

Self-drilling hollow anchor bolts and accessories



Application

During the constructions of underground works, it is very common to encounter soft rock, fractured zone and large deformation due to high ground stress. In the case of serious collapsing, extra-long anchor is needed instead of ordinary one.



Maxdrill self-drilling anchor embodies drilling, grouting and anchoring as a whole.

Widely used as an efficient anchoring means, in tunnel pre-support, slope, coast, mine, water conservancy projects, building foundation, roadbed reinforcement and geological diseases treatment such as landslide, crack, sink age. It's irreplaceable in narrow construction environment.



I. 自进式锚杆 Self-drilling hollow anchor bar

	Outer side diameter	Average Internal diameter	Effective external diameter	Aver.eff. Cross sectional area	Ultimate load capacity	Yield load capacity	Average tensile strength Rm	Average yield strength Rp0,2	Theoretical weight	Thread type
	mm	mm	mm	mm ²	KN	KN	N/mm ²	N/mm ²	KG/m	
R25N	25	14	23	290	200	150	690	520	2.3	ISO 10208
R32N	32	18.5	29.1	430	280	230	650	530	3.4	
R32S	32	15	29.1	520	360	280	690	540	4.1	
R32L	32	22	29.1	340	220	180	650	530	2.7	
R38N	38	19	35.7	770	500	400	650	520	6.1	
R51L	51	36	47.8	890	550	450	620	510	7.0	ISO 1720
R51N	51	33	47.8	1070	800	630	750	590	8.4	
T76N	76	51	76	1900	1600	1200	840	630	15.0	
T76S	76	45	76	2500	1900	1500	760	600	19.7	
Anchor plate	120mm X 120mm X 6mm			150mm X 150mm X 8mm			200mm X 200mm X 10mm			
Anchor nut	SW41 x H35			SW46 x H45			SW65 x H55			
Coupling	D35 x L150	D41 x L160		D55 x L170			D64 x L120			
Drill Bit	According to different condition, choose alloy, steel... Bit, custom design is available.									



Bit with and without sintered carbide inserts are all available.



R25

	Description	Size	Weight (kg)	Part No.	Remark
Bit with thread R25	Cast cross bit	R25/42 mm	0.35	25MR31042	Cast cross bit for sand and gravel
		R25/51 mm	0.38	25MR31051	
	Steel cross bit	R25/42 mm	0.30	25MR31142	Hardened cross bit for loose to medium dense conditions with small boulders.
		R25/51 mm	0.40	25MR31151	
	TC cross bit	R25/42 mm	0.35	25MR31242	TC cross bit for soft to medium rock formations
		R25/51 mm	0.45	25MR31251	

Bar R25	Length (mm)	Part No.
	1 m long	25MR01
	2 m long	25MR02
	3 m long	25MR03
	4 m long	25MR04
	6 m long	25MR06

Coupler R25	Diameter (mm)	Length (mm)	Part No.
	38	150	25MR1538

Nut R25	Key size (mm)	Length (mm)	Part No.
	41	41	25MR4141

Spherical nut R25	Key size (mm)	Length (mm)	Weight (kg)	Part No.
	41	41	0.33	25MR4141S

Anchor plate R25	Dimension (mm)	Hole diameter (mm)	Weight (kg)	Part No.
	150×150×8	27	1.36	25MR0827
	200×200×10	27	2.99	25MR1027

R32

	Description	Size	Weight (kg)	Part No.	Remark
Bit with thread R32N & R32S & R32L	Cast cross bit	R32/51 mm	0.45	32MR31051	Cast cross bit for sand and gravel
	Steel cross bit	R32/51 mm	0.40	32MR31151	Hardened steel bit for loose to medium dense ground conditions
		R32/76 mm	1.30	32MR31176	
	Steel 3 cutter bit	R32/76 mm	1.20	32MR31376	
	TC cross bit	R32/51 mm	0.45	32MR31251	TC insert bit for soft to medium rock formations
	TC 3 cutter bit	R32/76 mm	1.30	32MR33276	
	Steel arched bit	R32/51 mm	0.45	32MR34151	Hardened arched bit for optimized geometry for unconsolidated soil with small boulders
	TC arched bit	R32/51 mm	0.45	32MR34251	TC arched bit for optimized geometry for soft to medium rock formations
	Steel button bit	R32/51 mm	0.60	32MR30151	Hardened button bit for unconsolidated rock with boulders
	TC button bit	R32/51 mm	0.65	32MR30251	TC insert button bit for medium rock formation
	EX bit	R32/51 mm	0.40	32MR31151	Hardened cross cut drill bit, suitable for the majority of applications including narrow bands of soft rock.
	EXX bit (alternative)	R32/51 mm	0.50	32MR31251	EXX is the hardest drill bit available, for strong rock, hard seams and concrete footings.

