



Data Sheet

Form No. DS-1010	Issue Date 04/19/96	Rev. Date 8/26/21
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WATEROUS CX SERIES PUMPS

Description: Single Stage Centrifugal Fire Pump

Waterous CX Series Fire Pumps are Available as Follows:

Model	Intake	Discharge
CXS	6 in. Victaulic® Tee	4 in. ANSI Flange or Manifold with 3-1/2 in. 8-Bolt End Flanges and (2) 2-1/2 in. 4-Bolt Side Pads or Manifold with 4 in. 8-Bolt End Flanges and (8) 2-1/2 in. 4-Bolt Side Pads
CXV	6 in. Victaulic®	
CXN	DIN PN10 150 Flange	

Capacities and Ratings:

750 to 1500 U.S. GPM (2839 to 5678 L/min.) at 150 psi (10.3 bar) net pump pressure are available as follows:

Capacity (U.S. GPM)	Available for Models		
	CXS	CXV	CXN
750	No	Yes	Yes
1000	Yes	Yes	Yes
1250	Yes	Yes	Yes
1500	Yes (1)	Yes (1)	Yes (1)

Notes:

- CXS 1500 GPM rating requires two 6 in. suction hoses.

Test Pressure Limits: (Applies to both Cast Iron and Bronze Pumps)

Hydrostatic: 500 psig (34.5 bar)

Running: 350 psig (24.1 bar) maximum discharge pressure

Performance Data:

Refer to the CX performance sheet in this section of the Engineering Manual for performance data.

SPECIFY A COMPLETE PUMP AS FOLLOWS:

1.) VEHICLE INFORMATION

(See order form)

2.) PUMP INFORMATION

Rated Capacity-

U.S. GPM: 750, 1000, 1250, 1500

L/min.: 3000, 4000, 5000

Imperial GPM: 620, 840, 1050

Certification

NFPA or list other if required

Additional (Dual) Rating -

List capacity of dual rating if required

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3.) PUMP MODEL

Complete Pump/Transmission Model-

See table on page 5

Material-

Standard - Cast iron body and fittings, bronze fitted

Optional- Bronze body and fittings

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

Pump Discharge Position-

Up, left, right, down

(Note: Up position must be selected if a discharge manifold is ordered)

4.) TRANSMISSIONS

4a.) K Series- See data sheet DS-2000

4b.) PA Series- See data sheet DS-2004

4c.) T Series- See data sheet DS-2001 (not available on CXS models)

4d.) C20 Series- See data sheet DS-2006

4e.) QB Series- See data sheet DS-2007 (CXV only)

5.) IMPELLER SHAFT

Shaft Material-

Standard: 17-4 Stainless steel

Optional: K500 Monel (K and T transmissions only)

Seal Type-

Standard: Self-adjusting mechanical seal (intake pressure on seal not to exceed 200 psi)

Impeller-

Flame Plating- Standard: Without

Optional: With

Part Number- 750 to 1500 GPM: 71888 (CW impeller rotation)

71896 (CCW impeller rotation)

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6.) PRESSURE CONTROL SYSTEM

6a.) Discharge Relief Valve System- See data sheet DS-4004

Note: Pump mounted relief valve available only with 3-1/2 in. end flange discharge manifold, separately mounted relief valve available with all discharge arrangements).

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

7.) INTAKE

Intake Adapter-

Size-

CXV: 6 in. Victaulic®

CXS: 6 in. Victaulic® Tee

CXN: DIN PN10 150 Flange

Optional O-ring for CXN Flange:

Order Part No. W37108-6 (6-3/4 x 7-1/8 in.)

Side Taps-

CXV: Not available CXS:

Not available

CXN: Not available

Bottom Tap-

CXV: Not available CXS:

Not available

CXN: Not available

Intake Screen-

Size: 4 in., 5 in., 6 in. Material:

Zinc or brass

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8.) DISCHARGE

8a.) Discharge Type-

Manifold with 3-1/2 in. end flanges

Manifold with 4 in. end flanges and eight 2-1/2 in. 4-bolt pads

Blank (no manifold, 4 in. ANSI flange)

8b, 8c.) Left and Right Discharge Fittings (Only If Manifold Ordered)-

Select a fitting to be mounted on the pump plus any auxiliary fittings and discharge valves mounted on the main fittings pads.

See data sheet DS-4001 (discharge and auxiliary fittings)

See data sheet DS-4000 (discharge valves)

8d, 8e, 8f.) Manifold Pads and Relief Valve Pad Fittings (Only If Manifold Ordered)-

Select fittings and valves to be mounted on these pads

See data sheet DS-4001 (auxiliary fittings)

See data sheet DS-4000 (discharge valves)

8g.) Additional Discharge Valves-

List all valves to be shipped loose

See data sheet DS-4000

8h.) 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.) Priming 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.) Foam Manager Accessories- See data sheet DS-4010

11.) DRAIN VALVE

See data sheet DS-4006

12.) 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

13.) SPECIALITY ITEMS

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

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

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AVAILABLE MODELS:

Table 1. CX Series Pumps

Basic Pump Model	Available Drives				Complete Pump/Trans Model	Assembly No.	Drawing
	Trans Series	Trans Type	Trans Model	Driveline Size			
CXV	D	Direct Drive	D	1350/1410 Series End Yoke (1-3/8-10 SAE Spline)	CXD	83848	DPL83848
	K	Two-Gear No Clutch	Heavy Duty K	1-3/8-10 SAE SAE Class C Spline Hyd Flange 2 or 4 Bolt	CXVK	83848	DPL83848
	P	PTO Chain Drive	PA	1-1/2-10 SAE	CXVPA		
	T	Direct Engine Mount	Heavy Duty T	1-3/4-10 SAE	CXVT		
	C20	Split Shaft Chain Drive	C20C,C20D, C20E, C20F	2.35-46T Involute	CXVC20C CXVC20D CXVC20E CXVC20F		
	QB	PTO Chain Drive	QB	1-3/4-10 SAE	CXVQB		
CXS	D	Direct Drive	D	1350/1410 Series End Yoke (1-3/8-10 SAE Spline)	CXSD	83848	DPL83848
	K	Two-Gear No Clutch	Heavy Duty K	1-3/8-10 SAE SAE Class C Spline Hyd Flange 2 of 4 Bolt	CXSK	83848	DPL83848
	P	PTO Chain Drive	PA	1-1/2-10 SAE	CXSPA		
	T	Direct Engine Mount	T	1-3/4-10 SAE	CXST		
	C20	Split Shaft Chain Drive	C20C,C20D, C20E, C20F	2.35-46T Involute	CXSC20C CXSC20D CXSC20E CXSC20F		
CXN	D	Direct Drive	D	1350/1410 Series End Yoke (1-3/8-10 SAE Spline)	CXND	83848	DPL83848
	K	Two-Gear No Clutch	Heavy Duty K	1-3/8-10 SAE SAE Class C Spline Hyd Flange 2 of 4 Bolt	CXNK	83848	DPL83848
	P	PTO Chain Drive	PA	1-1/2-10 SAE	CXNPA		
	T	Direct Engine Mount	Heavy Duty T	1-3/4-10 SAE	CXNT		
	C20	Split Shaft Chain Drive	C20C,C20D, C20E, C20F	2.35-46T Involute	CXNC20C CXNC20D CXNC20E CXNC20F		