

EMERALD COAST UTILITIES AUTHORITY  
LIFT STATION PUMP OVERVIEW CHART

Horsepower	15 HP and Below	16-40 HP	41 HP and Above
RPM	1200 or 1800	1200 or 1800	900, 1200, or 1800 <sup>1</sup>
Pump Type	Submersible Centrifugal	Submersible Centrifugal	Submersible Centrifugal
Impeller Type <sup>2</sup>	Non-Clog or Vortex	Non-Clog or Vortex	Non-Clog or Vortex
Starter Type <sup>3</sup>	FVNR Starters	FVNR Starters (< 20HP) VFD/Soft Start (≥ 20HP)	VFD
Pump Manufacturer Warranty (100%)	5 year, See Spec.	5 year, See Spec.	5 year, See Spec.
Motor Insulation Class	Class H	Class H	Class H
Mechanical Seal Type - Pump Side	Silicon Carbide/Silicon Carbide	Silicon Carbide/Silicon Carbide	Silicon Carbide/Silicon Carbide
Mechanical Seal Type - Bearing Side	Carbon/Silicon Carbide	Carbon/Silicon Carbide	Carbon/Silicon Carbide
Bearings	40,000 hrs. min.	40,000 hrs. min.	40,000 hrs. min.
Impeller Wear Ring <sup>4</sup>	Stainless Steel/ 300 Series Brinnell Hardness	Stainless Steel/ 300 Series Brinnell Hardness	Stainless Steel/ 300 Series Brinnell Hardness
Volute Wear Ring <sup>4</sup>	Stainless Steel/ 400 Series Brinnell Hardness	Stainless Steel/ 400 Series Brinnell Hardness	Stainless Steel/ 400 Series Brinnell Hardness
Guide Rails / Material	2-inch diameter, Sch. 40, 316 S.S.	2-inch diameter, Sch. 40, 316 S.S.	TBD Based on Size of Pump
Seal Availability	2 Business Days	5 Business Days	TBD Based on Size of Pump
Impeller Availability	2 Business Days	5 Business Days	TBD Based on Size of Pump
Shaft	440 Stainless Steel	440 Stainless Steel	440 Stainless Steel
Approved Manufacturers <sup>5</sup>	KSB	KSB	KSB
	Fairbanks Morse	Fairbanks Morse	Fairbanks Morse
	EMU	EMU	
	Grundfos	Grundfos	
	Hydromatic	Hydromatic	

1 – 1800 rpm allowed on pump motors less than 61 horsepower only.

2 – Impellor type shall be chosen by ECUA Lift Station Manager or ECUA Engineering Department Project Engineer based on specific application.

3 – Starter type shall be chosen by ECUA I/E Manager or ECUA Engineering Department Project Engineer based on specific application.

4 – Hardened metallurgy may be required in some locations, primarily where high grit is anticipated (i.e. Pensacola Beach and Perdido Key).

5 – ECUA reserves the right to disallow any particular manufacturer from any specific project based on ECUA's judgment regarding application, prior experiences, etc.

**NOTE:** This chart is intended to provide an overview of various technical features required in specifying pumps. ECUA reserves the right to make selections that differ from the information stated in this chart and/or the specifications.

**NOTE:** Final pump selection for each project shall be selected from the chart of approved pumps as shown on the plans. Said chart shall match the pumps as shown on each project's Pump Selection Worksheet.