

CERTIFIED BUILDER AND DISTRIBUTOR

2

3

5 5

	Mobile Power Solutions
	PTO Quick Guide
	PTO Cross Reference
	Turnkey Solutiuons for End Dump Applications
	Mechanical PTOs
	Hotshift PTOs (Allison)
	Hotshift PTOs
	Rear Mount PTOs
	European Style PT0s
	Adapters
	Piston Pumps/Motors
	Bushing Pumps
	Dump Pumps
	Vane Pumps/Motors
	Control & Tipper Valves
	Cab Controls 1
	Mounting Towers & Brackets 1
	Oil Tanks
	Pneumatic Compressors 1
2+0	Assembly Arrangement 1
23 - 0,1	Nomenclature
	20 -
	1
~ 10	



Powering Business Worldwide

BACKED BY

Roadranger

bezares**usa**

SUPPORT

CONTACT YOUR ULT POWERTRAIN SPECIALIST FOR MORE DETAILS

Edmonton Alberta 833.442.0442 Mount Pearl Newfoundland 844.442.0442 Moncton New Brunswick 844.442.0442 Quebec City Quebec 844.442.0442 Ottawa Ontario 613.749.4858

Mississauga Ontario 833.442.0442 Winnipeg Manitoba 833.442.0442

WE ARE YOUR ONE-STOP DRIVELINE SOURCE SOLUTION!

ULTPOWERTRAIN.COM





Complete Mobile Power Solutions

Eaton is the North American master distributor for Bezares USA, a global manufacturer of Power Takeoffs (PTOs), hydraulic pumps, fittings, tanks, valves, and other related mobile power hydraulic components. In addition to distribution services, Eaton provides post-sale service and support through its extensive Roadranger field team.

Expertise

Decades of experience in heavy duty power management

Complete Solutions

Configurations for vocational and specialty applications

Peace of Mind

Backed by the Roadranger field team





Eaton's decades of experience and leadership in the development of commercial vehicle transmissions allows us to help customers develop highly customized systems and configurations for vocational needs and specialty applications.

BACKED BY

Roadranger SUPPORT

Eaton and Bezares: the Best Value & Support

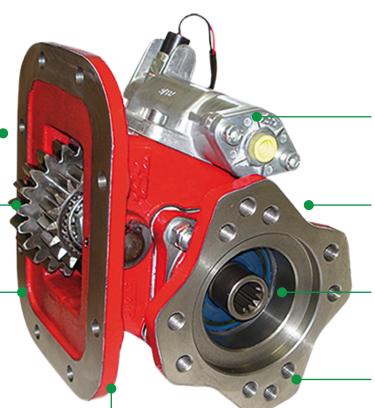
Hot shift PTOs - shift complete as a kit. All hoses, hardware, and wiring are included.

Industry exclusive idler shaft with locking nut and snap ring.*

Deep gear tooth carburization process creates stronger gear surfaces for long life.

Industry leading Garlock[™] gasket – material provides better tear resistance and easier installation, with Viton[™] o-ring material & shaft seals to prevent leaks.

Robust housings for durability and clearances when used with large bodied pumps.



Widest range (9) of Volvo I-Shift and Mack mDrive® PTOs on the market

Robust, integrated air shifter in the housing features a smooth engagement design to reduce clash shifting.*

Industry leading weight-to-torque ratio provides outstanding performance for the price and size.

Large, oversize bearings provide long life on higher torque applications such as blowers.

Best in class larger flange mounting hardware provides additional support and reduces failures caused by heavy pumps.

*Some models







Bezares PTO Quick Guide

Bezares PTO Cross Reference

Manual PTOs: Eaton-Fuller / Rockwell-Meritor / Spicer / Mack

Six bolt models: 1000/1010Six bolt model reversible: 6000

• Eight bolt models: 2000 Standard/Heavy Duty 4100/8500

Eight bolt model reversible: 6800/8000Eight bolt model dual output: 4200/4250

"Hot shift" PTO for Manuals: Eaton-Fuller / Rockwell-Meritor / Spicer / Mack

Six bolt model: 3200

· Eight bolt model: 3200 with AD68248 adapter

• Eight bolt model: 3800/3810

Aisin Transmission (Dodge):

Hot shift 3300

Allison Automatic: AT/MT/HT/CLT (SAE 6 bolt)

Manual PT0: 1000

Allison Automatic: 1000-2000 Series (SAE 6 Bolt)

Manual PT0: 1000Hot shift PT0: 3300

Allison World Transmission: MD/HD/3000/4000 series (SAE 10 Bolt)

3131 Heavy Duty

• 3151 Constant mesh: HD

• 3252 Low Profile-High Torque

• 3131 with rear pump mounting (3131RP) + bracket and 3190

Ford Automatic:

