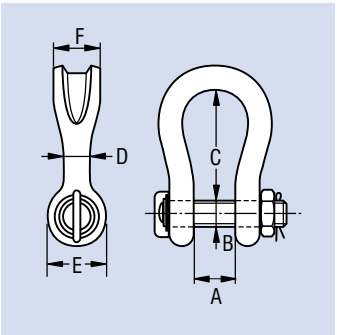
WLL kg	Weight approx. kg	Dimensions in mm					Reference no.
		A	B	C	D	E	
100	0.01	7	5	15.5	5	10	**111836**
160	0.02	8	6	18.0	6	12	**111838**
250	0.05	11	8	24.0	8	16	**111840**
400	0.09	14	10	30.0	10	20	**111842**
600	0.17	17	12	36.0	12	24	**111845**
1000	0.36	21	16	49.0	15	32	**111850**
1600	0.75	27	20	61.0	19	40	**111855**
2000	1.00	30	22	67.0	21	44	**111861**
2500	1.32	33	24	73.0	23	48	**111865**
3000	1.80	38	27	83.5	26	54	**111869**
4000	2.40	42	30	91.0	29	60	**111875**
5000	3.90	47	36	111.0	33	72	**111881**
6300	5.30	53	39	119.5	37	78	**111886**
8000	7.90	60	45	139.5	41	90	**111889**
10000	10.00	66	48	147.0	45	96	**111892**
12000	13.00	73	52	158.0	50	104	**111895**
16000	18.50	81	60	185.0	55	120	**111898**
20000	27.20	90	68	211.0	61	136	**111901**
25000	35.00	100	72	221.0	67	144	**111903**

new!

Wide-body shackle

5:1 factor of safety
Stirrup and bolt made from steel alloy
Painted
Bolt with nut and split pin

Shackles for heavy loads are now shown on page 234

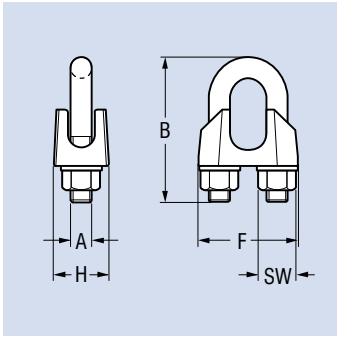


Clamps

Wire rope clamps similar to DIN EN 13411-5

Galvanised version
Without certificate of origin

The nominal size of the wire rope clamp corresponds to the maximum rope diameter. For intermediate sizes of the nominal rope diameter, the next larger clamp size is to be used. The nominal size 5 is valid only for nominal rope diameter 5 mm.
Please have a look about proper use according to BS EN 13411-5. Wire rope clamps with U-shaped clamp stirrups are not suitable for use with spiral ropes!



Nominal size of the wire rope clamp	Weight approx. kg	Dimensions in mm					Reference no.
		A	B	F	H	SW	
5.0	0.02	M 5	25	25	13	8	**205011**
6.5	0.04	M 6	32	30	16	10	**205012**
8.0	0.08	M 8	41	39	20	13	**205013**
10.0	0.09	M 8	46	40	20	13	**205014**
12.0	0.17	M 10	56	50	24	16	**187353**
14.0	0.26	M 12	66	59	28	18	**181861**
16.0	0.43	M 14	76	64	32	21	**211808**
22.0	0.68	M 16	96	74	34	24	**211810**
26.0	1.17	M 20	118	84	38	30	**111790**
30.0	1.40	M 20	131	95	41	30	**211812**
34.0	2.13	M 22	150	105	45	34	**211813**
40.0	2.68	M 24	167	117	49	34	**211814**

PFEIFER ready reckoner

Use of wire rope clamps

The first wire rope clamp is attached directly to the thimble.
The distance between the wire rope clamps must be at least the width of one wire rope clamp.
The clamping jaw must always be attached to the load-bearing rope leg.

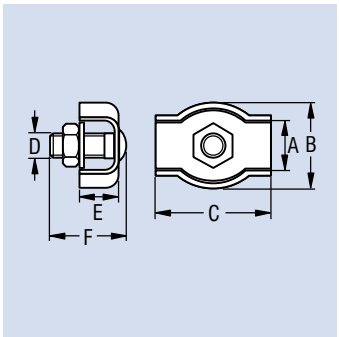
Please obtain further information on proper use according to EN 13411-5. Wire rope clamps with U-shaped clamp stirrups are not suitable for use with spiral ropes.

Forces and number of wire rope clamps

Nominal size of wire rope clamp	Torque Nm	Number of wire rope clamps
5	2.0	3
6.5	3.5	3
8	6.0	4
10	9.0	4
12	20	4
14	33	4
16	49	4
19	68	4
22	107	5
26	147	5
30	212	6
34	296	6
40	363	6

Simplex clamps

Fastening with one screw
For simple, flat rope connections

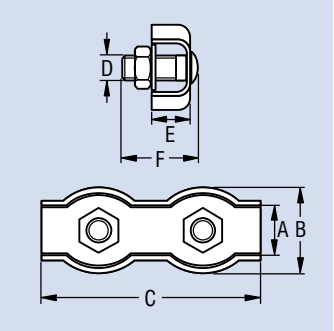


Nominal size of the wire rope clamp	Weight approx. kg	Dimensions in mm						Reference no.
		A	B	C	D	E	F	
2	0.004	M 4	12	15	4	5	14	**110992**
3	0.007	M 4	14	17	6	7	14	**110995**
4	0.013	M 5	18	20	8	7	18	**110998**
5	0.017	M 5	20	25	10	8	18	**111001**
6	0.025	M 6	24	30	12	9	23	**111003**
8	0.025	M 8	35	37	17	13	25	**204343**

Duplex clamps

Fastening with two bolts
For simple, flat rope connections
Doubled force transmission thanks to double bolts

