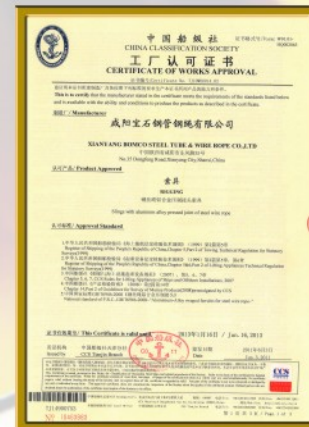
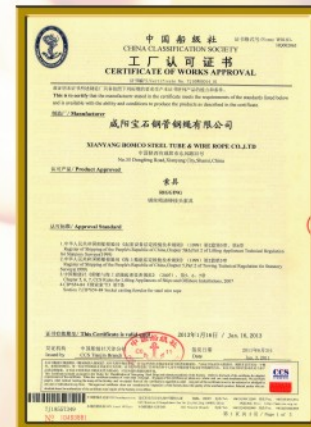
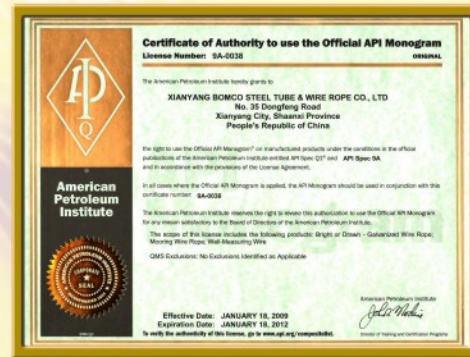


Company honor , Qualification, Certificate

- ISO 9001:2008 quality management system certificate for design and development and manufacture of wire rope
- License to use API Monogram on wire rope for oil field service
- Certificate of works approval for wire rope by CSS
- Certificate of works approval for pressed aluminum alloy sling by CSS
- Certificate of works approval for casted wire rope sling by CSS
- MA certificate (safety mark certificate for mining industry of China)
- National manufacture license of industrial products for wire rope products
- Inspection center of wire rope gets CMA approval by Shaanxi Bureau of Quality and Technical Supervision



WIRE ROPE FOR OILFIELD SERVICE

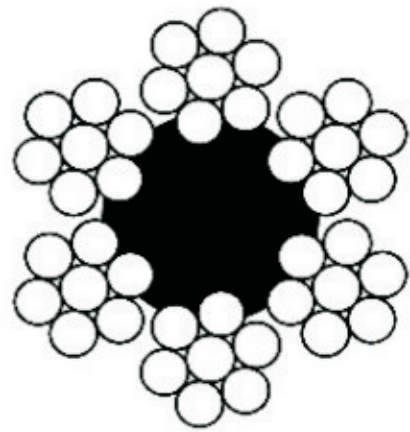
Products standards

API 9A Spec. is preferred products standards of wire ropes for oilfield service. Other standards include "GB8918 Wire rope for important purpose", "GB/T20118 wire rope for general purpose", "GB/T20067 larger diameter Wire rope", "YB/T5359 Compacted strand wire rope", "Q/SY1285 Compacted wire rope". We also can design and produce wire rope according to customer's special requirement.

Construction and characteristics

Main purpose: drilling line, workover line, swabbing line, sand line, wire rope for pumping unit, wire rope for offshore platform.





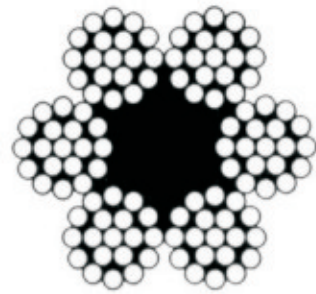
6 × 7-FC

- **Feature:** excellent anti-abrasion, anti-extrusion and stable construction.
- **Application:** sand line.

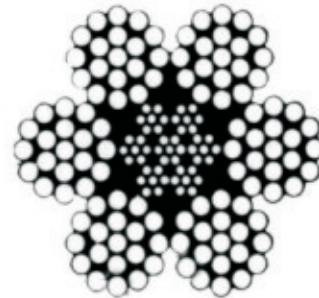


Nominal diameter		Mass (approx. Length mass)		Tensile strength grade			
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	IPS	EIP
Minimum breaking force KN							
8		22.1		37.6	41.6		
9		27.9		47.6	52.7		
(9.5)	(3/8)		(21)			52.1	57.4
10		34.5		58.8	65.1		
11		41.7		71.1	78.7		
(11.1)	(7/16)		(29)			70.5	77.6
12		49.7		84.6	93.7		
(12.7)	(1/2)		(37)			91.6	101
13		58.3		99.3			
14		67.6		115	110		
(14.3)	(9/16)		(47)		128	116	127
(15.9)	(5/8)		(58)			141	
16		88.3		150	167		
18		112		190	211		
19		125		212	235		
(19.1)	(3/4)		(84)			202	222
20		133		235	260		
22		167		284	315		
(22.2)	(7/8)		(115)			273	301
24		199		338	375		
(25.4)	(1)		(150)			353	389
26		233		397	440		
28		270		461	510		
(28.6)	(1-1/8)		(189)			443	488
(31.8)	(1-1/4)		(234)			543	597
32		353		602	666		
35		423		720	797		
36		447		762	843		
38		498		849	940		

6 × 19M-FC



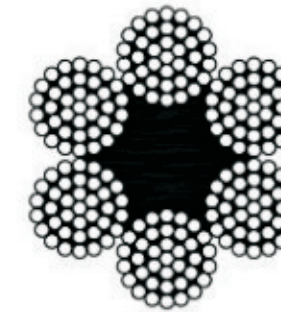
6 × 19M-IWRC



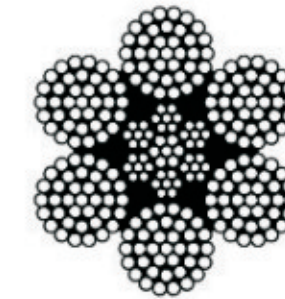
- **Feature:** excellent flexibility.
- **Application:** wire rope for pumping unit, wire rope sling, winch cable.

Nominal diameter mm	Mass (Approx. Length mass) kg/100m		Tensile strength grade			
			1770 MPa		1960 MPa	
	Minimum breaking force kN					
	FC	IWRC	FC	IWRC	FC	IWRC
8	22.1	24.7	34.8	37.6	38.5	41.6
9	28.0	31.2	44.0	47.6	48.7	52.7
10	34.6	38.6	54.3	58.8	60.2	65.1
11	41.9	46.7	65.8	71.1	72.8	78.7
12	49.8	55.6	78.2	84.6	86.6	93.7
13	58.5	65.2	91.8	99.3	102	110
14	67.8	75.7	107	115	118	128
16	88.6	98.8	139	150	154	167
18	112	125	176	190	195	211
19	125	139	196	212	217	235
20	138	154	217	235	241	260
22	167	187	263	284	291	315
24	199	222	313	338	347	375
26	234	261	367	397	407	440
28	271	303	426	461	472	510
32	354	395	556	602	616	666

6 × 37M-FC



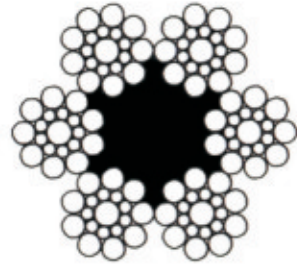
6 × 37M-IWRC



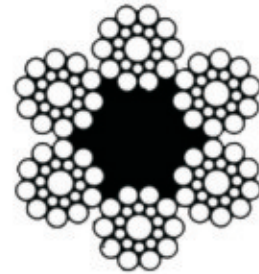
- **Feature:** more flexible than 6 × 19M.
- **Application:** wire rope for pumping unit, Wire rope for derrick raising.

