

Edson Articu-Lock™ Sheave Assemblies

Supplied By; American Rigging Supply, Inc.

Edson's Articu-Lock Sheaves – Ideal for performance sailboats, cruising/racing catamarans and high-tech cruising yachts above 27 feet. Edson engineers have designed this new sheave to be lightweight, strong and extremely easy to align and lock in place.

NOTE: Order AL for aluminum or BR for bronze sheaves.

- Single or Double Styles available.
- Sheaves can articulate through 180° for ease of installation and alignment.
- Available in 4", 6", 8" and 10" models.
- Stainless Needle Bearings, Pins and Races virtually eliminate friction and wear.
- High-Strength, Investment Cast 316 Stainless Base and Uprights.
- Large-footprint mounting base for extra support and strength.
- Cast Aluminum or Bronze Sheaves available.
- Positive lock when desired sheave angle is determined.
- Ideal for performance sailboats, cruising/racing catamarans and high-tech cruising yachts.
- Extra-deep grooved sheaves for extremely safe wire seat.
- 8" and 10" models feature integral grease fittings.

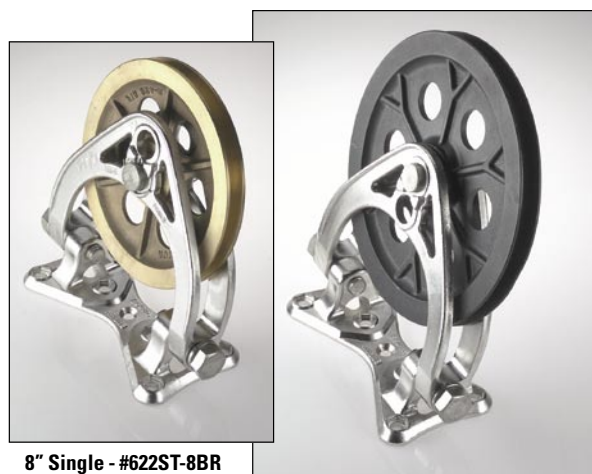


6" Double - #626ST-6AL



4" Single - #622ST-4AL

6" Single - #622ST-6AL

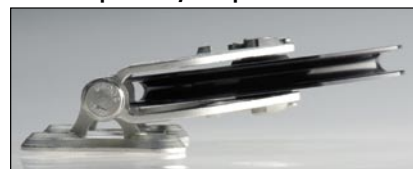


8" Single - #622ST-8BR

10" Single - #622ST-10AL



Two Single Articu-Lock Sheaves installed. Each can be mounted and adjusted independently for optimum cable lead.



NOTE: Sheaves must be locked in place when adjustment is complete.

ARTICU-LOCK™ SHEAVE ASSEMBLY ORDERING GUIDE

	Order #	Sheave Dia.	Base (Approx.)	Height Overall	Max. Wire Size	Pin Dia.	Aluminum Sheave Weight	Bronze Sheave Weight	Safe Working Load-Lbs.	Break Strength Lbs.
Single	622ST-4 AL	4"	5 1/4" x 3 1/4"	5 1/4"	1/4"	3/8"	3.7 lbs 1.68 Kg	n/a	4,000 lbs 1,814 Kg	8,000 lbs 3,628 Kg
	622ST-6 AL	6"	5 1/4" x 3 1/4"	7 1/4"	3/8"	3/8"	4 lbs 1.82 Kg	n/a	5,000 lbs 2,268 Kg	8,000 lbs 3,628 Kg
	622ST-8 (*)	8"	5 1/4" x 3 1/4"	5 1/4"	1/2"	3/8"	9.5 lbs 4.3 Kg	13.1 lbs 6.9 Kg	10,000 lbs 4,536 Kg	15,000 lbs 6,800 Kg
	622ST-10 (*)	10"	5 1/4" x 3 1/4"	7 1/4"	3/8"	3/8"	11.0 lbs 5.0 Kg	18.1 lbs 8.2 Kg	10,000 lbs 4,536 Kg	15,000 lbs 6,800 Kg
	622ST-10 (*)	25.4cm	14.6 x 8.3 cm	18.4 cm	8 mm	16 mm	5.0 Kg	8.2 Kg	4,536 Kg	6,800 Kg
Double	626ST-4 AL	4"	5 1/4" x 5"	5 1/4"	1/4"	3/8"	6.55 lbs 2.98 Kg	n/a	4,000 lbs 1,814 Kg	8,000 lbs 3,628 Kg
	626ST-6 AL	6"	5 1/4" x 5"	7 1/4"	3/8"	3/8"	7.65 lbs 3.48 Kg	n/a	5,000 lbs 2,268 Kg	8,000 lbs 3,628 Kg

* - specify AL (aluminum) or BR (bronze). 6" Sheave available with bronze oilite or stainless needle bearing - see price page.

