

Form No. DS-1015	Issue Date 05/25/01	Rev. Date 1/31/23
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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	Not Available	
S101	Crosspipe	S101C20C	1250	Not Available
		S101C20D	1500	Not Available
		S101C20E	1750	Not Available
		S101C20F	2000	Not Available

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.

DATA SHEET

WATEROUS S100 SERIES PUMPS

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

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

DATA SHEET

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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