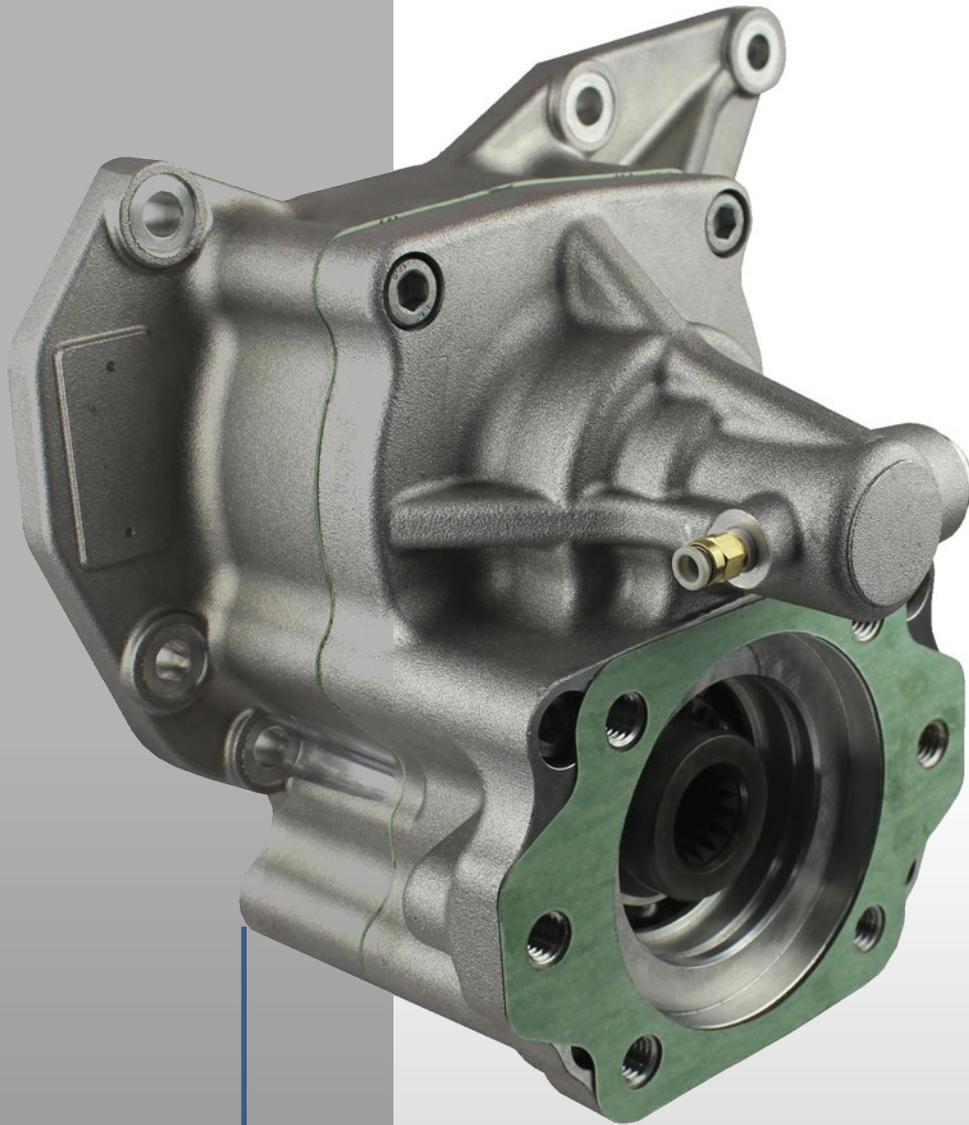




Building our world

Hydraulic Equipment Catalogue



07264K03

NEW Heavy Duty PTO
GENERATION
for **MERCEDES**



PTOs



Pumps &
Motors



Valves



Oil
Tanks



Winches

... & much more



About Bezares SA

In 1954 Bezares was founded in Madrid as a small workshop dedicated to the manufacture of mechanical and hydraulic components, evolving, with the passage of time, to become one of the leading companies in the market for power take-offs manufacturing.