Nominal diameter mm	Mass (Approx. Length mass) kg/100m		Tensile strength grade			
			1770 MPa		1960 MPa	
	Minimum breaking force kN					
	FC	IWRC	FC	IWRC	FC	IWRC
8	22.1	24.4	33.4	39.2	37.0	43.4
10	34.6	38.1	52.2	61.2	57.8	67.8
12	49.8	54.9	75.2	88.2	83.3	97.7
13	58.5	64.4	88.2	95.4	97.7	106
14	67.8	74.7	102	111	113	126
16	88.6	97.5	134	145	148	160
18	112	123	169	183	187	203
19	125	138	188	204	209	226
20	138	152	209	226	231	250
22	167	184	253	273	280	303
24	199	219	301	325	333	360
26	239	258	353	382	391	423
28	271	299	409	443	453	490
32	354	390	535	578	592	640
35	424	467	640	692	708	766
36	448	494	677	732	749	810
38	500	550	764	815	835	903
40	554	610	835	903	925	1000

6 × 19S-FC



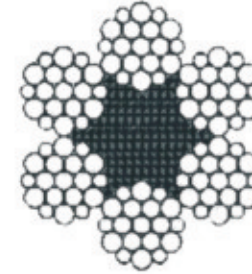
6 × 21F-FC



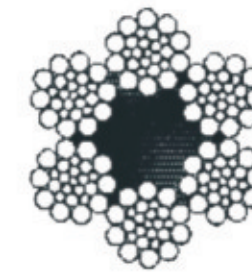
- Features:** Excellent performance of anti-abrasion and stability.
- Application:** Wire rope for drilling: 6 × 19S (≤ 38mm) , 6 × 26WS (≥ 38mm) ;
 Wire rope for oil/ swabbing line: 6 × 19S-FC; Wire rope for workover: 6 × 19S-FC, Wire rope for oil pumping unit: 6 × 25Fi.

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force kN									
8		23.0		37.4	41.4	45.6			
9		29.1		47.3	52.4	57.7			
(9.5)	(3/8)		(24)				54.3	59.7	
10		35.9		58.4	64.7	71.3			
11		43.3		70.7	78.3	86.2			
(11.1)	(7/16)		(32)				73.6	81.0	89.0
12		51.7		84.1	93.1	103			
(12.7)	(1/2)		(42)				95.2	105	115
13		60.7		98.7	109	120			
14		70.4		114	127	140			
(14.3)	(9/16)		(53)				120	133	145
(15.9)	(5/8)		(66)				149	164	180
16		91.9		150	166	182			
18		116		189	210	231			
19		130		211	233	257			
(19.1)	(3/4)		(95)				212	233	256

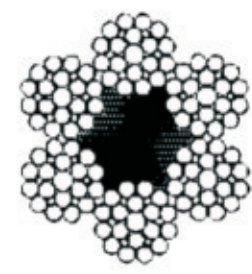
6 × 19W-FC



6 × 26WS-FC

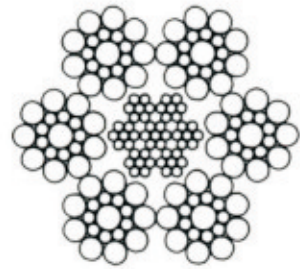


6 × 25F-FC

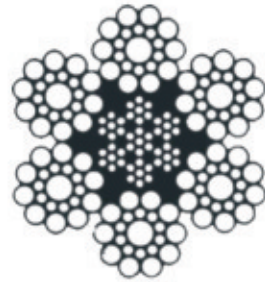


Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force kN									
20		144		234	259	285			
22		174		283	313	345			
(22.2)	(7/8)		(129)				286	315	347
24		207		336	373	411			
(25.4)	(1)		(168)				372	409	450
26		243		395	437	482			
28		281		458	507	559			
(28.6)	(1-1/8)		(213)				468	515	566
(31.8)	(1-1/4)		(263)				575	633	696
32		368		598	662	730			
(34.9)	(1-3/8)		(318)				691	761	836
35		440		716	792	873			
36		465		757	838	924			
38		518		843	934	1030			
(38.1)	(1-1/2)		(378)				818	898	987
40		574		935	1040	1140			
(41.3)	(1-5/8)		(444)				952	1050	1150
44		695		1130	1250	1380			
(44.5)	(1-3/4)		(515)				1100	1210	1330
45		727		1180	1310	1440			
(47.6)	(1-7/8)		(591)				1250	1380	1520
48		827		1350	1490	1640			

6 × 19S-IWRC



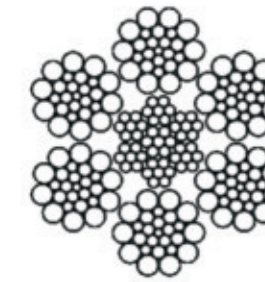
6 × 21F-IWRC



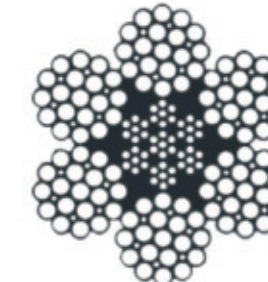
6 × 19W-IWRC



6 × 26WS-IWRC



6 × 25F-IWRC



- **Feature:** Excellent performance of anti-abrasion, crush-resistant and stability; higher breaking force than fiber core wire rope.
- **Application:** Drilling line: 6 × 19S (≤ 38mm) , 6 × 26WS (≥ 38mm)
Wire rope for workover: 6 × 19S.

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force kN									
8		25.6		40.3	44.7	49.2			
9		32.4		51.0	56.5	62.2			
(9.5)	(3/8)		(26)				58.4	67.2	73.8
10		40.0		63.0	69.8	76.9			
11		48.4		76.2	84.4	93.0			
(11.1)	(7/16)		(35)				79.1	90.7	99.6
12		57.6		90.7	100	111			
(12.7)	(1/2)		(46)				102	118	130
13		67.6		106	118	130			
14		78.4		124	137	151			
(14.3)	(9/16)		(58)				129	149	165
(15.9)	(5/8)		(72)				157	183	202
16		102		161	179	197			
18		130		204	226	249			
19		144		227	252	278			
(19.1)	(3/4)		(104)				228	262	288
20		160		252	279	308			
22		194		305	338	372			

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force kN									
(22.2)	(7/8)		(141)				308	354	390
24		230		363	402	443			
(25.4)	(1)		(185)				399	460	506
26		270		426	472	520			
28		314		494	547	603			
(28.6)	(1-1/8)		(234)				503	578	636
(31.8)	(1-1/4)		(289)				617	711	782
32		410		645	715	787			
(34.9)	(1-3/8)		(349)				743	854	943
35		490		772	855	942			
36		518		817	904	997			
38		578		910	1010	1110			
(38.1)	(1-1/2)		(416)				880	1010	1110
40		640		1010	1120	1230			
(41.3)	(1-5/8)		(488)				1020	1170	1300
44		774		1220	1350	1490			
(44.5)	(1-3/4)		(566)				1180	1360	1500
45		810		1280	1410	1560			
(47.6)	(1-7/8)		(649)				1350	1550	1710
48		922		1450	1610	1770			

6 × 31WS-FC



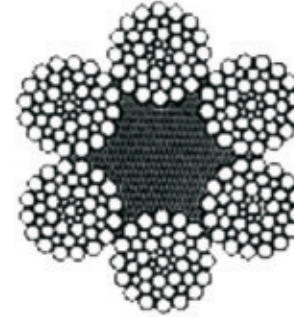
6 × 36WS-FC



6 × 41WS-FC



6 × 49SWS-FC



- **Feature:** outstanding performance of fatigue-resistance and flexibility.
- **Application:** mast raising line; anchor chain of offshore platform; chain of pontoon; tensioner line.

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force kN									
12		52.8		84.1	93.1	103			
14		71.9		114	127	140			
16		94.0		150	166	182			
18		119		189	210	231			
19		132		211	233	257			
(19.1)	(3/4)		(95)				212	233	256
20		147		234	259	285			
22		178		283	313	345			
(22.2)	(7/8)		(129)				286	315	347
24		211		336	373	411			
(25.4)	(1)		(168)				372	409	450
26		248		395	437	482			
28		288		458	507	559			
(28.6)	(1-1/8)		(213)				468	515	566
(31.8)	(1-1/4)		(263)				575	633	696
32		376		598	662	730			
(34.9)	(1-3/8)		(318)				691	761	836
35		450		716	792	873			

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force kN									
36		476		757	838	924			
38		530		843	934	1030			
(38.1)	(1-1/2)		(378)				818	898	987
40		587		935	1040	1140			
(41.3)	(1-5/8)		(444)				952	1050	1150
44		711		1130	1250	1380			
(44.5)	(1-3/4)		(515)				1100	1210	1330
45		743		1180	1310	1440			
(47.6)	(1-7/8)		(591)				1250	1380	1520
48		846		1350	1490	1640			
(50.8)	(2)		(673)				1420	1570	1730
51		955		1520	1680	1850			
52		992		1580	1750	1930			
(54.0)	(2-1/8)		(760)				1590	1750	1930
56		1150		1830	2030	2240			
(57.2)	(2-1/4)		(852)				1780	1960	2150
60		1320		2100	2330	2570			