• 5R110 (5 Speed) use 3900

• 6R140 (6 Speed) use 3920

• 10R140 (10 Speed) use 3940

PTOs for Automated Manual Transmissions

Endurant™ HD

• Bottom (8 bolt) models: 2010, 4110, 8500

· Rear (4 bolt) models: 95X Series

Detroit™ DT12®

• 120X Series

- DT12-DA / 14.93-1.0

- DT12-0A / 14.96-1.0

PACCAR Automated Transmission

• Bottom (8 bolt) models: 2010, 4110, 8500

• Rear (4 bolt) models: 95X Series

Volvo® I-Shift / Mack® mDRIVE™:

• 1198K03 Single output

• 11106K03 Single output heavy-duty - high speed

• 11107K*** Dual output heavy-duty - low / high speed

• 1196K03 Driveline only - slow speed

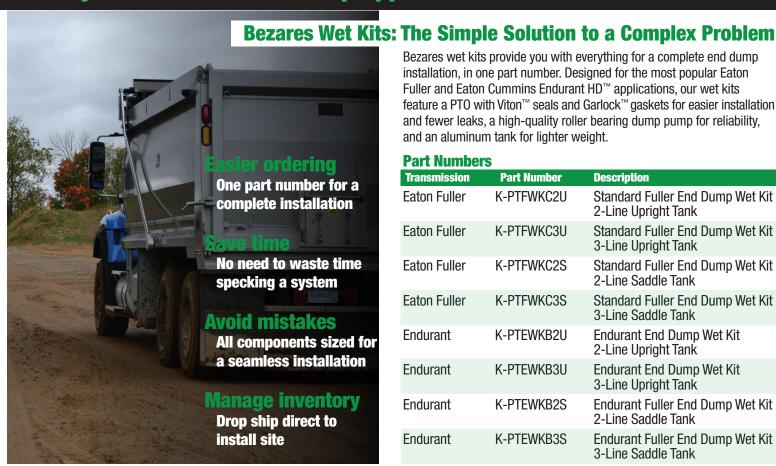
• 11109K52 Dual 1310 – low speed shafts (*** = output choices)

Common Part Number		
Eaton	Muncie	Chelsea
PT1000XBN011RA	TG6S-U6806-P1KX	442XFAHX-V3XK
PT1000XJN011SE	TG6S-U6810-P1BX	442XRAHX-V3XD
PT1000XCW011RA	TG6S-U6807-C1KX	442XLAHX-W3XK
PT2000XBN011SE	TG8S-U6806-P1BX	489XFAHX-V3XD
PT2000XBN011RA	TG8S-U6806-P1KX	489XFAHX-V3XK
PT2000XCN011RA	TG8S-U6807-P1KX	489XLAHX-V3XK
PT2000XCN011SE	TG8S-U6807-P1BX	489XLAHX-V3XD
PT2000XCN013RA	TG8S-U6808-P3KX	489XLAHX-V5XK
PT2000XEN011RA	TG8S-U6809-P1KX	489XQAHX-V3XK
PT2000XEN011SE	TG8S-U6809-P1BX	489XQAHX-V3XD
PT2000XEN013RA	TG8S-U6809-P3KX	489XQAHX-V5XK
PT2000XJN011RA	TG8S-U6810-P1KX	489XRAHX-V3XK
PT2000XJN011SE	TG8S-U6810-P1BX	489XRAHX-V3XD
PT2000X0N011SE	TG8S-U6812-P1BH	489XSAHX-V3XD
PT2010XCN243RA	TG8D-M6508-P3KX	489ZLDAX-V5XK
PT2010XAN751RA	TG8F-E8006-P1KX	489QCLZX-Q3SK
PT2010XBN751RA	TG8F-E8007-P1KX	489QFLZX-Q3XK
PT2010XCN751RA	TG8F-E8008-P1KX	489QHLZX-Q3XK
PT3252PBE631SA	A20-1005-HX1BBPX	280GCFJP-B3RK
PT3252PBE633SA	A20-1005-HX3BBPX	280GCFJP-B5RK
PT3900PEE654SE	FR64-F1506-D4NX	247FMKSP-B216
PT3920PEE713SF	FR66-F1209B3NX	249FMLLX-B416
PT4100XCN011RJ	SH8S-U6807-P1EX	OUTPUT N/A
PT4100XCN013RJ	SH8S-U6807-P3EX	OUTPUT N/A
PT4100XEN011RB	SH8S-U6809-P1PX	680XQAHX-V3AF
PT4100XEN011SE	SH8S-U6809-PIBX	680XQAHX-V3XD
PT4100XEN011IC	SH8S-U6809-P1CX	680XQAHX-V3XV
PT4100XJN011IC	SH8S-U6810-P1CX	680XRAHX-V3XV
PT6000XCN011SE	RL6S-U6805-P1BX	340XFAHX-V3XD
PT6800XBN011SE	RL8S-U6805-A3BX	348XFAHX-V3XD
PT8000XBN013IC	838S-U6806-L3CX	863XBAHX-Y5XV
PT8000XBN243IC	838S-M6506-L3CX	863XBDAX-Y5XV
PT8500XJN011RJ	828S-U6810-P1EX	880XMAHX-V3XS
PT8500XRN011IC	828S-U6812-P1CX	880XQAHX-V3XV
PT4100XCN011RJ	828S-U6810-P1EX	880XMAHX-V3XS
PT4100XEN011IC	828S-U6812-P1CX	880XQAHX-V3XV
PT4100XJN011IC	828S-U6813-P1CX	880XRAHX-V3XV
PT4110XBN751RJ	828F-E8009-TIEX	880QJLZX-Q3XS
PT4110XEN751IC	828F-E8013-T1CX	880QQLZX-Q3XV
PT1198K03 + PT116504	RS4S-P86VM-P1CX	523XTASX-H-XY
*Contact Roadranger support	ort for applications not lis	sted.





