



Tel/WhatsApp: +8615533040524

E-mail: matthew@jfrogbolt.com

ADD: 1512, Building B, Youyi Times Plaza, Renmin East Road,
Zhonghua Street, Congtai District, Handan City,
Hebei Province

www.jfrogbolt.com



WHATSAPP CODE



WECHAT CODE

MINING ACCESSORIES

Product Catalogue



河北玖富工矿配件有限公司
HEBEI JIUFU INDUSTRIAL AND MINING PARTS CO., LTD

www.jfrogbolt.com

• Company profile

Jiufu Company is a professional manufacturer providing metal anchoring product solutions.- Founded in 2014, after 10 years of development, our anchoring products are sold to 40 countries including the United States, Canada, Russia, Chile, Peru, Colombia, etc. Currently, we have 13 national general agents, and our high-quality products have received high praise from customers in different countries.

Jiufu Company has a production workshop of 20000 square meters, 8 product production lines, 5 engineers, and 3 German testing equipment, which can meet the production needs of various products and accessories. The regular model inventory is 3000 tons and can be shipped within 7 days.

We have 18 international certificates and qualifications, including ISO and SGS, and can participate in bidding for different projects. Currently, our products are involved in the construction of concrete projects in 30 countries.

Jiufu Company is committed to providing high-quality anchoring product solutions for metal mining, bridges and tunnels.

