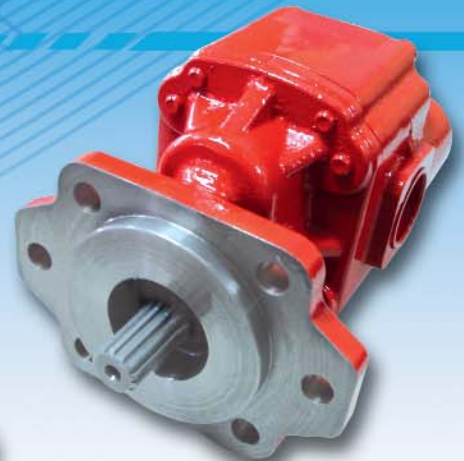


# Hydraulic Equipment For Truck



**BZ**  
bezaresusa

**Beginning  
in 1954**



## **“Over 50 Years of Quality Manufacturing”**

Bezares USA is an extension of BEZARES S.A., which was founded in 1954 by Eugenio and José Bezares in Madrid, Spain, and over the years has become a major player in the European market and worldwide. Continuing through the years as a family owned company, Bezares takes very seriously the reputation for quality, customer service, product development, and delivery that it has developed in Europe. We, at Bezares USA, are committed to developing and continuing this same reputation in the Americas.

Bezares produces a full line of PTO's to fit transmission applications from Allison through ZF. Because of Bezares' years of experience in the European market, we also have access to a wide range of PTO's for Isuzu, Mercedes, Mitsubishi, Volvo, and other transmissions that are now becoming more common in North, Central, and South America. Our hydraulics line includes dump pumps, birotational gear pumps, two lines of piston pumps and motors (straight & bent axis), a full range of tank sizes, diverter valves, and DC powerpacks.

With the recent opening of a new state of the art manufacturing and distribution facility in Spain, Bezares has made a major commitment to providing the needs of the PTO and truck-mounted hydraulics industry for the future. We strongly believe that the quality of the staff we have in the United States partnered with a developing network of distributors and our direct ties to Bezares in Spain will facilitate our ability to satisfy any and all of your current and future needs.

**Thank you for trusting Bezares USA as your  
Truck Mounted Hydraulic Systems provider.**

**Hydraulic Equipment  
Specialists**



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# Power Take Off's

## 1000 and 2000 Series



1000



2000

The 1000 and 2000 Series PTO has been engineered to work with most of the existing transmissions in the market. It is a very durable PTO with a wide range of input gears, shifters, speed ratios and output shafts to meet all of the market applications.

### 1000 and 2000 Series

Internal Ratio	50%(A)*	55%(B)	73%(C)	86%(E)	95%(J)	125%(O)	137%(R)	150%(S)	165%(T)
Torque Intermittent Service (LB. FT)	250*	250	250	225	225	200	200	190	175
Power 1.000 r.p.m. Intermittent Service (HP)	49	49	49	44	44	39	39	37	34

## 2300 and 3000 Series



2300



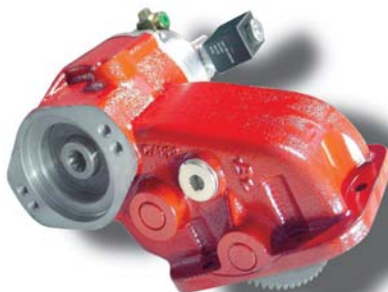
3000

Powershift PTO's, 6 bolt with standard and low profile housing. The 2300 series is used in manual transmissions and is available with air-shift actuation. The 3000 series can be engaged by either air-shift or hydraulic signal which is standard for automatic transmissions.

### 2300 and 3000 Series

Internal Ratio	33% (B)	42% (C)	50% (E)
Torque Intermittent Service (LB. FT)	309	309	309
Power 1.000 r.p.m. Intermittent Service (HP)	42	42	42

## 3900 Series



A Power Shift PTO used in the Ford F-Series. A wide range of output shafts are available: Z-9, Z-13, and round shaft. Two positions for a gear pump allow for different installation options.