Turnkey Solutions for End Dump Applications



Bezares wet kits provide you with everything for a complete end dump installation, in one part number. Designed for the most popular Eaton Fuller and Eaton Cummins Endurant HD™ applications, our wet kits feature a PTO with Viton™ seals and Garlock™ gaskets for easier installation and fewer leaks, a high-quality roller bearing dump pump for reliability, and an aluminum tank for lighter weight.

Part Numbers

Transmission	Part Number	Description
Eaton Fuller	K-PTFWKC2U	Standard Fuller End Dump Wet Kit 2-Line Upright Tank
Eaton Fuller	K-PTFWKC3U	Standard Fuller End Dump Wet Kit 3-Line Upright Tank
Eaton Fuller	K-PTFWKC2S	Standard Fuller End Dump Wet Kit 2-Line Saddle Tank
Eaton Fuller	K-PTFWKC3S	Standard Fuller End Dump Wet Kit 3-Line Saddle Tank
Endurant	K-PTEWKB2U	Endurant End Dump Wet Kit 2-Line Upright Tank
Endurant	K-PTEWKB3U	Endurant End Dump Wet Kit 3-Line Upright Tank
Endurant	K-PTEWKB2S	Endurant Fuller End Dump Wet Kit 2-Line Saddle Tank
Endurant	K-PTEWKB3S	Endurant Fuller End Dump Wet Kit 3-Line Saddle Tank

Each kit includes:

- PTO, bottom mount, air shift, 110%-130%
- 50 gallon aluminum tank (behind cab or round side mount)
- · Direct mount air shift dump pump with bracket (2- or 3-line systems)
- 10" console/in-cab control with kickout and feathering capabilities
- · Complete hose kit with fittings
- · High flow wing type quick disconnects
- Ball valve
- 25-micron filters (3-line models only)
- Hardware kit







Mechanical PTOs

Hotshift PTOs (Allison)



1000/2000 Series Compatible with the most common transmissions in the market. The 1000 / 2000 series PTOs feature a wide range of input gear, ratio, output, and shifter options. All cast iron construction with large 12mm flange bolts to support some of the larger pumps in the market. Also available in a deep mount 1010 and 2010 series.



4100 Series A heavy-duty PTO with a 475 ft./ lb. torque rating, in a lightweight and compact package. It's able to fit applications that require high torque demands and is smaller and lighter than competitive products for nearly all applications.



4200/4250 Series A dual output, eight bolt, heavy-duty PTO. Featuring two independently air operated outputs, with a variety of ratio and output combinations. The 4250 is a highly versatile PTO for many applications where two PTOs would otherwise be required. Exclusively for Eaton Fuller transmissions.



6000/6800/8000 Series Medium-duty 6 bolt (6000), 8 bolt (6800), and heavy-duty 8 bolt (8000) forward and reversible PTOs. Factory air shift only, with 1.25" round keyed shaft output. A wide variety of input gears are available.



8500 Series Super heavy-duty PTO with a variety of output and ratio options to fit almost any application. Compared to competitive models, the 8500 is 10-20% lighter for equivalent performance. It's the perfect PTO for applications requiring maximum torque and horsepower capabilities.

