DESCRIPTION: MIDSIP MOUNTED SINGLE STAGE CENTRIFUGAL FIRE PUMP

WATEROUS CS SERIES CENTRIFUGAL FIRE PUMPS ARE AVAILABLE AS FOLLOWS:

CS Single Stage: 750, 1000, 1250 GPM capacities at 150 psi
CSU Single Stage: 1250, 1500, 1750, 2000, 2250 GPM capacities at 150 psi

Refer to performance sheets for performance data.

Pump Pressure Limits:
- Hydrostatic Test: Cast Iron Body: 600 PSIG
- Discharge Pressure: CS and CSU: 400 PSIG maximum discharge pressure
SPECIFY A COMPLETE PUMP AS FOLLOWS:

1.) VEHICLE INFORMATION
   (See order form)

2.) PUMP INFORMATION
   Rated Capacity-
   U.S. GPM: CS- 500, 750, 1000, 1250    CSU- 1250, 1500, 1750, 2000, 2250
   L/min.: CS- 2000, 3000, 4000, 5000    CSU- 5000, 6000, 7000
   Imperial GPM: CS- 410, 620, 840, 1050 CSU- 1050, 1250, 1450, 1660
   Certification-
   NFPA or list other if required
   Additional (Dual) Rating-
   List capacity of dual rating if required

3.) PUMP MODEL
   Complete Pump/Transmission Model-
   See tables on page 6 & 7
   Discharge Flanges-
   Standard, with angle compensated discharge
   Optional on special order, non-angle compensated discharge
   (Side discharge openings perpendicular to pump mounting pads resulting in discharge openings offset 4° to the vehicle frames)
   Pump Body Mounting-
   Standard, non-inverted

4.) TRANSMISSIONS
   4a.) C20 Series- See data sheet DS-2006 (front or rear mounting must be specified)
   4b.) D Series- Specify front or rear drive
   4c.) K Series- See data sheet DS-2000
   4d.) PA Series- See data sheet DS-2004
5.) IMPELLER SHAFT

**Shaft Material** - 17-4 Stainless Steel

**Seal Type**
- **Standard** - Flexible Graphite (Grafoil®) adjustable packing in main pump (extra pressure (H) stage pump utilizes braided Graph-Lock® with aramind filament)
- **Optional** - Self adjusting mechanical seal (for salt or corrosive water applications order a bronze pump with monel shaft, Waterous furnishes special seals with this configuration)

**Impellers:**

**Flame Plating**
- **CS** - Standard: Without
- **Optional**: With
- **CSU** - Standard: With

**Part Numbers**

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<th>Note</th>
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6.) TRANSFER VALVE ACTUATOR

Not Used on CS Models

7.) PRESSURE CONTROL SYSTEM

7a.) Discharge Relief Valve System - See data sheet DS-4004

7b.) Intake Relief Valve - See data sheet DS-4004
8.) INTAKE

8a.) Tank to Pump Connection
   Check Valve: With or without
   Fitting: Blank (no fitting), 2-1/2 in. NPT, 3 in. NPT, 4 in. ANSI flange, blind flange
   (Note: 4 in. ANSI flange not available when PA transmission is used)
   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

8b, 8e.) Left and Right Rear Intake Adapters
   Standard - Without
   Optional - 5 in. ANSI fitting, 5 in. victaulic fitting

8c, 8f.) Left and Right Intake Extensions (Use for Wider Panel Widths)
   Standard - Without
   Optional - 4 in.

Note: If a pump mounted discharge relief valve is ordered, also order a relief valve spacer the same length
as the intake extension on the intake fitting relief valve pad.

8d, 8g.) 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.

9.) DISCHARGE

9a, 9b.) Left and Right Discharge Fittings
   Select a fitting to be mounted on the pump plus any auxiliary fittings and discharge valves
   mounted on the main fitting pads.
   See data sheet DS-4001 (discharge and auxiliary fittings)
   See data sheet DS-4000 (discharge valves)

9c.) Center Discharge Piping
   See data sheet DS-4007
9d.) Front Discharge (not available on bronze pumps)
   Non-angle compensated
   Angle compensated
   Angle compensated to match 4° offset on vehicle frame.

9e.) Additional Discharge Valves
   List all valves to be shipped loose
   See data sheet DS-4000

9f.) Discharge Valve Accessories
   List any control rods, panel items, etc.
   See data sheet DS-4000

10.) PRIMING SYSTEM
   10a.) Priming Pump- See data sheet DS-4002
   10b.) Priming Valve- See data sheet DS-4002
   10c.) Priming Tank- See data sheet DS-4002
   10d.) Prime-Safe Lubricant- See data sheet DS-4002

11.) FOAM SYSTEM
   11a.) Foam Manager- See data sheet DS-4010
   11b.) Eclipse CAFS- See data sheet DS-4011
   11c.) FoamPro Accessories- See data sheet DS-4010

12.) DRAIN VALVE
   See data sheet DS-4006

13.) OVERHEAT PROTECTION MANAGER (OPM)
   See data sheet DS-4012

14.) MISCELLANEOUS
   14a.) Additional Fittings- List any additional discharge and auxiliary fittings which are to be shipped loose
   See data sheet DS-4001
   14b.) Other Items- List any miscellaneous items such as Monarch BFV items, kits, Y transmission oil cooler as required
   See data sheet DS-4009

15.) SPECIALITY ITEMS
   15a.) Warranty- See data sheet DS-4008
   15b.) Paint- See data sheet DS-4008
## AVAILABLE MODELS:

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