



# Data Sheet

Form No. <b>DS-1015</b>	Issue Date <b>05/25/01</b>	Rev. Date <b>10/29/13</b>
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## WATEROUS S100 SERIES PUMPS

### DESCRIPTION: MIDSHIP MOUNTED SINGLE STAGE CENTRIFUGAL FIRE PUMP

**S100 PUMPS ARE AVAILABLE AS FOLLOWS:**

Table 1. S100 Series Pumps

Capacity (Ranking) (1)	Pump Model	Intake	Discharge (3 Options)	Transmission			Pump		Eclipse ES™ CAFS	Hydraulic Adapter on Back of Trans. (3)	Extended Shaft for Compressor Drive (4)	Ass'y No.	Dim. Drawing
				Series	Input Rotation	Driveline	Model	Mounting on C20 Trans.					
1250, 1500, 1750 or 2000 GPM	S100	8 in. Victaulic (1250, 1500, 1750 or 2000 GPM)	4 in. ANSI Flange or 5 in. ANSI Flange or Manifold	C20	CW	2.35-46T Spline, Input and Output Shaft or Input Shaft Only	S100C20B S100C20C S100C20D S100C20E S100C20F	Front (Input Shaft Side)	Without	With or Without	N/A	82571 or 82571-5	DPL82571
									With	Without	N/A	82649	DPL82649
								Rear (Output Shaft Side)	N/A	With or Without	N/A	82571-5 or 82571-3	DPL82571
				D (2)	CW or CCW	1410 Series End Yoke (1-3/8-10 SAE Spline)	S100D	-	N/A	N/A	N/A	82571-2	DPL82571
	PA	CW	1-1/2-10 SAE Spline, Input Shaft Only	S100PA	-	N/A	N/A	With or Without	82571-4	DPL82571			
	S101	Crosspipe (1250, 1500, 1750 or 2000 GPM)	4 in. ANSI Flange or 5 in. ANSI Flange or Manifold	C20	CW	2.35-46T Spline, Input and Output Shaft	S101C20C S101C20D S101C20E S101C20F	Front (Input Shaft Side)	N/A	With or Without	N/A	83067 or 83067-1	DPL83067

**Notes:**

- 1.) Contact Waterous Company for additional capacity and rating information if needed.
- 2.) S100D Direct Drive pump has mounting pads on the bearing housing, pump body and intake adapter.
- 3.) Hydraulic Pump Mounting Provision consists of an SAE Class B 2-Bolt flange with a 3/4-13T, 16/32 internal involute spline.
- 4.) Extended shaft for driving compressors consists of a 1-1/4 in. round keyed shaft. Waterous does not furnish sprocket or pulley.

**SPECIFY A COMPLETE PUMP AS FOLLOWS:**

**1.) VEHICLE INFORMATION**

(See order form)

**2.) PUMP INFORMATION**

**Rated Capacity-**

Model S100 (Victaulic Intake)	U.S. GPM: 1250, 1500, 1750, 2000 (with 8 in. Intake)
	L/min.: 6000, 7000
	Imperial GPM: 1250, 1450, 1660

Model S101 (Crosspipe Intake)	U.S. GPM: 1250, 1500, 1750, 2000
	L/min.: 6000, 7000
	Imperial GPM: 1250, 1450, 1660

**Certification-**

NFPA or list other

**Additional (Dual) Rating-**

List capacity of dual rating if required

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### 3.) PUMP MODEL

#### Complete Pump/Transmission Model-

See table above

#### Material-

Standard - Ductile iron body and fittings, bronze fitted  
(See form F-2011 for additional information on materials)

#### Pump Discharge Position-

S100C20 Series & S100PA: Left, Up, Right (See DPL82571 or DPL82649 for Restrictions)  
S100D Model: Left, Up  
S101C20 Series: Up Only

#### Bearing Housing Bracket Position (S100D Model Only)-

Inverted or Vertical

### 4.) TRANSMISSIONS

4a.) **C20 Series** - See data sheet DS-2006

**PA Series** - See data sheet DS-2004

4b.) **Direct Drive** -

Input Rotation: CW or CCW  
Input Shaft: 1-3/8-10 SAE Spline

### 5.) IMPELLER SHAFT

#### Shaft Material-

Standard: 17-4 Stainless steel

#### Seal Type-

Standard: Self-adjusting mechanical seal

#### Impeller Part No. -

S100C20 Series — 8 in. Intake — 

83012 (Front Mounted Pump)
82911 (Rear Mounted Pump)