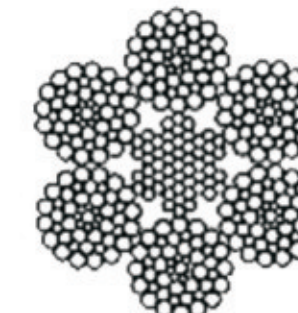
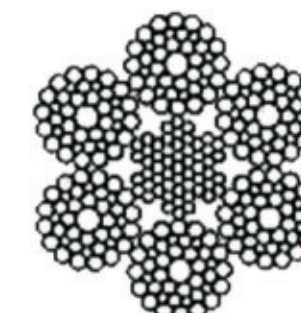
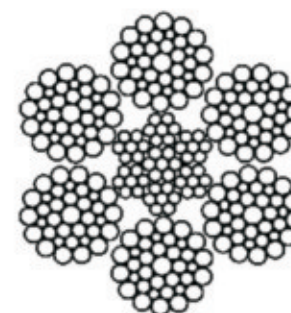
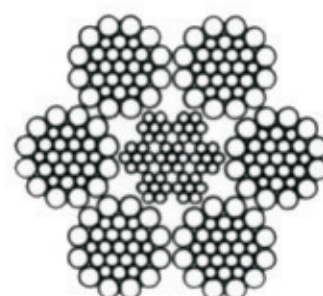
6 × 31WS-IWRC

6 × 36WS-IWRC

6 × 41WS-IWRC

6 × 49SWS-IWRC

- **Feature:** outstanding performance of fatigue-resistance and flexibility.
- **Application:** raising line; anchor chain of offshore platform; chain of pontoon; tensioner line; towing line; anchor line; wire rope for floating crane; wire rope for engineering vessel wire rope for Pipelayer.



Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force KN									
12		58.9		90.7	100	111			
14		80.2		124	137	151			
16		105		161	179	197			
18		133		204	226	249			
19		148		227	252	278			
(19.1)	(3/4)		(104)				228	262	288
20		164		252	279	308			
22		198		305	338	372			
(22.2)	(7/8)		(141)				308	354	390
24		236		363	402	443			
(25.4)	(1)		(185)				399	460	506
26		276		426	472	520			
28		321		494	547	603			
(28.6)	(1-1/8)		(234)				503	578	636
(31.8)	(1-1/4)		(289)				617	711	782
32		419		645	715	787			
(34.9)	(1-3/8)		(349)				743	854	943

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force KN									
35		501		772	855	942			
36		530		817	904	997			
38		591		910	1010	1110			
(38.1)	(1-1/2)		(416)				880	1010	1110
40		654		1010	1120	1230			
(41.3)	(1-5/8)		(488)				1020	1170	1300
44		792		1220	1350	1490			
(44.5)	(1-3/4)		(566)				1180	1360	1500
45		828		1280	1410	1560			
(47.6)	(1-7/8)		(649)				1350	1550	1710
48		942		1450	1610	1770			
(50.8)	(2)		(739)				1530	1760	1930
51		1060		1640	1810	2000			
52		1110		1700	1890	2080			
(54.0)	(2-1/8)		(834)				1710	1970	2160
56		1280		1980	2190	2410			
(57.2)	(2-1/4)		(935)				1910	2200	2420
60		1470		2270	2510	2770			

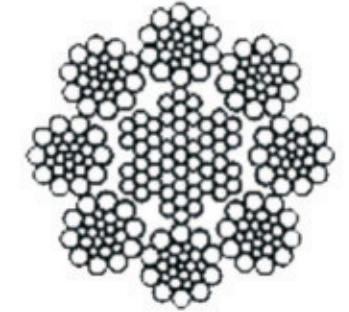
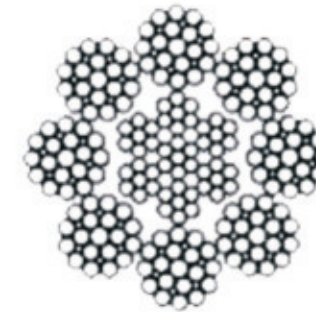
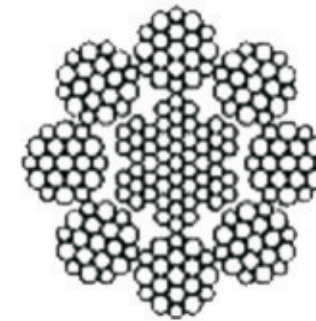
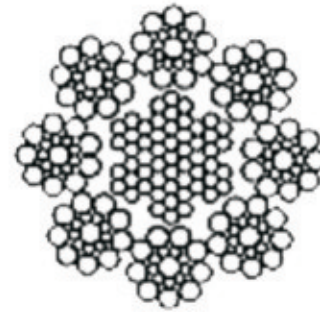
8 x 19S-IWRC

8 x 19W-IWRC

8 x 25F-IWRC

8 x 26WS-IWRC

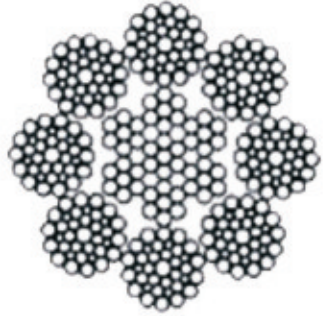
- ▣ **Feature:** outstanding performance of anti-abrasion, flexibility and fatigue-resistance.
- ▣ **Application:** wire rope for new style oil rig (rig type: ZJ75).



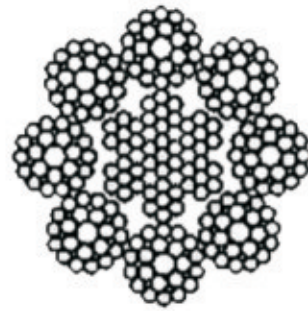
Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force KN									
10		40.7		63.0	69.8	76.9			
12		58.6		90.7	100	111			
14		79.8		124	137	151			
16		104		161	179	197			
18		132		204	226	249			
19		147		227	252	278			
(19.1)	(3/4)		(109)				228	262	288
20		163		252	279	308			
22		197		305	338	372			
(22.2)	(7/8)		(148)				308	354	390
24		234		363	402	443			
(25.4)	(1)		(193)				399	460	506
26		275		426	472	520			
28		319		494	547	603			
(28.6)	(1-1/8)		(245)				503	576	636
(31.8)	(1-1/4)		(302)				617	711	782

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
Minimum breaking force KN									
32		417		645	715	787			
(34.9)	(1-3/8)		(366)				743	854	943
35		499		772	855	942			
36		527		817	904	997			
38		588		910	1010	1110			
(38.1)	(1-1/2)		(435)				880	1010	1110
40		651		1010	1120	1230			
(41.3)	(1-5/8)		(511)				1020	1170	1300
44		788		1220	1350	1490			
(44.5)	(1-3/4)		(595)				1180	1360	1500
45		824		1280	1410	1560			
(47.6)	(1-7/8)		(680)				1350	1550	1710
48		938		1450	1610	1770			
(50.8)	(2)		(773)				1530	1760	1930
52		1100		1700	1890	2080			
(54.0)	(2-1/8)		(873)				1710	1970	2160
56		1280		1980	2190	2410			
60		1470		2270	2510	2770			

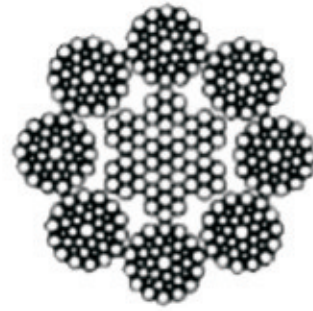
8 × 31WS-IWRC



8 × 29F-IWRC



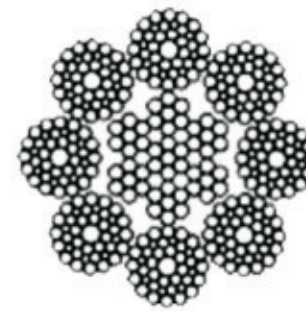
8 × 36WS-IWRC



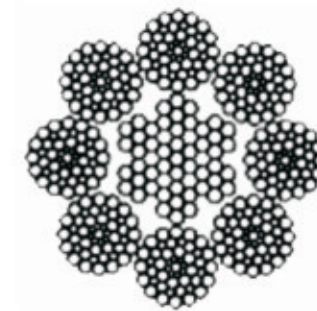
- Feature:** outstanding performance of fatigue-resistance and flexibility, this type wire rope can be made with some anti-rotary performance.
- Application:** derrick rising; dragging line for vessel; anchor; wire rope for floating crane; engineering vessel; wire rope for Pipelayer.

Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
				Minimum breaking force KN					
12		60.0		90.7	100	111			
13		70.5		106	118	130			
14		81.7		124	137	151			
16		107		161	179	197			
18		135		204	226	249			
19		151		227	252	278			
20		167		252	279	308			
22		202		305	338	372			
(22.2)	(7/8)		(148)				308	354	390
24		240		363	402	443			
(25.4)	(1)		(193)				399	460	506
26		282		426	472	520			
28		327		494	547	603			
(28.6)	(1-1/8)		(245)				503	578	636
(31.8)	(1-1/4)		(302)				617	711	782
32		427		645	715	787			

8 × 41WS-IWRC

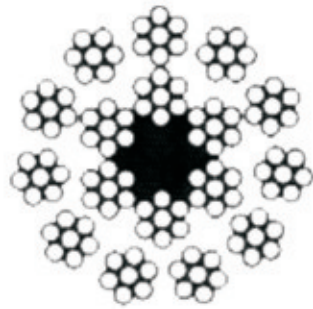


8 × 49SWS-IWRC

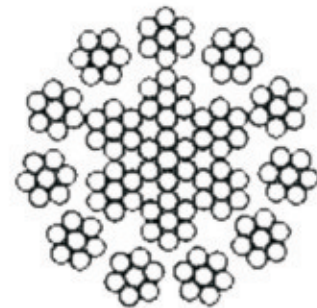


Nominal diameter		Mass (approx length mass)		Tensile strength grade					
mm	(in)	kg/100m	lb/100ft	1770 MPa	1960 MPa	2160 MPa	IPS	EIP	EEIP
				Minimum breaking force KN					
(34.9)	(1-3/8)		(366)				743	854	943
35		511		772	855	942			
36		540		817	904	997			
38		602		910	1010	1110			
(38.1)	(1-1/2)		(435)				880	1010	1110
40		667		1010	1120	1230			
(41.3)	(1-5/8)		(511)				1020	1170	1300
44		807		1220	1350	1490			
(44.5)	(1-3/4)		(592)				1180	1360	1500
45		844		1280	1410	1560			
(47.6)	(1-7/8)		(680)				1350	1550	1710
48		961		1450	1610	1770			
(50.8)	(2)		(773)				1530	1760	1930
51		1080		1640	1810	2000			
52		1130		1700	1890	2080			
(54.0)	(2-1/8)		(873)				1710	1970	2160
56		1310		1980	2190	2410			
(57.2)	(2-1/4)		(979)				1910	2200	2420
60		1500		2270	2510	2770			

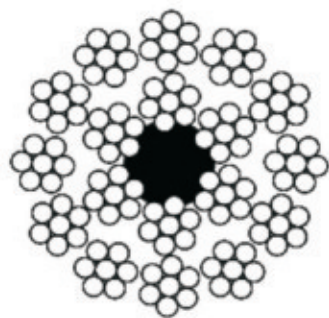
17 × 7-FC



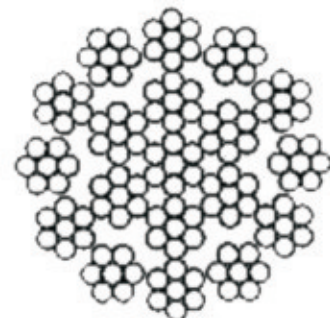
17 × 7-WSC



18 × 7-FC



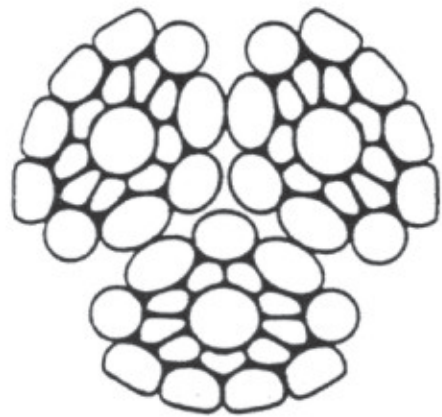
18 × 7-WSC



- **Feature:** non-rotary.
- **Application:** horse-head pumping –unit wire rope.

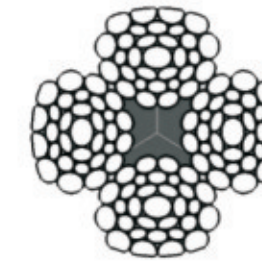
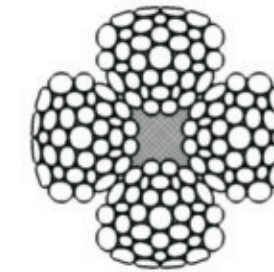


Nominal diameter		Mass (approx. Length mass)				Tensile strength grade			
		Fiber code		WSC					
mm	(in)	kg/100m	lb/100ft	kg/100m	lb/100ft	1770 MPa	1960 MPa	IPS	EIP
Minimum breaking force KN									
10		38.2		40.1		58.1	64.3		
11		46.2		48.5		70.2	77.8		
(11.1)	(7/16)		(33)		(35)			67.4	73.9
12		55.0		57.7		83.6	92.6		
(12.7)	(1/2)		(43)		(45)			87.6	95.8
13		64.5		67.8		98.1	109		
14		74.9		78.6		114	126		
(14.3)	(9/16)		(55)		(57)			110	121
(15.9)	(5/8)		(68)		(71)			136	149
16		97.8		103		149	165		
18		124		130		188	208		
19		138		145		210	232		
(19.1)	(3/4)		(97)		(102)			194	214
20		153		160		232	257		
22		185		194		281	311		
(22.2)	(7/8)		(132)		(139)			262	289
24		220		231		334	370		
(25.4)	(1)		(173)		(182)			341	375
26		258		271		392	435		
28		299		314		455	504		
(28.6)	(1-1/8)		(219)		(230)			429	472
(31.8)	(1-1/4)		(270)		(284)			527	579
32		391		411		594	658		
(34.9)	(1-3/8)		(327)		(343)			634	697
35		468		491		711	788		
36		495		520		752	833		
38		552		579		838	928		
(38.1)	(1-1/2)		(389)		(409)			751	826


K3 x 19S

- **Feature:** bigger fill factor high breaking force with smooth surface, excellent anti-abrasion and stability, anti-rotation, with good flexibility and anti-fatigue performance.
- **Application:** swabbing line in inclined well and horizontal well.

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
		Minimum breaking force kN			
10	45.1	67	71	75	80
11	54.6	81	86	91	96
12	65.0	96	102	109	115
13	76.2	113	120	127	135
14.5	91.5	136	144	153	162
16	111.4	165	176	186	197
18	141.0	209	222	236	249
19	157.0	233	248	263	277
20	174.0	258	274	291	307
22	210.5	312	332	352	372
24	250.5	372	395	419	443
25	271.9	403	429	454	480
26	294.0	436	464	492	519
28	341.0	506	538	570	602
30	391.5	580	617	654	691

K4 x 31WS-FC

K4 x 36WS-FC


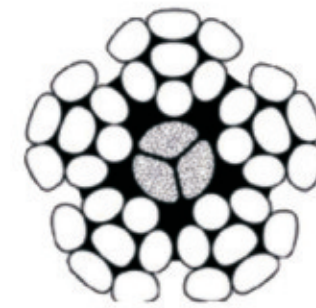
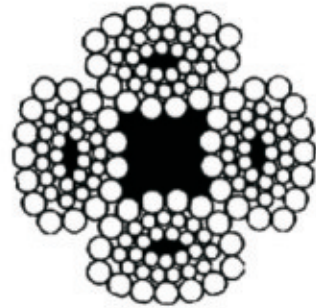
- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, anti-rotation, with good flexibility and anti-fatigue performance.
- **Application:** swabbing line in inclined well and horizontal well.

