



HOW TO SELECT THE MOST EFFECTIVE ANCHOR RODE ATTACHMENT (Swivel, shackle or?)

The best place to start is by evaluating your current anchor to rode attachment. Does it do everything you expect, need and require?

1. Does your rode/anchor attachment device allow necessary movement between the anchor rode and the anchor while you are deploying, set and recovering your anchor?
2. Is your rode/attachment device designed to take a full side load without the jaws of the connection opening and failing?
3. When recovering your anchor does the chain twist between the bow roller and the windlass?
4. Does your rode/anchor attachment device have a higher or equal too breaking strength to your rode (chain or rope)? Is the connector made of non corrosive materials for proper operation over its long life.
5. Does your rode/anchor attachment device allow the anchor to come up backwards or does your rode/anchor attachment device help your anchor rotate to the correct position during recovery into the bow roller? Can you operate your anchor windlass remotely?
6. Is your rode/anchor attachment device made of a one part homogenous body which will not separate and fail in use?
7. Does your rode/anchor attachment device's weight affect the balance of the anchor?
8. Is your rode/anchor attachment device designed and manufactured with a long neck, bolt or rod that may have the risk of bending or failing?
9. Are the contact surfaces of your rode/anchor attachment device abrasive and rough causing unnecessary resistance and wear? Can the surface be lubricated for smooth operation and long life service? Must it be regularly be re-galvanized?
10. Can your rode/anchor attachment device's connecting pins be easily fitted under rough sea conditions?
11. Are your rode/anchor attachment device's connecting pins totally secure against rotating loose by anchor chain movement or movement at anchor connection?
12. Does your rode/anchor attachment device use set screws that may be damaged under heavy loads or susceptible to crevice corrosion?
13. Does your rode/anchor attachment device pass through the bow roller without catching or deforming the roller assembly?
14. Is your rode/anchor attachment device chain attachment point designed for maximum strength and to easily fit the chain end and second link?
15. Is the design of your swivel efficient without extra material that does not aid in the operation of the swivel?
16. Is dirt on joint surfaces scraped off by component design of the swivel?

ANSWERS

1. Does your rode/anchor attachment device allow necessary movement between the anchor rode and the anchor while you are deploying, set and recovering your anchor?

Many swivels allow movement between anchor and rode with 2 or 3 joints (2 or 3 potential failure points).

- Ultra Swivels have a one half spherical joint. The Ultra Swivel passes through rollers without any restrictions by allowing 30 degree deflection and full rotation reducing any torsion on the chain which allows the windlass to work properly.

2. Is your rode/attachment device designed to take a full side load without the jaws of the connection opening and failing?

Most rode/attachment devices are designed primarily for axial loads and are not designed to take a large side load that maybe exhibited when an anchor must rotate in the seabed when tide, current or winds change direction or when it is subject to a side load during recovery. Even though the swivel maybe strong enough to take the full load in a straight line, when the load is from the side, poorly designed swivels will spread their jaws and fail or deform.

- The Ultra Swivel is designed to take full load from all directions. Compare the physical attributes of the swivel and you will see that it is stronger and better designed with larger sections, smooth transitions and without sharp angles that cause stress concentrations and failure.

3. When recovering your anchor does the chain twist between the bow roller and the windlass?

Connecting the rode to anchor chain with shackles does not allow for any rotation of the anchor rode between the bow roller and the windlass or the anchor when it is set. This may cause the rode to bind and twist and jump off the gypsy as the chain is recovered or cause the rode to tangle and foul. When a chain/three strand rope combination rode is used, three strand ropes will untwist when stretched under load and re-twist when the load is released, causing binding on the chain as it is recovered. Additionally when anchoring in a tidal area where a boat rotates around its anchor over a long period of time (many days) twists will develop in the anchor chain that will foul an anchor. A swivel eliminates this problem.

- The Ultra Swivel allows the chain to rotate or untwist when the anchor is set and when it is recovered.

