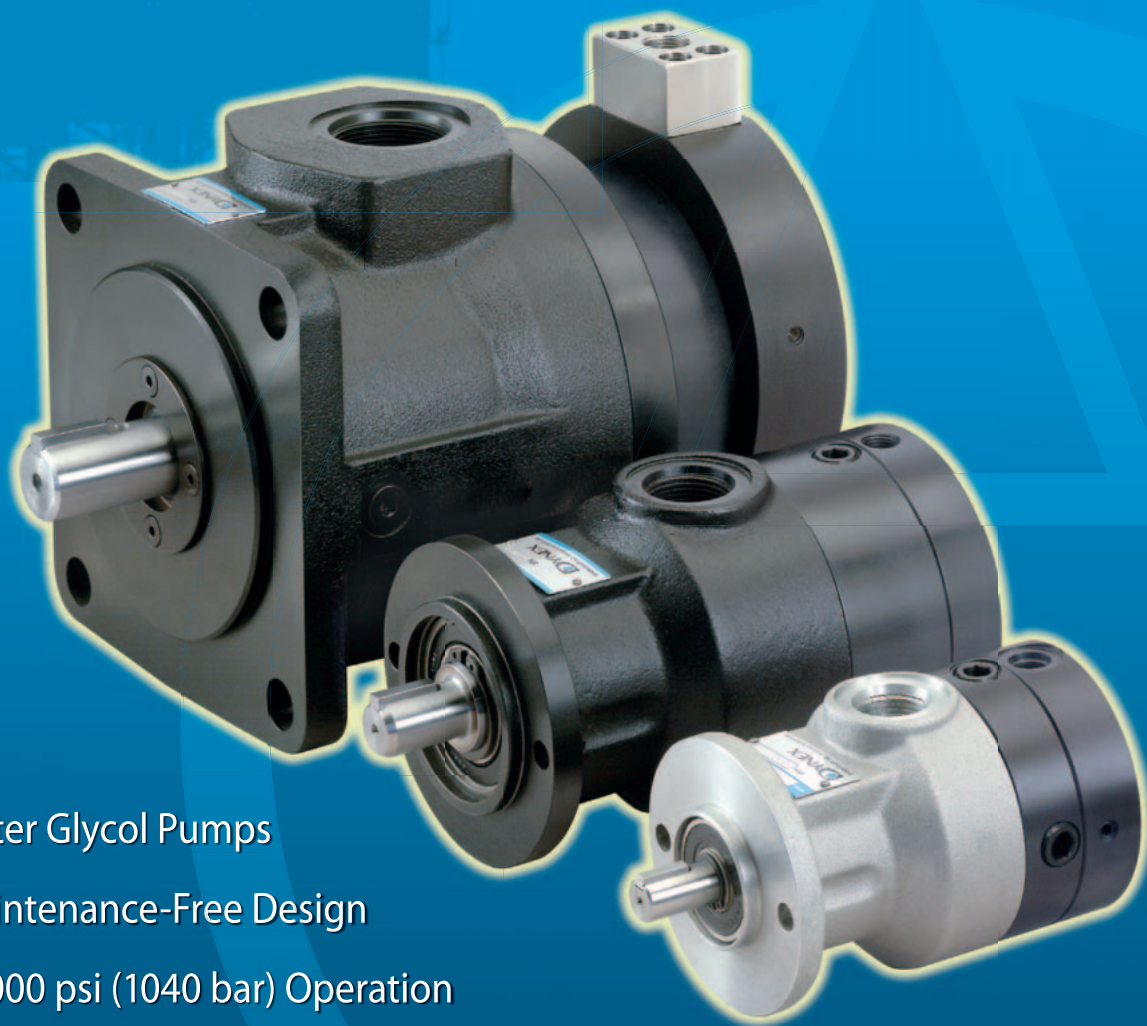
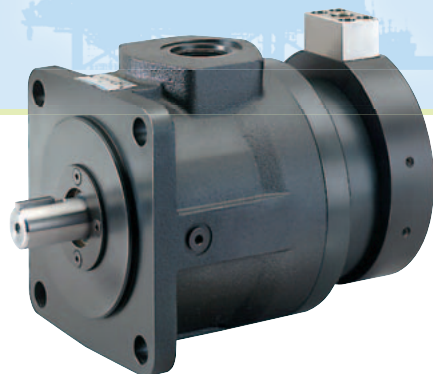


Pumps for Wellhead Safety Control Systems



- Water Glycol Pumps
- Maintenance-Free Design
- 15 000 psi (1040 bar) Operation
- Reduced Size, Weight & Cost
- 1-HP Panel System Pumps

Single-Fluid Water Glycol Pumps for Lower System Costs



PF4300 SERIES

These fixed displacement checkball pumps are compatible with a variety of water-based fluids. High pressure capability makes them ideal for offshore wellhead safety control systems and subsea applications.

