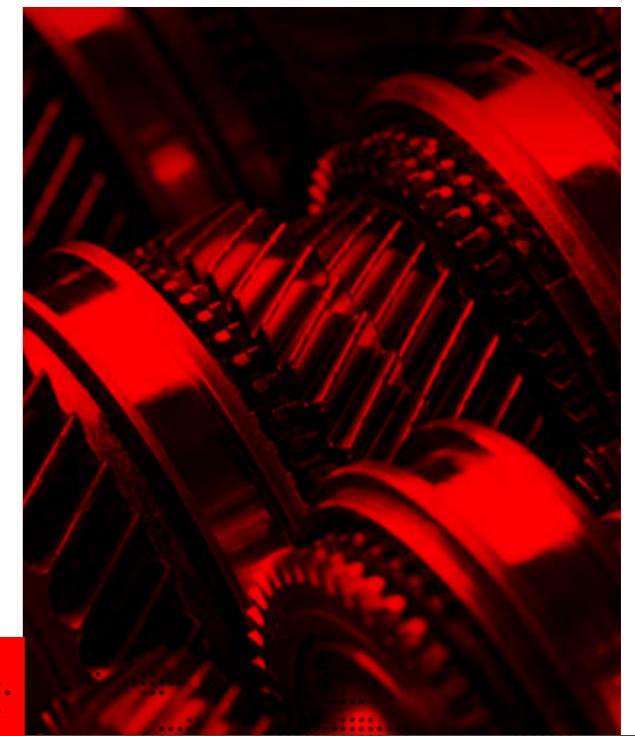




**MOTOROCK**  
— AUTOMOTIVE —



Arabacıalanı Mah. 54. Cad. Cadde 54 / B Blok No:3/3013  
Serdivan / Sakarya / Türkiye

[www.motorock.com.tr](http://www.motorock.com.tr)

Dişliler  
Gears



“KALİTE ASLA BİR TESADÜF DEĞİL,  
DAİMA AKILLI BİR GAYRETİN  
SONUCUDUR”

“Quality is never a coincidence, it is always the result of intelligent effort.”

## HAKKIMIZDA

Motorock, otomotiv endüstrisine yönelik araç parça üretimi alanında faaliyet gösteren yenilikçi ve güvenilir bir firmadır. Kuruluşumuzdan bu yana kaliteyi, dayanıklılığı ve müşteri memnuniyetini temel değerlerimiz olarak benimsedik. Modern üretim tesislerimiz, ileri teknoloji makine parkurumuz ve alanında uzman kadromuz ile otomotiv sektörüne yüksek standartlarda ürünler sunuyoruz. Ürünlerimiz, ulusal ve uluslararası pazarlarda tercih edilmekte ve sektördeki iş ortaklarımıza güvenilir çözümler sağlamaktadır. Ar-Ge çalışmalarına verdigimiz önem sayesinde, değişen müşteri ihtiyaçlarına hızlı bir şekilde yanıt veriyor, teknolojik gelişmeleri yakından takip ederek üretim süreçlerimize entegre ediyoruz.

Motorock olarak sadece üretimde değil, aynı zamanda sürdürülebilirlik ve çevreye duyarlılık konusunda da sorumluluk alıyoruz. Kaynakları verimli kullanan, çevre dostu üretim anlayışımızla geleceğe yatırım yapıyoruz. Hedefimiz, müşterilerimizin ihtiyaçlarını en doğru şekilde karşılamak, onlara uzun ömürlü ve güvenilir ürünler sunmak ve otomotiv sektöründe kalıcı bir değer yaratmaktır. Motorock, bugünün gücüyle yarının yolunu inşa ediyor.

## ABOUT US

*Motorock is an innovative and reliable company specializing in the production of automotive parts. Since our establishment, we have embraced quality, durability, and customer satisfaction as our core values. With our modern production facilities, advanced machinery, and expert team, we provide the automotive industry with products that meet the highest standards.*

*Our products are trusted and preferred in both domestic and international markets, offering reliable solutions to our business partners worldwide. Thanks to our strong commitment to R&D, we respond quickly to evolving customer needs while closely following technological advancements and integrating them into our production processes.*