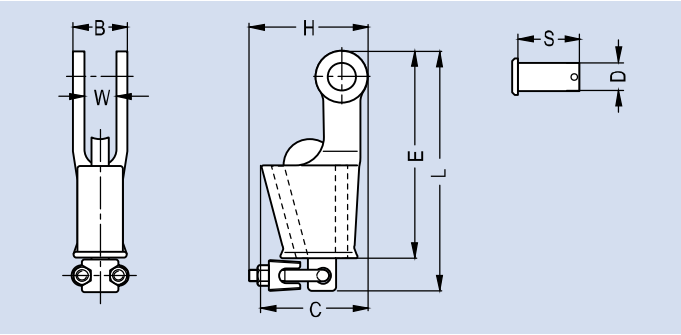
Nominal size of the wire rope clamp	Weight approx. kg	Dimensions in mm						Reference no.
		A	B	C	D	E	F	
2	0.009	M 3.5	12	30	4	5	14	**111006**
3	0.014	M 4	14	35	6	7	14	**111007**
4	0.024	M 5	18	40	8	7	18	**111009**
5	0.032	M 5	20	50	10	8	18	**111011**
6	0.050	M 6	24	60	12	9	23	**111012**
7	0.076	M 8	28	64	15	12	25	**111014**
8	0.100	M 8	35	75	17	13	25	**111016**
10	0.171	M 10	37	95	21	16	32	**111018**



Wedge end clamps with bolt for wire ropes

Dip-coated version
For rope diameter 16-17 mm: wedge end clamp with extra-large wedge without hole for safety clamp

The next larger wedge lock is to be used for intermediate sizes of the nominal rope diameter.



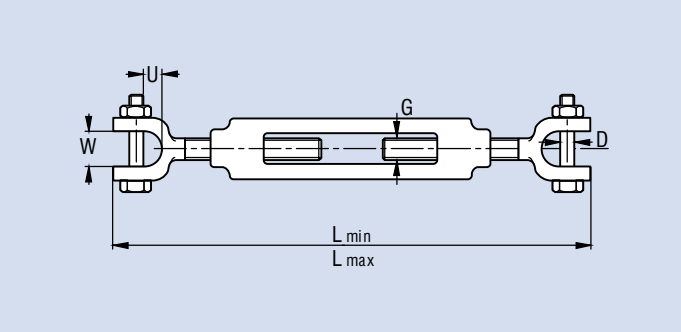
for max. rope Ø mm	Weight approx. kg	Dimensions in mm								Reference no.
		B	C	D	E	H	L	S	W	
9–10	1.44	43.0	69.1	20.6	145	77.7	198	54.1	20.6	**110920**
11–13	2.79	50.8	88.1	25.4	175	95.5	226	65.0	25.4	**135631**
14–16	4.40	60.2	109.0	30.2	210	114.0	273	82.6	31.8	**110922**
18–19	6.58	71.7	130.0	35.1	251	134.0	314	92.2	38.1	**110926**
20–22	9.75	82.7	149.0	41.4	286	156.0	365	109.0	44.5	**110928**
24–26	13.90	95.8	161.0	50.8	325	177.0	414	119.0	51.0	**110932**
28	20.50	107.8	176.0	57.0	365	194.0	466	138.0	57.0	**110935**
30–32	29.40	120.3	222.0	63.5	415	239.0	520	156.0	66.5	**110937**

A further selection of our rope connections is given on page 219

Turnbuckles

Turnbuckles with two forks and lock nuts

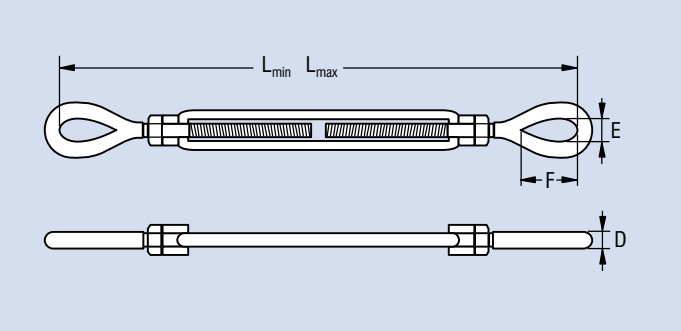
High-tensile version, galvanised
Bolt with nut; from 3/4-inch thread: bolt with split pin.



WLL kg	Thread Inch	Weight approx. kg	Dimensions in mm						Reference no.
			D	G	L_{min}	L_{max}	U	W	
230	1/4	0.15	6.3	6.3	201	302	16	11	**110725**
360	5/16	0.21	6.3	7.9	239	353	22	12	**110726**
540	3/8	0.34	8.0	9.5	302	416	22	13	**110727**
1000	1/2	0.69	9.5	12.7	338	452	26	16	**110728**
1000	1/2	0.78	9.5	12.7	414	585	26	16	**110729**
1000	1/2	1.93	9.5	12.7	490	719	26	16	**110730**
1590	5/8	1.07	13.0	15.8	394	508	33	18	**110732**
1590	5/8	1.39	13.0	15.8	470	641	33	18	**110733**
1590	5/8	1.71	13.0	15.8	546	775	33	18	**110734**
2360	3/4	1.76	15.5	19.0	432	546	38	23	**110736**
2360	3/4	2.15	15.5	19.0	508	679	38	23	**110737**
2360	3/4	2.43	15.5	19.0	584	813	38	23	**110738**
2360	3/4	3.17	15.5	19.0	737	1080	38	23	**110740**
3270	7/8	3.63	19.0	22.2	618	854	44	27	**110742**
3270	7/8	4.42	19.0	22.2	772	1121	44	27	**110745**
4540	1	4.05	22.0	25.4	524	638	52	30	**110747**
4540	1	5.08	22.0	25.4	676	905	52	30	**110748**
4540	1	6.03	22.0	25.4	829	1172	52	30	**110750**
4540	1	7.17	22.0	25.4	980	1437	52	30	**110752**
6900	1 1/4	9.07	29.0	31.7	753	989	73	44	**110754**
6900	1 1/4	11.00	29.0	31.7	905	1255	73	44	**110758**
6900	1 1/4	12.90	29.0	31.7	1058	1521	73	44	**110760**
9700	1 1/2	13.10	35.0	38.0	804	1052	70	52	**110762**

