

# Octopus

Industry-based solution  
for oil & gas



**Severstal**  **Metiz**

[metiz.severstal.com](http://metiz.severstal.com)

# About company

Severstal is a vertically integrated steel and steel-related mining company.

Severstal-metiz is a Russian corporate group which consolidates metalware assets of Severstal company.

Severstal-metiz is in the TOP-5 of the biggest European companies in its business segment. It has the development strategy aimed at the achievement of shared corporate objectives of Severstal.

Construction industry, oil and gas industry, automotive industry, metallurgy and machinery are principal customers of Severstal-metiz.

Being in a regular dialogue with its customers, developing partnership with suppliers and studying market demands, Severstal-metiz improves the quality of its products and services as well as develops new types of products, allowing customers to reduce operational costs.

Severstal-metiz is an environmentally safe factory, which is confirmed by an ISO 14001:2015 certificate.

Quality management system (QMS) of the Company meets the requirements of the international standard ISO 9001:2015. The Company has also obtained the International Certification Network IQNet Certificate of Conformity.



## A wide range of Severstal-metiz products has 5 product lines:

### Wire and wire products

- Wire, nails
- Cut wire
- Plaited, woven, welded meshes
- Gabions
- Fences
- Strands
- Fiber

### Wire ropes

- Special wire ropes
- Standard wire ropes
- Cable-stayed systems
- Slings

### Cold-drawn products

- Cold-drawn steel
- Wire for cold heading
- Steel shaped profiles

### Fasteners

- General purpose fasteners
- Fasteners for automotive industry
- Special fasteners
- Railway fasteners

### Others

- Consumer goods
- Spring blocks



## Export countries 2021

Armenia	Latvia
Austria	Lithuania
Azerbaijan	Moldova
Belarus	Mongolia
Belgium	Netherlands
Bulgaria	Norway
Croatia	Panama
Czech Republic	Poland
Denmark	Portugal
Ecuador	Romania
Estonia	Saudi Arabia
Finland	Serbia
France	Slovakia
Georgia	Spain
Germany	Sweden
Greece	Tajikistan
Hungary	Türkiye
Israel	Turkmenistan
Italy	UK
Kazakhstan	USA
Kyrgyzstan	Uzbekistan

**> 100 000**

The number of items  
in the product line

**> 4 500**

Clients number

**20%**

Russian market share

**\$95.1 million**

EBITDA in 2020

**5 500**

Employees

**42**

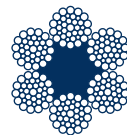
Export countries

# Steel wire rope

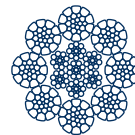
One of the main directions of Severstal-metiz is production and development of steel wire ropes.

The product line of the company includes more than 100 types of ropes, which are produced in accordance with Russian and international standards.

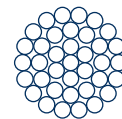
Our clients are more than 500 Russian and foreign companies operating in various business areas: from mining to the production and maintenance of elevators.



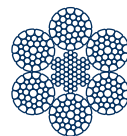
6-strand



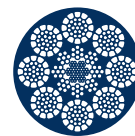
8-strand



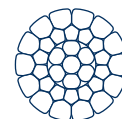
Spiral



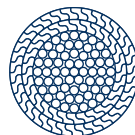
6-strand with compacted outer strands



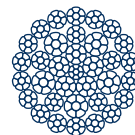
Plastic sheathed



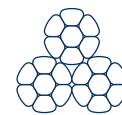
Compacted spiral



Full locked



Multistrand



3-strand

## Wire ropes production sites



## Cherepovets

- Wire ropes diameter: 0.65-65.0 mm
- Grade: 1180-2160 N/mm<sup>2</sup>
- Production capacity:  
≈ 2400-2800 tons per month

## Volgograd

- Wire ropes diameter: 0.65-100.0 mm
- Grade: 1180-2160 N/mm<sup>2</sup>
- Production capacity:  
≈ 3000-5500 tons per month

**1955** year

Steel wire ropes launch

**2008-2017** year

Redaelli Tecna S.p.A. is a part of Severstal-metiz

**\$23.5** million

Investments in steel wire ropes equipment in 2017-2020



## Quality control at all stages of manufacturing

Severstal-metiz is a part of the metallurgical company Severstal.

It allows us to control the rope production process from the moment the ore is mined to the moment the final product is made.

We pay special attention to the quality at every stage of production. Raw materials, wire and wire ropes go through standard compliance tests under laboratory conditions to ensure product quality control.



Beside wire ropes production we can cut them to required length and terminate with sleeves. We also help our clients with wire rope selection, based on type of equipment, breaking load and exploitation terms. Our own research and development center allows us to design any lifting products for the necessary tasks with the provision of all necessary accompanying documentation.

## Certification

The company's quality management system is certified according to international standards ISO 9001:2015, 45001:2018 and 14001:2015.



# Industry-based solution

We developed a solution for each area of use. This solution includes:

- Special ropes with improved performance and extended service life;
- Additional services;
- Technical support.

Industry-based solutions help our customers to reduce equipment downtime, to increase the safety of its work, as well as to reduce the cost of maintenance of equipment.

Customers choose our industry-based solutions for:

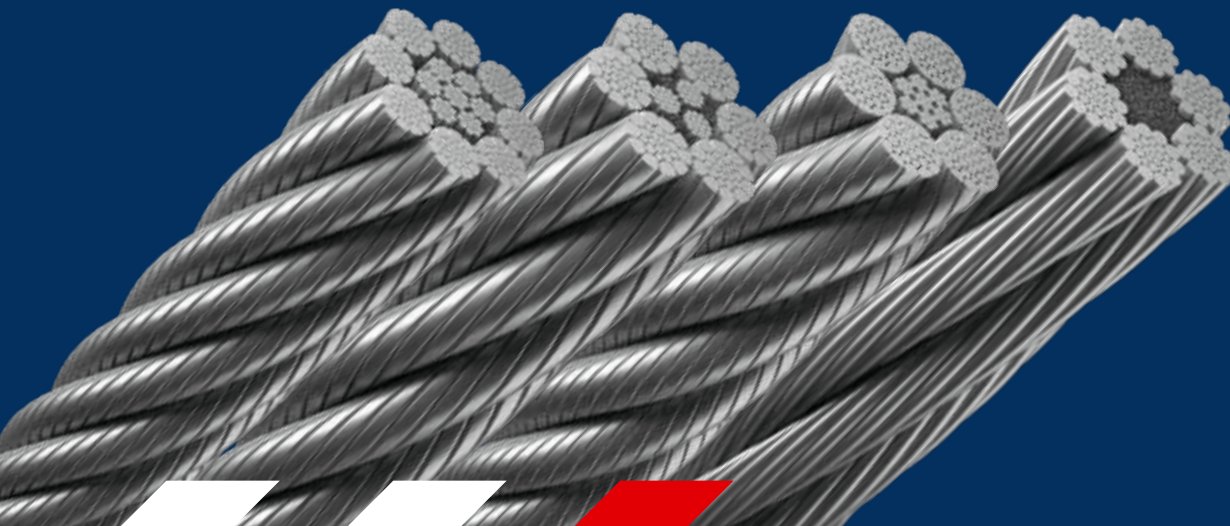
- Oil and gas;
- Mining;
- Production and maintenance of elevators;
- All types of cranes used in any manufacturing industry;
- Cableways.