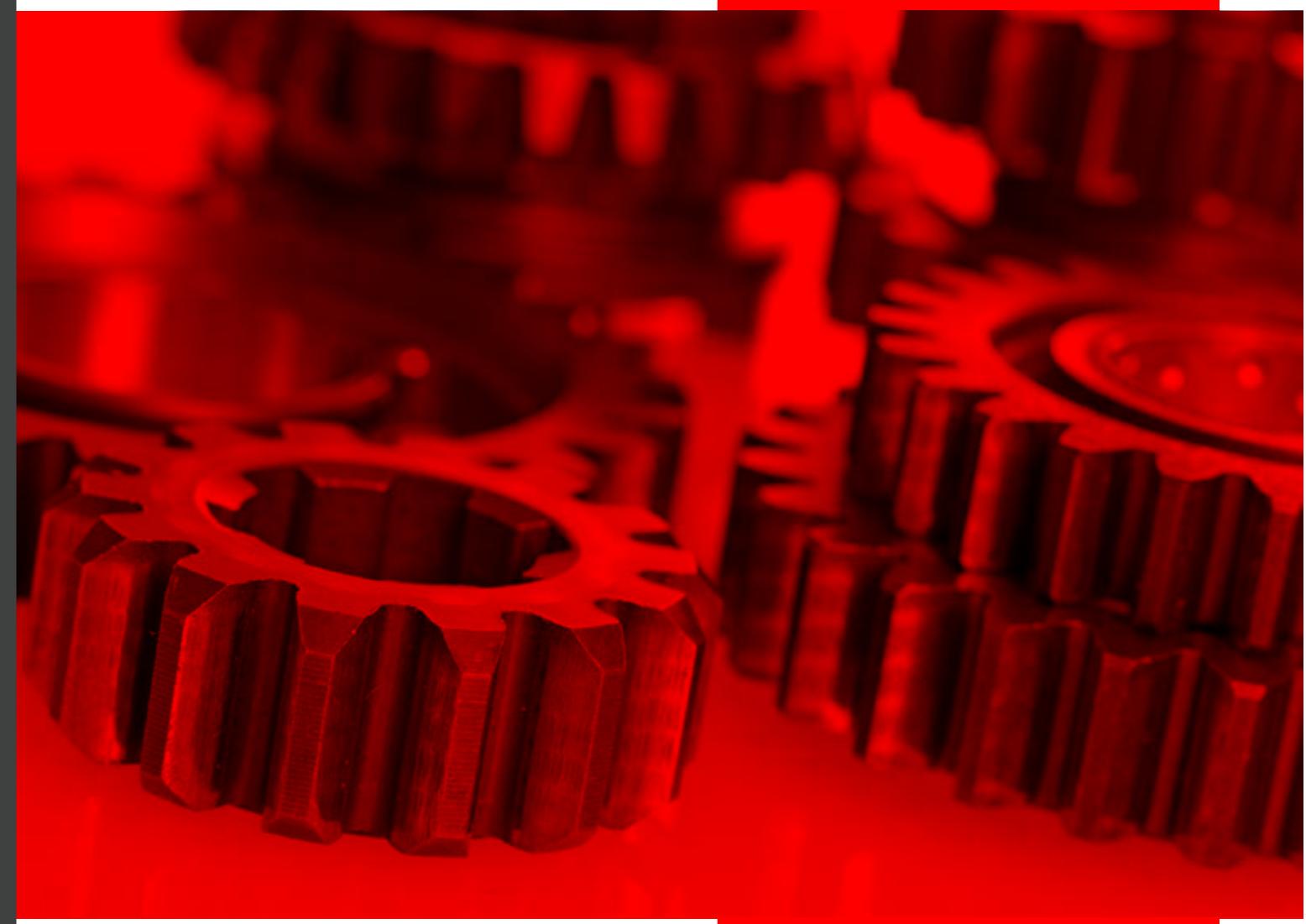
*At Motorock, we also take responsibility in terms of sustainability and environmental awareness. By adopting eco-friendly production practices and efficient use of resources, we invest in the future.*

*Our mission is to meet our customers' needs in the most accurate way, provide them with long-lasting and dependable products, and create lasting value in the automotive industry. Motorock is building the road to the future with the strength of today*