PTO Series	Intermitt Max. Torque (Lb. FT)	tent Service Max. Power (HP @ 1000rpm)	Max. Torque	us Service* Max. Power (HP @ 1000rpm)	Weight (Lb)
1000	250	49	178	35	32
2000	250	49	178	35	34
4100	420	90	340	65	37
4200 4250	420	80	300	57	75
6000	210	30	150	30	37
6800	210	30	150	30	40
8000	500	500	400	76	60
8500	500	95	400	76	70

*Continuous service is defined as more than 5 minutes of operation every 15 minutes.



3131 The 3131 series is the newest heavy-duty PTO from Bezares, designed and developed for the most grueling applications on the market today. This PTO has maximum torque ratings of 500 ft./lbs. and 97 HP @ 1000 RPM. The 3131 features a single pressure hose, with internal lubrication to decrease install time. A wide range of gear ratios and output options are available, including a rear pump option (model 3131RP).



3131RP Same characteristics as 3131, but for rear pump installations.

3190 The 3190 output adapter for the rear pump option gives you the versatility of being able to change your output from a SAE B, SAE BB, SAE C, or even DIN 5462 in a very short time.

This will also lessen your need to stock dozens of PTO models.



3151 Series Constant mesh 10 bolt PTO models for Allison and Caterpillar series transmissions. These PTOs have a wide range of ratios and outputs.



3252 A new, medium-duty, low-profile PTO, engineered to assist with the space constraints that are faced in modern trucks. An internal lubrication design eliminates one hose and reduces install time, saving unnecessary cost. A wide range of output and gear ratio options allows the 3252 to fit many applications.

		tent Service Continuous		Continuous Service*	
	Max. Torque			Max. Power	Weight
Series	, ,	(HP @ 1000rpm)	` '	(HP @ 1000rpm)	(Lb)
3000	310	59	310	44	55
3131	500	97	400	78	40
3151	500	97	400	78	32
3252	410	78	310	59	30

*Continuous service is defined as more than 5 minutes of operation every 15 minutes.





Hotshift PTOs

Rear Mount PTOs



3300 Series Allison / Aisin

This versatile, 6 bolt, hotshift PTO is designed for the 1000/2000 Allison transmission family, and Aisin automatic transmissions. The 3200 (manual transmission) and 3300 series are offered with multiple ratios and outputs, as well as electric over hydraulic controls.



3200 / 3800 Series Eaton Fuller & More

The 3800 series PTO was developed based on the 3200 series, which has been proven in the market for over a decade. This 8 bolt PTO meets the demands of the market for a hot shift PTO for the 8 bolt aperture. This PTO features air shifting, and a wide range of ratios and outputs.



3900 / 3920 Series Ford

Our 3900 and 3920 series PTO's have been designed for the Ford F-Series Torgshift® transmissions. Both PTO's have both a direct and a remote mount output option.



3940 Series Ford

The 3940 series PTO fits the Ford F-Series 10-speed Torgshift automatic transmission. A DIN 5462 output shaft and special adapters provide versatility and allow for direct mounting of high pressure pumps, such as a bent axis piston pump, directly to the PTO. Unique profile saves up to an hour of installation time.



Adapter Kit Easily convert standard DIN output with additional bolt-on adapters:

Description	Part Number
Ford 3940 PTO w/DIN output	PT3940P0E783DA
3/4" 11T Adapter	PT806635
5/8" 9T Adapter	PT806735
7/8" 13T ∆danter	PT806835

		ent Service	Continuous Service*		rice Continuous Service*	
PT0 Series	Max. Torque (Lb. FT)	Max. Power (HP @ 1000rpm)	Max. Torque (Lb. FT)	Max. Power (HP @ 1000rpm)	Weight (Lb)	
3200 3300 3800	250	49	178	35	30	
3920	200	27	140	27	30	
3900	120	16	86	16	30	
3940	230	44	160	30	36	

^{*}Continuous service is defined as more than 5 minutes of operation every 15 minutes.



Endurant™ HD

95X Series is the lightest and most compact rear counter shaft PTO for Endurant in the heavyduty seament. Offset design improves position of attached pumps.



120X Series is a two-gear PTO for the DT12. Aluminum housing marries heavy-duty strength with light weight and is designed to improve clearance and ease of installation.



Volvo® I-Shift / Mack® mDRIVE™

Bezares features the largest variety of rear mount PTOs to fit Volvo I-Shift and Mack mDRIVE transmissions on the market. With 9 models, we can help you match the perfect PTO for the application required.