For each of the areas of application we produce product line of special ropes with unique technical characteristics and construction.

**Octopus®** is our solution for oil & gas industry.

It includes 6-strand, 8-strand special wire ropes with compacted outer strands and polymer filling of the inner and outer strands. Thanks to their design, Octopus wire ropes are much stronger and have extended operational life compared to standard and out-dated ropes. This allows our customers to significantly reduce the number of wire rope replacement operations and cut the cost of servicing drilling rigs.

We select ropes for different application conditions of the equipment for the most efficient operation, in a short time we carry out delivery and provide additional services.



# Octopus

Industry-based solution  
for oil & gas



High-rated  
quality



Cost  
minimization



Better  
performance

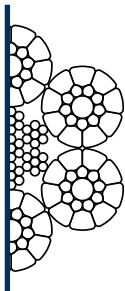


Reduced  
downtime



More  
safety

## Compacting



- 01 Strength  
+ 10-15%
- 02 Contact with bearing  
surface + 8-10%
- 03 Strands interlocking  
is eliminated



## API certificate

Severstal-metiz is the only manufacturer of steel wire ropes in the Russian Federation that has been certified according to API-9A standard from the American Petroleum Institute.

Most of the largest oil and gas companies in the world require API certification for supplying products.

Such certificate is possible to receive only if the company implements and constantly improves its quality management.

Getting an API certificate proves that Severstal-metiz produces high quality steel wire ropes within the oil and gas industry solution - Octopus.



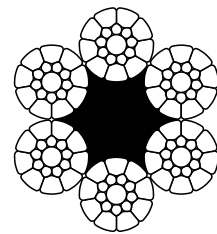
## Octopus® advantages

- |   |   |
|---|---|
| <p><b>01</b> High strength and wear resistance.</p> <p><b>02</b> Less bearing surface wear.</p> | <p><b>03</b> Operation at low temperatures.</p> <p><b>04</b> Lower impact of dynamic loads on a rope.</p> |
|---|---|

## Fiber cores

Sisal fiber is used as raw material for the fiber core of hoist ropes. Due to its properties, the core acquires the ability to absorb and accumulate lubricant, gradually generating it during the operation of the rope. Therefore, the rope remains lubricated throughout the entire service life. Fiber cores, unlike polypropylene cores, do not fail under the influence of low temperatures.

The default lubricant is German operational lubricant Nyrosten T55. Upon a customer's request, it is possible to apply low-temperature lubricant Nyrosten A19/200 with the range of operating temperatures from -55 to +100 °C.



## End fittings

Wire ropes are complete with end fittings. We use special factory-made eye end fittings for splicing the rope when it is inserted into the hoist system to maintain the structural integrity of the rope after cut and slip procedure.



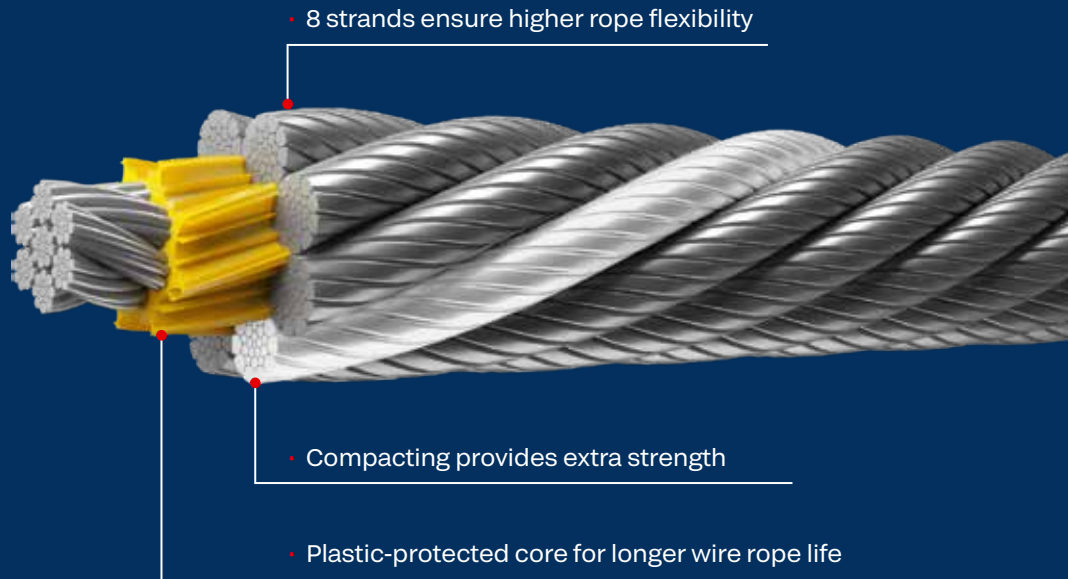
## Mesh grips for steel wire ropes

For easier installation of a new rope, we offer our customers special steel wire mesh grips. They are tightened securely on the free ends of the old rope and the new one connecting them firmly. After that, the rope is installed on the winding hoist drum.





## Special design



## Comparison of wire ropes

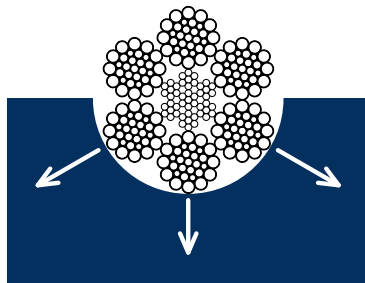
### EN 12385-4 (6x31WS-IWRC)

Diameter - 25.0 mm

Weight - 2.66 kg/m

Grade - 1770 N/mm<sup>2</sup>

**MBL - 531 kN**



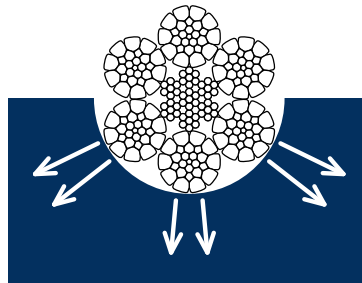
### Octopus 6K (6xK26WS-IWRC)

Diameter - 25.0 mm

Weight - 2.72 kg/m

Grade - 1770 N/mm<sup>2</sup>

**MBL - 542 kN**



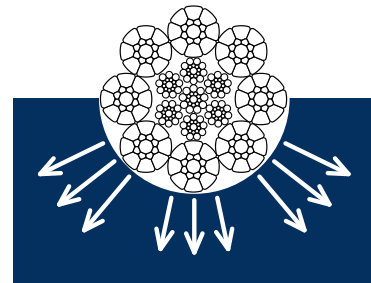
### Octopus 817K (8xK17S-IWRC)

Diameter - 25.0 mm

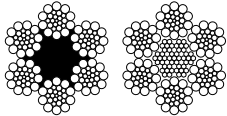
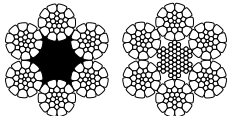
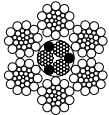
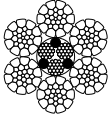
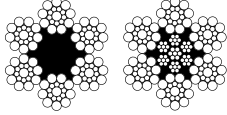
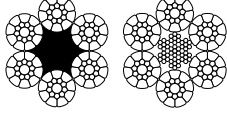
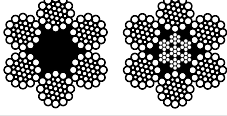
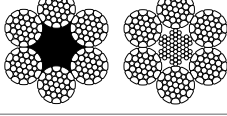
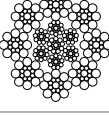
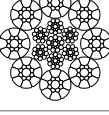
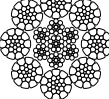
Weight - 2.78 kg/m