• Certifications

ISO standard SGS Authentication 20+
AAA Product certificates 30+



20,000 square meters
FACTORY FLOOR AREA

3,000 tons
INVENTORY

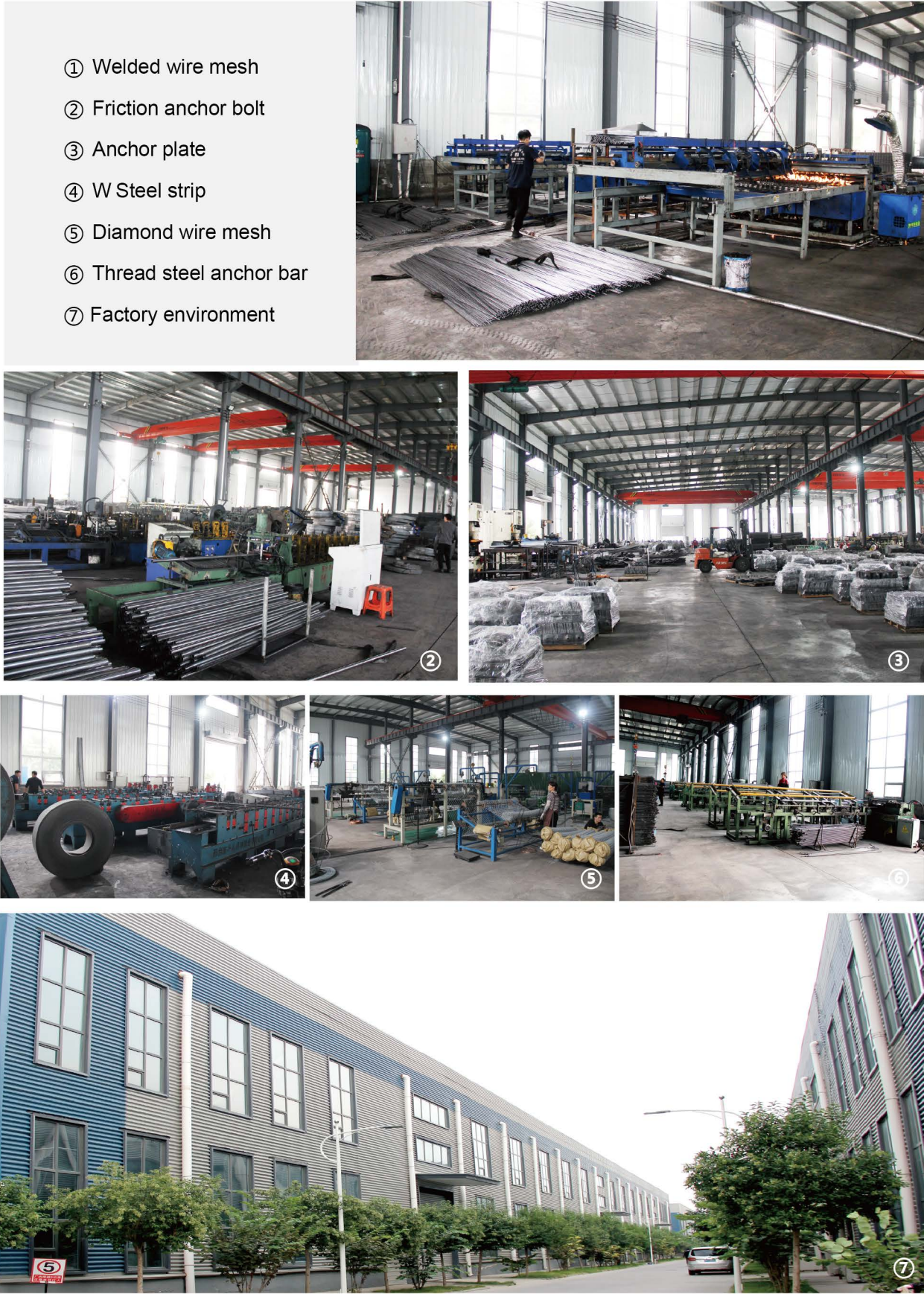
8
PRODUCTION LINE

5
ENGINEER

\$3 million
GOODS SUPPORT



• Production workshop

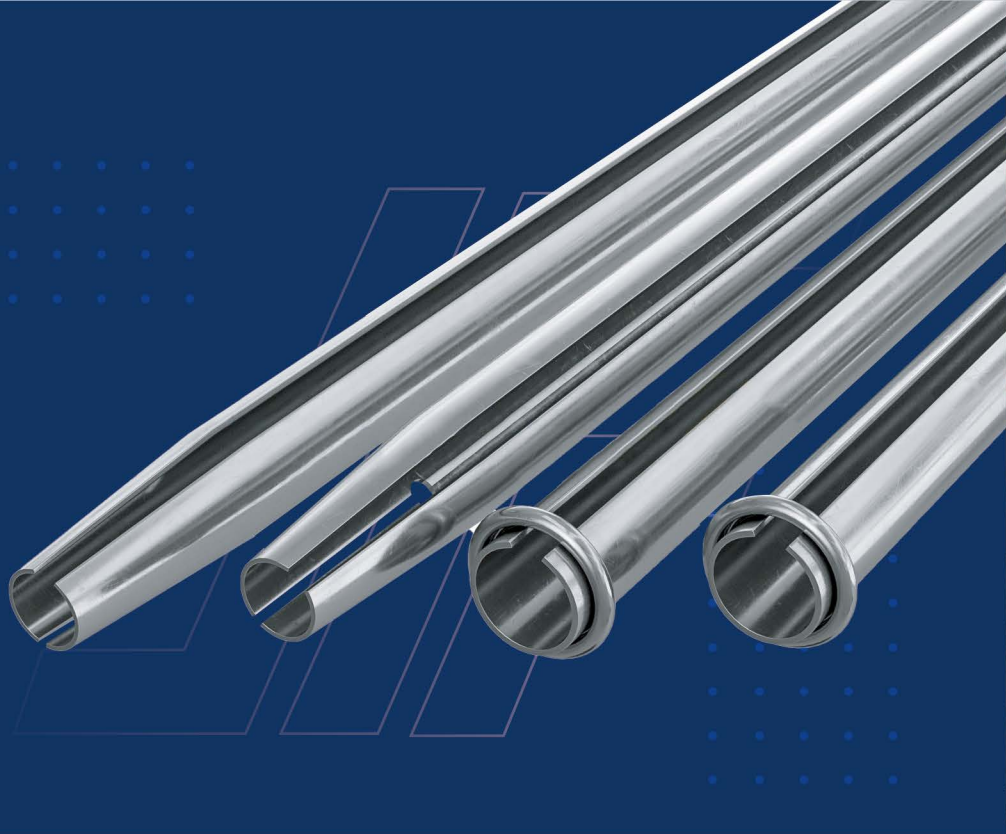


• Group photo



Friction Bolts

Immediate
Frictional Support



• Description

Split Set Bolt, also called Split Set Stabilizer or Friction Bolt, is an indispensable advanced material for underground mining support. Split set bolt is a very specific support product, and it is an advanced material used for the support of the roof of the underground copper or gold mining and other projects.

Friction bolts have been used internationally in mining for decades and are considered the simplest form of ground support available in metal mining. Compression of the high tensile steel "C" shape into a hole diameter smaller than the tube generates a load transfer from the steel to the rock. A steel ring is fixed to the collar end of the tube that will retain a plate on the installed tube to establish compressive force against rock.

Available in either black or hot dip galvanized. Variety of diameters (34 mm, 40 mm and 47 mm) and various lengths from 600 mm to 3,000 mm. Used in the development and production headings for immediate support with quick and easy installation.

• How To Use And Assemble ?

A pull collar fixing at the ring end enables load testing during the bolt installation. The tapered end of friction bolt can be easily inserted into the drilled holes. Friction bolt can be installed with either hand held or mechanized equipment, such as a jackdrill, a stopper, a roof bolting jumbo, or any other type of drill.

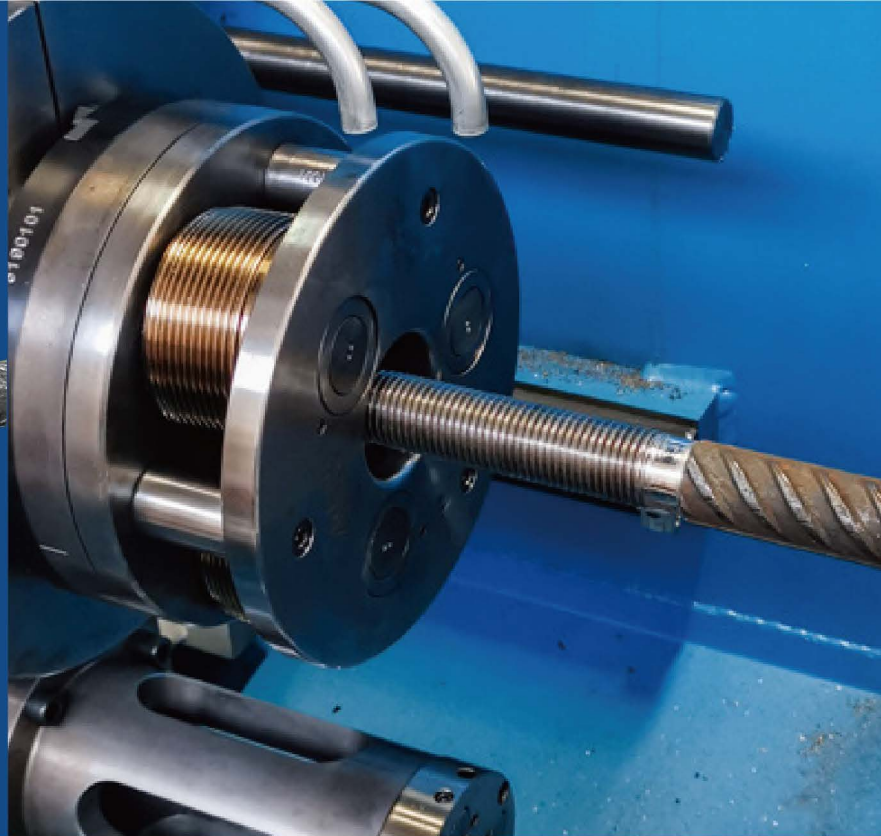
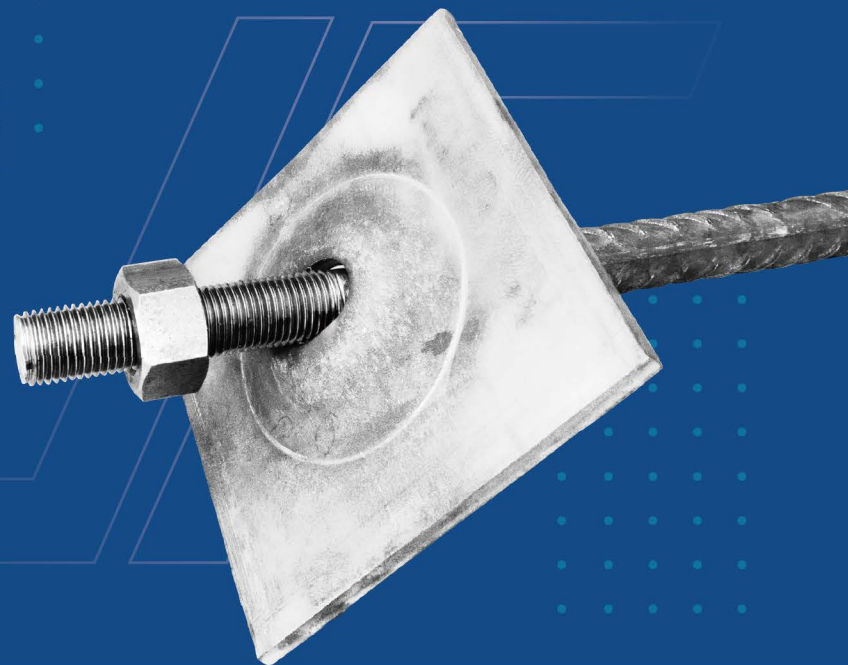