11111K03 / 11112K03 / 11113K03

11109K52







11107K*** (***=output choices)

11106K03

	Intermittent Service		Continuous Service*		
PTO Series	Max. Torque (Lb. FT)	Max. Power (HP @ 1000rpm)	Max. Torque (Lb. FT)	Max. Power (HP @ 1000rpm)	Weight (Lb)
95X10 95X13 95X15	293	95	305 235 205	85 66 58	23.6
120X I	DIN 406	120	305	85	24.2
120X SAI	BB 325	92	290	80	
1198K	03 309	60	221	42	32
1196K	03 609	118	435	84	17
111111	K03 361	70	258	50	26.4
11112 11113	K03 464 K03	90	331	64	26.4
11109	K52 361/31	0 70/60	258/221	50/43	72
11107	(*** 413/44	2 80/85	332/369	64/71	88
11106	K03 413	80	295	57	40
70229	04 405	78	331	64	27.5

^{*}Continuous service is defined as more than 5 minutes of operation every 15 minutes.





European Style PTOs

Piston Pumps & Motors







ΖF





FR Bent Axis Piston Pump

Fixed displacement pumps and motors with a compact design that enables installation in almost all applications. Available in ISO 4 and SAE B / BB versions.

Motors with the same flow rates also available.

GPM (@ 1000rpm)	Displacement (cu ln/rev)	Max. Pressure P3 (PSI)	Max. Speed (cu ln/rev)
5	1.16	5800	2800
8	1.85	5800	2600
11*	2.44	5800	2600
13	3.05	5800	2300
16*	3.65	5800	2300
21*	4.88	5800	2000
29*	6.71	5800	1900

^{*}Standard models.



MR Bent Axis Piston Pump

Fixed displacement piston pump designed for use in medium/high pressure applications. Its small body allows installation in reduced spaces. Available in ISO 4.

GPM (@ 1000rpm)	Displacement (cu ln/rev)	Max. Pressure P3 (PSI)	Max. Speed (cu In/rev)
11	2.4	5076	2400
12	2.7	4350	1600
16	3.65	5076	2200
21	4.8	4350	1900
29	6.68	5076	1800
33	7.54	4350	1700



Scania



DIN to SAE Adapters

Convert easily from DIN output to any SAE output needed.





Geared Adapters

Clear mounting obstacles or switch PTO output rotation with Bezares' six bolt geared adapters. Offered in a 45° angle or straight option, these can be used with any spur cut input gear that Bezares has available. A 22° offset adapter is also available, which has more flexibility for some helical cut gears.



FRV Variable Displacement Pump

Ideal for truck cranes with load sensing systems, it provides the required flow at the right time. It incorporates a manual flow control, reducing the number of control valves necessary. Available in ISO 4.

GPM (@ 1000rpm)	Displacement	Max. Pressure P3	Max. Speed
	(cu ln/rev)	(PSI)	(cu ln/rev)
22	7.54	5076	2500





Bushing Pumps



BES Series

Lightweight aluminum body design gear pump with left hand rotation for those low to medium flow systems. Compact design size makes it ideal for direct mounting to PTO's in small envelopes on today's chassis. 2 bolt SAE A flange, with either 3/4"-11 tooth or 5/8"-9 tooth shafts available. Rear SAE 0-Ring ports standard.

GPM (@ 1000rpm)	Displacement (cu ln/rev)	Max. Pressure P3 (PSI)	Max. Speed (cu In/rev)
4	.98	4060	4000
7	1.71	4200	2500
9	1.95	3625	3000



BEL Series

Birotational pump with a cast iron housing, giving it great resistance to high pressures and RPMs.

Available with ISO 4-bolt and SAE 2/4-bolt flanges. Available in ISO 4 and UNI 3 versions.

GPM (@ 1000rpm)	Displacement (cu ln/rev)	Max. Pressure P3 (PSI)	Max. Speed (cu ln/rev)
13	3.05	4600	2750
16	3.66	4500	2750
19	4.27	4200	2750
22	4.88	3900	2500
26	6.1	3400	2500
30	7.02	3300	2500



BEM Series

A birotational pump with a cast iron body. Rear and side ports provide greater versatility and simplify installation. Available with ISO 4-bolt and SAE 2/4-bolt flanges. UNI 3.

GPM (@ 1000rpm)	Displacement (cu ln/rev)	Max. Pressure P3 (PSI)	Max. Speed (cu In/rev)
6	1.4	4400	2000
8	1.77	4200	2000
11	2.5	3800	2000
12	2.8	3600	2000



BE XL Series

A larger model pump in cast iron for the highest working pressure performance. Available with ISO 4-bolt and SAE 2/4-bolt flanges.

GPM (@ 1000rpm)	Displacement (cu In/rev)	Max. Pressure P3 (PSI)	Max. Speed (cu In/rev)
23	5.4	4200	2500
27	6.3	4200	2500
31	7.2	4200	2500
35	8.1	3900	2500
39	9	3600	2000





Dump Pumps

A full range of high quality dump pumps in stock for quick shipping, including small to full size series; manual or air shift.