Grade - 1770 N/mm<sup>2</sup>

**MBL - 548 kN**



# Octopus® range of products

Sketch	Name	Type	Construction	Certification
	<b>Octopus 6</b>	6-strand wire ropes	6x26	EN 12385-4
	<b>Octopus 6K</b>	6-strand wire ropes with compacted outer strands	6xK26	EN 12385-4, API-9A
	<b>Octopus 626</b>	6-strand wire ropes with mixed core	6x26	EN 12385-4, API-9A
	<b>Octopus 626K</b>	6-strand wire ropes with mixed core and compacted outer strands	6xK26	EN 12385-4, API-9A
	<b>Octopus 619</b>	6-strand wire ropes	6x19	EN 12385-4, API-9A
	<b>Octopus 619K</b>	6-strand wire ropes with compacted outer strands	6xK19	EN 12385-4, API-9A
	<b>Octopus 631</b>	6-strand wire ropes	6x31	EN 12385-4, API-9A
	<b>Octopus 631K</b>	6-strand wire ropes with compacted outer strands	6xK31	EN 12385-4, API-9A
	<b>Octopus 817</b>	8-strand wire ropes	8x17	EN 12385-4, API-9A
	<b>Octopus 817K</b>	8-strand wire ropes with compacted outer strands	8xK17	EN 12385-4, API-9A
	<b>Octopus 826K</b>	8-strand wire ropes with compacted outer strands	8xK26	EN 12385-4, API-9A

# Special wire ropes according to API-9A

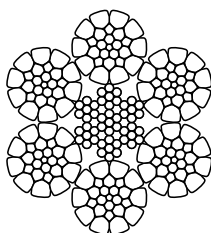
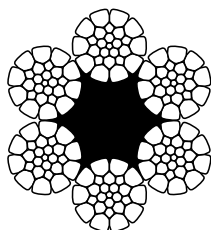


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for oil & gas

# Octopus 6K

6-strand wire ropes  
with compacted outer strands

**API-9A**



## Construction

6x26 (1+5+5/5+10) + 1 fiber core

6x26 (1+5+5/5+10) + 7x7 (1+6)

## Advantages

### in comparison with standard solutions

- increased abrasion resistance
- high flexibility
- lower impact of dynamic loads on the rope

## Specifications

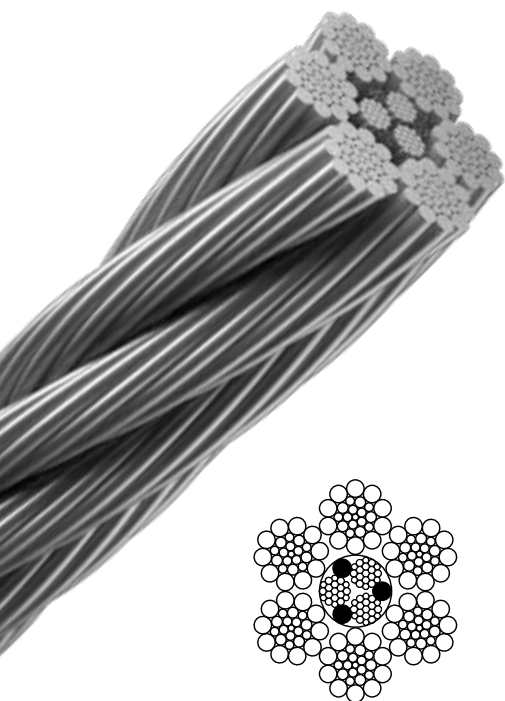
Diameter		Weight of 1000 m, kg	Rope grade					
			1770	1960	2160	IPS	EIP	EEIP
mm	inch		Minimum breaking load, kN					
Rope with fiber core								
25.4	1	2520	-	-	-	397	440	485
28	-	3070	496	549	605	-	-	-
28.6	1⅜	3270	-	-	-	517	573	631
31.8	1¼	3950	-	-	-	624	691	762
32	-	3950	624	691	762	-	-	-
34.9	1⅜	4840	-	-	-	766	848	934
35	-	4840	766	848	934	-	-	-
38	-	5780	916	1014	1118	-	-	-
38.1	1½	5780	-	-	-	916	1014	1118
Rope with metal core								
25.4	1	2800	445	-	-	445	493	544
28	-	3470	552	612	674	-	-	-
28.6	1⅜	3610	-	-	-	575	637	702
31.8	1¼	4390	-	-	-	699	774	853
32	-	4390	699	774	853	-	-	-
34.9	1⅜	5350	-	-	-	853	944	1040
35	-	5350	853	944	1040	-	-	-
38	-	6390	1020	1129	1244	-	-	-
38.1	1½	6390	-	-	-	1020	1129	1244



# Octopus 626

6-strand wire ropes  
with mixed core

**API-9A**



## Construction

6x26 (1+5+5/5+10)+3x19(1+6+6/6)+3 fiber fillers

Mixed core consists of 3 fiber fillers and 3 metal strands.

## Advantages

### in comparison with standard solutions

- increased abrasion resistance
- high flexibility
- lower impact of dynamic loads on the rope

## Specifications

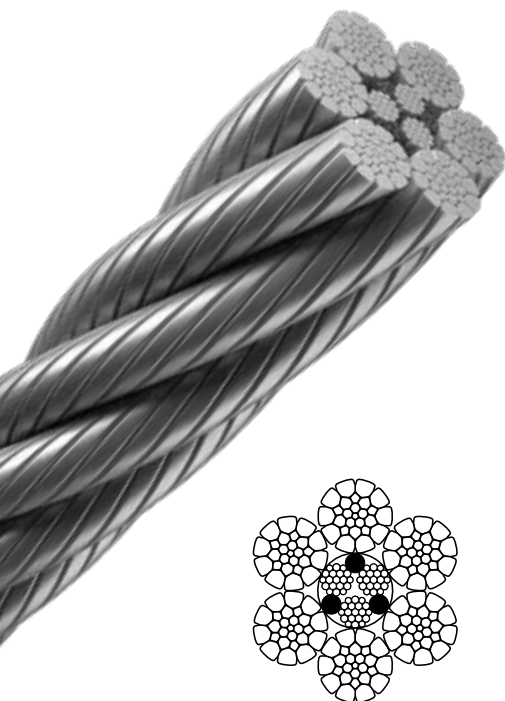
Diameter		Weight of 1000 m, kg	Rope grade					
			1770	1960	2160	IPS	EIP	EEIP
mm	inch		Minimum breaking load, kN					
25.4	1	2630	-	-	-	385	435	478
28	-	3170	476	527	581	-	-	-
28.6	1 ⅜	3270	-	-	-	486	547	601
31.8	1 ¼	4020	-	-	-	596	672	739
32	-	4020	622	689	759	-	-	-
34.9	1 ¾	5000	-	-	-	717	808	890
35	-	5000	744	824	908	-	-	-
38	-	5810	877	972	1070	-	-	-
38.1	1 ½	5810	-	-	-	849	954	1049



# Octopus 626K

6-strand wire ropes  
with compacted outer strands and mixed core

**API-9A**



## Construction

6x26 (1+5+5/5+10)+3x19(1+6+6/6)+3 fiber fillers

Mixed core consists of 3 fiber fillers and 3 metal strands.

