

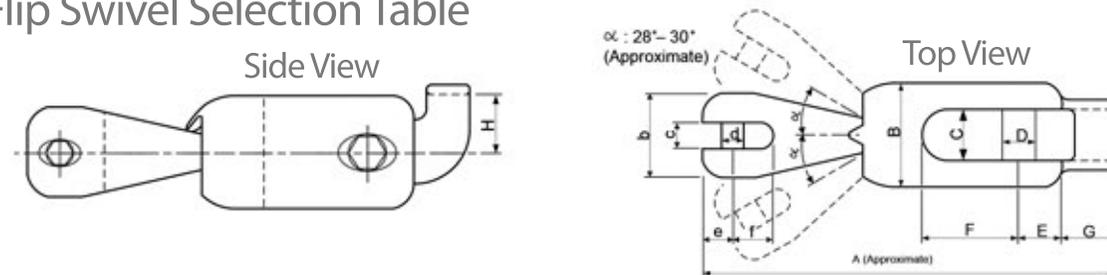
ULTRA FLIP SWIVEL USER'S GUIDE



Ultra Marine
Ultra Safe Anchoring

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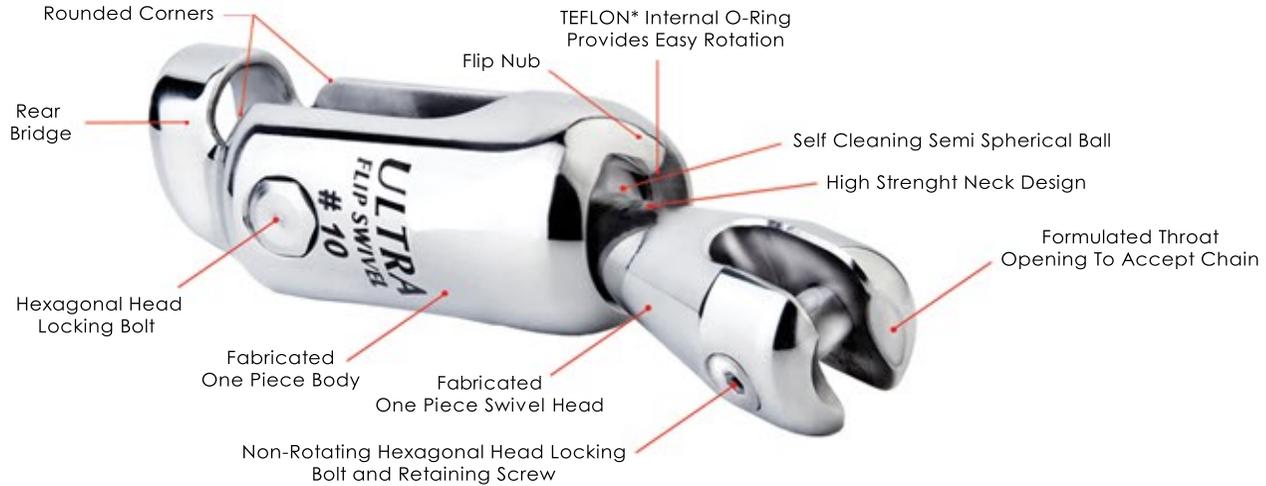
ULTRA Flip Swivel Selection Table