**MOTOROCK**

— AUTOMOTIVE —



## PİSTONLU POMPALAR / PISTON PUMPS



A1 VDP



A2 BI | BID

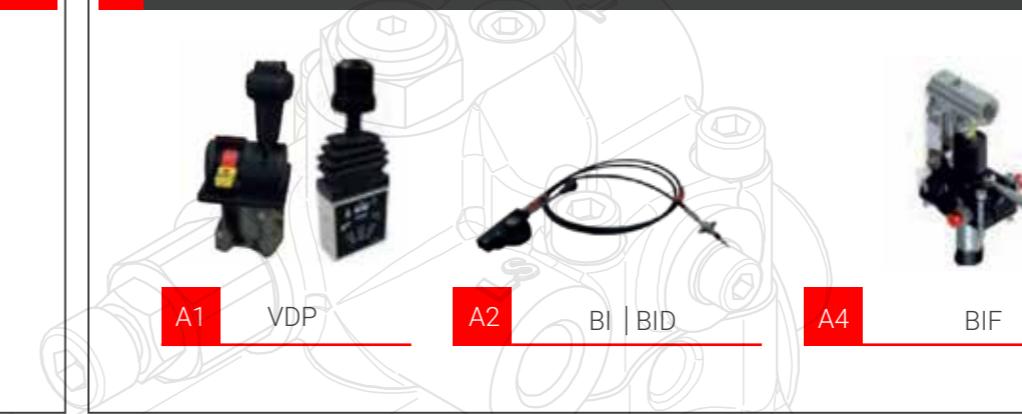


A4 BIF



A5/A6 BH | BHD

## KONNEKTÖRLER, VANALAR VE KONTROLLER / CONNECTOR, VALVES & CONTROL



## DİŞLİ POMPASI / GEAR PUMP



B1 B2



B2 B3 | B3D



B3 B35



B4 PV

## GÜÇ AKTARMA PARÇA VE ŞANZIMANLARI / POWER TAKE OFF'S & GEARBOX



## HİDROLİK MOTOR / HYDRAULIC MOTORS



C1 MBI



C2 MBIF



C3 MB3

## HİDROLİK GÜÇ PAKET VE ÜRÜNLERİ / HYDRAULIC POWER PACKAGES AND PRODUCTS



G1 HYDRAULIC POWER PACKS



G2 HYDRAULIC UNITS

## KONNEKTÖRLER, VANALAR VE KONTROLLER / CONNECTOR, VALVES & CONTROL



D1 ADMISSION CONNECTOR



D2 ACCESSORIES



D3 HYDRAULIC VALVES

## YAĞ TANKI / OIL TANK



H1/H4 SIDE MOUNTING



H2/H5 REAR MOUNTING



H3 CHASIS MOUNTING



I1 TIPPER SCISSORS



I3 WET KINGS

## POWER TAKE OFF'S AND ADAPTER KIT'S MAZ



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

## POWER TAKE OFF'S GAZ



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

## POWER TAKE OFF'S AND ADAPTER KIT'S VOLVO



## POWER TAKE OFF'S AND ADAPTER KIT'S MERCEDES



## POWER TAKE OFF'S AND ADAPTER KIT'S ZF



AMP SP TWIN OUTPUT

## HYDRAULIC POWER PACKS & HYDRAULIC UNITS HYDRAULIC POWER PACKS



## POWER TAKE OFF'S MAN / VW

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



**MOTOROCK**

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## 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
	TO ORDER WITH PNEUMATIC SWITCH WITH SENSOR SOCKET CONNECTOR DIN 72585 YOU MUST ADD "Z" TO THE PTO REF. EX: TF4002SPZ
	CABLE CONNECTOR FOR DIN 72585 MECHANICAL SWITCH SENSOR (REF. CCSEN08)

## POWER TAKE OFF'S ACESSORIES

### ADAPTERS

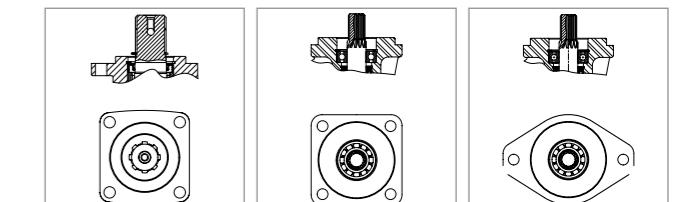
	TO ORDER PTO WITH - UNI (3 HOLES) ADAPTER YOU MUST ORDER PTO REF. + ADAPTER REF. EX: 4002AMP + ADA4F3F
	TO ORDER PTO WITH - UNI (3 HOLES) SHORT ADAPTER YOU MUST ORDER PTO REF. + SHORT ADAPTER REF. EX: 4002AMP + ADA4F3FC
	TO ORDER PTO WITH - SAE 1" 1/4 KEY SHAFT ADAPTER, YOU MUST ORDER PTO REF. + ADAPTER REF. EX: 4002AMP + ADA4FK11RE

## ILLUSTRATION



DISPLACEMENT cc/rot (in³/rot)	MAXIMUM CONTINUOUS PRESSURE bar (psi)	MAXIMUM ROTATION SPEED rpm	FLANGE OR AXLE OPTIONS		
<b>BSP THREADS</b>					
82 (5.0)	210 (3000)	2000	PV4S82_23P2	PVB4S82_23P2	PVB2S82_23P2
102 (6.2)	190 (2700)	2000	PV4S105_23P2	PVB4S105_23P2	PVB2S105_23P2

DISPLACEMENT in³/rot (gpm at 1000 rpm)	MAXIMUM CONTINUOUS PRESSURE bar (psi)	MAXIMUM ROTATION SPEED rpm	FLANGE OR AXLE OPTIONS		
<b>NPTF THREADS</b>					
5.0 (22)	210 (3000)	2000	PV4C22_23P2	PVB4C22_23P2	PVB4C22_23P2
6.2 (27)	190 (2700)	2000	PV4C27_23P2	PVB4C27_23P2	PVB4C27_23P2