## Advantages

### in comparison with standard solutions

- increased abrasion resistance
- high flexibility
- lower impact of dynamic loads on the rope

## Specifications

Diameter		Weight of 1000 m, kg	Rope grade					
			1770	1960	2160	IPS	EIP	EEIP
mm	inch		Minimum breaking load, kN					
25.4	1	2770	-	-	-	418	463	510
28	-	3320	503	557	614	-	-	-
28.6	1 ⅜	3440	-	-	-	520	576	635
31.8	1 ¼	4240	-	-	-	644	713	786
32	-	4240	644	713	786	-	-	-
34.9	1 ¾	5200	-	-	-	791	876	965
35	-	5200	791	876	965	-	-	-
38	-	6030	919	1018	1122	-	-	-
38.1	1 ½	6030	-	-	-	919	1018	1122

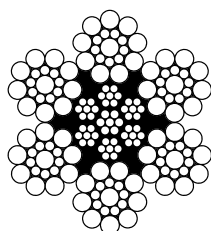
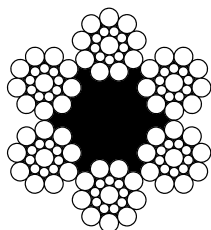
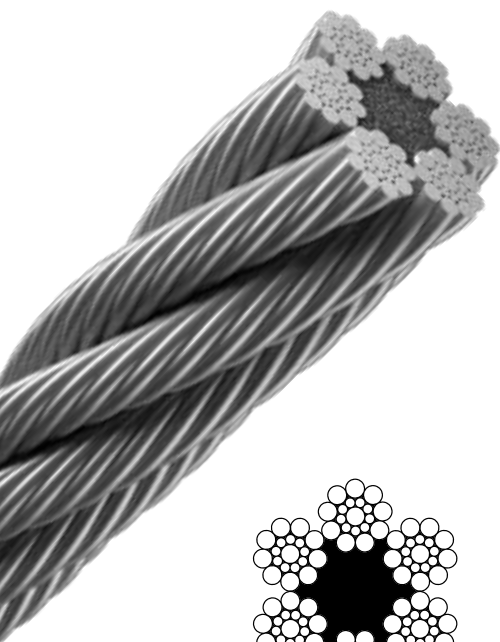


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# Octopus 619

6-strand wire ropes

**API-9A**



## Construction

6x19 (1+9+9) + 1 fiber core

6x19 (1+9+9) + 7x7 (1+6)

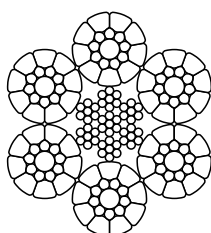
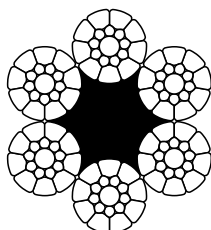
## Specifications

Diameter		Weight of 1000 m, kg	Rope grade						
			1770	1960	2160	IPS	EIP	EEIP	
mm	inch		Minimum breaking load, kN						
Rope with fiber core									
25.4	1	2320	-	-	-	372	409	450	
28	-	2810	458	507	559	-	-	-	
28.6	1 ⅜	2940	-	-	-	468	515	566	
31.8	1 ¼	3680	-	-	-	575	633	-	
32	-	3680	598	662	-	-	-	-	
34.9	1 ¾	4400	-	-	-	691	761	-	
35	-	4400	716	792	-	-	-	-	
38	-	5180	843	934	-	-	-	-	
38.1	1 ½	5180	-	-	-	818	898	-	
Rope with metal core									
25.4	1	2580	-	-	-	399	460	506	
28	-	3140	494	547	603	-	-	-	
28.6	1 ⅜	3270	-	-	-	503	578	636	
31.8	1 ¼	4100	-	-	-	617	711	-	
32	-	4100	645	715	-	-	-	-	
34.9	1 ¾	4900	-	-	-	743	854	-	
35	-	4900	772	855	-	-	-	-	
38	-	5780	910	1010	-	-	-	-	
38.1	1 ½	5780	-	-	-	880	1010	-	

# Octopus 619K

6-strand wire ropes  
with compacted outer strands

**API-9A**



## Construction

6x19 (1+9+9) + 1 fiber core

6x19 (1+9+9) + 7x7 (1+6)

## Specifications

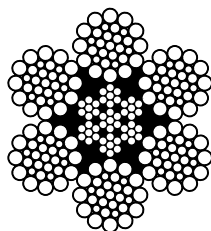
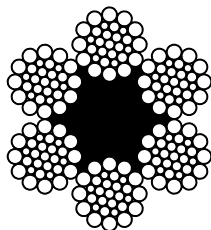
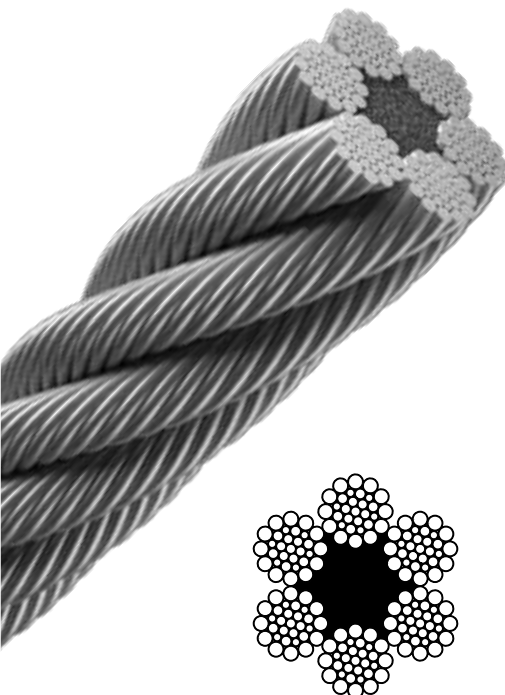
Diameter		Weight of 1000 m, kg	Rope grade					
			1770	1960	2160	IPS	EIP	EEIP
mm	inch		Minimum breaking load, kN					
Rope with fiber core								
25.4	1	2540	-	-	-	402	446	491
28	-	3100	491	544	599	-	-	-
28.6	1 ⅜	3230	-	-	-	512	567	625
31.8	1 ¼	4040	-	-	-	641	710	-
32	-	4040	641	710	-	-	-	-
34.9	1 ¾	4850	-	-	-	769	852	-
35	-	4850	769	852	-	-	-	-
38	-	5800	921	1020	-	-	-	-
38.1	1 ½	5800	-	-	-	921	1020	-
Rope with metal core								
25.4	1	2820	-	-	-	452	500	551
28	-	3430	550	609	671	-	-	-
28.6	1 ⅜	3570	-	-	-	572	633	698
31.8	1 ¼	4470	-	-	-	717	793	-
32	-	4470	717	793	-	-	-	-
34.9	1 ¾	5350	-	-	-	858	950	-
35	-	5350	858	950	-	-	-	-
38	-	6410	1027	1137	-	-	-	-
38.1	1 ½	6410	-	-	-	1027	1137	-



