



ABER

Manufacturing Hydraulic Excellence since 1972

ABER

MANUFACTURING HYDRAULIC EXCELLENCE SINCE 1972

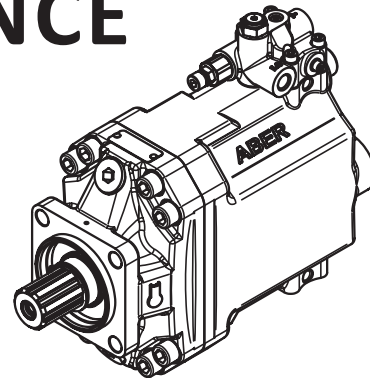
ABER is an expert in the domain of the oil-hydraulic and in the transmission of power applied mainly on trucks (cranes and tippers).

In its domains ABER is one of the most important manufacturers in the international market. The close relationship with its customers has, over the years, produced a customer base that is both loyal and expanding.

Founded in Maia (Porto - Portugal) in 1972, ABER currently occupies a site of 7,300 square meters, being its production and management area of 4,500 square meters. The plant has achieved ISO 9001:2008 certification

Obtained invention patents and constant introduction of new products are the result of the quest for innovation and dynamism. This endless search for technological progress ensures it offers its customers the best solution for the task in hand.

On its daily work ABER conjugates the use of the best available productive equipment and the best methods of quality control; and privileges the respect for its collaborators, for the work well done, the honesty in its relationship with customers and suppliers, and the excellence of the products placed in the whole world.



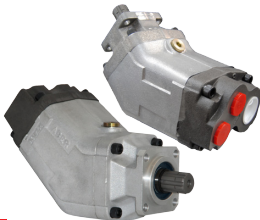
Piston Pumps

A



A1

VDP



A 2

BI | BID



A4

BIF



A5

BH | BHD

Gear Pumps

B



B1

B2



B2

B3 | B3D



B4

B35

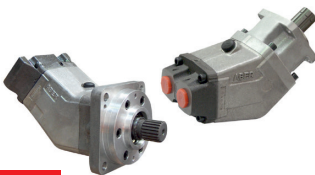


B5

PV

Hydraulic Motors

C



C1

MBI



C2

MBIF



C3

MB3

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Connectors, Valves & Controls

D



D1

Admission
Connectors



D3

Accessories



D4

Hydraulic Valves



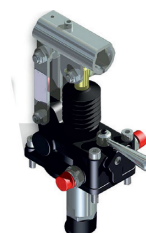
D8

Pneumatic
Accessories



D9

Mechanic
Controls



D9

Hand Pumps

Power Take Off's & Gearboxes

E/F



E1

PTO'S



F1

Gearboxes

Hydraulic Power Packs & Hydraulic Units **G**



G1 Hydraulic Power Packs



G1 Hydraulic Units

Oil Tanks **H**



H1/H4 Side Mounting



H2/H5 Rear Mounting

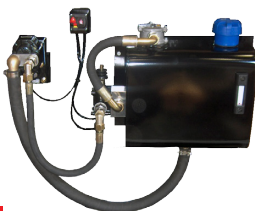


H3 Chassis Mounting

Tipper Scissors & Wet Kits **I**



I1 Tipper Scissors



I3 Wet Kits

HYDRAULIC PISTON PUMPS

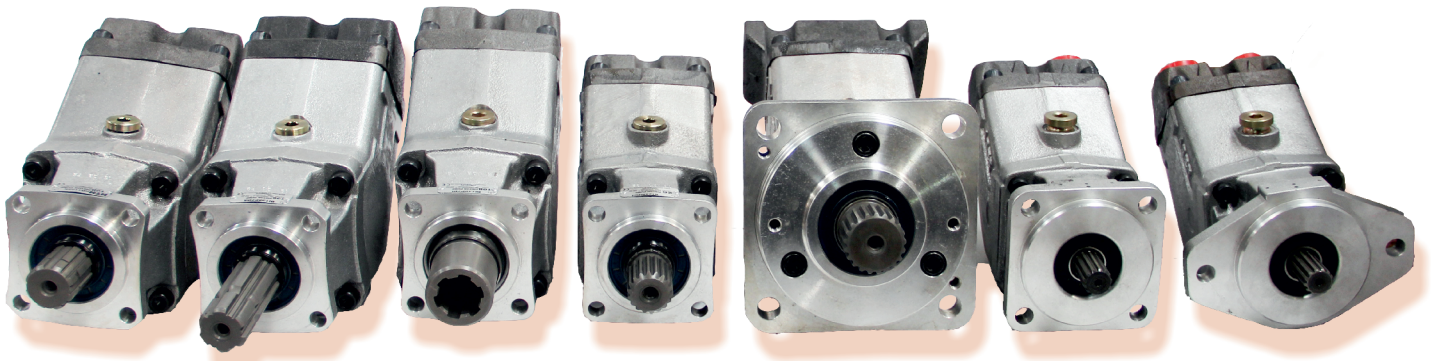
Efficiency and Lightness

BI SERIES

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THE WIDEST RANGE
OF PISTON PUMPS IN
MARKET



Maximum Efficiency
Less Pulse
Reversible

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Manufacturing Hydraulic Excellence since 1972

HOW TO SELECT A HYDRAULIC PUMP

INFORMATION

To ensure that the PTO will not be overloaded, and get the correct flow requirements, with the speed of the engine chosen, it is important use a pump with the right capacity.

Pump capacity (D), expressed in cm³/rot, can be calculated using the following formula:

$$D = \frac{Q \times 1000}{N \times Z}$$

D = Pump Capacity (cm³/rot)

Q = Flow Required (l/min)

N = Motor Speed (rpm)

Z = Engine to PTO ratio

Example

What is the capacity that the pump should have the required flow is 80l/min, the engine to PTO ratio is 1:0,82, and engine speed is 1300 rpm ?

$$D = \frac{80 \times 1000}{1300 \times 0,82} = 75 \text{ cm}^3/\text{rot}$$

The right Pump Capacity to this case is 75cm³/rot or higher.

In order to not overload the PTO mechanical units, it is important to calculate the torque and the power consumed by the pumps.

Torque and power are calculated with the following expression:

$$M = \frac{D \times P_b}{63}$$

$$P = \frac{D \times N \times Z \times P_b}{600 \times 0,90 \times 1000}$$

M = Torque (Nm)

D = Pump Capacity (cm³/rot)

P_b = Pressure (bar)

P = Power (kW)

N = Motor Speed (rpm)

Z = PTO ratio

0,90 = Pump efficiency

Can change from one Pump to Another

Example

What is the torque and power required in the PTO with the selected pump, if the system is at 200 bar?

$$M = \frac{75 \times 200}{63} = 238 \text{ Nm}$$

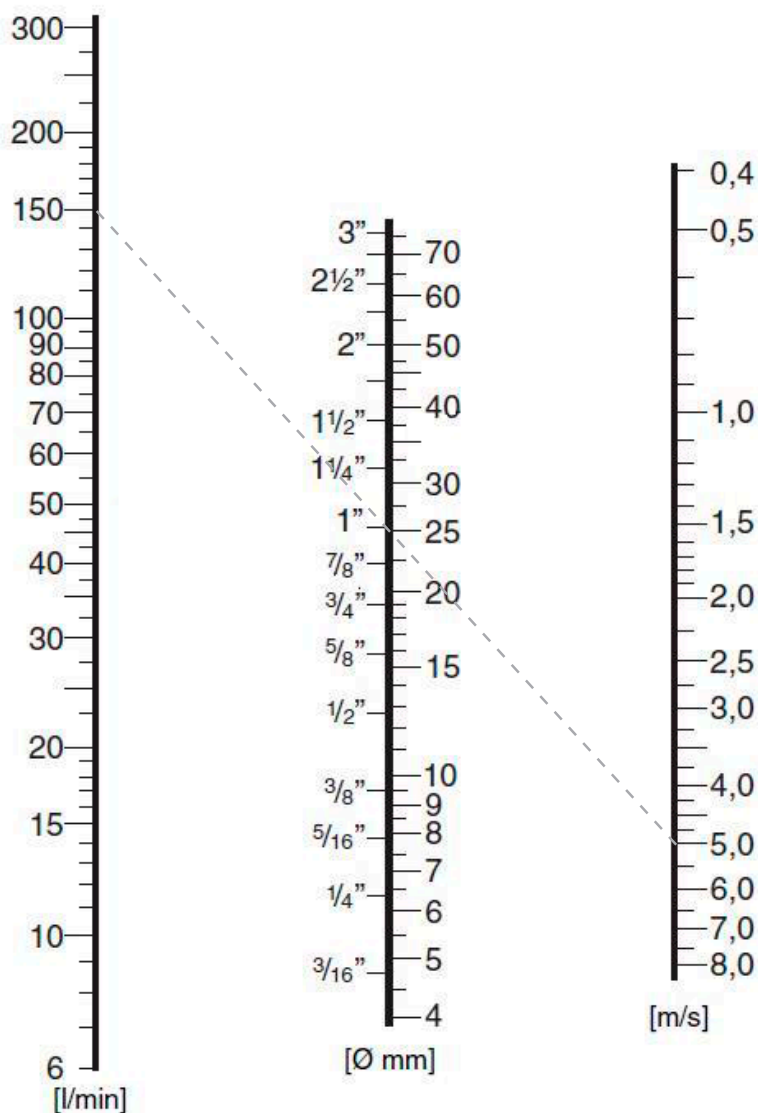
$$P = \frac{75 \times 1300 \times 0,82 \times 200}{600 \times 0,90 \times 1000} = 29,6 \text{ kW}$$

The torque on the PTO will be 238 Nm.

Power output from the PTO will be 29,6 kW.

IMPORTANT: If the calculated load exceeds the maximum allowed for the PTO, a different combination should be selected.

INFORMATION NOMOGRAM FOR HOSE SELECTION



EXAMPLE: Pressure line at 150bar with flow rate of 150l/min.

PROCEDURE: 1st step - Mark the flow rate value in l/min units

2nd step - Mark the fluid speed value in m/s , or use the indicative values mentioned on the table according to hose use and line pressure.

3rd step - Join the two known points;

4th step - Find the third point, which in this example will be the pipe/hose nominal diameter

RESULT: The hose nominal internal diameter should be of 1".

OIL SPEED	USUAL VALUES
ADMISSION LINE	0,5 to 1,0m/s
RETURN TO TANK LINE	2,0 to 3,0m/s
PRESSURE LINE	
0 to 50bar	3,5m/s
50 to 100bar	3,5 to 4,5m/s
100 to 150bar	4,5 to 5,0m/s
150 to 200bar	5,0 to 5,5m/s
200 to 300bar	5,5 to 6,0m/s

PISTON PUMPS

ABER piston pumps are an example of our fine tuning and engineering

Variable Displacement Pumps
VDP SERIES

Bent Axis Piston Pumps
BI SERIES | BID SERIES

Straight Piston Pumps
BH SERIES | BHD SERIES

Wide range of displacements

VDP SERIES 40 cc/rot to 109 cc/rot (2.4 in³/rot to 6.7 in³/rot)

BI SERIES 17 cc/rot to 172 cc/rot (1.0 in³/rot to 10.5 in³/rot)

BID SERIES 38+37 cc/rot to 70+66 cc/rot (2.3+2.3 in³/rot to 4.3+4.0 in³/rot)

BIF SERIES 17 cc/rot to 81 cc/rot (1.0 in³/rot to 4.9 in³/rot)

BH SERIES 14 cc/rot to 110 cc/rot (0.9 in³/rot to 6.7 in³/rot)

BHD SERIES 20+20 cc/rot to 83+42 cc/rot (1.2+1.2 in³/rot to 5.1+2.6 in³/rot)

HYDRAULIC PISTON PUMPS VDP SERIES | VARIABLE DISPLACEMENT PUMPS

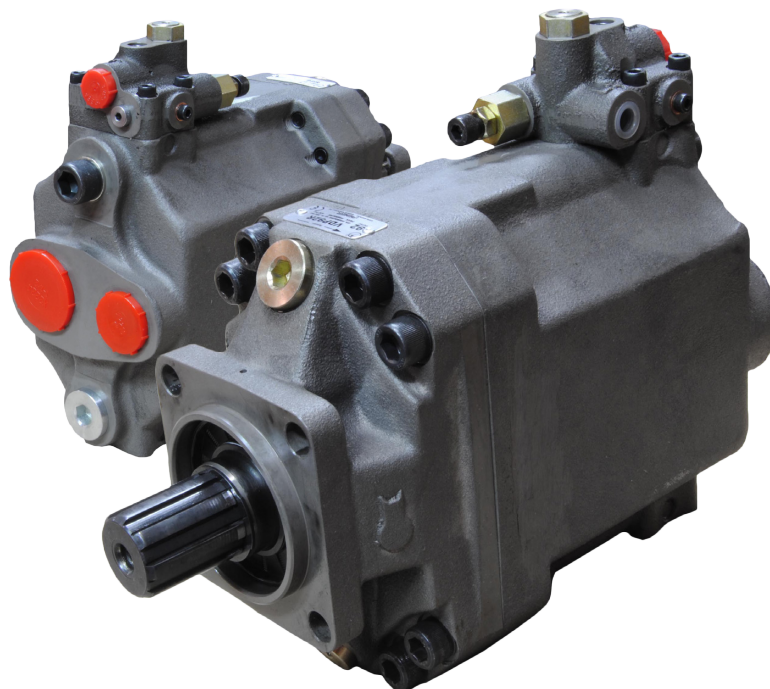
40 cc/rot (2.4 in³/rot) to

109 cc/rot (6.7 in³/rot)

Efficiency and robustness



Adaptable pressure
Fast Reaction
Flow Reset
High Pressure
Long Service life
Low Noise
Compact Design
High Efficiency
Efficient Cooling



With ABER's VDP, it is possible to precisely regulate the displacement, in order to output just enough power for the required movements.

Designed with care for the needs and applications in the hydraulic trucks industry, it can be used for a wide range of applications.

DISPLACEMENT	FLANGE AND AXLE OPTIONS			
	DIN 5462 ISO 7653 (EN)	DIN 5480 ISO 3019-2 (IA)	SAE C 4 BOLTS (C4)	SAE C 2 BOLTS (C2)
cc/rot (in ³ /rot)				
UP TO 400 bar (5800 psi)				
40 (2.4)	VDP40_	VDP40_IA_	VDP40_C4_	VDP40_C2_
60 (3.7)	VDP60_	VDP60_IA_	VDP60_C4_	VDP60_C2_
76 (4.6)	VDP76_	VDP76_IA_	VDP76_C4_	VDP76_C2_
92 (5.6)	VDP92_	VDP92_IA_	VDP92_C4_	VDP92_C2_
109 (6.7)	VDP109_	VDP109_IA_	VDP109_C4_	VDP109_C2_

* TO ORDER THIS PUMP, CONSULT THE ORDERING CODE IN THE TECHNICAL SHEET AND SPECIFY THE DIRECTION REQUIRED OF ROTATION, BY ADDING A "L" OR "R" TO THE PUMP REFERENCE, AFTER THE DISPLACEMENT

This type of pump can't change it's rotation direction after being assembled
Example: VDP60R / VDP92L

HYDRAULIC PISTON PUMPS BI SERIES | BENT AXIS PISTON PUMPS

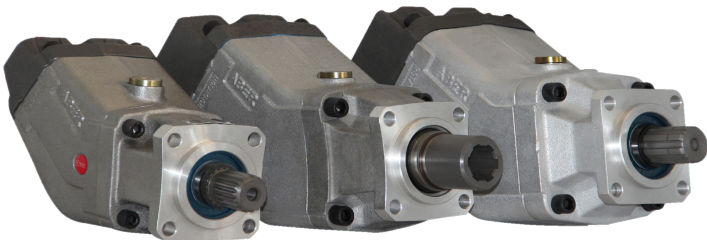
17 cc/rot (1.0 in³/rot) to
172 cc/rot (10.5 in³/rot)

Efficiency and Lightness



Maximum Efficiency
Less Pulse
Switchable Sense of Rotation
Reversible

BI Series allow a change in the rotation way in an easy and safe way for all the pump components.



When at work, these pumps show an excellent performance, with very low noise and a continuous flow of the oil due to the type of pistons of which is built (5 pistons on BI_M, 7 pistons on BI_M7 and BI_P7 and 9 pistons on BI_H9). These pumps are equipped with seals that bear extreme environmental temperatures.

DISPLACEMENT cc/rot (in ³ /rot)	FLANGE AND AXLE OPTIONS						
	DIN 5462 ISO 7653 (EN)	DIN 9611 AGRICULTURAL (DA)	DIN 9611 INTERIOR (DI)	DIN 5482 MULTIPLIER (DM)	DIN 5480 ISO 3019-2 (IA1)	SAE* 4 BOLTS (B4/C4)	SAE* 2 BOLTS (B2/C2)
UP TO 350 bar (5000 psi)							
17 (1.0)	BI17M	BI17MDA	-	BI17MDM	-	BI17M5B4	BI17M5B2
26 (1.6)	BI25M	BI25MDA	-	BI25MDM	-	BI25M5B4	BI25M5B2
32 (2.0)	BI30M	BI30MDA	-	BI30MDM	-	BI30M5B4	BI30M5B2
42 (2.6)	BI40M	BI40MDA	-	BI40MDM	-	BI40M5B4	BI40M5B2
50 (3.1)	BI50M	BI50MDA	-	BI50MDM	BI50M5IA1	BI50M5B4	BI50M5B2
60 (3.7)	BI60M7	BI60M7DA	-	BI60M7DM	BI60M7IA1	BI60M7B4	BI60M7B2
80 (4.9)	BI80P7	BI80P7DA	BI80P7DI	-	BI80P7IA1	BI80P7C4	BI80P7C2
108 (6.6)	BI110P7	BI110P7DA	BI110P7DI	-	BI110P7IA1	BI110P7C4	BI110P7C2
142 (8.7)	BI140H9	BI140H9DA	-	-	BI140H9IA1	BI140H9C4	BI140H9C2
156 (9.5)	BI160H9	BI160H9DA	-	-	BI160H9IA1	BI160H9C4	BI160H9C2
UP TO 300 bar (4300 psi)							
81 (4.9)	BI80M7	BI80M7DA	-	BI80M7DM	BI80M7IA1	BI80M7B4	BI80M7B2
126 (7.7)	BI125P7	BI125P7DA	BI125P7DI	-	-	BI125P7C4	BI125P7C2
172 (10.5)	BI170H9	BI170H9DA	-	-	-	BI170H9C4	BI170H9C2
UP TO 250 bar (3600 psi)							
136 (8.3)	BI135P7	BI135P7DA	BI135P7DI	-	BI135P7IA1	BI135P7C4	BI135P7C2

* TO ORDER THE PUMP WITH THE SAE FLANGE AND THE KEY SHAFT, YOU MUST ADD "K" TO THE PUMP REF.
Example: BI30M5B4K

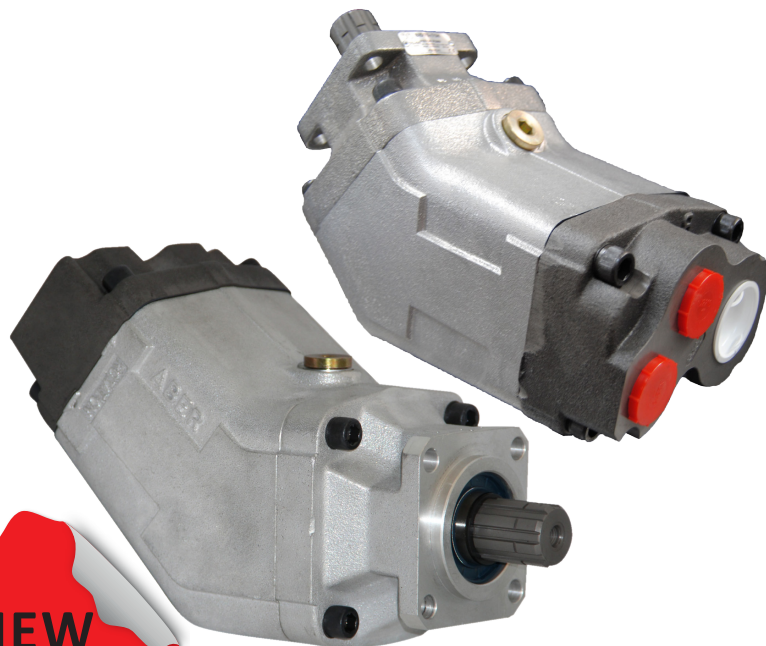
ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown.

HYDRAULIC PISTON PUMPS BID SERIES | DOUBLE BENT AXIS PISTON PUMPS

38+37 cc/rot (2.3+2.3 in³/rot) to
70+66 cc/rot (4.3+4.0 in³/rot)

Two Independent Oil Outlets
Two Independent Pressure Lines

Bent Axis Piston Pump with two outlets, which work on independent pressure and on independent circuits, when use to serve two independent oil circuits.



**NEW
IMPROVEMENT**



BID SERIES

Two Oil Outlets
Maximum Efficiency
Switchable Sense of Rotation
Reversible

**The first and only, double outlet
pump in the world, with switchable
sense of rotation.**

DISPLACEMENT cc/rot (in ³ /rot)	FLANGE AND AXLE OPTIONS				
	DIN 5462 ISO 7653 (EN)	DIN 9611 AGRICULTURAL (DA)	DIN 9611 INTERIOR (DI)	SAE 4 BOLTS (B4/C4)	SAE 2 BOLTS (B2/C2)
UP TO 350 bar (5000 psi)					
57 + 28 (3.5 + 1.7)	BID57+28P	BID57+28PDA	BID57+28PDI	BID57+28PB4	BID57+28PB2
38 + 37 (2.3 + 2.3)	BID40+40P	BID40+40PDA	BID40+40PDI	BID40+40PB4	BID40+40PB2
80 + 38 (4.9 + 2.3)	BID80+40H	BID80+40HDA	BID80+40HDI	BID80+40HC4	BID80+40HC2
58 + 60 (3.5 + 3.7)	BID55+55H	BID55+55HDA	BID55+55HDI	BID55+55HC4	BID55+55HC2
UP TO 300 bar (4300 psi)					
70 + 66 (4.3 + 4.0)	BID70+70H	BID70+70HDA	BID70+70HDI	BID70+70HC4	BID70+70HC2

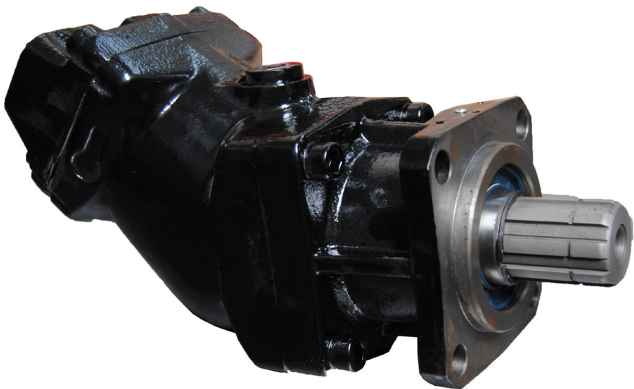
* TO ORDER THE PUMP WITH THE SAE FLANGE AND THE KEY SHAFT, YOU MUST ADD "K" TO THE PUMP REF.
Example: BID80+40HC4K

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BIF SERIES | IRON CAST BENT AXIS PISTON PUMPS

17 cc/rot (1.0 in³/rot) to
81 cc/rot (4.9 in³/rot)

Efficiency and Compact Design



Iron cast BIF Series pumps were designed to be very compact. The BIF series configuration, gives particular advantage on mobile applications such as trucks with high collision probability between the rear axle truck transmission and the hydraulic pump.

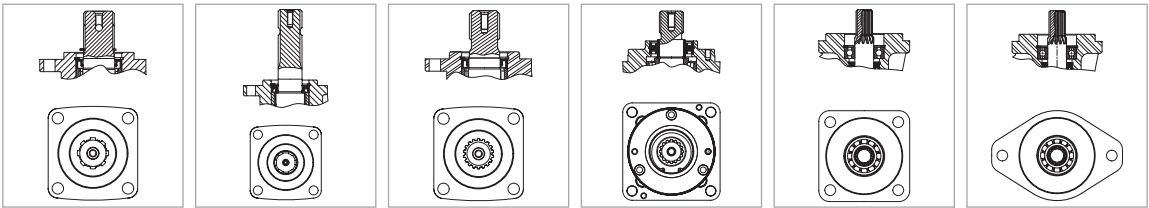
BIF NEW SERIES

- Higher Pressure
- Less Pulse
- Maximum Efficiency
- Compact Design
- Fits on ZF Astronic Gearbox Transmissions



When at work, these pumps show an excellent performance, with very low noise and a continuous flow of the oil due to the type of pistons of which is built (5 pistons on BI_M, 7 pistons on BI_M7). These pumps are equipped with seals that bear extreme environmental temperatures.

BIF Series allows a change in the rotation way with an easy and safe procedure for all the pump components.

