

WATER HYDRAULIC PRODUCTS



System Solutions Guide







Innovative Solutions...

For your most demanding manufacturing requirements when you need:

> Water under pressure Minimized fire risk Environmental protection Reduction or elimination of unscheduled downtime

Oilgear Experience...

Time-proven application know-how for industry worldwide:

> 80 years of leadership in engineered fluid power and power transmission solutions

25 years experience with water-based and other fire-resistant fluids

Full System Responsibility...

Complete integration of your system from design through installation:

> State-of-the-art precision electronic controls

Engineered components that deliver the accuracy, performance, and reliability you require.

Call on your Oilgear team of seasoned professionals to discuss a **custom solution** for your manufacturing process, whether you need an **upgrade** or a completely **new system**.

Aluminum Foundry

Aluminum Rolling Mills

Automotive

Brass Rolling Mills

Centrifugal Casting

Chemical Processing

Civil

Cleaning

Concast

Cutting

D.C. Casting

Die Casting

Entertainment

Extrusion

Food Processing

Forging

Foundry

Glass Making

Hydroforming

Metal Processing

Mining

Marine

Offshore

Oil and Gas

Plastics

Pulp and Paper

Rubber

Steel Rolling Mills

Walking Beam Furnace Systems





Axial Piston Port Plate Pumps

PVWW→ Economy

(Bulletin #47013)

PVG→ High Performance (Bulletin #47019)

PVK→ Larger High Performance (Bulletin #47025)

Flows to 60 gpm with 95/5 Fluid Pressures to 3500 psi with 95/5 Fluid Flows to 120 gpm with Water Glycol Pressures to 4000 psi with Water Glycol Operation to 1800 rpm (Higher rpm on application)



Axial Piston Check Valve Pumps

(Bulletin # 46005)

PFBK and PFCM

Fixed Displacement Pumps
Stepped Deliveries to 58.6 gpm
5000 psi with 95/5 Hydraulic Fluid
Operation to 1800 rpm (Higher rpm on application)

A8 PUMP

5.0 gpm/1200 rpm (19.2 lpm) (6.6 h.p.) 6.3 gpm/1500 rpm (24 lpm) (8.3 h.p.) 7.6 gpm/1800 rpm (28.8 lpm) (10 h.p.) 2000 psi (2500 psi max)



Duplex Water Pump

Ideal for new installations or to replace Triplex, Quintplex, or Centrifugal pumps

100 to 600 gpm
Pressure to 5000 psi
Tap Water, 95/5, and Water Glycol Fluid
Variable Delivery
Pressure Compensated
Other Controls: Volume, Load Sense, H.P. Limiting





Amplifier Cartridge Type 2 Port By-pass Valves

Proportional or On/Off (Bulletin # 80225)

VRT Slip-in Cartridges-ISO7368

Flows to 792 qpm (3000 lpm) Pressures to 7250 psi (500 bar) ISO/DIN Sizes: 06/016, 09/032, 10/040, 12/063, 13/080

VBW Manifold Face Mtd.-HWCF-IS01581

Pressures to 4500 psi (310 bar) ISO/DIN Sizes: 06/016, 08/025, 10/040



Pressure Controls

2 Stage Pilot Operated Single Stage Direct Operated (Bulletin # 80100)

Surface Mounted and Slip-in Types Flows to 120 qpm (450 lpm, 7000 psi (480 bar) Pressures to 1200 bar available Operators Available: Remote, Multi-Pressure, Stepper Motor, Electronic



Model VC Check Valves

(Bulletin # 80104)

ISO Mounting Pattern:

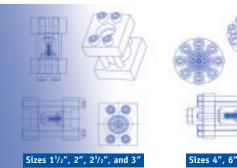
- Slip-in Valves ISO 7368
- Manifold Face Mount ISO 5781

Flows to 1300 qpm (5000 lpm)

Pressures/Pending Style: 7250 psi (500 bar)

to 20,300 psi (1400 bar)

Sizes/mm: 16, 25, 32, 40, 50, 63, 80, 100, 150, 200





In-line Water Check Valves

3500 psi (5000 psi on application) Sizes: 11/2", 2", 21/2", 3", 4", 6", 8"



Cartridge Poppet Directionals

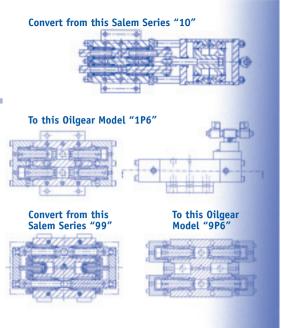
Replace or Convert Salem Packed Spool Valves

