

Atlas Copco Rock Reinforcement

MAI Systems® SDA® R 32N&S

The **Atlas Copco MAI® Self-Drilling Anchor** is a unique anchoring system and is today's answer to the increasing demands of the tunnelling industry and ground engineering for safer and faster production.

The system provides advantages for all areas of its applications, where boreholes would require the time consuming drilling with casing systems in unconsolidated or cohesive soil.

Features and Advantages

- Fits Atlas Copco standard Boomer, ROC and Mustang rigs.
- Particularily suitable for difficult ground conditions.
- A high rate of installation since drilling, placing and grouting can be performed in one single operation.
- Self drilling system eliminates the requirement for a cased borehole.
- Installation with simultaneous drilling and grouting possible.
- Easy installation in all directions, also upwards.
- Suitable for working in limited space, height and in areas of difficult access.
- Simple post grouting system.
- Hot-dipped galvanizing for corrosion protection

Applications

Tunnelling

- Radial bolting
- Forepoling
- Face stabilization
- Portal preparation

Ground engineering

- Slope stabilization
- Micro injection pile
- Temporary support anchor
- Soil nailing



SPECIFICATIONS

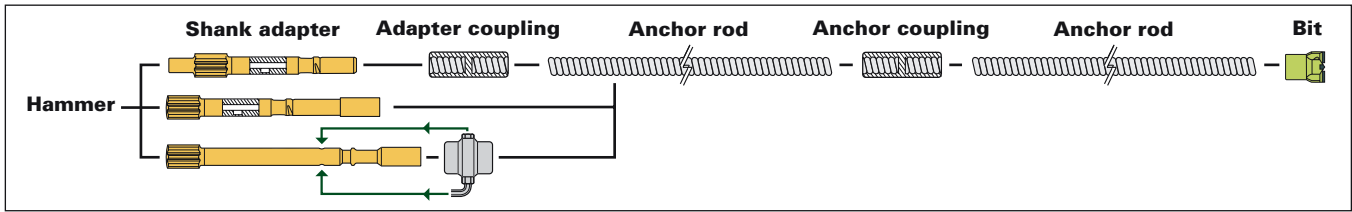
TECHNICAL DATA	R 32N	R 32S	GENERAL DATA
Outside diameter.....	32 mm	32 mm	Type of steel..... EN 10083-1
Internal diameter, average.....	18.5 mm	15 mm	Thread type..... R32. ISO 10208
External diameter, effective.....	29.1 mm	29.1 mm	
Effective cross sectional area, average.....	396 mm ²	488 mm ²	
Ultimate load capacity.....	280 kN	360 kN	
Yield load capacity.....	230 kN	280 kN	
Average tensile strength, Rm.....	720 N/mm ²	740 N/mm ²	
Average yield strength, Rp0,2.....	560 N/mm ²	570 N/mm ²	
Weight.....	3.4 kg/m	4.1 kg/m	

Atlas Copco MAI Systems® SDA®

MAI® - SDA® Anker (Self Drilling Hollow Core Anchor)

A Hollow Core Anchor system as self drilling rock bolt for tunnelling in accordance with DIN 21521

MAI Systems[®] SDA[®] R 32N&S



ANCHOR ROD R32

	Outside 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	Weight
	mm	mm	mm	mm ²	kN	kN	N/mm ²	N/mm ²	kg/m
R32N	32	18.5	29.1	396	280	230	720	560	3.4
R32S	32	15	29.1	488	360	280	740	570	4.1
Part number									
	1 meter long	2 meter long	3 meter long	4 meter long	6 meter long				
R32N	9899101495	9899100754	9899100755	9899100756	-				
R32S	9899101159	9899100758	9899100759	9899100760	-				
R32N gal.	9899102101	9899101160	9899101852	9899102188	-				
R32S gal.	9899102663	9899101367	9899101366	9899102443	-				

ANCHOR COUPLING R32N&S

	Diam. mm	Length mm	Part number	Kg	Type	
R32N	42	145	9899700083	0.80	N Type	Type Machined steel coupling with patented middle stop
R32S	42	190	9899700078	1.02	S Type	Type Machined steel coupling with patented middle stop
R32N&S gal.	42	160	9899150115	0.85	N&S Type	Type Machined steel coupling hot dip galvanized

NUT R32

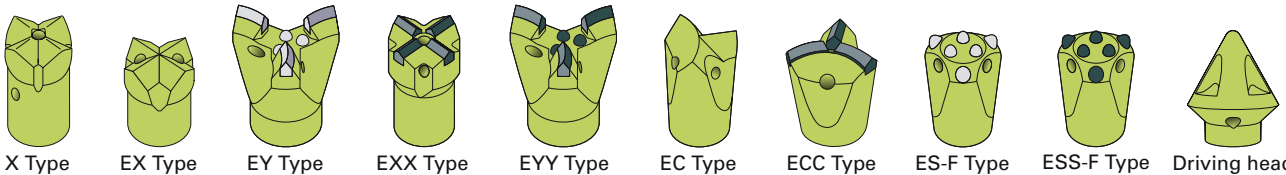
	Key size mm	Length mm	Part number	Kg	
R32N&S	46	45	9899100767	0.35	Machined steel nut
R32N&S	46	45	9899101161	0.35	Machined steel nut hot dip galvanized

ANCHOR PLATE R32

	Dimension mm	Thickness mm	Part number	Kg	Hole diam. mm	
R32N	200 x 200	10	9899100798	3.00	35	Cold deformed with patented geometry
R32S	200 x 200	12	9899100799	3.70	35	Cold deformed with patented geometry
R32N&S gal.	200 x 200	10	9899101163	3.20	35	Cold deformed with patented geometry, hot dip galvanized
	200 x 200	12	9899101369	3.90	35	Cold deformed with patented geometry, hot dip galvanized

DRILL BIT R32

	Description	Kg	Diam. mm	Part number	Type	
R32N	R32/Ø51/X	0.49	51	9899100779	X Type	Forged bit for sand and gravel
R32S	R32/Ø51/EX	0.20	51	9899100781	EX Type	Hardened cross bit for loose to medium dense ground conditions
	R32/Ø76/EX	1.23	76	9899101267	EX Type	Hardened cross bit for loose to medium dense ground conditions
	R32/Ø76/EY	1.20	76	9899151037	EY Type	Hardened cross bit for loose to medium dense ground conditions
	R32/Ø51L105/EXX	0.84	51	9899150135	EXX Type	TC cross bit for soft to medium rock formations.
	R32/Ø76/EYY	1.03	51	9899150354	EYY Type	TC cross bit for soft to medium rock formations.
	R32/Ø51/EC	0.42	51	9899150083	EC Type	Hardened drill bit with optimized geometry for unconsolidated soil with small boulders
	R32/Ø51/ECC	0.42	51	9899150752	ECC Type	Hardened drill bit with optimized geometry for soft to medium rock formations.
	R32/Ø51/ES-F	0.40	51	9899150030	ES Type	Hardened button bit for unconsolidated rock with boulders.
	R32/Ø51/ESS-F	0.40	51	9899150031	ESS Type	Button bit with TC inserts for medium rock formations.
	R32/Ø51/L110/ESS-F	0.90	51	9899150963	ESS Type	Button bit with TC inserts for medium rock formations.
	R32/Ø65	0.55	65	9899150036	Driving head	Hardened percussion bit for very soft to soft soft caly



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