Edson's Sheaves and Sheave Assemblies are available in Bronze or lightweight Hard Coat Aluminum (see charts for sizes), and are specially designed for use in wire rope steering systems for sailboats.

The Aluminum Sheaves are ideal for the performance boat that requires sensitive, lightweight steering. The 4" sheaves run on oil impregnated bronze bearings, while 6" sheaves use bronze or stainless needle bearings. The larger (8", 10", and 12") sizes in Bronze or Aluminum run on stainless needle bearings and liners for super sensitive action.



Tech Tip

ABYC & CE standards require sheave diameters to be a minimum of 16X the diameter of the wire. However, for optimum steering performance, use the largest sheave possible to prevent wire jump-out and to reduce friction.

SINGLE UPRIGHT SHEAVE ASSEMBLY

Order #	Sheave Dia.	Base (Approx.)	Height Overall	Max. Wire Size	Pin Dia.	Weight		Safe Working Load Lbs.	Break Strength Lbs.
						Alum. lbs.	Bronze lbs.		
620BR-4AL	4"	3" x 2 1/4"	4 5/8"	1/4"	3/8"	1 1/4"	n/a	4,000	8,000
620BR-6AL	6"	3 3/4" x 5 1/4"	6 1/2"	3/8"	3/8"	4 1/2"	n/a	5,000	10,000
620(*)-8	8"	8" x 3 3/4"	9"	1/2"	1"	3.95	7.7	10,000	20,000
620(*)-10	10"	9" x 5"	11"	1/2"	1"	11	21	15,000	30,000
620(*)-12	12"	10 1/2" x 7"	14"	3/4"	1 1/4"	17	36	20,000	40,000

* Specify AL for aluminum or BR for Bronze. 6" Sheaves available with bronze oilite or stainless needle bearing - see price page.

FLAT SHEAVE ASSEMBLIES

Order #	Sheave Dia.	Base (Approx.)	Height Overall	Max. Wire Size	Pin Dia.	Weight		Safe Working Load Lbs.	Break Strength Lbs.
						Alum. lbs.	Bronze lbs.		
847-4AL	4"	2 1/2" x 7"	1 1/2"	1/4"	3/8"	2	n/a	4,000	8,000
847-6AL	6"	4 3/4" x 9"	1 3/4"	3/8"	3/8"	2.24	n/a	5,000	10,000
621(*)-8	8"	11 1/8" x 5"	2 3/4"	1/2"	1"	4	8	10,000	20,000
621(*)-10	10"	14" x 7"	3 3/4"	1/2"	1"	9	19	15,000	30,000
621(*)-12	12"	16" x 14"	4 1/2"	3/4"	1 1/4"	19	38	20,000	40,000

* Specify AL for aluminum or BR for Bronze. 6" Sheaves available with bronze oilite or stainless needle bearing - see price page.

SINGLE SHEAVE SELECTION GUIDE

Sheaves Only



Edson's Sheaves may be the answer in many areas of custom boat building, not only for steering but also for centerboards, custom deck hardware, or remote actuators, such as emergency shut off valves and CO2 systems. Great care should be taken to insure that the wire and sheave size are matched.

Order #624 (specify size and material).

Order #	Sheave Dia.	Hub Width	Rim Width	Max. Wire Size	Pin Dia.	Weight		Safe Working Load-Lbs.	Break Strength Lbs.
						Alum. lbs.	Bronze lbs.		
624-3BR Bronze only	3"	1/2"	1/2"	3/16"	3/8"	N/A	9 oz	3,000	5,000
624-4AL Aluminum only	4"	3/8"	1/2"	1/4"	3/8"	5 oz	N/A	4,000	8,000
624-6AL Aluminum only	6"	3/4"	3/8"	3/8"	3/8"	11 oz	N/A	5,000	10,000
624-8(*)	8"	1"	3/4"	1/2"	1"	1.6	5	10,000	20,000
624-10(*)	10"	1 1/4"	1"	1/2"	1"	2.5	8	15,000	30,000
624-12(*)	12"	2"	1 1/8"	3/4"	1 1/4"	7.0	21.9	20,000	40,000

* Specify AL for aluminum or BR for Bronze. 6" Sheaves available with bronze oilite or stainless needle bearing - see price page.