Turnbuckles with two eyes and lock nut

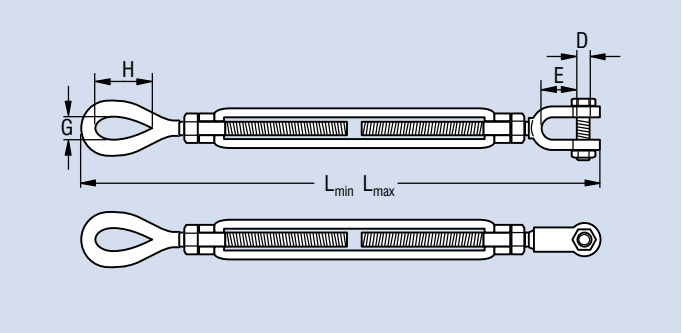
High-tensile version, galvanised



WLL kg	Thread Inch	Weight approx. kg	Dimensions in mm					Reference no.
			D	E	F	L_{min}	L_{max}	
230	1/4	0.12	6.35	8.65	19.8	198	300	**237454**
360	5/16	0.20	7.85	11.10	23.8	230	344	**237455**
540	3/8	0.32	9.00	13.00	28.0	302	416	**222789**
1000	1/2	0.66	12.00	18.00	36.0	338	452	**237427**
1000	1/2	0.76	12.00	18.00	36.0	414	585	**237428**
1000	1/2	0.91	12.00	18.00	36.0	490	719	**237429**
1590	5/8	1.07	14.00	21.00	43.0	394	508	**237430**
1590	5/8	1.31	14.00	21.00	43.0	470	641	**237431**
1590	5/8	1.71	14.00	21.00	43.0	546	775	**237433**
2360	3/4	1.65	17.00	25.00	53.0	432	546	**237434**
2360	3/4	1.95	17.00	25.00	53.0	508	679	**237435**
2360	3/4	2.30	17.00	25.00	53.0	584	813	**236150**
2360	3/4	2.85	17.00	25.00	53.0	737	1080	**237436**
3270	7/8	3.33	20.00	31.00	59.0	625	854	**237437**
3270	7/8	4.24	20.00	31.00	59.0	778	1121	**236151**
4540	1	4.35	22.00	36.00	74.0	676	905	**237440**
4540	1	5.09	22.00	36.00	74.0	829	1172	**237441**
4540	1	6.00	25.40	36.50	76.0	812	1320	**236156**
4540	1	7.52	25.40	36.50	76.0	964	1625	**237442**
6900	1 1/4	8.12	29.00	45.00	88.0	760	989	**237443**
6900	1 1/4	10.40	29.00	45.00	88.0	912	1255	**237444**
6900	1 1/4	12.10	31.80	46.00	90.5	1024	1697	**237445**
9710	1 1/2	12.70	32.00	54.00	105.0	823	1052	**198977**

Turnbuckles with fork - eye and lock nut

High-tensile version, galvanised
Bolt with nut; from 3/4-inch thread: bolt with split pin.

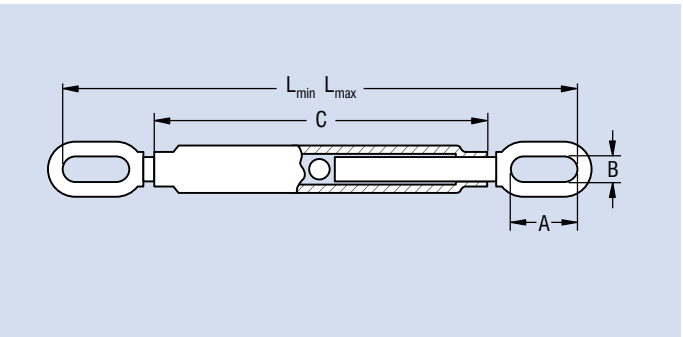


WLL kg	Thread Inch	Weight approx. kg	Dimensions in mm						Reference no.
			D	E	G	H	L_{min}	L_{max}	
230	1/4	0.14	6.35	15.7	8.65	19.8	205	307	**237456**
360	5/16	0.23	7.85	22.1	11.10	23.8	242	356	**237457**
540	3/8	0.34	8.00	22.0	13.00	28.0	302	416	**222790**
1000	1/2	0.69	9.50	26.0	18.00	36.0	338	452	**165612**
1000	1/2	0.78	9.50	26.0	18.00	36.0	414	585	**165613**
1000	1/2	1.25	9.50	26.0	18.00	36.0	490	719	**165614**
1590	5/8	1.07	13.00	33.0	21.00	43.0	394	508	**170905**
1590	5/8	1.39	13.00	33.0	21.00	43.0	470	641	**170906**
1590	5/8	2.22	13.00	33.0	21.00	43.0	546	775	**170907**
2360	3/4	2.34	15.50	38.0	25.00	53.0	432	546	**175565**
2360	3/4	1.95	15.50	38.0	25.00	53.0	508	679	**237413**
2360	3/4	2.95	15.50	38.0	25.00	53.0	584	813	**170908**
2360	3/4	3.30	15.50	38.0	25.00	53.0	737	1080	**171072**
3270	7/8	4.20	19.00	44.0	31.00	59.0	625	854	**110721**
3270	7/8	4.19	19.00	44.0	31.00	59.0	778	1121	**237414**
4540	1	4.66	22.00	52.0	36.00	74.0	676	905	**159047**
4540	1	5.08	22.00	52.0	36.00	74.0	829	1172	**237421**
4540	1	6.03	25.40	52.5	36.50	76.0	835	1343	**237422**
4540	1	7.52	25.40	52.5	36.50	76.0	988	1648	**237423**
6900	1 1/4	10.92	29.00	73.0	45.00	88.0	760	989	**204631**
6900	1 1/4	11.00	29.00	73.0	45.00	88.0	912	1255	**170910**
6900	1 1/4	12.90	29.00	73.0	45.00	88.0	1064	1521	**237424**
9710	1 1/2	13.10	35.00	70.0	54.00	105.0	823	1052	**110723**