Rod Dia. (mm)	Specification	Ultimate Tensile Load (kN)	Tensile Force of Ring (kN)	Cross Section Area (mm ²)	Material	Applicable Drilling-hole Dia (mm)
33	JF33×2.5	100-110	75-80	214	Q235/Q355	28~32
	JF33×3.0	110-120	80-85	253		
39	JF39×2.5	110-120	80-95	251	Q235/Q355	35~48
	JF39×3.0	120-140	95-105	297		
43	JF43×2.5	115-130	90-105	283	Q235/Q355	39~42
	JF43×3.0	130-140	105-110	355		
46	JF46×2.5	120-140	100-110	299	Q235/Q355	42~45
	JF46×3.0	140-165	110-120	354		

Rod Dia. (mm)	Specification	Length (mm)	Thickness (mm)	Bearing Capacity (kN)	Material	Weight (kg)
33	JF33-150×150×4	150	4	70-80	Q235/Q355	0.63
39	JF39-150×150×4	150	4	70-80	Q235/Q355	0.62
43	JF43-150×150×6	150	4	80-90	Q235/Q355	0.94
46	JF46-150×150×6	150	4	80-90	Q235/Q355	0.94

Thread Steel Anchor Bar

Rock Strengthening



• Description

JF-bar anchor uses a reinforcing bar as a load-bearing element, which has a metric thread on one side. JF rod anchors are used in more demanding, steeper terrains, and in the construction of tunnels.

It can be installed on earthy and rocky terrain (tunnels, slope stabilization, various fixings). Rock and soil anchoring is a construction technique used to increase and maintain the stability of a rock or soil mass. The installation of anchors as reinforcing elements increases the shear strength of the terrain. In this process, anchors are mainly subjected to tensile load.

The anchor rod is obtained when a suitable thread is cold-rolled on the reinforcing rod on one side of the ribbed reinforcing rod. The base plates are made from steel flat sheets (flat steel). The hexagon nut is nonstandard, with a standard metric thread, it is purpose-built in a CNC machine from hexagonal material.

• Main applications



Slope protection



Embankment protection



Protection of construction pits



Slope protection combined with nets



Securing the tunnel and creating an open tunnel front.

The rock and soil anchor system can be used in compact and loose soils and rocks.

• Technical Characteristics

Diameter	Nut	Nominal tensile capacity F _{m,nom} k min	Force at the yield point F _{p0.2} kN min	Re N/mm ² min	Re N/mm ² 2 min	Plate mm	Spacer d*s mm
25	M25.65 x 3mm	250	220	500	540	150x150x10 200x200x10	32
28	M28.65 x 3mm	340	300	500	540	200x200x10 150x150x10	32
32	M33.18 x 3.5mm	470	420	500	540	200x200x12	40

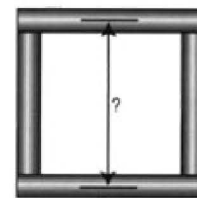
PSB830				PSB930				PSB1080			
Min Yield Stress/load Mpa	Min Yield Stress/load kN	Min Yield Stress/load Mpa	Min Yield Stress/load kN	Min Yield Stress/load Mpa	Min Yield Stress/load kN	Min Yield Stress/load Mpa	Min Yield Stress/load kN	Min Yield Stress/load Mpa	Min Yield Stress/load kN	Min Yield Stress/load Mpa	Min Yield Stress/load kN
830	147	1030	182	930	165	1080	191	1080	191	1230	218
830	261	1030	323	930	292	1080	339	1080	339	1230	386
830	408	1030	506	930	457	1080	530	1080	530	1230	604
830	667	1030	828	930	748	1080	868	1080	868	1230	989
830	845	1030	1049	930	947	1080	1099	1080	1099	1230	1252
830	1043	1030	1295	930	1169	1080	1358	1080	1358	1230	1546
830	1629	1030	2022	930	1826	1080	2120	1080	2120	1230	2414

Welded Mesh Straps Mesh

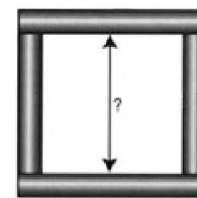
Rock Strengthening

Diameters and Specifications

Size of Opening

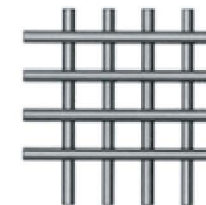


Measured
center-to-center
of wire



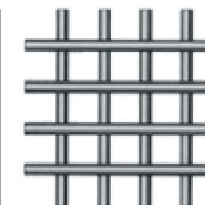
Measured
inside-to-inside
of opening

Edge Requirements



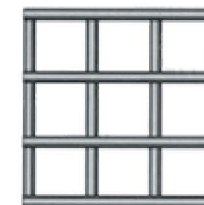
Random Tails

- Easiest (least expensive) to shear.
- Fewer cuts to get product to finished size.