Likewise, Bezares is a world reference in pumps and other hydraulic components manufacturing, also. We currently have a large commercial network with a presence in more than 80 countries on five continents.

For years, we have the ISO 9000: 2000 quality certificate and the ISO 14001 environmental management certificate and we have acquired the ISO-TS automotive certificate.



bezares.com



PTOs

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Pumps & Motors

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Power Packs

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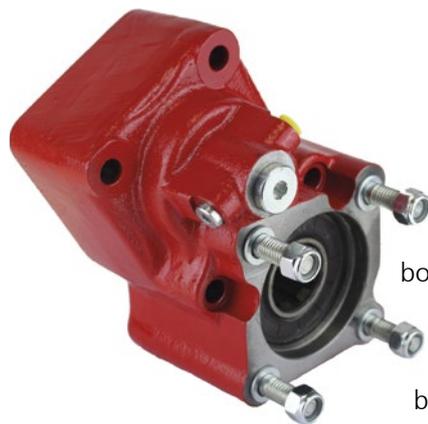
Winches

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PTO's

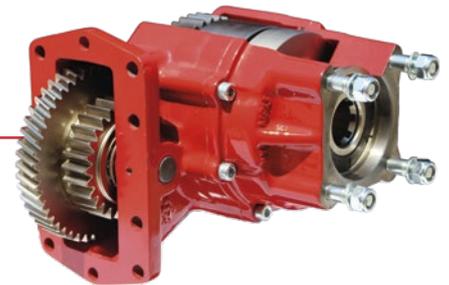
One of the widest ranges of PTO's on the market, supplying units for practically all gearboxes brands in the world, such as Allison, Eaton, Hino, Hyundai, Isuzu, Iveco, Mercedes Benz, Mitsubishi, Nissan, Renault, Scania, Toyota, Volvo and ZF, among others.

- Allison
- Clark
- Dana
- Eaton
- Gaz
- Hino
- Hyundai
- Isuzu
- Iveco
- Kamaz
- Mack
- Maz
- Mercedes
- Mitsubishi
- Nissan
- Pegaso
- Praga
- Renault
- Rover
- Scania
- Shaanxi
- Spicer
- Tata
- Toyota
- Turner
- Volkswagen
- Volvo
- ZF



102K003 for ZF

Rear PTO with a 5th additional bolt for a better support with heavy pumps (ZF Ecosplit, Astronic and TraXon) through our integrated flanges. Pneumatic shifting, ISO 4 bolts pump rotated output.



240603 for Allison

Two gears PTO with built-in clutch. Hydraulic shift. Installation on either side of the gearbox. Various transmission ratios. For HD boxes (4000 series) the hydraulic version is recommended.

Shifts Available	Output flanges available
Mechanical	ISO 4-hole DIN 5462
Pneumatic	UNI 3 (21 UNI 222)
Vacuum	SAE (A, B, BB, C)
Electrical	Output Plate

Electro-hydraulic (Allison series)



1182323 for Volvo

3-gear PTO's with 3 separate or simultaneous outputs which can be combined as Pump, Flange Plate or No Output. Pneumatic shifting, mounted on the rear gearbox window.

07264K03 for Mercedes

Base PTO + flange kit (without shaft), heavy duty housing made of aluminium to connect ISO 4 bolts pumps. Pneumatic shifting. Mounting on rear 7 bolts-window of the Gearbox.
Necessary to save interference with main flange over Ø180mm

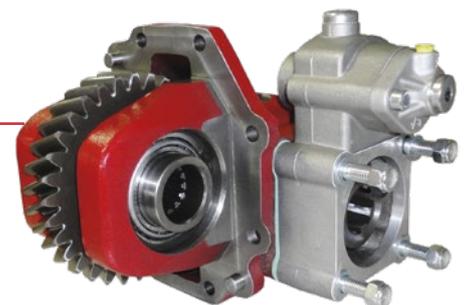


1027403 for ZF Astronic

High Power, built-in clutch PTO, mounting on 5 bolts flange of the gearbox. Pneumatic shifting. Valid for gearboxes with and without interarder.

