



*Engineered to Move...*



## *2400 Series Dry Valve Pumps*



*Truck and Body Applications*

## DRY VALVE PUMPS - FEATURES

The Hydreco-type valve affords the user a low cost, low maintenance convenient source of hydraulic power for many truck applications, especially refuse packer trucks. The horsepower demand is reduced significantly by the use of a Dry Valve when the need for hydraulic power is not required.

This is not accomplished with a costly clutch and PTO assembly, but rather by closing off the supply of hydraulic fluid to the pump, except for a small metered amount to keep the pump cool and the roller bearings lubricated. The Dry Valve automatically provides the proper lubrication for continuous operation in the dry mode when a line is run from the outlet back to the tank.

This system is controlled by the use of an air-operated cylinder (80 psi) and housing mounted on the inlet port of the Hydreco 2400 Series pump. The valve to operate the cylinder, when hydraulic power is needed, can be remotely mounted in the most convenient location for the truck operator.

The heart of this dry valve system is the Hydreco 2400 Series high performance gear pump.

The pump is rated to 3000 psi and 2750 rpm and utilizes a very rigid dowelled two-piece construction.

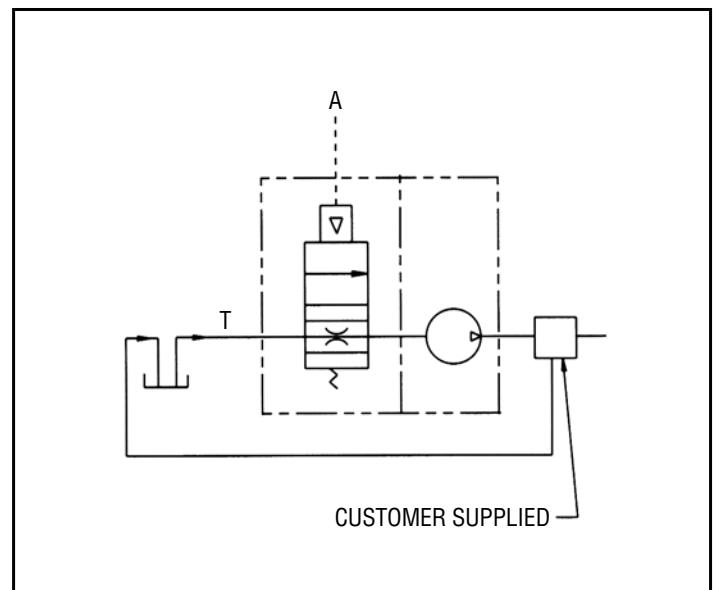
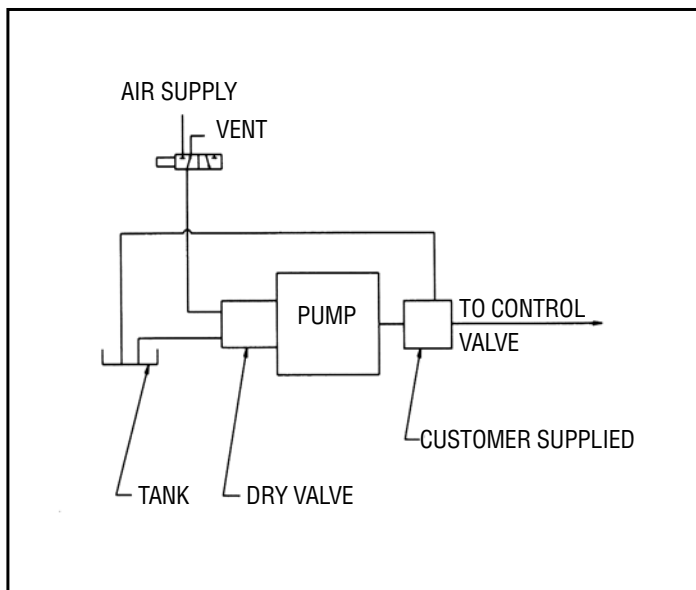
This simplified construction method is comprised of a 4 bolt design with integral gears and shafts. This design maintains perfect alignment and thus eliminates any decrease in efficiency due to 'center section shift' at high pressures.

The 2400 Series units have pressure balanced wear plates on one side of the gears. By balancing pressure forces on the front and back of each plate, a precise balance is obtained resulting in high-volumetric efficiencies and minimum contact with rotating parts for low mechanical losses.