# Octopus 631

6-strand wire ropes

API-9A



## Construction

6x31 (1+6+6/6+12) + 1 fiber core

6x31 (1+6+6/6+12) + 7x7 (1+6)

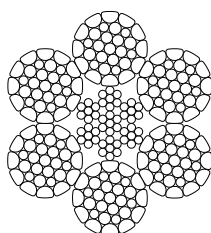
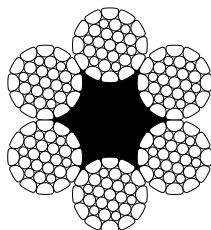
## Specifications

Diameter		Weight of 1000 m, kg	Rope grade					
			1770	1960	2160	IPS	EIP	EEIP
mm	inch		Minimum breaking load, kN					
Rope with fiber core								
25.4	1	2500	-	-	-	372	409	450
28	-	2880	458	507	559	-	-	-
28.6	1 ⅝	2940	-	-	-	468	515	566
31.8	1 ¾	3760	-	-	-	575	633	696
32	-	3760	598	662	730	-	-	-
34.9	1 ⅞	4500	-	-	-	691	761	836
35	-	4500	716	792	873	-	-	-
38	-	5300	843	934	1030	-	-	-
38.1	1 ½	5300	-	-	-	818	898	987
Rope with metal core								
25.4	1	2750	-	-	-	399	460	506
28	-	3210	494	547	603	-	-	-
28.6	1 ⅝	3270	-	-	-	503	578	636
31.8	1 ¾	4190	-	-	-	617	711	782
32	-	4190	645	715	787	-	-	-
34.9	1 ⅞	5010	-	-	-	743	854	943
35	-	5010	772	855	942	-	-	-
38	-	5910	910	1010	1110	-	-	-
38.1	1 ½	5910	-	-	-	880	1010	1110

# Octopus 631K

6-strand wire ropes  
with compacted outer strands

**API-9A**



## Construction

6x31 (1+6+6/6+12) + 1 fiber core

6x31 (1+6+6/6+12) + 7x7 (1+6)

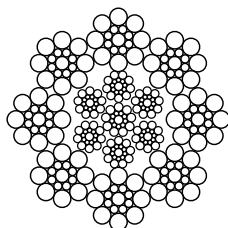
## Specifications

Diameter		Weight of 1000 m, kg	Rope grade						
			1770	1960	2160	IPS	EIP	EEIP	
mm	inch		Minimum breaking load, kN						
Rope with fiber core									
25.4	1	2550	-	-	-	403	446	492	
28	-	3150	500	554	610	-	-	-	
28.6	1 ⅜	3350	-	-	-	529	586	646	
29	-	3370	533	591	651	-	-	-	
31.8	1 ¾	4000	-	-	-	632	700	772	
32	-	4000	632	700	772	-	-	-	
34.9	1 ⅝	4870	-	-	-	770	853	940	
35	-	4870	770	853	940	-	-	-	
38	-	5820	923	1022	1126	-	-	-	
38.1	1 ½	5820	-	-	-	923	1022	1126	
Rope with metal core									
25.4	1	2830	-	-	-	452	501	552	
28	-	3490	558	618	681	-	-	-	
28.6	1 ⅝	3680	-	-	-	588	651	718	
29	-	3740	597	661	729	-	-	-	
31.8	1 ¾	4440	-	-	-	708	784	864	
32	-	4440	708	784	864	-	-	-	
34.9	1 ⅝	5360	-	-	-	859	951	1048	
35	-	5360	859	951	1048	-	-	-	
38	-	6420	1029	1139	1256	-	-	-	
38.1	1 ½	6420	-	-	-	1029	1139	1256	

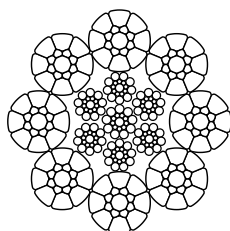
# Octopus 817 & 817K

8-strand wire ropes

API-9A



**Octopus 817**



**Octopus 817K**

## Construction

8x17(1+8+8) + 6x19(1+9+9) + 1x19(1+9+9)

## Advantages

### in comparison with standard solutions

- higher flexibility in comparison with 6-strand wire ropes
- high strength
- reduced friction between outer wires of strands and pulley groove surface

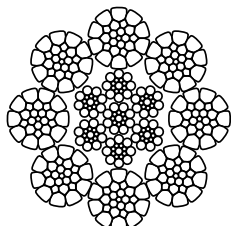
## Specifications

Diameter		Weight of 1000 m, kg	Rope grade					
			1770	1960	2160	IPS	EIP	EEIP
mm	inch		Minimum breaking load, kN					
Octopus 817 - without compaction								
25.4	1	2668	-	-	-	399	460	506
28	-	3229	494	547	603	-	-	-
28.6	1 ⅝	3399	-	-	-	503	578	636
31.8	1 ¾	4215	-	-	-	617	711	782
32	-	4215	645	715	787	-	-	-
34.9	1 ⅞	4985	-	-	-	743	854	943
35	-	4985	772	855	942	-	-	-
38	-	6006	910	1010	1110	-	-	-
38.1	1 ½	6006	-	-	-	880	1010	1110
Octopus 817K - with compacted outer strands								
25.4	1	2825	-	-	-	426	471	520
28	-	3492	526	583	642	-	-	-
28.6	1 ⅝	3629	-	-	-	545	604	665
31.8	1 ¾	4486	-	-	-	676	749	825
32	-	4486	676	749	825	-	-	-
34.9	1 ⅞	5261	-	-	-	793	878	967
35	-	5261	793	878	967	-	-	-
38	-	6333	954	1057	1165	-	-	-
38.1	1 ½	6333	-	-	-	954	1057	1165

# Octopus 826K

8-strand wire ropes  
with compacted outer strands

**API-9A**



## Construction

8x26(1+5+5/5+10) + 6x17(1+8+8) + 1x17(1+8+8)

## Advantages

### in comparison with standard solutions

- increased wire abrasion resistance
- less pulley groove wear
- improved strength characteristics
- increased resistance against transverse crushing

## Specifications

Diameter		Weight of 1000 m, kg	Rope grade					
			1770	1960	2160	IPS	EIP	EEIP
mm	inch		Minimum breaking load, kN					
25.4	1	3013	-	-	-	482	534	588
28	-	3672	588	651	717	-	-	-
28.6	1 ¼	3831	-	-	-	613	679	748
31.8	1 ¾	4774	-	-	-	764	846	932
32	-	4774	764	846	932	-	-	-
34.9	1 ¾	5725	-	-	-	916	1015	1118
35	-	5725	916	1015	1118	-	-	-
38	-	6720	1076	1191	1313	-	-	-
38.1	1 ½	6720	-	-	-	1076	1191	1313