093103 for Scania

Power Take-off two gears, constant mesh, to connect Iso 4 bolts pumps. Pneumatic shifting, mounting on right side of the Gearbox. Valid for vehicles with pneumatic and mechanical systems.



Gear pumps and Motors



BEA Pump

Bidirectional, with an aluminium body, making it particularly light-weight in a small size and with low noise levels.

BEA Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
11	10.6	300	2000
17	16	275	2000

BEM Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
23	23	300	2000
30	29	290	2000
40	41	260	2000
45	46	250	2000

BEM Pump

A bidirectional model with a casting iron body. Rear and side ports, providing greater versatility and simplifying assembly. Available in ISO 4 and UNI 3 versions.



BEL Pump

Bidirectional, with a casting iron body, giving it great resistance to high pressures and rpm's. Available with ISO 4-bolt and SAE 2/4-bolt flanges. Available in ISO 4 and UNI 3 versions.

BEL Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
50	50	300	2500
60	60	290	2500
70	70	270	2500
80	80	250	2200
100	100	220	2200
120	115	220	2200

BEXLNS Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
85	88.5	290	2000
100	103.3	290	1800
115	118	290	1500
130	132.8	270	1300
150	147.5	250	1200

BE XLNS Pump

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



Piston pumps



NEW FR2 TWIN FLOW PISTON PUMP

Twin flow configuration, that allows a great variety of solutions in different job applications. High performance, long life unit with reduced dimensions. Designed for continuous duty. Few rotative parts.

FR2 Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
54 + 54R/L	55.4(a) 52(b)	350	1400

FR Bent axis piston pump

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

Motors with the same flow rates also available.



FR Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
20	19	450	2200
30	30	450	2000
40	39	450	2000
50	50	450	1700
60	60	450	1700
80	79	450	1500
110	109	400	1400

MR bent axis piston pump



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

MR Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
45	44	300	1400
80	78	300	1500
125	123	300	1300

FRV variable displacement pump

Provides the required flow at the right time. Incorporates a manual flow control, reducing the number of control valves necessary. Available in ISO 4.



FRV Pump	Displacement (cm ³ /rev.)	Maximum pressure P3 (bar)	Maximum speed P1 (RPM)
84	84	350	2500

Vane pumps and Motors



Vickers Design

A full range of TDZ models based on Vickers designs. Both complete units and all spare parts are 100% interchangeable with models manufactured by Vickers.



Denison Design

A full range of TDZ models based on Denison designs. Both complete units and all spare parts are 100% interchangeable with models manufactured by Denison.



Spare parts for pumps and motors

A full range of TDZ spare parts for Bezares/TDZ, Denison and Vickers vane pumps and motors.

Type	Series	Disp.	Max. Speed	Max. Press.
TDZ Design				
Single Vane Pump	BHP1	2,...7	2500	175
Single Vane Pump	BHP4, BHP6, BHP7	26,...235	2500	210
Denison Design				
Single Vane Pump (Very High pressure)	T7B	6,...52	2800	320
Single Vane Pump	T6C, T6D, T6E,	11,...270	2800	275
Double Vane Pump (Very High pressure)	T7BB, T67CB, T67DB, T67EB	9,...270	2800	320
Double Vane Pump	T6CC, T6DC, T6EC, T6ED	11,...270	2800	275
Triple Vane Pump (Very High pressure)	T67DBB, T67EDB	9,...270	2800	320
Triple Vane Pump	T6DCC, T6EDC	11,...270	2800	275
Vickers Design				
Single Vane Pump	V10, V20	1,...13	4800	175
Single Vane Pump	20V, 25V, 35V, 45V	2,...72	2500	210
Double Vane Pump	2520V, 3520V, 3525V	2,...45	2500	210
Double Vane Pump	4520V, 4525V, 4535V	2,...72	2500	210
Thru Drive Vane Pump	25VT, 35VT, 45VT	8,...72	2500	210
Single Vane Pump	V10F, V20F, VTM42	1,...13	4800	175



Tipping Valves BZD-BZV 150 / 180 / 250

Tipping valves, with proportional open or closed circuit units having two descent speeds of up to 250 litres, a pneumatic shift, and with a pressure relief valve adjustable up to 400 bars. These include a non-return valve, push or pull end-of-stroke limiters, an optional pressure switch and a pressure sensor. We can also supply 2 and 3 pressure limiters to control various applications

Flow diverter, Diverter valves - 901011

Pneumatic and mechanical models designed without a stopping point between A and B.