### 3900 Series

Internal Ratio	142%
Torque Intermittent Service (LB. FT)	120
Power 1.000 r.p.m. Intermittent Service (HP)	16



# Power Take Off's



3100



3250

## 3100 and 3250 Series

Power Shift PTO's for Allison Automatic World Transmission. 7 internal ratios give this PTO a wide range of options, together with standard output shafts ( SAE B, SAE C, roundshaft, etc.) along with hydraulic or air-shift engagement. The 3250 Series is the only PTO in the market with the possibility of arrangement in positions 1 and 3. Both power take offs are available in constant mesh (non-shiftable).

3100 Series								3250 Series				
Internal Ratio	(B) 52%	(C) 60%	(E) 68%	(G) 81%	(J) 86%	(M) 97%	(O) 118%	(B) 55%	(C) 63%	(E) 73%	(J) 84%	(O) 110%
Torque Intermittent Service (LB. FT)	354	354	354	354	354	354	354	250	250	250	250	250
Power 1.000 r.p.m. Intermittent Service (HP)	56	56	56	56	56	56	56	35	35	35	35	35

## 4000 Series



This has been designed for heavy duty applications and is very compact. It is available with standard internal ratios and several types of output shafts. Also available in positions 1 and 3.

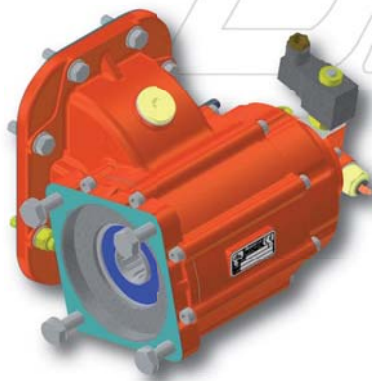
4000 Series					
Internal Ratio	57% (B)	70% (C)	86% (E)	105% (E)	127% (O)
Torque Intermittent Service (LB. FT)	420	420	420	350	325
Power 1.000 r.p.m. Intermittent Service (HP)	80	80	80	67	62

## 4200 Series



This is the only PTO with twin outputs available in the market today. Two independent outputs are possible with many output shaft types: SAE B, SAE C, roundshaft, etc. Different internal ratios make it useful for many applications.

4200 Series								
Internal Ratio	55%	60%	64%	70%	75%	80%	86%	95%
Torque Intermittent Service (LB. FT)	420	420	420	420	420	420	350	350
Power 1.000 r.p.m. Intermittent Service (HP)	80	80	80	80	80	80	67	67



# Power Take Off's

## 3600 Series

Is a powershift PTO for an 8-bolt mount that offers a variety of options: positions 1, 2, 3, and 4. Includes both hydraulic and air-shift engagement.

3600 Series			
Internal Ratio	33% (B)	42% (C)	50% (E)
Torque Intermittent Service (LB. FT)	309	309	309
Power 1.000 r.p.m. Intermittent Service (HP)	42	42	42

## 3200 Series



All input gears from PTO 1000/2000 are possible to assemble on this PTO, making it very flexible for any manual or automatic transmission. Together with a wide range of internal ratios and output shaft types, it makes this PTO flexible enough to meet any application.

3200 Series									
Internal Ratio	40% (Z)	50% (A)	55% (B)	73% (C)	86% (E)	95% (J)	125%(O)	137%(R)	150%
Torque Intermittent Service (LB. FT)	250	250	250	250	225	225	200	200	190
Power 1.000 r.p.m. Intermittent Service (HP)	49	49	49	49	44	44	39	39	37

## 6000 Series



The 6000 Series is a single, low-speed, forward and reverse PTO. Options include air-shift or lever. This series uses the same input gears as the 1000/2000 series PTOs, making it applicable on most manual transmissions.