DISPLACEMENT	FLANGE AND AXLE OPTIONS					
	DIN 5462 ISO 7653 (EN)	DIN 9611 AGRICULTURAL (DA)	DIN 5482 MULTIPLIER (DM)	DIN 5480 ISO 3019-2 (IA1)	SAE B* 4 BOLTS (B4)	SAE B* 2 BOLTS (B2)
cc/rot (in ³ /rot)						
UP TO 400 bar (5800 psi)						
17 (1.0)	BIF17M	BIF17MDA	BIF17MDM	-	BIF17M5B4	BIF17M5B2
26 (1.6)	BIF25M	BIF25MDA	BIF25MDM	-	BIF25M5B4	BIF25M5B2
32 (2.0)	BIF30M	BIF30MDA	BIF30MDM	-	BIF30M5B4	BIF30M5B2
42 (2.6)	BIF40M	BIF40MDA	BIF40MDM	-	BIF40M5B4	BIF40M5B2
50 (3.1)	BIF50M	BIF50MDA	BIF50MDM	BIF50M5IA1	BIF50M5B4	BIF50M5B2
60 (3.7)	BIF60M7	BIF60M7 DA	BIF60M7DM	BIF60M7IA1	BIF60M7B4	BIF60M7B2
UP TO 350 bar (5000 psi)						
81 (4.9)	BIF80M7	BIF80M7DA	BIF80M7DM	BIF80M7IA1	BIF80M7B4	BIF80M7B2
						

* TO ORDER THE PUMP WITH THE SAE FLANGE AND THE KEY SHAFT, YOU MUST ADD "K" TO THE PUMP REFERENCE.
Example: BIF30M5B4K

HYDRAULIC PISTON PUMPS

BH SERIES | STRAIGHT PISTON PUMPS

14 cc/rot (0.9 in³/rot) to

110 cc/rot (6.7 in³/rot)



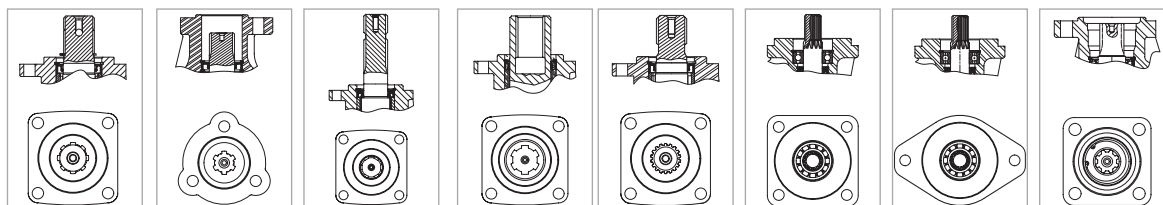
Maximum Efficiency
Robustness
Great Performance
Low Noise
Continuous Flow
Bidirectional



ABER BH Series are very robust. They are equipped with radial and axial bearings. To manufacture this pumps, ABER uses high resistant material in strategic points.

When at work these pumps show a good performance, with very low noise and a continuous flow of the oil due to the type of pistons of which is built.

DISPLACEMENT cc/rot (in ³ /rot)	FLANGE AND AXLE OPTIONS							
	DIN 5462 ISO 7653 (EN)	DIN 5463 UNI (UNI)	DIN 9611 AGRICULTURAL (DA)	DIN 9611 INTERIOR (DI)	DIN 5482 MULTIPLIER (DM)	SAE 4 BOLTS (B4/C4)	SAE 2 BOLTS (B2/C2)	8 TEETH 12DP (DB)
UP TO 400 bar (5800 psi)								
52 (3.2)	BHS21716EN	BHS21716UNI	BHS21716DA	-	BHS21716DM	BHS21716B4	BHS21716B2	-
60 (3.7)	BHV21816EN	BHV21816UNI	BHV21816DA	-	BHV21816DM	BHV21816B4	BHV21816B2	-
80 (4.9)	BHV211113EN	BHV211113UNI	BHV211113DA	BHV211113DI	-	BHV211113C4	BHV211113C2	-
UP TO 350 bar (5000 psi)								
14 (0.9)	BHV21313EN	BHV21313UNI	BHV21313DA	-	-	BHV21313B4	BHV21313B2	BHV21313DB
UP TO 320 bar (4600 psi)								
19 (1.2)	BHV21316EN	BHV21316UNI	BHV21316DA	-	BHV21316DM	BHV21316B4	BHV21316B2	BHV21316DB
25 (1.5)	BHV21416EN	BHV21416UNI	BHV21416DA	-	BHV21416DM	BHV21416B4	BHV21416B2	BHV21416DB
32 (2.0)	BHV21516EN	BHV21516UNI	BHV21516DA	-	BHV21516DM	BHV21516B4	BHV21516B2	BHV21516DB
40 (2.4)	BHV21616EN	BHV21616UNI	BHV21616DA	-	BHV21616DM	BHV21616B4	BHV21616B2	BHV21616DB
45 (2.7)	BHV21716EN	BHV21716UNI	BHV21716DA	-	BHV21716DM	BHV21716B4	BHV21716B2	BHV21716DB
50 (3.1)	BHT25519EN	BHT25519UNI	BHT25519DA	-	-	BHT25519B4	BHT25519B2	-
60 (3.7)	BHT25619EN	BHT25619UNI	BHT25619DA	-	-	BHT25619B4	BHT25619B2	BHT25619DB
80 (4.9)	BHT22819EN	BHT22819UNI	BHT22819DA	BHT22819DI	-	BHT22819B4	BHT22819B2	-
86 (5.2)	BHV25913EN	BHV25913UNI	BHV25913DA	BHV25913DI	-	BHV25913B4	BHV25913B2	-
UP TO 250 bar (3600 psi)								
32 (2.0)	BHZ25319EN	BHZ25319UNI	BHZ25319DA	-	-	BHZ25319B4	BHZ25319B2	BHZ25319DB
40 (2.4)	BHZ25419EN	BHZ25419UNI	BHZ25419DA	-	-	BHZ25419B4	BHZ25419B2	BHZ25419DB
50 (3.1)	BHZ25519EN	BHZ25519UNI	BHZ25519DA	-	-	BHZ25519B4	BHZ25519B2	BHZ25519DB
60 (3.7)	BHZ25619EN	BHZ25619UNI	BHZ25619DA	-	-	BHZ25619B4	BHZ25619B2	BHZ25619DB
70 (4.3)	BHZ25716EN	BHZ25716UNI	BHZ25716DA	-	-	BHZ25716B4	BHZ25716B2	-
80 (4.9)	BHZ25719EN	BHZ25719UNI	BHZ25719DA	-	-	BHZ25719B4	BHZ25719B2	-
110 (6.7)	BHZ25916EN	BHZ25916UNI	BHZ25916DA	BHZ25916DI	-	BHZ25916B4	BHZ25916B2	-



HYDRAULIC PISTON PUMPS

BHD SERIES | DOUBLE STRAIGHT PISTON PUMPS

20+20 cc/rot (1.2+1.2 in³/rot) to
83+42 cc/rot (5.1+2.6 in³/rot)

Two Independent Oil Outlets
Two Independent Pressure Lines

Straight Piston Pump with two outlets, which work on independent pressure and on independent circuits, when use to serve two independent oil circuits.



Two Oil Outlets
Robustness
Bidirectional

DISPLACEMENT cc/rot (in ³ /rot)	FLANGE AND AXLE OPTIONS					
	DIN 5462 ISO 7653 (EN)	DIN 5463 UNI (UNI)	DIN 9611 AGRICULTURAL (DA)	DIN 9611 INTERIOR (DI)	SAE 4 BOLTS (B4/C4)	SAE 2 BOLTS (B2/C2)
UP TO 400 bar (5800 psi)						
45 + 45 (2.7 + 2.7)	BHD45+45EN	BHD45+45UNI	BHD45+45DA	BHD45+45DI	BHD45+45C4	BHD45+45C2
65 + 22 (4.0 + 1.3)	BHD65+22EN	BHD65+22UNI	BHD65+22DA	BHD65+22DI	BHD65+22C4	BHD65+22C2
UP TO 300 bar (4300 psi)						
20 + 20 (1.2 + 1.2)	BHD20+20EN	BHD20+20UNI	BHD20+20DA	-	BHD20+20B4	BHD20+20B2
25 + 25 (1.5 + 1.5)	BHD25+25EN	BHD25+25UNI	BHD25+25DA	-	BHD25+25B4	BHD25+25B2
30 + 30 (1.8 + 1.8)	BHD30+30EN	BHD30+30UNI	BHD30+30DA	-	BHD30+30B4	BHD30+30B2
40 + 40 (2.4 + 2.4)	BHD40+40EN	BHD40+40UNI	BHD40+40DA	BHD40+40DI	BHD40+40B4	BHD40+40B2
60 + 30 (3.7 + 1.8)	BHD60+30EN	BHD60+30UNI	BHD60+30DA	BHD60+30DI	BHD60+30B4	BHD60+30B2
80 + 21 (4.9 + 1.3)	BHD80+21EN	BHD80+21UNI	BHD80+21DA	BHD80+21DI	BHD80+21C4	BHD80+21C2
53 + 53 (3.2 + 3.2)	BHD53+53EN	BHD53+53UNI	BHD53+53DA	BHD53+53DI	BHD53+53C4	BHD53+53C2
80 + 27 (4.9 + 1.6)	BHD80+27EN	BHD80+27UNI	BHD80+27DA	BHD80+27DI	BHD80+27C4	BHD80+27C2
UP TO 250 bar (3600 psi)						
50 + 50 (3.1 + 3.1)	BHD50+50EN	BHD50+50UNI	BHD50+50DA	BHD50+50DI	BHD50+50B4	BHD50+50B2
72 + 38 (4.4 + 2.3)	BHD72+38EN	BHD72+38UNI	BHD72+38DA	BHD72+38DI	BHD72+38B4	BHD72+38B2
83 + 42 (5.1 + 2.6)	BHD83+42EN	BHD83+42UNI	BHD83+42DA	BHD83+42DI	BHD83+42B4	BHD83+42B2

GEAR PUMPS

ABER gear pumps are a testimony to durability and performance.

External gear pumps

B2 SERIES

B3 SERIES

B3D SERIES | TANDEM PUMPS

B35 SERIES

PV SERIES

Wide range of displacements

B2 SERIES 12 cc/rot to 39 cc/rot (0.7 in³/rot to 2.4 in³/rot)

B3 SERIES 38 cc/rot to 125 cc/rot (2.3 in³/rot to 7.63 in³/rot)

B3D SERIES 38 cc/rot to 125 cc/rot (2.3 in³/rot to 7.63 in³/rot)

B35 SERIES 64.5 cc/rot to 154.2 cc/rot (3.94 in³/rot to 9.4 in³/rot)

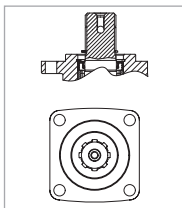
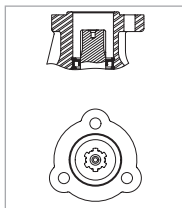
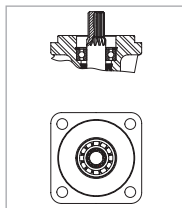
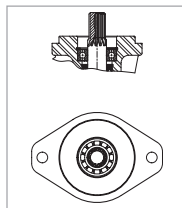
PV SERIES 82 cc/rot to 102 cc/rot (5.0 in³/rot to 6.2 in³/rot)

HYDRAULIC GEAR PUMPS
B2 SERIES

12 cc/rot (0.7 in³/rot) to
39 cc/rot (2.4 in³/rot)



Small
Fast to Mount
Bidirectional

B2T SERIES			 BIDIRECTIONAL	 REAR INLET/OUTLET		
DISPLACEMENT cc/rot (in³/rot)	MAXIMUM OPERATING PRESSURE bar (psi)	MAXIMUM CONTINUOUS ROTATION rpm	FLANGE AND AXLE OPTIONS			
			DIN 5462 ISO 7653 (EN)	DIN 5463 UNI (UNI)	SAE B 4 BOLTS (B4)	SAE B 2 BOLTS (B2)
12 (0.7)	280 (4000)	2500	B24T12	B23T12	B2B4T12	B2B2T12
16 (1.0)	280 (4000)	2000	B24T16	B23T16	B2B4T16	B2B2T16
20 (1.2)	260 (3800)	2000	B24T20	B23T20	B2B4T20	B2B2T20
26 (1.6)	240 (3500)	2000	B24T25	B23T25	B2B4T25	B2B2T25
32 (2.0)	220 (3200)	1800	B24T32	B23T32	B2B4T32	B2B2T32
39 (2.4)	170 (2500)	1800	B24T40	B23T40	B2B4T40	B2B2T40
						

ABER is constantly engaged in improving its products and, therefore, reverses itself the right to modify without any further notice the characteristics shown.

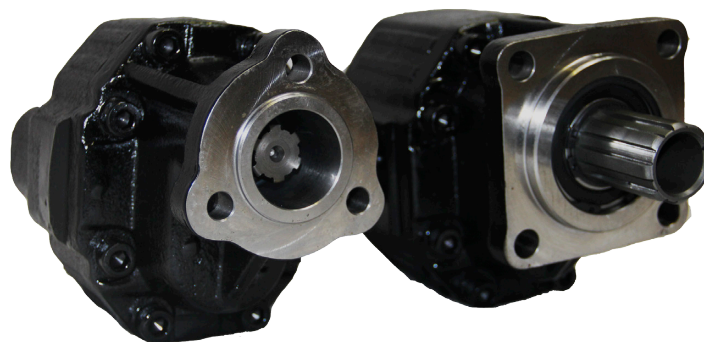
To order the UNI-DIRECCIONAL version, you must add "U" to the pump Ref.
Example: B24TU25

HYDRAULIC GEAR PUMPS B3 SERIES

38 cc/rot (2.3 in³/rot) to
125 cc/rot (7.6 in³/rot)



Medium Size
Fast to Mount
Bidirectional



B3T SERIES



BIDIRECTIONAL



REAR INLET/OUTLET

DISPLACEMENT cc/rot (in ³ /rot)	MAXIMUM OPERATING PRESSURE bar (psi)	MAXIMUM CONTINUOUS ROTATION rpm	FLANGE AND AXLE OPTIONS				
			DIN 5462 ISO 7853 (EN)	DIN 5463 UNI (UNI)	DIN 9611 AGRICULTURAL (DA)	SAE B 4 BOLTS (B4)	SAE B 2 BOLTS (B2)
38 (2.3)	280 (4000)	2600	B34T38	B33T38	B34T38DA	B3B4T38	B3B2T38
45 (2.8)	280 (4000)	2500	B34T45	B33T45	B34T45DA	B3B4T45	B3B2T45
52 (3.2)	260 (3800)	2200	B34T52	B33T52	B34T52DA	B3B4T52	B3B2T52
61 (3.7)	240 (3500)	2000	B34T61	B33T61	B34T61DA	B3B4T61	B3B2T61
70 (4.3)	220 (3200)	1900	B34T70	B33T70	B34T70DA	B3B4T70	B3B2T70
82 (5.0)	210 (3000)	1800	B34T82	B33T82	B34T82DA	B3B4T82	B3B2T82
91 (5.6)	190 (2700)	1800	B34T90	B33T90	B34T90DA	B3B4T90	B3B2T90
102 (6.2)	190 (2700)	1600	B34T105	B33T105	B34T105DA	B3B4T105	B3B2T105
116 (7.1)	180 (2600)	1600	B34T115	B33T115	B34T115DA	B3B4T115	B3B2T115
125 (7.6)	170 (2500)	1500	B34T125	B33T125	B34T125DA	B3B4T125	B3B2T125

B3GT SERIES

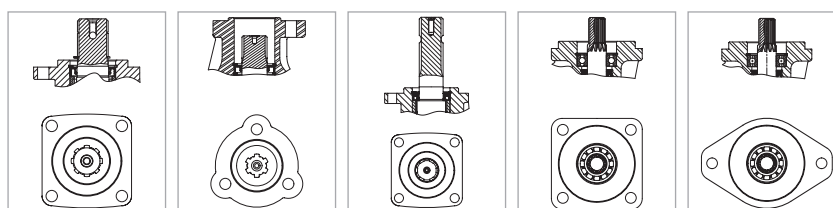


BIDIRECTIONAL



REAR INLET/OUTLET
SIDE INLET/OUTLET

38 (2.3)	280 (4000)	2600	B34GT38	B33GT38	B34GT38DA	B3B4GT38	B3B2GT38
45 (2.8)	280 (4000)	2500	B34GT45	B33GT45	B34GT45DA	B3B4GT45	B3B2GT45
52 (3.2)	260 (3800)	2200	B34GT52	B33GT52	B34GT52DA	B3B4GT52	B3B2GT52
61 (3.7)	240 (3500)	2000	B34GT61	B33GT61	B34GT61DA	B3B4GT61	B3B2GT61
70 (4.3)	220 (3200)	1900	B34GT70	B33GT70	B34GT70DA	B3B4GT70	B3B2GT70
82 (5.0)	210 (3000)	1800	B34GT82	B33GT82	B34GT82DA	B3B4GT82	B3B2GT82
91 (5.6)	190 (2700)	1800	B34GT90	B33GT90	B34GT90DA	B3B4GT90	B3B2GT90
102 (6.2)	190 (2700)	1600	B34GT105	B33GT105	B34GT105DA	B3B4GT105	B3B2GT105
116 (7.1)	180 (2600)	1600	B34GT115	B33GT115	B34GT115DA	B3B4GT115	B3B2GT115
125 (7.6)	170 (2500)	1500	B34GT125	B33GT125	B34GT125DA	B3B4GT125	B3B2GT125



To order the UNI-DIRECCIONAL version, you must add "U" to the pump Ref.

Example: B34TU82

Note: Different displacements can be made

HYDRAULIC GEAR PUMPS B3D SERIES | TANDEM PUMPS

38 cc/rot (2.3 in³/rot) to
125 cc/rot (7.6 in³/rot)



Tandem gear pump with bidirectional sense of flow,
with side outlet, prepared for mounting of UNI gear
pumps.



Medium Size
Fast
Assembled up to Three Pumps
Bidirectional

B3D SERIES

BIDIRECTIONAL

SIDE INLET/OUTLET

DISPLACEMENT cc/rot (in ³ /rot)	FLANGE AND AXLE OPTIONS				
	DIN 5462 ISO 7653 (EN)	DIN 5463 UNI (UNI)	DIN 9611 AGRICULTURAL (DA)	SAE B 4 BOLTS (B4)	SAE B 2 BOLTS (B2)
38 (2.3)	B34D38	B33D38	B34RD38DA	B3B4D38	B3B2D38
52 (3.2)	B34D52	B33D52	B34RD52DA	B3B4D52	B3B2D52
61 (3.7)	B34D61	B33D61	B34RD61DA	B3B4D61	B3B2D61
70 (4.3)	B34D70	B33D70	B34RD70DA	B3B4D70	B3B2D70
82 (5.0)	B34D82	B33D82	B34RD82DA	B3B4D82	B2B2D82
91 (5.6)	B34D90	B33D90	B34RD90DA	B3B4D90	B3B2D90
102 (6.2)	B34D105	B33D105	B34RD105DA	B3B4D105	B3B2D105
116 (7.1)	B34D115	B33D115	B34RD115DA	B3B4D115	B3B2D115
125 (7.6)	B34D125	B33D125	B34RD125DA	B3B4D125	B3B2D125



Note: To Know the maximum operating pressure consult the technical sheet.

To order the UNI-DIRECCIONAL version, you must add “U” to the pump Ref.
Example: B34UD82

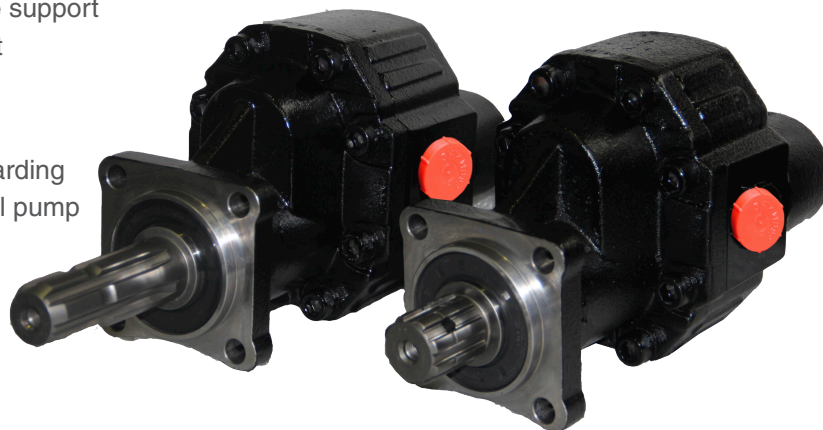
ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown.

HYDRAULIC GEAR PUMPS B35 SERIES

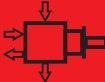
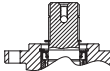
64.5 cc/rot (3.9 in³/rot) to
154.2 cc/rot (9.4 in³/rot)

The B35 series brings another dimension to our range of products, it is a high performance pump, double support by taper roller bearings on the main shaft, built to endure extreme working conditions.

Having a high performance and endurance regarding it's size, it is the viable choice in the hydraulic oil pump solutions.



i **NEW B35 SERIES**
High Performance
Long Life Period
Stronger
Reinforced
Bidirectional

B35 SERIES			 BIDIRECTIONAL	 REAR INLET/OUTLET SIDE INLET/OUTLET
DISPLACEMENT	MAXIMUM OPERATING PRESSURE	MAXIMUM CONTINUOUS ROTATION	FLANGE AND AXLE OPTIONS	
cc/rot (in³/rot)	bar (psi)	rpm	DIN 5462 ISO 7653 (EN)	DIN 9611 AGRICULTURAL (DA)
64.5 (3.9)	270 (3900)	2000	B354GTR64	B354GTR64DA
74.7 (4.5)	260 (3800)	2000	B354GTR74	B354GTR74DA
83.8 (5.1)	260 (3800)	1800	B354GTR84	B354GTR84DA
94.0 (5.7)	230 (3300)	1800	B354GTR94	B354GTR94DA
104.2 (6.3)	220 (3200)	1800	B354GTR104	B354GTR104DA
114.5 (7.0)	205 (3000)	1800	B354GTR114	B354GTR114DA
124.7 (7.6)	205 (3000)	1600	B354GTR124	B354GTR124DA
133.7 (8.1)	200 (2900)	1500	B354GTR134	B354GTR134DA
154.2 (9.4)	185 (2700)	1500	B354GTR154	B354GTR154DA
			 	 

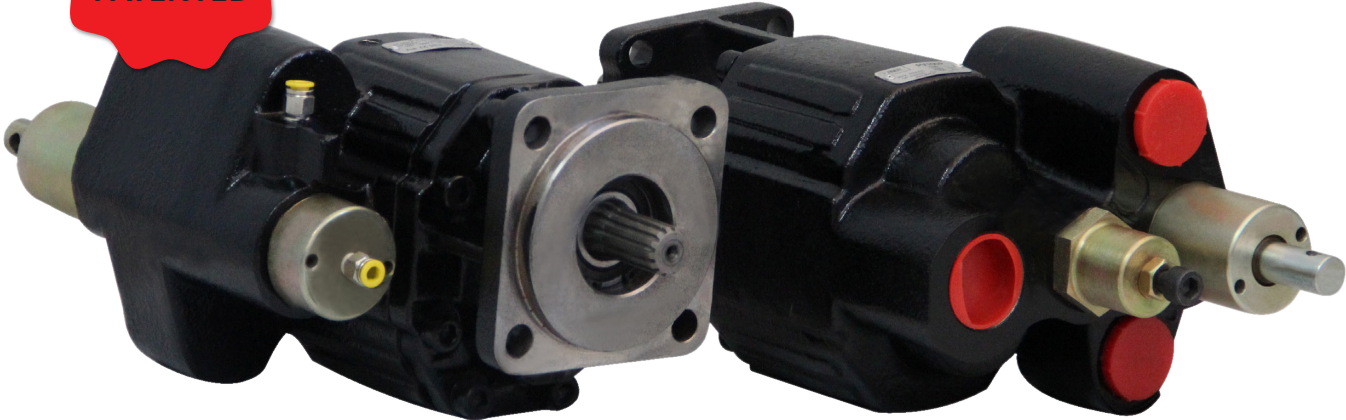
To order the UNI-DIRECCIONAL version, you must add "U" to the pump Ref.
Example: B354GTUR84

HYDRAULIC GEAR PUMPS WITH INTEGRATED VALVE
PV SERIES



- Sensitive Valve
- Quick Relief
- Efficient Cylinder Protection
- Easy to Apply
- Fast to Mount

82 cc/rot (5.0 in³/rot) to
102 cc/rot (6.2 in³/rot)



DISPLACEMENT	MAXIMUM OPERATING PRESSURE bar (psi)	MAXIMUM CONTINUOUS ROTATION rpm	FLANGE AND AXLE OPTIONS		
			DIN 5462 ISO 7653 (EN)	SAE B 4 BOLTS (B4)	SAE B 2 BOLTS (B2)
cc/rot (in ³ /rot)					
BSP THREADS					
82 (5.0)	210 (3000)	1800	PV4S82P1	PVB4S82P1	PVB2S82P1
102 (6.2)	190 (2700)	1600	PV4S105P1	PVB4S105P1	PVB2S105P1

DISPLACEMENT	MAXIMUM OPERATING PRESSURE bar (psi)	MAXIMUM CONTINUOUS ROTATION rpm	FLANGE AND AXLE OPTIONS	
			SAE B 4 BOLTS (B4)	SAE B 2 BOLTS (B2)
in ³ /rot (gpm at 1000 rpm)				
NPTF THREADS				
5.0 (22)	210 (3000)	1800	PVB4C22P1	PVB2C22P1
6.2 (27)	190 (2700)	1600	PVB4C27P1	PVB2C27P1

To order extra sensitive relief valve version, you must exchange P1 to P2 in the end of pump reference.
Example: PVB4C22P2

HYDRAULIC MOTORS

ABER produces high quality gear and piston motors

Bent Axis Piston Motors

MBI SERIES 17 cc/rot to 172 cc/rot (1.0 in³/rot to 10.5 in³/rot)

MBIF SERIES 17 cc/rot to 81 cc/rot (1.0 in³/rot to 4.9 in³/rot)

Gear Motors

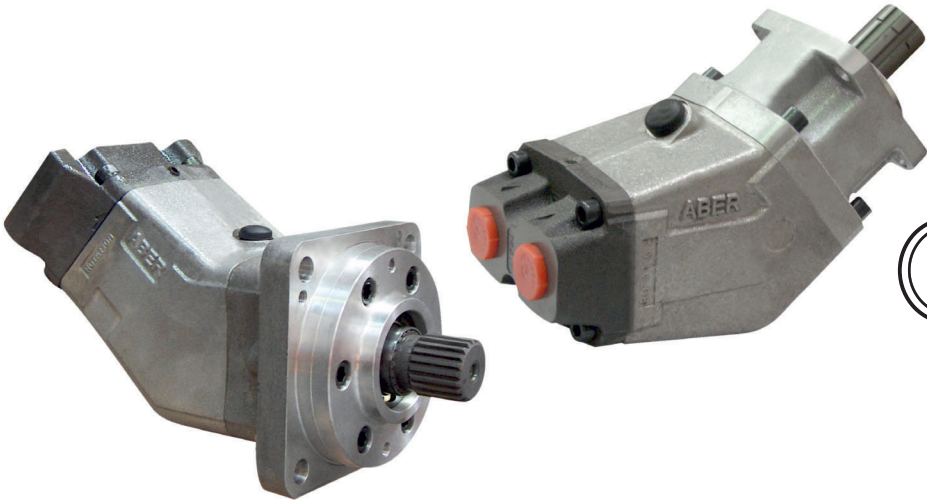
MB3 SERIES 38 cc/rot to 125 cc/rot (2.3 in³/rot to 7.6 in³/rot)

Both motors can be changed to iron casting in order to increase their durability, performance and endure harsh environments.