Type #	Chain Diameter		Whole Length Approx. mm A	Chain Part Dimensions mm b x c x d x e x f	Anchor Part Dimensions mm B x C x D x E x F	Flipping Bridge Dimensions G x H	Breaking Load (*)		Maximum Anchor Weight kg - lbs
	mm	inch					kN	lbf	
UFS 6 - 12	6	1/4"	121	25 x 7,6 x 7 x 9 x 11	35 x 16 x 11 x 13 x 31	14 x 17	38,4	8640	12 - 26
UFS 8 - 21	6 8	1/4" 5/16"	147,5	30 x 9,4 x 9 x 11 x 14,5	40 x 19 x 13 x 16 x 36,5	18,5 x 20	56,7	12740	21 - 46
UFS 10 - 35	8 10	5/16" 3/8"	168	35 x 11,6 x 11 x 13 x 17	45 x 21 x 14,5 x 18 x 40	21 x 22,5	90,7	20400	35 - 77
UFS 13 - 60	10 12 13	3/8" 1/2"	211,5	45 x 15,2 x 14,5 x 16,5 x 23	55 x 26 x 18 x 23 x 51,5	26,5 x 30	160,9	36200	60 - 132
UFS 16 - 100	12 13 14 16	1/2" 5/8"	250	53 x 18,2 x 18 x 20 x 27	65 x 31 x 22 x 27 x 59	33 x 36	236,5	53200	100 - 220
UFS 20 - 160	14 16 18 20	5/8" 3/4"	309	65 x 23 x 22 x 26 x 34	85 x 40 x 26 x 32 x 72	40 x 40,5	321,5	72300	160 - 350
UFS 26 - 250	20 23 26	3/4" 1"	364	85 x 30 x 26 x 33 x 43	110 x 52 x 32 x 40 x 77	48 x 56	474,8	106700	250 - 550
UFS 32 - 360	26 30 32	1" 1 1/4"	475	110 x 38 x 32 x 43 x 55	140 x 66 x 40 x 52 x 99	68 x 60	~726	~163047	360 - 800

- Tested by RINA (except UFS 32 - 360).
- Safe Working Load = 0,5 x Breaking Load.
- UFS selection should be based on maximum anchor weight.
- ULTRA Flip Swivels will accommodate the next size smaller chain, therefore one size larger should be selected for chain such as Grade 70 (G7).
- Custom ULTRA Flip Swivels can be manufactured to accommodate smaller chain.
- Custom swivels can also be made for symmetrical stockless anchors.

ULTRA Flip Swivel User's Guide



Basic Characteristics :

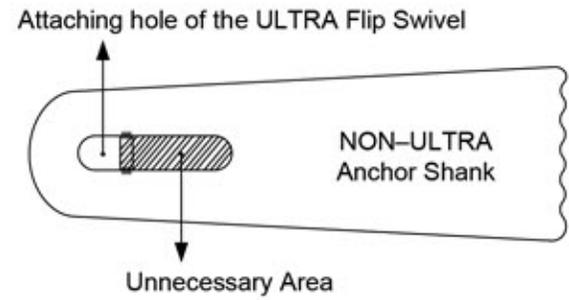
Congratulations on your purchase of an ULTRA Flip Swivel.

- Swivels are anchor chain connectors – connecting the chain at one end of the swivel and the anchor at the other.
- The ULTRA Flip Swivel's design is unique from most other anchor swivels in that its breaking load is higher than the chain it is connected to.
- The ULTRA Flip Swivel's other difference to most other anchor swivels is that its pins cannot unwind over time like standard shackle pins. Thanks to the special form of ULTRA pin heads and sockets, the force exerted onto the swivel pins by the anchor and chain at both ends of the swivel cannot loosen the pins at all. Together with the retaining setscrews which hold the pins in place, as no movement is possible to the pin itself, the setscrews themselves will not unwind over time.
- Another very important difference and feature of the ULTRA Flip Swivel is that if the anchor comes upside down on to the bow roller, The ULTRA Flip Swivel design forces the anchor to rotate into its correct orientation. (Note: This function is not possible for ULTRA Swivels to suit 300kg – 500kg stockless anchors).