4. Does your rode/anchor attachment device have a higher or equal too breaking strength to your rode (chain or rope)? Is the connector made of non corrosive materials for proper operation over its long life.

A majority of swivels on the market have a lower breaking strength than the chain they are intended to be used with, causing them to fail under extreme loads. The connection point between the anchor and it's rode has the highest concentration of forces. This connection must work from multiple directions to accommodate the loads it is subject to. The materials used in cheap swivels corrode causing joints to bind leading to premature failure and a possible dangerous situation.

- Ultra Swivel's breaking strength is higher than the appropriate size DIN766 short link anchor chains intended to be used with and is designed to take side loads from all directions. Ultra Swivels are made from 316L stainless steel and bearing surfaces are polished and coated to provide long life and service with simple maintenance

5. Does your rode/anchor attachment device allow the anchor to come up backwards or does your rode/anchor attachment device help your anchor rotate to the correct position during recovery into the bow roller? Can you operate your anchor windlass remotely?

Trying to turn an upside down anchor around for retrieval into a bow roller is an uncomfortable process. Normal swivels provide no help for this problem.

- Only the Ultra Flip Swivel offers you a solution to this problem in addition to all of its other great functions. If your anchor recovers backwards, the Ultra Flip Swivel forces the anchor to rotate when it reaches about 45 degree to your bow roller. This is not an immediate process; gravity must have time to work. Recovering the anchor slowly as it begins to reach the bow roller is necessary, allowing the Ultra Flip Swivel to nudge the anchor to port or starboard which will then force the center of gravity of the anchor to fall off center and then gravity will cause the anchor to rotate into its correct position as you

continue to draw the anchor into its roller. If you have a high speed windlass then you should wait for a short bit when your anchor reaches your bow roller to allow the Ultra Flip Swivel time to work. This feature of the Ultra Flip Swivel will let you recover your anchor by a remote control from your cockpit or flybridge.

6. Is your rode/anchor attachment device made of a one part homogenous body which will not separate and fail in use?

Most swivels main body sections are multi parted and designed to work axially. Those parts are assembled by pin, clinch, weld, bolt, etc. Stress on these multiple pieces wear connections and loosen with usage allowing pieces to fail.

- Only Ultra Swivel's main body parts are fabricated as one piece by a special technique. Therefore, there is no risk of loosening of parts on an Ultra Swivel. All sections of the Ultra Swivel are designed to take the full side load and can not separate or flex allowing parts to loosen.

7. Does your rode/anchor attachment device's weight affect the balance of the anchor?

Other swivels' main body sections are made of multiple parts, either they are too small with lower breaking strength or they are oversized to accommodate a higher breaking load.

- Ultra Swivel's main body sections are fabricated as one part and the unused section of the sphere removed. Redundant materials are removed so there are is no extra weight thus not affecting the balance of anchor they are used with. The Ultra Swivel is, is at the same time slim and compact with higher breaking strength than its competition.

8. Is your rode/anchor attachment device designed and manufactured with a long neck, bolt or rod that may have the risk of bending or failing?

Similar designs have a cylindrical thin neck or pin between the chain connection part and the anchor connection part. This piece has been known to bend when forced to one side restricting the swivel's rotation ability.

- Ultra Swivels do not have a thin neck, bar or rod. The chain connection part is directly connected to the joint. Side loads bending other swivels have no effect on Ultra Swivels.

9. Are the contact surfaces of your rode/anchor attachment device abrasive and rough causing unnecessary resistance and wear? Can the surface be lubricated for smooth operation and long life service? Must it be regularly be re-galvanized?

When same metal pieces are working on the each others, abrasion takes place. This also causes extra surface roughness and does not let swivel work properly. A special problem with galvanized swivels that causes the galvanization to wear away and rust begins to form.

- Only Ultra's half spherical joint surface is machined smooth like a ball bearing and is covered by hard chrome to eliminate this problem. The Ultra Swivel performs as new for many years when lubricated with lithium base grease at its joint during normal preventative maintenance servicing of your vessel. Made from 316L Stainless steel the ultra swivel will provide many years of service and proudly display how you feel about the safety of your vessel while complementing the other stainless in your bow assembly.

