

SWIVELS

SS1, S1 L Rotator Triangular
S2, S2 L Rotator Round
S3 Orbitor
S11 nanoSwivel

Models SS1, S2L, S3 & S11 are CE certified

Manufactured in **USA** using domestic & foreign materials

WARNING!

For expert use only!

• These activities are inherently dangerous and carry a significant risk of injury or death that cannot be eliminated.

• It is the user's responsibility to obtain specific training and to use it safely. These instructions DO NOT tell you everything you need to know.

• Do not use unless you can and will understand and assume all risks and responsibilities for all damage/injury/death that may result from use of this equipment or the activities undertaken with it.

• Any device is subject to failure-carefully check before and after each use.

• You must always have a backup-never trust a life to a single tool.

• Everyone using this equipment must be given and thoroughly understand the instructions and refer to them before each use.

• You must have a rescue plan and the means to implement it. Inert suspension in a harness can quickly result in death!

• Do not use around electrical hazards, moving machinery or near sharp edges or abrasive surfaces.

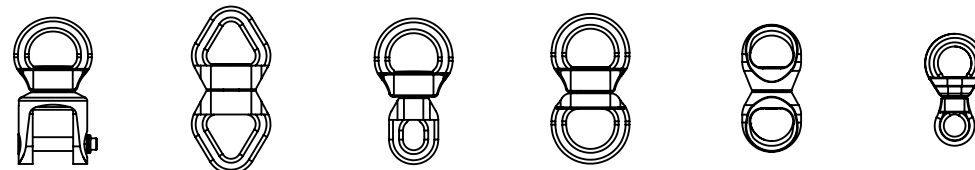
• We are not responsible for any direct, indirect or accidental consequences or damage resulting from the use of our products.

INTRODUCTION

Thank you for purchasing this Rock Exotica product. We make a variety of swivels that excel in a wide variety of uses.

Construction: The top and bottom are CNC 4-axis machined from high strength aluminum alloy. The axle is stainless steel, turned from a solid bar. Swivels are equipped with sealed ball bearings.

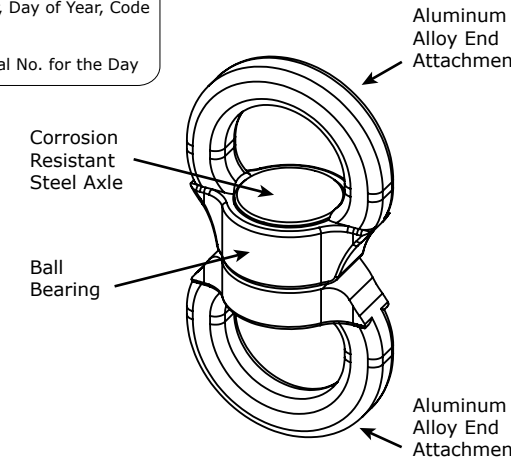
History: Rock Exotica designed the first compact & light-weight ball bearing swivel in the late 80's. It was originally intended for somewhat modest uses such as preventing a haul line from twisting. From the initial modest sales, the number of ways to use them quickly multiplied & they became a necessity in a huge number of systems & situations. We've made far more high quality swivels in more versions than anyone else on the planet.



	SS1(CE)	S1 L	S2	S2 L (CE)	S3 (CE)	S11 (CE)
Strength	36kN	36kN	36kN	36kN	26kN	23kN
WLL	5kN	5kN	5kN	5kN	5kN	3kN
Height	3.75" (95.3mm)	4.24" (108mm)	3.7" (94mm)	3.8" (96.5mm)	3.2" (81mm)	2.8"(71mm)
Width	2" (50.8mm)	2" (50.8mm)	1.98" (50mm)	1.98" (50mm)	1.5" (38.1mm)	1.44"(37mm)
Weight	6.4 oz. (181gm)	5.1 oz. (144gm)	3.9 oz. (110gm)	4.4 oz. (124gm)	3.5 oz. (99gm)	1.65 oz. (47gm)

Manufacture Data:
10 001 A
Year, Day of Year, Code

001
Serial No. for the Day



Swivel models SS1, S2 L, S3 & S11 are CE certified:
CE 0120 EN 354
Notified body controlling the manufacturing of this PPE:
SGS United Kingdom Ltd. (CE 0120),
202B Worle Parkway, Weston-super-Mare, BS22 6WA UK.
Notified body which performed EC type examination: VVUU,a.s., notified body No. 1019,
Pikartska 1337/7, Ostrava-Radvanice, Czech Republic.

SS1-Shackle Swivel
Special Consideration:

When installing the shoulder screw make sure it is in all the way. The head should be flush with the shackle body. The shoulder portion must pass through the hole on the opposite side from the head. If the screw is not all the way in, then the shoulder will just butt up against the hole, but will not go into the unit and will not reach full strength-this is very dangerous

When using the nylon lock nut, always inspect it to be sure the locking element is in place. Once the locking element begins to contact the thread and you can no longer turn it with your fingers, you should use a hex wrench to screw it three to four turns. If you can not turn it don't use the shackle swivel. Only use a new nylon locking nut with each use because of its locking ability is reduced after the first use. Inspect Shackle Swivel before and after each use to ensure it is not damaged.