Pump Selection

The table shows specifications for standard pressure models, and for high-pressure "H" option models for maximum pressures to 15000 psi (1040 bar). The "H" option models are available with high-pressure coned and threaded or B.S.P. outlet ports.

Ordering requires a complete model code specifying shaft and outlet port options.

Installation

Mounting is S.A.E. D 4-bolt pattern with 0.25 inch (6,4 mm) pilot engagement.

Vertical shaft mounting is possible with a line connected to the bleed port in the pump housing. Contact the sales department for instructions.

Bi-directional shaft rotation provides constant direction of output flow regardless of drive shaft rotation.

Pump weight is 116 lb (53 kg).

Special Fluid Operation

Because of the wide range of water-based fluid characteristics, contact the sales department for a review of the application requiring non-petroleum based fluid.

Pressures to 15000 psi (1040 bar)

Individual piston check valves provide long life and greater volumetric efficiency, especially at high pressures with low-lubricity fluids.

The unique checkball pump design provides long life operating with water glycol and other water-based fluids.

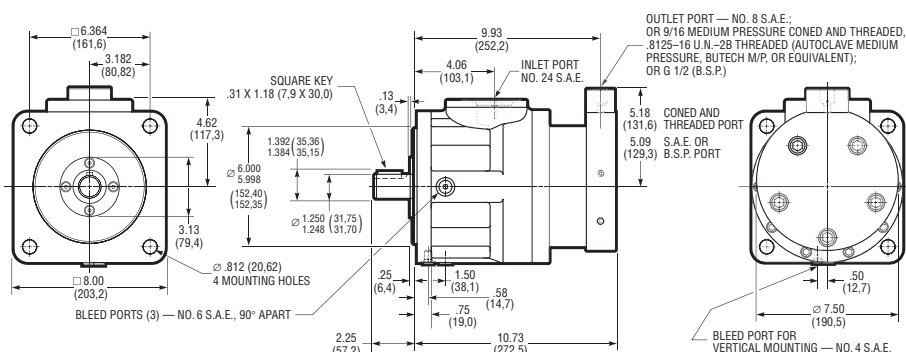
A large flushing path for contaminants makes these pumps very tolerant of dirty environments.

No Lubrication Circuit Required

The single-fluid design avoids the need for a separate lubrication circuit and the cost of ongoing maintenance.

Eliminating the lubrication circuit means less space, labor and piping cost.

These pumps provide reliable, low-cost operation on unmanned platforms around the world.



Dimensions are shown in inches (millimeters in parentheses) and are nominal. The drawing shows a standard keyed shaft. Contact the sales department for port and shaft options, and for complete installation and operating recommendations.

Specifications

Pump Models	Output Flow at 1200 rpm ^①		Output Flow at 1500 rpm ^{①②}		Output Flow at 1800 rpm ^{①②}		Maximum Pressure		Rated Speed rpm ^②	Maximum Speed rpm ^②
	U.S. gpm	L/min	U.S. gpm	L/min	U.S. gpm	L/min	psi	bar		
PF4303-11	1.5	5,6	1.8	6,9	2.2	8,3	8000	560	1200	1800
PF4304-11	2.1	8,1	2.7	10,1	3.2	12,1	8000	560	1200	1800
PF4305-11	2.5	9,3	3.1	11,7	3.7	14,0	8000	560	1200	1800
PF4306-11	3.1	11,6	3.8	14,5	4.6	17,4	8000	560	1200	1800
PF4308-11	3.6	13,6	4.5	17,0	5.4	20,4	8000	560	1200	1800
PF4309-11	4.0	15,1	5.0	18,9	6.0	22,7	8000	560	1200	1800
PF4310-11	4.5	17,1	5.7	21,4	6.8	25,7	8000	560	1200	1800
PF4312-11	5.5	20,7	6.8	25,9	8.2	31,0	8000	560	1200	1800
PF4303H-11	1.3	4,8	1.6	6,2	2.0	7,5	15 000	1040	1200	1800
PF4304H-11	2.0	7,6	2.5	9,5	3.1	11,7	12 000	830	1200	1800
PF4305H-11	2.3	8,9	2.9	11,0	3.6	13,6	10 000	700	1200	1800
PF4306H-11	2.9	11,1	3.7	13,9	4.4	16,6	10 000	700	1200	1800
PF4308H-11	3.5	13,2	4.3	16,5	5.3	19,9	10 000	700	1200	1800
PF4309H-11	3.9	14,7	4.8	18,2	5.9	22,3	10 000	700	1200	1800
PF4310H-11	4.4	16,7	5.5	21,0	6.7	25,3	10 000	700	1200	1800
PF4312H-11	5.4	20,4	6.7	25,6	8.1	30,7	10 000	700	1200	1800

^① Output flow based on typical performance using 33 SUS (1,9 cSt) water glycol fluid at maximum pressure with pressurized inlet where required. Contact the sales department for minimum inlet pressure requirements.