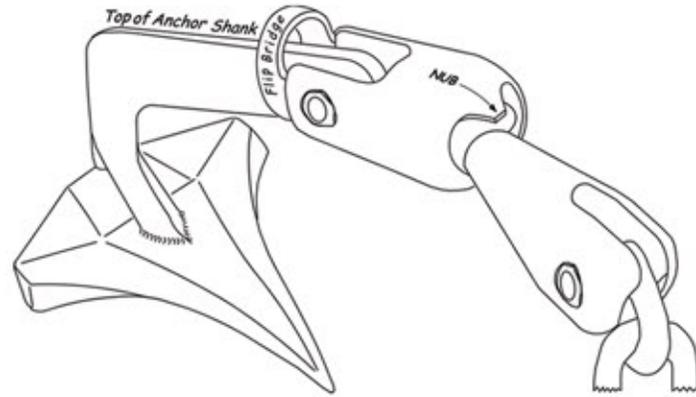
Selecting Criteria :

- ULTRA Flip Swivels are selected in two steps.
 - At first appropriate size swivel for the anchor is selected from the selection table. The selected swivel's maximum anchor weight limitation has to be higher than the anchor weight it is about to be connected to.
 - At second step the swivel is controlled as per both it can be connected to the intended chain and it has higher breaking load than this chain.
- If you will use your ULTRA Flip Swivel with a higher grade chain, it is better to select the ULTRA Flip Swivel that is one size bigger than the chain you are connecting it to. For instance : If you have Ø8 mm higher grade chain, instead of UFS 8 - 21 ULTRA Flip Swivel it is recommended you choose UFS 10 - 35 ULTRA Flip Swivel. The chain pins of ULTRA Flip Swivel's are designed so as they can accept one size smaller chain. You can see them from selection table.
- If you intend to use an ULTRA Flip Swivel with a stockless anchor, you do not require a rear bridge and flipping nub as featured on a standard ULTRA Flip Swivel. This non-standard detail needs to be noted when the order is placed. Alternatively, if the stockless anchor is large (such as 300-500 Kg), we recommend you install the World's first roller bearing swivel - the ULTRA Roller Bearing Swivel.

- ULTRA Flip Swivel on another anchor rather than ULTRA Anchor :
 - You should keep in your mind that most of the traditional anchors have slots instead of holes on their shanks. This is because using U (or D) locks while the swivels were not developed. All technical specifications and security of the ULTRA Flip Swivel are much better than the U (or D) locks of the same group. However, once you use ULTRA Flip Swivel on another anchor having slot connection rather than the ULTRA Anchor, rarely you might experience that it is locked at an undesirable position due to movements in the slot.
 - If you want to make sure of even this rare problem never occurs, you should just block the unnecessary back emptiness in the slot by a small modification.



Fitting (Installation) Considerations :