Turnbuckles with two long eyes

DIN 82004

Galvanised model



Nominal size	WLL kg	Weight approx. kg	Dimensions in mm						Reference no.
			A	B	C	G	L_{min}	L_{max}	
M 12	**400**	0.75	29	13	180	M 12	305	445	**111734**
M 16	**600**	1.41	48	21	200	M 16	366	516	**111736**
M 18	**1000**	1.72	48	21	220	M 18	385	550	**111738**
M 22	**1600**	2.85	58	26	240	M 22	460	630	**111740**
M 24	**2000**	3.61	58	26	260	M 24	470	660	**111742**
M 27	**2500**	5.23	72	32	280	M 27	536	736	**111744**
M 30	**3150**	6.40	72	32	300	M 30	556	766	**111746**
M 33	**4000**	9.00	94	40	320	M 33	631	856	**111748**
M 36	**5000**	10.30	94	40	340	M 36	651	886	**111750**
M 42	**6300**	13.00	108	45	380	M 42	724	984	**111751**
M 45	**8000**	19.50	115	49	420	M 45	785	1080	**197706**
M 52	**10000**	27.00	125	54	460	M 52	865	1180	**237272**
M 56	**12500**	37.00	144	60	500	M 56	995	1340	**237273**
M 64	**16000**	53.40	163	66	540	M 64	1055	1420	**237274**

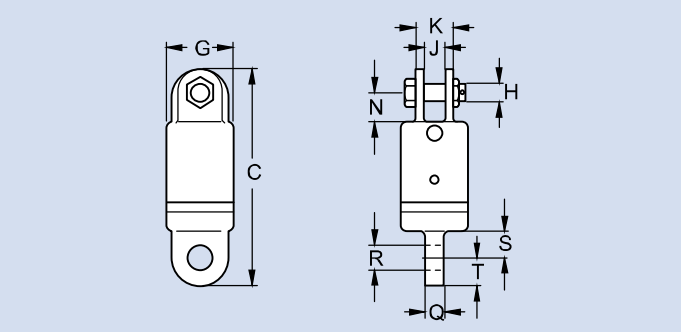
Swivels

Swivel with tapered roller thrust bearing

Rotatable under load
Swivels are separately tested for double working load limit (with certificate).
Minimum breaking force is 5 times the working load limit.
Fork with bolt, nut and split pin.
With force-feed lubrication

Do not use with demolition balls.

Warning: Do not use rotation-resistant ropes or ropes that are not rotation-free with a swivel. If disregarded, this will lead to considerable damage to property, serious injuries or death!



WLL kg	Weight approx. kg	Dimensions in mm										Reference no.
		C	G	H	J	K	N	Q	R	S	T	
3000	4.08	237	70	19.1	22.4	41.2	33.3	19.1	26.2	28.5	31.8	**136382**
5000	6.12	256	76	22.4	25.4	57.0	41.2	25.4	32.5	31.8	31.8	**136383**
8500	13.27	311	102	25.4	39.6	71.5	54.0	31.8	35.8	41.2	38.1	**217040**
10000	19.73	409	114	38.1	44.5	86.0	89.0	42.9	42.9	70.0	47.8	**136385**
15000	28.46	425	127	38.1	44.5	86.0	89.0	49.3	51.5	70.0	54.0	**136386**
25000	61.23	546	152	51.0	51.0	117.0	94.0	57.0	58.5	98.5	60.5	**136387**
35000	68.04	546	165	51.0	51.0	117.0	94.0	57.0	58.5	98.5	60.5	**136388**
45000	102.06	657	178	57.0	63.5	127.0	102.0	63.5	64.5	102.0	76.0	**136389**

For other connection types and capacities up to 600 tonnes, please consult PFEIFER.

Rope pulleys

We will be happy to supply pulleys acc. to your specific design upon request.
Return pulleys are shown on page 51 with the tool ropes (page 242).

Special pulleys on request

These and other return pulleys are shown on page 51

This bricklayer pulley is shown on page 242

Heavy-duty accessories

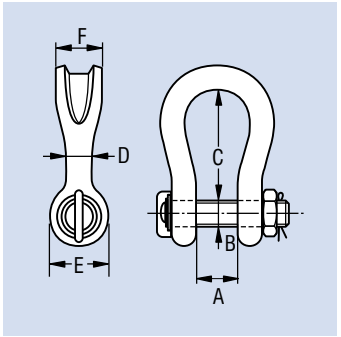
The powerful connection to your heavy load

new!

Heavy-duty wide-body shackles

- **Wide-body shackle for heavy loads with wide stirrup for better support of your attachment equipment**

5:1 factor of safety
Alloy steel stirrup and bolt, painted
Bolt with nut and split pin.
Stamped with grade, working load limit (WLL), CE and manufacturing code

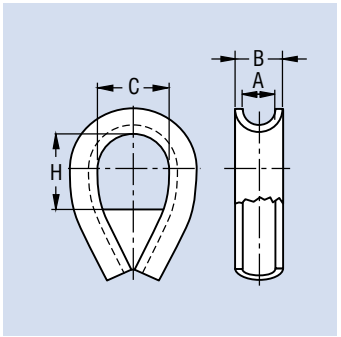


WLL t	Weight approx. kg	Dimensions in mm						Reference no.
		A	B	C	D	E	F	
40	22	80	51	200	55	109	97	**235880**
55	50	85	57	250	60	115	100	**226293**
75	67	105	70	290	70	140	120	**235881**
125	105	130	80	365	85	155	150	**235882**
150	160	140	95	390	94	180	170	**235883**
200	220	150	105	480	110	200	205	**235884**
250	320	170	120	540	126	228	240	**235885**
300	350	185	134	600	135	245	265	**223981**
400	635	220	160	575	160	295	320	**235886**
500	803	250	180	680	170	330	340	**235887**
700	1260	300	215	750	200	392	400	**235888**

new!