**MOTOROCK**  
— AUTOMOTIVE —

# HYDRAULIC PISTON MOTORS

## BENT AXIS PISTON MOTORS

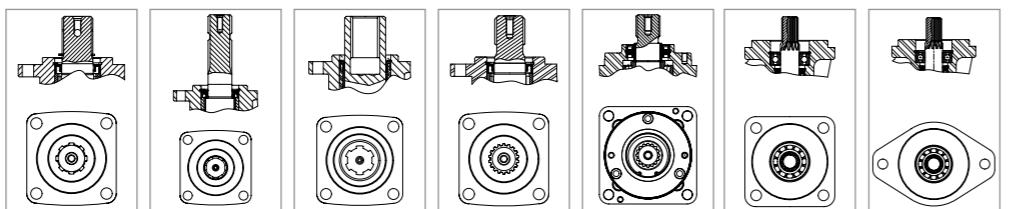


17 cc/rot (1.0 in<sup>3</sup>/rot) to  
172 cc/rot (10.5 in<sup>3</sup>/rot)



**Excellent Performance**  
**Low Noise**  
**High Efficiency**  
**Bidirectional**

DISPLACEMENT cc/rot (in <sup>3</sup> /rot)	FLANGE OR 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)
17 (1.0)	MBI17M	MBI17MDA	-	MBI17MDM	MBI17M5IA1	MBI17M5B4	MBI17M5B2
26 (1.6)	MBI25M	MBI25MDA	-	MBI25MDM	MBI25M5IA1	MBI25M5B4	MBI25M5B2
32 (2.0)	MBI30M	MBI30MDA	-	MBI30MDM	MBI30M5IA1	MBI30M5B4	MBI30M5B2
42 (2.6)	MBI40M	MBI40MDA	-	MBI40MDM	MBI40M5IA1	MBI40M5B4	MBI40M5B2
50 (3.1)	MBI50M	MBI50MDA	-	MBI50MDM	MBI50M5IA1	MBI50M5B4	MBI50M5B2
60 (3.7)	MBI60M7	MBI60M7DA	-	MBI60M7DM	MBI60M7IA1	MBI60M7B4	MBI60M7B2
81 (4.9)	MBI80M7	MBI80M7DA	-	MBI80M7DM	MBI80M7IA1	MBI80M7B4	MBI80M7B2
80 (4.9)	MBI80P7	MBI80P7DA	MBI80P7DI	-	MBI80P7IA1	MBI80P7C4	MBI80P7C2
108 (6.6)	MBI110P7	MBI110P7DA	MBI110P7DI	-	MBI110P7IA1	MBI110P7C4	MBI110P7C2
126 (7.7)	MBI125P7	MBI125P7DA	MBI125P7DI	-	MBI125H9IA1	MBI125P7C4	MBI125P7C2
136 (8.3)	MBI135P7	MBI135P7DA	MBI135P7DI	-	MBI135H9IA1	MBI135P7C4	MBI135P7C2
142 (8.7)	MBI140H9	MBI140H9DA	MBI140H9DI	-	MBI140H9IA1	MBI140H9C4	MBI140H9C2
156 (9.5)	MBI160H9	MBI160H9DA	MBI160H9DI	-	MBI160H9IA1	MBI160H9C4	MBI160H9C2
172 (10.5)	MBI170H9	MBI170H9DA	MBI170H9DI	-	-	MBI170H9C4	MBI170H9C2



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

# HYDRAULIC PISTON MOTORS

## MBIF SERIES IRON CAST BENT AXIS PISTON MOTORS

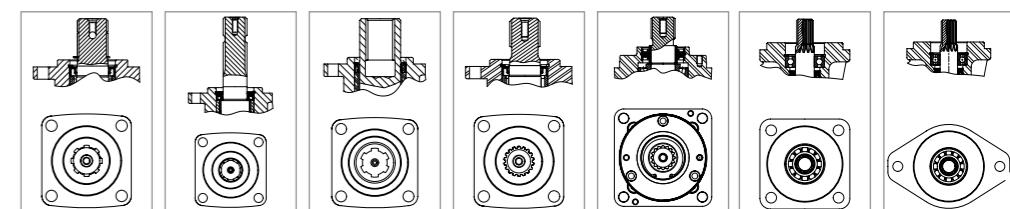
17 cc/rot (1.0 in<sup>3</sup>/rot) to  
81 cc/rot (4.9 in<sup>3</sup>/rot)