^② Contact the sales department for operation above the rated speed of 1200 rpm.

No Cross-Fluid Contamination

Dynex pumps use the water glycol to lubricate their internal bearings.

Therefore, this design eliminates the potential for cross-fluid contamination, which can occur in other designs requiring a secondary oil for lubrication.

Smaller, Lighter and Lower Cost

Checkball pumps facilitate easier installation and handling than other pump designs.

The unique checkball design provides a high horsepower to weight ratio.

The result is long-life performance, with less weight, size and cost than a triplex or plunger pump.

Vertical In-Reservoir Mounting

Checkball pumps can be installed in a water glycol reservoir, not easily done with other pump designs with separate lubrication circuits.

Oil-free checkball pumps assure no fluid cross-contamination.

Internal lubricity passages ensure adequate bearing lubrication for long service life. Vertical mount bleed ports simplify air removal during installation, preventing potential cavitation problems.



PF1300 SERIES

These fixed displacement checkball pumps are compatible with a variety of water-based fluids. High pressure capability makes them ideal for offshore wellhead safety control systems and subsea applications.

Pump Selection

The table shows specifications for standard pressure models, and for high-pressure "H" option models for maximum pressures to 10000 psi (700 bar). The "H" option models are available with high-pressure coned and threaded or B.S.P. outlet ports.

Ordering requires a complete model code specifying shaft, seal and outlet port options.

Installation

Mounting is S.A.E. A 2-bolt pattern with 0.25 inch (6,4 mm) pilot engagement.

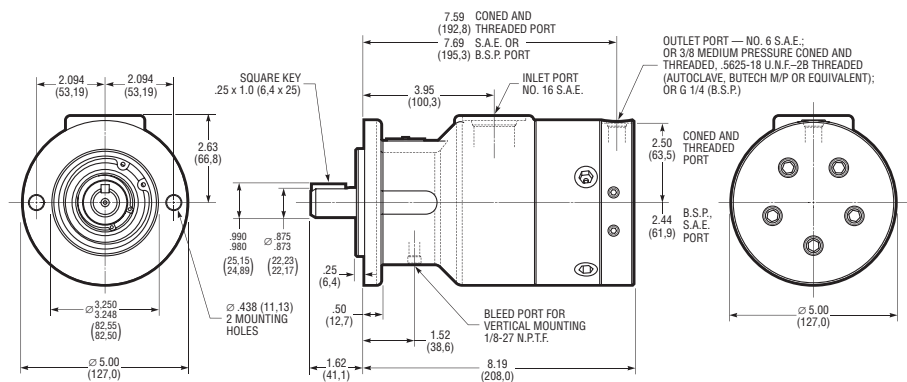
Vertical shaft mounting is possible with a line connected to the bleed port in the pump housing. Contact the sales department for instructions.

Bi-directional shaft rotation provides constant direction of output flow regardless of drive shaft rotation.

Pump weight is 36 lb (16 kg).

Special Fluid Operation

Because of the wide range of water-based fluid characteristics, contact the sales department for a review of the application requiring non-petroleum based fluid.



Dimensions are shown in inches (millimeters in parentheses) and are nominal. The drawing shows a standard keyed shaft. Contact the sales department for port, shaft and seal options, and for complete installation and operating recommendations.

Specifications

Pump Models	Output Flow at 1500 rpm ^①		Output Flow at 1800 rpm ^①		Maximum Pressure		Rated Speed rpm
	U.S. gpm	L/min	U.S. gpm	L/min	psi	bar	
PF1301-10	0.26	0.98	0.31	1,18	8000	560	1800
PF1303-10	0.36	1,35	0.43	1,63	8000	560	1800
PF1305-10	0.46	1,73	0.55	2,08	8000	560	1800
PF1308-10	0.60	2,30	0.73	2,76	8000	560	1800
PF1315-10	0.76	2,87	0.91	3,45	8000	560	1800
PF1318-10	1.01	3,82	1.21	4,58	8000	560	1800
PF1320-10	1.18	4,47	1.42	5,37	8000	560	1800
PF1301H-10	0.25	0,95	0.30	1,14	10 000	700	1800
PF1303H-10	0.35	1,31	0.42	1,58	10 000	700	1800
PF1305H-10	0.44	1,70	0.54	2,03	10 000	700	1800
PF1308H-10	0.60	2,26	0.72	2,73	9000	630	1800
PF1315H-10	0.74	2,80	0.89	3,37	10 000	700	1800
PF1318H-10	1.00	3,78	1.20	4,54	9000	630	1800

^① Output flow based on typical performance using 33 SUS (1,9 cSt) water glycol fluid at maximum pressure with flooded inlet.