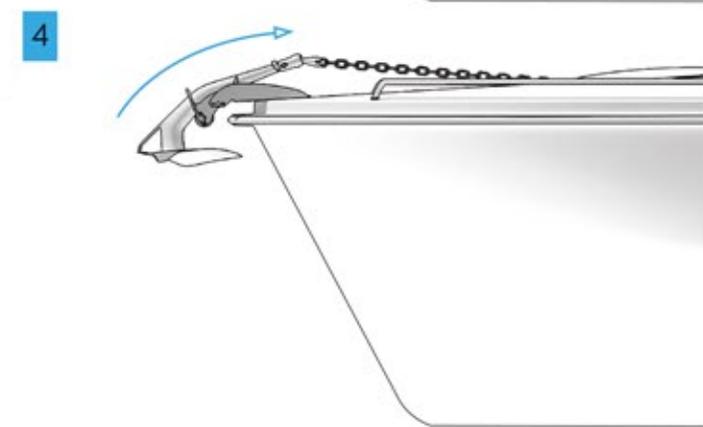
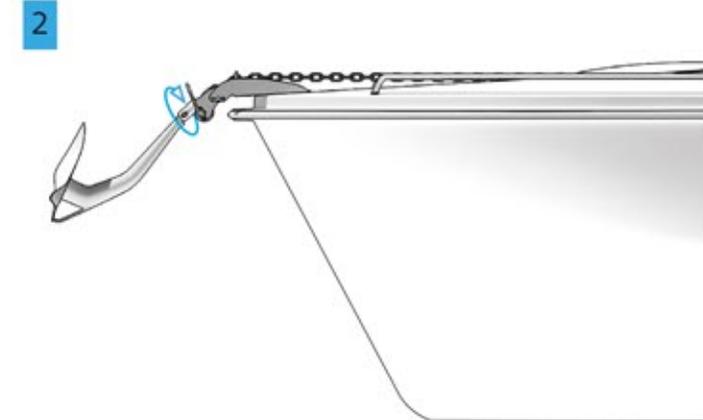
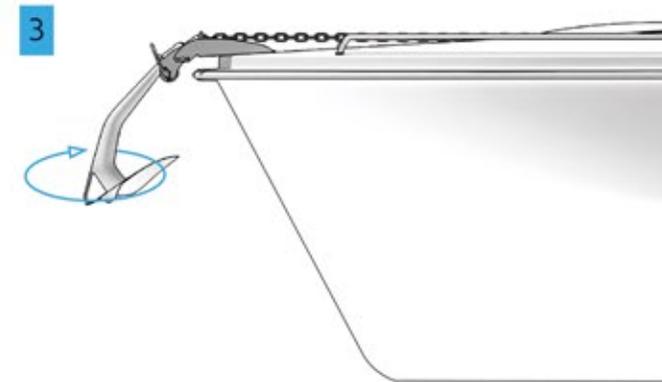
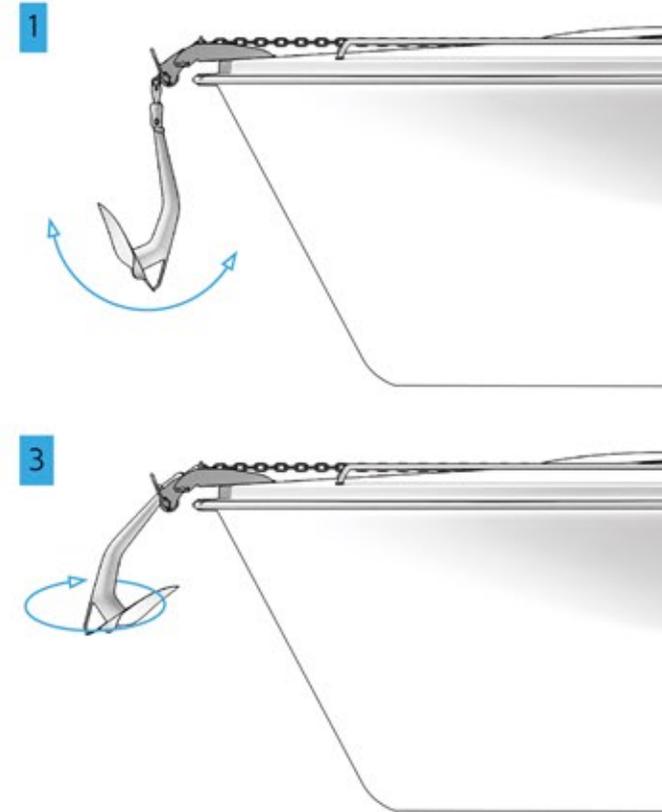
- Installation involves inserting the pins and setscrews on the small end/throat of the Ultra Flip Swivel through the chain, and vice versa on the large end/throat through the anchor eye.