**Higher Pressure**  
**Compact Design**  
**High Reliability**  
**Bidirectional**



DISPLACEMENT cc/rot (in <sup>3</sup> /rot)	FLANGE OR 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)
17 (1.0)	MBIF17M	MBIF17MDA	-	-	MBIF17MDM	MBIF17M5IA1	MBIF17M5B4
26 (1.6)	MBIF25M	MBIF25MDA	-	-	MBIF25MDM	MBIF25M5IA1	MBIF25M5B4
32 (2.0)	MBIF30M	MBIF30MDA	-	-	MBIF30MDM	MBIF30M5IA1	MBIF30M5B4
42 (2.6)	MBIF40M	MBIF40MDA	-	-	MBIF40MDM	MBIF40M5IA1	MBIF40M5B4
50 (3.1)	MBIF50M	MBIF50MDA	-	-	MBIF50MDM	MBIF50M5IA1	MBIF50M5B4
60 (3.7)	MBIF60M7	MBIF60M7DA	-	-	MBIF60MDM	MBIF60M7IA1	MBIF60M7B4
81 (4.9)	MBIF80M7	MBIF80M7DA	-	-	MBIF80MDM	MBIF80M7IA1	MBIF80M7B4
80 (4.9)	MBIF80P7	MBIF80P7DA	MBIF80P7DI	-	MBIF80P7DI	-	MBIF80P7C4
108 (6.6)	MBIF110P7	MBIF110P7DA	MBIF110P7DI	-	MBIF110P7DI	-	MBIF110P7C2
126 (7.7)	MBIF125P7	MBIF125P7DA	MBIF125P7DI	-	MBIF125P7DI	-	MBIF125P7C2
136 (8.3)	MBIF135P7	MBIF135P7DA	MBIF135P7DI	-	MBIF135P7DI	-	MBIF135P7C2
142 (8.7)	MBIF140H9	MBIF140H9DA	MBIF140H9DI	-	MBIF140H9DI	-	MBIF140H9C4
156 (9.5)	MBIF160H9	MBIF160H9DA	MBIF160H9DI	-	MBIF160H9DI	-	MBIF160H9C2
172 (10.5)	MBIF170H9	MBIF170H9DA	MBIF170H9DI	-	MBIF170H9DA	MBIF170H9DI	-



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

## HYDRAULIC GEAR MOTORS

### MB3 SERIES

38 cc/rot (2.3 in<sup>3</sup>/rot) to  
125 cc/rot (7.6 in<sup>3</sup>/rot)



Medium Size  
Fast to Mount  
Bidirectional

#### MB3T SERIES



BIDIRECTIONAL



REAR INLET/OUTLET

DISPLACEMENT cc/rot (in <sup>3</sup> /rot)	FLANGE OR 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)	MB34T38	MB33T38	MB34T38DA	MB3B4T38	MB3B2T38
45 (2.8)	MB34T45	MB33T45	MB34T45DA	MB3B4T45	MB3B2T45
52 (3.2)	MB34T52	MB33T52	MB34T52DA	MB3B4T52	MB3B2T52
61 (3.7)	MB34T61	MB33T61	MB34T61DA	MB3B4T61	MB3B2T61
70 (4.3)	MB34T70	MB33T70	MB34T70DA	MB3B4T70	MB3B2T70
82 (5.0)	MB34T82	MB33T82	MB34T82DA	MB3B4T82	MB3B2T82
91 (5.6)	MB34T90	MB33T90	MB34T90DA	MB3B4T90	MB3B2T90
102 (6.2)	MB34T105	MB33T105	MB34T105DA	MB3B4T105	MB3B2T105
116 (7.1)	MB34T115	MB33T115	MB34T115DA	MB3B4T115	MB3B2T115
125 (7.6)	MB34T125	MB33T125	MB34T125DA	MB3B4T125	MB3B2T125

#### MB3GT SERIES



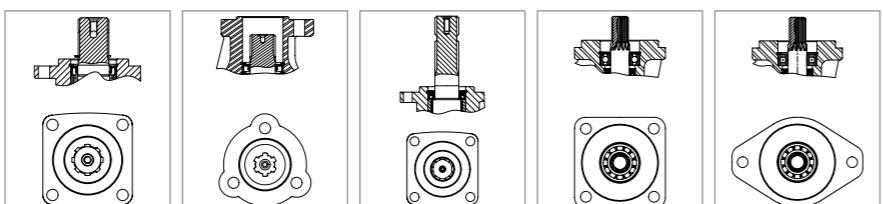
BIDIRECTIONAL



REAR INLET/OUTLET



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



NOTE: DIFFERENT FLANGES, AXES, PORT SIZES AND SHAFT SUPPORTS CAN BE ORDERED. FOR THAT, CONTACT DIRECTLY ABER.