**Octopus** Industry-based solution  
for oil & gas



# Special wire ropes according to EN

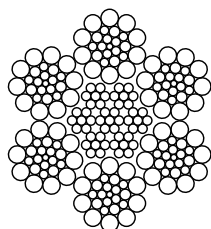
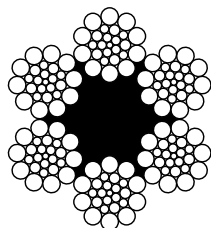
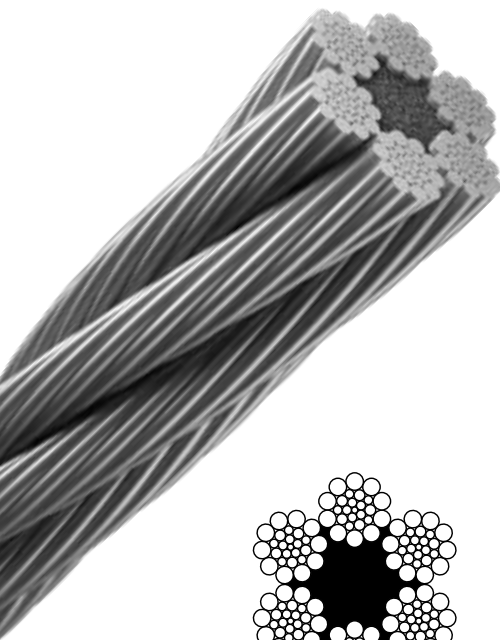


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for oil & gas

# Octopus 6

6-strand wire ropes

**EN 12385-4**



## Construction

6x26 (1+5+5/5+10) + 1 fiber core

6x26 (1+5+5/5+10) + 7x7 (1+6)

## Advantages

### in comparison with standard solutions

- increased abrasion resistance
- high flexibility
- lower impact of dynamic loads on the rope

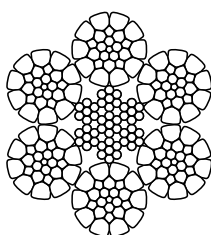
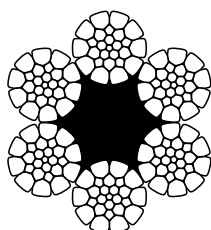
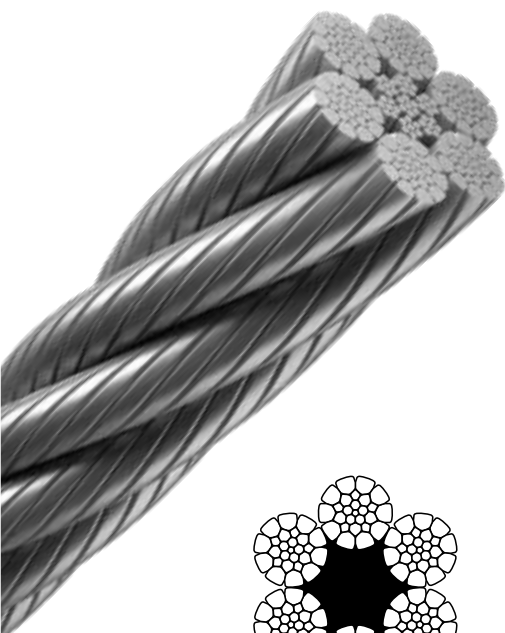
## Specifications

Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm²		
		1570	1770	1960
		Minimum breaking load, kN		
Rope with fiber core				
25	2277	329	371	411
26	2435	352	397	440
28	2839	412	464	514
29	3053	442	498	551
30	3307	480	542	600
32	3683	531	599	663
35	4494	650	733	811
38	5253	757	853	945
Rope with metal core				
25	2566	360	406	449
26	2760	386	435	482
28	3191	448	506	560
29	3400	476	536	594
30	3710	522	589	652
32	4126	577	651	721
35	5043	707	797	883
38	5886	823	928	1030

# Octopus 6K

6-strand wire ropes  
with compacted outer strands

**EN 12385-4**



## Construction

6x26 (1+5+5/5+10) + 1 fiber core

6x26 (1+5+5/5+10) + 7x7 (1+6)

## Advantages

### in comparison with standard solutions

- increased abrasion resistance
- high flexibility
- lower impact of dynamic loads on the rope

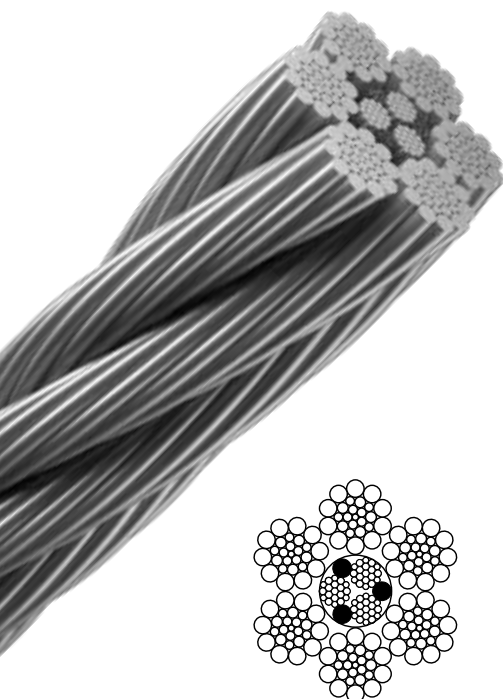
## Specifications

Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm <sup>2</sup>		
		1570	1770	1960
		Minimum breaking load, kN		
Rope with fiber core				
25	2439	339	382	423
26	2626	366	412	457
28	3056	426	480	531
28.6	3227	447	504	558
29	3266	453	510	565
30	3597	502	566	626
32	3951	547	617	683
35	4875	677	763	845
38	5657	783	882	977
Rope with metal core				
25	2724	383	432	478
26	2953	414	467	517
28	3402	479	540	598
28.6	3553	501	565	626
29	3602	505	570	631
30	3991	563	635	703
32	4387	615	694	768
35	5413	761	858	950
38	6280	880	992	1100

# Octopus 626

6-strand wire ropes  
with mixed core

**EN 12385-4**



## Construction

6x26 (1+5+5/5+10)+3x19(1+6+6/6)+3 fiber fillers

Mixed core consists of 3 fiber fillers and 3 metal strands.

## Advantages

### in comparison with standard solutions

- increased abrasion resistance
- high flexibility
- lower impact of dynamic loads on the rope

## Specifications

Diameter, mm	Weight of 1000 m, kg	Rope grade - 1770 N/mm <sup>2</sup> Minimum breaking load, kN
25	2556	425
28	3192	533
30	3704	619
32	4229	687
35	5046	841
38	5861	978



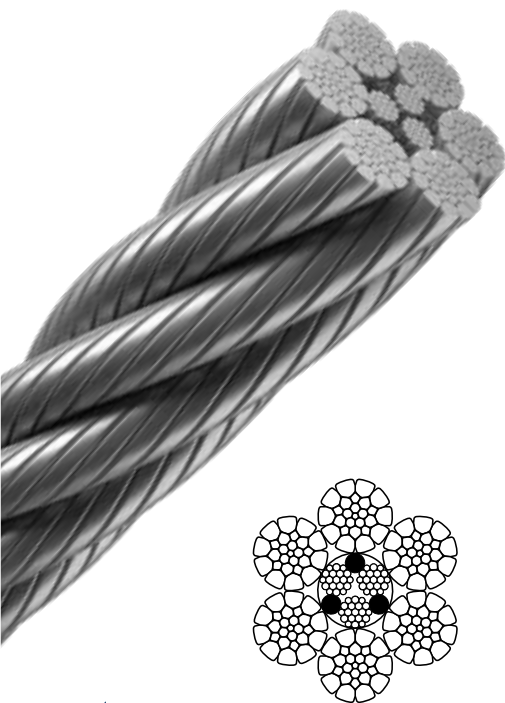
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for oil & gas