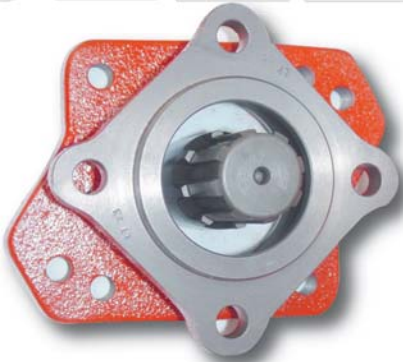
6000 Series		
Internal Ratio	73%	83%
Torque Intermittent Service (LB. FT)	210	210
Power 1.000 r.p.m. Intermittent Service (HP)	30	30

# Power Take Off's

## Bezarez

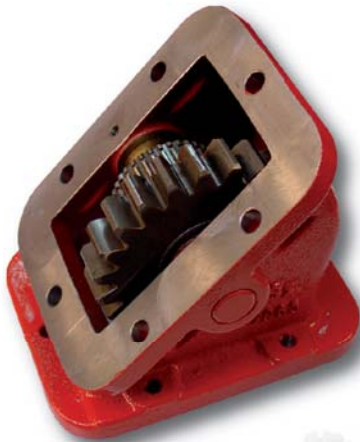
### Adapter Kit

A wide range of adapters make it possible to change the PTO output quickly.



### Adapter Gear Assemblies

A variety of adapters make it possible to change the PTO output shaft, rotation, and resolve any interference problems. The 622 Series is used for helical gears by using a standard 1000 Series PTO.



# BEZARRES Hydraulic Pump

## Dump Pumps



**PP102-LMS-20/25**   **PP101-20/25**  
**Direct Mount**   **Remote Mount**

Pump / valve combinations, available in remote mount or direct mount. Two or three - line installations. Air remote operators available. Pressures to 172 Bar (2500 PSI). Dump pump are constructed in a cast iron and have a built in relief valve to protect the system, cylinder, pump, etc. Both lever and air shifter for the valve are available. We have dump pumps for all jobs. The pumps flow range is from 37 to 46 GPM. These pumps are 100% factory tested. Pressures range from 2000 to 2500 PSI. Transmission mounting brackets available upon request.

Dump Pumps				
Pump Pipe	Part Number	Displacement (Cu in / rev)	Max. continuous Pressure (PSI)	Max. Speed (r.p.m)
Remote Mount	PP101-25	6,38	2500	2000
	PP101-20	5,10	2500	2000
Direct Mount	PP102-LMS-25	6,38	2500	2000
	6P102-LMS-20	5,10	2500	2000



**BEA SF 4.2, 5.0, 6.1, 7.1, 8.2, 8.7 (G.P.M)**

Gear pump, birotational capability, with internal drainage. Aluminum body is lighter than cast pumps and permits operation at higher pressures with a low level of noise. With Sae " A " 2 bolt flange.

BEA		SF 4.2	SF 5.0	SF 6.1	SF 7.1	SF 8.2	SF 8.7
Displacement (Cu in / rev)		0.976	1.159	1.403	1.647	1.891	2.013
Speed (r.p.m)	min.	500	500	500	500	500	500
	máx.	1800	1500	1200	1100	900	850
Maximum continuous Pressure (PSI)		3600	3350	3200	2700	2400	2250
Maximum peak Pressure (PSI)		4200	3900	3600	3200	2900	2700
Weight (Lb)		8.3	8.6	8.9	9.3	9.6	9.8



**BRAE 4.5, 6.6, 9.1, 10.5 (G.P.M)**

Gear pump, birotational capability, with nodular graphite cast iron body and flange. This makes for a lighter weight pump that can operate at higher pressures with a lower noise level than standard cast iron pumps. SAE "B" 2/4 bolt flange.