Heavy-duty thimbles

hot-dip galvanised
with welded-in cross-piece



Nominal size for max. rope Ø mm	Weight approx. kg	Dimensions in mm				Reference no.
		A	B	C	H	
35	3.2	35	55	80	100	**211009**
40	5.1	40	65	90	120	**211010**
50	9.2	50	80	110	125	**211011**
62	17.4	62	100	140	160	**211012**
72	19.4	72	115	160	175	**211013**
85	29.0	85	125	190	245	**211014**
100	39.0	100	150	200	290	**211015**
115	52.0	115	165	210	300	**211016**

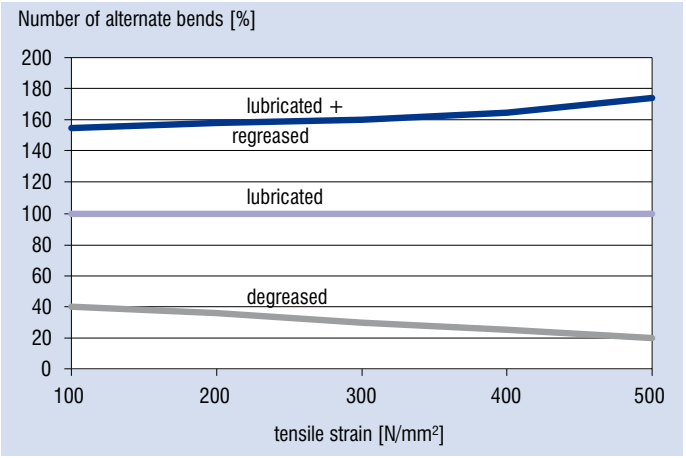
Rope care

Caring for your ropes by relubrication and regreasing is very worthwhile.

The wire rope is greased internally and externally during manufacture. The grease serves to reduce the damaging friction between the elements of the rope. At the same time the grease prevents corrosion. When the rope is in use, the lubricant is used up, especially on the outside. This causes increased friction in the rope elements which leads to faster wear and tear.

The rope can also be protected from corrosion by galvanising. However, galvanised ropes also have to be lubricated in order to minimise the internal wear and tear which starts with abrasion of the zinc coating.

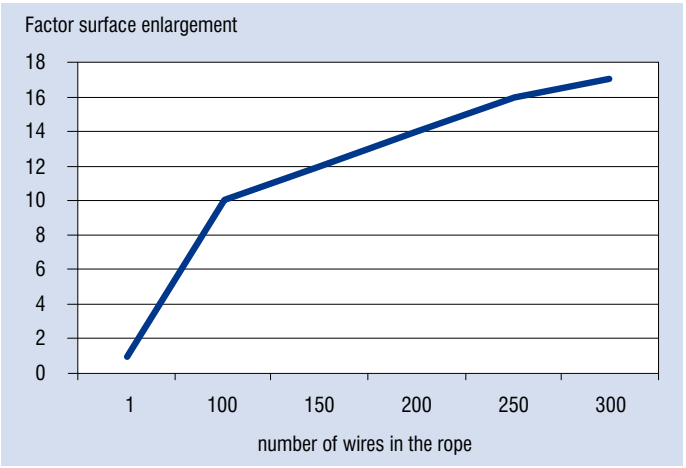
Lubricating a steel wire rope significantly increases its lifespan and thus the service life of your machine.



Does lubrication prevent corrosion?

Because of the individual wires or strands twisted together, the surface of a steel wire rope is many times larger than a single rod of the same diameter. Due to the larger surface area, ropes are roughly 15 times more susceptible to corrosion than solid material of the same diameter.

If the external protection (rope grease) is lacking then e. g. water can penetrate the wire rope. The steel wire rope can then rust through from inside outwards. The problem is that the wire rope does not show any recognisable external damage and therefore fails due to reasons which cannot be detected visually.



When do ropes need to be relubricated?

The rope must be relubricated at appropriate intervals, depending on all the factors such as weathering, usage, soiling etc. This requires the rope to be checked regularly.

Drying time

The evaporation time of the solvent must be taken into account. This depends primarily on the ambient temperature.

Lubricant quantity:

The quantity of lubricant depends on the type of rope and its diameter.

But the principle to apply is: small amounts at short intervals.

Formula for lubricant requirement per rope:

$$\text{Quantity [l]} = \frac{0.2\ \text{[l]} \cdot \text{rope length [m]} \cdot \text{rope diameter [mm]}}{100\ \text{[m]} \cdot 10\ \text{[mm]}}$$

What are the criteria for the choice of lubricant?

Compatibility with:

- Base lubricant
- Rope pulley material

Requirements:

- Ease of penetration
- Ease of application
- Flash point
- Viscosity

Rope spray PFEIFER RL-S

Version	Packing unit	Reference no.
600 ml	12	**245066**

Rope oil PFEIFER RL-B

Version	Reference no.
10 l	**212406**
30 l	**212405**

Rope handling

Reel winding device Winder Willi

new!

Gentle rope handling and protection against mechanical damage

- **Efficient – considerable increase in the rope life as operation and reeling mistakes are avoided**
- **Operation possible with many PFEIFER standard reels as the reel can be exchanged**
- **Fast clamping and unclamping of reels without tools**
- **Considerably faster reeling and unreeling of ropes**
- **Space-saving storing – foldable hand crankle**

PFEIFER Winder Willi revolutionises reeling and unreeling of ropes, no matter if on building site, in stock or in the workshop.
This winding device originated from the numerous proposals of our customers. From these suggestions, together with the long-lasting PFEIFER experience, Winder Willi originated as a reeling device uniting comfort, ergonomics and high efficiency.
Winder Willi, a "must" for crane and lift mechanics, as well as for all working with "loose" ropes (e. g. ropes for hoists).