S100PA Series — 8 in. Intake — 83012

S100D Series — 8 in. Intake — 

82911 (CW Input)
83012 (CCW Input)

S101C20 Series — Crosspipe Intake — 82012 (Front Mounted Pump)

### 6.) PRESSURE CONTROL SYSTEM

6a.) **Discharge Relief Valve-** Builder Supplied Governor System or Waterous supplied,  
See Data Sheet DS-4004

6b.) **Intake Relief Valve-** See data sheet DS-4004

### 7.) INTAKE

#### 7a.) Intake, S100 Models

1.) **Intake Size** - 8 in. Victaulic®

2.) **Intake Screen**

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### 7b.) Intake, S101 Models

#### 1.) Tank to Pump Connection

**Check Valve:** With or without

**Fitting:** Blank (no fitting), 2-1/2 in. NPT, 3 in. NPT, blind flange

**(Note: 4 in. ANSI flange not available)**

or

#### **Tank to Pump Valve:**

**Fitting:** 3-1/2 in. angle comp. hose connection

4 in. non-angle comp. hose connection

4 in. angle comp. hose fitting

#### **With Manual Operator Handle:**

**Mounting:** Top or left

**Fig. No. (Open-Close Position):** 1 through 16 (see DPL81962)

#### **With Electric Rotary Actuator:**

**Mounting:** Top (see DPL82771)

**Voltage:** 12 or 24 Volt

#### 2.) Left and Right Intake Fittings

Select a fitting to be mounted on the pump plus any auxiliary fittings mounted on the main fitting pads. Also select an intake screen if required.

See data sheet DS-4003.

### 8.) DISCHARGE

#### 8a.) Discharge Fitting-

(Blank) No Fitting 5 in. ANSI Flange

or

Manifold with 4 in. end flanges and (8) 2-1/2 in. 4-bolt pads mounted parallel or perpendicular to intake (with 4° angle compensated or without angle compensation)

or

Manifold with 3-1/2 in. end flanges and (2) 2-1/2 4-bolt and (2) 2 in. NPT side pads mounted parallel or perpendicular to intake (with 4° angle compensation or without angle compensation)

or

5 in. ANSI to 4 in. ANSI flange adapter (with 4° angle compensation or without angle compensation)

#### 8b.) Manifold-

Select any auxiliary fittings and discharge valves which are to be mounted on the discharge manifold.

See data sheet DS-4001 (auxiliary fittings)

See data sheet DS-4000 (discharge valves)

#### 8c.) Additional Discharge Valves-

List all valves to be shipped loose

See data sheet DS-4000

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### 8d.) Discharge Valve Accessories-

List any control rods, panel items, etc.  
See data sheet DS-4000

### 9.) PRIMING SYSTEM

9a.) Priming Pump- See data sheet DS-4002

9b.) Priming Valve- See data sheet DS-4002

9c.) Optional Lubricant Tank- See data sheet DS-4002

9d.) Prime-Safe Lubricant- See data sheet DS-4002

### 10.) FOAM SYSTEM

10a.) Foam Manager- See data sheet DS-4010

10b.) Accessories- See data sheet DS-4010

### 11.) ECLIPSE ES SYSTEM

Available with S100 models only, not available with S101 models. (See table on page 1)

### 12.) DRAIN VALVE

See data sheet DS-4006

### 13.) MISCELLANEOUS

12a.) Additional Fittings- List any additional discharge and auxiliary fittings which are to be shipped loose  
See data sheet DS-4001

12b.) Other Items- List any miscellaneous items such as Monarch BFV items, kits as required  
See data sheet DS-4009

### 14.) SPECIALITY OPTIONS

13a.) Warranty- See data sheet DS-4008

13b.) Paint- See data sheet DS-4008

13c.) Extra Operators Manuals- See data sheet DS-4008

13d.) Operation and Maintenance Video- See data sheet DS-4008