Equal Tails

- Custom welded mesh is often made with equal tails to reduce cost.
- No need to re-size.



Flush Edges

- Material has to be oversized, then sheared down.
- Scrap and extra processes increase the price.
- Less likely to be damaged in shipping.

• JIU FU Welded wire mesh

Welded mesh is mainly used on the surface of the rock layer to prevent the rock from falling after being broken. The welded mesh is linked with a large number of bolts to form an integrated support system, which greatly improves the safety of the mine.

JIUFU welded wire mesh is made of high-strength steel wire, welded by high-frequency welding machines. the welding are not easy to crack.

In coal mine roadway support, coal mine steel mesh is used in combination with steel mesh, bolts and joists, to form an integral bearing structure with bolts as the mainstay.

• JIU FU Straps mesh

Osro rod straps are used in mining and tunnelling to provide continuous strip support between rock bolts, inhibiting fall-outs between the bolts and helping to maintain the integrity of the rockmass. The rock bolts are installed through the Osro straps and tightened against the rock surface.The stiffness of the strapresults in pre-loading of the rock, as well as transferring loads due to rock movement onto the bolts.Osro straps may replace steel sheets and formed plates such as “W” straps.

Specifications	Unit	Data
Length	m	2.0, 5.5, 6.0
Width	mm	300
Main Rods		5 parallel rods, 8 mm diameter
Cross Wires		Every 150 mm, 6 mm diameter
End Wires		2 cross wires, 75 mm apart at ends of each strap
Galvanising		If specified

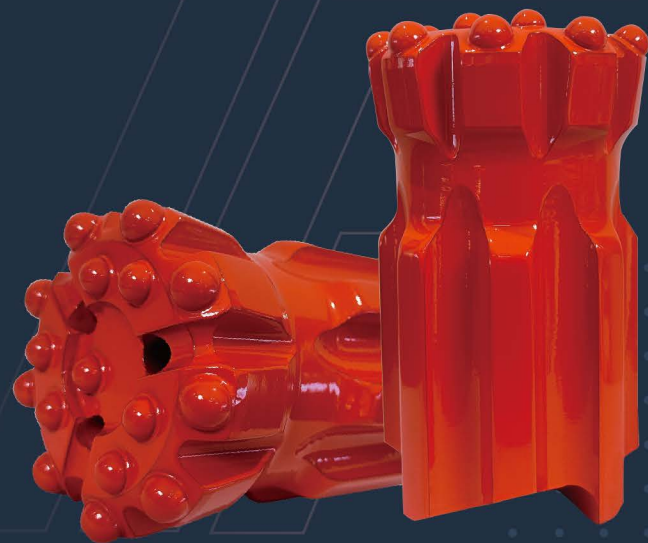
Laboratory data may vary in the field due to unevenness of the rock surface and loads imposed.

Mesh Count or Center-to- Center	Wire Diameter		Opening Width		Open Area %	Weight, Stainless Steel	
	inches	mm	inches	mm		Lbs/sq. ft.	Kg/m ²
4 x 4	0.028	0.711	0.222	5.639	78.9%	0.202	0.986
3 x 3	0.047	1.194	0.286	7.264	73.6%	0.428	2.090
2 x 2	0.047	1.194	0.453	11.51	82.1%	0.284	1.387
2 x 2	0.063	1.600	0.437	11.10	76.4%	0.507	2.475
1/2" x 1" c.c.	0.063	1.600	0.437	11.10	81.9%	0.380	1.855
1" x 1" c.c.	0.063	1.600	0.937	23.80	87.8%	0.263	1.284
1" x 1" c.c.	0.078	1.981	0.920	23.37	84.6%	0.400	1.953
1" x 1" c.c.	0.080	2.032	0.920	23.37	84.6%	0.416	2.031
1" x 1" c.c.	0.125	3.175	0.875	22.23	76.6%	1.016	4.961
1" x 1" c.c.	0.135	3.429	0.865	21.97	74.8%	1.185	5.786
1-1/2" x 1 1/2" c.c.	0.135	3.429	1.365	34.67	82.8%	0.796	3.886
2" x 1" c.c.	0.125	3.175	1.875	47.63	82.0%	0.766	3.740
2" x 1" c.c.	0.135	3.429	1.865	47.37	80.7%	0.893	4.360
2" x 2" c.c.	0.109	2.769	1.895	48.13	89.8%	0.392	1.914
2" x 2" c.c.	0.135	3.429	1.865	47.37	87.0%	0.602	2.939
2" x 2" c.c.	0.080	2.032	1.920	48.77	70.6%	0.211	1.030
2" x 2" c.c.	0.125	3.175	1.875	47.63	87.9%	0.516	2.519
2" x 2" c.c.	0.1875	4.763	1.813	46.04	82.1%	1.154	5.634
2" x 2" c.c.	0.250	6.350	1.750	44.45	76.6%	2.063	10.072
3" x 3" c.c.	0.1875	4.763	2.813	71.45	87.9%	0.781	3.813
3" x 3" c.c.	0.250	6.350	2.750	69.85	84.0%	1.396	6.816
4" x 2" c.c.	0.250	6.350	3.750	95.25	82.0%	1.563	7.631
4" x 4" c.c.	0.1875	4.763	3.813	96.84	90.8%	0.595	2.905
4" x 4" c.c.	0.250	6.350	3.750	95.25	87.9%	1.063	5.190

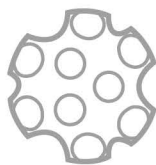
Nominal weights are similar for stainless steel, plain steel and galvanized steel.

Thread Button Bit

Mining Rock Drilling Tools



HOW TO CHOOSE A STYLE



Normal drill bit

Suitable for ordinary rock, hardness 8–14, abrasive rock. The main appearance is flat type, tooth diameter is moderate, alloy impact resistance and wear resistance balance, multi-choice high-ball teeth and semi-ballistic teeth, generally adapted to a variety of rocks, for the general rock and unclear rock type of the case is recommended.