Version	Dimensions without handle and reel	Surface	Weight kg	**Reference no.**	Suitable reel
Winder Willi 3.0	approx. 450 × 365 × 355mm	powder-coated frame Shaft and flanges zink plated	14	**235775**	167824
Winder Willi 5.0	approx. 650 × 550 × 480mm	powder-coated frame Shaft and flanges zink plated	55	**244505**	167824

If you need our Winder Willi in a different size for your special operation, we will be pleased to submit our quotation.

Simplifies reeling and unreeling of ropes to standard reels as well on site as in stock or in the workshop.

Operation with so many PFEIFER standard reels possible as the reel can be exchanged.

Can be transported by common fork lifters / fork lift trucks and can therefore be transported safely.

Seal of bearing by bent-lever closure.

Can be held in position by pedal sheet metals. Ergonomic reeling of the rope due to the integrated crank handle.

Working without tools: due to clamping by the moveable mandrel by means of a lever screw.

Foldable crank handle allows space-saving storing.

Smooth reeling due to plain bearing.

www.willi-will-wickeln.de

Round reels

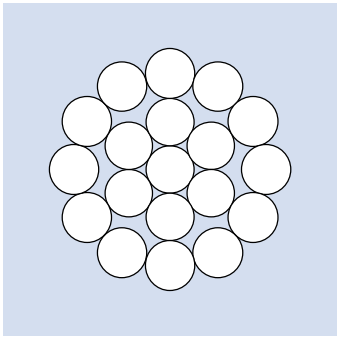
In the case of intermediate diameters or weights, the next larger reel will be charged for.
Please contact us for other dimensions, wooden lining or the conditions of returning.

Diameter mm	Capacity approx. kg	Weight approx. kg	**Reference no.**
300	80	1.85	**167824**
500	250	7.04	**167827**
700	300	25.00	**112891**
800	500	35.00	**112895**
1000	1000	80.00	**112901**
1400	2500	160.00	**112907**
2500	10000	600.00	**112915**

Stainless steel ropes

Stainless steel rope 1 × 19

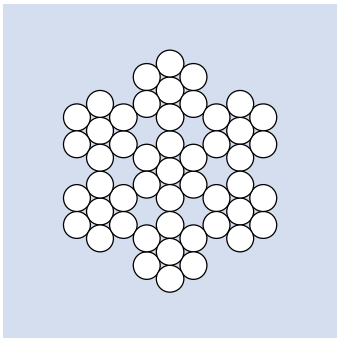
Material 1.4401



Nominal rope Ø mm	Weight per unit length kg/m	Minimum breaking force F_{min} kN 1570 N/mm²	Reference no.
2.0	0.019	3.30	**134365**
2.5	0.032	5.15	**134367**
3.0	0.044	7.42	**134368**
3.5	0.060	10.10	**134369**
4.0	0.079	13.20	**134370**
5.0	0.124	20.60	**134371**
6.0	0.178	29.70	**134372**
8.0	0.317	52.80	**134375**

Stainless steel rope 6 × 7 SEL

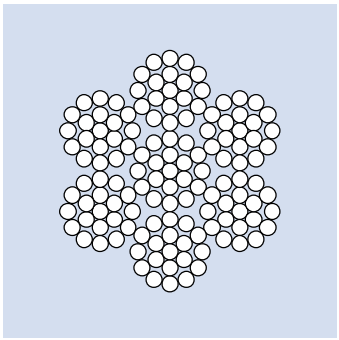
Material 1.4401



Nominal rope Ø mm	Weight per unit length kg/m	Minimum breaking force F_{min} kN 1570 N/mm²	Reference no.
2.0	0.016	2.3	**134404**
2.5	0.024	3.5	**134406**
3.0	0.035	5.1	**134408**
3.5	0.050	6.9	**134409**
4.0	0.070	9.0	**134410**
5.0	0.096	14.1	**134412**
6.0	0.138	20.2	**134414**
8.0	0.252	36.0	**134417**

Stainless steel rope 6 × 19 SEL

Material 1.4401



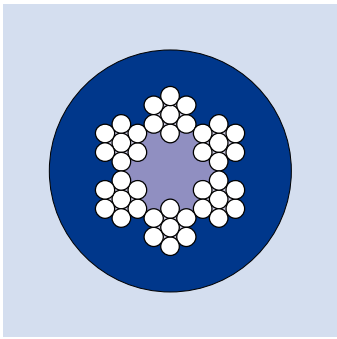
Nominal rope Ø mm	Weight per unit length kg/m	Minimum breaking force F_{min} kN 1570 N/mm²	Reference no.
2.0	0.015	2.1	**134424**
2.5	0.024	3.3	**134425**
3.0	0.034	4.7	**134426**
3.5	0.048	6.4	**134427**
4.0	0.061	8.3	**134428**
5.0	0.095	13.0	**134429**
6.0	0.150	18.8	**134430**
7.0	0.187	25.5	**134431**
8.0	0.244	33.3	**134432**

Plastic sheathed steel wire ropes

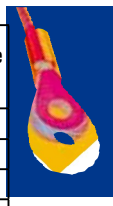
Plastic-sheathed round strand ropes

Galvanised version with PVC plastic sheathing

Ropes with a larger diameter, other constructions and plastics such as polyamide and polyethylene on enquiry