For permanent installation use an epoxy with the lock nut. You may also fill the hex socket of the screw to reduce anyone's ability to use a wrench. A thread locking agent is not recommended for nylon locknuts.

S1 are the original swivels with a triangular shape, still desired by many users.

S2 swivels are an updated design with rounded tops and bottoms for better nesting of multiple carabiners and are a little shorter and lighter than the S1.

S3 is a smaller, personal size swivel with a compact, rounded design.

S11 nanoSwivel is about as small as a swivel can be. It uses a miniature high capacity thrust bearing. There is a rubber O-ring in the small end that fits a 12mm carabiner & helps it stay positioned. *But if it is positioned wrong, it will tend to stay in the wrong position, so always make sure it (or any swivel) is situated correctly!* **Any bending force will greatly reduce the strength of a swivel!**

Intended Use
Only the loading shown as "OK" is allowed. Always verify proper positioning of your system and components. Swivels must be free to align with the load, any restraint is dangerous. Make sure you use redundant systems. Slack must be kept out of the system. If the swivel is not observable or is not under constant tension, use closed rings (screw links, etc.) or loops (webbing, etc.) that cannot be broken. This product is intended for use by medically fit, specifically trained and experienced users.

Inspect Before & After Use
Check all parts for cracks, deformation, corrosion, wear, etc. Verify that the swivel rotates normally & the axle screw has not loosened.

Inspection During Use
Regularly inspect and monitor your system, confirming proper connections, equipment position, fully locked connectors, etc.

Compatibility
Verify compatibility with other components of your system. Incompatible connections can cause detachment, breakage, etc. If a swivel is used with cable it must be anti-rotation cable!

Lifetime
Lifetime is indefinite and depends on usage and conditions. Lifetime can be short or it could even be a single use in some cases.

Maintenance & Storage
Clean if necessary with fresh water, then allow to dry completely. Store in a dry place away from extremes of heat and cold and avoid chemical exposure.

Principal Material
Aluminum alloy, anodized. Corrosion resistant steel axle. Steel ball bearing.

Repairs or Modifications to Equipment
Are only allowed by the manufacturer or those authorized in writing by the manufacturer.

Detailed Inspection
In addition to inspection before, during and after each use, a detailed inspection by a competent inspector must be done at least every 3 months or more frequently depending on amount and type of use. Make a copy of these instructions and use one as the permanent inspection record and keep the other with the equipment. It is best to issue new gear to each user so they know its entire history.

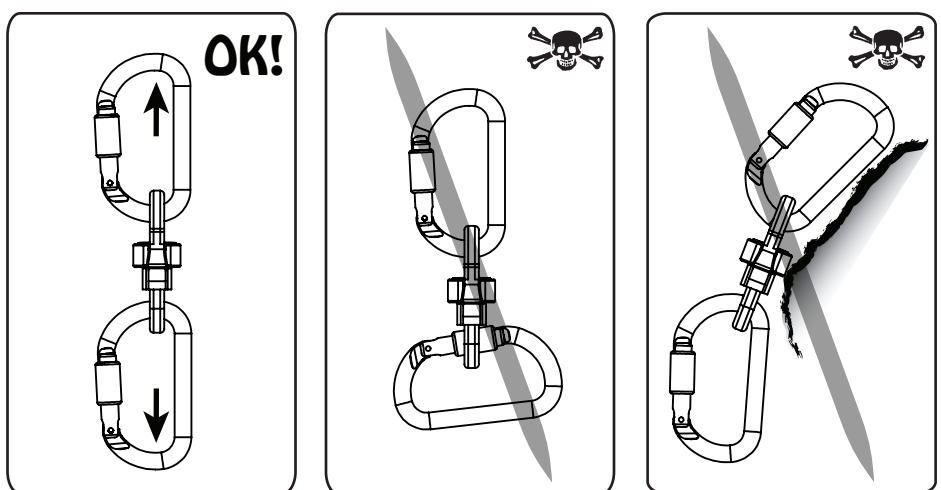
Anchors
Must meet the EN 795 standard. Strength must meet the needs of the particular situation (at least 10kN) and the user must always stay below the anchor. Clearance under the user must always be enough to prevent hitting anything in case of a fall (the length of this equipment can influence the height of a fall).

Thorough and specific training is absolutely essential before use.
Being at height is dangerous and it is up to you to reduce the risks as much as possible - but the risks can never be eliminated. There are many ways to misuse this equipment, too many to list or imagine. You must personally understand and assume all risks and responsibilities of using this equipment. If you cannot or do not want to do this, do not use this equipment.

Environmental Factors
Moisture, ice, salt, sand, snow, chemicals and other factors can prevent proper operation or can greatly accelerate wear.

Leverage Hazard
A swivel or other equipment can lever against a connector (such as a carabiner) and break it, opening the connector and allowing the pulley to fall out. Guard against this at all times! The Swivel must always be under tension in your system to avoid shifting into an incorrect position.

Stay Up To Date!
Regularly go to our website and read the latest user instructions.
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rockexotica.com
rock exotica equipment LC
POB 160470
Freeport Center, F-11
Clearfield, UT 84016
USA
801 728-0630

PURCHASE RECORD		DATE	CONDITION	INSPECTOR
Model				
Complete Batch #				
Year of Manufacture				
Purchase Date				
Date of 1st Use				
User				