Edson Pedestal Idlers provide maximum strength, minimum friction and easy installation. They come assembled, yet are fully adjustable for proper alignment. Each idler assembly has stainless grommets that allow the steering cables to pass through. Idler plates feature black anodized aluminum or cast bronze, corrosion-resistant bases, investment cast stainless uprights and anodized aluminum sheaves.

NOTE: Adjustable Sheave Uprights must be locked in place with supplied bolts and nuts after installation.

Adjustable Idlers

Edson's Adjustable Idler - designed for boats having the quadrant on the forward side of the rudderpost, and the pedestal either forward or aft of the rudderpost. They can be used for Radial Drive Steering Systems when the pedestal is located aft of the rudderpost. Feature anodized aluminum bases, stainless uprights, anodized aluminum sheaves and sheave guards.

4" Adjustable Idler - Order #711AL-4AL

6" Adjustable Idler - Order #711AL-6AL

4" Adjustable Compact Idler - Order 713AL-FL-4AL

6" Adjustable Compact Idler - Order 713AL-FL-6AL*

(Compact Idlers compatible ONLY with 476 pedestals)

Edson's Adjustable Racing/Cruising Idler - designed especially for boats with high rudder loads, and is a step up in strength from #711 Adjustable Idler. Cast bronze base with swivel-type grommets for easy alignment of the sheaves. Additional bolts (supplied) must be installed for locking sheaves in place. Stainless uprights and anodized aluminum sheaves with integral sheave guards are standard.

4" Adjustable Racing/Cruising Idler - Order #711BR-4AL

6" Adjustable Racing/Cruising Idler - Order #711BR-6AL*

Adjustable Crossed-Wire Idlers

Edson's Adjustable Crossed-Wire Idler - for use on boats where the quadrant is aft of the rudderpost or on Radial Drive Steering Systems when the pedestal is located forward of the rudderpost. This exclusive Edson design crosses the wire within the pedestal column and the slanted sheaves, correctly aiming the wires at the sprocket for proper alignment of the wire to the sheaves, reducing the risk of chaffing. The sheaves are fully adjustable between 10° and 155° aft and lock in place to maintain the desired setting. They also feature anodized aluminum bases, stainless uprights, anodized aluminum sheaves and sheave guards.

4" Adjustable Crossed-Wire Idler - Order #776AL-4AL

6" Adjustable Crossed-Wire Idler - Order #776AL-6AL*

4" Cross Wire Compact Idler - Order 712AL-FL-4AL

6" Cross Wire Compact Idler - Order 712AL-FL-6AL*

(Compact Idlers compatible ONLY with 476 pedestals)

Edson's Adjustable Racing/Cruising Slanted Crossed-Wire Idler - for use in racing/cruising boats. This exclusive Edson design crosses the wire within the pedestal column and the slanted sheaves correctly aim the wires at the sprocket. This idler is required for steerers with a larger than 2.2 pitch diameter sprocket. Additional bolts (supplied) must be installed for locking sheaves in place. Stainless uprights, Bronze Base and anodized aluminum sheaves with integral sheave guards are standard.

4" Adjustable Racing/Cruising Crossed-Wire Idler - Order #776BR-4AL

6" Adjustable Racing/Cruising Crossed-Wire Idler - Order #776BR-6AL*



All Edson Idlers now come standard with Sheave Guards!



WARNING! Larger steering wheel diameters impart higher loads on the complete steering system—all components including chain, wire and idlers should be up-sized.