BRAE		4.5	6.6	9.1	10.5
Displacement (Cu in / rev)		1.05	1.62	2.12	2.38
Speed (r.p.m)	min.	300	300	300	300
	máx.	3000	3000	2800	2500
Maximum continuous Pressure (PSI)		3600	3600	3400	3300
Maximum peak Pressure (PSI)		4000	4000	3800	3700
Weight (Lb)		23.6	24.6	25.7	26

# BEZARAS Hydraulic Pump

**BE L RA 13.2, 15.9, 18.5, 21.1 RB 26.4 (G.P.M)**



Gear pump specially designed to increase the mounting possibilities, with unique characteristics like its SAE "B" flange 2/4 bolts, rear and side ports, lighter weight, and reduced dimensions. Also its high strength (body and flange are made of nodular graphite cast iron) avoids the need for installation of expensive support brackets.

This gear pump will be helpful in applications with limited space, is perfect for higher pressure applications, has birotational capability, and the availability to interchange its shaft between 13 or 15 teeth.

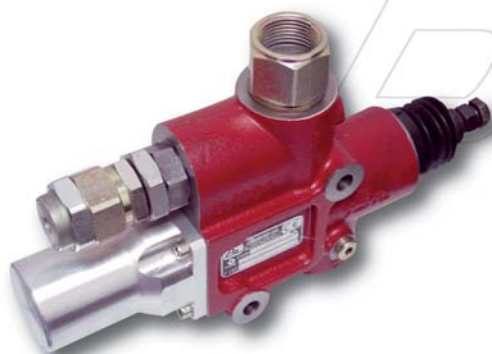
BE L RA		13.2	15.9	18.5	21.1	RB 26.4
Displacement (Cu in / rev)		3.050	3.660	4.27	4.88	6.1
Speed (r.p.m)	min.	500	500	500	500	500
	máx.	2000	1800	1700	1600	1400
Maximum continuous Pressure (PSI)		4200	3900	3400	2900	2600
Maximum peak Pressure (PSI)		4600	4400	4000	3300	3000
Weight (Lb)		30.14	31.68	33.22	34.77	37.85



**BE XL RB 23.4, 27.3, 30.4, 34.3, 39.6 (G.P.M)**

Gear pump that has in common almost all the properties described for BEL RA model (SAE flange 2/4 bolts, rear and side ports, lighter weight, high strength, made of nodular graphite cast iron, reversible rotation, great variety of sizes, very reliable...). Also has its own characteristics like the 15 teeth shaft supported by two strong taper roller bearings to permit us an axial load up to 700lb.

BE XL RB		23.4	27.3	30.4	34.3	39.6
Displacement (Cu in / rev)		5.398	6.301	7.198	8.101	8.998
Speed (r.p.m)	min.	500	500	500	500	500
	máx.	2000	1800	1500	1300	1200
Maximum continuous Pressure (PSI)		3600	3600	3600	3300	3000
Maximum peak Pressure (PSI)		4200	4200	4200	3900	3600
Weight (Lb)		46.91	49.23	49.76	51.74	54.06



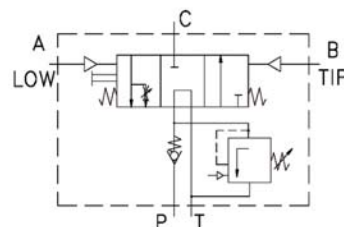
## Accessories

### Distributor BZDP 180 2P Pneumatic

The tipping valve BZDP180-2P has a 2 position pressure pneumatic selector allowing the use of several tippers with different operating pressures. The pressure difference between the 2 positions may be chosen and fixed before shipment.

#### BZDP 180 2P NTCAS

Max. Flow		47.5 Galon
Working Temperatures	Normal	+140°F a +158°F
	Extreme	-40°F a +212°F
Air Pressure For Good Operation		8 bar
Weight		15.6 Lb
Max. pressure Setting		5100 PSI

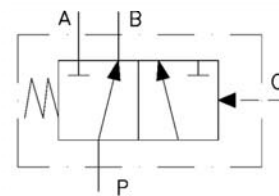


### 3 Way Pneumatic Diverter Constant Opening

The BZ pneumatic diverter is a 2-position 2-selector valve that provides a simple means of directing oil flow into two separate hydraulic circuits. It is operated by a pneumatic system and in its neutral position (without air pressure) ports "B" and "P" are connected.