HYDRAULIC MOTORS

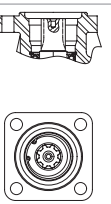
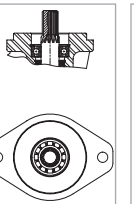
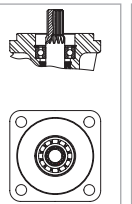
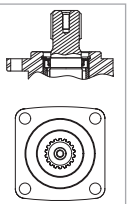
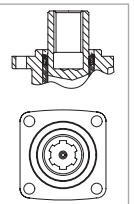
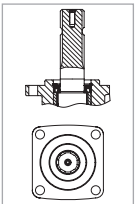
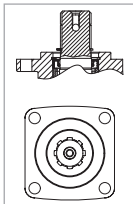
MBI SERIES | BENT AXIS PISTON MOTORS

17 cc/rot (1.0 in³/rot) to
172 cc/rot (10.5 in³/rot)



Excellent Performance
Low Noise
High Efficiency
Bidirectional

DISPLACEMENT cc/rot (in³/rot)	MAXIMUM CONTINUOUS ROTATION rpm	FLANGE AND AXLE OPTIONS						
		DIN 5462 ISO 7653 (EN)	DIN 9611 AGRICULTURAL (DA)	DIN 9611 INTERIOR (DI)	DIN 5482 MULTIPLIER (DM)	DIN 5480 ISO 3019-2 (IA1)	SAE* 4 BOLTS (B4/C4)	SAE* 2 BOLTS (B2/C2)
UP TO 350 bar (5000 psi)								
17 (1.0)	3200	MBI17M	MBI17MDA	-	MBI17MDM	-	MBI17M5B4	MBI17M5B2
26 (1.6)	3200	MBI25M	MBI25MDA	-	MBI25MDM	-	MBI25M5B4	MBI25M5B2
32 (2.0)	3200	MBI30M	MBI30MDA	-	MBI30MDM	-	MBI30M5B4	MBI30M5B2
42 (2.6)	2800	MBI40M	MBI40MDA	-	MBI40MDM	-	MBI40M5B4	MBI40M5B2
50 (3.1)	2400	MBI50M	MBI50MDA	-	MBI50MDM	MBI50M5IA1	MBI50M5B4	MBI50M5B2
60 (3.7)	2400	MBI60M7	MBI60M7DA	-	MBI60M7DM	MBI60M7IA1	MBI60M7B4	MBI60M7B2
80 (4.9)	2400	MBI80P7	MBI80P7DA	MBI80P7DI	-	MBI80P7IA1	MBI80P7C4	MBI80P7C2
108 (6.6)	2250	MBI110P7	MBI110P7DA	MBI110P7DI	-	MBI110P7IA1	MBI110P7C4	MBI110P7C2
142 (8.7)	2400	MBI140H9	MBI140H9DA	MBI140H9DI	-	MBI140H9IA1	MBI140H9C4	MBI140H9C2
156 (9.5)	2400	MBI160H9	MBI160H9DA	MBI160H9DI	-	MBI160H9IA1	MBI160H9C4	MBI160H9C2
UP TO 300 bar (4300 psi)								
81 (4.9)	2200	MBI80M7	MBI80M7DA	-	MBI80M7DM	MBI80M7IA1	MBI80M7B4	MBI80M7B2
126 (7.7)	2000	MBI125P7	MBI125P7DA	MBI125P7DI	-	-	MBI125P7C4	MBI125P7C2
172 (10.5)	2400	MBI170H9	MBI170H9DA	-	-	-	MBI170H9C4	MBI170H9C2
UP TO 250 bar (3600 psi)								
136 (8.3)	2000	MBI135P7	MBI135P7DA	MBI135P7DI	-	-	MBI135P7C4	MBI135P7C2



* TO ORDER THE MOTOR WITH THE SAE FLANGE AND THE KEY SHAFT, YOU MUST ADD "K" TO THE MOTOR REF.
Example: MBI30M5B4K

ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown.

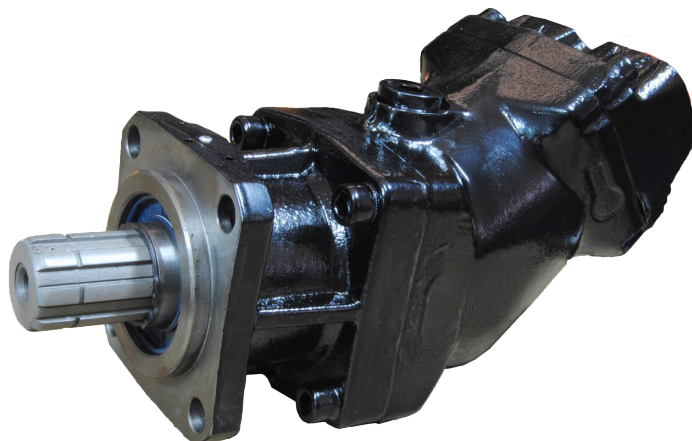
HYDRAULIC MOTORS MBIF | IRON CAST BENT AXIS PISTON MOTORS

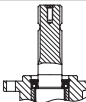
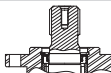
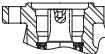
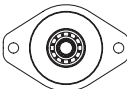
17 cc/rot (1.0 in³/rot) to

81 cc/rot (4.9 in³/rot)



Higher Pressure
Compact Design
High Reability
Bidirectional



DISPLACEMENT cc/rot (in³/rot)	MAXIMUM CONTINUOUS ROTATION rpm	FLANGE AND AXLE OPTIONS					
		DIN 5462 ISO 7653 (EN)	DIN 9611 AGRICULTURAL (DA)	DIN 5482 MULTIPLIER (DM)	DIN 5480 ISO 3019-2 (IA1)	SAE B* 4 BOLTS (B4/C4)	SAE B* 2 BOLTS (B2/C2)
UP TO 400 bar (5800 psi)							
17 (1.0)	3200	MBIF17M	MBIF17MDA	MBIF17MDM	-	MBIF17M5B4	MBIF17M5B2
26 (1.6)	3200	MBIF25M	MBIF25MDA	MBIF25MDM	-	MBIF25M5B4	MBIF25M5B2
32 (2.0)	3200	MBIF30M	MBIF30MDA	MBIF30MDM	-	MBIF30M5B4	MBIF30M5B2
42 (2.6)	2800	MBIF40M	MBIF40MDA	MBIF40MDM		MBIF40M5B4	MBIF40M5B2
50 (3.1)	2400	MBIF50M	MBIF50MDA	MBIF50MDM	MBIF50M5IA1	MBIF50M5B4	MBIF50M5B2
60 (3.7)	2400	MBIF60M7	MBIF60M7DA	MBIF60M7DM	MBIF60P7IA1	MBIF60M7B4	MBIF60M7B2
UP TO 350 bar (5000 psi)							
81 (4.9)	2400	MBIF80M7	MBIF80M7DA	MBIF80M7DM	MBIF80M7IA1	MBIF80M7B4	MBIF80M7B2
							
							

* TO ORDER THE MOTOR WITH THE SAE FLANGE AND THE KEY SHAFT, YOU MUST ADD "K" TO THE MOTOR REF.
Example: MBIF30M5B4K

ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown.



HYDRAULIC GEAR MOTORS
MB3 SERIES

38 cc/rot (2.3 in³/rot) to
125 cc/rot (7.6 in³/rot)



Medium Size
Fast to Mount
Bidirectional

MB3T SERIES



BIDIRECTIONAL



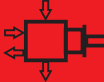
REAR INLET/OUTLET

DISPLACEMENT cc/rot (in ³ /rot)	MAXIMUM CONTINUOUS ROTATION rpm	FLANGE AND AXLE OPTIONS				
		DIN 5462 ISO 7653 (EN)	DIN 5463 UNI (UNI)	DIN 9611 AGRICULTURAL (DA)	SAE B 4 BOLTS (B4)	SAE B 2 BOLTS (B2)
38 (2.3)	2600	MB34T38	MB33T38	MB34T38DA	MB3B4T38	MB3B2T38
45 (2.8)	2500	MB34T45	MB33T45	MB34T45DA	MB3B4T45	MB3B2T45
52 (3.2)	2200	MB34T52	MB33T52	MB34T52DA	MB3B4T52	MB3B2T52
61 (3.7)	2000	MB34T61	MB33T61	MB34T61DA	MB3B4T61	MB3B2T61
70 (4.3)	1900	MB34T70	MB33T70	MB34T70DA	MB3B4T70	MB3B2T70
82 (5.0)	1800	MB34T82	MB33T82	MB34T82DA	MB3B4T82	MB3B2T82
91 (5.6)	1800	MB34T90	MB33T90	MB34T90DA	MB3B4T90	MB3B2T90
102 (6.2)	1600	MB34T105	MB33T105	MB34T105DA	MB3B4T105	MB3B2T105
116 (7.1)	1600	MB34T115	MB33T115	MB34T115DA	MB3B4T115	MB3B2T115
125 (7.6)	1500	MB34T125	MB33T125	MB34T125DA	MB3B4T125	MB3B2T125

MB3GT SERIES

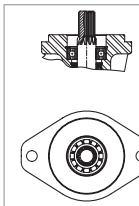
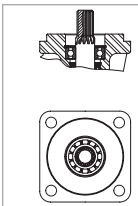
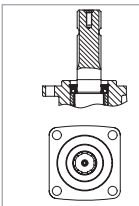
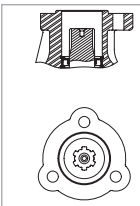
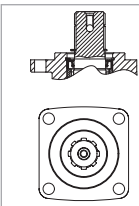


BIDIRECTIONAL



REAR INLET/OUTLET
SIDE INLET/OUTLET

38 (2.3)	2600	MB34GT38	MB33GT38	MB34GT38DA	MB3B4GT38	MB3B2GT38
45 (2.8)	2500	MB34GT45	MB33GT45	MB34GT45DA	MB3B4GT45	MB3B2GT45
52 (3.2)	2200	MB34GT52	MB33GT52	MB34GT52DA	MB3B4GT52	MB3B2GT52
61 (3.7)	2000	MB34GT61	MB33GT1	MB34GT61DA	MB3B4GT61	MB3B2GT61
70 (4.3)	1900	MB34GT70	MB33GT70	MB34GT70DA	MB3B4GT70	MB3B2GT70
82 (5.0)	1800	MB34GT82	MB33GT82	MB34GT82DA	MB3B4GT82	MB3B2GT82
91 (5.6)	1800	MB34GT90	MB33GT90	MB34GT90DA	MB3B4GT90	MB3B2GT90
102 (6.2)	1600	MB34GT105	MB33GT105	MB34GT105DA	MB3B4GT105	MB3B2GT105
116 (7.1)	1600	MB34GT115	MB33GT115	MB34GT115DA	MB3B4GT115	MB3B2GT115
125 (7.6)	1500	MB34GT125	MB33GT125	MB34GT125DA	MB3B4GT125	MB3B2GT125



Note: Different displacements can be made

CONNECTORS, VALVES & CONTROLS

Because we have so many possibilities, it is part of our mission to provide adaptors, connectors and valves to complement our client's needs.

Admission Connectors

Accessories

Hydraulic Valves

- Tipping Valves

- Sectional Directional Control Valves

- High Pressure 2 Ways Ball Valves | High Pressure 3 Ways Ball Valves

- High Pressure 3 Ways Flow Divider

- Bypass Valves

- Pressure Relief Valves

- Ball Valves

- Electrical Distributors | Electrovalves

Pneumatic Accessories

- Pneumatic controls

- Pneumatic Kits | Vacuum Kits

- Hoses | Fittings

Mechanic Controls

- Cable with Lever

End of Strokes

Hand Pumps

ADMISSION CONNECTORS

INDICATIVE SELECTION FOR THE MOST COMMON APPLICATIONS

(Pump Rotation Between 800 and 1200 rpm)

VDP SERIES | VARIABLE DISPLACEMENT PUMPS

REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
 AD112200	40 ; 60	1" 1/2 BSP	2"	Steel	Straight
AD112212	76 ; 92 ; 109	1" 1/2 BSP	2" 1/2	Steel	Straight

BI SERIES | HYDRAULIC BENT AXIS PISTON PUMPS

REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
 AD100114	17 ; 26 ; 32 ; 42	1" BSP	1" 1/4	Steel	Straight
AD100112	17 ; 26 ; 32 ; 42 ; 50 ; 60	1" BSP	1" 1/2	Steel	Straight
AD100200	50 ; 60	1" BSP	2"	Steel	Straight
AD114200	80 ; 81	1" 1/4 BSP	2"	Steel	Straight
AD112134	108 ; 126 ; 136	1" 1/2 BSP	1" 3/4	Steel	Straight
AD112200	108 ; 126 ; 136	1" 1/2 BSP	2"	Steel	Straight
AD200200	142 ; 156 ; 172	2" BSP	2"	Steel	Straight
AD200212	142 ; 156 ; 172	2" BSP	2" 1/2	Steel	Straight
 A45100114	17 ; 26 ; 32 ; 42	1" BSP	1" 1/4	Brass	Elbow 45°
A45100112	17 ; 26 ; 32 ; 42 ; 50 ; 60	1" BSP	1" 1/2	Brass	Elbow 45°
A45100200	50 ; 60	1" BSP	2"	Brass	Elbow 45°
A45114200	80 ; 81	1" 1/4 BSP	2"	Brass	Elbow 45°
A45112200	108 ; 126 ; 136	1" 1/2 BSP	2"	Brass	Elbow 45°
A45200200	142 ; 156 ; 172	2" BSP	2"	Brass	Elbow 45°
 A90100114	17 ; 26 ; 32 ; 42	1" BSP	1" 1/4	Brass	Elbow 90°
A90100112	17 ; 26 ; 32 ; 42 ; 50 ; 60	1" BSP	1" 1/2	Brass	Elbow 90°
A90100134	50 ; 60	1" BSP	1" 3/4	Brass	Elbow 90°
A90100200	50 ; 60	1" BSP	2"	Brass	Elbow 90°
A90114134	80 ; 81	1" 1/4 BSP	1" 3/4	Brass	Elbow 90°
A80114200	80 ; 81	1" 1/4 BSP	2"	Brass	Elbow 90°
A90112200	108 ; 126 ; 136	1" 1/2 BSP	2"	Brass	Elbow 90°
A90200200	142 ; 156 ; 172	2" BSP	2"	Brass	Elbow 90°

BH SERIES | HYDRAULIC STRAIGHT PISTON PUMPS

REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
 AD114114	14 ; 19 ; 25 ; 32	1" 1/4 BSP	1" 1/4	Steel	Straight
AD114112	14 ; 19 ; 25 ; 32 ; 40 ; 45 ; 50 ; 60 ⁽¹⁾	1" 1/4 BSP	1" 1/2	Steel	Straight
AD114134	60 ⁽¹⁾	1" 1/4 BSP	1" 3/4	Steel	Straight
AD114200	60 ⁽¹⁾	1" 1/4 BSP	2"	Steel	Straight
AD112112	52 ; 60 ⁽²⁾	1" 1/2 BSP	1" 1/2	Steel	Straight
AD112134	52 ; 60 ⁽²⁾	1" 1/2 BSP	1" 3/4	Steel	Straight
AD112200	52 ; 60 ⁽²⁾ ; 70 ; 80 ⁽¹⁾ ; 86 ; 110	1" 1/2 BSP	2"	Steel	Straight
AD200200	80 ⁽²⁾ ; 86 ; 110	2" BSP	2"	Steel	Straight
 A45114112	14 ; 19 ; 25 ; 32 ; 40 ; 45 ; 50 ; 60 ⁽¹⁾	1" 1/4 BSP	1" 1/2	Brass	Elbow 45°
A45114200	60 ⁽¹⁾	1" 1/4 BSP	2"	Brass	Elbow 45°
A45112112	52 ; 60 ⁽²⁾	1" 1/4 BSP	1" 1/2	Brass	Elbow 45°
 A90114114	14 ; 19 ; 25 ; 32	1" 1/4 BSP	1" 1/4	Brass	Elbow 90°
A90114112	14 ; 19 ; 25 ; 32 ; 40 ; 45 ; 50 ; 60 ⁽¹⁾	1" 1/4 BSP	1" 1/2	Brass	Elbow 90°
A90114134	60 ⁽¹⁾	1" 1/4 BSP	1" 3/4	Brass	Elbow 90°
A90112112	52 ; 60 ⁽²⁾	1" 1/2 BSP	1" 1/2	Brass	Elbow 90°
A90112200	52 ; 60 ⁽²⁾ ; 70 ; 80 ⁽¹⁾ ; 86 ; 110	1" 1/2 BSP	2"	Brass	Elbow 90°
A90200200	80 ⁽²⁾ ; 86 ; 110	2" BSP	2"	Brass	Elbow 90°

* PUMP MAXIMUM SPEED SHOULD BE ALWAYS CONFIRMED
1cc/rot = 0.061 in³/rot

⁽¹⁾ Except for BHV pumps

⁽²⁾ Only for BHV pumps

BHD SERIES | HYDRAULIC STRAIGHT PISTON PUMPS WITH TWO OUTLETS



REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
AD114112	20+20 ; 25+25 ; 30+30	1" 1/4 BSP	1" 1/2	Steel	Straight
AD114134	30+30	1" 1/4 BSP	1" 3/4	Steel	Straight
AD114200	30+30	1" 1/4 BSP	2"	Steel	Straight
AD200200	45+45 ; 50+50 ; 53+53 ; 72+38 ; 80+27; 83+42	2" BSP	2"	Steel	Straight
AD200212	45+45 ; 50+50 ; 53+53 ; 72+38 ; 80+27; 83+42	2" BSP	2" 1/2	Steel	Straight
A45114112	20+20 ; 25+25 ; 30+30	1" 1/4 BSP	1" 1/2	Brass	Elbow 45°
A45114200	30+30	1" 1/4 BSP	2"	Brass	Elbow 45°
A90114112	20+20 ; 25+25 ; 30+30	1" 1/4 BSP	1" 1/2	Brass	Elbow 90°
A90114134	30+30	1" 1/4	1" 3/4	Brass	Elbow 90°
A90200200	40+40 ; 45+45 ; 50+50 ; 60+30 ; 72+38 ; 80+27	2"	2"	Brass	Elbow 90°

BID SERIES | HYDRAULIC BENT AXIS PISTON PUMPS WITH TWO OUTLETS



REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
AD112200	38+37 ; 57+28	1" 1/2 BSP	2"	Steel	Straight
AD112212	80+38 ; 58+60 ; 70+66	1" 1/2 BSP	2" 1/2	Steel	Straight
AD112300	80+38 ; 58+60 ; 70+66	1" 1/2 BSP	3"	Steel	Straight
A45112200	38+37 ; 57+28	1" 1/2 BSP	2"	Brass	Elbow 45°
A90112200	38+37 ; 57+28	1" 1/2 BSP	2"	Brass	Elbow 90°

B2 SERIES | HYDRAULIC GEAR PUMPS



REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
AD034100	12 ; 16 ; 20 ; 26	3/4" BSP	1"	Steel	Straight
AD034114	12 ; 16 ; 20 ; 26 ; 32 ; 39	3/4" BSP	1" 1/4	Steel	Straight
AD034112	32 ; 39	3/4" BSP	1" 1/2	Steel	Straight
A45034112	12 ; 16 ; 20 ; 26 ; 32 ; 39	3/4" BSP	1" 1/2	Brass	Elbow 45°
A90034114	12 ; 16 ; 20 ; 26 ; 32 ; 39	3/4" BSP	1" 1/4	Brass	Elbow 90°
A90034112	32 ; 39	3/4" BSP	1" 1/2	Brass	Elbow 90°

B3 SERIES | B3D SERIES | PV SERIES | HYDRAULIC GEAR PUMPS



REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
AD034112	38	3/4" BSP	1" 1/2	Steel	Straight
AD100112	38 ; 45 ; 52 ; 61 ; 70	1" BSP	1" 1/2	Steel	Straight
AD100200	38 ; 45 ; 52 ; 61 ; 70	1" BSP	2"	Steel	Straight
AD114200	82 ; 102 ; 116 ; 125	1" 1/4 BSP	2"	Steel	Straight
A45034112	38	3/4" BSP	1" 1/2	Brass	Elbow 45°
A45100112	45 ; 52 ; 61 ; 70	1" BSP	1" 1/2	Brass	Elbow 45°
A45100200	45 ; 52 ; 61 ; 70	1" BSP	2"	Brass	Elbow 45°
A45114200	82 ; 102 ; 116 ; 125	1" 1/4 BSP	2"	Brass	Elbow 45°
A90034112	38	3/4" BSP	1" 1/2	Brass	Elbow 90°
A90100100	45 ; 52 ; 61	1" BSP	1" 1/4	Brass	Elbow 90°
A90100112	45 ; 52 ; 61	1" BSP	1" 1/2	Brass	Elbow 90°
A90100134	45 ; 52 ; 61 ; 70	1" BSP	1" 3/4	Brass	Elbow 90°
A90114134	82	1" 1/4 BSP	1" 3/4	Brass	Elbow 90°
A90114200	82 ; 102 ; 116 ; 125	1" 1/4 BSP	2"	Brass	Elbow 90°

B35 SERIES | HYDRAULIC GEAR PUMPS



REFERENCE	PUMP DISPLACEMENT (cc/rot)	THREAD	HOSE	MATERIAL	SHAPE
AD100200	64 ; 74	1" BSP	2"	Steel	Straight
AD114200	84 ; 94 ; 104 ; 114 ; 124 ; 134 ; 154	1" 1/4 BSP	2"	Steel	Straight
A45100200	64 ; 74	1" BSP	2"	Brass	Elbow 45°
A45114200	84 ; 94 ; 104 ; 114 ; 124 ; 134 ; 154	1" 1/4 BSP	2"	Brass	Elbow 45°
A90100134	64 ; 74	1" BSP	1" 3/4	Brass	Elbow 90°
A90114200	84 ; 94 ; 104 ; 114 ; 124 ; 134 ; 154	1" 1/4 BSP	2"	Brass	Elbow 90°

ACCESSORIES



CARDAN FLANGE - DIN 5462 SPLINE BORE

REFERENCE	DESCRIPTION
F1100	Cardan Flange SAE 1100 to DIN 5462 spline bore (A8x32x36)
F1300	Cardan Flange SAE 1300 to DIN 5462 spline bore (A8x32x36)
F1400	Cardan Flange SAE 1400 to DIN 5462 spline bore (A8x32x36)
FD100	Cardan Flange DIN 100 to DIN 5462 spline bore (A8x32x36)

Note: Cardan Flange SAE to DIN 5463 spline bore also available



CARDAN FLANGE - DIN 5462 SPLINE SHAFT

REFERENCE	DESCRIPTION
FM1100	Cardan Flange SAE 1100 to DIN 5462 spline shaft (B8x32x36)
FM1300	Cardan Flange SAE 1300 to DIN 5462 spline shaft (B8x32x36)
FM1400	Cardan Flange SAE 1400 to DIN 5462 spline shaft (B8x32x36)
FMD100	Cardan Flange DIN 100 to DIN 5462 spline shaft (B8x32x36)



CARDAN FLANGE - DIN 5480 SPLINE BORE

REFERENCE	DESCRIPTION
F1100MIA1	Cardan Flange SAE 1100 to DIN 5480 spline bore (A35x2x30x16)
F1300MIA1	Cardan Flange SAE 1300 to DIN 5480 spline bore (A35x2x30x16)
F1400MIA1	Cardan Flange SAE 1400 to DIN 5480 spline bore (A35x2x30x16)
F1100PIA1	Cardan Flange SAE 1100 to DIN 5480 spline bore (A42x2x30x21)
F1300PIA1	Cardan Flange SAE 1300 to DIN 5480 spline bore (A42x2x30x21)
F1400PIA1	Cardan Flange SAE 1400 to DIN 5480 spline bore (A42x2x30x21)



CARDAN FLANGE - DIN 9611 SPLINE BORE

REFERENCE	DESCRIPTION
FG1100	Cardan Flange SAE 1100 to DIN 9611 spline bore (SAE 1" 3/8)
FG1300	Cardan Flange SAE 1300 to DIN 9611 spline bore (SAE 1" 3/8)
FG1400	Cardan Flange SAE 1400 to DIN 9611 spline bore (SAE 1" 3/8)
FGD100	Cardan Flange DIN 100 to DIN 9611 spline bore (SAE 1" 3/8)



CARDAN FLANGE - ADJUSTABLE KEY HUB

REFERENCE	DESCRIPTION
FA1100	Cardan Flange SAE 1100 to Adjustable Key Hub
FA1300	Cardan Flange SAE 1300 to Adjustable Key Hub
FA1400	Cardan Flange SAE 1400 to Adjustable Key Hub
FAD100	Cardan Flange DIN 100 to Adjustable Key Hub