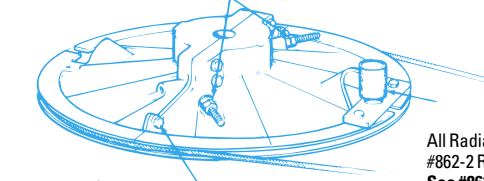


IDLER SPECIFICATIONS AND ORDERING GUIDE						
Part No.	Boat Length	Idler Size in (cm)	Dia Wire in (cm)	Max Width in (cm)	Max Depth in (cm)	Weight lbs (kg)
711AL-4AL	to 36'	4 (10.2)	to 1/4 (.64)	9.5 (24.1)	5.0 (12.7)	6.5 (2.9)
711AL-6AL	37'-44'	6 (15.2)	to 3/8 (.95)	13 (33.0)	7.25 (18.4)	9.0 (4.1)
711BR-4AL	to 36'	4 (10.2)	to 1/4 (.64)	9.5 (24.1)	6.0 (15.2)	8.0 (3.6)
711BR-6AL	35'-48'	6 (15.2)	3/8 (.95)	9.5 (24.1)	7.5 (19.0)	13.0 (5.9)
776AL-4AL	to 36'	4 (10.2)	to 1/4 (.64)	8.25 (21.0)	5.0 (12.7)	7.0 (3.2)
776AL-6AL	37'-44'	6 (15.2)	to 3/8 (.95)	12.5 (31.8)	7.25 (18.4)	9.5 (4.3)
776BR-4AL	to 36'	4 (10.2)	to 1/4 (.64)	9.5 (24.1)	6.0 (15.2)	8.0 (3.6)
776BR-6AL	35'-48'	6 (15.2)	to 3/8 (.95)	9.5 (24.1)	7.5 (19.0)	13.0 (5.9)

*NOTE: 6" Sheaves available with bronze oilite or stainless needle bearing - see price page.



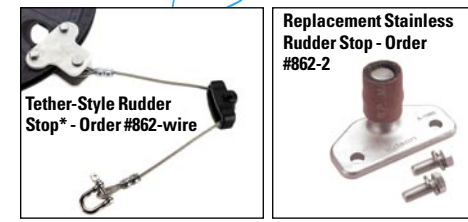
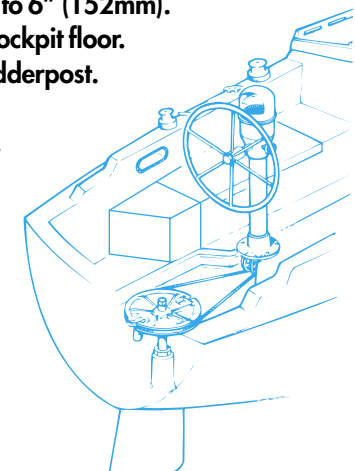
Requires two Take-Up Eyes #618. Place nuts on same side and tighten together.



1/4"-20 S.S. bolts and nuts are supplied and must be installed.

- Ideal for boats up to 55' (17m) with vertical rudderposts where cables can be led directly from the pedestal idler to the drive wheel.
- Three hub sizes to fit rudderposts from 1" (25mm) to 6" (152mm).
- Works well for boats with limited space beneath cockpit floor.
- Easy installation — split design clamps around rudderpost.
- Reduces sheave and steering friction.
- Can be used with Pedestal and Bulkhead Steerers.
- Heat Treated Anodized Aluminum Construction.
- Dished shape for extra strength.
- Can be mounted up or down for increased versatility and space savings.
- Each Drive Wheel is Custom Bored to your exact specification.
- Must be secured with Key, Through Bolt or Set Screws.
- Rudderstop Included.
- Steerer can be installed forward or aft of the rudderpost with appropriate idler.
- Unique Wire Tether-Style Rudder Stop Available

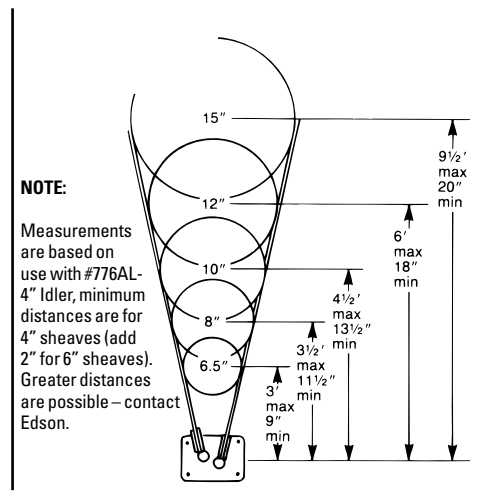
NOTE: All Radial Wheels must be mechanically affixed to rudderpost. See Tech-Tip pg 20. Larger custom radial drives can be produced for large and rectangular rudderposts.