- When the anchor eye is inserted into the large end/throat of the ULTRA Flip Swivel, the correct orientation is for the rear bridge to marry to the top of the anchor shank (or in other words the inverted "U" shape of rear bridge is to be in line with the top of the anchor shank). The ULTRA Flip Swivel MUST be orientated this way to function correctly and permit the anchor to flip into the proper position/orientation on your bow roller. Refer attached image as a further reference regarding this important installation instruction. (See drawing)

- While inserting the chain into the small end/throat of the Ultra Flip Swivel the pin MUST be inserted parallel to the Main Axis. Refer attached image as a further reference regarding this important installation instruction. The pins and setscrews of small ULTRA Flip Swivels (particularly UFS 6 - 12 & UFS 8 - 21) should not be forced as this can cause damage/wear which may cause problems when you want to remove the ULTRA Flip Swivel from the ground tackle. ULTRA Flip Swivel pins and setscrews are not affected by anchor and chain movements when installed correctly - they don't unwind in time. Apply normal force when tightening the setscrews. For extra safety use Loctite on the retaining setscrews.

- it may be better to heat your ULTRA Flip Swivel setscrews before removing them if you have used Loctite when initially installed.

How ULTRA Flip Swivel Works ?



ULTRA Flip Swivel - Normal Performance :

- The windlass operator is not required to do anything special for the ULTRA Flip Swivel to perform its role. If you witness an unexpected action, it should be investigated. For instance, if your anchor is recovered onto the bow roller in an upside-down orientation, these are its potential reasons ;

- Avoiding too fast recovery speed and damaging the swivel :

Generally it is desired to recover anchor quickly. However, this may not let the swivel turn the anchor right way up. In this case wait for 1 second as the anchor touches the bow roller at which time if the anchor is upside-down orientation the ULTRA Flip Swivel will commence to rotate the anchor.

- Narrow Rollers: Sides of the roller blocks the anchor when it is about to turn the right way up

- Chain channels in the rollers: Channel sides blocks the anchor and it does not let it flip.

ULTRA Flip Swivel - Fixing Hook / Safety Lanyard :

- After the anchor is recovered, it is recommended you attach a safety lanyard to ensure the anchor cannot deploy unintentionally. The safety lanyard can be attached to the void on the ULTRA Flip Swivel body - in between its body and anchor. Refer attached image as a further reference regarding this point. The safety lanyard should then be firmly fastened to a cleat or strong point on the foredeck.



Maintenance :

- ULTRA Flip Swivels are designed to work for many years without maintenance. However, given its importance within your anchoring system and for the safety of the vessel and its crew, we recommend as below.

- Your ULTRA Flip Swivel needs to be inspected visually at least once per year (and more often if the anchor is in constant use). Look to see that the setscrews are still tight, and the pins firmly in their rebated sockets.

- If the ball joint covered by mineral, applying water resist lithium based grease, relaxes its functionality.

- It is normal to see some scars on the neck of your ULTRA Flip Swivel made by the flipping nub. These scars take place when the nub forces the anchor rotate to the proper position/orientation – evidence that your ULTRA Flip Swivel is performing its role. This is only an aesthetic scar. However, these scars shouldn't increase over time. If the surface diameter under the scars is smaller than the diameter at where the neck and body combine, the swivel needs to be replaced. Otherwise continuation of this situation may cause a swivel failure.

Possible reasons of such a situation :

- Swivel is used together with an anchor heavier than its maximum anchor weight limitation in other words, using smaller swivel than the recommended one.

- Smaller swivel is used together with higher grade chain having higher breaking load than the swivel. In this case as the small swivel will work together with higher loads it will have excessive wear. A swivel with higher breaking load than the chain connected has to be selected.

- Too narrow rollers blocking the anchor from sides and does not let the anchor turn the right way up on the bow roller.

- Rollers having special chain channels. These channels can block the anchor from sides once it is about to turn the right way up. They have more disadvantages against their advantages.

- Using too fast recovery speed. It does not give enough time to anchor turn the right way up on the bow roller and it forces the swivel extremely. To not let this happen wait for 1 second as the anchor touches the bow roller. After the anchor turns slowly you can recover it totally without forcing the swivel extremely.

IMPORTANT NOTES :

- You have to pay attention to all above warnings. Otherwise, you might endanger your life and boat in time. For such situation the manufacturer and sellers of the ULTRA Flip Swivel are exclusion of liability.