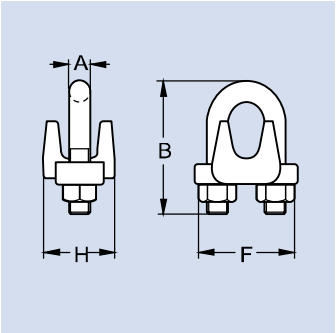
Nominal rope Ø mm	Nominal rope Ø (core) mm	Weight per unit length kg/m	Construction	Minimum breaking force F_{min} kN 1770 N/mm²	Reference no.
3.0	2	0.026	6 x 7 FC	2.35	**133120**
4.0	3	0.039	6 x 7 FC	5.29	**133123**
5.0	4	0.070	6 x 7 FC	9.41	**133127**
6.5	5	0.094	6 x 19 FC	13.60	**133140**
8.0	6	0.188	6 x 19 FC	19.60	**133143**
10.0	8	0.254	6 x 19 FC	34.80	**133145**
12.0	10	0.420	6 x 19 FC	54.40	**133147**



Stainless steel rope accessories

Wire rope clamps

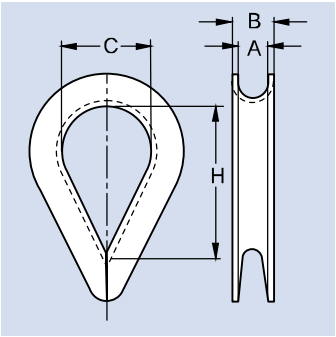
Material stainless steel
Heavy duty version



Nominal size for max. nominal rope Ø mm	Weight approx. kg	Dimensions in mm				Reference no.
		A	B	F	H	
2	0.012	3	17	14	15	110946
3	0.015	3	21	16	15	110947
4	0.020	4	23	18	18	110948
5	0.030	5	27	20	21	110949
6	0.040	6	32	27	23	110950
8	0.080	8	41	34	28	110951
10	0.150	10	51	44	36	110952
12	0.230	12	62	50	38	110953
14	0.280	12	69	52	44	110955
16	0.410	14	79	59	47	110956
18	0.470	14	81	61	52	110957
22	0.900	18	103	77	61	110958

Thimbles

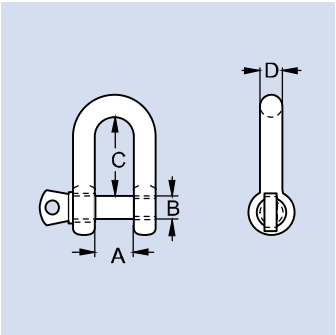
Material stainless steel



Nominal size for max. nominal rope Ø mm	Weight approx. kg	Dimensions in mm				Reference no.
		A	B	C	H	
3	0.004	3	5.0	10	18	111549
4	0.005	4	6.0	11	20	111550
5	0.006	5	7.0	13	21	111551
6	0.010	6	8.4	16	28	111552
7	0.012	7	9.4	17	31	111553
8	0.018	8	10.8	19	33	111554
10	0.029	10	13.8	24	38	111556
12	0.046	12	14.0	27	42	111557
14	0.073	14	18.4	33	51	111558
16	0.097	16	21.0	37	60	111559
18	0.160	18	26.0	41	67	111560
20	0.215	20	28.0	46	73	111561
22	0.340	22	32.0	49	78	111562
24	0.375	24	34.0	55	93	111563
28	0.620	28	40.0	67	105	111564

Shackle straight design

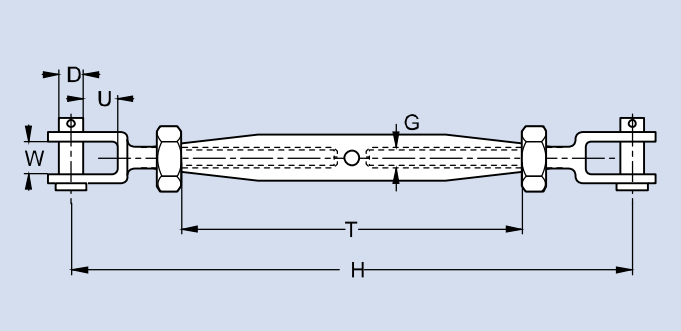
Material stainless steel



WLL kg	Nominal size	Weight approx. kg	Dimensions in mm				Reference no.
			A	B	C	D	
120	5	0.018	10	5	20	5	111990
150	6	0.028	12	6	24	6	111991
300	8	0.064	16	8	32	8	111992
400	10	0.150	20	10	40	10	111993
600	12	0.200	24	12	48	12	111994
1000	16	0.480	32	16	64	16	111997
1500	19	0.840	38	19	76	19	111998
2000	22	1.270	45	22	88	22	111999
3000	25	1.840	50	25	100	25	112000

Turnbuckles with two forks

Material stainless steel

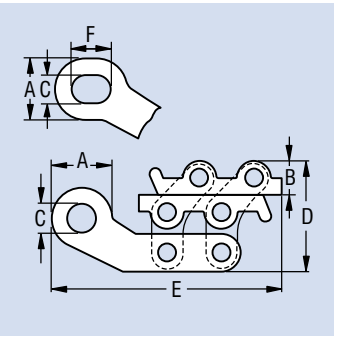


Nominal size	Weight approx. kg	Dimensions in mm						Reference no.
		D	G	H	T	U	W	
M 5	0.053	5.0	M 5	120	80	9.0	6	**111714**
M 6	0.099	6.0	M 6	145	95	8.5	7	**111715**
M 8	0.171	8.0	M 8	165	105	11.0	10	**111716**
M 10	0.278	9.0	M 10	195	125	13.0	12	**111719**
M 12	0.548	12.0	M 12	245	150	21.0	13	**111720**
M 14	0.642	12.5	M 14	270	165	19.0	14	**111721**
M 16	0.925	16.0	M 16	325	190	26.0	17	**111722**
M 20	1.745	19.0	M 20	380	210	29.0	20	**111723**

Accessories for rope tensioning

Rope tensioning clamp DIN 48342

the best, the safest and the gentlest way to tension ropes
completely forged from steel
with hardened and serrated steel jaws and tensioning springs
galvanised
burnished jaws
with milled serrations