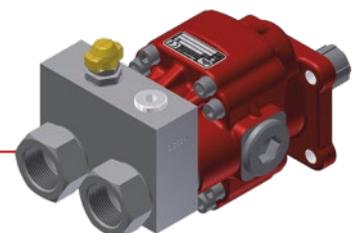


150L for fitting to BE L 50/60/80/100/120

Tipping valves, with proportional open circuit units coupled to a pump for 150 litres, with a pneumatic shift and a pressure relief valve. This avoids the need to fit a pressure return hose to the tank, allowing discharge through the feed line. It allows configuration of pump rotation in both directions, and it can be rotated by 180° to avoid fitting overlaps.

Pressure relief valves for BE L Pumps

With an aluminium body for fitting to the L series of BE pumps. Relieves pressure overloads building up in the pressure line to the feed line, preventing unnecessary wear on the hydraulic circuit components.



Oil Tanks

Side mounted oil tank 75 - 200L



Side-mounted tank with flanges for filter and oil level control. Finished in painted sheet steel. Optional oil filter.

Steel
30-50l

HDPE
30l



Filter and oil level control. Light, durable design, finished in polyethylene, 100% recyclable.

Side mounted

With flanges for filter and oil level control. Finished in painted steel, aluminium and stainless steel.

Rear-Cab

Steel 80-200l

With oil level control. Finished in painted sheet steel.



On chassis 20-40l

Finished in painted sheet steel.



Full Range of Oil Tanks

Side mounted

Rear-Cab

On chassis

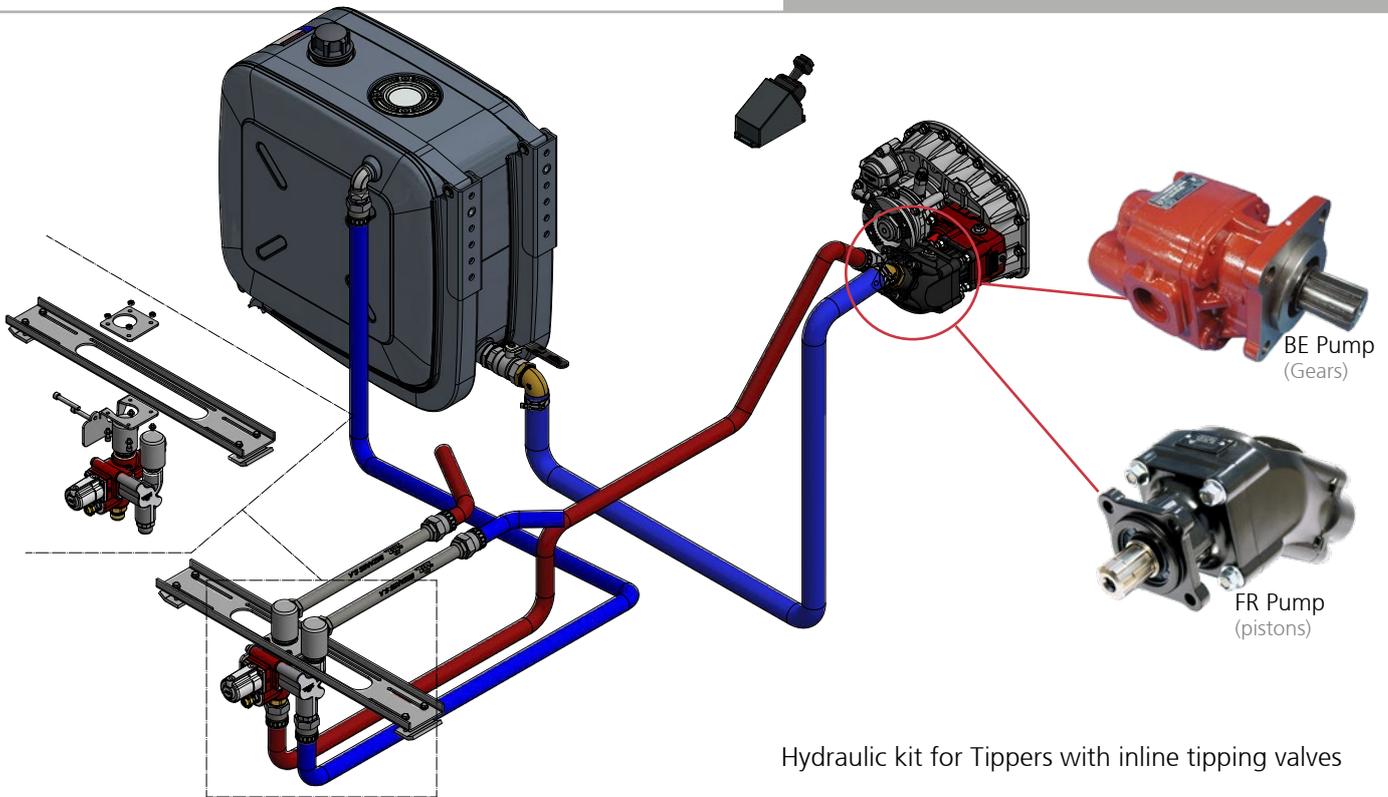
30 to 200 litres
Aluminium, stainless steel,
painted steel and high density
polyethylene.