- Once above warnings are not taken in consideration, ULTRA Flip Swivel is void of warranty.

Corrosions :

- Possible corrosion of the first couple of chain links connected to the ULTRA Flip Swivel: This will only take place when the ULTRA Flip Swivel is used together with galvanized chain. The Galvanized layer works as sacrificial anode against stainless steel and melts. These links without zinc protection will rust in sea water and salt air. Depending on how often you use your anchor, this scenario can occur between 1 to 3 years. Since, it doesn't occur suddenly, it doesn't cause an immediate security risk. In a proper time, these rusted links should be cut off the chain.

- Possible corrosion of the first couple of meter chain links connected to the ULTRA Flip Swivel: This also only takes place when the swivel is used together with galvanized chain. ULTRAnchor unlike other anchors in the market set quickly and digs deeper in the sea bottom when under high load. As a result of this, the first couple of meters of chain connecting to the anchor shank rubs with sea bottom. The zinc cover wears off these links in time and they rust in sea water and salt air. You can solve this problem using the first couple of meter chains 316L stainless steel. However, a couple of galvanized chain links connected with the stainless steel chain can also get rusted in a couple of years. Since, it doesn't occur suddenly, it doesn't cause an immediate security risk. In a proper time, these rusted links should be cut off the chain.

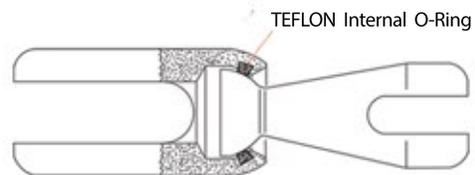
Pollutions :

- Stainless Steel: While your ULTRA Flip Swivel is in use, it can come into contact with foreign metals on the sea floor. This can leave some microscopic particles on your ULTRA Flip Swivel. These particles may then leave rust marks in some cases it might appear like the whole swivel is rusted. This is very rare but not impossible. In both cases rust is only at the surface and it doesn't cause any security problems. It can be cleaned in any kind of stainless steel polisher.

- Becoming colorful: While, it is in use, swivel can get in touch with some mineral sand mixtures. If we stay on anchor for a long time in such a place, stainless steel can react with it and it can become colorful. This is also only a surface problem and it doesn't cause any security problems and it can be cleaned by any kind of stainless steel polisher. Another very similar fouling on the swivel can take place on sea bottoms polluted with diesel fuel. It can easily be cleaned by detergent.

- Surface looking as covered with whitewash: When the swivel is used together with galvanized chain, minerals in sea water can settle on the stainless steel surface and it looks as whitewashed. It can easily be cleaned by any kind of acidic liquid such as lemon water, vinegar or sink opener.

- Stiffness on the ball : ULTRA Flip Swivel's ball is Teflon ring joint. It can even work when it is too dirty. However, using grease on ball joint from time to time helps it work better. You should use water resistant lithium base grease. However, you shouldn't use grease at any case on ULTRA Roller Bearing Swivels.