Soft rock drill bit

Mainly applicable to non-breaking, hardness of 8 or less, non-abrasive rock. The main appearance is concave, tooth diameter is small, alloy impact resistance and wear resistance is better, more selection of semi-ballistic teeth, ballistic teeth, powder ingernifying effect is better than ordinary type, in order to improve work efficiency.



Hard rock drill bit

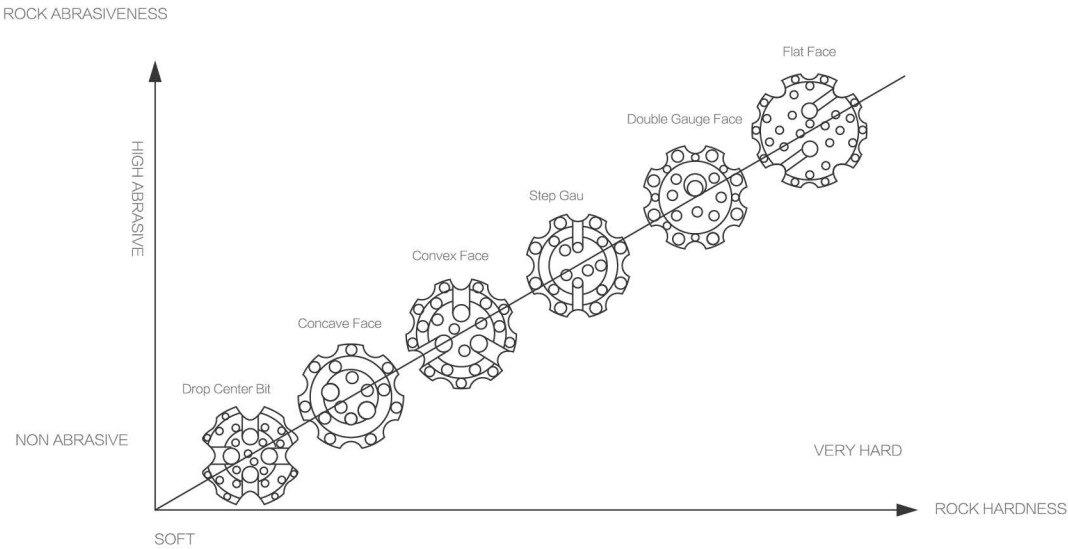
Mainly used in F14 and above, non-abrasive rocks. The main performance is a large profile, tooth-shaped multi-choice ball teeth and high-ball teeth, alloy wear resistance and impact resistance is better, powder inger effect is slightly lower than ordinary drill bit. Because the amount of alloy is more, the price is higher than that of the normal type.



Retrac drill bit

Mainly used in the rock relatively broken, rock layer changes in the construction, the main appearance of concave band tail design, conducive to unexpected situations in the back of the brazing, front-end style can be selected by reference to the above product design.

BIT FACE SHAPE SELECTION



HOW TO SELECT A PROFILE



Parabolic button

Parabolic Button are usually used as gauge buttonsand front buttons of DTH Bits,suitable for medium abrasive and hard formations.



Ballistic button

The high tooth height, mainly used in soft rock and ordinary rock F12 below, the speed of entry is fast, but the hard rock, very hard rock is prone to the phenomenon of broken teeth.



Hemispherical button

The tooth height is low, mainly used in extremely hard rock F14 or above, improve wear resistance, prevent the appearance of broken teeth, the speed is lower.

TRAPEZOIDAL STANDARD THREAD BUTTON BITS



Description of the model

L 89 - T 45 - 13D - 35 - B13

The gauge button diameter is 13mm.

Gauge tooth alloy angle

13 - Number of alloys D- alloy type

Thread Dia 45mm

T=Trapezoidal thread

Bit Dia 89mm

Thread Bits

RETRAC THREAD BITS

Description of the model

LF 89 - T 45 - 13D - 35 - B13

The gauge button diameter is 13mm.

Gauge tooth alloy angle

13 - Number of alloys D- alloy type

Thread Dia 45mm

T=Trapezoidal thread

Gauge Dia 89mm

Thread Bits (Retrac)



Product technical parameters

				NO.Button size					
						NO.Flushing Holes (PCS)			
Number	Model	Bit Dia.(mm)	Thread	Gauge	Front	Gauge tooth angle	Side	Front	Weight (KG)
L024	L64-T38-9D-40-B12	64	T38	6×12	3×11	40°	2	1	1.6
L025	L64-T38-10D-35-B12	64	T38	6×12	3×11 1×9	35°		3	1.6
L026	L64-T38-12D-35-B10	64	T38	8×10	4×10	35°	1	2	1.6
L027	L76-T38-12D-35-B12	76	T38	8×12	4×12	35°	1	4	2.4
L028	L76-T38-10D-40-B13	76	T38	6×13	4×12	40°	1	2	2.45
L029	L76-T45-12D-35-B12	76	T45	8×12	4×12	35°	1	4	2.5
L030	L76-T45-13D-35-B12	76	T45	8×12	5×11	35°	1	4	2.5
L031	L89-T38-14D-35-B12	89	T38	8×12	4×12 2×10	35°		4	3
L032	L89-T38-13D-35-B13	89	T38	8×13	5×12	35°	1	4	3.25
L033	L89-T45-14D-35-B13	89	T45	8×13	4×12 2×10	35°		4	3.3
L034	L89-T45-13D-35-B13	89	T45	8×13	5×12	35°	1	4	3.4
L035	L89-T51-14D-35-B13	89	T51	8×13	4×12 2×10	35°		4	3.4
L036	L89-T51-13D-35-B13	89	T51	8×13	5×12	35°		4	3.4
L037	L92-GT60-14D-35-B14	92	GT60/TW60	8×14	6×12	35°		4	5.8
L038	L102-T45-14D-35-B14	102	T45	8×14	4×12 2×10	35°		4	4.2
L039	L102-T45-18D-35-B13	102	T45	9×13	9×11	35°		3	4.3
L040	L102-T51-14D-35-B14	102	T51	8×14	4×12 2-11	35°		4	4.2
L041	L102-T51-18D-35-B13	102	T51	9×13	9×11	35°		3	4.5
L042	L102-GT60-18D-35-B14	102	GT60/TW60	9×14	9×12	35°		3	6.5
L043	L115-T45-15D-35-B14	115	T45	8×14	4×14 3×12	35°		4	5.5
L044	L115-T45-19D-35-B14	115	T45	9×14	10×12	35°		3	5.8
L045	L115-T51-16D-35-B14	115	T51	8×14	4×14 4×12	35°		4	5.5
L046	L127-T45-19D-35-B15	127	T45	9×15	10×13	35°		3	7.1
L047	L165-GT60-21D-35-B16	165	GT60/TW60	9×16	12×16	35°		3	15