10 to 200 litres
Painted steel

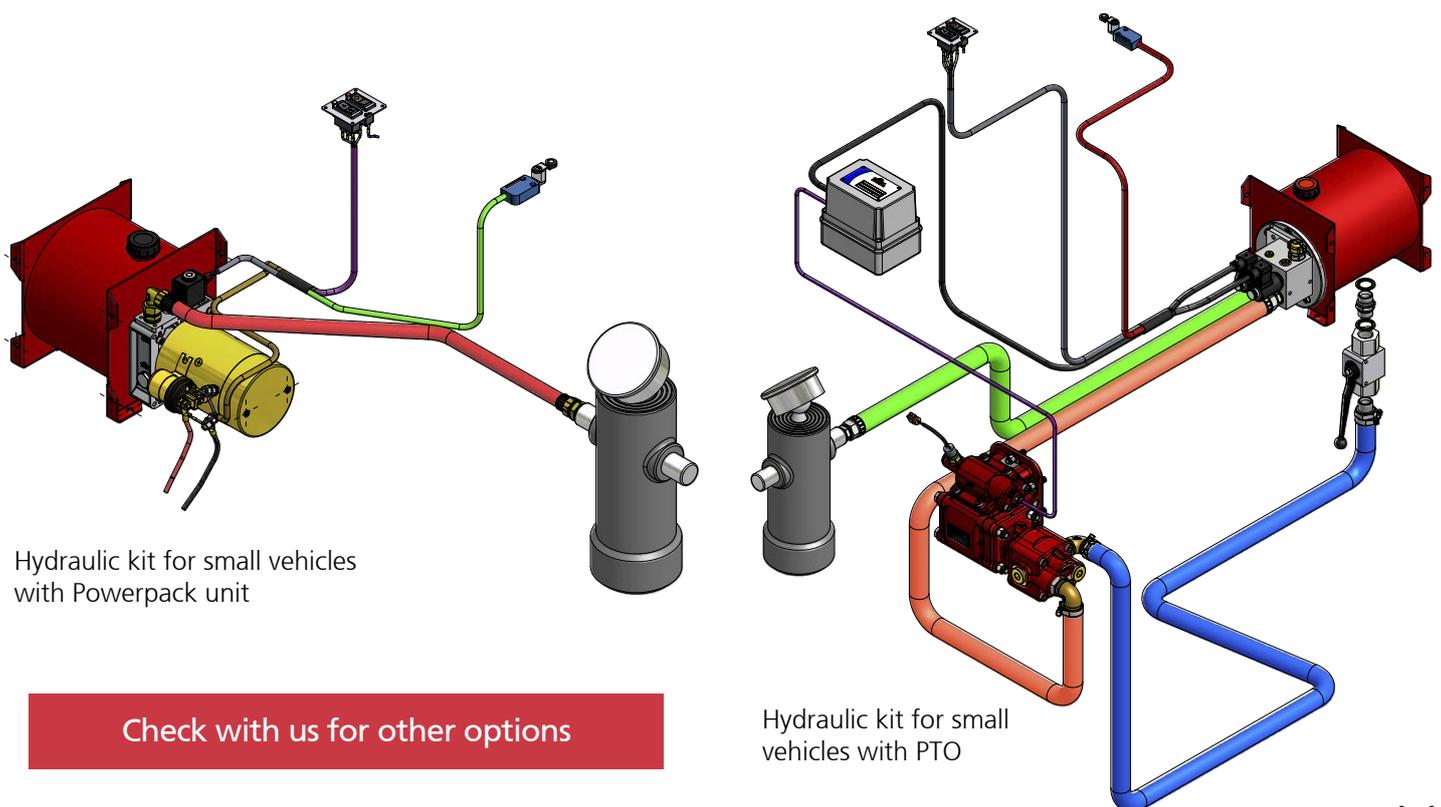
up to 40 litres
Painted steel

Hydraulic Kits

Large vehicles



Small Vehicles



Check with us for other options

Power-Packs

Micro power-packs

Compact systems, with 0.8 kW motor, 0.26 to 0.63cc pumps and 0.75 to 1.5l tanks. used in applications such as loading ramps or lifts for vehicles for the disabled.



Inline power-packs

Electro-hydraulic power station with direct current in 12 or 24V from 2.5 to 4.5 Kw for demanding applications with pressure up to 250 bar. Includes starter and anchor bracket.

Mini power-packs

Made of high-pressure-injected cast aluminium. Single and double action applications and versions for special applications which, combined with the use of cartridge valves (SAE 08 - 3/4 " -16 UNF), allows multiple circuits to be used.



Motors - Mini Power-pack

DC 12V 1,8 kW @ 2600 RPM

DC 24V. 2 kW @ 2400 RPM

Oil Tanks - Mini power-packs

Capacity (L)	Weight (kg)	Material
1.5	0.25	HDPE
4	0.5	HDPE
5	3.0	Steel
6	0.9	HDPE
7,5	4.0	Steel
8	1	HDPE
10	1.1	HDPE
10	5.3	Steel
12	1.25	HDPE
15	6.3	Steel
16	1.5	HDPE

Pumps - Mini power-packs

Q (cm ³ /rev)	0.8	1.3	1.6	2.17	2.6	3.2	4.2	5.8	8
Maximum operating pressure (bar)	200	210	200	210	210	200	180	140	100
Maximum Intermittent Pressure (Bar)	250	250	250	250	250	250	230	210	140

Winches



Arrastre compacto

Compact and lightweight winch for up to 4.2 tonnes. Its simplified design is the result of Bezares experience in the design and development of winch technology, with special attention to improving the efficiency, compact design, reduced weight and number of internal parts without sacrificing performance, resulting in the optimum technical features in a small unit.

Heavy-duty winch

Hydraulic Winch with two-stage planetary geartrain. Bidirectional, with an overcentre valve and a mechanical emergency brake capacity of 100%. Made of tempered aluminium, with a compact design giving a lower overall weight compared to other models with the same pulling capacity.



Heavy load winches

Hydraulic winch for line pulls of up to 30,000Kg with planetary reduction gearing, automatic multi-disc oil bath brake (applied when the winch is not operating) brake valve and guide rollers.