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
		Minimum breaking force kN			
10	46.8	65	69	73	78
11	56.7	79	84	89	94
12	67.4	94	100	106	112
13	79.1	110	117	124	131
14.5	98.4	137	146	154	163
16	119.8	167	177	188	199
18	151.6	211	225	238	252
19	169.0	235	250	265	280
20	187.2	261	277	293	311
22	226.5	316	336	355	375
24	269.6	375	399	423	447
25	292.5	407	433	460	486
26	316.4	441	469	497	525
28	366.9	511	544	576	609
30	421.2	589	624	662	698
32	479.2	667	710	752	795
34	531.2	740	787	833	881
35	562.9	784	834	884	934
36	590.1	822	874	927	979
38	657.4	916	974	1032	1091
40	728.5	1015	1079	1144	1208

K4 x 39S-FC

K5 x 7-FC

- Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, anti-rotation, with good flexibility and anti-fatigue performance.
- Application:** swabbing line in thin oil well.



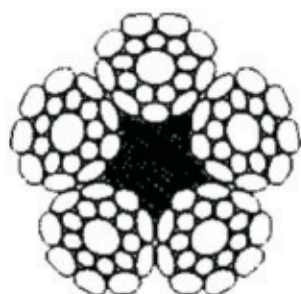
- Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion, anti-crushing and stability.
- Application:** sand line and swabbing line for nominal vertical well.

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
		Minimum breaking force kN			
10	41.7	60	64	67	71
11	50.4	72	77	82	86
12	59.9	86	92	97	103
13	70.3	101	108	114	120
14.5	87.5	126	134	142	150
16	106.5	153	163	173	182
18	134.9	194	206	219	231
20	166.5	239	255	270	285
22	201.4	290	308	326	345
24	239.7	345	367	388	410
26	281.3	40	430	456	482
28	326.2	469	499	529	559
30	374.4	538	573	607	641
32	426.0	613	652	691	730
34	480.9	692	736	780	824
36	539.1	775	825	874	923
38	600.7	864	919	974	1029
40	665.6	957	1018	1079	1140
42	733.8	1055	1123	1190	1257
44	805.4	1158	1234	1306	1379
46	880.2	1266	1346	1427	1508
48	958.5	1378	1466	1554	1642

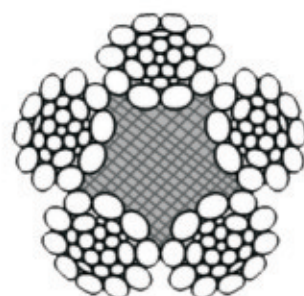
Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
		Minimum breaking force kN			
10	44.3	66	70	74	79
11	53.6	80	85	90	95
12.7	71.5	106	113	120	127
13	74.9	112	119	126	133
14.5	91.5	136	145	154	162
16	109.5	163	173	184	194
18	138.5	206	220	233	246
19	151.6	226	240	255	269
20	168.0	250	266	282	298



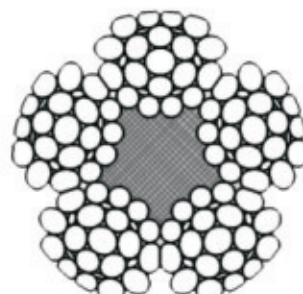
K5 × 19S-FC



K5 × 26WS-FC



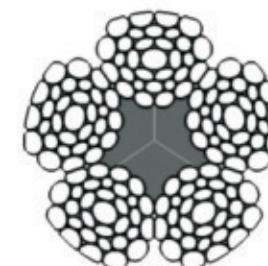
K5 × 25F-FC



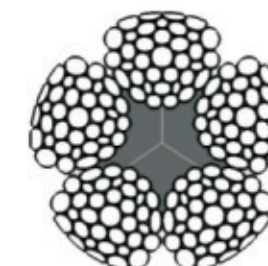
- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion, anti-crushing and stability.
- **Application:** special for swabbing line.

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
		Minimum breaking force kN			
13	78.99	112	119	126	133
14.5	98.29	139	148	157	166
16	117.52	166	177	188	189
18	148.73	211	224	237	251
19	162.73	230	245	260	275
20	180.31	255	272	288	304
22	218.19	309	329	348	368
24	259.64	368	391	415	438
25	281.74	399	424	450	475
26	304.72	432	459	487	514
28	353.39	501	532	564	596

K5 × 31WS-FC

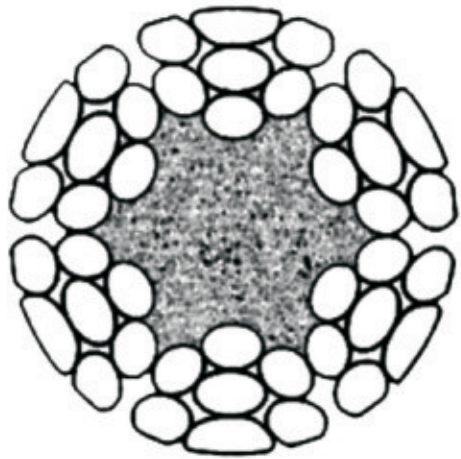


K5 × 36WS-FC



- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, with good flexibility and anti-fatigue performance.
- **Application:** wire rope for workover .

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
		Minimum breaking force kN			
13	77.5	106	112	119	126
14.5	96.5	132	140	148	157
16	117.5	165	175	187	197
18	148.7	209	222	236	249
20	183.6	258	274	291	308
22	222.1	312	333	352	372
24	264.3	372	396	419	443
26	310.2	437	464	492	520
28	359.8	506	539	571	603
30	405.5	570	607	644	679
32	453.0	638	678	719	759
34	511.3	719	765	811	857
36	573.3	807	858	910	961
38	638.7	899	956	1014	1071
40	707.7	986	1060	1123	1186
42	780.3	1099	1168	1238	1308
44	856.3	1206	1282	1359	1435
45	895.7	1261	1341	1421	1501

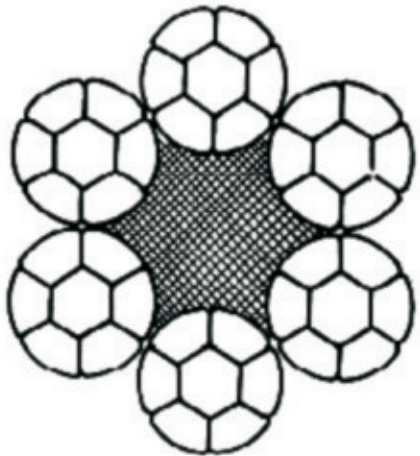


Wire rope for pumping unit K6 x 7-FC

- o **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability.
- o **Application:** sand line , swabbing line and wire rope for new type pumping unit.

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
Minimum breaking force kN					
13	68.5	101	108	114	121
14.5	85.2	126	134	142	150
16	103.7	154	163	173	183
18	131.2	194	207	219	232
20	159.1	236	251	266	281
22	192.5	285	303	321	340
24	229.1	339	361	383	404
26	268.9	398	424	449	474
28	311.8	462	491	521	550
30	357.9	530	564	598	632
32	407.3	603	642	680	719

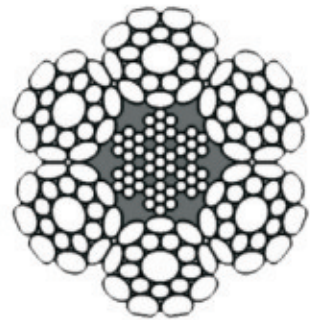
6 x K7-FC



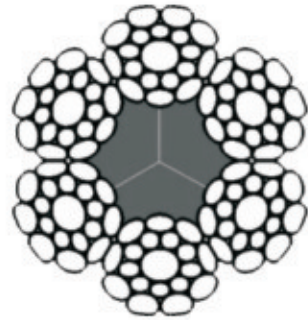
- o **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion, anti-crushing and stability.
- o **Application:** sand line , swabbing line and wire rope for new type pumping unit.