Direct mount SAE B 4-Bolt, or twin shaft remote mount available on all models.





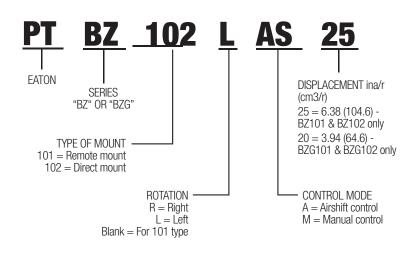


Eaton Part No.	Muncie Part No.	Parker Part No.	Permco Part No.	Metaris Part No.	Description
PTBZ102LAS25	E3XA1270BPRL or E2X	C102-D-25-1-AS	DMD-25-Z-L-AS-25	MH102-C-25-L-AS	SAE 4-Bolt 7/8" 13 Spline Shaft, Direct Mount, Air Shift, Rear Pipe Ports, CCW Rotation, 2 or 3 line (for most Eaton/Fuller manual transmissions)
PTBZ102RAS25	E3XA12702BPRR or E2X	C102-D-25-AS	DMD-25-Z-R-AS-25	MH102-C-25-R-AS	SAE 4-Bolt 7/8" 13 Spline Shaft, Direct Mount, Air Shift, Rear Pipe Ports, CW Rotation, 2 or 3 line (for most Allison and some Mack transmissions)
PTBZ101AS25	E3A12701RPRB or E2X	C101-D-25-AS	DM-640-25-ZR-M-AS	MH101-C-25-AS	1" Dual Shaft w-1/4" Key, Remote Mount, Air Shift, Rear Pipe Ports, 2 or 3 line (must have driveline from PTO to operate pump)
Note: To order the	e Eaton/Bezares Dump P	ump in a Manual S	Shift, replace "A" with "	M" in part number. A	bove pumps are 27 GPM @ 1000 Pump RPMs
PTBZG102RMS20	S2LD11502BPRR	G102-1-2.0-R-4S	DMD-400-20-XR-200	MH102-G-2-R	SAE 4 Bolt 7/8" 13 Spline shaft, Direct Mount, Lever Shift, Rear Pipe Ports, CW Rotation, 2 or 3 line (for Allison transmissions with single axle dump body)
PTBZG102LMS20	S3LD11502BPRL	G102-1-2.0-L-4S	DMD-400-20-XL-200	MH102-G-2-L	SAE 4 Bolt 7/8" 13 Spline shaft, Direct Mount, Lever Shift, Rear Pipe Ports, CCW Rotation, 2 or 3 line (for manual transmissions with single axle dump body)
PTBZG10120	S3LD11501RPRB	G101-1-2.0	DMD-400-20-ZR-200	M101-G-2	1" Dual Shaft 1/4" key, Remote Mount, Lever Shift, Rear Pipe Ports, 2 or 3 line (must have drive line from PTO to

Note: Above pumps are 15 GPM @ 1000 Pump RPMs. Change "M" to "A" in part number to order with air shift.

Flow- Power @ 2500 PSI Speed (RPM)	BZG 101/102 Flow GPM	BZ 101/102 Flow GPM
900	13.5	22
1200	18.5	30
1500	23.5	39
1800	29	47
2100	34	55
2400	39	51

Main Data	BZG 101/102	BZ 101/102
Gear Width	2"	2.5"
Displacement (In 3/rev)	3.94	6.38
Max. Continuous Pressure	2500	2500
Speed (RPM)	600-2400	600-2400





Vane Pumps & Motors

Туре	Series	Displacement (cu In/rev)	Max. RPM	Max. Pressure (PSI)	
DENISON DESIGN					
Single Vane Pump (Very High pressure)	T7B, T7DSW	0.37 - 9.70	3600	4641 A full range of TDZ	' mo
Single Vane Pump	T6C, T6D, T6E	0.67 - 16.48	2800	3988 based on Denison	des
Double Vane Pump (Very High pressure)	T7BB, T67CB, T67DB, T67EB	0.55 - 16.48	2800	Both complete unit	
Double Vane Pump	T6CC, T6DC, T6EC, T6ED	0.67 - 16.48	2800	spare parts are 100 interchangeable wi	
Triple Vane Pump (Very High pressure)	T67DBB, T67EDB	0.67 - 16.48	2800	3988 manufactured by D	
Triple Vane Pump	T6DCC, T6EDC	0.67 - 16.48	2800	3988	
VICKERS DESIGN					
Single Vane Pump	V10, V20	0.06 - 0.79	4800	2538 A full range of TDZ	mo
Single Vane Pump	20V, 25V, 35V, 45V	0.12 - 4.39	2500	3045 based on Vickers d	
Double Vane Pump	2520V, 3520V, 3525V	0.12 - 2.75	2500	Both complete unit	
Double Vane Pump	4520V, 4525V, 4535V	0.12 - 4.39	2500	spare parts are 100 interchangeable wi	
Thru Drive Vane Pump	25VT, 35VT, 45VT	0.49 - 4.39	2500	3045 manufactured by V	
Single Vane Pump	V10F, V20F, VTM42	0.06 - 0.79	4800	2538	



Spare Parts A full range of TDZ spare parts for Bezares/TDZ, Denison and Vickers vane

pumps and motors.