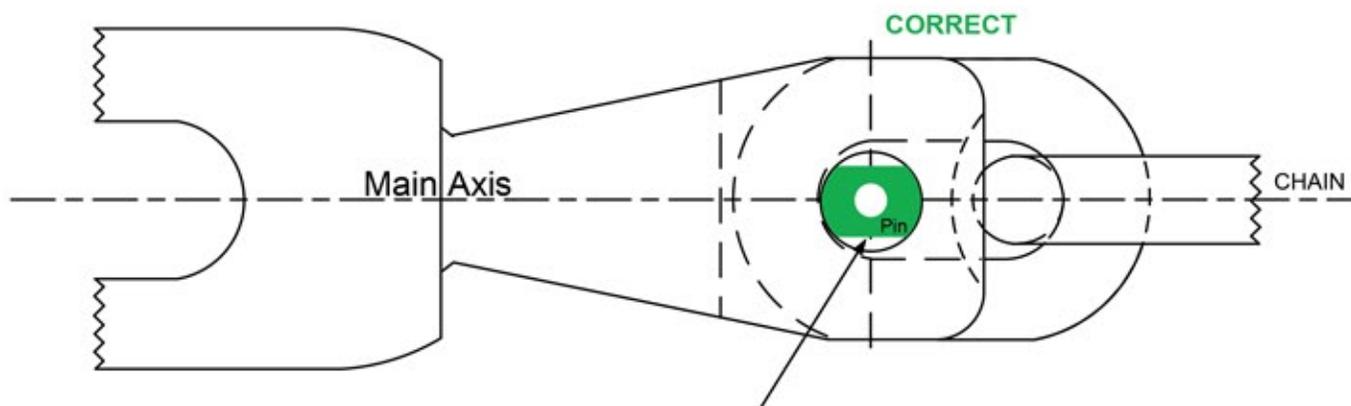
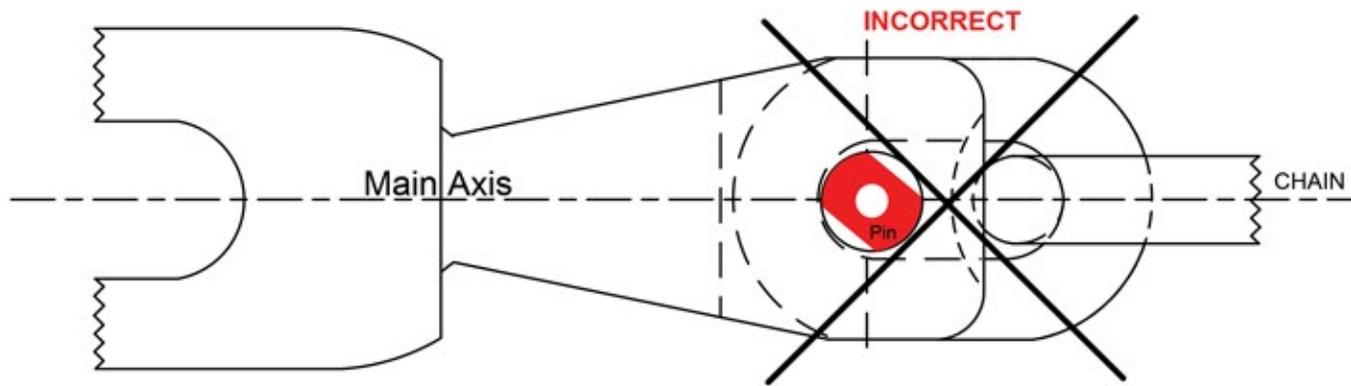


(*) Teflon Du Pont. 7

ULTRA Flip Swivel Unique Features :

- * **One Piece Body:** Fabricated (not cast) one piece body ensures maximum strength. It is suitable to be used with most anchor types.
- * **One Piece Head:** Fabricated (not cast) one piece swivel head (which includes the semi spherical ball) ensures maximum strength.
- * **Semi Spherical Ball:** Self cleaning and allows 360 degree swivel.
- * **Hexagonal Head Bolts:** Ensures locking bolt cannot release unintentionally.
- * **TEFLON* O-Ring:** Our internal TEFLON* O-Ring stops metal friction occurring when under load providing low resistance and smooth operation.
- * **Flip Nub:** If the anchor is recovered up-side down the flip nub will assist the anchor to correctly right itself onto the roller.
- * **Rounded Corners:** Reduces potential damage to contacted surfaces.
- * **Throat Opening:** The opening is specially suited to the chain size.
- * **Specifications:** The swivel's connectable max. anchor weight, chain size and breaking strength is recorded on the rear side of the swivel.
- * **Warranty:** All ULTRA Swivels are supplied with a standard five year warranty.

(*) : TEFLON Du Pont.



Flat surfaces of the pin must be connected parallel to the Main Axis

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