ISO (4 BOLTS) PTO - OUTPUT SHAFT ADAPTER

REFERENCE	DESCRIPTION
ADA1100R	ISO (4 Bolts) PTO to output shaft SAE 1100 adapter, with two bearings
ADA1300R	ISO (4 Bolts) PTO to output shaft SAE 1300 adapter, with two bearings
ADA1400R	ISO (4 Bolts) PTO to output shaft SAE 1400 adapter, with two bearings
ADAD100R	ISO (4 Bolts) PTO to output shaft DIN 100 adapter, with two bearings
ADA1100	ISO (4 Bolts) PTO to output shaft SAE 1100 adapter, with one bearing
ADA1300	ISO (4 Bolts) PTO to output shaft SAE 1300 adapter, with one bearing
ADA1400	ISO (4 Bolts) PTO to output shaft SAE 1400 adapter, with one bearing
ADAD100	ISO (4 Bolts) PTO to output shaft DIN 100 adapter, with one bearing



ISO-UNI / UNI-ISO / ISO-ISO ADAPTER

REFERENCE	DESCRIPTION
ADA3F4F	(to all PTO's) UNI (3 Bolts) to ISO (4 Bolts) adapter
ADA4F3F	(to all PTO's) ISO (4 Bolts) to UNI (3 Bolts) adapter
ADA4F3FC	(to low torque PTO's) ISO (4 Bolts) to UNI (3 Bolts), short adapter
ADAUNIISO	UNI (3 Bolts) to ISO 3019-2 (4 Bolts) adapter
ADARSEN	STDRU (4 Bolts) to ISO (4 Bolts) adapter
ADA4F4F1RE	ISO (4 Bolts) Male-Female adapter, with one ball bearing + retainer seal
ADA4F4F2RC	ISO (4 Bolts) Male-Female adapter, with two tapered roller bearings
ADA4F4F2RE	ISO (4 Bolts) Male-Female adapter, with two ball bearings

Note: Different combinations can be made

HYDRAULIC VALVES TIPPING VALVES



REFERENCE	DESCRIPTION
UP TO 300 bar (4300 psi)	
DTCA130	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent
DTCA130H	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent 3 fixation holes type H
DTCA1302P	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent 2 pressure range
DTCA1303P	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent 3 pressure range
VVLR130	Tipping Valve up to 130 l/min ; Close circuit ; 1 or 2 descent speeds
VVLR1302P	Tipping Valve up to 130 l/min ; Close circuit ; 1 or 2 descent speeds ; 2 pressure range
VVLR1303P	Tipping Valve up to 130 l/min ; Close circuit ; 1 or 2 descent speeds ; 3 pressure range
VVLR13001	Tipping Valve up to 130 l/min ; Close circuit ; 1 or 2 descent speeds (1" BSP)
VVLR130F	Tipping Valve up to 130 l/min ; Close circuit ; 1 or 2 descent speeds ; push stroke end
DTCA130F	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent ; push stroke end
DTCA13001	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent (1" BSP)
DTCA1302V	Tipping Valve up to 130 l/min ; Open circuit ; 2 descent speeds
DTCA250	Tipping Valve up to 250 l/min ; Open circuit ; progressive descent
DTCA2502P	Tipping Valve up to 250 l/min ; Open circuit ; progressive descent ; 2 pressure range
DTCA2503P	Tipping Valve up to 250 l/min ; Open circuit ; progressive descent ; 3 pressure range
DT50C3C0	Tipping Valve up to 50 l/min + cable for mechanical operation 3.0 m
UP TO 200 bar (2900 psi)	
VVP150	Tipping Valve up to 150 l/min ; Close circuit ; progressive descent
DTCA170	Tipping Valve up to 170 l/min ; Open circuit ; progressive descent
DTCA1702P	Tipping Valve up to 170 l/min ; Open circuit ; progressive descent ; 2 pressure range
DTCA1703P	Tipping Valve up to 170 l/min ; Open circuit ; progressive descent ; 3 pressure range
DTCA170F	Tipping Valve up to 170 l/min ; Open circuit ; progressive descent ; push stroke end
DTCA1702V	Tipping Valve up to 170 l/min ; Open circuit ; 2 descent speeds

HYDRAULIC VALVES SECTIONAL DIRECTIONAL CONTROL VALVES



REFERENCE	DESCRIPTION
UP TO 350 bar (5000 psi)	
DTS10020	Directional control Valve up to 100 l/min ; Open circuit; Parallel circuit ; Double action ; Adjustable main relief valve
UP TO 320 bar (4600 psi)	
DTS25060	Directional control Valve up to 250 l/min ; Open circuit; Parallel circuit ; Double action ; Adjustable main relief valve
UP TO 180 bar (2600 psi)	
DTS15020	Directional control Valve up to 150 l/min ; Open circuit; Parallel circuit ; Double action ; Adjustable main relief valve

Note: Different combinations can be made



HYDRAULIC VALVES HIGH PRESSURE 2 WAYS BALL VALVES

REFERENCE	DESCRIPTION
UP TO 500 bar (7200 psi)	
VD2V38C1	2 Ways Ball Valve up to 35 l/min ; 3/8" BSP
VD2V12C1	2 Ways Ball Valve up to 60 l/min ; 1/2" BSP
UP TO 315 bar (4500 psi)	
VD2V34C1	2 Ways Ball Valve up to 100 l/min ; 3/4" BSP
VD2V10C1	2 Ways Ball Valve up to 150 l/min ; 1" BSP



HYDRAULIC VALVES HIGH PRESSURE 3 WAYS BALL VALVES

REFERENCE	DESCRIPTION
UP TO 315 bar (4500 psi)	
VD3V38C1	3 Ways Ball Valve up to 35 l/min ; 3/8" BSP
VD3V12C1	3 Ways Ball Valve up to 60 l/min ; 1/2" BSP
VD3V34C1	3 Ways Ball Valve up to 100 l/min ; 3/4" BSP
VD3V10C1	3 Ways Ball Valve up to 150 l/min ; 1" BSP



HYDRAULIC VALVES HIGH PRESSURE 3 WAYS FLOW DIVIDER

REFERENCE	DESCRIPTION
UP TO 350 bar (5000 psi)	
DC3V38C1	3 Ways Flow Divider up to 60 l/min ; 3/8" BSP
DC3V12C1	3 Ways Flow Divider up to 90 l/min ; 1/2" BSP
DC3V34C1	3 Ways Flow Divider up to 120 l/min ; 3/4" BSP
DC3V34AP	3 Ways Flow Divider up to 200 l/min ; 3/4" BSP ; Pneumatic Circuit Selector
DC3V10AP	3 Ways Flow Divider up to 200 l/min ; 1" BSP ; Pneumatic Circuit Selector
UP TO 300 bar (4300 psi)	
DC3V10C1	3 Ways Flow Divider up to 200 l/min ; 1" BSP

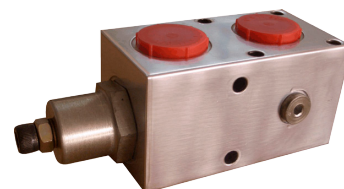
HYDRAULIC VALVES BYPASS VALVES



REFERENCE	DESCRIPTION	SOLENOID
UP TO 210 bar (3000 psi)		
BP3060L	Bypass Valve to work in pumps from 17cc/rot to 60cc/rot	24 VDC*
BP80L	Bypass Valve to work in pumps of 80cc/rot	24 VDC*
BP110L	Bypass Valve to work in pumps from 110cc/rot to 135cc/rot	24 VDC*
BPR3060L	Bypass with relief valve to work in pumps from 17cc/rot to 60cc/rot	24 VDC*
BPR80L	Bypass with relief valve to work in pumps of 80cc/rot	24 VDC*
BPR110L	Bypass with relief valve to work in pumps from 110cc/rot to 135cc/rot	24 VDC*
UP TO 350 bar (5000 psi)		
BP3060H	Bypass Valve to work in pumps from 17cc/rot to 60cc/rot	24 VDC*
BP80H	Bypass Valve to work in pumps of 80cc/rot	24 VDC*
BP110H	Bypass Valve to work in pumps from 110cc/rot to 135cc/rot	24 VDC*
BPR3060H	Bypass with relief valve to work in pumps from 17cc/rot to 60cc/rot	24 VDC*
BPR80H	Bypass with relief valve to work in pumps of 80cc/rot	24 VDC*
BPR110H	Bypass with relief valve to work in pumps from 110cc/rot to 135cc/rot	24 VDC*

* On request 12VDC solenoids are also available

HYDRAULIC VALVES PRESSURE RELIEF VALVES



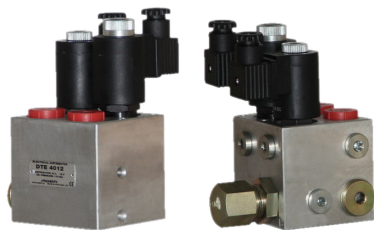
REFERENCE	DESCRIPTION
UP TO 350 bar (5000 psi)	
LP120	Pressure relief valve up to 120 l/min
UP TO 250 bar (3600 psi)	
LP80	Pressure relief valve up to 80 l/min
UP TO 220 bar (3200 psi)	
LP150	Pressure relief valve up to 150 l/min

HYDRAULIC VALVES BALL VALVES

Usually installed on admission line, directly on oil tanks outlet



REFERENCE	DESCRIPTION
CCKH017	Ball Valve 1" BSP ; Female - Female (Brass)
CCKH029	Ball Valve 1" 1/4 BSP ; Male - Female (Brass)
CCKH06	Ball Valve 1" 1/2 BSP ; Male - Female (Brass)



HYDRAULIC VALVES ELECTRICAL DISTRIBUTORS

REFERENCE	DESCRIPTION	SOLENOID
DTE4012	Electrical Distributor 3 ways, 40 l/min	12 VDC
DTE4024	Electrical Distributor 3 ways, 40 l/min	24 VDC
DTE8012	Electrical Distributor 3 ways, 80 l/min	12 VDC
DTE8024	Electrical Distributor 3 ways, 80 l/min	24 VDC



HYDRAULIC VALVES ELECTROVALVES

REFERENCE	DESCRIPTION	SOLENOID
EVNC01	Electrovalve, normally close ; 40 l/min ; 1/2" BSP	12 VDC
EVNC02	Electrovalve, normally close ; 40 l/min ; 1/2" BSP	24 VDC
EVNO01	Electrovalve, normally open ; 40 l/min ; 1/2" BSP	12 VDC
EVNO02	Electrovalve, normally open ; 40 l/min ; 1/2" BSP	24 VDC
EVNC03	Electrovalve, normally close ; 40 l/min ; 3/8" BSP	12 VDC
EVNC04	Electrovalve, normally close ; 40 l/min ; 3/8" BSP	24 VDC
EVNO03	Electrovalve, normally open ; 40 l/min ; 3/8" BSP	12 VDC
EVNO04	Electrovalve, normally open ; 40 l/min ; 3/8" BSP	24 VDC
EVNCAR01	Electrovalve normally close ; 40 l/min ; 1/2" BSP ; with check valve	12 VDC
EVNCAR02	Electrovalve, normally close 40 l/min ; 1/2" BSP ; with check valve	24 VDC
EVNOAR01	Electrovalve, normally open ; 40 l/min ; 1/2" BSP ; with check valve	12 VDC
EVNOAR02	Electrovalve, normally open ; 40 l/min ; 1/2" BSP ; with check valve	24 VDC
EVNCAR03	Electrovalve normally close ; 40 l/min ; 3/8" BSP ; with check valve	12 VDC
EVNCAR04	Electrovalve, normally close 40 l/min ; 3/8" BSP ; with check valve	24 VDC
EVNOAR03	Electrovalve, normally open ; 40 l/min ; 3/8" BSP ; with check valve	12 VDC
EVNOAR04	Electrovalve, normally open ; 40 l/min ; 3/8" BSP ; with check valve	24 VDC
EVNC0C1	Electrovalve normally close ; 40 l/min ; 1/2" BSP ; with check valve+relief valve	12 VDC
EVNC0C2	Electrovalve normally close ; 40 l/min ; 1/2" BSP ; with check valve+relief valve	24 VDC
EVNO0C1	Electrovalve normally open ; 40 l/min ; 1/2" BSP ; with check valve+relief valve	12 VDC
EVNO0C2	Electrovalve normally open ; 40 l/min ; 1/2" BSP ; with check valve+relief valve	24 VDC
EVNC8012	Electrovalve normally close ; 80 l/min ; 1/2" BSP ; with check valve+relief valve	12 VDC
EVNC8024	Electrovalve normally close ; 80 l/min ; 1/2" BSP ; with check valve+relief valve	24 VDC
EVNO8012	Electrovalve normally open ; 80 l/min ; 1/2" BSP ; with check valve+relief valve	12 VDC
EVNO8024	Electrovalve normally open ; 80 l/min ; 1/2" BSP ; with check valve+relief valve	24 VDC

PNEUMATIC ACCESSORIES

PNEUMATIC CONTROLS



REFERENCE	DESCRIPTION	HANDLE
AOHCACC1	One-way valve, with warning light+pres.gauge	Fix up and down
AOHCACMC1	One-way valve, metallic	Fix up and down
AOHCACC2	Double one-way valve, with warning light+pres.gauge	Fix up and down
AOHCACMC2	Double one-way valve, metallic	Fix up and down
AOHCACC3	Triple one-way valve, with warning light+pres.gauge	Fix up and down
AOHCACMC3	Triple one-way valve, metallic	Fix up and down
AOHCD4C2	2 way distributor valve, with warning light+pres.gauge	Fix up and down
AOHCD7C3	3 way distributor valve, with warning light+pres.gauge	Fix up and down
AOHCD5C2	2 way distributor valve, with warning light+pres.gauge	automatic return up and down
AOHCD8C3	3 way distributor valve, with warning light+pres.gaug	automatic return up and down
AOHCD6C2	2 way distributor valve, with warning light+pres.gauge	automatic return up and down
AOHCD9C3	3 way distributor valve, with warning light+pres.gauge	automatic return up and down
ABCD42	2 way distributor valve, with warning light+pres.gauge	Fix up and down
ABCD73	3 way distributor valve, with warning light+pres.gauge	Fix up and down
ABCD731L	3 way distributor valve, with warning light+pres.gauge	Fix up and down without automatic switching off PTO
ABCD52	2 way distributor valve, with warning light+pres.gauge	automatic return up and down
ABCD83	3 way distributor valve, with warning light+pres.gauge	automatic return up and down
ABCD62	2 way distributor valve, with warning light+pres.gauge	automatic return up and down
ABCD93	3 way distributor valve, with warning light+pres.gauge	automatic return up and down
DCM01	Distributor Control Meiller type	Turn 90° right fixation
PTOCM01	PTO Control Meiller type	automatic return up and down
V358910CP	Pneumatic Valve 5x2 R 1/8" BSP	Fix up

PNEUMATIC ACCESSORIES

PNEUMATIC KITS

VACUUM KITS

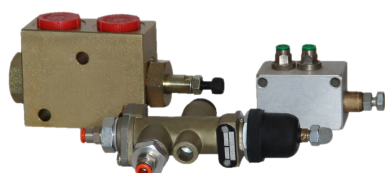


REFERENCE	DESCRIPTION
KPNE12	Pneumatic KIT 12 VDC
KPNE24	Pneumatic KIT 24 VDC
KVAC12	Vacuum KIT 12 VDC
KVAC24	Vacuum KIT 24 VDC



PNEUMATIC ACCESSORIES HOSES | FITTINGS

REFERENCE	DESCRIPTION
AOHTNY6C4	Nylon Hose 6*4 (up to 15 bar ; Work T: -20 to 100°C)
R614CCR	Quick Air Fitting 1/4" BSP, 4x6. Elbow 90°
R614DCR	Quick Air Fitting 1/4" BSP, 4x6. Straight
R618CCR	Quick Air Fitting 1/8" BSP, 4x6. Elbow 90°
R618DCR	Quick Air Fitting 1/8" BSP, 4x6. Straight



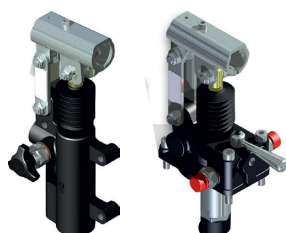
END OF STROKES

REFERENCE	DESCRIPTION
AOHVFC12	Hydraulic End of Stroke Valve 1/2" BSP
AOHVFC34	Hydraulic End of Stroke Valve 3/4" BSP
VFCNO	Pneumatic End of Stroke Normally Open
SVFCNO	Pneumatic End of Stroke Normally Open + Support
VFCOCCC	Pneumatic End of Stroke Valve, Open/Closed Circuit
TBTFC01	Electric End of Stroke, for three tipper scissor



MECHANIC CONTROLS CABLE WITH LEVER

REFERENCE	DESCRIPTION
AOHCC0T3C0	Cable for mec. operation 3.5m with lever



HAND PUMPS

REFERENCE	DESCRIPTION
HP20DS01	Hand pump ; 20 cc ; Double acting ; Single acting circuit ; with lowering valve
HP50DS01	Hand pump ; 50 cc ; Double acting ; Single acting circuit ; with lowering valve
HP70DS01	Hand pump ; 70 cc ; Double acting ; Single acting circuit ; with lowering valve
HPT12DS01	Hand pump ; 12 cc; Assembling to Tank ; Double acting ; Single acting circuit ; with lowering valve
HPT25DS01	Hand pump ; 25 cc ; Assembling to Tank ; Double acting ; Single acting circuit ; with lowering valve
HPT45DS01	Hand pump ; 45 cc ; Assembling to Tank ; Double acting ; Single acting circuit ; with lowering valve
HPT12DD01	Hand pump ; 12 cc ; Assembling to Tank ; Double acting ; Double acting circuit ; with lowering valve
HPT25DD01	Hand pump ; 25 cc ; Assembling to Tank ; Double acting ; Double acting circuit ; with lowering valve
HPT45DD01	Hand pump ; 45 cc ; Assembling to Tank ; Double acting ; Double acting circuit ; with lowering valve

ACCESSORIES

SUPPORT MOTOR-PUMP

SUPPORT MOTOR - PUMP is an assembly which allows the transmission of hydraulic power from the tractor to the hydraulic circuit in question, to operate the tipper trailer.

This support allows an optimal coupling between pump and motor, this coupling is obtained through a tube where it is possible to connect both UNI and EN flanges.

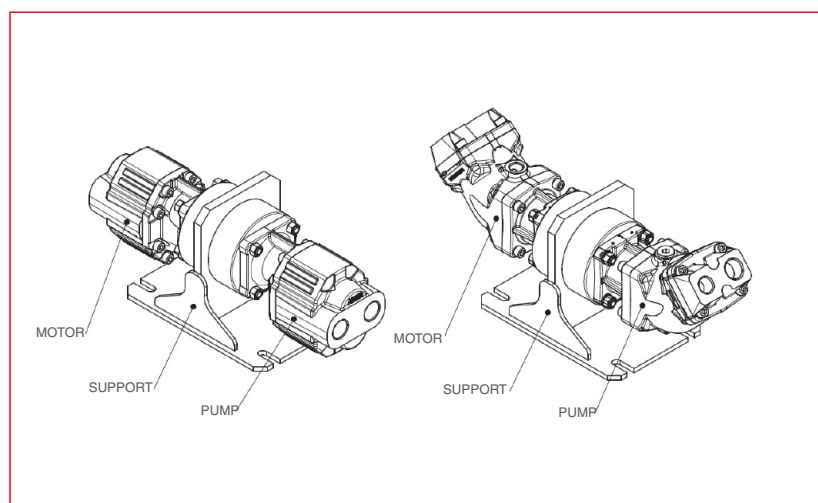
With this support it is not necessary to use the cardan shaft to make the connection to the tipper trailer. This allows greater safety and enhanced maneuverability of the vehicle without affecting its performance.



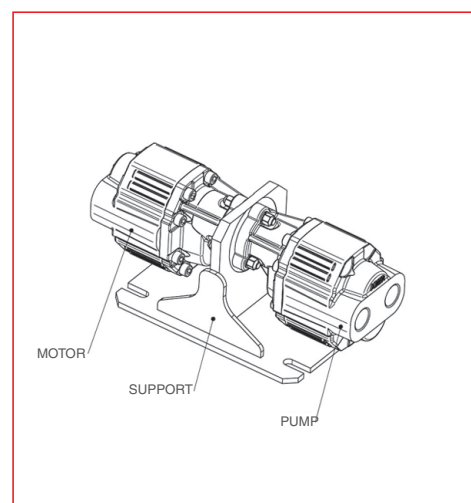
REFERENCE	DESCRIPTION
SMPUNI	SUPPORT MOTOR- PUMP DIN 5463 (UNI)
SMPEN	SUPPORT MOTOR- PUMP DIN 5462 (EN)

Note: All ABER pumps and motors with DIN 5463 (UNI) flange can be assembled with SMPUNI support and All ABER pumps and motors with DIN 5462 (EN) flange can be assembled with SMPUEN support.

SMPEN Assembly:



SMPUNI Assembly:



POWER TAKE OFF'S

We have an extended range of Power Take Off's, (PTO'S) always working to adapt to the needs of our clients.

TOYOTA

MITSUBISHI

ISUZU

ZF

VOLVO

MAN / VW

EATON / FULLER

MERCEDES

SCANIA

IVECO

IVECO

NISSAN

RENAULT

KAMAZ

MAZ

SHAANXI

GAZ

ALLISON

HINO

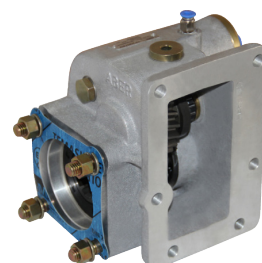
TATA

POWER TAKE OFF'S TOYOTA



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF1001M*	-	M150 ; M153 ; M155	1:1,13	MECHANIC
TF1001P*	-	M150 ; M153 ; M155	1:1,13	PNEUMATIC
TF1001V*	-	M150 ; M153 ; M155	1:1,13	VACUUM
TF1006M*	-	H260	1:1,16	MECHANIC
TF1006P*	-	H260	1:1,16	PNEUMATIC
TF1006V*	-	H260	1:1,16	VACUUM
TF1008PUNI*	UNI SERIES	R451	1:1,14	PNEUMATIC
TF1008VUNI*	UNI SERIES	R451	1:1,14	VACUUM

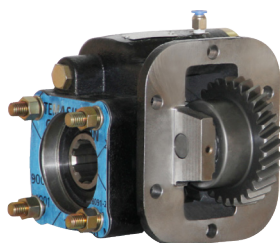
POWER TAKE OFF'S MITSUBISHI



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF2001AM*	-	M2-S5 ; M3-S5	1:1	MECHANIC
TF2001AP*	-	M2-S5 ; M3-S5	1:1	PNEUMATIC
TF2001AV*	-	M2-S5 ; M3-S5	1:1	VACUUM
TF2002AM*	-	M015S5	1:0,88	MECHANIC
TF2002AP*	-	M015S5	1:0,88	PNEUMATIC
TF2002AV*	-	M015S5	1:0,88	VACUUM
TF2003AM*	-	M035S5 ; M035S6	1:0,91	MECHANIC
TF2003AP*	-	M035S5 ; M035S6	1:0,91	PNEUMATIC
TF2003AV*	-	M035S5 ; M035S6	1:0,91	VACUUM
TF2004AM*	-	M025S5	1:0,91	MECHANIC
TF2004AP*	-	M025S5	1:0,91	PNEUMATIC
TF2004AV*	-	M025S5	1:0,91	VACUUM
TF2005AM*	-	M040S5	1:1,11	MECHANIC
TF2005AP*	-	M040S5	1:1,11	PNEUMATIC
TF2005AV*	-	M040S5	1:1,11	VACUUM
TF2006AM*	-	M027S5 ; M038S5 ; M038S6	1:0,90	MECHANIC
TF2006AP*	-	M027S5 ; M038S5 ; M038S6	1:0,90	PNEUMATIC
TF2006AV*	-	M027S5 ; M038S5 ; M038S6	1:0,90	VACUUM
TF2007AM*	-	M036S5 ; M036S6	1:0,91	MECHANIC
TF2007AP*	-	M036S5 ; M036S6	1:0,91	PNEUMATIC
TF2007AV*	-	M036S5 ; M036S6	1:0,91	VACUUM

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF2011APUNI	UNI SERIES	MO60S6-OD-6.748 ; MO60S6-6.875	1:1,37	PNEUMATIC
TF2012APUNI	UNI SERIES	MO60S6-D-8.064 ; MO70S6-D-8.064	1:1,2	PNEUMATIC
TF2013APUNI	UNI SERIES	MO70S6-OD-6.807	1:1,65	PNEUMATIC
TF4105M*	-	6S-420 ; MO37S6	1:1,39	MECHANIC
TF4105P*	-	6S-420 ; MO37S6	1:1,39	PNEUMATIC
TF4105V*	-	6S-420 ; MO37S6	1:1,39	VACUUM



