

Form No. <b>DS-1015</b>	Issue Date <b>05/25/01</b>	Rev. Date <b>1/7/25</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. Available Pump Models

Intake	Pump Model	Discharge	Transmission			Pump and Transmission		Eclipse ES CAFS	Hydraulic Pump Mounting Provision (See Note 1)	See Dwg
			Series	Input Rotation	Driveline	Model	Pump Mounting on Transmission			
8 in. Victaulic	S100	4 in. or 5 in. ANSI Flange or Manifold	C22	CW	2.35-46T Spline		Front (Input Shaft Side)	Without	With or Without	DPL83918
								With	Not Available	DPL83939
							Rear (Output Shaft Side)	Not Available	With or Without	DPL83918
			D (See Note 2)	CW or CCW	1410 Series End Yoke	S100D	-	Not Available	Not Available	
			PA	CW	1-1/2-10 SAE Spline	S100PA	Input Shaft Side	Not Available	Not Available	
			QC Direct Engine Mount	CW	1-3/4-10 SAE Spline	S100QC	Opposite Side of Input Shaft	Not Available	Not Available	
Crosspipe	S101	4 in. or 5 in. ANSI Flange or Manifold	C22	2.35-46T Spline	2.35-46T Spline	S101C22C S101C22D S101C22E S101C22F	Front (Input Shaft Side)	Not Available	With or Without	

Table 2. Available Rated Capacities

Model			U.S. GPM	Additional Dual Rating
Pump	Intake	Pump and Transmission		
S100	8 in. Victaulic	S100C20B	1250	1500
		S100C20C	1500	1250 or 2000
		S100C20D	1750	2000
		S100C20E	2000 (See Note 3)	1500 or 1750
		S100C20F		
		S100D		
		S100PA	1250	1500
			1500	Not Available
S101	Crosspipe	S101C20C	1250	Not Available
		S101C20D	1500	Not Available
		S101C20E		
		S101C20F		

**Notes:**

- 1) Hydraulic Pump Mounting Provision consists of an SAE Class B 2-bolt flange with a 3/4-13T, 16/32 internal involute spline on the transmission end opposite of the pump.
- 2) S100D Direct Drive pump has mounting pads on the bearing housing, pump body and intake adapter.
- 3) 2000 GPM rated S100 pump models incorporate an intake inducer.

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***SPECIFY A COMPLETE PUMP AS FOLLOWS:***

### **1.) VEHICLE INFORMATION**

(See order form)

### **2.) PUMP INFORMATION**

#### **Rated Capacity-**

See table 2

#### **Certification-**

NFPA or list other

#### **Additional (Dual) Rating-**

See table 2

### **3.) PUMP MODEL**

#### **Pump and Transmission Model-**

See table 1

#### **Material-**

Standard - Ductile iron body and fittings, bronze fitted

(See form F-2011 for additional information on materials)

#### **Pump Discharge Position-**

S100C22 Series & S100PA: Left, Up, Right (See DPL83918 or DPL83939 for Restrictions)

S100D Model: Left, Up, Right

S101C22 Series: Up Only

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

Inverted or Vertical

### **4.) TRANSMISSIONS**

#### **4a.) C22 Series -** See data sheet DS-2009

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

**QC Series** – See data sheet DS-1011 and DS-1022

#### **4b.) Direct Drive -**

Input Rotation: CW or CCW

Input Shaft: 1-3/8-10 SAE Spline

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### 5.) IMPELLER SHAFT

#### Shaft Material-

Standard: 17-4 Stainless steel

#### Seal Type-

Standard: Self-adjusting mechanical seal

#### Impeller Part No.-

S100C22 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)
S101C22 Series	Crosspipe Intake	—	83012 (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

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### 7.) INTAKE

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

1.) Intake Size - 8 in. Victaulic®

2.) Intake Screen

#### 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

**With Manual Rotary Actuator Handle (Indicating):**

**Mounting:** Top

**Fig. No. 1-2** (see dwg DPL83630)

**Voltage:** 12 or 24 Volt

**With Manual Rotary Actuator Handle (Indicating):**

**Mounting:** Top

**Fig No. 1-2** (see dwg DPL83630)

##### 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.

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### 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

#### 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

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#### 13.) MISCELLANEOUS

- 13a.) Additional Fittings-** List any additional discharge and auxiliary fittings which are to be shipped loose  
See data sheet DS-4001
- 13b.) Other Items-** List any miscellaneous items such as Monarch BFV items, kits as required  
See data sheet DS-4009

#### 14.) SPECIALITY OPTIONS

- 14a.) Warranty-** See data sheet DS-4008
- 14b.) Paint-** See data sheet DS-4008
- 14c.) Extra Operators Manuals-** See data sheet DS-4008
- 14d.) Operation and Maintenance Video-** See data sheet DS-4008