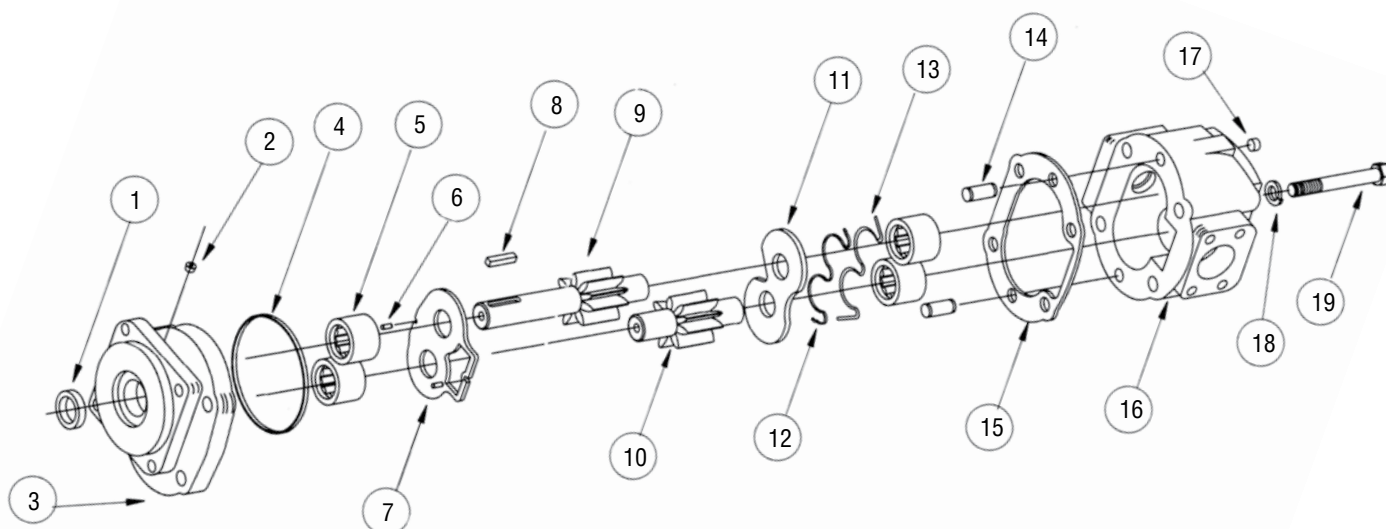
The long life, precision roller bearings are continuously pressure-lubricated even when the pump is under no load.

Multiple units of a modular design can be used with a Dry Valve 2400 Series pump.