(Bulletin # 89401)

15 to 4000 gpm 4000 psi

Fluids: Plain Water, HWCF Other Low Viscosity Fluids Emulsions, Mineral Oil, Synthetics Sizes: 1/2", 3/4", 1", 11/4", 11/2"

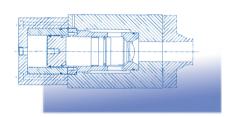
2", 3", 4", 6", 8"



Poppet Descale Valves

Poppet Cartridge in Block Housing 500 to 4000 gpm 3600 psi; 5000 psi available

Sizes: 3", 4", 6", 8"

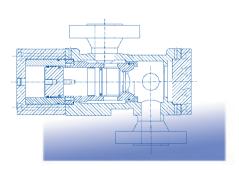


Poppet Conversion for Salem Descaler

(Bulletin # 89401)

Poppet Cartridge fits directly into Salem Descaler Housing 800 to 4000 gpm 3000 psi

Sizes: 4", 6", 8"



Cylinder Prefill Valves

(Bulletin # 86000)

Model V S A

3-way Spool Type Flows to 2500 gpm 5000 psi Sizes: 4", 6", 8", 10"

Model V P E

2-way Seated Type Flows to 13,000 gpm Pressures to 14,500 psi

Sizes/mm: 40, 50, 65, 90, 130, 190, 250, 300



12 Sizes Directional Valves 3/8" to 8" 7 gpm to 4000 gpm

(Bulletin # 80080)

Directional Control Valve 2-way = 3-way = 4-Way Series 10-

Rated Pressure: 2000 psi • 4000 psi

> SIZES: ½", ¾", 1", 1¼", 1½", 2", 3", 4" Capacity:

9 to 1175 gpm

Operator Type: Air Cylinder - Hydraulic Cylinder - Lever

Descaling Water Valve 2-way Series 11-

Rated Pressure: 3000 psi

> SIZES: 4". 6". 8" Capacity:

1033 to 2869 gpm

Internal Hydraulic **Operator Type:**

Hydraulic/Air Directional Control Valve 2-way = 3-way = 4-Way Series 13

Hydraulic: 350 psi Air: 250 psi **Rated Pressure:** Capacity: SIZES: 11/4", 11/2", 2", 3", 4", 6", 8"

Hydraulic: 115 to 3850 gpm Air: 1430 to 3530 scfm

Internal Air Pistons Lever Operator Type:

Air/Hydraulic Directional Control Valve Series 14 3-way **4-**Way

Rated Pressure: 125 psi

SIZES: 1/2", 1", 11/4", 11/2", 2", 3" Capacity:

Air: 265 to 705 scfm . Hydraulic: 9 to 258 gpm

Operator Type: Internal Air Pistons . Lever

Directional Control Valve Series 77 3-way **4-**Way

3000 psi **Rated Pressure:**

> SIZES: 3/8", 3/4", 1", 11/2", 21/2" Capacity:

> > 6 to 372 gpm

Sol./Air Pilot Internal Hydraulic Lever **Operator Type:**

Directional Control Valve 2-way ■ 3-way ■ 4-Way Series 99

2000 psi **Rated Pressure:**

> SIZES: 3/8", 3/4", 1", 11/4", 11/2", 2" Capacity:

> > 6 to 258 gpm

Internal Hydraulic . Lever **Operator Type:**

4", 6", 8" Strainers 800 to 4000 qpm

(Bulletin # 80080)

Descaling Water Strainer .027"gaps or optional .015" gaps Series 12-

3000 psi 4000 psi Available Rated Pressure:

> SIZES: 4", 6", 8" Capacity: Flows to 4720 gpm







Series 13



Series 14





Series 99









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For more information about your application or the products in this brochure, please contact your nearest Oilgear facility.

Performance Assurance

Each Oilgear component manufactured is shipped with corporate commitment to stay with the installation until the unit performs as specified.

This total dedication to performance is based upon experience gained since 1921 in matching fluid power systems to a tremendous range of machines and applications.

Oilgear's Performance Assurance is made possible because of the many hydraulic techniques learned over the years in supplying machinery builders and users with unique solutions to hundreds of unusual fluid power problems.

Historically, Oilgear has concentrated its energies on hydraulic equipment and systems. Every Oilgear facility is staffed with factory trained and field experienced application engineers.

Performance Assurance doesn't stop with the design of the system or the sale of the component. Oilgear engineers will be there — when they are needed, where they are needed — supplying the technical support, field service, parts and repairs to make sure each component operates correctly.