Nominal diameter mm	Mass (Approx.length mass) kg/100m	Tensile strength grade			
		1570 MPa	1670 MPa	1770 MPa	1870 MPa
Minimum breaking force kN					
16	105	151	160	170	180
18	133	191	203	215	227
20	164	236	250	266	280
22	198	285	303	321	339
24	236	339	361	382	404
26	277	398	423	449	474
28	321	462	491	520	550
30	369	530	564	597	631
32	420	603	641	680	718

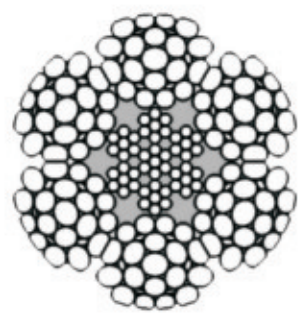
K6 × 19S-IWRC



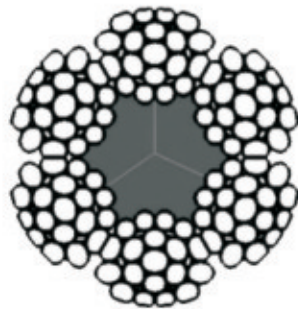
K6 × 19S-FC



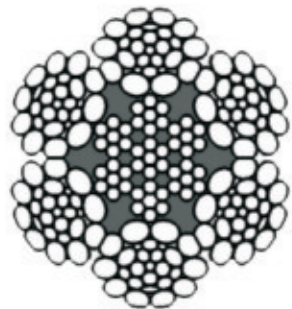
K6 × 25F-IWRC



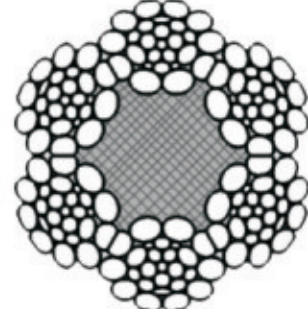
K6 × 25F-FC



K6 × 26WS-IWRC



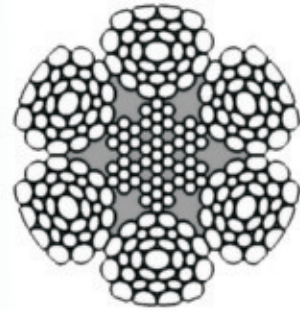
K6 × 26WS-FC



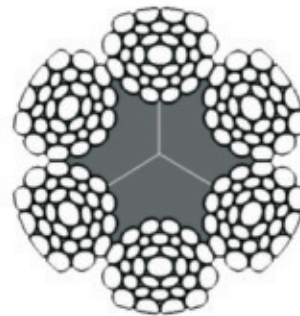
- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion, anti-crushing and stability.
- **Application:** wire rope for workover, swabbing line.

Nominal diameter mm	Mass (Approx. length mass) kg/100m		Tensile strength grade							
			1570 MPa		1670MPa		1770MPa		1870 MPa	
	Minimum breaking force kN									
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
13	73.6	84.5	102	118	109	126	115	133	122	141
14.5	91.7	105.1	127	147	135	156	143	166	151	175
16	111.6	128.0	155	179	165	190	174	202	184	213
18	141.2	161.9	196	226	208	241	221	255	233	270
19	157.4	180.4	218	252	232	268	246	284	260	301
20	174.4	199.9	242	280	257	297	272	315	288	333
22	211.0	241.9	292	338	311	360	330	381	348	403
24	251.0	287.9	348	403	370	428	392	454	414	480
25	272.4	312.4	378	437	402	465	426	493	450	520
26	294.6	337.9	408	473	434	503	460	533	486	563
28	341.7	391.8	474	548	504	583	534	618	564	653
30	392.3	449.8	544	629	578	669	613	709	648	749
32	438.2	502.5	607	703	646	748	685	792	724	837
34	494.7	567.3	686	793	729	844	773	895	817	945
35	524.3	601.2	727	841	773	894	819	948	866	1001
36	554.6	630.2	769	881	818	938	867	994	916	1050
38	618.0	695.7	857	973	911	1035	966	1097	1020	1159
40	684.8	770.9	949	1078	1010	1147	1070	1215	1131	1284

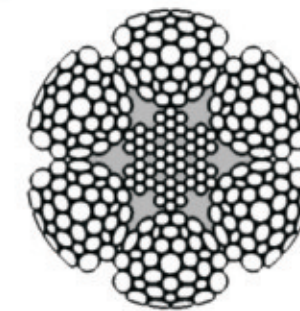
K6 x 31WS-IWRC



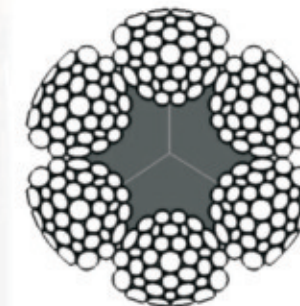
K6 x 31WS-FC



K6 x 36WS-IWRC



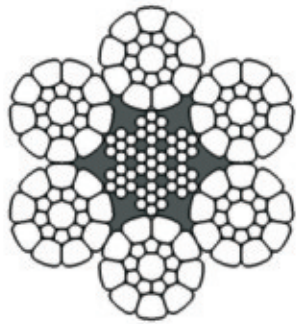
K6 x 36WS-FC



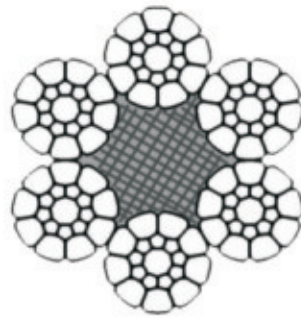
- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, with good flexibility and anti-fatigue performance.
- **Application:** wire rope for workover.

Nominal diameter mm	Mass (Approx. length mass) kg/100m		Tensile strength grade							
			1570 MPa		1670MPa		1770MPa		1870 MPa	
			Minimum breaking force kN							
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
16	114.5	130.2	159	184	169	196	179	208	189	219
18	144.9	164.8	201	233	214	248	227	263	240	278
19	161.4	183.6	224	260	238	276	253	293	267	309
20	178.8	203.4	248	288	264	306	280	325	296	343
22	216.4	246.1	300	348	320	371	339	393	358	415
24	257.5	292.9	358	415	380	441	403	467	426	494
25	279.4	317.8	388	450	413	478	437	507	462	536
26	302.2	337.6	420	478	446	408	473	539	500	569
28	350.5	391.5	487	554	518	589	549	625	580	660
30	402.3	449.5	559	636	594	677	630	717	665	758
32	449.5	502.1	624	711	664	756	704	801	743	846
34	507.5	566.9	705	802	749	853	794	904	839	956
35	537.7	600.7	747	850	794	904	842	958	889	1013
36	563.7	629.7	783	891	833	948	882	1005	932	1061
38	628.1	701.6	872	993	928	1056	983	1119	1039	1183
40	695.9	777.4	966	1100	1028	1170	1089	1240	1151	1310

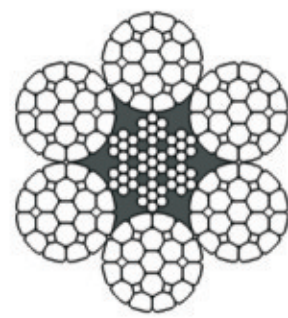
6 × K19S-IWRC



6 × K19S-FC



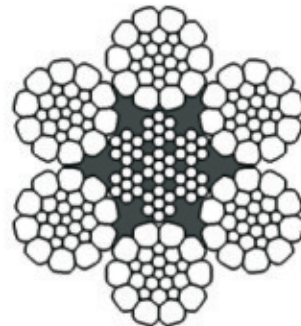
6 × K25F-IWRC



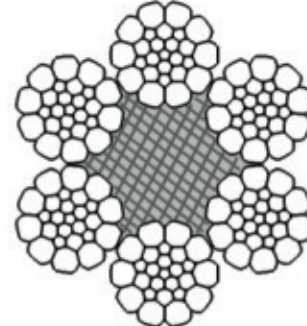
6 × K25F-FC



6 × K26WS-IWRC



6 × K26WS-FC

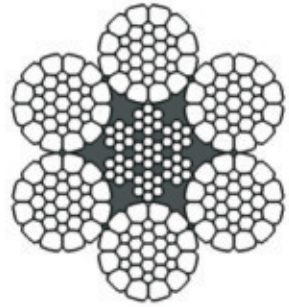


- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, lifetime is more than 1.5 times than ordinary rope.
- **Application:** wire rope for oil drilling, wire rope for workover.