## ACCESSORIES

### SUPPORT MTOR -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.

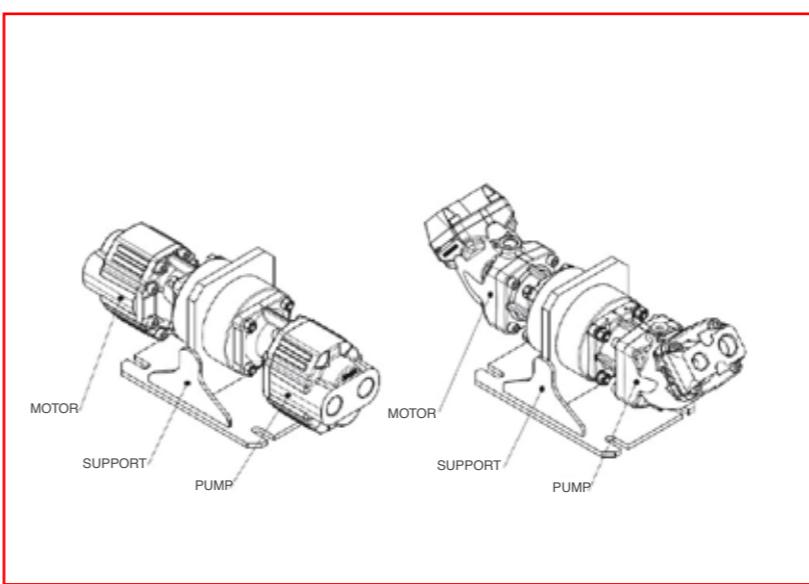


With this support it is not necessary to use the cardan shaft to make the connection to the tipper trailer. This allows greater safety and enhanced maneuverability of the vehicle without affecting its performance.

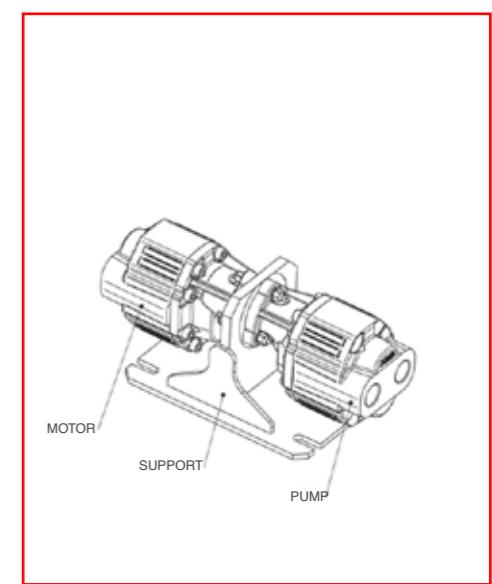
REFERENCE	DESCRIPTION
SMPUNI	SUPPORT MOTOR- PUMP DIN 5463 (UNI)
SMPEN	SUPPORT MOTOR- PUMP DIN 5462 (EN)

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 SMPEN support.

SMPEN Assembly:



SMPUNI Assembly:





## POWER TAKE OFF'S ALLISON CLUTCH SHIFT SERIES

REFERENCE	OBSERVATION	GEAR BOX	RATIO	CONTROL
TF9063E3ENBP	ISO 4 BOLT OUTPUT	MD 3000/3200/3060P/3066P/3560P/3566P HD 4000/4060P/4076P/4560P	1:0,83	ELECTRIC (12V) OVER HYDRAULIC
TF9063E3ENDP	ISO 4 BOLT OUTPUT	MD 3000/3200/3060P/3066P/3560P/3566P HD 4000/4060P/4076P/4560P	1:0,83	ELECTRIC (24V) OVER HYDRAULIC
TF9063E3XVBP	1410 FLANGE OUTPUT	MD 3000/3200/3060P/3066P/3560P/3566P HD 4000/4060P/4076P/4560P	1:0,83	ELECTRIC (12V) OVER HYDRAULIC
TF9063E3XVDP	1410 FLANGE OUTPUT	MD 3000/3200/3060P/3066P/3560P/3566P HD 4000/4060P/4076P/4560P	1:0,83	ELECTRIC (24V) OVER HYDRAULIC

NOTE: DIFFERENT INTERNAL RATIO COMBINATIONS AVAILABLE.

PTO MOUNTING KIT, PRESSURE LUB KIT AND ELECTRIC KIT NEED TO BE ORDER SEPARATELY.



## POWER TAKE OFF'S ALLISON CONSTANT MESH SERIES

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 AVAILABLE.

## 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 <sup>(1)</sup>	PNEUMATIC
TF10018P*	SIDE MOUNT	GRSO905	1:2,17 <sup>(1)</sup>	PNEUMATIC

## POWER TAKE OFF'S SCANIA



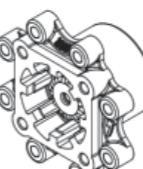
Different combinations available  
Better management of stocks  
Easy to assemble  
Quick customer response



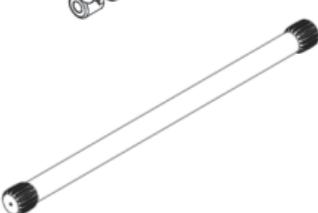
## HOW TO ORDER

VK10 0 5 1

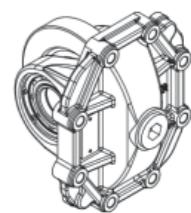
REAR FLANGE  
0 Without rear flange  
1 With rear flange



SHAFT  
0 Without shaft  
5 524mm shaft  
6 620mm shaft



SIDE BASKET  
0 Without side basket  
2 700 N.m GR/GRS side basket  
3 1200 N.m GR/GRS side basket  
7 700 N.m GRSO side basket



