



ESU1 SPECIFICATIONS

VEHICLE MOUNTED PUMP



Pump Body:

Grey iron with double stripping edge volute minimizes radial forces at all flow rates.

Intake:

8-inch (200mm) Victaulic®

Discharge:

5-inch (127mm) ANSI flange

Impeller:

Bronze impeller, balanced mechanically and hydraulically for vibration-free operation and flame-plated to assure longer life despite the presence of abrasives in the water supply.

Impeller Shaft and Seal:

Stainless steel shaft and impeller nut with spring-loaded mechanical shaft seal. Self-adjusting mechanical seal eliminates leakage and routine maintenance.

Wear Rings:

Bronze labyrinth-type (reverse-flow) replaceable wear rings increase pump life and keep maintenance costs to a minimum.

V-ring:

Located on the impeller shaft between mechanical seal and transmission oil seal, the V-ring provides added protection by keeping water and foreign matter out of the bearings.

Oil Seals:

Single lip, spring-loaded design for lubrication seal and additional bearing protection from dirt and water.

Warranty

Waterous Seven-Year Limited Warranty

Conditions of Sales

For details on Waterous Conditions of Sales, refer to F-2190, Conditions of Sales located on the Waterous web site at www.waterousco.com or by contacting Waterous.

ESU1 Pump Performance

GPM	L/min	L/Sec	PSI	Bar	kPa	MPa
1500	5678	94	150	10	1000	1.0
1750	6624	110				
2000	7570	126				
2250*	8517	142				

*Pump Inducer Required

Optional Equipment

- VENTURIS™ Air Priming System, see F-2940
- Electric Priming System, see F-2418
- Pressure Control Systems:
 - Discharge Relief Valves, see F-897
 - Piloted Intake Relief Valves, see F-2192
 - Non-Piloted Intake Relief Valve, see F-2192-N
- Corrosion Protection – Zinc Intake Screens and Magnesium Anodes
- Overheat Protection Manager, see F-2422
- Drain Valves, see F-1158
- 21st Century Manifold (4 in. end flanged manifold with (8) 2-1/2 in. side pads)
- 5-inch ANSI to 4-inch ANSI Adapter
- 6" (152mm) Dual Intake "Rams Horn"
- Seven-Year Limited Warranty with Total Protection Package (TPP-5)

C22 Chain Drive Transmission

Housing: High-strength aluminum

Drive Ratios – 1.69, 1.79, 1.88, 1.97, 2.03, 2.27

Shafts: Drive line shafts made from alloy steel forgings, hardened and ground to size.

Drive and Driven Sprockets

Made of steel. All sprockets are hardened and have ground bores.

Drive Chain

High-strength involute form chain.

Bearings

Deep-groove, anti-friction ball bearings give support and proper alignment to the impeller shaft assembly. Bearings are oil-splash lubricated, completely separated from the water being pumped, and protected by a V-ring and oil seals.

Passive Lubrication System

C22 uses a passive lubrication system. Eliminates the need for a separate oil pump.

Shift Mechanism

Constant-mesh, two-position sliding collar that engages all teeth simultaneously. In-cab controlled pneumatic shift or an optional electric shift. A patented internal locking mechanism provides a positive lock in PUMP or ROAD position.

Bearing Housing

Housing:

Cast in Aluminum

Bearings:

Deep-groove, anti-friction ball bearings give support and proper alignment to the impeller shaft assembly. Bearings are oil-splash lubricated, completely separated from the water being pumped, and protected by a V-ring and oil seal.