Product technical parameters

				NO.Button size					
						NO.Flushing Holes (PCS)			
Number	Model	Bit Dia.(mm)	Thread	Gauge	Front	Gauge tooth angle	Side	Front	Weight (KG)
LF001	LF57-R32-9D-35-B11	57	R32	6×11	3×10	35°		3	1.6
LF002	Lf64-R32-10D-35-B11	64	R32	6×11	3×11 1×9	35°	1	3	2
LF003	Lf64-T38-9D-35-B12	64	T38	6×12	3×11	35°	1	2	2
LF004	Lf64-T38-13D-35-B10	64	T38	8×10	4×10 1×9	35°		4	2
LF005	LF76-T38-10D-35-B12	76	T38	6×11	4×11	35°	2	2	3.2
LF006	LF76-T38-13D-35-B11	76	T38	8×11	4×11 1×11	35°		4	3.2
LF007	Lf76-T45-12D-35-B12	76	T45	8×12	4×11	35°	2	2	3.1
LF008	LF76-T45-13D-35-B12	76	T45	8×12	4×11 1×11	35°		4	3.1
LF009	LF78-T38-13D-35-B12	78	T38	8×12	4×11 1×11	35°		4	3.5
LF010	LF89-R32-13D-35-B12	89	R32	8×12	5×11	35°		2	4.8
LF011	LF89-R32-14D-35-B12	89	R32	8×12	4×11 2×11	35°		4	4.8
LF012	LF89-T38-13D-35-B12	89	T38	8×13	5×12	35°	2	2	4.1
LF013	LF89-T38-14D-35-B12	89	T38	8×12	4×11 2×11	35°		4	4.1
LF014	LF89-T45-14D-35-B12	89	T45	8×13	5×12	35°	2	2	4.5
LF015	LF89-T45-15D-35-B13	89	T45	8×13	4×12 1×12	35°		4	4.5
LF016	LF89-T51-14D-35-B12	89	T51	8×13	5×12	35°	2	2	4.3
LF017	LF89-T51-15D-35-B13	89	T51	8×13	4×13 1×12	35°		4	4.3
LF018	LF102-T45-15D-35-B12	102	T45	8×12	7×12	35°		2	7.1
LF019	Lf102-T45-18D-35-B13	102	T45	9×13	9×11	35°		3	6.5
LF020	LF102-T45-14D-35-B14	102	T45	8×14	4×12 2×11	35°		4	7.3
LF021	LF102-T51-15D-35-B12	102	T51	8×12	7×12	35°		2	6.5
LF022	LF102-T51-18D-35-B13	102	T51	9×13	9×11	35°		3	6.8
LF023	LF102-T51-14D-35-B14	102	T51	8×14	4×12 2×11	35°		4	6.8
LF024	LF105-T45-14D-35-B14	105	T45	8×14	6×13	35°		2	7.1
LF025	LF115-T45-15D-35-B14	115	T45	8×14	4×13 3×12	35°		4	7.8
LF026	LF115-T45-19D-35-B14	115	T45	9×14	10×12	35°		3	7.9

Rock Drilling Tools

Drilling Applications



high quality top hammer rock drilling tools,which are widely use in mines, quarries, earthworks and other engineering drilling blasting hole, guardrail hole, mountain reinforcement, anchorage and other engineering holes, geothermal exploration hole, Well bore and other fields.

THREADED CONNECTION - DRIFTING DRILL ROD



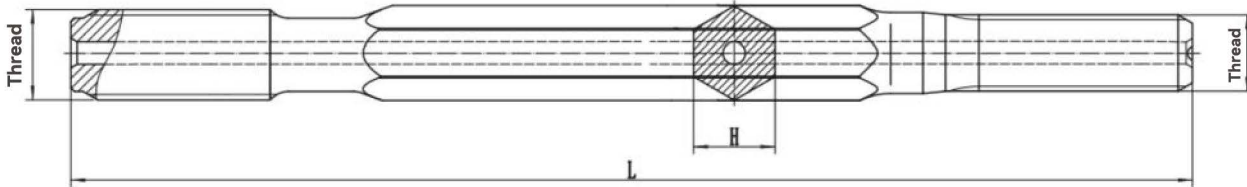
Product technical parameters

		Drifting and tunnelling drill rod				
		Length		The diameter of the tool		
Number	Model	mm	ft	mm	in	Weight(KG)
JF 001	JF 32-R32-H32-T38-3050	3050	10'	32	1 3/8"	19.5
JF 002	JF 32-R32-H32-T38-3700	3700	12'	32	1 1/4"	24
JF 003	JF 32-R32-H32-T38-4305	4305	14'	32	1 1/4"	27.9
JF 004	JF 32-R32-H32-T38-4915	4915	16'	32	1 1/4"	31.8
JF 005	JF 35-R32-H35-T38-3700	3700	12'	35	1 3/8"	29
JF 006	JF 35-R32-H35-T38-4305	4305	14'	35	1 3/8"	33.8
JF 007	JF 35-R32-H35-T38-4915	4915	16'	35	1 3/8"	38.6
JF 008	JF 35-R32-H35-T38-5525	5525	18'	35	1 3/8"	43.4