Mineral Oil Pumps For Panel Systems



PF500 SERIES

These fixed displacement pumps require low input power, as low as 1.0 HP at 10 000 psi (0,7 kW at 700 bar).

Pump Selection

The table shows specifications for standard pressure models, and for high-pressure "H" option models for maximum pressures to 15 000 psi (1040 bar). The "H" option models are available with high-pressure coned and threaded or B.S.P. outlet ports.

Pump output can be reduced by one-half by deactivating two pistons.

Ordering requires a complete model code specifying shaft, seal and outlet port options.

Installation

Mounting is S.A.E. A-A 2-bolt pattern with 0.25 inch (6,4 mm) pilot engagement.

Vertical shaft mounting is possible with a line connected to the bleed port in the pump housing. Contact the sales department for instructions.

Bi-directional shaft rotation provides constant direction of output flow regardless of drive shaft rotation.

Wind- and Solar-Powered Systems

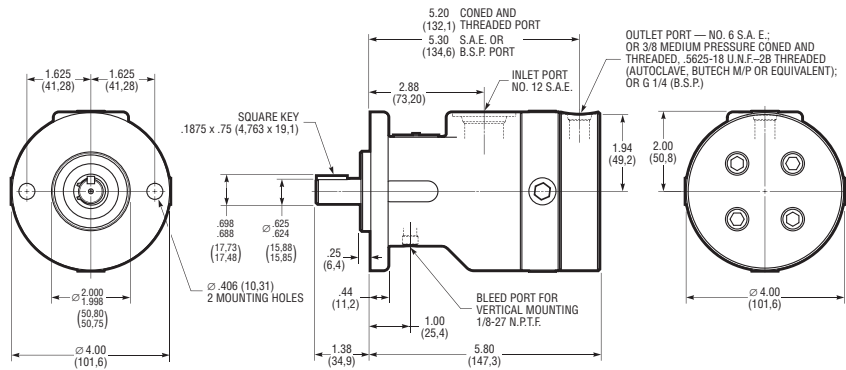
Reduced power requirements make checkball pumps ideal for remote locations with limited power supply.

Individual piston check valves provide long life in adverse environments, at pressures to 15 000 psi (1040 bar).

Ideal for Portable Power Units

Compact high-pressure pumps are used on power units for high-torque wrenches and other service tools.

One Split-Flow® model can supply multiple functions in a circuit without flow dividers.



Dimensions are shown in inches (millimeters in parentheses) and are nominal. The drawing shows a standard keyed shaft. Contact the sales department for shaft, port and seal options, and for complete installation and operating recommendations.

Specifications

Pump Models	Output Flow at 1500 rpm ^①		Output Flow at 1800 rpm ^①		Rated Pressure		Maximum Intermittent Pressure		Rated Speed rpm ^②	Maximum Speed rpm
	U.S. gpm	L/min	U.S. gpm	L/min	psi	bar	psi	bar		
PF501-11	0.17	0,66	0.21	0,79	8000	560	8000	560	1800	3600
PF504-11	0.28	1,06	0.34	1,28	8000	560	8000	560	1800	3600
PF507-11	0.38	1,45	0.46	1,74	8000	560	8000	560	1800	3600
PF510-11	0.57	2,16	0.69	2,59	8000	560	8000	560	1800	3600
PF501H-11	0.17	0,64	0.20	0,75	10 000	700	15 000	1040	1800	3600
PF504H-11	0.27	1,02	0.32	1,22	10 000	700	15 000	1040	1800	3600
PF507H-11	0.37	1,40	0.45	1,70	10 000	700	15 000	1040	1800	3600
PF510H-11	0.56	2,12	0.67	2,52	10 000	700	15 000	1040	1800	3600

① Output flow based on typical performance using 100 SUS (20 cSt) mineral oil at rated pressure with pressurized inlet where required. Contact the sales department for minimum inlet pressure requirements.

② Contact the sales department for applications requiring continuous duty operation at speeds higher than 1800 rpm or lower than 900 rpm.

Download Dynex Product Specifications!

www.dynexhydraulics.com

Go!

USA Headquarters

770 Capitol Drive
Pewaukee, WI 53072
Tel: 262-691-0300
FAX: 262-691-0312
E-mail: sales@dynexhydraulics.com

Power Units & Systems

54 Nickerson Road
Ashland, MA 01721
Tel: 508-881-5110
FAX: 508-881-6849
E-mail: ashland@dynexhydraulics.com

European Sales

Unit C5 Steel Close, Little End Road,
Eaton Socon, Huntingdon,
Cambs. PE19 8TT. United Kingdom
Tel: +44 (0) 1480 213980 FAX: +44 (0) 1480 405662
E-mail: sales@dynexhydraulics.co.uk