# Octopus 626K

6-strand wire ropes  
with compacted outer strands and mixed core

**EN 12385-4**



## Construction

6x26 (1+5+5/5+10)+3x19(1+6+6/6)+3 fiber fillers

Mixed core consists of 3 fiber fillers and 3 metal strands

## Advantages

### in comparison with standard solutions

- increased abrasion resistance
- high flexibility
- lower impact of dynamic loads on the rope

## Specifications

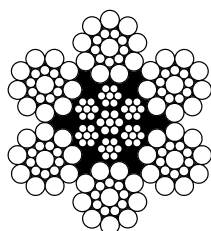
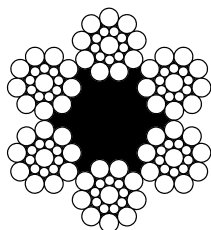
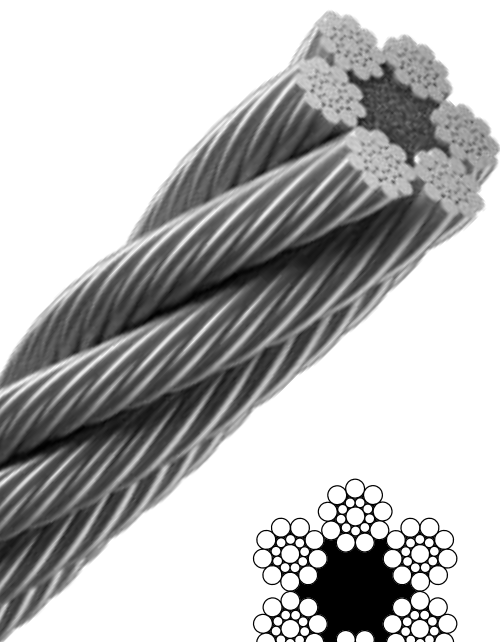
Diameter, mm	Weight of 1000 m, kg	Rope grade - 1770 N/mm <sup>2</sup> Minimum breaking load, kN
25	2669	444
28	3366	560
30	3885	649
32	4318	717
35	5291	881
38	6149	1 025



# Octopus 619

6-strand wire ropes

**EN 12385-4**



## Construction

6x19 (1+9+9) + 1 fiber core

6x19 (1+9+9) + 7x7 (1+6)

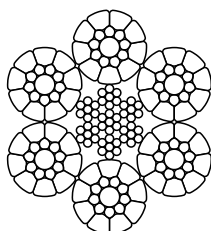
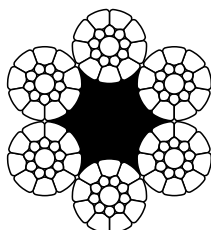
## Specifications

Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm²		
		1770	1960	2160
		Minimum breaking load, kN		
Rope with fiber core				
25.4	2320	377	417	460
28	2810	458	507	-
28.6	2940	478	529	-
31.8	3630	591	654	-
32	3680	598	662	-
34.9	4370	711	788	-
38	5180	843	934	-
38.1	5210	848	939	-
Rope with metal core				
25.4	2580	407	450	496
28	3140	494	547	-
28.6	3270	515	571	-
31.8	4040	637	706	-
32	4100	645	715	-
34.9	4870	768	850	-
38	5780	910	1008	-
38.1	5810	915	1013	-

# Octopus 619K

6-strand wire ropes  
with compacted outer strands

**EN 12385-4**



## Construction

6x19 (1+9+9) + 1 fiber core

6x19 (1+9+9) + 7x7 (1+6)

## Specifications

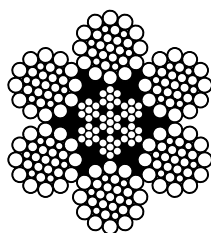
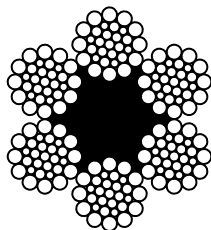
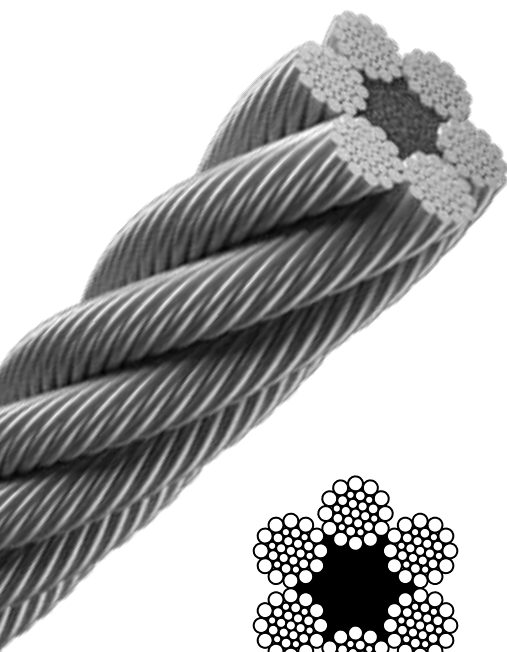
Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm <sup>2</sup>		
		1770	1960	2160
		Minimum breaking load, kN		
Rope with fiber core				
25.4	2620	421	466	491
28.6	3290	528	585	625
31.8	4030	648	718	-
34.9	4860	781	864	-
38.1	5760	925	1024	-
Rope with metal core				
25.4	2890	455	504	551
28.6	3640	574	636	698
31.8	4450	702	777	-
34.9	5380	848	939	-
38.1	6360	1002	1109	-



# Octopus 631

6-strand wire ropes

**EN 12385-4**



## Construction

6x31 (1+6+6/6+12) + 1 fiber core

6x31 (1+6+6/6+12) + 7x7 (1+6)

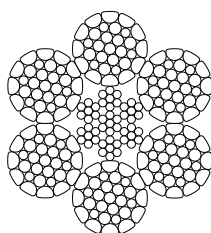
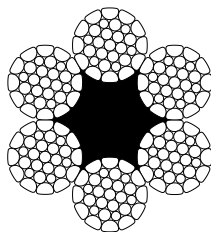
## Specifications

Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm²		
		1770	1960	2160
Minimum breaking load, kN				
Rope with fiber core				
25	2290	365	404	-
25.4	2500	372	409	450
28	2880	458	507	559
28.6	3170	468	515	566
29	3250	491	544	-
31.8	3910	575	633	696
34.9	4730	691	761	836
38.1	5630	818	898	987
Rope with metal core				
25	2560	394	436	-
25.4	2750	399	460	506
28	3210	494	547	603
28.6	3480	503	578	636
29	3580	530	587	-
31.8	4300	617	711	782
34.9	5190	743	854	943
38.1	6190	880	1010	1110

# Octopus 631K

6-strand wire ropes  
with compacted outer strands

**EN 12385-4**



## Construction

6x31 (1+6+6/6+12) + 1 fiber core

6x31 (1+6+6/6+12) + 7x7 (1+6)

## Specifications

Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm²		
		1770	1960	2160
		Minimum breaking load, kN		
Rope with fiber core				
25.4	2550	403	447	492
28.6	3350	529	586	646
31.8	4000	632	700	772
32	4000	632	700	772
34.9	4870	770	852	940
38.1	5820	923	1022	1126
Rope with metal core				
25.4	2830	453	501	552
28.6	3680	588	652	718
31.8	4440	709	785	865
32	4440	709	785	865
34.9	5360	859	951	1048
38.1	6420	1029	1140	1256