10. Can your rode/anchor attachment device's connecting pins be easily fitted under rough sea conditions?

Some swivels require total disassembly and reassembly to attach rode to anchor. Some incorporate set screws that are small and difficult to adjust.

- The Ultra Swivel anchor and chain connection pins are fitted by pushing without screwing with square or hexagonal heads fitting into recesses with their ends connected by retaining screws. This makes connecting an Ultra Swivel easier under rough sea conditions.

11. Are your rode/anchor attachment device's connecting pins totally secure against rotating loose by anchor chain movement or movement at anchor connection?

Pin connectors on screw shackles and some swivels can loosen over time from chain and anchor shank movements causing the loss of your anchor at an unexpected moment.

- Ultra Swivels connecting pin heads are square or hexagonal. They sit in recesses in the swivel body. They do not have outside projections that can catch on the bow roller or other fittings. This recessed non rotational head design of the connecting pin eliminates outside loads on the pins. There is no chance for Ultra's pins loosening from outside loads. The heavy jaws of the Ultra Swivel will not spread allowing the pin to loosen.

12. Does your rode/anchor attachment device use set screws that may be damaged under heavy loads or susceptible to crevice corrosion?

Similar swivel designs use set screws fastened into the pins from the swivel ends. In such cases, extra load on pins mashes set screw ends and it makes it hard to take out. Also to fasten these end set screws the Allen or hex head wrench's arm interferes with either chain or anchor shank. Another problem of end set screws is they make the jaws (the most heavily loaded cross-section of the swivel) weaker.

- Ultra Swivels use a retaining screw located at the end of the connecting pin. They can not be damaged as they are not subject to outside loads. The retaining screws do not loosen and at the same time they can easily be removed with simple tools. Since retaining screws are on the side of the Ultra Swivel, tools (hex head or Allen wrench) do not interfere with the chain or anchor shank. There is nothing inside the jaws of the Ultra Swivel to weaken the load carrying capacity of the pin.

13. Does your rode/anchor attachment device pass through the bow roller without catching or deforming the roller assembly?

Projected sides and sharp corners of similar ball and socket swivel designs damage the surfaces they touch and shackle pins catch.

- All sides and corners of Ultra Swivels are rounded as much as possible. They don't damage the surfaces and they easily pass through rollers. The streamline shape of the Ultra Swivel is designed to pass smoothly without catching or damage.

14. Is your rode/anchor attachment device chain attachment point designed for maximum strength and to easily fit the chain end and second link?

Lesser swivels must cut back on the length of the jaws to accommodate the second link of chain, weakening the connecting point of the swivel jaws or the chain fits tight to the jaws making assembly difficult.

- Ultra Swivel is designed to accommodate the second link without weakening the jaws. There is a recessed area at the swivel end for the second link. The chain end can easily be connected to Ultra Swivel without having a weaker cross-section.

15. Is the design of your swivel efficient with features that assist in the operation?

The joint of similar ball and socket swivel designs consist of a full sphere and a tight race which limits the ball's movement in all directions. There is no play in the ball/socket which makes it harder to get rid of dirt from the socket section and makes the swivel susceptible to binding.

- Ultra Swivel's non used half of sphere is removed since it is not necessary. Therefore the half sphere allows play in the ball/socket joint which causes a flushing action that lets dirt pass through the socket section. Consequently risk of seizing up of the ball and socket is reduced. This half sphere also makes angular movements to the sides forcing dirt inside the joint out.

16. Is dirt on joint surfaces scraped off by component design of the swivel?

Competing swivels have rounded edges that will not clean the ball surface of contamination. It is expected on similar designs that any dirt sticking to the joint surface will leave the joint on its own.

- The side of the mouth opening of the Ultra Swivel's joint, presses against the half sphere's surface as a circular line and sharp edge that actively scrapes dirt from the surface of the half sphere under load.

To conclude an Ultra Swivel is your best selection for you rode anchor connection device!