	Length (mm)	Type	Part No.
Bar R32	1 m long	R32L	32MR01L
		R32N	32MR01N
		R32S	32MR01S
	2 m long	R32L	32MR02L
		R32N	32MR02N
		R32S	32MR02S
	3 m long	R32L	32MR03L
		R32N	32MR03N
		R32S	32MR03S
	4 m long	R32L	32MR04L
		R32N	32MR04N
		R32S	32MR04S

	6 m long	R32L R32N R32S	32MR06L 32MR06N 32MR06S
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Coupler R32	Diameter (mm)	Length (mm)	Weight (kg)	Part No.
	42	160	0.85	32MR1642

Nut R32	Key size (mm)	Length (mm)	Weight (kg)	Part No.
	46	45	0.35	32MR4546

Spherical nut R32	Key size (mm)	Length (mm)	Weight (kg)	Part No.
	41	41	0.33	32MR4141S

Anchor plate R32	Dimension (mm)	Hole diameter (mm)	Weight (kg)	Part No.
	150×150×8	27	1.36	32MR0827
	200×200×10	27	2.99	32MR1027

R38

	Description	Size	Weight (kg)	Part No.	Remark
Bit with thread R38N	Steel cross bit	R38/76 mm	1.20	38MR31176	Hardened cross bit for loose to medium dense conditions with small boulders
		R38/90 mm	1.40	38MR31190	
	Steel arched bit	R38/76 mm	1.20	38MR34176	Hardened arched bit for optimized geometry for unconsolidated soil with small boulders
	TC arched bit	R38/115 mm	2.85	38MR342115	TC arched bit for optimized geometry for soft to medium rock formations
	TC cross bit	R38/76 mm	1.25	38MR31276	TC cross bit for soft to medium rock formations
		R38/90 mm	1.45	38MR31290	
	TC 3 cutter bit	R38/76 mm	0.85	38MR33276	TC insert bit for soft to medium rock formations
	Steel button bit	R38/76 mm	1.00	38MR30176	Hardened button bit for unconsolidated rock with boulders
TC button bit	R38/76 mm	1.00	38MR30276	TC insert button bit for medium rock formations	

Bar R38	Length (mm)	Part No.
	1 m long	38MR01
	2 m long	38MR02
	3 m long	38MR03
	4 m long	38MR04
	6 m long	38MR06

Coupler R38	Diameter (mm)	Length (mm)	Part No.	Weight (kg)
	51	220	38MR2251	1.70

Nut R38	Key size (mm)	Length (mm)	Part No.	Weight (kg)
	50	60	38MR6050	0.40

Spherical nut R38	Key size (mm)	Length (mm)	Part No.	Weight (kg)
	55	65	38MR6555S	0.90

Anchor plate R38	Dimension (mm)	Hole diameter (mm)	Part No.	Weight (kg)
	200×200×10	40	38MR1040	2.94
	200×200×12	40	38MR1240	3.60

R51

	Description	Size	Weight (kg)	Part No.	Remark
R51L& R51N	Steel cross bit	R51/85 mm	1.30	51MR31185	Hardened cross bit for loose to medium dense conditions with small boulders
	TC cross bit	R51/115 mm	1.80	51MR312115	TC cross bit for soft to medium rock formations
	Steel button bit	R51/100 mm	1.85	51MR301100	TC insert button bit for unconsolidated rock with boulders
		R51/115 mm	2.00	51MR301115	
	TC button bit	R51/100 mm	1.85	51MR302100	TC insert button bit for medium rock formations

Bar R51	Length	Type	Part No.
	1 m long	R51L R51N	51MR01
	2 m long	R51L R51N	51MR02
	3 m long	R51L R51N	51MR03
	4 m long	R51L R51N	51MR04
	6 m long	R51L R51N	51MR06

Coupler R51	Diameter	Length	Part No.	Weight (kg)
	63	200	51MR2063	1.90

Nut R51	Key size	Length	Part No.	Weight (kg)
	75	70	51MR7075	1.55

Spherical nut R51	Key size	Length	Part No.	Weight (kg)
	75	70	51MR7075S	1.73

Anchor plate R51	Dimension	Hole diameter	Part No.	Weight (kg)
	200×200×12	52.5	51MR1252	3.6

T76

	Description	Size	Part No.	Weight (kg)	Remark
T76N & T76S	Steel cross bit	T76/130 mm/EYS	76MR311130	6.00	Hardened drill bit with buttons for medium to dense soil and rock
	TC button bit	T76/130 mm/EYSS	76MR302130S	6.00	As above but with TC-inserts
	TC button bit	T76/130mm/ESS-F	76MR302130F	6.00	Button bit with TC-inserts for medium to hard rock formations

Bar T76	Length	Type
	1 m long	R32L R32N
	2 m long	R32L

	3 m long	R32N
		R32L
	4 m long	R32N
		R32L
	6 m long	R32N
		R32L

Coupler T76	Diameter	Length	Part No.	Weight (kg)
	97	220	76MT2297	4.70

Nut T76	Key size	Length	Part No.	Weight (kg)
	100	80	76MT8010	2.70

Anchor plate T76	Dimension	Hole diameter	Part No.	Weight (kg)
	250×250×40	80	76MT4080	18
	250×250×60	80	76MT6080	27

Guide of product code

Bit: 25 M R 30 0 42
A B C D E F

Code	Description	Options	Options
A	Connect size	25 32 38 51 76	25 32 38 51 76
B	Maxdrill		
C	Thread	R T	R Thread T Thread
D	Tungsten carbide type	30 31 32 33 34	Button bit Cross bit Asymmetrical cutter bit Arching
E	Carbide inserts	0 1 2	Cast Steel TC
F	Diameter	42 51 76 90 115	φ42 φ51 φ76 φ90 φ115