



Most vessels with a pedestal steering system will find a quadrant or radial drive wheel installed below decks at the rudder post. The wires from the pedestal terminate at either a quadrant or radial giving direct feedback to the helmsperson. Quadrants are most often made of manganese bronze and radials are heat-treated anodized aluminum. In no case should the autopilot be attached directly to the quadrant or radial drive wheel.

Quadrants and Radials are NON-RETURNABLE. Please measure carefully. See current [Quadrant and Radial price page](#) for additional machining charges on special bores, square bores, keyways, or set screws.

What does Edson need to know in order to machine a quadrant/radial specific to your boat?

Rudder Post Diameter

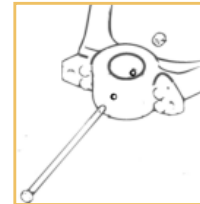
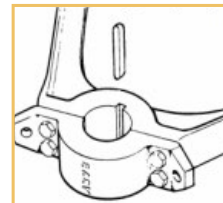
Quadrant or Radial

Securement Method



Style Quadrant or Radial
Model Part Number (Found on Pg. 2)

Key and Keyway



Through-Bolt

Set Screws



Measuring The Rudder Post

All quadrants and radials are custom machined to match the rudder post diameter. The measurement on the rudder post should be taken with digital calipers to an accuracy of 0.001" (For Example: 2.375" diameter). Please watch the video linked to the right. [Measure the rudder post.](#)

Choosing a Quadrant or Radial (Q/R)

Method 1

Find the "FIG" number on the Q/R. The figure number is the part number to order. There are casting numbers labeled "PART" on the Q/R these refer to only part of the Q/R and not the whole product.

Method 2

If you can't determine what the "FIG" number is then measure the Q/R. Measure from the center of the bore to the edge, this will give you the radius or size of the Q/R.

Example: 676-12 is a part number for a quadrant. "676" refers to a quadrant and "12" refers the size of the quadrant, 12" radius from center of bore to edge of quadrant.

Method 3

Don't have an existing Q/R then check our [sailboat data sheets](#) to see if we have information online for your vessel. No luck there? You can email us at info@edsonmarine.com with the make, model and year of your vessel and one of our team members will check if we have information on the steering system for it.

Custom Builds/New Boats

For a custom project or new build we recommend working with a naval architect if you are unsure which quadrant or radial will work best for the planned steering system. Contact us at info@edsonmarine.com with any questions.

Quadrants



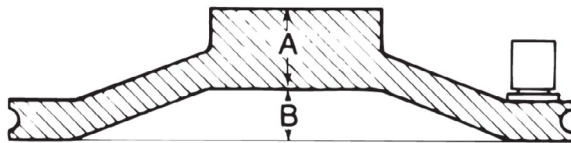
Part#	Material	Boat Size L.O.A	Quadrant Radius in(cm)	Hub Height in(cm)	Weight lbs(kg)
676BR-8	Bronze	up to 35'	8 (20.3)	1 $\frac{1}{16}$ (4.0)	12 (5.4)
676BR-10	Bronze	35-45	10 (25.4)	1 $\frac{1}{16}$ (4.0)	12 (5.9)
676BR-12	Bronze	40-50	12 (30.5)	1 $\frac{1}{16}$ (4.0)	15 (5.6)
676BR-14	Bronze	45-55	14 (35.6)	1 $\frac{1}{16}$ (4.0)	17 (7.7)
676BR-16	Bronze	50-60	16 (40.6)	2 $\frac{1}{2}$ (6.4)	36 (16.3)
676BR-18	Bronze	55-65	18 (45.7)	2 $\frac{1}{2}$ (6.4)	36 (16.3)
676AL-18	Aluminum	55-65	18 (45.7)	2 $\frac{1}{2}$ (6.4)	15 (6.8)
676BR-20	Bronze	60-70	20 (50.8)	2 $\frac{1}{2}$ (6.4)	40 (18.1)
676BR-24	Bronze	70-90	24 (61.0)	2 $\frac{1}{2}$ (6.4)	46 (20.9)
676AL-24	Aluminum	70-90	24 (61.0)	2 $\frac{1}{2}$ (6.4)	19 (8.6)