WLL kN	max. rope Ø	Weight approx. kg	Dimensions in mm					Reference no.
			A	B	C	E	F	
5	1.0–4.0	0.250	36	15	19	124	19	**111019**
10	3.0–8.0	0.855	47	21	20	169	20	**111020**
17	5.0–10.0	1.160	44	24	18	195	18	**111022**
30	8.0–16.0	1.900	54	25	30	245	39	**111024**
35	12.0–26.0	3.880	62	31	29	265	38	**111026**
40	20.0–38.0	6.500	62	36	29	286	38	**198260**

Wedge clamp

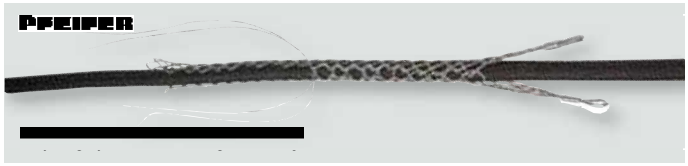
wedge chamber made of steel, St. 50
steel wedge, quenched and tempered
steel plunger
surface-hardened
black paint finish

WLL kN	max. rope Ø	Weight approx. kg	Reference no.
10	5.0–10.0	2.0	**198559**
20	10.5–14.0	4.2	**198561**
30	15.0–21.0	5.5	**198562**

Rope-, cable- and hose grips

Rope-, cable- and hose grips for pulling or holding, in various designs.

Caple grip with thimble



Strain relief grips

We are happy to prepare your personal quote on request

Versions available

- Closed with thimble
- Closed with eye
- Open with two thimbles
- Open with two eyes
- Cable connecting grip open at both sides
- Cable grip for overhad-lines
- Divided longitudinally with binding strands
- Special designs with swaged thread
- Reinforced version with additional strand
- All versions also available in stainless steel

Areas of application

- For pulling in steel wire ropes on cranes, rope winches and in locks
- Strain relief and securing cables in cable shafts or wind turbines
- Preventing damage to high-pressure hoses if they have been released unintentionally
- Pulling cables into buildings
- Pulling in overhead cables

- We can also supply larger quantities of manufactured cable grips at short notice.
- All cable grips are manufactured by hand in Germany.
- Top quality, highly flexible production

Connecting grip

Utility ropes and accessories

The indispensable, versatile utility ropes in hemp or polypropylene are a 'must' on every site and in every professionally-equipped vehicle.
Whether you want to guide a load on the crane or lift a tool to an elevated work-place, utility ropes in hemp or polypropylene are dependable partners!

"Hemp" utility ropes

new!

- **Very 'grippy'**

Completely ready made, with snap hook spliced in at one end, the other end plain
When new, suitable for lifting loads up to max. 50 kg over short distances

Nominal rope Ø mm	Reference no.
16	**199559**
20	**199560**
24	**199561**

Extension for hemp utility ropes

new!

- **With these extensions you can increase the range of your hemp utility rope by various lengths in an adaptable manner.**

Completely ready made, with snap hook spliced in at one end, and the other end has a spliced eye for connecting to the standard rope
When new, suitable for lifting loads up to max. 50 kg over short distances

Nominal rope Ø mm	Reference no.
16	**235874**
20	**235875**
24	**235876**

"Polypropylene" utility ropes

new!

- **Very 'grippy'**
- **Moisture-resistant**

Completely ready made, with snap hook spliced in at one end, the other end plain
Woven design
When new, suitable for lifting loads up to max. 50 kg over short distances

Nominal rope Ø mm	Reference no.
16	**233556**
20	**232497**

Extension for polypropylene utility ropes

new!

- **With these extensions you can increase the range of your polypropylene utility rope by various lengths in an adaptable manner.**

Completely ready made, with snap hook spliced in at one end, and the other end has a spliced eye for connecting to the standard rope
When new, suitable for lifting loads up to max. 50 kg over short distances

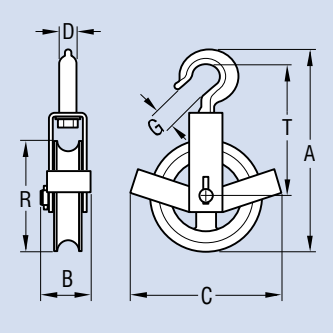
Nominal rope Ø mm	Reference no.
16	**235877**
20	**235878**

Rope pulley, can be opened for hemp and polypropylene utility ropes

CE

new!

Galvanised and painted
With rotatable hook

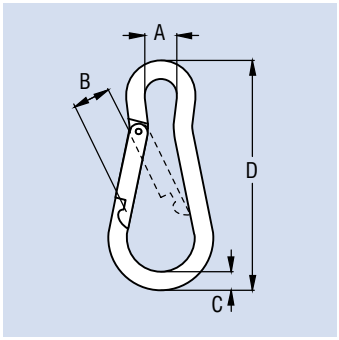


permissible tensile force kN	Max. winch tensile force kN	Dimensions in mm							Reference no.
		A	B	C	D	G	R	T	
5	2.5	240	61	165	19	20	125	158.5	**147639**

Fire brigade snap hook DIN 5299, shape C

- **Also available with screw-type safety latch – please consult PFEIFER.**
- **Not permitted for use as a connector in fall protection systems!**
- **Only for subordinate lifting purposes**
- **Not permitted as attachment devices!**

Galvanised or nickel-plated model



Weight approx. kg	Dimensions in mm				Reference no.
	A	B	C	D	
0.011	7	6	4	40	**143586**
0.010	8	7	5	50	**112480**
0.020	9	8	6	60	**112484**
0.040	10	8	7	70	**112487**
0.060	12	10	8	80	**112489**
0.080	12	10	9	90	**112492**
0.127	15	11	10	100	**112493**
0.180	18	16	11	120	**112495**
0.260	20	19	12	140	**112498**
0.350	22	33	13	160	**112500**
0.480	22	33	14	180	**112502**
0.620	24	33	15	200	**112503**