*Customer supplied wire.

RADIAL DRIVE SPECIFICATIONS

Part No.	Size	A = Hub Thickness in (cm)	B = Offset or Dish in (cm)
777	6.5	1 1/2 (4.8)	1 1/2 (3.2)
	8	1 1/2 (4.1)	1 1/2 (4.1)
	10	2 1/4 (5.7)	1 1/2 (3.5)
	12	2 1/4 (5.7)	1 1/2 (3.5)
	15	2 1/4 (5.7)	1 1/2 (3.5)
800	8	1 1/2 (4.1)	1 1/2 (4.1)
	10	2 1/4 (5.7)	1 1/2 (3.5)
	12	2 1/4 (5.7)	1 1/2 (3.5)
	15	2 1/4 (5.7)	1 1/2 (3.5)
802	8	2 (5.1)	Flat
	10	2 (5.1)	Flat
	12	2 1/2 (6.4)	Flat



NOTE: Measurements are based on use with #776AL-4" Idler, minimum distances are for 4" sheaves (add 2" for 6" sheaves). Greater distances are possible - contact Edson.

All Radial Drive Wheels are supplied with #862-2 Rudder Stop. See #862 on price page for replacement and additional sizes of rudderstops.



Tech Tip

- 1) If pedestal is forward of the rudderpost, use the #776AL Idler and cross the cables inside the pedestal for proper steering direction.
- 2) Boats with high rudder loads require independent rudderpost stops.
- 3) Max. keyway size is the maximum keyway that can be used with the maximum bore.
- 4) Use #684 stainless keys only.
- 5) 1/4"-20 stainless bolts and nuts are supplied and must be installed in the holes supplied on the outside of the radius.
- 6) For additional Radial Drive installation instructions, see Edson Steering Installation Guide.

RADIAL DRIVE ORDERING GUIDE

Order #	Boat Size L.O.A. feet	Drive Wheel Radius in (cm)	Outside Diameter in (cm)	Pilot Bore in (cm)	Max Bore in (cm)	Max Size Keyway in (cm)	Weight lb (kg)
777-6.5	to 30	6.5 (16.5)	13 (33.0)	1 1/8 (2.3)	3 (7.6)	3/8 (.95)	6.5 (2.9)
777-8	to 35	8 (20.3)	16 (40.6)	1 1/8 (2.3)	2.5 (6.4)	3/8 (.95)	7.5 (3.4)
777-10	36-41	10 (25.4)	21 (53.3)	1.5 (3.8)	3 3/8 (8.6)	1/2 (1.3)	10.5 (4.7)
777-12	42-48	12 (30.5)	25 (63.5)	1.5 (3.8)	3 3/8 (8.6)	1/2 (1.3)	22 (10.0)
777-15	48-55	15 (38.1)	30 (76.2)	1.5 (3.8)	3 3/8 (8.6)	1/2 (1.3)	26 (11.8)
800-8	to 35	8 (20.3)	16 (40.6)	2.5 (6.4)	3.5 (8.9)	3/8 (.95)	8 (3.6)
800-10	36-41	10 (25.4)	21 (53.3)	3 3/8 (8.6)	4.5 (11.4)	1/2 (1.3)	13 (5.9)
800-12	42-48	12 (30.5)	25 (63.5)	3 3/8 (8.6)	4.5 (11.4)	1/2 (1.3)	23 (10.4)
800-15	48-55	15 (38.1)	30 (76.2)	3 3/8 (8.6)	4.5 (11.4)	1/2 (1.3)	27 (12.2)
802-8	to 35	8 (20.3)	17 (43.2)	3 3/8 (8.6)	6 (15.2)	3/8 (.95)	14 (6.4)
802-10	36-41	10 (25.4)	21 (53.3)	4 1/8 (11.1)	6 (15.2)	3/8 (.95)	16 (7.3)
802-12	42-48	12 (30.5)	25 (63.5)	4 1/8 (11.1)	6 (15.2)	3/8 (.95)	23.5 (10.7)

NOTE: Selection Guide is to be used with specific recommendations approved by your naval architect.