## HYDRAULIC CIRCUIT SCHEMATICS

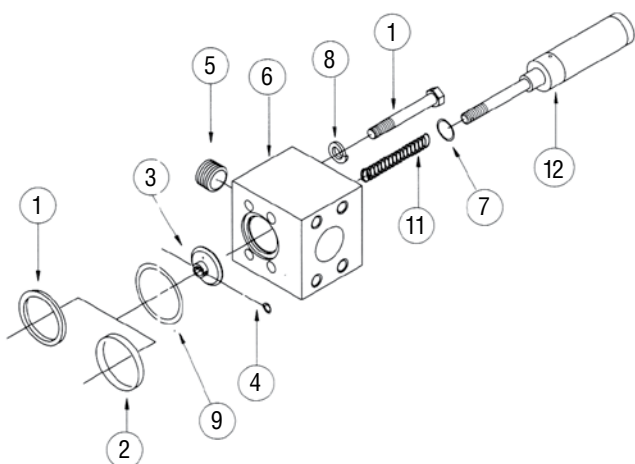


# DRY VALVE PUMPS



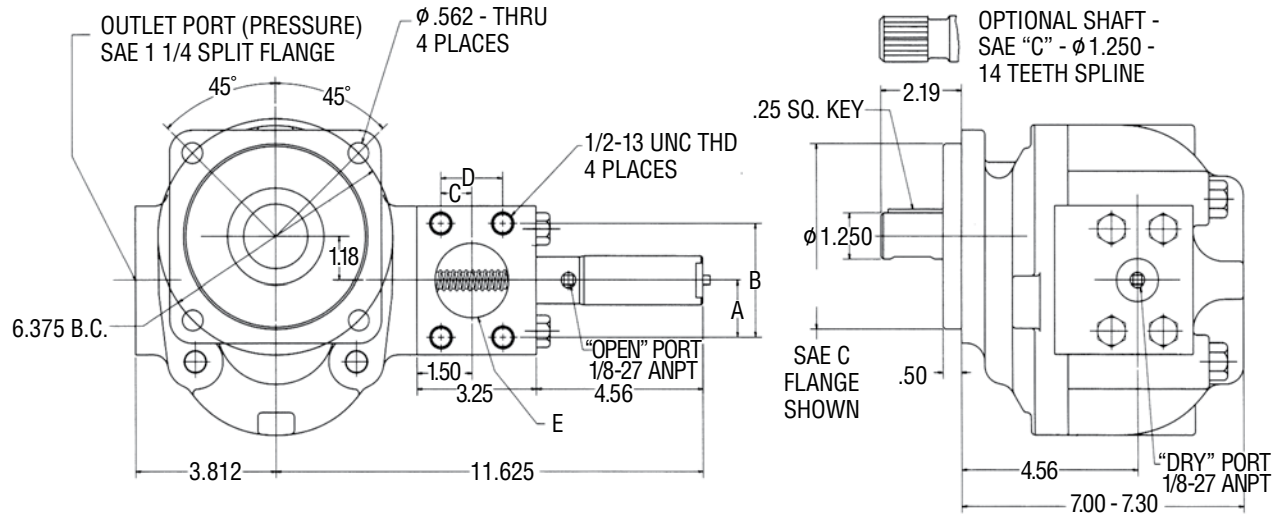
Item No	Description	Qty	242862A5L	2436G2A5L	244262A5L
1	Seal	1	A907X073	A907X073	A907X073
2	Plug	1	A300X001	A300X001	A300X001
3	Adapter	1	2X24X33	2X24X33	2X24X33
4	O-ring	1	A1023X013	A1023X013	A1023X013
5	Bearing	4	A340X042	A340X042	A340X042
6	Roll Pin	2	A770X001	A770X001	A770X001
7	Wear Plate	1	12X24X23	12X24X23	12X24X23
8	Square Key	1	A389X009	A389X009	A389X009
9	Drive Shaft	1	6X2413X38	6X2416X38	6X2419X38
10	Driven Shaft	1	6X2413X23	6X2416X23	6X2419X23
11	Wear Plate	1	12X24X32	12X24X32	12X24X32
12	Back Up	1	A991X035	A991X035	A991X035
13	O-ring	1	A908X035	A908X035	A908X035
14	Dowel Pin	2	A1050X002	A1050X002	A1050X002
15	Spacer	1	22X24X20	22X24X20	22X24X20
16	Cover	1	3X2413X35	3X2416X38	3X2419X37
17	Plug	1	A300X003	A300X003	A300X003
18	Lock Washer	4	A252X013	A252X013	A252X013
19	Hex Head Bolt	4	A117X016	A117X016	A117X016

# DRY VALVES



Item No	Description	Qty	VC8X1	VC8X2
1	Spacer	1	830X830	830X831
2	Spacer	1	830X775	830X776
3	Check Valve	1	513X212	513X213
4	Cotter Pin	1	A267X006	A267X006
5	Plug	1	A300X005	A300X005
6	Housing	1	450X248	450X249
7	O-ring	1	A395X013	A395X013
8	Lock Washer	4	A252X011	A252X011
9	O-ring	1	A395X043	A395X035
10	Bolt	4	A105X013	A105X013
11	Spring	1	A501X587	A501X857
12	Air Cyl	1	M72X2	M72X2

# INSTALLATION DIMENSIONS



Series	DimA	DimB	DimC	DimD	DimE	FlangeSize
2428	1.375	2.750	.703	1.406	1.5	SAE1.1/12
2436	1.531	3.062	.844	1.688	2.0	SAE2
2442	1.531	3.062	.844	1.688	2.0	SAE2

# MODEL SPECIFICATIONS

Model No.	Cir.	Max RPM	Max PSI	Adaptor	Shaft	Inlet	Outlet	Rot.	Wt.	Dry Valve
2428G2A5L	6.5	2750	3000	SAEC	1.1/4KEY	1.1/2SF	1.1/4SF	CCW	671bs	VC8X2
2436G2A5L	8.3	2750	3000	SAEC	1.1/4KEY	2SF	1.1/4SF	CCW	70lbs	VC8X1
2442G2A5L	9.7	2750	3000	SAEC	1.1/4KEY	2SF	1.1/4SF	CCW	70lbs	VC8X1

## Dry Valve Pump Product Features

Smaller overall length • 3000 psi rated pressure, higher pressure available in select models

Other models can be configured with dry valve options.

### WARNINGS: Keys To Successful Dry Valve Application

- Use proper size pump. Larger pumps will create excessive heat.
- Select a source for 80 to 120 psi air. Do not use air supply dedicated to air brake system.
- Before installing pump and Dry Valve, clean hydraulic system and change filters.
- Check components for contamination and damage especially the lubricating orifice in the Dry Valve.
- Properly size the flow control and flow regulator.



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