EXAMPLE: VK WITHOUT SIDE BASKET; 620MM SHAFT, AND WITH REAR FLANGE, REF. VK10061

\* ALSO AVAILABLE WITH ELECTRIC/MECHANIC SENSOR ON/OFF



## 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 250 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*

\* 12VDC solenoids are also available. You only have to include the number 12 at the end of the reference.  
Example: BP3060H12

## 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)

## PNEUMATIC ACCESSORIES PNEUMATIC CONTROLS



REFERENCE	DESCRIPTION	HANDLE
AOHCACC1	One-way valve, with warning light+pres.gauge	Fix up and down
AOHCACC2	Double one-way valve, with warning light+pres.gauge	Fix up and down
AOHCACC3	Triple one-way valve, with warning light+pres.gauge	Fix 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
ABCD73IL	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 fix down
ABCD93	3 way distributor valve, with warning light+pres.gauge	Automatic return up and fix down
PC2S02T6	Mini switch 2 way distributor valve ; Ø6 mm hose coupling	Automatic return up and down
PC2S12T6	Mini switch 2 way distributor valve ; Ø6 mm hose coupling	Automatic return up and fix down
PC2S22T6	Mini switch 2 way distributor valve ; Ø6 mm hose coupling	Fix up and down
SABCD	Support for distributor valve (ABCD Series)	-
SPC2S4	Support for four in line mini switch distributor valve (PC Series)	-
DCM01	2 way distributor valve, Meiller type	Automatic return up and down
PTOCM01	1 way valve, PTO Control Meiller type	Turn 90°
TCM01	2 way valve, Taipal 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
AOHFC12	Hydraulic End of Stroke Valve (push version) 1/2" BSP
AOHFC34	Hydraulic End of Stroke Valve (push version) 3/4" BSP
AOHFC34C	Hydraulic End of Stroke Valve (pull version) 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

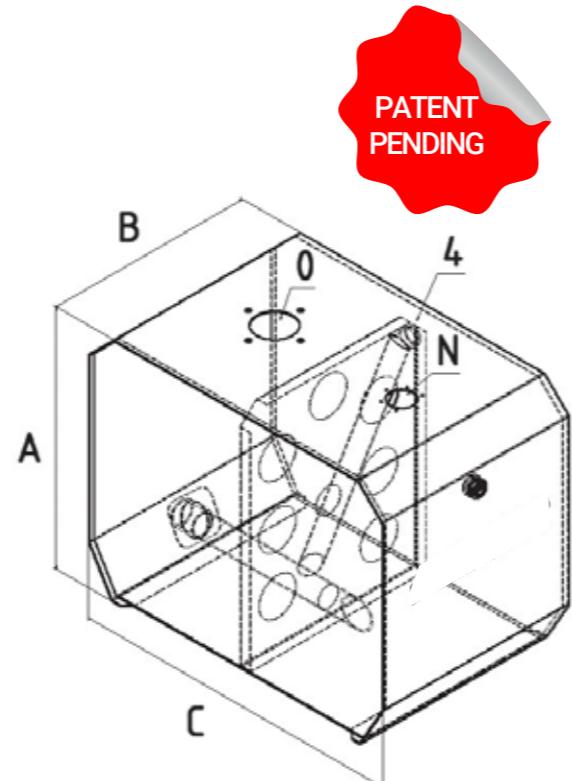
REFERENCE	DESCRIPTION
HP20DS01	Hand pump ; 20 cc ; Double acting ; Single acting circuit ; with lowering valve
HP50DS01	Hand pump ; 50 cc ; Double acting ; Single acting circuit ; with lowering valve
HP70DS01	Hand pump ; 70 cc ; Double acting ; Single acting circuit ; with lowering valve
HPT12DS01	Hand 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

## OIL TANKS

CAPACITY FROM 80 LITERS TO 250 LITERS  
SIDE MOUNTING

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

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
	100L		L LONG OPTICAL OIL LEVEL INDICATOR	FB FILLER CAP BREather PLUG WITH INTEGRAL AIR FILTER	M8	1A TANK TOP OIL RETURN FILTER DOUBLE PORT	3 FLANGE TO ELECTRICAL DISTRIBUTOR AND OIL FILTER
	130L	AL ALUMINUM			Ø86,4	DISTRIBUTOR NOT INCLUDED	4 DIRECT OIL RETURN
	160L				Ø126,1	DISTRIBUTOR NOT INCLUDED	S1 SIDE BELT SUPPORT
	200L	IX STAINLESS STEEL					M MANOMETER FOR RETURN FILTER
	250L						S2 SIDE OR REAR BELT SUPPORT

WITH THE SAME SUPPORTS IS POSSIBLE TO USE AS SIDE OR REAR MOUNTING

### 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



## ADMISSION CONNECTORS

INDICATIVE SELECTION FOR THE MOST COMMON APPLICATIONS  
(Pump Rotation Between 800 and 1200 rpm)