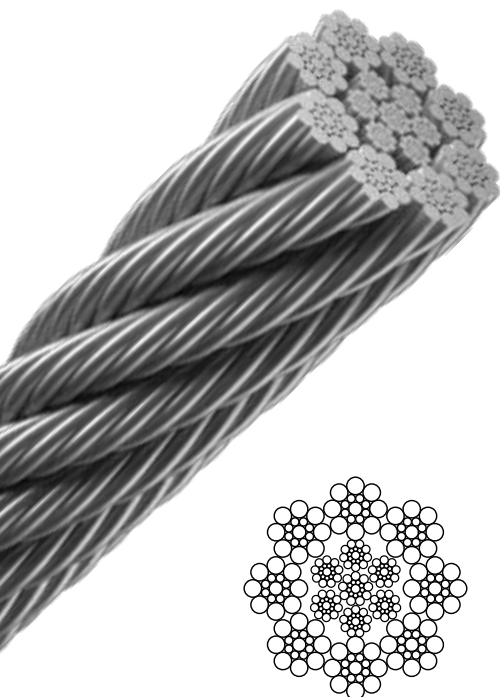




# Octopus 817

8-strand wire ropes

**EN 12385-4**



## Construction

8x17(1+8+8) + 6x19(1+9+9) + 1x19(1+9+9)

## Advantages

### in comparison with standard solutions

- higher flexibility in comparison with 6-strand wire ropes
- high strength
- reduced friction between outer wires of strands and pulley groove surface

## Specifications

Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm²		
		1570	1770	1960
		Minimum breaking load, kN		
25	2630	360	405	449
26	2800	383	432	478
28	3355	459	518	573
29	3480	477	538	596
30	3750	514	579	642
32	4285	587	662	733
35	5040	694	783	867
38	6095	836	943	1044

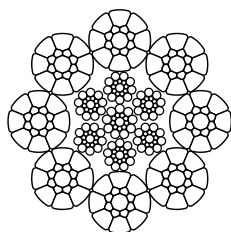


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# Octopus 817K

8-strand wire ropes  
with compacted outer strands

**EN 12385-4**



## Construction

8x17(1+8+8) + 6x19(1+9+9) + 1x19(1+9+9)

## Advantages

### in comparison with standard solutions

- higher flexibility in comparison with 6-strand wire ropes
- high strength
- reduced friction between outer wires of strands and pulley groove surface

## Specifications

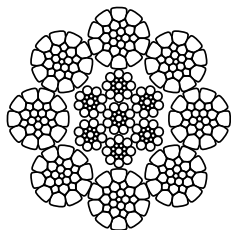
Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm²		
		1570	1770	1960
		Minimum breaking load, kN		
25	2780	433	455	479
26	2980	464	488	514
28	3560	554	582	614
29	3720	579	608	641
30	3980	620	652	687
32	4580	712	748	789
35	5370	835	878	925
38	6470	1010	1060	1110



# Octopus 826K

8-strand wire ropes  
with compacted outer strands

**EN 12385-4**



## Construction

8x26(1+5+5/5+10) + 6x17(1+8+8) + 1x17(1+8+8)

## Advantages

### in comparison with standard solutions

- increased wire abrasion resistance
- less pulley groove wear
- improved strength characteristics
- increased resistance against transverse crushing

## Specifications

Dia- meter, mm	Weight of 1000 m, kg	Rope grade, N/mm²		
		1770	1960	2160
		Minimum breaking load, kN		
25	2 940	454	503	554
28	3 730	582	644	710
32	4 835	753	834	919
35	5 840	874	968	-
38	6 825	1 060	1 180	-



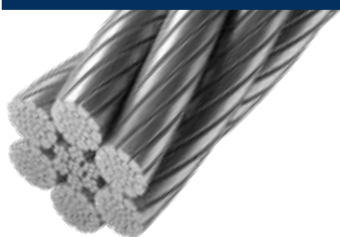
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for oil & gas

# Raising lines

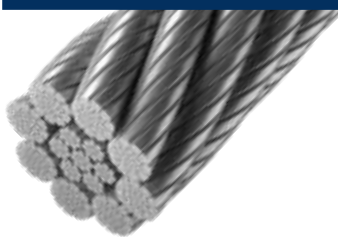
We produce raising lines for many types of drilling rigs such as:  
ZJ30-90DBS; IRI 270; WDI 823-825; 1500HP; DM 750-2000;  
CS 320; CS HR 4000-6000; WEI DS250LT.

## Spare parts:

- **6-strand wire ropes**  
with compacted  
outer strands



- **8-strand wire ropes**  
with compacted  
outer strands

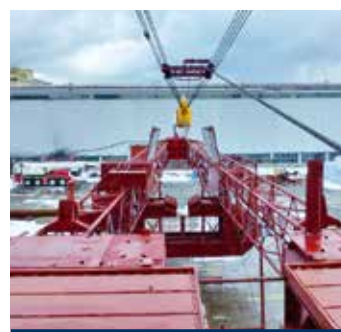


<b>Diameter</b>	28-90 mm
<b>Minimum breaking load</b>	70-700 tonnes



## ■ Sockets combinations:

- closed socket /  
open socket
- open socket /  
open socket



## Additional services

- Prestretching of wire rope
  - Socket pouring
  - Test for compliance with the declared technical characteristics.
  - The test stand for elongation and breakdown allows to perform product testing with certificate confirming the quality.
- We have 3 test benches: 160 tons, 250 tons, 500 tons.



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+7 (8202) 53-91-91 / [metiz.severstal.com](http://metiz.severstal.com)



# Required information for steel wire ropes supply

## 1 Initial data

- Rope designation

## 2 Wire rope information

- Reference document (standard)
- Rope construction
- Grade
- Direction and type of lay
- Surface processing (bright, galvanized)
- Nominal diameter and tolerance
- Nominal length and tolerance
- MBL
- Lubricant type and code
- Requirements for spool  
(wooden, metal; painted; phytotreatment)
- Requirements for packaging

## 3 Other information

- Required certificates



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# Service center

Our experience shows that the more accurately the rope is selected, the longer its service life is. The specialists of the service center have already helped dozens of customers in the selection and maintenance of ropes on various equipment: from cranes to drilling platforms. When working with a new object, they take into account many aspects: scope of use, equipment features, operating conditions, etc.

**To ensure the durability of ropes, the specialists of the service center provide the following services:**

- Rope selection for specific operating conditions.
- Consultations on the features of the application, mounting and operation of ropes.
- Development of special rope construction (together with the Technological department).
- Supply of experimental batches of products.
- Selection of the end fittings and fasteners.
- Technical support of the rope installation.
- Rope running time monitoring and warranty period calculation.
- Organization of seminars.

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**tel.: +7 (8202) 53-91-91**

**e-mail: [helpdesk.ssk@severstal.com](mailto:helpdesk.ssk@severstal.com)**



# Octopus

Industry-based solution  
for oil & gas

## JSC Severstal-Metiz

1/33, ul. 50-letiya Oktyabrya, Cherepovets,  
Vologda region, 162608, Russia

+7 (8202) 53-91-91

octopus@severstal.com

[metiz.severstal.com/octopus](http://metiz.severstal.com/octopus)