Product technical parameters

		Bench and production drill rod				
		Length		The diameter of the tool		
Number	Model	mm	ft	mm	in	Weight(KG)
JF 013	JF 39-T38-R39-T38-3050	3050	10'	39	1 17/32"	25.5
JF 014	JF 39-T38-R39-T38-3660	3660	12'	39	1 17/32"	30.6
JF 015	JF 39-T38-R39-T38-4270	4270	14'	39	1 17/32"	35.4
JF 016	JF 52-T51-R52-T51-3660	3660	12'	52	2"	55.7
JF 017	JF 52-T51-R52-T51-4265	4265	14'	52	2"	64.8

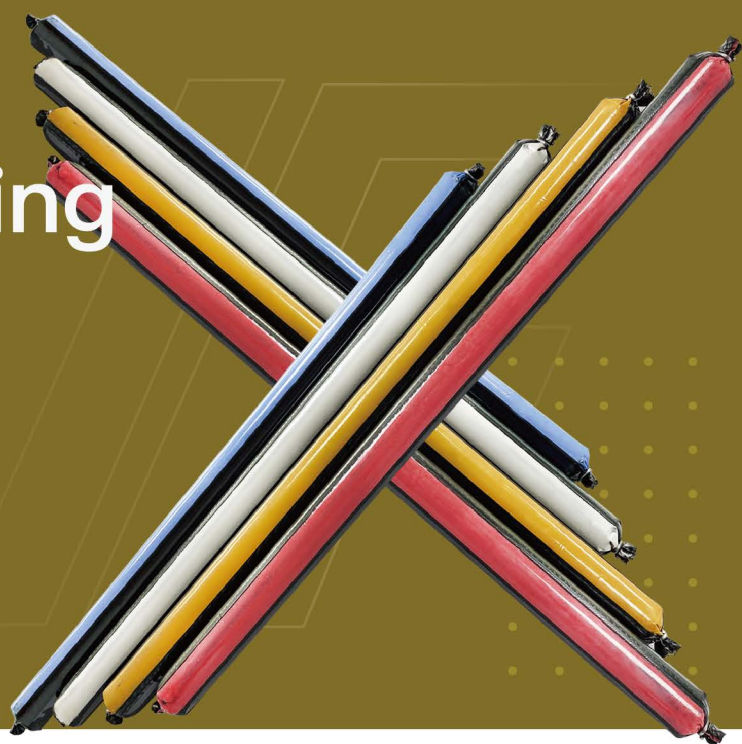
DRIFTING DRILL ROD



Name	Length (mm)	Diameter (mm)	Thread	Weight (kg)
Drifting Drill Rod	1200	H25	R25-R22	4.66
	1500			5.82
	1800			6.98
	2000			7.76
	2175			8.44
	2175	H28	R28-R25	10.98
	2475			12.50
	3050			15.40
	3700			18.69
	4050			20.45
	3090	H32	T38-R32	19.71
	3700			23.61
	4305			27.47
	4915			31.36
	5525			35.25
	3090	H35	T38-R32	24.35
	3700			29.16
	4305			33.92
	4915			38.73
	5525			43.54

Resin Anchoring Agent

Rapid Mechanized Construction



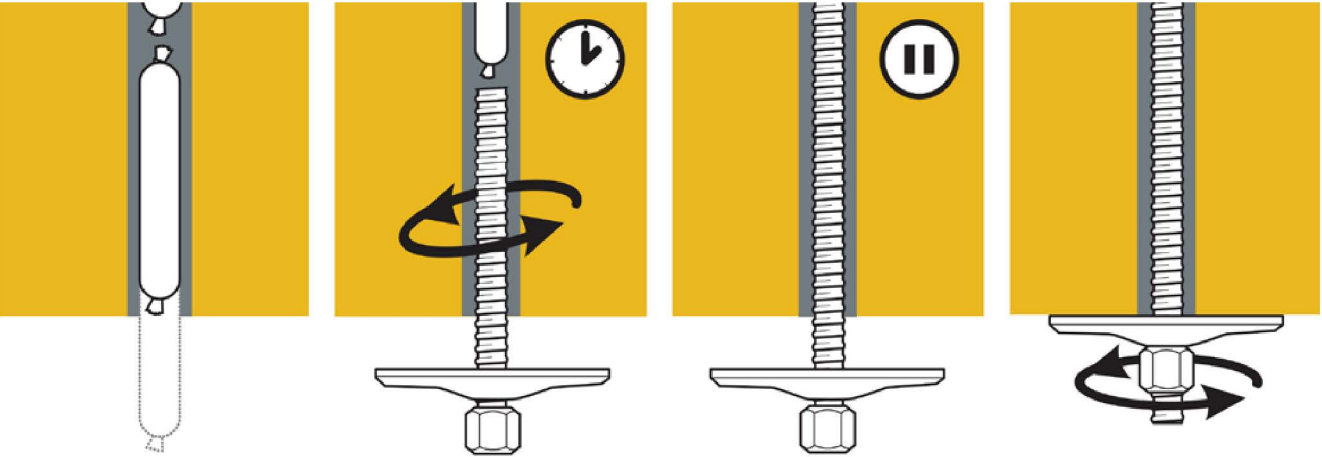
The anchoring agent is a kind of mastic bonding material made of unsaturated polyester resin for high strength anchoring agent, marble powder, accelerator and auxiliary materials in a certain proportion. Resin anchoring agent has the characteristics of quick curing at room temperature, high bonding strength, reliable anchoring forceand good durability, especially suitable for rapid mechanized construction.