### VDP SERIES I 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 I 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°
A90114200	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 I 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 <sup>(1)</sup>	1" 1/4 BSP	1" 1/2	Steel	Straight
AD114134	60 <sup>(1)</sup>	1" 1/4 BSP	1" 3/4	Steel	Straight
AD114200	60 <sup>(1)</sup>	1" 1/4 BSP	2"	Steel	Straight
AD112112	52 ; 60 <sup>(2)</sup>	1" 1/2 BSP	1" 1/2	Steel	Straight
AD112134	52 ; 60 <sup>(2)</sup>	1" 1/2 BSP	1" 3/4	Steel	Straight
AD112200	52 ; 60 <sup>(2)</sup> ; 70 ; 80 <sup>(1)</sup> ; 86 ; 110	1" 1/2 BSP	2"	Steel	Straight
AD200200	80 <sup>(1)</sup> ; 86 ; 110	2" BSP	2"	Steel	Straight
A45114112	14 ; 19 ; 25 ; 32 ; 40 ; 45 ; 50 ; 60 <sup>(1)</sup>	1" 1/4 BSP	1" 1/2	Brass	Elbow 45°
A45114200	60 <sup>(1)</sup>	1" 1/4 BSP	2"	Brass	Elbow 45°
A45112112	52 ; 60 <sup>(2)</sup>	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 <sup>(1)</sup>	1" 1/4 BSP	1" 1/2	Brass	Elbow 90°
A90114134	60 <sup>(1)</sup>	1" 1/4 BSP	1" 3/4	Brass	Elbow 90°
A90112112	52 ; 60 <sup>(2)</sup>	1" 1/2 BSP	1" 1/2	Brass	Elbow 90°
A90112200	52 ; 60 <sup>(2)</sup> ; 70 ; 80 <sup>(1)</sup> ; 86 ; 110	1" 1/2 BSP	2"	Brass	Elbow 90°
A90200200	80 <sup>(2)</sup> ; 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

# ACCESSORIES

	<b>CARDAN FLANGE – DIN 5462 SPLINE BORE</b>	
	<b>REFERENCE</b>	<b>DESCRIPTION</b>
	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		
	<b>CARDAN FLANGE – DIN 5462 SPLINE SHAFT</b>	
	<b>REFERENCE</b>	<b>DESCRIPTION</b>
	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)
	<b>CARDAN FLANGE – DIN 5480 SPLINE BORE</b>	
	<b>REFERENCE</b>	<b>DESCRIPTION</b>
	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)
	<b>CARDAN FLANGE – DIN 9611 SPLINE BORE</b>	
	<b>REFERENCE</b>	<b>DESCRIPTION</b>
	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)
	<b>CARDAN FLANGE – ADJUSTABLE KEY HUB</b>	
	<b>REFERENCE</b>	<b>DESCRIPTION</b>
	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
	<b>ISO (4 BOLTS) PTO – OUTPUT SHAFT ADAPTER</b>	
	<b>REFERENCE</b>	<b>DESCRIPTION</b>
	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
	<b>ISO-UNI / UNI-ISO / ISO-ISO ADAPTER</b>	
	<b>REFERENCE</b>	<b>DESCRIPTION</b>
	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	STDRE (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
<b>UP TO 300 bar (4300 psi)</b>	
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
DTCA1302PP	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent ; 2 pressure range (with pneumatic selector)
DTCA1303P	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent 3 pressure range
DTCA130F	Tipping Valve up to 130 l/min ; Open circuit ; progressive descent ; push end of stroke
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 ; Open circuit + cable for mechanical operation 3.0 m
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 end of stroke
<b>UP TO 250 bar (3600 psi)</b>	
DTCA200	Tipping Valve up to 200 l/min ; Open circuit ; progressive descent
DTCA200H	Tipping Valve up to 200 l/min ; Open circuit ; progressive descent ; 3 fixation holes type H
DTCA2002P	Tipping Valve up to 200 l/min ; Open circuit ; progressive descent ; 2 pressure range
DTCA2002PP	Tipping Valve up to 200 l/min ; Open circuit ; progressive descent ; 2 pressure range (with pneumatic selector)
DTCA2003P	Tipping Valve up to 200 l/min ; Open circuit ; progressive descent ; 3 pressure range
DTCA200F	Tipping Valve up to 200 l/min ; Open circuit ; progressive descent ; push stroke end
DTCA2002V	Tipping Valve up to 200 l/min ; Open circuit ; 2 descent speeds
DTCA1802S61R2	Tipping Valve up to 180 l/min ; Open circuit ; progressive descent ; SAE 61 flange cylinder mounting
VVP150	Tipping Valve up to 150 l/min ; Close circuit ; progressive descent

# HYDRAULIC VALVES SECTIONAL DIRECTIONAL CONTROL VALVES

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

NOTE: DIFFERENT COMBINATIONS CAN BE MADE



MotorRock

A U T O M O T I V E