POWER TAKE OFF'S ISUZU

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF3003M*	-	MSA 5G ; MSA 5P	1:1,19	MECHANIC
TF3003P*	-	MSA 5G ; MSA 5P	1:1,19	PNEUMATIC
TF3003V*	-	MSA 5G ; MSA 5P	1:1,19	VACUUM
TF3004M*	-	MSA 5D ; MSA 5S ; MXA 5R ; MXA 6R ; MXA 6S	1:1,19	MECHANIC
TF3004P*	-	MSA 5D ; MSA 5S ; MXA 5R ; MXA 6R ; MXA 6S	1:1,19	PNEUMATIC
TF3004V*	-	MSA 5D ; MSA 5S ; MXA 5R ; MXA 6R ; MXA 6S	1:1,19	VACUUM
TF3005M*	-	MBP 6Q	1:1,13	MECHANIC
TF3005P*	-	MBP 6Q	1:1,13	PNEUMATIC
TF3005V*	-	MBP 6Q	1:1,13	VACUUM
TF3006M*	-	MSB 5G ; MSB 5S ; MSB 5M ; MSB 5R	1:1,17	MECHANIC
TF3006P*	-	MSB 5G ; MSB 5S ; MSB 5M ; MSB 5R	1:1,17	PNEUMATIC
TF3006V*	-	MSB 5G ; MSB 5S ; MSB 5M ; MSB 5R	1:1,17	VACUUM
TF3008M*	-	MY Y - 5T ; MY Y - 6S ; MY Y-6P ; MOH25 ; MOH30 ; MOY-9K	1:1	MECHANIC
TF3008P*	-	MY Y - 5T ; MY Y - 6S ; MY Y-6P ; MOH25 ; MOH30 ; MOY-9K	1:1	PNEUMATIC
TF3008V*	-	MY Y - 5T ; MY Y - 6S ; MY Y-6P ; MOH25 ; MOH30 ; MOY-9K	1:1	VACUUM
TF3009M*	-	MZZ-5D ; MZZ-6C ; MZZ-6U ; MZZ-6W ; MOZ-10	1:1,07	MECHANIC
TF3009P*	-	MZZ-5D ; MZZ-6C ; MZZ-6U ; MZZ-6W ; MOZ-10	1:1,07	PNEUMATIC
TF3009V*	-	MZZ-5D ; MZZ-6C ; MZZ-6U ; MZZ-6W ; MOZ-10	1:1,07	VACUUM
TF3010M*	-	MZZ-6F ; MZZ-6R ; MZZ-6S ; MOZ-53	1:1,07	MECHANIC
TF3010P*	-	MZZ-6F ; MZZ-6R ; MZZ-6S ; MOZ-53	1:1,07	PNEUMATIC
TF3010V*	-	MZZ-6F ; MZZ-6R ; MZZ-6S ; MOZ-53	1:1,07	VACUUM
TF3012M*	-	MBP-6R	1:1,13	MECHANIC
TF3012P*	-	MBP-6R	1:1,13	PNEUMATIC
TF3012V*	-	MBP-6R	1:1,13	VACUUM
TF3013P*	-	MAG 6G ; MAG 6W ; MAL 5T ; MAL 6Q ; MAL 6S ; MAJ 7T ; MAJ 7U	1:1,67	PNEUMATIC
TF3014P*	-	MZW 6P (for 6 cylinders motors)	1:0,91	PNEUMATIC

POWER TAKE OFF'S AND ADAPTER KIT'S

ZF



SP



AMP

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF4001AMP*	-	S5-35	1:1,32	PNEUMATIC
TF4001SP*	-	S5-35	1:1	PNEUMATIC
TF4002AMP*	-	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000 ; 6AS-1000	1:1,32	PNEUMATIC
TF4002SP*	-	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000 ; 6AS-1000	1:1	PNEUMATIC
TF4003AMP*	VK4002 + TF4002AMP	16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1650 ; (trilobe); 16-S-1650 (OLD)	1:1,32	PNEUMATIC
TF4003SP*	VK4002 + TF4002SP	16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1650 ; (trilobe); 16-S-1650 (OLD)	1:1	PNEUMATIC
TF4004AMP*	VK4001 + TF4002AMP	8-S-151 ; 12-S-2100 ; 12-S-2300 ; 12-S-2800 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO ; 16-S-1920 TD ; 16-S-2220 TO/TD ; 16-S-2520 TO ; 8-S-1620 TD ; 8-S-1820 TO ; 8-S-220 TO ; 16-S-2320 TD ; 16-S-2330 TD ; 16-S-2720 TO ; 16-S-2720 TO (Z=14) ; 16-S-1650 (NEW)	1:1,32	PNEUMATIC
TF4004SP*	VK4001 + TF4002SP	8-S-151 ; 12-S-2100 ; 12-S-2300 ; 12-S-2800 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO ; 16-S-1920 TD ; 16-S-2220 TO/TD ; 16-S-2520 TO ; 8-S-1620 TD ; 8-S-1820 TO ; 8-S-220 TO ; 16-S-2320 TD ; 16-S-2330 TD ; 16-S-2720 TO ; 16-S-2720 TO (Z=14) ; 16-S-1650 (NEW)	1:1	PNEUMATIC
TF4005AMP*	VK4005 + TF4002AMP	16-K-130 ; 16-S-112 ; 16-S-150 ; (trilobe)	1:1,32	PNEUMATIC
TF4005SP*	VK4005 + TF4002SP	16-K-130 ; 16-S-112 ; 16-S-150 ; (trilobe)	1:1	PNEUMATIC
TF4006AMP*	VK4006 + TF4002AMP	16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A ; (trilobe)	1:1,32	PNEUMATIC
TF4006SP*	VK4006 + TF4002SP	16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A ; (trilobe)	1:1	PNEUMATIC
TF4011AMP*	VK4007 + TF4002AMP	16-S-151 IT ; 16-S-181 IT ; 16-S-221 IT ; 16-S-1621 TD IT ; 16-S-1821 TO IT ; 16-S-1921 TD IT ; 16-S-2221 TD/TO IT ; 16-S-2321 TD IT ; 16-S-2331 TD IT ; 16-S-2521 TO IT ; 16-S-2721 TO IT ; 16-S-2731 TO IT ; (Z=14)	1:1,32	PNEUMATIC
TF4011SP*	VK4007 + TF4002SP	16-S-151 IT ; 16-S-181 IT ; 16-S-221 IT ; 16-S-1621 TD IT ; 16-S-1821 TO IT ; 16-S-1921 TD IT ; 16-S-2221 TD/TO IT ; 16-S-2321 TD IT ; 16-S-2331 TD IT ; 16-S-2521 TO IT ; 16-S-2721 TO IT ; 16-S-2731 TO IT ; (Z=14)	1:1	PNEUMATIC
TF4012AMP*	VK4008 + TF4002AMP	16-S-251 IT ; 16-S-2720 TO IT ; (Z=14)	1:1,32	PNEUMATIC
TF4012SP*	VK4008 + TF4002SP	16-S-251 IT ; 16-S-2720 TO IT ; (Z=14)	1:1	PNEUMATIC
TF4013AMP*	VK4009 + TF4002AMP	16-S-150 IT ; (trilobe)	1:1,32	PNEUMATIC
TF4013SP*	VK4009 + TF4002SP	16-S-150 IT ; (trilobe)	1:1	PNEUMATIC
TF4014AMP*	-	S6-36 ; 6S-850 ; 6S-700 ; 6AS-700	1:1,32	PNEUMATIC
TF4014SP*	-	S6-36 ; 6S-850 ; 6S-700 ; 6AS-700	1:1	PNEUMATIC
TF4015AMP*	VK4015 + TF4002AMP	5-90 GP ; 5-92 GP ; 4-120 GP	1:1,32	PNEUMATIC
TF4015SP*	VK4015 + TF4002SP	5-90 GP ; 5-92 GP ; 4-120 GP	1:1	PNEUMATIC
TF4016AMP*	VK4016 + TF4002AMP	5-110 GPA	1:1,32	PNEUMATIC
TF4016SP*	VK4016 + TF4002SP	5-110 GPA	1:1	PNEUMATIC
TF4017AMP*	VK4017 + TF4002AMP	5-110 GP ; 5-111 GP ; 4-150 GP	1:1,32	PNEUMATIC
TF4017SP*	VK4017 + TF4002SP	5-110 GP ; 5-111 GP ; 4-150 GP	1:1	PNEUMATIC
TF4018AMP*	VK4Q18 + TF4002AMP	9-S-75/13,16 ; 9-S-75/9,56 (ratio)	1:1,32	PNEUMATIC
TF4018SP*	VK4018 + TF4002SP	9-S-75/13,16 ; 9-S-75/9,56	1:1	PNEUMATIC
TF4019AMP*	VK4019 + TF4002AMP	9-S-109/10,25 ; 9-S-109/10,24 ; 16-S-109/11,86 ; 16-S-109/13,53	1:1,32	PNEUMATIC
TF4019SP*	VK4019 + TF4002SP	9-S-109/10,25 ; 9-S-109/10,24 ; 16-S-109/11,86 ; 16-S-109/13,53	1:1	PNEUMATIC
TF4020AMP*	VK4020 + TF4002AMP	9-S-109/12,92 ; 16-S-109/13,04 ; 16-S-109/13,30 ; 16-S-109/13,42 ; 8-S-109	1:1,32	PNEUMATIC

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF4020SP*	VK4020 + TF4002SP	9-S-109/12,92 ; 16-S-109/13,04 ; 16-S-109/13,30 ; 16-S-109/13,42 ; 8-S-109	1:1	PNEUMATIC
TF4021AMP*	VK4021 + TF4002AMP	9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9-S-1110 TO/9,48 ; 9-S-1310 TO/9,48	1:1,32	PNEUMATIC
TF4021SP*	VK4021 + TF4002SP	9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9-S-1110 TO/9,48 ; 9-S-1310 TO/9,48	1:1	PNEUMATIC
TF4022AMP*	VK4022 + TF4002AMP	12-AS-1800 ; 12-AS-2301 ; 16-AS-2601 ; 12-AS-1630 TD ; 12-AS-1930 TD/TO ; 12-AS-2130 TD/TO ; 12-AS-2131 TD ; 12-AS-2140 TD ; 12-AS-2340 TD ; 12-AS-2430 TD ; 12-AS-2540 TD/TO ; 12-AS-2330 TO ; 12-AS-2530 TO ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD ; 16-AS-2601 OD ; 16-AS-2630 TO	1:1,32	PNEUMATIC
TF4022SP*	VK4022 + TF4002SP	12-AS-1800 ; 12-AS-2301 ; 16-AS-2601 ; 12-AS-1630 TD ; 12-AS-1930 TD/TO ; 12-AS-2130 TD/TO ; 12-AS-2131 TD ; 12-AS-2140 TD ; 12-AS-2340 TD ; 12-AS-2430 TD ; 12-AS-2540 TD/TO ; 12-AS-2330 TO ; 12-AS-2530 TO ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD ; 16-AS-2601 OD ; 16-AS-2630 TO	1:1	PNEUMATIC
TF4023AMP*	VK4023 + TF4002AMP	12-AS-1800 IT /1631 TD IT /1931 TD/TO IT /2131 TD/TO IT /2141 TD IT /2301 TD/TO IT /2341 TD IT /2431 TD IT /2331 TO IT /2531 TO IT /2541 TO IT /2741 TO IT /2941 TO IT ; 16-AS-2200 IT /2231 TD IT /2601 TD/TO IT /2631 TO IT	1:1,32	PNEUMATIC
TF4023SP*	VK4023 + TF4002SP	12-AS-1800 IT /1631 TD IT /1931 TD/TO IT /2131 TD/TO IT /2141 TD IT /2301 TD/TO IT /2341 TD IT /2431 TD IT /2331 TO IT /2531 TO IT /2541 TO IT /2741 TO IT /2941 TO IT ; 16-AS-2200 IT /2231 TD IT /2601 TD/TO IT /2631 TO IT	1:1	PNEUMATIC
TF4024P*	-	S5-42/5,72	1:1,59	PNEUMATIC
TF4026P*	-	S5-42/4,65	1:1,59	PNEUMATIC
TF4027P*	-	S5-42/7,55	1:1,33	PNEUMATIC
TF4028P*	-	S5-42/6,56	1:1,36	PNEUMATIC
TF4029M*	-	5S-200 ; 5S-270 ; 5S-300 ; 2825.5 ; 2830.5	1:1,65	MECHANIC
TF4029P*	-	5S-200 ; 5S-270 ; 5S-300 ; 2825.5 ; 2830.5	1:1,65	PNEUMATIC
TF4029V*	-	5S-200 ; 5S-270 ; 5S-300 ; 2825.5 ; 2830.5	1:1,65	VACUUM
TF4030M*	-	6S-300 ; 6S-350	1:1,58	MECHANIC
TF4030P*	-	6S-300 ; 6S-350	1:1,58	PNEUMATIC
TF4030V*	-	6S-300 ; 6S-350	1:1,58	VACUUM
TF4032M*	-	6S-380 ; 6AS-380 ; 6S-400 ; 6AS-400 ; 2840.6 (part number 8873021 to 8873022)	1:1,55	MECHANIC
TF4032P*	-	6S-380 ; 6AS-380 ; 6S-400 ; 6AS-400 ; 2840.6 (part number 8873021 to 8873022)	1:1,55	PNEUMATIC
TF4032V*	-	6S-380 ; 6AS-380 ; 6S-400 ; 6AS-400 ; 2840.6 (part number 8873021 to 8873022)	1:1,55	VACUUM
TF4033AMP*	REINFORCED	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000 ; 6AS-1000	1:1	PNEUMATIC
TF4034AMP*	REINFORCED	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000 ; 6AS-1000	1:1,73	PNEUMATIC
TF4035AMP*	REINFORCED	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000 ; 6AS-1000	1:1,56	PNEUMATIC
TF4036AMP*	REINFORCED	S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000 ; 6AS-1000	1:1,35	PNEUMATIC
TF4037AMP*	REINFORCED	S6-36 ; 6S-850 ; 6S-700 ; 6AS-700	1:1,56	PNEUMATIC
TF4038AMP*	REINFORCED	S6-36 ; 6S-850 ; 6S-700 ; 6AS-700	1:1,35	PNEUMATIC
TF4039AMP*	REINFORCED	S6-36 ; 6S-850 ; 6S-700 ; 6AS-700	1:1	PNEUMATIC
TF4040AMP*	REINFORCED	S6-36 ; 6S-850 ; 6S-700 ; 6AS-700	1:1,73	PNEUMATIC
TF4041AMP*	REINFORCED VK4001 + TF4033AMP	8-S-151 ; 12-S-2100 ; 12-S-2300 ; 12-S-2800 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO ; 16-S-1920 TD ; 16-S-2220 TO/TD ; 16-S-2520 TO ; 8-S-1620 TD ; 8-S-1820 TO ; 8-S-220 TO ; 16-S-2320 TD ; 16-S-2330 TD ; 16-S-2720 TO ; 16-S-2720 TO (Z=14) ; 16-S-1650 (NEW)	1:1	PNEUMATIC
TF4042AMP*	REINFORCED VK4002 + TF4033AMP	16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1650 ; (trilobe) ; 16-S-1650 (OLD)	1:1	PNEUMATIC
TF4043AMP*	REINFORCED VK4005 + TF4033AMP	16-K-130 ; 16-S-112 ; 16-S-150 ; (trilobe)	1:1	PNEUMATIC
TF4044AMP*	REINFORCED VK4006 + TF4033AMP	16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A ; (trilobe)	1:1	PNEUMATIC
TF4045AMP*	REINFORCED VK4007 + TF4033AMP	16-S-151 IT ; 16-S-181 IT ; 16-S-221 IT ; 16-S-1621 TD IT ; 16-S-1821 TD IT ; 16-S-1921 TD IT ; 16-S-2221 TD/TO IT ; 16-S-2321 TD IT ; 16-S-2331 TD IT ; 16-S-2521 TO IT ; 16-S-2721 TO IT ; 16-S-2731 TO IT (Z=14)	1:1	PNEUMATIC
TF4046AMP*	REINFORCED VK4008 + TF4033AMP	16-S251 IT ; 16-S-2720 TO IT (Z=14)	1:1	PNEUMATIC

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF4047AMP*	REINFORCED VK4009 + TF4033AMP	16-S-150 IT ; (trilobe)	1:1	PNEUMATIC
TF4048AMP*	REINFORCED VK4015 + TF4033AMP	5-90 GP ; 5-92 GP ; 4-120 GP	1:1	PNEUMATIC
TF4049AMP*	REINFORCED VK4016 + TF4033AMP	5-110 GPA	1:1	PNEUMATIC
TF4050AMP*	REINFORCED VK4017 + TF4033AMP	5-110 GP ; 5-111 GP ; 4-150 GP	1:1	PNEUMATIC
TF4051AMP*	REINFORCED VK4018 + TF4033AMP	9-S-75/13,16 ; 9-S-75/9,56	1:1	PNEUMATIC
TF4052AMP*	REINFORCED VK4019 + TF4033AMP	9-S-109/10,25 ; 9-S-109/10,24 ; 16-S-109/11,86 ; 16-S-109/13,53	1:1	PNEUMATIC
TF4053AMP*	REINFORCED VK4020 + TF4033AMP	9-S-109/12,92 ; 16-S-109/13,04 ; 16-S-109/13,30 ; 16-S-109/13,42 ; 8-S-109	1:1	PNEUMATIC
TF4054AMP*	REINFORCED VK4021 + TF4033AMP	9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9-S-1110 TO/9,48 ; 9-S-1310 TO/9,48	1:1	PNEUMATIC
TF4055AMP*	REINFORCED VK4022 + TF4033AMP	12-AS-1800 ; 12-AS-2301 ; 16-AS-2200 ; 12-AS-2601 ; 12-AS-1630 TD ; 12-AS-1930 TD/TO ; 12-AS-2130 TD/TO ; 12-AS-2131 TD ; 12-AS-2140 TD ; 12-AS-2340 TD ; 12-AS-2430 TD ; 12-AS-2540 TD/TO ; 12-AS-2330 TO ; 12-AS-2530 TO ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD/OD ; 16-AS-2630 TO	1:1	PNEUMATIC
TF4056AMP*	REINFORCED VK4023 + TF4033AMP	12-AS-1800 IT ; 12-AS-1631 TD IT ; 12-AS-1931 TD/TO IT ; 12-AS-2131 TD/TO IT ; 12-AS-2141 TD IT ; 12-AS-2301 TD/TO IT ; 12-AS-2341 TD IT ; 12-AS-2431 TD IT ; 12-AS-2331 TO IT ; 12-AS-2531 TO IT ; 12-AS-2541 TO IT ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD/OD ; 16-AS-2630 TO	1:1	PNEUMATIC
TF4057AMP*	REINFORCED VK4001 + TF4034AMP	8-S-151 ; 12-S-2100 ; 12-S-2300 ; 12-S-2800 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO ; 16-S-1920 TD ; 16-S-2220 TO/TD ; 16-S-2520 TO ; 8-S-1620 TD ; 8-S-1820 TO ; 8-S-220 TO ; 16-S-2320 TD ; 16-S-2330 TD ; 16-S-2720 TO ; 16-S-2720 TO (Z=14) ; 16-S-1650 (NEW)	1:1,73	PNEUMATIC
TF4058AMP*	REINFORCED VK4002 + TF4034AMP	16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1650 ; (trilobe) ; 16-S-1650 (OLD)	1:1,73	PNEUMATIC
TF4059AMP*	REINFORCED VK4005 + TF4034AMP	16-K-130 ; 16-S-112 ; 16-S-150 ; (trilobe)	1:1,73	PNEUMATIC
TF4060AMP*	REINFORCED VK4006 + TF4034AMP	16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A ; (trilobe)	1:1,73	PNEUMATIC
TF4061AMP*	REINFORCED VK4007 + TF4034AMP	16-S-151 IT ; 16-S-181 IT ; 16-S-221 IT ; 16-S-1621 TD IT ; 16-S-1821 TO IT ; 16-S-1921 TD IT ; 16-S-2221 TD/TO IT ; 16-S-2321 TD IT ; 16-S-2331 TD IT ; 16-S-2521 TO IT ; 16-S-2721 TO IT ; 16-S-2731 TO IT (Z=14)	1:1,73	PNEUMATIC
TF4062AMP*	REINFORCED VK4008 + TF4034AMP	16-S-251 IT ; 16-S-2720 TO IT (Z=14)	1:1,73	PNEUMATIC
TF4063AMP*	REINFORCED VK4009 + TF4034AMP	16-S-150 IT ; (trilobe)	1:1,73	PNEUMATIC
TF4064AMP*	REINFORCED VK4015 + TF4034AMP	5-90 GP ; 5-92 GP ; 4-120 GP	1:1,73	PNEUMATIC
TF4065AMP*	REINFORCED VK4016 + TF4034AMP	5-110 GPA	1:1,73	PNEUMATIC
TF4066AMP*	REINFORCED VK4017 + TF4034AMP	5-110 GP ; 5-111 GP ; 4-150 GP	1:1,73	PNEUMATIC
TF4067AMP*	REINFORCED VK4018 + TF4034AMP	9-S-75/13,16 ; 9-S-75/9,56	1:1,73	PNEUMATIC
TF4068AMP*	REINFORCED VK4019 + TF4034AMP	9-S-109/10,25 ; 9-S-109/10,24 ; 16-S-109/11,86 ; 16-S-109/13,53	1:1,73	PNEUMATIC
TF4069AMP*	REINFORCED VK4020 + TF4034AMP	9-S-109/12,92 ; 16-S-109/13,04 ; 16-S-109/13,30 ; 16-S-109/13,42 ; 8-S-109	1:1,73	PNEUMATIC
TF4070AMP*	VK4021 + TF4034AMP	9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9-S-1110 TO/9,48 ; 9-S-1310 TO/9,48	1:1,73	PNEUMATIC
TF4071AMP*	REINFORCED VK4022 + TF4034AMP	12-AS-1800 ; 12-AS-2301 ; 16-AS-2200 ; 12-AS-2601 ; 12-AS-1630 TD ; 12-AS-1930 TD/ TO ; 12-AS-2130 TD/TO ; 12-AS-2131 TD ; 12-AS-2140 TD ; 12-AS-2340 TD ; 12-AS-2430 TD ; 12-AS-2540 TD/TO ; 12-AS-2330 TO ; 12-AS-2530 TO ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD/OD ; 16-AS-2630 TO	1:1,73	PNEUMATIC
TF4072AMP*	REINFORCED VK4023 + TF4034AMP	12-AS-1800 IT ; 12-AS-1631 TD IT ; 12-AS-1931 TD/TO IT ; 12-AS-2131 TD/TO IT ; 12-AS-2141 TD IT ; 12-AS-2301 TD/TO IT ; 12-AS-2141 TD IT ; 12-AS-2331 TO IT ; 12-AS-2531 TO IT ; 12-AS-251 TO IT ; 12-AS-2741 TO IT ; 12-AS-2941 TO IT ; 16-AS-2200 IT ; 16-AS-2231 TD IT ; 16-AS-2601 TD/TO IT ; 16-AS-2631 TO IT	1:1,73	PNEUMATIC

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF4073AMP*	VK4001 + TF4035AMP	8-S-151 ; 12-S-2100 ; 12-S-2300 ; 12-S-2800 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO ; 16-S-1920 TD ; 16-S-2220 TO/TD ; 16-S-2520 TO ; 8-S-1620 TD ; 8-S-1820 TO ; 8-S-220 TO ; 16-S-2320 TD ; 16-S-2330 TD ; 16-S-2720 TO ; 16-S-2720 TO (Z=14) ; 16-S-1650 (NEW)	1:1,56	PNEUMATIC
TF4074AMP*	REINFORCED VK4002 + TF4035AMP	16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1650 ; (trilobe) ; 16-S-1650 (OLD)	1:1,56	PNEUMATIC
TF4075AMP*	REINFORCED VK4005 + TF4035AMP	16-K-130 ; 16-S-112 ; 16-S-150 ; (trilobe)	1:1,56	PNEUMATIC
TF4076AMP*	REINFORCED VK4006 + TF4035AMP	16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A ; (trilobe)	1:1,56	PNEUMATIC
TF4077AMP*	REINFORCED VK4007 + TF4035AMP	16-S-151 IT ; 16-S-181 IT ; 16-S-221 IT ; 16-S-1621 TD IT ; 16-S-1821 TO IT ; 16-S-1921 TD IT ; 16-S-2221 TD/TO IT ; 16-S-2321 TD IT ; 16-S-2331 TD IT ; 16-S-2521 TO IT ; 16-S-2721 TO IT ; 16-S-2731 TO IT (Z=14)	1:1,56	PNEUMATIC
TF4078AMP*	REINFORCED VK4008 + TF4035AMP	16-S251 IT ; 16-S-2720 TO IT (Z=14)	1:1,56	PNEUMATIC
TF4079AMP*	REINFORCED VK4009 + TF4035AMP	16-S-150 IT ; (trilobe)	1:1,56	PNEUMATIC
TF4080AMP*	REINFORCED VK4015 + TF4035AMP	5-90 GP ; 5-92 GP ; 4-120 GP	1:1,56	PNEUMATIC
TF4081AMP*	REINFORCED VK4016 + TF4035AMP	5-110 GPA	1:1,56	PNEUMATIC
TF4082AMP*	REINFORCED VK4017 + TF4035AMP	5-110 GP ; 5-111 GP ; 4-150 GP	1:1,56	PNEUMATIC
TF4083AMP*	REINFORCED VK4018 + TF4035AMP	9-S-75/13,16 ; 9-S-75/9,56	1:1,56	PNEUMATIC
TF4084AMP*	REINFORCED VK4019 + TF4035AMP	9-S-109/10,25 ; 9-S-109/10,24 ; 16-S-109/11,86 ; 16-S-109/13,53	1:1,56	PNEUMATIC
TF4085AMP*	REINFORCED VK4020 + TF4035AMP	9-S-109/12,92 ; 16-S-109/13,04 ; 16-S-109/13,30 ; 16-S-109/13,42 ; 8-S-109	1:1,56	PNEUMATIC
TF4086AMP*	REINFORCED VK4021 + TF4035AMP	9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9-S-1110 TO/9,48 ; 9-S-1310 TO/9,48	1:1,56	PNEUMATIC
TF4087AMP*	REINFORCED VK4022 + TF4035AMP	12-AS-1800 ; 12-AS-2301 ; 16-AS-2200 ; 12-AS-2601 ; 12-AS-1630 TD ; 12-AS-1930 TD/TO ; 12-AS-2130 TD/TO ; 12-AS-2131 TD ; 12-AS-2140 TD ; 12-AS-2340 TD ; 12-AS-2430 TD ; 12-AS-2540 TD/TO ; 12-AS-2330 TO ; 12-AS-2530 TO ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD/OD ; 16-AS-2630 TO	1:1,56	PNEUMATIC
TF4088AMP*	REINFORCED VK4023 + TF4035AMP	12-AS-1800 IT ; 12-AS-1631 TD IT ; 12-AS-1931 TD/TO IT ; 12-AS-2131 TD/TO IT ; 12-AS-2141 TD IT ; 12-AS-2301 TD/TO IT ; 12-AS-2341 TD IT ; 12-AS-2431 TD IT ; 12-AS-2331 TO IT ; 12-AS-2531 TO IT ; 12-AS-2541 TO IT ; 12-AS-2741 TO IT ; 12-AS-2941 TO IT ; 16-AS-2200 IT ; 16-AS-2231 TD IT ; 16-AS-2601 TD/TO IT ; 16-AS-2631 TO IT	1:1,56	PNEUMATIC
TF4089AMP*	REINFORCED VK4001 + TF4036AMP	8-S-151 ; 12-S-2100 ; 12-S-2300 ; 12-S-2800 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO ; 16-S-1920 TD ; 16-S-2220 TO/TD ; 16-S-2520 TO ; 8-S-1620 TD ; 8-S-1820 TO ; 8-S-220 TO ; 16-S-2320 TD ; 16-S-2330 TD ; 16-S-2720 TO ; 16-S-2730 TO (Z=14)	1:1,35	PNEUMATIC
TF4090AMP*	REINFORCED VK4002 + TF4036AMP	16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1650 ; (trilobe)	1:1,35	PNEUMATIC
TF4091AMP*	REINFORCED VK4005 + TF4036AMP	16-K-130 ; 16-S-112 ; 16-S-150 ; (trilobe)	1:1,35	PNEUMATIC
TF4092AMP*	REINFORCED VK4006 + TF4036AMP	16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A ; (trilobe)	1:1,35	PNEUMATIC
TF4093AMP*	REINFORCED VK4007 + TF4036AMP	16-S-151 IT ; 16-S-181 IT ; 16-S-221 IT ; 16-S-1621 TD IT ; 16-S-1821 TD IT ; 16-S-1921 TD IT ; 16-S-2221 TD/TO IT ; 16-S-2321 TD IT ; 16-S-2331 TD IT ; 16-S-2521 TO IT ; 16-S-2721 TO IT ; 16-S-2731 TO IT (Z=14)	1:1,35	PNEUMATIC
TF4094AMP*	REINFORCED VK4008 + TF4036AMP	16-S251 IT ; 16-S-2720 TO IT (Z=14)	1:1,35	PNEUMATIC
TF4095AMP*	REINFORCED VK4009 + TF4036AMP	16-S-150 IT ; (trilobe)	1:1,35	PNEUMATIC
TF4096AMP*	REINFORCED VK4015 + TF4036AMP	5-90 GP ; 5-92 GP ; 4-120 GP	1:1,35	PNEUMATIC
TF4097AMP*	REINFORCED VK4016 + TF4036AMP	5-110 GPA	1:1,35	PNEUMATIC
TF4098AMP*	REINFORCED VK4017 + TF4036AMP	5-110 GP ; 5-111 GP ; 4-150 GP	1:1,35	PNEUMATIC
TF4099AMP*	REINFORCED VK4018 + TF4036AMP	9-S-75/13,16 ; 9-S-75/9,56	1:1,35	PNEUMATIC