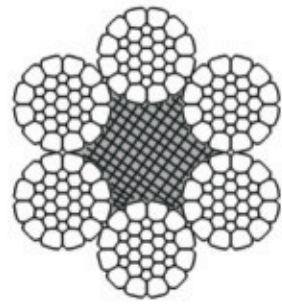
Nominal diameter mm	Mass (Approx.length mass) kg/100m		Tensile strength grade									
			1570 MPa		1670MPa		1770MPa		1870 MPa		1960 MPa	
	FC	IWRC	Minimum breaking force kN									
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
16	109	118	150	166	159	176	169	187	179	197	187	207
18	138	150	190	210	202	223	214	236	226	250	237	261
20	170	185	234	259	249	275	264	292	279	308	292	323
22	206	224	283	314	301	333	320	353	338	373	354	391
24	245	266	337	373	359	397	380	420	402	444	421	465
26	287	312	396	438	421	466	446	493	472	521	494	545
28	333	366	459	508	488	540	518	572	547	604	573	633
30	382	416	527	583	561	620	594	657	628	693	658	726
32	435	473	600	664	638	705	676	747	714	789	749	826
34	491	534	677	749	720	796	763	843	806	890	845	933
36	551	598	759	840	807	893	856	945	904	998	947	1046
38	614	667	846	936	899	995	953	1053	1010	1112	1056	1165
40	680	739	937	1037	997	1102	1060	1167	1120	1232	1170	1291
42	750	815	1030	1143	1100	1215	1160	1287	1230	1359	1290	1423
44	823	894	1130	1254	1210	1333	1280	1412	1350	1491	1415	1562
46	899	977	1240	1371	1320	1457	1400	1544	1480	1630	1547	1707
48	979	1064	1350	1493	1440	1587	1520	1681	1610	1775	1684	1859



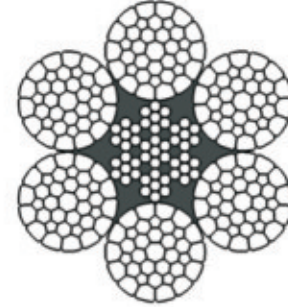
6 × K31WS-IWRC



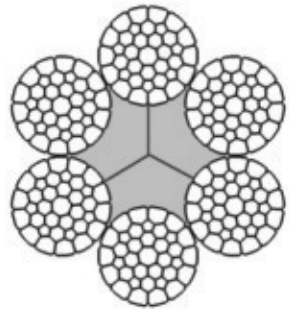
6 × K31WS-FC



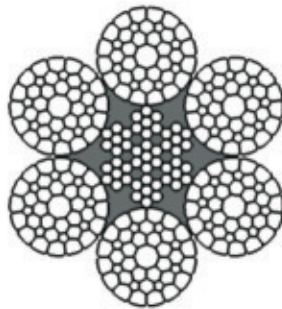
6 × K36WS-IWRC



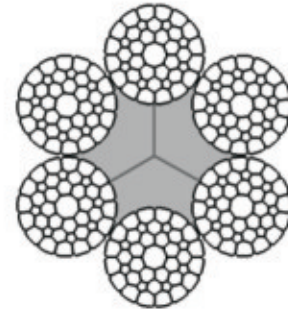
6 × K36WS-FC



6 × K41WS-IWRC



6 × K41WS-FC

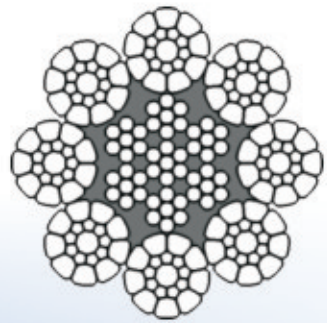


- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, with good flexibility and anti-fatigue performance; lifetime more than 1.5 times than ordinary rope.
- **Application:** wire rope for workover.

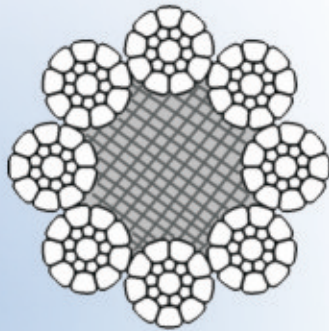


Nominal diameter mm	Mass (Approx. length mass) kg/100m		Tensile strength grade									
			1570 MPa		1670MPa		1770MPa		1870 MPa		1960 MPa	
	Minimum breaking force kN											
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
16	110	119	154	166	164	177	174	187	184	198	193	207
18	139	150	195	211	208	224	220	237	233	250	244	262
20	172	186	241	260	257	276	272	293	287	309	301	324
22	208	225	292	315	311	335	329	354	348	374	364	392
24	247	267	347	375	370	398	392	422	414	445	434	466
25	268	290	377	405	401	431	425	457	449	482	470	506
26	290	314	408	440	434	467	460	495	486	522	509	547
28	336	364	473	510	503	542	533	574	563	606	590	635
30	386	418	543	585	577	622	612	659	647	696	677	729
32	439	475	618	666	657	708	696	750	736	791	771	829
34	496	537	697	752	742	799	786	846	830	893	870	936
36	556	602	782	843	831	896	881	949	931	1002	976	1049
38	619	670	871	939	926	998	982	1057	1037	1116	1087	1169
40	686	743	965	1040	1026	1106	1088	1171	1149	1237	1204	1296
42	756	819	1064	1147	1132	1219	1199	1291	1267	1363	1328	1428
44	830	899	1168	1259	1242	1338	1316	1417	1391	1496	1457	1568
46	907	982	1276	1376	1358	1462	1439	1549	1520	1636	1593	1713
48	988	1069	1390	1498	1478	1592	1567	1687	1655	1781	1734	1866
50	1072	1160	1508	1626	1604	1728	1700	1830	1796	1932	1882	2024
52	1159	1255	1631	1758	1735	1869	1839	1979	1943	2090	2035	2190
54	1250	1354	1759	1896	1871	2015	1983	2135	2095	2254	2195	2361
56	1345	1456	1891	2039	2012	2167	2132	2296	2253	2424	2361	2539
58	1442	1562	2029	2187	2158	2325	2287	2463	2417	2600	2532	2724
60	1544	1671	2171	2341	2310	2488	2448	2635	2586	2783	2710	2915

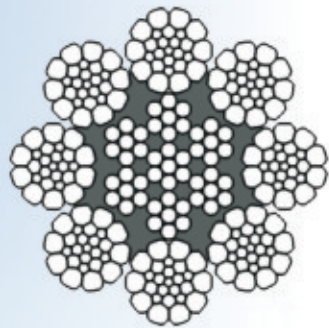
PS: sum minimum breaking force = minimum breaking force × 1.214 (FC) or 1.260 (IWRC)



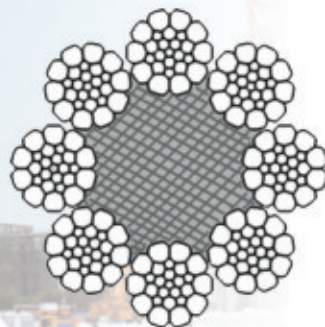
8 x K19S-IWRC



8 x K19S-FC



8 x K26WS-IWRC



8 x K26WS-FC



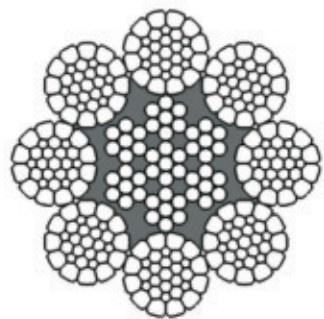
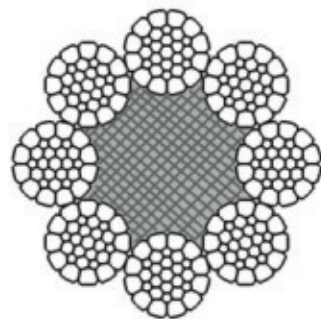
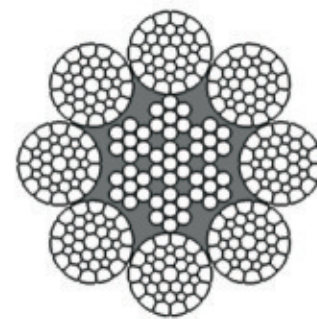
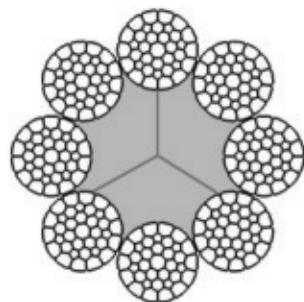
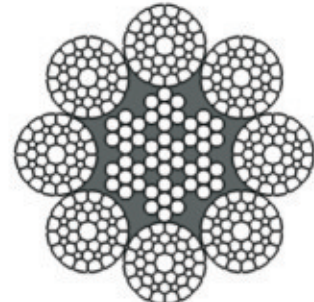
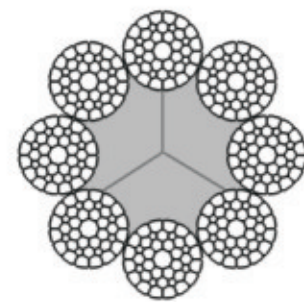
- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, lifetime is more than 1.5 times than ordinary rope.
- **Application:** wire rope for new type oil rig (rig type: over ZJ75).