• Technical Parameter

Type	Diameter and length (mm* mm)	Weight (g)	Hole Diameter (m)	Piece/Box
JF2335	φ23*350	300±15	φ28±2	50
JF2360	φ23*600	500±15	φ28±2	50
JF2835	φ28*350	400±15	φ32±2	40
JF2850	φ28*500	640±15	φ32±2	40
JF3535	φ35*350	600±15	φ42±2	20
JF3540	φ35*400	800±10	φ42±2	20

Speed	GelTime Seconds	Hold Time Seconds	Color Code
CKA	8~25	10~30	Yellow
CKB	26~40	30~60	Red
MSK	41~90	90~180	Blue
MSZ	91~180	480	White

Rotation direction: Coal - Clockwise / Hard Rock - Anti Clockwise



• Product Features

- Easy to install, requiring no specialty injection equipment
- Resistant to anchoring failure caused by blasting or vibration
- Rapid anchoring of the bolt to the surrounding strata
- High load transfers achievable almost immediately
- Full column bonded bolts strongly resist the horizontal and lateral strata movement associated with convergence
- Provides strength and rigidity to prevent sag
- Acts as a reinforcement that clamps the individual strata layers into a single high strength beam

Cutting Pick

Hardrock And Coal Mining

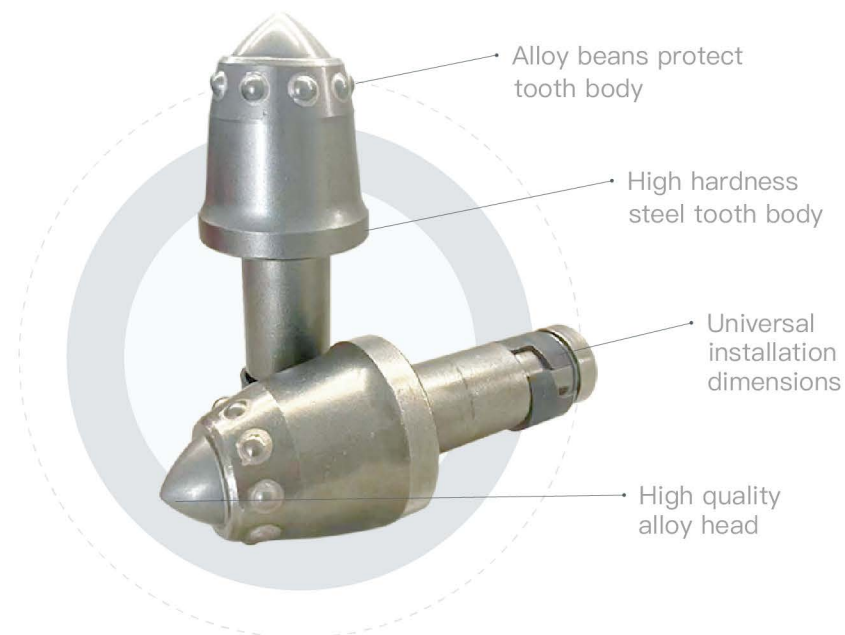


• Description

The cutting picks is a tool attached to the rotary cutting wheel, which is used for cutting coal rock, whole rock, hard rock and other rock formations. It has the characteristics of high-speed rotation, high strength, high wear resistance, etc., and can complete the high-efficiency cutting task in a short time.

• Advantage

- Highest grade steel
- 100% virgin materials
- Micro-grain tungsten carbide tips
- Excellent wear and impact resistance
- Longer tool life
- Varied sizes and configurations are available
- Competitive price



• Products



Swellex Bolt

Rapid And Performing
Stabili-sation Device

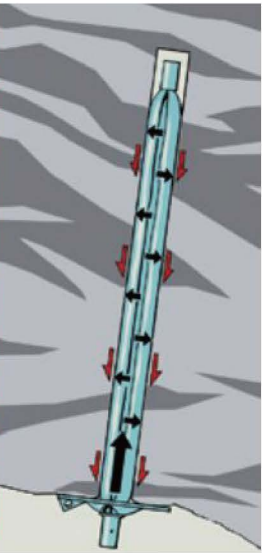
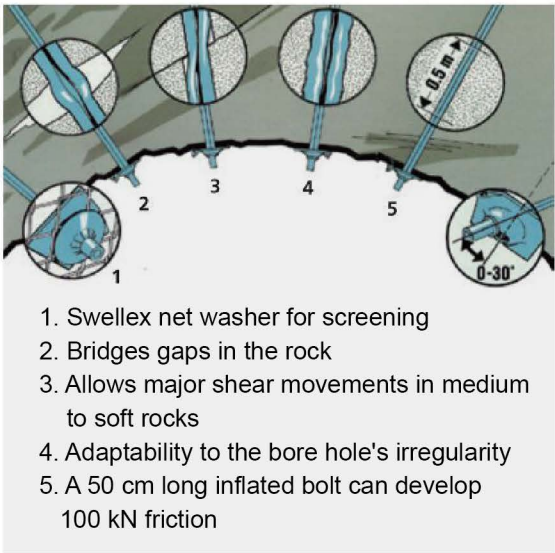


• Description

Swellex expandable rock-bolting system has gained wide recognition in the mining and tunneling industry. This unique rock bolt consists of a welded tube folded in upon itself, sealed at one end. It is re-expanded using a high pressure water flow provided by a special pump and adapter. The bolt is expanded inside the borehole drilled into the excavation wall. The installation process is easy and very similar to other rock bolt installation processes, making Swellex rock bolts accessible to all operators.

• Technical Data

JIU FU Swellex Bolt	PM12	PM16	PM24
Minimum Breathing Load (kN)	110	160	240
Minimum Elongation A5	10%	10%	10%
Minimum Yield Load (kN)	100	130	130
Inflation Water Pressure	300bar	240bar	240bar
Hole Diameter (mm)	32-39	43-52	43-52
Profile Diameter (mm)	27	36	36
Tube Thickness (mm)	2	2	2
Original Tube Diameter (mm)	41	54	54
Upper BushingDiameter (mm)	28	38	38
Bushing Head Diameter (mm)	30/36	41/48	41/48
Length (m)		Weight (kg)	
1.2	2.5		
1.5	3.1		
1.8	3.7	5.1	7.2
2.1	4.3	5.8	8.4
2.4	4.9	6.7	9.5
3.0	6.0	8.2	10.6
3.3	6.6	8.9	12.9
3.6	7.2	9.7	14.0
4.0	8.0	10.7	15.6
4.5	9.0	12.0	17.4
5.0	9.9	13.3	19.3
6.0	11.9	15.9	23.1



Friction
and
interlocking
support of
the whole
length