Radial Drive Wheels



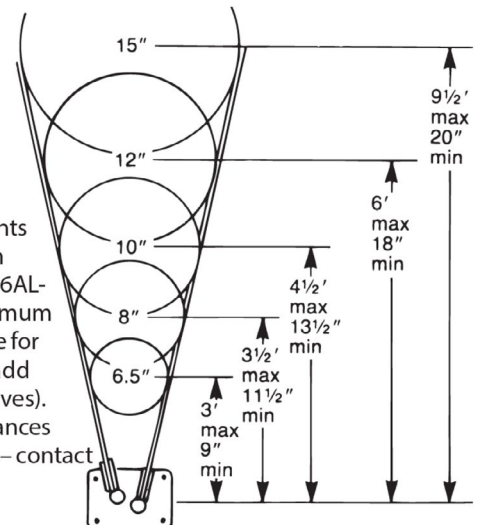
Part#	Boat Size L.O.A	Drive Wheel Radius in(cm)	Outside Diameter in(cm)	Max Bore in(cm)	Weight lbs(kg)
777-6.5	to 30	6.5 (15.5)	13 (33.0)	2.875 (7.3)	6.5 (2.9)
777-8	to 35	8 (20.3)	16 (40.6)	2.875 (7.3)	7.5 (3.4)
777-10	36-41	10 (25.4)	21 (53.3)	3.375 (8.6)	10.5 (4.7)
777-12	42-48	12 (30.5)	25 (63.5)	3.375 (8.6)	22 (10)
800-8	to 35	8 (20.3)	16 (40.6)	3.5 (8.9)	8 (3.6)
800-10	36-41	10 (25.4)	21 (53.3)	4.5 (11.4)	13 (5.9)
800-12	42-48	12 (30.5)	25 (63.5)	4.5 (11.4)	23 (10.4)
802-8	to 35	8 (20.3)	17 (43.2)	6 (15.2)	14 (6.4)
802-10	36-41	10 (25.4)	21 (53.3)	6 (15.2)	16 (7.3)
802-12	42-48	12 (30.5)	25 (63.5)	7 (17.8)	23.5 (10.7)

Radial Measurements



Part #	Size	A=Hub Thickness in(cm)	B=Offset or Dish in(cm)
777	7	1.875(4.8)	1.25(3.2)
	8	1.625(4.1)	1.625(4.1)
	10/12	2.25(5.7)	1.375(3.5)
800	8	1.625(4.1)	1.625(4.1)
	10/12	2.25(5.7)	1.375(3.5)
802	8/10	2(5.1)	Flat
	12	2.375(6.1)	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.



Order Details Order online or submit to info@edsonmarine.com before placing the order

Customer Name: _____

Company Name (If Applicable): _____

Phone: _____

Email: _____

Boat Type/Model: _____

Length: _____ Year: _____

Selecting a Securement Method

- Keyway
- Through Bolt
- Set Screws

Go to [EB380-2](#) for help determining which securement method to use.

Square Rudder Posts

If your boat has a square rudder post, Edson needs the following information:

1. The leg length of the square
2. The degree in which the angles of the square point
3. Points Fore and Aft would be as shown in the red with the points at 0° and 180°
4. Flats Fore and Aft would be as shown in the blue with the points at 135° and 315°

Non-standard keyways within 20° of 270° and 90°(On the image to the right) need to be reviewed before the order is accepted.

Standard keyways are located at 0° and 180°.

Mark the location of the keyway and note the degrees from 0° below.



Quadrant/Radial & Machining Details

Style:	Quadrant	Radial
Part Number:		

Bore Size (taken with calipers to an accuracy of 0.001"): _____

Securement Methods

Please select one of the securement methods and fill in any required information.

1	Key (Specify Key Size)		Need key stock ¹ ? Yes No
2	Through Bolt (Select bolt size)	3/8-inch (Standard)	Other:
3	Set Screws (Only if options 1 & 2 are not possible)	3/8-inch (Standard)	Other:

Notes: _____

¹ Key stocks are sold separately. 1/4", 1/2" and 3/8" key stocks available.