Model	Max line pull 1st layer (kg)	Maximum Speed (last layer m/min)
BZC/BULL	4200	25/30
BZC/E50	4600	21
BZC/E70	7000	16
GT	10000	18
GT	15000	12
GT	20000	22
GT	30000	6



30.000

Heavy load
High capacity drum
Automatic multi-disc brake (in rest position)

20.000

Heavy load
Braking valve
Automatic multi-disc brake



7.000

Reinforced, planetary reduction in two stages
Long or short drum

3.600 / 6.800 kg

10.000 / 15.000 kg

20.000 / 30.000 kg



4.200

Reduced drum: special for 4x4 car carriers

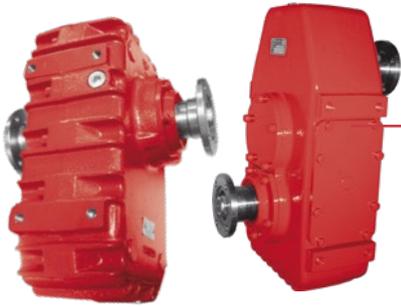
Light or reinforced models



4.200

Compact and lightweight, planetary reduction

Transfer and Multiplier Gearboxes



Multiplier Gearboxes

High power. Bottom input, top output. Available with different internal ratios.

Agricultural gearboxes

Special for tractors with different output types (SAE B, SAE BB, ISO).

Made of high strength tempered aluminium, giving high torque and power.

Available with double output.



6013399 (+ PTO1000)

Transfer gearboxes with windows for fitting 2 PTO's, which allows great flexibility when choosing the best position for the auxiliary shafts. A wide range of internal ratios enables the right one for every application.

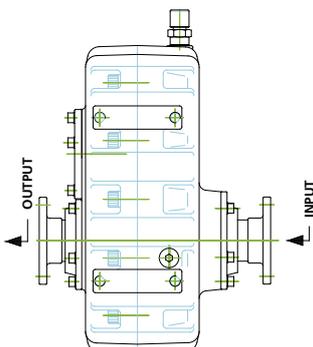
4x4

Special gearbox to convert 4x2 vehicles to 4x4, 2 speeds (40% and 47%), torque up to 2000 Nm and with the ability to connect a PTO.

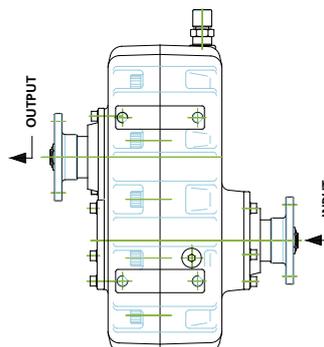


GEAR-UP BOXES TYPES

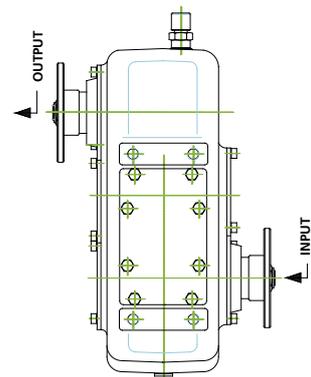
1 - Coaxial



2 - Non coaxial



3 - Vertical





Manifolds

A full range of standard CETOP manifolds, in aluminium or cast iron (GG25), with or without built-in pressure limiters, from 1 to 8 stations and with side or rear ports.

Valves

A comprehensive selection of solenoid valves, tipping control valves and flow and pressure control valves in modular or sandwich format. Our fitting system with stackable valves allows an infinite variety of circuits, minimizing the space required, thus saving on installation time and on costly piping installations.



Sizes: TN-06, TN-10, TN-16, TN-25 (CETOP-3, 5, 7,8)

Accessories



Adapters

Spacer kit to avoid possible overlapping when fitting the pump onto the PTO. Different bearing combinations according to the needs of the application.

Suction Pipe Fittings

For hydraulic pumps. Includes reinforced clamp.



Pneumatic pressure kit

Maintenance free air compressor with anti-humidity protection box. Protection relay to cut the current if there is less than 6.5 bar of pressure after 8 seconds. In this case would be necessary to switch off/on the current to rearm the unit.



2 and 3 way Pneumatic controller

2& 3 ways pneumatic controls with warning light for PTO engagement or to operate over the tipping valve. Combined with appropriate tipping valve, enables proportional control for lowering dump bodies.

BZEA 300 L. 12V / 24V Oil cooler.

Mini air compressor, maintenance free. Sealed protective case. This unit provides air pressure in small vehicles that do not have their own compressed air tank.





Hydraulic Equipment

World leader in hydraulic equipment manufacturing

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