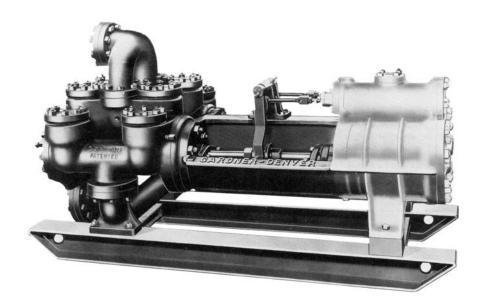


DFS (FC-FS) HIGH PRESSURE DUPLEX STEAM PUMP Air • Steam • Gas Driven



SPECIFICATIONS:

No. of Pistons: 2 Stroke Length: 10"

Pump Weight: 3,100 lbs.

(1,406 kg)

Fluid Cylinder
Connections
Suction: 4"

Discharge: 3"

VALVE POT TYPE DUPLEX STEAM PUMPS

With Piston Type Steam Valves – Divided Type Fluid End

(Special Slide Valve Steam End for 250 lbs. maximum pressure available for 10 inch stroke steam pumps.)

| DFS (FC-FS) SIZES AND RATINGS | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-----|-----------------------------------|-----|-----------------|-----|---------------------------------|------------|-------------|------------|---------------------------|------------|-------------------------------|------------|---------------------------------------|-------------|-------------|-------------|-------------|-------------|
| SIZE | | | | Steam Max Steam | | | | Max Fluid | | *DISPLACEMENT | | | | | | | | | |
| | | | | | | End | | Pressure | | Fluid End | | Pressure | | · · · · · · · · · · · · · · · · · · · | | 30 RPM | | 60 RPM | |
| Diameter of Steam Cylinders | | Diameter of Fluid Cylinders | | of | | Suitable for Max Pressure | | Fluid Max | | Suitabl Maxim Press | ıum | with Max Steam Pressure | | Gal. | Liters | Gal. | Liters | Gal. | Liters |
| in | mm | in | mm | in | mm | lbs/ in2 | kg/ cm2 | lbs/ in2 | kg/ cm2 | lbs/ in2 | kg/ cm2 | lbs/ in2 | kg/ cm2 | per Rev. | per Rev. | per Min. | per Min. | per Min. | per Min. |
| | | 5 | 127 | | | | | 400 | 28.1 | | | 1120 | 78.7 | 3.247 | 12.29 | 97.4 | 369 | 195 | 738 |
| | | 4.5 | 114 | | | | | 400 | 28.1 | Test | | 1380 | 97.0 | 2.601 | 9.84 | 78.0 | 295 | 156 | 591 |
| 10 | 254 | 4 | 102 | 10 | 254 | 400 | 28.1 | 400 | 28.1 | Pressure | 492 | 1740 | 122.3 | 2.023 | 7.66 | 60.7 | 230 | 121 | 458 |
| | | 3.5 | 89 | | | | | 400 | 28.1 | 7000 psi | | 2285 | 160.6 | 1.513 | 5.73 | 45.4 | 172 | 90.8 | 344 |
| | | 3 | 76 | | | | | 400 | 28.1 | | | 3120 | 219.3 | 1.071 | 4.05 | 32.1 | 122 | 64.3 | 243 |
| | | 2.5** | 64 | | | | | 400 | 28.1 | | | 3580 | 251.7 | .697 | 2.64 | 20.9 | 79 | 41.8 | 158 |

Cylinder liners and pistons interchangeable in sizes listed in each group.

Stalling pressures are approximately 50% in excess of maximum fluid pressures.

Specifications subject to change without notice.

^{*} Theoretical displacement with rods deducted (no slippage considered).

^{**} Available for standard fitted, oil fitted, or brass fitted only (not mud, slush or grout fitted).



DFS (FC-FS) High Pressure Duplex Steam Pump Air • Steam • Gas Driven

STANDARD EQUIPMENT

- Rods and pistons.
- Liners and valves.
- Wood skids.
- All necessary drain cocks and plugs.

OPTIONAL EQUIPMENT

- Lubricator
- Fluid liner pullers
- Valve seat pullers
- Surge chamber
- · Steel skid
- Stainless steel valves

| *MODEL DESIGNATIONS | | | | | | |
|---------------------------|----------------------|--|--|--|--|--|
| MODEL | FC-FS | | | | | |
| Mud Service Fitted* | DFSC | | | | | |
| Grout & Cement Service* | DFSF | | | | | |
| Oil Service | DFSJ | | | | | |
| General Service | DFST | | | | | |
| Bronze Fitted (Water Svc) | DFSM | | | | | |
| Stroke | 10" | | | | | |
| Liner Size | | | | | | |
| Maximum | 5" | | | | | |
| Minimum | 2.5" | | | | | |
| Fluid End Type | Cast Steel Two Piece | | | | | |

^{*}Minimum liner size 3"

MATERIAL SPECIFICATIONS

| COMPONENT | STANDARD FITTED | MUD, GROUT & CEMENT FITTED | OIL SERVICE FITTED | BOILER FEED or WATER SERVICE | |
|-----------------------|--------------------|-------------------------------|-----------------------|------------------------------|--|
| Cylinder | Cast Steel | Cast Steel | Cast Steel | Cast Steel | |
| Liners | Hardened Steel | Hardened Steel | Hardened Steel | Bronze | |
| Suction Manifold | Cast Iron | Cast Iron | Cast Iron | Cast Iron | |
| Discharge Manifold | Nodular Iron | Nodular Iron | Nodular Iron | Nodular Iron | |
| Packing | Braided Polymer | Molded Convex | Braided Polymer | Braided Polymer | |
| Piston | Iron Follower Type | Steel Insert Type | Iron Solid Type | Bronze Follower Type | |
| Piston Rod | Hardened Steel | Hardened Steel | Hardened Steel | Bronze | |
| Stuffing Box | Nodular Iron | Nodular Iron | Nodular Iron | Nodular Iron | |
| Valve | Steel Wing Guided | Steel Wing Guided | Steel Wing Guided | Bronze Wing Guided | |
| Valve Seats | Steel | Steel | Steel | Bronze | |

| STEAM END | | | | | | |
|-------------|--------------------|--|--|--|--|--|
| COMPONENT | MATERIAL | | | | | |
| Cylinder | Cast Iron | | | | | |
| Piston | Cast Iron | | | | | |
| Packing | Braided Polymer | | | | | |
| CONNECTIONS | | | | | | |
| Inlet | 2" | | | | | |
| Exhaust | 2 ½" | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

^{*}Materials listed are furnished as standard equipment. Alternate materials available upon request.



