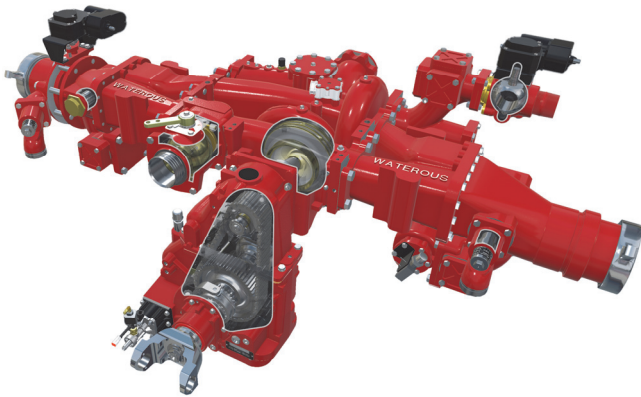




CS/CSU SINGLE STAGE

VEHICLE MOUNTED PUMP



CS/CSU Pump Performance							
Model	GPM	L/min	L/Sec	PSI	Bar	kPa	MPa
CS	750	2839	47	150	10	1000	1.0
	1000	3785	63				
	1250	4732	78				
CSU	1500	5678	94	150	10	1000	1.0
	1750	6624	110				
	2000	7570	126				
	2250	8517	142				

Pump Features

Casing

Two-piece, horizontally-split, high-tensile, close grained gray iron. All passageways are carefully matched to assure the very best hydraulic flow characteristics.

Wear Rings

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

Impellers

Bronze, balanced both mechanically and hydraulically for vibration-free operation. Flame-plated impeller hubs are standard on CSU (optional on CS).

Impeller Shaft

Heat-treated stainless steel is ground at all critical areas, polished under packing. An exclusive two-piece impeller shaft allows separation of the transmission from the pump without disassembling either component.

Bearings

Three deep-groove, anti-friction ball bearings, located outside the pumping chamber, give support and proper alignment to the impeller shaft assembly. Bearings are oil or grease lubricated, completely separated from the water being pumped, and protected by seal housings, flinger rings and oil seals.

Shaft Seal

Seal housings on packed pumps are equipped with braided flexible graphite (BFG) rings held in place by a split bronze gland which is fully removable and adjustable. Self-adjusting, spring-loaded mechanical seals are available which eliminate leakage and routine maintenance.

Flinger Rings

Located on the impeller shaft between seal housings and bearing housings, flinger rings provide added protection and keep water and foreign matter out of the bearings.

Oil Seals

Standard lip type for lubrication and additional bearing protection from dirt and water.

Simple to Operate

- Power shift engages pump with indicating lights confirming shift is complete.
- Single control activates the priming system, automatically opening the priming valve and starting the primer.
- Single ON-OFF control activates the automatic relief valve systems.

Versatility

The Waterous CS/CSU pump was designed with versatility in mind. Waterous offers a complete selection of intake and discharge locations and sizes, and overall piping arrangements.

- Discharge locations are available to meet any need, and sizes from 2-1/2 inches to 5 inches are available.
- Extra large discharge system assures you of the most efficient water delivery system available to the fire service.
- Thoroughly tested to meet NFPA and special contract provisions.

Optional Equipment

- VENTURIS™ Air Priming System, see F-2940
- Electric Priming System, see F-2418
- Pressure Control Systems:
 - Discharge Valve, see F-897
 - Piloted Intake Relief Valve, 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
- 3-1/2" Tank to Pump Valve
- Discharge Valves, see F-1161
- Seven-Year Limited Warranty with Total Protection Package (TPP-5)

C22 Series Transmission (Split-Shaft)

Housings: High-strength aluminum, three-piece, horizontally-split.

Drive Ratios: 1.27, 1.41, 1.48, 1.58, 1.69, 1.79, 1.88, 1.97, 2.03, 2.27, 2.46

Shafts: Drive line shafts made from alloy steel forgings, hardened and ground to size, 2.35 inch 46-tooth involute spline.

Drive and Driven Sprockets

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

Drive Chain: High-strength involute form chain.

Ball Bearings

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

Lubrication System

An internal lubrication system delivers lubricant directly to the drive chain. This design eliminates the need for an external lubrication pump and auxiliary cooling.

Shift Mechanism

Constant-mesh, two-position sliding collar engages all teeth simultaneously. In-cab controlled pneumatic shift. Internal locking mechanism provides positive lock in PUMP or ROAD position.

PA Series Transmission (PTO Driven)

Housings: Cast aluminum body

Drive Ratios: 1.71, 1.91, 2.05

Drive & Driven Sprockets

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

Drive Chain: High-strength involute form chain

Bearings: Anti-friction ball bearings

Optional Rear Facing Output Shaft

1-3/8-10 SAE spline for Spicer 1280 or 1310 series end yokes

K Series Transmission (PTO-Driven)

Housing: Aluminum (CS Models), Gray Iron (CSU Models)

Gears: Helical, precision cut, crown shaved for proper load distribution and quiet operation.

Warranty

Waterous Seven-Year Limited Warranty