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF4100AMP*	REINFORCED VK4019 + TF4036AMP	9-S-109/10,25 ; 9-S-109/10,24 ; 16-S-109/11,86 ; 16-S-109/13,53	1:1,35	PNEUMATIC
TF4101AMP*	REINFORCED VK4020 + TF4036AMP	9-S-109/12,92 ; 16-S-109/13,04 ; 16-S-109/13,30 ; 16-S-109/13,42 ; 8-S-109	1:1,35	PNEUMATIC
TF4102AMP*	REINFORCED VK4021 + TF4036AMP	9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9-S-1110 TO/9,48 ; 9-S-1310 TO/9,48	1:1,35	PNEUMATIC
TF4103AMP*	REINFORCED VK4022 + TF4036AMP	12-AS-1800 ; 12-AS-2301 ; 16-AS-2200 ; 12-AS-2601 ; 12-AS-1630 TD ; 12-AS-1930 TD/TO ; 12-AS-2130 TD/TO ; 12-AS-2131 TD ; 12-AS-2140 TD ; 12-AS-2340 TD ; 12-AS-2430 TD ; 12-AS-2540 TD/TO ; 12-AS-2330 TO ; 12-AS-2530 TO ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD/OD ; 16-AS-2630 TO	1:1,35	PNEUMATIC
TF4104AMP*	REINFORCED VK4023 + TF4036AMP	12-AS-1800 IT ; 12-AS-1631 TD IT ; 12-AS-1931 TD/TO IT ; 12-AS-2131 TD/TO IT ; 12-AS-2141 TD IT ; 12-AS-2301 TD/TO IT ; 12-AS-2141 TD IT ; 12-AS-2331 TO IT ; 12-AS-2531 TO IT ; 12-AS-251 TO IT ; 12-AS-2741 TO IT ; 12-AS-2941 TO IT ; 16-AS-2200 IT ; 16-AS-2231 TD IT ; 16-AS-2601 TD/TO IT ; 16-AS-2631 TO IT	1:1,35	PNEUMATIC
TF4105M*	-	6S-420 ; M037S6 (left side assembly)	1:1,39	MECHANIC
TF4105P*	-	6S-420 ; M037S6 (left side assembly)	1:1,39	PNEUMATIC
TF4105V*	-	6S-420 ; M037S6 (left side assembly)	1:1,39	VACUUM
ADAPTER KIT				
VK4001	-	8-S-151 ; 12-S-2100 ; 12-S-2300 ; 12-S-2800 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1620 TD ; 16-S-1820 TO ; 16-S-1920 TD ; 16-S-2220 TO/TD ; 16-S-2520 TO ; 8-S-1620 TD ; 8-S-1820 TO ; 8-S-220 TO ; 16-S-2320 TD ; 16-S-2330 TD ; 16-S-2720 TO ; 16-S-2720 TO (Z=14) ; 16-S-1650 (NEW)	-	-
VK4002	-	16-S-130 ; 16-S-160 ; 16-S-190 ; 16-S-220 ; 16-S-112/17,28 ; 8-S-151 ; 16-S-151 ; 16-S-181 ; 16-S-221 ; 16-S-1650 ; (trilobe) ; 16-S-1650 (OLD)	-	-
VK4005	-	16-K-130 ; 16-S-112 ; 16-S-150 ; (trilobe)	-	-
VK4006	-	16-S-112 A ; 16-S-130 A ; 16-S-160 A ; 16-S-190 A ; 16-S-220 A ; (trilobe)	-	-
VK4007	-	16-S-151 IT ; 16-S-181 IT ; 16-S-221 IT ; 16-S-1621 TD IT ; 16-S-1821 TO IT ; 16-S-1921 TD IT ; 16-S-2221 TD/TO IT ; 16-S-2321 TD IT ; 16-S-2331 TD IT ; 16-S-2521 TO IT ; 16-S-2721 TO IT ; 16-S-2731 TO IT ; (Z=14)	-	-
VK4008	-	16-S-251 IT ; 16-S-2720 TO IT ; (Z=14)	-	-
VK4009	-	16-S-150 IT ; (trilobe)	-	-
VK4015	-	5 - 90 GP ; 5 - 92 GP ; 4 - 120 GP	-	-
VK4016	-	5 - 110 GPA	-	-
VK4017	-	5 - 110 GP ; 5 - 111 GP ; 4 - 150 GP	-	-
VK4018	-	9-S-75/13,16 ; 9-S-75/9,56	-	-
VK4019	-	9-S-109/10,25 ; 9-S-109/10,24 ; 16-S-109/11,86 ; 16-S-109/13,53	-	-
VK4020	-	9-S-109/12,92 ; 16-S-109/13,04 ; 16-S-109/13,30 ; 16-S-109/13,42 ; 8-S-109	-	-
VK4021	-	9-S-109/12,91 ; 16-S-109/13,31 ; 16-S-109/13,41 ; 9-S-1110 TO/9,48 ; 9-S-1310 TO/9,48	-	-
VK4022	-	12-AS-1600 ; 12-AS-2301 ; 16-AS-2200 ; 16-AS-2601 ; 12-AS-1630 TD ; 12-AS-1930 TD/TO ; 12-AS-2130 TD/TO ; 12-AS-2131 TD ; 12-AS-2140 TD ; 12-AS-2340 TD ; 12-AS-2430 TD ; 12-AS-2540 TD ; 12-AS-2330 TO ; 12-AS-2530 TO ; 12-AS-2540 TO ; 12-AS-2740 TO ; 12-AS-2940 TO ; 16-AS-2230 TD ; 16-AS-2601 DD/OD ; 16-AS-2630 TO	-	-
VK4023	-	12-AS-1800 IT ; 12-AS-1631 TD IT ; 12-AS-1931 TD/TO IT ; 12-AS-2131 TD/TO IT ; 12-AS-211 TD IT ; 12-AS-2301 TD/TO IT ; 12-AS-2341 TD IT ; 12-AS-2431 TD IT ; 12-AS-2331 TO IT ; 12-AS-2531 TO IT ; 12-AS-2541 TO IT ; 12-AS-2741 TO IT ; 12-AS-2941 TO IT ; 16-AS-2200 IT ; 16-AS-2231 TD IT ; 16-AS-2601 TD/TO IT ; 16-AS-2631 TO IT	-	-

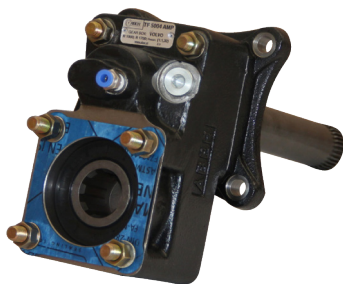
POWER TAKE OFF'S ZF (TWIN OUTPUT)



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF4201AMP		S5-50 ; S5-90 ; S6-65 ; S6-66 ; S6-70 ; S6-75 ; S6-80 ; S6-90 ; 6S-800 ; 6S-1000 ; 6AS-1000	1:1,56	PNEUMATIC

NOTE: Different ratio combinations can be made for different Gearboxes (Mercedes, Volvo, etc.)

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF



POWER TAKE OFF'S AND ADAPTER KIT'S VOLVO

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF5001AMP*	-	R50 ; R51 ; R52 ; SR52	1:1,32	PNEUMATIC
TF5001SP*	-	R50 ; R51 ; R52 ; SR52	1:1	PNEUMATIC
TF5002AMP*	-	R61 ; MR61 ; SR61 ; R62 ; MR62 ; SR62 ; R60	1:1,32	PNEUMATIC
TF5002SP*	-	R61 ; MR61 ; SR61 ; R62 ; MR62 ; SR62 ; R60	1:1	PNEUMATIC
TF5003AMP*	VK5003 + TF4002AMP	R70 ; SR70 ; SR71	1:1,32	PNEUMATIC
TF5003SP*	VK5003 + TF4002SP	R70 ; SR70 ; SR71	1:1	PNEUMATIC
TF5004AMP*	VK5004 + TF4002AMP	R1000 ; SR1000 ; R1400 ; R1700 ; SR1400 ; SR1700 ; SR1900 ; SR2000 ; SR2400 ; SRO2400 ; VT1708 ; VT2009B ; VT2014B ; VT2214 ; VT2412B ; VT2514B ; VTO2214B ; VTO2514B ; VT2814B ; VTO2814B	1:1,32	PNEUMATIC
TF5004SP*	VK5004 + TF4002SP	R1000 ; SR1000 ; R1400 ; R1700 ; SR1400 ; SR1700 ; SR1900 ; SR2000 ; SR2400 ; SRO2400 ; VT1708 ; VT2009B ; VT2014B ; VT2214 ; VT2412B ; VT2514B ; VTO2214B ; VTO2514B ; VT2814B ; VTO2814B	1:1	PNEUMATIC
TF5005AMP*	VK5005 + TF4002AMP	R1000 IT ; SR1000 IT ; R1400 IT ; R1700 IT ; SR1400 IT ; SR1700 IT ; SR1900 IT ; SR2000 IT ; SR2400 IT ; SRO2400 IT ; VT1708 IT ; VT2009B IT ; VT2014B IT ; VT2214 IT ; VT2412B IT ; VT2514B IT ; VTO2214B IT ; VTO2514B IT ; VT2814B IT ; VTO2814B IT	1:1,32	PNEUMATIC
TF5005SP*	VK5005 + TF4002SP	R1000 IT ; SR1000 IT ; R1400 IT ; R1700 IT ; SR1400 IT ; SR1700 IT ; SR1900 IT ; SR2000 IT ; SR2400 IT ; SRO2400 IT ; VT1708 IT ; VT2009B IT ; VT2014B IT ; VT2214 IT ; VT2412B IT ; VT2514B IT ; VTO2214B IT ; VTO2514B IT ; VT2814B IT ; VTO2814B IT	1:1	PNEUMATIC
TF5006AMP*	REINFORCED VK5004 + TF4033AMP	R1000 SR1000 ; R1400 ; R1700 ; SR1400 ; SR1700 ; SR1900 ; SR2000 ; SR2400 ; SRO2400 ; VT1708 ; VT2009B ; VT2014B ; VT2214 ; VT2412B ; VT2514B ; VTO2214B ; VTO2514B ; VT2814B ; VTO2814B	1:1	PNEUMATIC
TF5007AMP*	REINFORCED VK5005 + TF4033AMP	R1000IT ; SR1000 IT ; R1400 IT ; R1700 IT ; SR1400 IT ; SR1700 IT ; SR1900IT ; SR2000 IT ; SR2400 IT ; SRO2400 IT ; VT1708 IT ; VT2009B IT ; VT2014B IT ; VT2214 IT ; VT2412B IT ; VT2514B IT ; VTO2214B IT ; VTO2514B IT ; VT2814B IT ; VTO2814B IT	1:1	PNEUMATIC
TF5008AMP*	REINFORCED VK5004 + TF4034AMP	R1000 SR1000 ; R1400 ; R1700 ; SR1400 ; SR1700 ; SR1900 ; SR2000 ; SR2400 ; SRO2400 ; VT1708 ; VT2009B ; VT2014B ; VT2214 ; VT2412B ; VT2514B ; VTO2214B ; VTO2514B ; VT2814B ; VTO2814B	1:1,73	PNEUMATIC
TF5009AMP*	REINFORCED VK5005 + TF4034AMP	R1000 IT ; SR1000 IT ; R1400 IT ; R1700 IT ; SR1400 IT ; SR1700 IT ; SR1900 IT ; SR2000 IT ; SR2400 IT ; SRO2400 IT ; VT1708 IT ; VT2009B IT ; VT2014B IT ; VT2214 IT ; VT 2412B IT ; VT2514B IT ; VTO2214B IT ; VTO2514B IT ; VT2814B IT ; VTO2814B IT	1:1,73	PNEUMATIC
TF5010AMP*	REINFORCED VK5004 + TF4035AMP	R1000 ; SR1000 ; R1400 ; R1700 ; SR1400 ; SR1700 ; SR9100 ; SR2000 ; SR2400 ; SRO2400 ; VT1708 ; VT2009B ; VT2014B ; VT2214 ; VT2412B ; VT2514B ; VTO2214B ; VTO2514B ; VT2814B ; VTO2814B	1:1,56	PNEUMATIC
TF5011AMP*	REINFORCED VK5005 + TF4035AMP	R1000 IT ; SR1000 IT ; R1400 IT ; R1700 IT ; SR1400 IT ; SR1700 IT ; SR1900 IT ; SR2000 IT ; SR2400 IT ; SRO2400 IT ; VT1708 IT ; VT2009B IT ; VT2014B IT ; VT2214 IT ; VT2412B IT ; VT2514B IT ; VTO2214B IT ; VTO2514B IT ; VT2814B IT ; VTO2814B IT	1:1,56	PNEUMATIC
TF5012AMP*	REINFORCED VK5004 + TF4036AMP	R1000 ; SR1000 ; R1400 ; R1700 ; SR1400 ; SR1700 ; SR1900 ; SR2000 ; SR2400 ; SRO2400 ; VT1708 ; VT2009B ; VT2014B ; VT2214 ; VT2412B ; VT2514B ; VTO2214B ; VTO2514B ; VT2814B ; VTO2814B	1:1,35	PNEUMATIC
TF5013AMP*	REINFORCED VK5005 + TF4036AMP	R1000 IT ; SR1000 IT ; R1400 IT ; R1700 IT ; SR1400 IT ; SR1700 IT ; SR1900 IT ; SR2000 IT ; SR2400 IT ; SRO2400 IT ; VT1708 IT ; VT2009B IT ; VT2014B IT ; VT2214 IT ; VT2412B IT ; VT2514B IT ; VTO2214B IT ; VTO2514B IT ; VT2814B IT ; VTO2814B IT	1:1,35	PNEUMATIC
TF5015AMP*	VK5006 + TF4002AMP	AT2412C ; AT2412AT ; AT2512C ; AT2514 ; AT2515C ; AT2612D ; AT2812C ; ATO2512C ; ATO3112C ; TMD12AD/AO (MACK)	1:1,32	PNEUMATIC
TF5015SP*	VK5006 + TF4002SP	AT2412C ; AT2412AT ; AT2512C ; AT2514 ; AT2515C ; AT2612D ; AT2812C ; ATO2512C ; ATO3112C ; TMD12AD/AO (MACK)	1:1	PNEUMATIC
TF5016AMP*	REINFORCED VK5006 + TF4033AMP	AT2412C ; AT2412AT ; AT2512C ; AT2514 ; AT2515C ; AT2612D ; AT2812C ; ATO2512C ; ATO3112C ; TMD12AD/AO (MACK)	1:1	PNEUMATIC

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

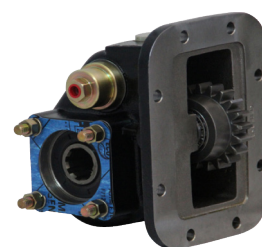
REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF5017AMP*	REINFORCED VK5006 + TF4034AMP	AT2412C ; AT2412AT ; AT2512C ; AT2514 ; AT2515C ; AT2612D ; AT2812C ; ATO2512C ; ATO3112C ; TMD12AD/AO (MACK)	1:1,73	PNEUMATIC
TF5018AMP*	REINFORCED VK5006 + TF4035AMP	AT2412C ; AT2412AT ; AT2512C ; AT2514 ; AT2515C ; AT2612D ; AT2812C ; ATO2512C ; ATO3112C ; TMD12AD/AO (MACK)	1:1,56	PNEUMATIC
TF5019AMP*	REINFORCED VK5006 + TF4036AMP	AT2412C ; AT2412AT ; AT2512C ; AT2514 ; AT2515C ; AT2612D ; AT2812C ; ATO2512C ; ATO3112C ; TMD12AD/AO (MACK)	1:1,35	PNEUMATIC
ADAPTER KIT				
VK5003	-	R70 ; SR70 ; SR71	-	-
VK5004	-	R1000 ; SR1000 ; R1400 ; R1700 ; SR1400 ; SR1700 ; SR1900 ; SR2000 ; SR2400 ; SR02400 ; VT1708 ; VT2009B ; VT2014B ; VT2214 ; VT2412B ; VT2514B ; VTO2214B ; VTO2514B ; VT 2814B ; VTO2814B	-	-
VK5005	-	R1000 IT ; SR1000 IT ; R1400 IT ; R1700 IT ; SR1400 IT ; SR 700 IT ; SR1900 IT ; SR2000 IT ; SR2400 IT ; SR02400 IT ; VT1708 IT ; VT2009B IT ; VT2014B IT ; VT2214 IT ; VT2412B IT ; VT2514B IT ; VTO2214B IT ; VTO2514B IT ; VT2814B IT ; VTO2814B IT	-	-
VK5006	-	AT2412C ; AT2412AT ; AT2512C ; AT2514 ; AT2515C ; AT2612D ; AT2812C ; ATO2512C ; ATO3112C ; TMD12AD/AO (MACK)	-	-

POWER TAKE OFF'S MAN | VW



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF6001AMP*	-	007.1	1:1,32	PNEUMATIC
TF6001SP*	-	007.1	1:1	PNEUMATIC

POWER TAKE OFF'S AND ADAPTER KIT'S EATON/FULLER



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF7001AMP*	-	FS4106 ; FSO4106 ; FS5206 ; FSO5206 ; FS6106	1:1,32	PNEUMATIC
TF7001SP*	-	FS4106 ; FSO4106 ; FS5206 ; FSO5206 ; FS6106	1:1	PNEUMATIC
TF7002AMP*	VK7002 + TF4002AMP	FS5109 ; FSO5109 ; FS6109 ; FSO6109 ; FS6309 ; FSO6309 ; FS8209 ; FSO8209 ; FS8309 ; FSO8309 ; FS1109	1:1,32	PNEUMATIC
TF7002SP*	VK7002 + TF4002SP	FS5109 ; FSO5109 ; FS6109 ; FSO6109 ; FS6309 ; FSO6309 ; FS8209 ; FSO8209 ; FS8309 ; FSO8309 ; FS1109	1:1	PNEUMATIC
TF7003AMP*	-	RTS12316 ; RTS14316 ; RTS17316 ; RTS012316A ; RTS014316A ; RTS017316A	1:1,32	PNEUMATIC
TF7003SP*	-	RTS12316 ; RTS14316 ; RTS17316 ; RTS012316A ; RTS014316A ; RTS017316A	1:1	PNEUMATIC
TF7004AMP*	-	RTS12316 IT ; RTS14316 IT ; RTS17316 IT ; RTS012316A IT ; RTS014316A IT ; RTS017316A IT	1:1,32	PNEUMATIC

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF7004SP*	-	RTS12316 IT ; RTS14316 IT ; RTS17316 IT ; RTS012316A IT ; RTS014316A IT ; RTS017316A IT	1:1	PNEUMATIC
TF7007P*	-	SERIES FULLER RT ; RTO ; RTOO ; RTX ; RTF ; (Bottom ; 8 Bolts)	1:0,71	PNEUMATIC
TF7008M*	-	6109DT/OD ; 8209 ; 8309 ; ES11109	1:1,28	MECHANIC
TF7008P*	-	6109DT/OD ; 8209 ; 8309 ; ES11109	1:1,28	PNEUMATIC
TF7008V*	-	6109DT/OD ; 8209 ; 8309 ; ES11109	1:1,28	VACUUM
TF7009AMP*	REINFORCED VK7002 + TF4033AMP	FS5109 ; FS05109 ; FS6109 ; FS06109 ; FS6309 ; FS06309 ; FS8209 ; FS08209 ; FS8309 ; FS08309	1:1	PNEUMATIC
TF7010AMP*	REINFORCED VK7002 + TF4034AMP	FS5109 ; FS05109 ; FS6109 ; FS06109 ; FS6309 ; FS06309 ; FS8209 ; FS08209 ; FS8309 ; FS08309	1:1,73	PNEUMATIC
TF70011AMP*	REINFORCED VK7002 + TF4035AMP	FS5109 ; FS05109 ; FS6109 ; FS06109 ; FS6309 ; FS06309 ; FS8209 ; FS08209 ; FS8309 ; FS08309	1:1,56	PNEUMATIC
TF7012AMP*	REINFORCED VK7002 + TF4036AMP	FS5109 ; FS05109 ; FS6109 ; FS06109 ; FS6309 ; FS06309 ; FS8209 ; FS08209 ; FS8309 ; FS08309	1:1,35	PNEUMATIC
TF7016P	UNI SERIES	FS-6306A ; FS-5306A	1:0,90	PNEUMATIC
ADAPTER KIT				
VK7001	-	FS4106 ; FS04106 ; FS5206 ; FS05206 ; FS6106	-	-
VK7002	-	FS5109 ; FS05109 ; FS6109 ; FS06109 ; FS6309 ; FS06309 ; FS8209 ; FS08209 ; FS8309 ; FS08309 ; FS1109	-	-



POWER TAKE OFF'S AND ADAPTER KIT'S MERCEDES

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF8001AMP*	-	G3/36 ; G3/40 ; G3/45 ; G3/50 ; G3/55 ; G3/60 ; G3/61	1:1,32	PNEUMATIC
TF8001SP*	-	G3/36 ; G3/40 ; G3/45 ; G3/50 ; G3/55 ; G3/60 ; G3/61	1:1	PNEUMATIC
TF8005AMP*	VK8005 + TF4002AMP	G210 ; G211 ; G221 ; G240 ; G248 ; G260 ; G280 ; G281 ; G131-9 ; G231-16 ; G241-16 ; G330 (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,32	PNEUMATIC
TF8005SP*	VK8005 + TF4002SP	G210 ; G211 ; G221 ; G240 ; G248 ; G260 ; G280 ; G281 ; G131-9 ; G231-16 ; G241-16 ; G330 (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1	PNEUMATIC
TF8007AMP*	-	G4/65 ; G4/95 ; G4/110	1:1,32	PNEUMATIC
TF8007SP*	-	G4/65 ; G4/95 ; G4/110	1:1	PNEUMATIC
TF8009AMP*	-	G-60 ; G-85 ; G-90	1:1,32	PNEUMATIC
TF8009SP*	-	G-60 ; G-85 ; G-90	1:1	PNEUMATIC
TF8010AMP*	VK8010 + TF4002AMP	G210 IT ; G211 IT ; G221 IT ; G240 IT ; G248 IT ; G260 IT ; G280 IT ; G281 IT ; G131-91T ; G231-16 IT ; G241-16 IT ; G330 IT ; (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,32	PNEUMATIC
TF8010SP*	VK8010 + TF4002SP	G210 IT ; G211 IT ; G221 IT ; G240 IT ; G248 IT ; G260 IT ; G280 IT ; G281 IT ; G131-91T ; G231-16 IT ; G241-16 IT ; G330 IT ; (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1	PNEUMATIC
TF8012AMP*	-	G56-6/6,29-0,78	1:1,32	PNEUMATIC
TF8013AMP*	REINFORCED VK8005 + TF4033AMP	G210 ; G211 ; G221 ; G240 ; G248 ; G260 ; G280 ; G281 ; G131-9 ; G231-16 ; G241-16 ; G330 (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1	PNEUMATIC