Nominal diameter mm	Mass (Approx.length mass) kg/100m		Tensile strength grade									
			1570 MPa		1670MPa		1770MPa		1870 MPa		1960 MPa	
	FC	IWRC	Minimum breaking force kN									
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
16	106	120	133	165	141	175	150	186	158	196	166	206
18	134	152	168	209	179	222	189	235	200	248	210	260
20	166	188	207	258	220	274	234	290	247	306	259	321
22	201	227	251	312	267	332	283	351	299	371	313	389
24	239	271	298	371	317	395	336	418	355	441	373	463
26	281	318	350	436	373	463	395	490	417	518	437	543
28	325	368	406	505	432	537	458	569	484	601	507	630
30	374	423	466	580	496	616	526	653	555	689	582	723
32	425	481	531	660	564	701	598	743	632	784	662	823
34	480	543	599	745	637	792	675	839	713	886	748	929
36	538	609	671	835	714	888	757	940	800	993	838	1041
38	599	679	748	931	796	989	843	1048	891	1106	934	1160
40	664	752	829	1031	882	1096	935	1161	987	1226	1035	1286
42	732	829	914	1137	972	1208	1030	1280	1089	1351	1141	1418
44	804	910	1003	1248	1067	1326	1131	1405	1195	1483	1252	1556
46	878	994	1096	1364	1166	1449	1236	1535	1306	1621	1369	1700
48	956	1083	1194	1485	1270	1578	1346	1672	1422	1765	1490	1851
50	1038	1175	1295	1611	1378	1712	1460	1814	1543	1915	1617	2009
52	1122	1271	1401	1743	1490	1852	1579	1962	1669	2071	1749	2173
54	1210	1370	1511	1879	1607	1997	1703	2116	1799	2234	1886	2343
56	1302	1474	1625	2021	1728	2148	1832	2275	1935	2402	2028	2520
58	1396	1581	1743	2168	1854	2304	1965	2441	2076	2577	2176	2703
60	1494	1692	1865	2320	1984	2466	2103	2612	2222	2758	2328	2893



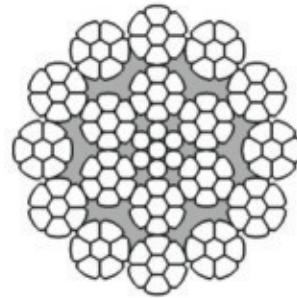
- **Feature:** bigger fill factor, high breaking force with smooth surface, excellent anti-abrasion and stability, with good flexibility and anti-fatigue performance, lifetime is more than 1.5 times than ordinary rope.
- **Application:** new type wire rope for mast raising line, dragline for vessel, anchor, wire rope for floating crane, wire rope for engineering vessel, wire rope for pipelayer .

Nominal diameter mm	Mass (Approx.length mass) kg/100m		Tensile strength grade							
			1570 MPa		1670MPa		1770MPa		1870 MPa	
	Minimum breaking force kN									
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
16	98	121	128	169	136	180	144	190	152	201
18	124	153	162	214	172	227	183	241	193	254
20	153	189	200	264	213	281	225	297	238	314
22	186	229	242	319	257	340	273	360	288	380
24	221	273	288	380	306	404	324	428	343	452
26	259	320	338	446	359	474	381	502	402	530
28	301	371	392	517	417	550	442	582	467	615
30	345	426	450	597	478	631	507	669	536	706
32	393	485	512	676	544	718	577	761	609	803
34	443	547	578	763	614	811	651	859	688	907
36	497	613	648	855	689	909	730	963	771	1017
38	554	683	721	953	767	1013	813	1073	859	1133
40	614	757	799	1056	850	1122	901	1189	952	1255
42	677	835	881	1164	938	1237	994	1311	1050	1384
44	742	916	967	1278	1029	1358	1091	1438	1152	1519
46	811	1001	1057	1396	1125	1484	1192	1572	1259	1660
48	884	1090	1157	1521	1225	1616	1298	1712	1371	1807
50	959	1183	1249	1650	1329	1754	1408	1857	1488	1961
52	1037	1280	1351	1785	1437	1897	1523	2000	1609	2121
54	1118	1380	1457	1924	1550	2045	1643	2167	1735	2288
56	1203	1484	1567	2070	1667	2200	1767	2330	1866	2460
58	1290	1592	1681	2220	1788	2360	1895	2499	2002	2639
60	1381	1704	1799	2376	1913	2525	2028	2675	2142	2824

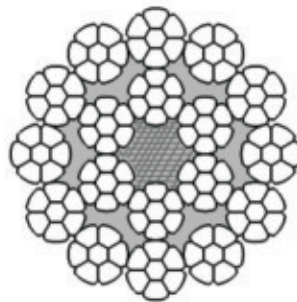
8 × K31WS – IWRC

8 × K31WS – FC

8 × K36WS – IWRC

8 × K36WS – FC

8 × K41WS – IWRC

8 × K41WS – FC




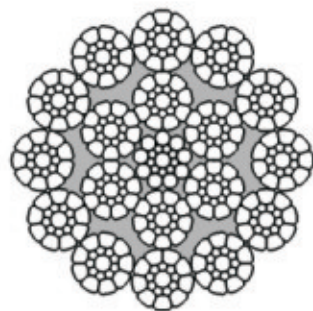
18 x K7 - WSC



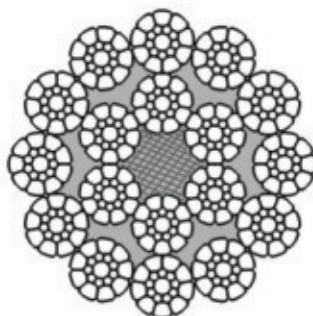
18 x K7 - FC



18 x K19S - WSC



18 x K19S - FC



Feature: high breaking force with smooth surface, excellent anti-abrasion, anti-rotate, lifetime is more than 1.5 times than ordinary rope.
Application: wire rope for pumping unit.

Nominal diameter mm	Mass (Approx. length mass) kg/100m		Tensile strength grade									
			1570 MPa		1670MPa		1770MPa		1870 MPa		1960 MPa	
	FC	IWRC	Minimum breaking force kN									
	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC	FC	IWRC
18	138	152	178	188	189	200	201	212	212	224	222	235
20	171	188	220	232	234	247	248	262	262	277	274	290
22	207	227	266	281	283	299	300	317	317	335	332	351
24	246	271	317	335	337	356	357	377	377	399	395	418
26	289	318	371	393	395	418	419	443	442	468	464	490
28	335	368	431	455	458	484	486	513	513	542	538	569
30	384	423	495	523	526	556	558	589	589	623	617	653
32	437	481	563	595	599	633	634	671	670	709	702	743
34	494	543	635	672	676	714	716	757	757	800	793	838
36	553	609	712	753	758	801	803	849	848	897	889	940
38	617	679	793	839	844	892	895	946	945	999	991	1050
40	683	752	879	929	935	989	991	1050	1050	1110	1100	1160
42	753	829	969	1020	1030	1090	1090	1160	1150	1220	1210	1280
44	827	910	1060	1120	1130	1200	1200	1270	1270	1340	1330	1400
46	904	995	1160	1230	1240	1310	1310	1390	1380	1460	1450	1530
48	984	1080	1270	1340	1350	1420	1430	1510	1510	1590	1580	1670
50	1070	1180	1370	1450	1460	1540	1550	1640	1640	1730	1720	1810
52	1150	1270	1490	1570	1580	1670	1680	1770	1770	1870	1850	1960
54	1250	1370	1600	1690	1700	1800	1810	1910	1910	2020	2000	2110
56	1340	1470	1720	1820	1830	1940	1940	2050	2050	2170	2150	2270
58	1440	1580	1850	1950	1970	2080	2080	2200	2200	2330	2310	2440
60	1540	1690	1980	2090	2100	2220	2230	2360	2360	2490	2470	2610