#### 3 Way Pneumatic Diverter Constant Opening

Maximum Pressure	5075 PSI
Maximum Pressure to Shift the Spool	3625 PSI
Maximum Flow	66 US gal
Air Pressure	100 - 150 PSI



# Accessories

## Reservoirs

We have a complete line of tanks to fit all your application needs. they are available in aluminum, steel, stainless steel, and polyethylene with standard capacities ranging from 7 to 100 gallons. Styles include, Upright, Saddle-Mount, and Side-Mount. We also have the ability to provide custom designed tanks when needed.



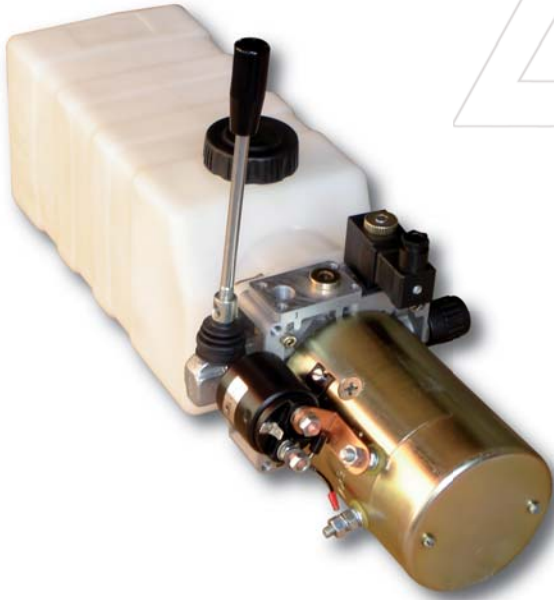
## Pneumatic Cab

We have a complete range of pneumatic valves specially designed for operation of the power take off and/or hydraulic valve fitted on the truck.



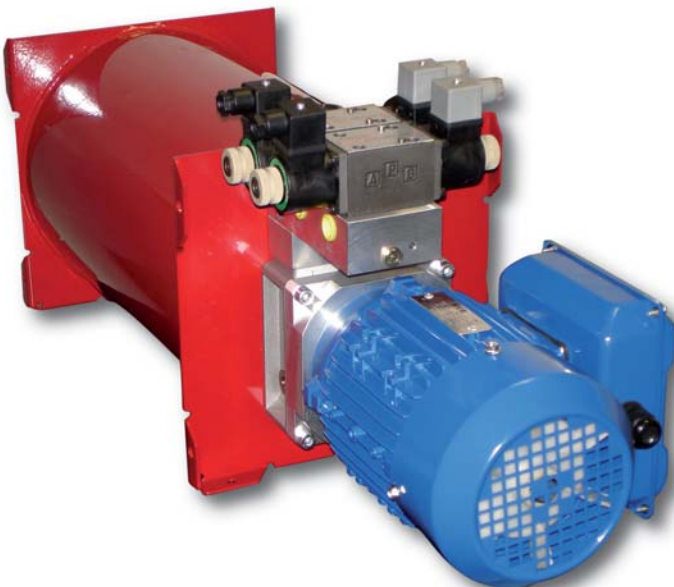
# Accessories

## Mini Power Packs



These are assemblies consisting of a gear pump, electric motor, valve, and oil tank. Available with steel or plastic oil tank. Components such as check valves, pressure relief valves, emergency release valves, flow control valves, direct or pilot-operated directional control valves, manual valves and emergency hand pumps can be integrated.

Mini Power Packs	
Max. Operating Pressure Continuous	2550 - 3000 PSI
Max. Peak Pressure	3000 - 3600 PSI
Displacement	0.05 - 0.48 (Cu in / rev)
Plastic Tank Capacity	92 - 458 Cu in
Steel tank Capacity	305 - 1220 Cu in
Power: DC motor 12,24V	1.1 - 2.7 HP





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