Control & Tipper Valves



9030890 The 9030890 valve is an air operated dual pressure tipping valve with two independent operating pressures. This valve is a perfect fit for a walking floor and dump combination, at a fraction of the cost of other options.



9058090 Air operated single pressure tipper valve. Perfect fit for applications where a dump pump is not applicable due to clearance issues with certain transmissions, or most rear mount PTO applications where supporting the pump requires extensive fabrication and increased labor costs.



901211 The 901211 is a two position, two selector valve that offers a simple means of directing oil flow into two separate hydraulic circuits. It is air operated with an open center in neutral position.







Cab Controls

Bezares offers a variety of in-cab controls for PTOs. Three different size tower consoles for combo control valves are also available. Controls include standard PTO on/off only PTAK101X air kit, PTAK126C with kick out option, PTAK127C without kick out, and PTAK128C with a feathering option. LV series mechanical lever controls, which are a high quality lever shift option in three different lengths, are offered for applications where air shift is not an option.







2/3 Ways Pneumatic Control



Oil Tanks

We offer a full line of tanks to fit all application needs. Our tanks are available in aluminum, steel, and poly ranging in capacities from 7 to 100 gallons. Styles include upright mount, saddle mount, and square side mount, with special order options including a sight gauge, two inch ports, and stainless steel straps.



Mounting Towers & Brackets

for Control Valve without PTO Switch and Metering PTO/Dump Combo Valve

Pneumatic Compressors

The Bezares mini air compressor is a 12 Volt, easy to install, completely 15 14 self-contained, and very 13 12 11 10 10 10 low maintenance model. Compact design allows for current (A). easy installation on most trucks, even inside the driver compartment. **Excellent solution for** small vehicles with no factory air option. slpm ... standard litre per minute(21°C, 1014 mbar) Volumen depósito / Reservoir Volume [1]: 1 L Voltaje / Operating Voltage [V]: 13,5 V





Assembly Arrangement

Œ

Part Number Nomenclature

PT 2000 X

Shifter Type

C = Cable

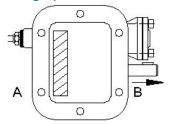
1. Right, forward

3. Left, forward

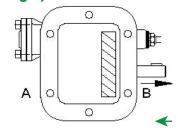
0

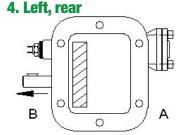
В

Type Engine



2. Right, rear





Suggested PTO Percentages

Type Engine	KPW	PIU %
Aerial Ladder and Platforms	800-1500	80-130
Aerial Bucket Man Lifts	800-1200	80-130
Aerial Cranes Digger Derricks	800-1200	80-130
Auto Carriers	ldle	125-210
Auto Tow Trucks	Idle-1200	90-120
Heavy-duty Tow Trucks	1000-1500	90-130
Air Compressors 85 ft per min Capacity 125 ft per min Capacity 180 ft per min Capacity	1200-2000 1200-2000 1200-2000	100 100 100
Blowers Pneumatic	1500-3500	150-250
Dump Bodies Small Single Axle Medium Single-Tandem Large Tri-Axle Dump Trailers Dump Trailers with Moving Floor Hydraulic Pumps	1000-2000 1000-2000 1000-2000 1000-2000 1000-1800	50-80 80-100 60-130 80-130 80-130
1-15 GPM 16-35 GPM 36+ GPM	Idle-3000 Idle-3000 Idle-3000	80-130 80-130 80-130
Product Pumps See Mfg for Correct Flow		
Refuse	1000-1800	80-130
Snow Plows	1000-3000	60-90
Spreaders Mechanical	1200-2500	45-60
Spreaders Hydraulic	1200-250	75-90
Tailgates	ldle	60-75
Walking Floors	1000-1500	125-175
Winches See Hydraulic Pumps		

Note: Always check manufacturer for correct specifications and flow requirements.