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF8014AMP*	REINFORCED VK8005 + TF4034AMP	G210 ; G211 ; G221 ; G240 ; G248 ; G260 ; G280 ; G281 ; G131-9 ; G231-16 ; G241-16 ; G330 (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,73	PNEUMATIC
TF8015AMP*	REINFORCED VK8005 + TF4035AMP	G210 ; G211 ; G221 ; G240 ; G248 ; G260 ; G280 ; G281 ; G131-9 ; G231-16 ; G241-16 ; G330 (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,56	PNEUMATIC
TF8016AMP*	REINFORCED VK8005 + TF4036AMP	G210 ; G211 ; G221 ; G240 ; G248 ; G260 ; G280 ; G281 ; G131-9 ; G231-16 ; G241-16 ; G330 (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,35	PNEUMATIC
TF8017AMP*	REINFORCED VK8010 + TF4033AMP	G210 IT ; G211 IT ; G221 IT ; G240 IT ; G248 IT ; G260 IT ; G280 IT ; G281 IT ; G131-91T ; G231-16 IT ; G241-16 IT ; G330 IT ; (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1	PNEUMATIC
TF8018AMP*	REINFORCED VK8010 + TF4034AMP	G210 IT ; G211 IT ; G221 IT ; G240 IT ; G248 IT ; G260 IT ; G280 IT ; G281 IT ; G131-91T ; G231-16 IT ; G241-16 IT ; G330 IT ; (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,73	PNEUMATIC
TF8019AMP*	REINFORCED VK8010 + TF4035AMP	G210 IT ; G211 IT ; G221 IT ; G240 IT ; G248 IT ; G260 IT ; G280 IT ; G281 IT ; G131-91T ; G231-16 IT ; G241-16 IT ; G330 IT ; (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,56	PNEUMATIC
TF8020AMP*	REINFORCED VK8010 + TF4036AMP	G210 IT ; G211 IT ; G221 IT ; G240 IT ; G248 IT ; G260 IT ; G280 IT ; G281 IT ; G131-91T ; G231-16 IT ; G241-16 IT ; G330 IT ; (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	1:1,35	PNEUMATIC
TF8021AMP *	REINFORCED	G-60 ; G-85 ; G-90	1:1,73	PNEUMATIC
TF8022AMP *	REINFORCED	G-60 ; G-85 ; G-90	1:1,35	PNEUMATIC
ADAPTER KIT				
VK8005	-	G210 ; G211 ; G221 ; G240 ; G248 ; G260 ; G131-9 ; G231-16 ; G241-16 ; G330 (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	-	-
VK8010	-	G210 IT ; G211 IT ; G221 IT ; G240 IT ; G248 IT ; G260 IT ; G131-9 IT ; G231-16 IT ; G241-16 IT ; G330 IT (G125 ; G155 ; G180 ; G200 Current flange produced after 1990)	-	-

POWER TAKE OFF'S SCANIA



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF10005P*	-	GR801	1:1,25	PNEUMATIC
TF10007P*	-	GRS890 ; GRS900 ; GRS920 ; GRS-900R ; GRSH-900	1:1,19	PNEUMATIC
TF10009P*	-	GR-900 ; GR900R ; GRH-900	1:1,1	PNEUMATIC
TF10011P*	-	GRS905 700 Nm Shaft 524mm	1:1,1	PNEUMATIC
TF10012P*	-	GRS905 1200 Nm Shaft 524mm	1:1,1	PNEUMATIC
TF10013P*	-	GRS905 700 Nm Shaft 620mm	1:1,1	PNEUMATIC
TF10014P*	-	GRS905 1200 Nm Shaft 620mm	1:1,1	PNEUMATIC
TF10016P*	-	GRSO905 Shaft 620 mm	1:1,1	PNEUMATIC
TF10017P*	SIDE MOUNT	GR875 ; GR905 ; GRS895 ; GRS905	1:1,33 ⁽¹⁾	PNEUMATIC
TF10018P*	SIDE MOUNT	GRSO905	1:2,17 ⁽¹⁾	PNEUMATIC

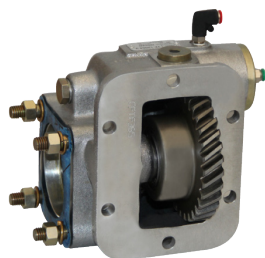
⁽¹⁾ Main output

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF



POWER TAKE OFF'S AND ADAPTER KIT'S IVECO

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF11001P*	-	2845,6 ; 2855,6	1:1,35	PNEUMATIC
TF11002P*	-	2865,6	1:1,35	PNEUMATIC
TF11003P*	VK11003 + TF11002P	2870,9	1:1,35	PNEUMATIC
TF11004P*	VK11004 + TF11002P	2895,9 (after 11/02/1998)	1:1,35	PNEUMATIC
TF11005P*	-	2845,5 ; 2855,5	1:1,35	PNEUMATIC
TF11006P*	VK11006 + TF11002P	2895,9 (before 11/02/1998)	1:1,35	PNEUMATIC
TF4029M*	-	5S-200 ; 5S-270 ; 5S-300 ; 2825.5 ; 2830.5	1:1,65	MECHANIC
TF4029P*	-	5S-200 ; 5S-270 ; 5S-300 ; 2825.5 ; 2830.5	1:1,65	PNEUMATIC
TF4029V*	-	5S-200 ; 5S-270 ; 5S-300 ; 2825.5 ; 2830.5	1:1,65	VACUUM
TF4032M*	-	6S-380 ; 6AS-380 ; 6S-400 ; 6AS-400 ; 2840.6 (part number 8873021 to 8873022)	1:1,55	MECHANIC
TF4032P*	-	6S-380 ; 6AS-380 ; 6S-400 ; 6AS-400 ; 2840.6 (part number 8873021 to 8873022)	1:1,55	PNEUMATIC
TF4032V*	-	6S-380 ; 6AS-380 ; 6S-400 ; 6AS-400 ; 2840.6 (part number 8873021 to 8873022)	1:1,55	VACUUM
ADAPTER KIT				
VK11003	-	2870,9	-	-
VK11004	-	2895,9 (after 11/02/1998)	-	-
VK11006	-	2895,9 (before 11/02/1998)	-	-



POWER TAKE OFF'S NISSAN

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF12004V*	-	M5-35	1:1,43	VACUUM



POWER TAKE OFF'S RENAULT

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF14003P*	-	B9 ; B18	1:1,56	PNEUMATIC

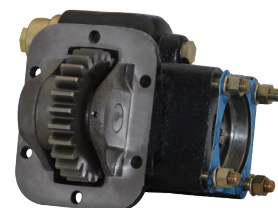
* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

POWER TAKE OFF'S KAMAZ



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF18002P*	-	14 ; 15	1:1,47	PNEUMATIC
TF18001P*	UNI SERIES	14 ; 15	1:1,47	PNEUMATIC
TF18001P2*	UNI SERIES TWO OUTPUTS	14 ; 15	1:1,47	PNEUMATIC

POWER TAKE OFF'S AND ADAPTER KIT'S MAZ



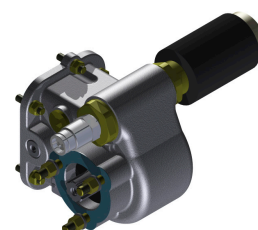
REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF19002P*	-	236	1:1,32	PNEUMATIC
TF19001P*	UNI SERIES	236	1:1,32	PNEUMATIC
ADAPTER KIT				
VK19003	-	236 ; 238	-	-
VK19004	-	239	-	-

POWER TAKE OFF'S SHAANXI



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF22001AMP*	-	9JS ; 10JS	1:1,21	PNEUMATIC
TF22002AMP*	-	12JS ; 16JS	1:1,21	PNEUMATIC

POWER TAKE OFF'S GAZ



REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF23001EUNI*	UNI SERIES	3302	1:1,28	ELECTRIC
TF23001MUNI*	UNI SERIES	3302	1:1,28	MECHANIC
TF23001PUNI*	UNI SERIES	3302	1:1,28	PNEUMATIC
TF23001VUNI*	UNI SERIES	3302	1:1,28	VACUUM

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

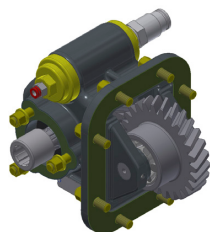
ABER is constantly engaged in improving its products and, therefore, reserves itself the right to modify without any further notice the characteristics shown.



POWER TAKE OFF'S ALLISON

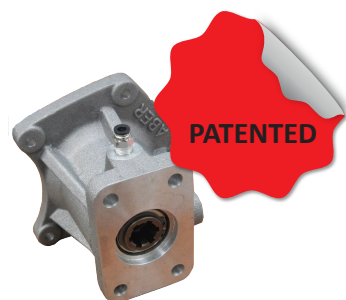
REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF10A74MREN	RIGHT SIDE ASSEMBLY EN OUTPUT - ISO 4 BOLT	10.16P RH	1:0,74	CONSTANT MESH
TF10A74MLEN	LEFT SIDE ASSEMBLY EN OUTPUT - ISO 4 BOLT	10.16P RH	1:0,74	CONSTANT MESH
TF10A74MRB2	RIGHT SIDE ASSEMBLY SAE B OUTPUT - 2 BOLT	10.16P RH	1:0,74	CONSTANT MESH
TF10A74MLB2	LEFT SIDE ASSEMBLY SAE B OUTPUT - 2 BOLT	10.16P RH	1:0,74	CONSTANT MESH
TF10A74MRB4	RIGHT SIDE ASSEMBLY SAE B OUTPUT - 4 BOLT	10.16P RH	1:0,74	CONSTANT MESH
TF10A74MLB4	LEFT SIDE ASSEMBLY SAE B OUTPUT - 4 BOLT	10.16P RH	1:0,74	CONSTANT MESH

NOTE: Different internal ratio combinations can be made



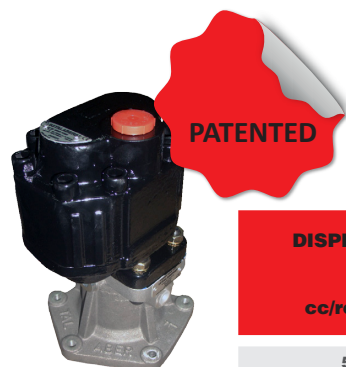
POWER TAKE OFF'S HINO

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF24001PUNI*	UNI SERIES	LF06S/8.190	1:1,53	PNEUMATIC
TF24002PUNI*	UNI SERIES	LJ06S/6.477 ; LJ06S/6.893-0.77 ; LJ06S/8.189	1:1,24	PNEUMATIC
TF24003PUNI*	UNI SERIES	LX06S/6.098-0.761	1:1,5	PNEUMATIC



POWER TAKE OFF'S TATA

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TFTALABERAMP	-	G750	1:1,32	PNEUMATIC
TFTALABERSP	-	G600	1:1	PNEUMATIC



GEAR PUMP TATA

DISPLACEMENT	MAXIMUM OPERATING PRESSURE	MAXIMUM CONTINUOUS ROTATION	AXLE DIN 5462
cc/rot (in³/rot)	bar (psi)	rpm	(8x32x36mm)
57 (3.5)	260 (3800)	2000	B3TALABER57

* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF

POWER TAKE OFF'S ACESSORIES MECHANICAL SWITCH SENSOR



TO ORDER WITH MECHANICAL SWITCH SENSOR YOU MUST "S" TO THE PTO REF. EX: TF4001SPS



TO ORDER WITH MECHANICAL SWITCH WITH SENSOR SOCKET CONNECTOR DIN 72585 YOU MUST ADD "C" TO THE PTO REF. EX: TF4001SPC



CABLE CONNECTOR FOR DIN 72585 MECHANICAL SWITCH SENSOR (REF. CCSEN08)

POWER TAKE OFF'S ACESSORIES ADAPTERS



TO ORDER PTO WITH - UNI (3 HOLES) ADAPTER YOU MUST ORDER PTO REF. + ADAPTER REF.
EX: 4002AMP + ADA4F3F



TO ORDER PTO WITH - UNI (3 HOLES) SHORT ADAPTER YOU MUST ORDER PTO REF. + SHORT ADAPTER REF.
EX: 4002AMP + ADA4F3FC

Illustration



GEARBOXES

ABER range off gearboxes for hydraulic applications such as industrial and agricultural applications with high torque and speed.

**Heavy duty
Compact design
High ratios**

GEARBOXES GB SERIES | HEAVY DUTY GEARBOXES

The ABER gearboxes series are the open response to a market demands to system with a high torque and speed requirements with a high range of flanges and axle for industrial and agricultural applications

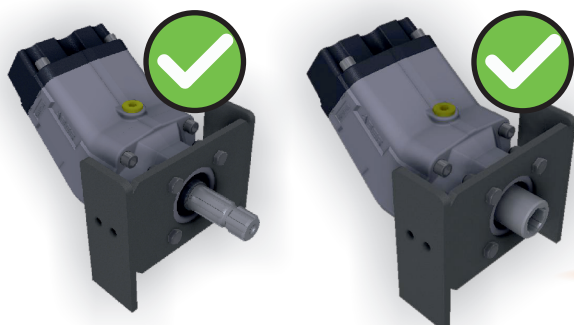
i **NEW GB SERIES**
Heavy duty
Compact design
High ratios
High torques



REFERENCE	INPUT AXLE	OUTPUT AXLE	INTERNAL RATIO	MÁX CONT. TORQUE (N.m)
GBDA25EN	DIN 5462 (A8x32x36) (EN)	DIN 9611 (B6x30x35) (DA)	1:2.5	800
GBDI25EN	DIN 5462 (A8x32x36) (EN)	DIN 9611 (A6x30x35) (DI)	1:2.5	800

Note: Different internal ratios and axle combinations can be made

**NEW
SOLUTION**



BENT AXIS PISTON PUMP



DIRECT MOUNTING

HIGHER PRESSURE

HIGHER RELIABILITY

HIGHER EFFICIENCY

HIGHER DURABILITY

LESS PARTS

HYDRAULIC POWER PACKS & HYDRAULIC UNITS

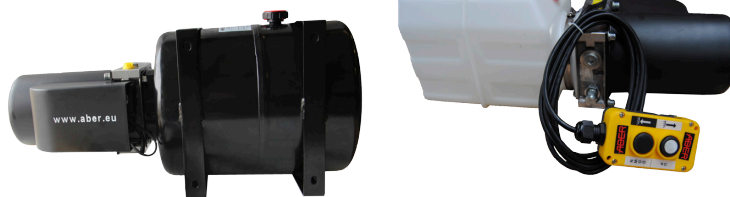
ABER offers a wide range of Hydraulic Power Packs compatible with a lot of vehicle (commercial, truck), suitable to apply in various hydraulic systems.

Our Hydraulic Power Packs and Units can have multiple combinations and configurations to better meet the needs of the system which will be installed.

As we are aware of the market we also have kits for changing a Single Acting Hydraulic Power Pack in to a Double Acting Hydraulic Power Pack and other components.

HYDRAULIC POWER PACKS & HYDRAULIC UNITS

HYDRAULIC POWER PACKS



HOW TO ORDER

C				
ELECTRIC MOTOR		PUMP DISPLACEMENT	TANK	EFFECT
01220	12VDC 2,00kW	20 2,0cc/rot	P06 6,0L Plastic	S Single Acting
02422	24VDC 2,20kW	25 2,5cc/rot	P08 8,0L Plastic	D Double Acting
02430	24VDC 3,00kW	33 3,3cc/rot	P10 10,0L Plastic	D2 2 x Double Acting
22018*	220VAC 1,85kW	37 3,7cc/rot	M08 8,0L Metal	D3 3 x Double Acting
38022*	380VAC 2,20 kW		M12 12,0L Metal	D4 4 x Double Acting
			M18 18,0L Metal	

(*) Protective electric board for hand controller is required (CQE230/CQE400).

EXAMPLE

C 01220 25 M12 S 1

Hydraulic Power Pack ; 12 VDC 2,0 kW ; 2,0 cc/rot ; 6,0L Plastic Tank ; single acting with exterior controller

General combinations available

C0122025M12S1 | C0122025M12D1
C0122020P06S1 | C0122020P06D1
C0242225M12S1 | C0242225M12D1
C0243033M18S1 | C0243033M18D1
C2201837P08S1 | C2201837P08D1

REFERENCE	DESCRIPTION OF KIT TO CHANGE SINGLE ACTING TO DOUBLE ACTING
CKSD12	Kit for 12VDC Hydraulic Power Packs
CKSD24	Kit for 24VDC Hydraulic Power Packs
CKSD220	Kit for 220VAC Hydraulic Power Packs

Example of applications:



REFERENCE	DESCRIPTION OF THE COMPONENTS FOR SINGLE ACTING HYDRAULIC POWER PACKS
CCE01	Exterior Controller
CCE03	Exterior Controller with Emergency Button
CB1	Power Pack Button
CJ1	Power Pack Joystick



REFERENCE	DESCRIPTION OF THE COMPONENTS FOR DOUBLE ACTING HYDRAULIC POWER PACKS
CCE02	Exterior Controller
CDEE01201	Electrovalve 12 VDC
CDEE02401	Electrovalve 24 VDC
CDEE22001	Electrovalve 220 VAC
CCCT008	Aluminum Block
CCCT021	Intermediate Aluminum Block
CCCT015	Plug



HYDRAULIC POWER PACKS & HYDRAULIC UNITS

HYDRAULIC UNITS

This kind of complete hydraulic units is usually projected and assembled according to our costumer hydraulic power demand and with all the functions and accessories requested.

Example:

REFERENCE	VOLTAGE/MORTOR	PUMP DISPLACEMENT	TANK
HCAP01	380VDC 5,5kW	16cc/rot + 12cc/rot	160L

Note: Different configurations can be made



OIL TANKS

THE BEST QUALITY OIL TANKS ON THE MARKET

STANDARD BRACKETS IN STAINLESS STEEL

BAFFLE PLATE

Baffle Plates are used to preserve stability

INNOVATIVE SUPPORTS

Allows Side and Rear Mounting

INNOVATIVE SUCTION LINE

Allows to use oil that is not coming hot from the hydraulic system

MATERIAL 2mm | 2,5mm THICK

PAINTED 2 COATS WITH BLACK FINISH

BREATHER/FILLER WITH INTEGRAL AIR FILTER

SEVERAL MOUNTING OPTIONS

TWO OIL RETURNS AVAILABLE

OIL TANKS

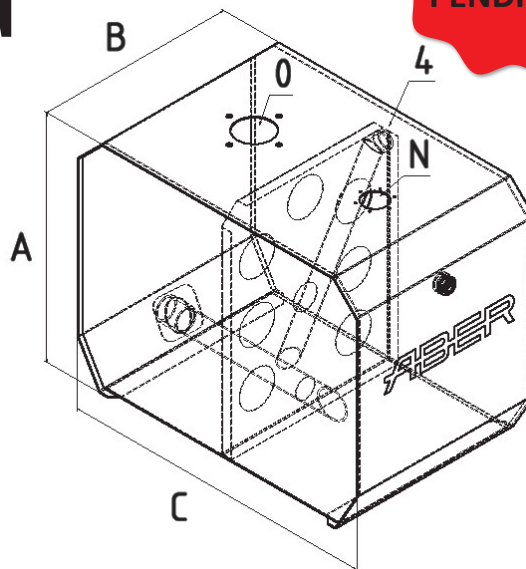
CAPACITY FROM 80 LITERS TO 250 LITERS

SIDE MOUNTING

**PATENT
PENDING**

CAPACITY LITERS	MATERIAL	A mm	B mm	C mm	SUCTION PIPE " BSP
80	FE - AL - IX	510	290	640	1" 1/2
100	FE - AL - IX	510	350	640	1" 1/2
130	FE - AL - IX	550	360	710	1" 1/2
160	FE - AL - IX	550	450	710	1" 1/2
200	FE - AL - IX	550	560	710	1" 1/2
201	AL	620	500	710	1" 1/2
250	FE - AL - IX	550	700	710	1" 1/2

ON REQUEST MANY OTHER CONFIGURATIONS AND VOLUMES CAN BE PRODUCED. FOR NON STANDARD DIMENSIONS PLEASE CONTACT US.



HOW TO ORDER

ON DARKER COLOR ARE THE USUALLY SELECTED OPTIONS

TSB											
MODEL	STANDARD CAPACITY	MATERIAL	LEVEL INDICATOR	FILLER AND BREATHER	MOUNTING OPTIONS				SUPPORT	OPTIONALS	
TSB	80L	FE STEEL	R ROUND OIL LEVEL INDICATOR	N READY FOR FILLER CAP PLUG	0 READY FOR TANK TOP OIL RETURN FILTER OR FLANGE FOR VALVE	1 TANK TOP OIL RETURN FILTER SINGLE PORT	2 FLANGE TO PNEUMATIC DISTRIBUTOR AND OIL FILTER	3 FLANGE TO ELECTRICAL DISTRIBUTOR AND OIL FILTER	4 DIRECT OIL RETURN	S1 SIDE BELT SUPPORT	M MANOMETER FOR RETURN FILTER
	100L										
	130L	AL ALUMINIUM		FB FILLER CAP BREATHING PLUG WITH INTEGRAL AIR FILTER						S2 SIDE OR REAR BELT SUPPORT	
	160L		L LONG OPTICAL OIL LEVEL INDICATOR								
	200L	IX STAINLESS STEEL									
	250L										

EXAMPLE

TSB 160 FE L FB 1 S1 M

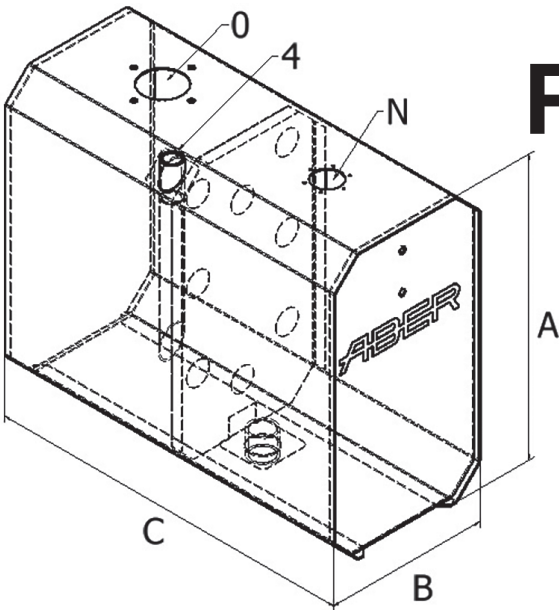
Tank with 160 liters, Side Mounting with Brackets, made in Steel, with Long Optical Oil Level, Filler Cap with Integral Air Filter, Tank Top Return Filter (Single), and Side Belt Support with manometer



OIL TANKS

CAPACITY FROM 100 LITERS TO 245 LITERS

REAR MOUNTING



CAPACITY LITERS	MATERIAL	A mm	B mm	C mm	SUCTION PIPE " BSP
100	FE - AL - IX	580	320	600	1" 1/2
120	FE - AL - IX	580	320	720	1" 1/2
140	FE - AL - IX	580	320	840	1" 1/2
170	FE - AL - IX	580	320	1000	1" 1/2
200	FE - AL - IX	580	320	1170	1" 1/2
245	FE - AL - IX	760	320	1000	1" 1/2

ON REQUEST MANY OTHER CONFIGURATIONS AND VOLUMES CAN BE PRODUCED. FOR NON STANDARD DIMENSIONS PLEASE CONTACT US.

HOW TO ORDER

ON DARKER COLOR ARE THE USUALLY SELECTED OPTIONS

TRB

MODEL	STANDARD CAPACITY	MATERIAL	LEVEL INDICATOR	FILLER AND BREATHER	MOUNTING OPTIONS				SUPPORT	OPTIONALS	
TRB	100L 120L 140L 170L 200L 245L	FE STEEL AL ALUMINIUM IX STAINLESS STEEL	R ROUND OIL LEVEL INDICATOR L LONG OPTICAL OIL LEVEL INDICATOR 	N READY FOR FILLER CAP PLUG FB FILLER CAP BREATHER PLUG WITH INTEGRAL AIR FILTER 	0 READY FOR TANK TOP OIL RETURN FILTER OR FLANGE FOR VALVE 	1 TANK TOP OIL RETURN FILTER SINGLE PORT 1A TANK TOP OIL RETURN FILTER DOUBLE PORT 	2 FLANGE TO PNEUMATIC DISTRIBUTOR AND OIL FILTER DISTRIBUTOR NOT INCLUDED	3 FLANGE TO ELECTRICAL DISTRIBUTOR AND OIL FILTER DISTRIBUTOR NOT INCLUDED	4 DIRECT OIL RETURN 	R1 REAR BELT SUPPORT R2 SIDE BELT SUPPORT 	M MANOMETER FOR RETURN FILTER

EXAMPLE
TSB 245 AL L FB 1 R1 M

Tank with 245 liters, Rear Mounting with Brackets, made in Aluminium, with Long Optical Oil Level, Filler Cap with Integral Air Filter, Tank Top Return Filter (Single), and Rear Belt Support with manometer



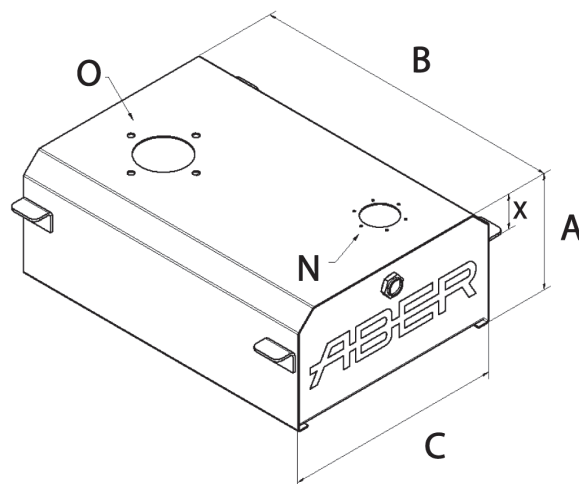
OIL TANKS

CAPACITY FROM 15 LITERS TO 80 LITERS

CHASSIS MOUNTING

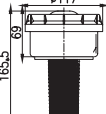
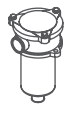
CAPACITY LITERS	MATERIAL	A mm	B mm	C mm	X mm	SUCTION PIPE " BSP
15	FE - AL - IX	215	280	255	65	3/4"
20	FE - AL - IX	195	320	370	65	3/4"
35	FE - AL - IX	195	520	370	65	1"
45	FE - AL - IX	290	500	360	65	1" 1/4
60	FE - AL - IX	265	605	405	65	1" 1/4
80	FE - AL - IX	310	380	800	65	1" 1/4

ON REQUEST MANY OTHER CONFIGURATIONS AND VOLUMES CAN BE PRODUCED. FOR NON STANDARD DIMENSIONS PLEASE CONTACT US.



