



FOAM SYSTEMS

CAFSystems™

FIRE PUMPS

VEHICLE-MOUNTED PUMP

# S100



PA

Transmission  
Options



TC22

Get the power and performance of a traditional midship fire pump in a compact, lightweight design. Made of ductile iron, the S100 are nearly 35% lighter, and yet 25% stronger than identical pumps made with gray iron.

## PERFORMANCE

- 1250 to 2000 GPM (5000 to 8000 l/min)

## AVAILABLE MOUNTING

- Mid-Ship: Equipped with C22 Chain Drive Transmission
- PTO: Equipped with PA Chain Drive PTO
- Rear Mount: Equipped with TC22 Transmission

# SPECIFICATIONS: VEHICLE MOUNTED: MODEL S100

## 2000 GPM (8000 L/min) End Suction Fire Pump

S100 Pump Performance									
GPM	L/min	L/Sec	PSI	Bar	kPa	MPa	Impeller RPM	HP	kW
1250	5000	80	150	10	1000	1.0	3315	162	121
1500	6000	100					3430	187	139
1750	7000	115					3565	216	161
2000	7500	125					3700	251	187

### Pump Features

#### Pump Body:

Cast in ductile iron. Double stripping edge volute minimizes radial forces at all flow rates.

#### Intake:

8-inch (200mm) Victaulic®

#### Discharge:

5-inch ANSI flange or an optional 21st Century Manifold (4 in. end flanged manifold with (8) 2-1/2 in. side pads) or an optional 5 in. ANSI to 4 in. ANSI adapter.

#### 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.

#### Pump Inducer:

Inducer raises inlet pressure to the impeller.

#### 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](http://www.waterousco.com) or by contacting Waterous.

### Industry Leading Sales and Support

When you purchase equipment, not only do you get quality products, you get quality service. Our expert service technicians are the best in the business and they are always happy to answer any service questions you might have.

#### Sales/Applications Assistance

Phone: 651-450-5234 (Press 3)  
[pumpsales@waterousco.com](mailto:pumpsales@waterousco.com)

#### Service Assistance

Phone: 651-450-5200  
Fax: 800-488-1228  
[service@waterousco.com](mailto:service@waterousco.com)

### Optional Equipment

- VENTURIS™ Air Priming System, see F-2940
- Priming System, see F-2418
- Pressure Control Systems:
  - Discharge Relief Valves, see F-897
  - Intake Relief Valves (Piloted), see F-2192
  - New Intake Relief Valve (Non-Piloted), see F-2192-N
- Corrosion Protection – Zinc Intake Screens and Magnesium Anodes
- Overheat Protection Manager, see F-2422
- Drain Valves, see F-1158
- 21<sup>st</sup> Century Manifold
- 5-inch ANSI to 4-inch ANSI Adapter
- Seven-Year Limited Warranty with Total Protection Package (TPP-5)
- Electronic Tachometer Sensor (with C22 Transmissions only)
- Transmissions Available:

### S100C22 and S100PA Transmission

**Housing:** High-strength aluminum

**Drive Ratios – C22:** 1.27, 1.41, 1.48, 1.58, 1.69, 1.79, 1.88, 1.97, 2.03, 2.27, 2.46

**Drive Ratios – PA:** 1.71, 1.91, 2.05

**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 and PA use a passive lubrication system that eliminates the need for a separate oil pump.

#### Shift Mechanism (C20 Only)

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.

### S100D 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