Nomenclature Example (2000 Series):



Eaton Part

Series

2000 = Standard mounting, 8 bolt 2010 = Deep mounting, 8 bolt

Versions

PT0 %

X = Standard

G = Greaseable output shaft

P = Oil pressure lube

Internal Ratio 1:0.5 (A) > 801534

1:0.55 (B) ► 801034

1:0.73 (C) ► 800534

1:0.8 (E) - 800634

1:0.95 (J) ► 800734

1:1.25 (O) ► 800834

1:1.37 (R) ► 801334

1:1.50 (S) ► 801434

1:1.65 (T) ► 800934

Input Gear

01 = Fuller Series (R/675)

02 = Universal (R/683)

03 = Spicer (R/736)

05 = Spicer (R/677)

06 = Fuller (Tremec) (R/679)

07 = Navistar (R/693)

08 = Spicer (R/682)

09 = Spicer (R/684)

10 = Chevy (R/678)

11 = Chevy/Spicer (R/699)

13 = New Process (R/718)

14 = Fuller (R/737)

15 = Eaton/Fuller FS-4005C/4205C (R/717)

16 = ZF (R/716)

17 = Eaton 6305 A (R/680)

18 = Eaton FS 3005/4005 AB (R/681)

20 = Dodge (R/701)

21 = ZF S5-42/5.72 (R/676)

22 = Eaton/Fuller (R/738) 23 = Eaton/Fuller FS-3005 B (R/714)

24 = Mack (R/695)

25 = Eaton/Fuller FS-7206 A (R/715)

27 = Eaton/Fuller (R/692)

28 = Fuller (R/771)

30 = Eaton/Fuller (R/698)

33 = Spicer (R/697)34 = Spicer (R/696)

36 = New Process (R/739)

39 = Warner (R/741)

41 = Warner (R/743)

42 = Fuller (R/770)

W = Wire w/10' cable \\ 9078999 - POS 2/3 \\

 $N = Air \text{ w/o } 101 \text{ Air Kit} \begin{cases} 9078899 - POS 1/4 \\ 9078999 - POS 2/3 \\ \end{cases}$

50 = ZF (R/694)

51 = Dodge (R/702)

52 = ZED/F (R/700)

55 = Mack/Renault (R/748)

56 = Tremec (R/744)

57 = ZF (R/740)

61 = Ford (R/754)

64 = Allison (R/752)

66 = Fuller (R/862)

67 = Aisin (R/870)

68 = Tremec (R/897)

70 = Mercedès G60 (R/956)

75 = Endurant (G/210)

Assembly Arrangements 1 = Right, forward

2 = Right, rear3 = Left, forward

 $4 = \overline{\text{Left}}$, rear

Output Type

DA = ISO 4 bolt

IA = Flange SAE 1100

IB = Flange SAE 1300

IC = Flange SAE 1400

SE = SAE Type 1 1/4" round shaft SF = SAE "A" 2 bolt 9T SH = SAE "AA" 2 bolt 11T

RA = SAE "B" 2/4 bolt 13T. rotatable

RB = SAE "BB" 2/4 bolt 15T. rotatable

TP = Tyron Pump (Chelsea type)

DA



CERTIFIED BUILDER AND DISTRIBUTOR

Learn More about Eaton's entire portfolio of truck and automotive parts and services for the aftermarket at EatonPartsOnline.com

INDUSTRY BEST

easy to do business

expertise

ROADRANGER **ACADEMY**

TRAINING

solutions

SUPPORT



DETROIT LOCKER® **POSI®**

high performance

DETROIT TRUETRAC®

ELocker®

strength

ELocker4®

CLUTCHES OF ADVANTAGE SELF-ADJUST®



EVERTOUGH®

ECA CLUTCH REMANUFACTURED

ADVANTAGE AUTOMATED

430mm ANGLE RING

INSTALL KITS

reliability



Genuine Eaton

FLEX REMAN

AUTHORIZED REBUILT TRANSMISSION lence

ECOMMERCE

ServiceRanger™ 4

DEALER LOCATOR IntelliConnect™

PRODUCT SELECTORS

TVS® Technology

R2650

SUPERCHARGERS

R1900

V-series

Tanks





JBRICANTS



PS-386

peace of mind

protects your investment

PS-278

WAVE INVERTER



OVERHAUL **KITS**

BULK KITS

value for the money REBUILD KITS



performance

RING &



Powering Business Worldwide

BACKED BY



CONTACT YOUR ULT POWERTRAIN SPECIALIST FOR MORE DETAILS

Edmonton Alberta 833.442.0442

Mount Pearl Newfoundland 844.442.0442

Moncton **New Brunswick** 844.442.0442

Quebec City Quebec 844.442.0442

Ottawa Ontario 613.749.4858

Mississauga Ontario 833.442.0442

Winnipeg Manitoba 833.442.0442

WE ARE YOUR ONE-STOP DRIVELINE SOURCE SOLUTION!

ULTPOWERTRAIN.COM