HOW TO ORDER

ON DARKER COLOR ARE THE USUALLY SELECTED OPTIONS

TC	+		+		+		+		+		+	
MODEL	STANDARD CAPACITY	MATERIAL	LEVEL INDICATOR	FILLER AND BREATHER	MOUNTING OPTIONS				OPTIONALS			
TC	15L 20L 35L 45L 60L 80L	FE STEEL AL ALUMINIUM IX STAINLESS STEEL	R ROUND OIL LEVEL INDICATOR  L LONG OPTICAL OIL LEVEL INDICATOR 	N READY FOR FILLER CAP PLUG FB FILLER CAP BREATHER PLUG WITH INTEGRAL AIR FILTER 	0 READY FOR TANK TOP OIL RETURN FILTER OR FLANGE FOR VALVE 	1 TANK TOP OIL RETURN FILTER SINGLE PORT  1A TANK TOP OIL RETURN FILTER DOUBLE PORT	2 FLANGE TO PNEUMATIC DISTRIBUTOR AND OIL FILTER  DISTRIBUTOR NOT INCLUDED	3 FLANGE TO ELECTRICAL DISTRIBUTOR AND OIL FILTER  DISTRIBUTOR NOT INCLUDED	4 DIRECT OIL RETURN	M MANOMETER FOR RETURN FILTER		

EXAMPLE

TC 35 FE R FB 1 M

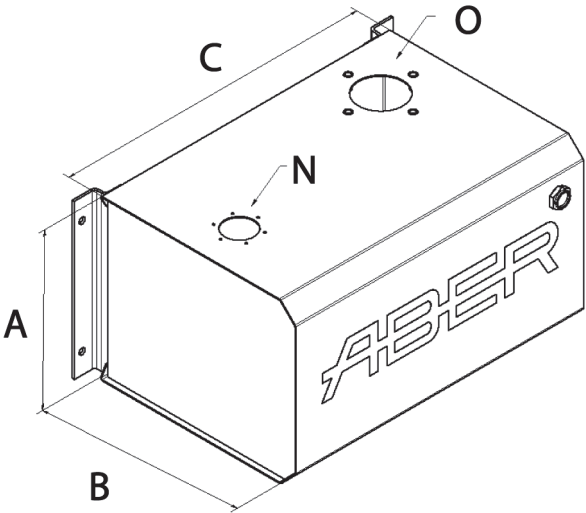
Tank with 35 liters, Chassis Mounting, made in Steel, with Round Oil Level, Filler Cap Breather Plug with Integral Air Filter, and Tank Top Return Filter (Single) with manometer



OIL TANKS

CAPACITY FROM 25 LITERS TO 80 LITERS

SIDE MOUNTING

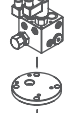
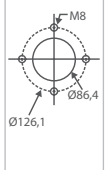


CAPACITY LITERS	MATERIAL	A mm	B mm	C mm	SUCTION PIPE " BSP
25	FE - AL - IX	280	280	380	1 "
30	FE - AL - IX	280	320	360	1 "
35	FE - AL - IX	280	280	500	1 "
60	FE - AL - IX	310	380	560	1" 1/4
80	FE - AL - IX	500	360	500	1" 1/4

ON REQUEST MANY OTHER CONFIGURATIONS AND VOLUMES CAN BE PRODUCED. FOR NON STANDARD DIMENSIONS PLEASE CONTACT US.

HOW TO ORDER

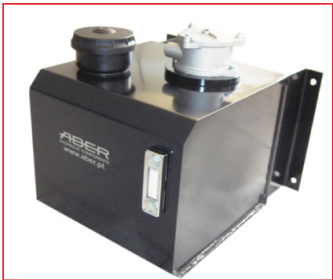
ON DARKER COLOR ARE THE USUALLY SELECTED OPTIONS

TS	+		+		+		+		+	
MODEL	STANDARD CAPACITY	MATERIAL	LEVEL INDICATOR	FILLER AND BREATHER	MOUNTING OPTIONS				OPTIONALS	
TS	25L	FE STEEL	R ROUND OIL LEVEL INDICATOR	N READY FOR FILLER CAP PLUG	0 READY FOR TANK TOP OIL RETURN FILTER OR FLANGE FOR VALVE	1 TANK TOP OIL RETURN FILTER SINGLE PORT	2 FLANGE TO PNEUMATIC DISTRIBUTOR AND OIL FILTER	3 FLANGE TO ELECTRICAL DISTRIBUTOR AND OIL FILTER	4 DIRECT OIL RETURN	M MANOMETER FOR RETURN FILTER
	30L									
	35L	AL ALUMINIUM	L LONG OPTICAL OIL LEVEL INDICATOR	FB FILLER CAP BREATHER PLUG WITH INTEGRAL AIR FILTER		1A TANK TOP OIL RETURN FILTER DOUBLE PORT				
	60L									
	80L	IX STAINLESS STEEL								

EXAMPLE

TS 30 FE L FB 1 M

Tank with 30 liters, Side Mounting, made in Steel, with Long Optical Oil Level, Filler Cap with Integral Air Filter, Tank Top Return Filter (Single) with manometer



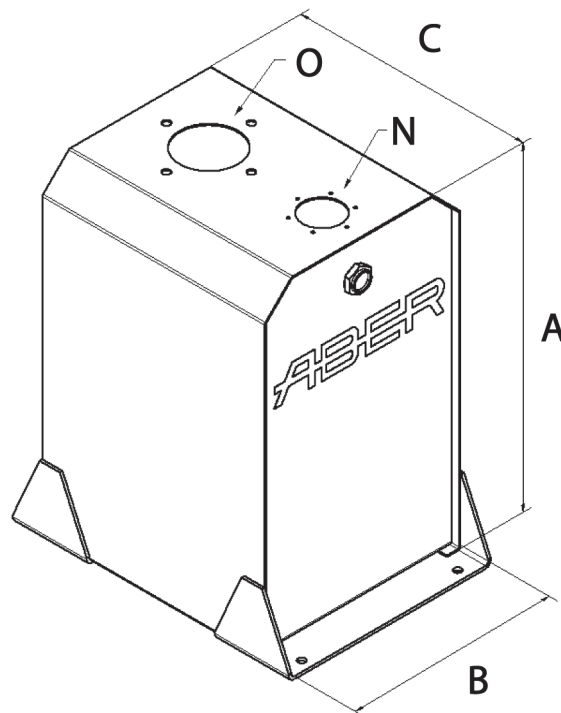
OIL TANKS

CAPACITY FROM 10 LITERS TO 80 LITERS

REAR MOUNTING

CAPACITY LITERS	MATERIAL	A mm	B mm	C mm	SUCTION PIPE " BSP
20	FE - AL - IX	265	220	450	1"
40	FE - AL - IX	475	290	330	1"
60	FE - AL - IX	475	290	490	1" 1/4
80	FE - AL - IX	475	290	650	1" 1/2
100	FE - AL - IX	645	290	585	1" 1/2

ON REQUEST MANY OTHER CONFIGURATIONS AND VOLUMES CAN BE PRODUCED. FOR NON STANDARD DIMENSIONS PLEASE CONTACT US.



HOW TO ORDER

ON DARKER COLOR ARE THE USUALLY SELECTED OPTIONS

TR

MODEL	STANDARD CAPACITY	MATERIAL	LEVEL INDICATOR	FILLER AND BREATHER	MOUNTING OPTIONS	OPTIONALS
TR	20L	FE STEEL	R ROUND OIL LEVEL INDICATOR	N READY FOR FILLER CAP PLUG	0 READY FOR TANK TOP OIL RETURN FILTER OR FLANGE FOR VALVE	M MANOMETER FOR RETURN FILTER
	40L					
	60L	AL ALUMINIUM	L LONG OPTICAL OIL LEVEL INDICATOR	FB FILLER CAP BREATHING PLUG WITH INTEGRAL AIR FILTER	1 TANK TOP OIL RETURN FILTER SINGLE PORT	
	80L				1A TANK TOP OIL RETURN FILTER DOUBLE PORT	
	100L	IX STAINLESS STEEL			2 FLANGE TO PNEUMATIC DISTRIBUTOR AND OIL FILTER	
					3 FLANGE TO ELECTRICAL DISTRIBUTOR AND OIL FILTER	
					4 DIRECT OIL RETURN	

EXAMPLE

TR 40 FE L FB 1 M

Tank with 40 liters, Rear Mounting, made in Steel, with Long Optical Oil Level, Filler Cap with Integral Air Filter, Tank Top Return Filter (Single) with manometer



TIPPER SCISSORS & WET KITS

Tipping Scissors wide range of Power

Rear Tipper Scissor 1,5ton | Three Tipper Scissor 1,5ton

Rear Tipper Scissor 3,5ton | Three Tipper Scissor 3,5ton

Rear Tipper Scissor 7,5ton | Three Tipper Scissor 7,5ton

Rear Tipper Scissor 19ton | Three Tipper Scissor 19ton

Rear Tipper Scissor 26ton | Three Tipper Scissor 26ton

Rear Tipper Scissor 32ton | Three Tipper Scissor 32ton

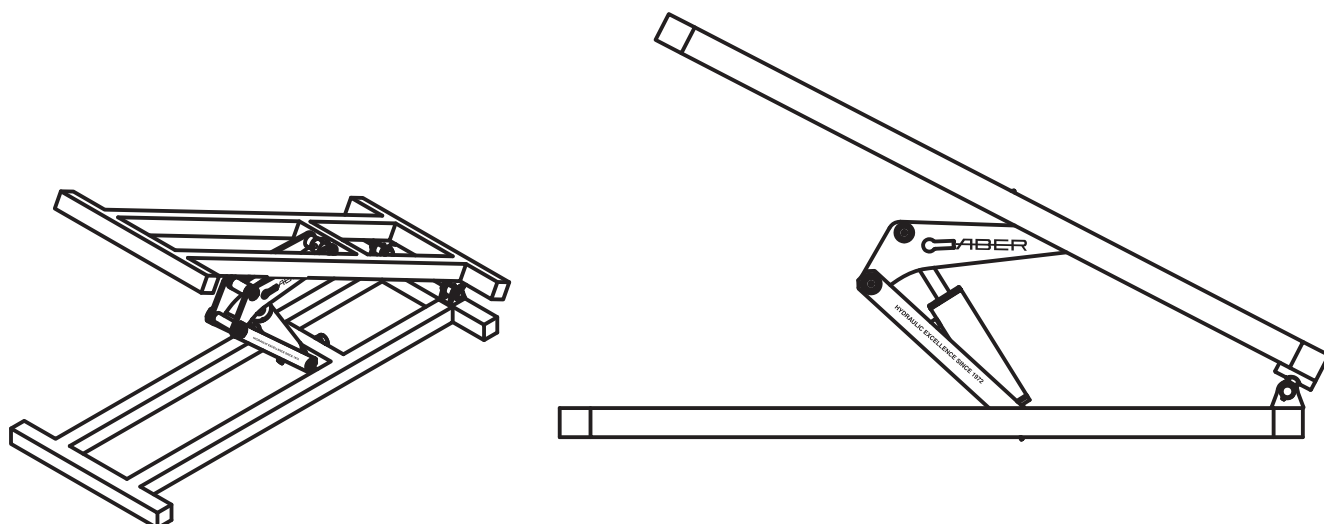
Wet Kits from 6m³ to 45m³ to apply in different applications such as:

Truck Units

Truck Units with trailer

Truck Units with hydraulic rear door

Tractor Units



ABER REAR TIPPER SCISSOR SET

ABER TIPPER SCISSOR



REFERENCE	POWER (T)	PRESSURE (Bar)	STROKE (mm)
TB1,5T1	1,8	180	684
TB3,5T1	3,5	200	881
TB7,5T1	7,5	350	1205
TB19T1	15	350	1914
TB26T1	23	350	1916
TB32T1	32	350	2295
TBVN263200T1	2,6	180	1099
TBVN263550T1	2,6	180	1160
TBVN264350T1	2,6	180	1398

For 3,5ton Trucks
Lifting capacity 1,5ton

TIPPER SCISSOR
TB1,5T1

+

HYDRAULIC POWER PACK
12 VDC

+

TIPPING COMPONENTS

STB1,5T1A

TIPPER SCISSOR
TB1,5T1

+

HYDRAULIC POWER PACK
24 VDC

+

TIPPING COMPONENTS

STB1,5T1B

Metal tank, add a M to the reference.
Example STB3,5T1AM

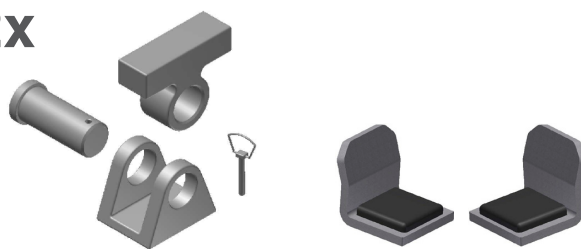
ABER POWER PACK



12 VDC, 2,0kW | 2,0cc | Simple Action | Controller | 6 Liters Plastic Tank
24 VDC, 2,2kW | 2,5cc | Simple Action | Controller | 6 Liters Plastic Tank
Metal Tank available on request
Double action available on request

ABER TIPPING COMPONENTS

2x



REFERENCE

TBKD3,5T1

REFERENCE

TBKA

For 7,5ton Trucks
Lifting capacity 3,5ton

TIPPER SCISSOR
TB3,5T1

+

HYDRAULIC POWER PACK
12 VDC

+

TIPPING COMPONENTS

STB3,5T1A

TIPPER SCISSOR
TB3,5T1

+

HYDRAULIC POWER PACK
24 VDC

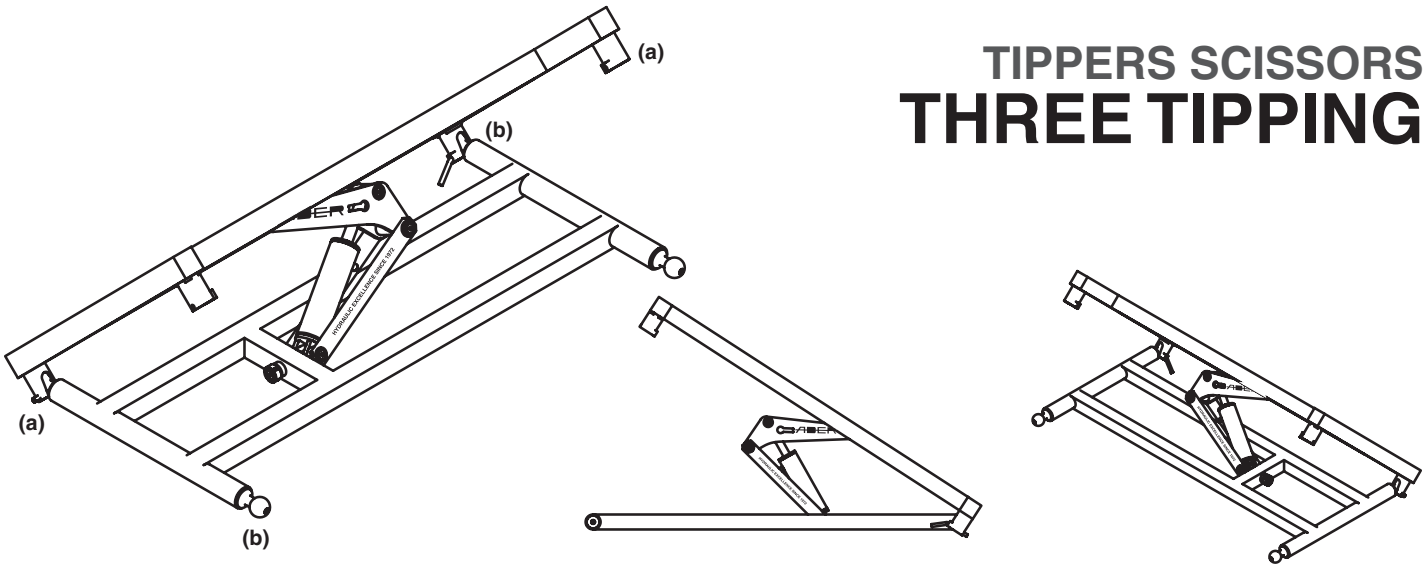
+

TIPPING COMPONENTS

STB3,5T1B

Double action, add a DA to the reference.
Example S1B3,5T1ADA

TIPPERS SCISSORS
THREE TIPPING



ABER THREE TIPPER SCISSOR SET

ABER TIPPER SCISSOR



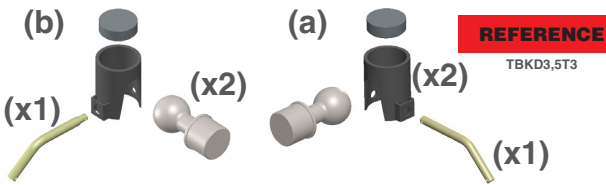
REFERENCE	POWER (T)	PRESSURE (Bar)	STROKE (mm)
TB1,5T3	1,8	180	684
TB3,5T3	3,5	200	881
TB7,5T3	7,5	350	1205
TB19T3	15	350	1914
TB26T3	23	350	1916
TB32T3	32	350	2295
TBVN263200T3	2,6	180	1099
TBVN263550T3	2,6	180	1160
TBVN264350T3	2,6	180	1398

ABER POWER PACK



12 VDC, 2,0kW | 2,0cc | Simple Action | Controller | 6 Liters Plastic Tank
24 VDC, 2,2kW | 2,5cc | Simple Action | Controller | 6 Liters Plastic Tank
Metal Tank available on request
Double action available on request

ABER TIPPING COMPONENTS



ABER END OF STROKE

REFERENCE	DESCRIPTION
TBTF01*	Electric end of stroke, for three tipper scissor

*Available separately

For 3,5ton Trucks
Lifting capacity 1,5ton

TIPPER SCISSOR
TB1,5T3

+

HYDRAULIC POWER PACK
12 VDC

+

TIPPING COMPONENTS

STB1,5T3A

TIPPER SCISSOR
TB1,5T3

+

HYDRAULIC POWER PACK
24 VDC

+

TIPPING COMPONENTS

STB1,5T3B

For 7,5ton Trucks
Lifting capacity 3,5ton

TIPPER SCISSOR
TB3,5T3

+

HYDRAULIC POWER PACK
12 VDC

+

TIPPING COMPONENTS

STB3,5T3A

TIPPER SCISSOR
TB3,5T3

+

HYDRAULIC POWER PACK
24 VDC

+

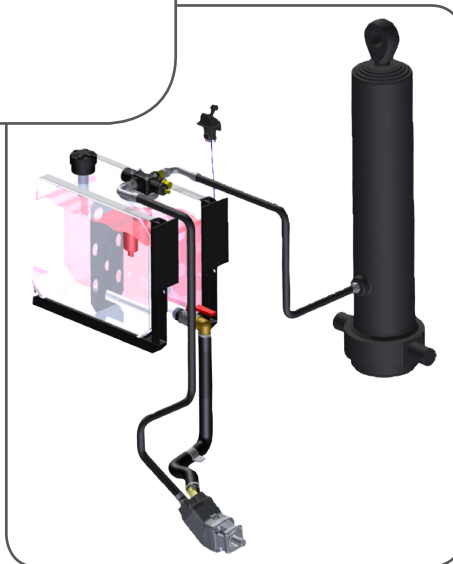
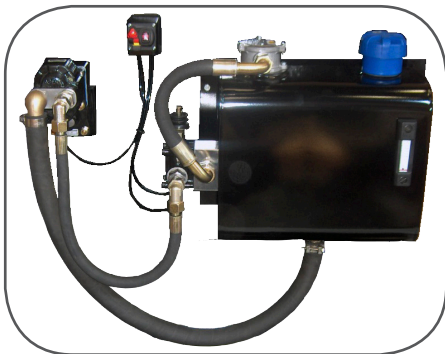
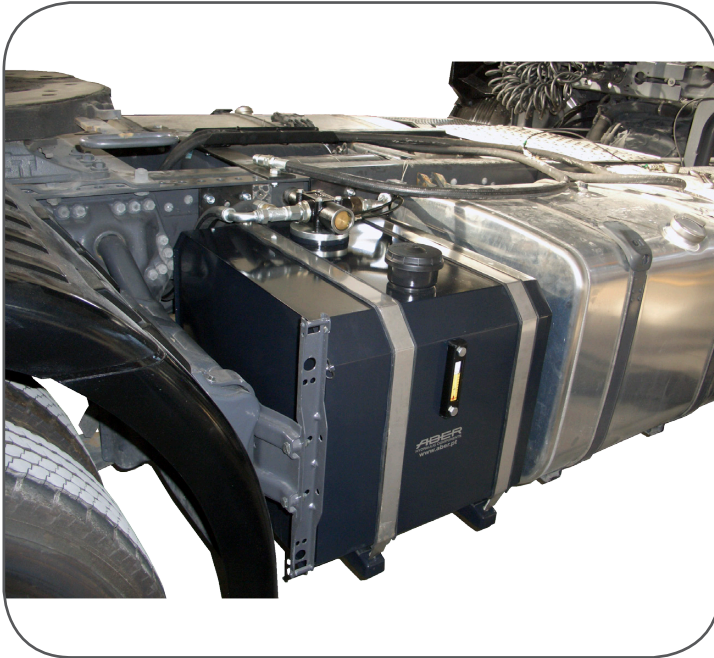
TIPPING COMPONENTS

STB3,5T3B

Metal tank, add a M to the reference.
Example STB3,5T3AM

Double action, add a DA to the reference.
Example STB3,5T3ADA

WET KITS



WET KITS FOR TRUCK UNITS

6 m ³	12 m ³	16 m ³
18 m ³	20 m ³	

WET KITS FOR TRACTOR UNITS

20 m ³	24 m ³
32 m ³	45 m ³

WET KITS FOR TRUCK UNITS WITH TRAILER

16 m³

WET KITS FOR TRUCK UNITS WITH END OF STROKE VALVE

18m³

WET KITS FOR TRUCK UNITS WITH HYDRAULIC REAR DOOR

16 m ³	18 m ³
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ABER is able to supply a full range of wet kits to suit applications such as tipper, truck cranes, truck moving floor, etc.

Trucks and semi-trucks that have a Power Take Off (PTO) often use wet kits. When the truck hydraulic circuit requests an hydraulic pump, that pump depends on the PTO to deliver the necessary mechanical power. The hydraulic pump is used to operate the auxiliary equipment. This equipment depends on the hydraulic pump to function.

Wet kits are made up of several different parts usually including, the PTO, the oil-hydraulic pump, tipping valve, control and command valves, filters, oil reservoir (tank), and all the necessary hydraulic hoses and fittings.

Once the hydraulic pump receives rotation from the PTO, it will begin to push hydraulic fluid into the outlet hoses, leading to the cylinders or hydraulic motors action. At this point, it is possible to lift the loads and carry out any other similar operations. All the oil returned to tank is filtered in order to be available to the pump admission line.

Wet kits are available in various sizes and to suit various applications, please contact ABER so that we can suggest the best wet kit to suit your personalized requirements.

[illegible]

Examples of applications



ABER LIMITED WARRANTY

ABER – Embraiaagens e Comandos Hidráulicos António Bernardes, Lda.

We declare that all products manufactured by ABER, Ltd. have a warranty of 12 months from the serial date mark, against production defects.

The warranty of ABER, Ltd. products is limited to the substitution of the defective product when verified and recognized by ABER.

ABER pumps can cause the aspiration of the oil of the gear box, therefore they must be solely applied in power take off's of first quality and well sealed in order to support this aspiration.

ABER, Ltd. shall not, under any circumstances, be liable for loss of time, manufacturing costs, labour, materials, loss of profits, incidental, special or consequential damages, direct or indirect, because of defective products, whether due to claims arising under the contract of sale or independently thereof, and whether or not such claim is based on contract, tort or warranty.

ABER, Ltd. only obligation is to repair or replace, at its election, free of charge, any part of the product that its inspection shows to be defective and, if appropriate, the lowest round trip transportation charges from ABER, Ltd. original customer to Maia, Portugal and return, but excluding all transportation costs from ABER, Ltd. original customer to its customer.

A return authorization number must be obtained from authorized ABER, Ltd. personnel prior to returning any products for warranty consideration. All claims must be accompanied by a complete written explanation of claimed defects and the circumstances of operational failure. Products returned for warranty consideration shall be shipped to ABER, Ltd. through prepaid freight, with a return authorization attached.

In the event that a product is repaired under warranty, that product shall carry the remainder of the original warranty period.

This expressed limited warranty is the sole warranty of ABER, Ltd. There are no warranties which extend beyond the limited warranty herein expressly set forth.

This limited warranty is in lieu of all other warranties of any nature, expressed or implied, including, but not limited to, warranties for merchantability or fitness or for any measure of service or suitability or for a specific purpose notwithstanding any disclosure to ABER, Ltd. of the use to which the product is to be put.

The sale of ABER, Ltd. products, under any other warranty or guarantee, expressed or implied, is not authorized and there are not warranties made to goods or products manufactured by anyone else than ABER, Ltd.

This warranty does not apply to pieces that are subject to normal worn out, to products that are subject to improper use, to problems or defects caused in the products by technicians who were not previously approved by ABER, Ltd.

The warranty of a Aber product can only be given if there is evidence that filters are being used and also replaced every 6 months in the system where the Aber product is installed.



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