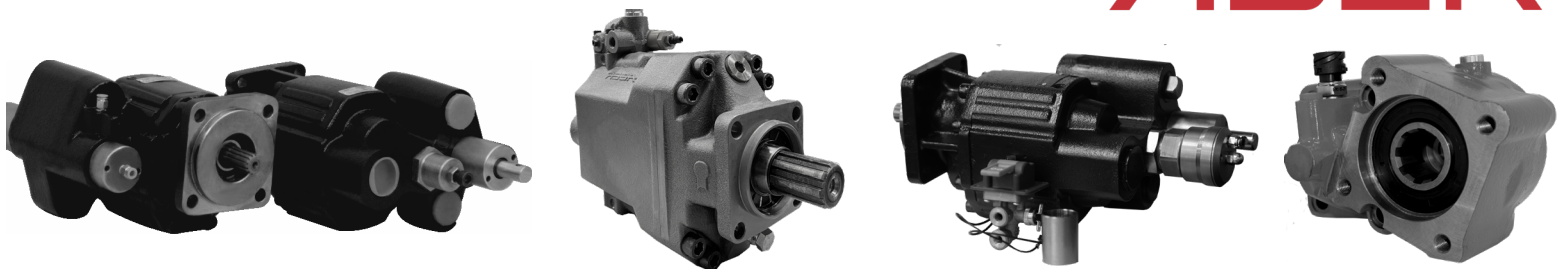




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ABER





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Ordering Code



Example

LG	27	D	B4	R	2530	N16
01	02	03	04	05	06	07

Series

01	LG	Little Giant Dump Pump
-----------	----	------------------------

Displacement

02	22	5.0 in ³ /rev - 22 gpm at 1,000 rpm
	27	6.2 in ³ /rev - 27 gpm at 1,000 rpm

Operation

03	D	Dual Pressure Pump
	S	Single Pressure Dump Pump

Mounting Flange and Shaft

04	B4	SAE B 4 BOLT 13T Shaft
	D4	4 Bolt Flange, DIN 5462

Rotation

05	R	Right-Hand
	L	Left-Hand

Relief Valve Setting

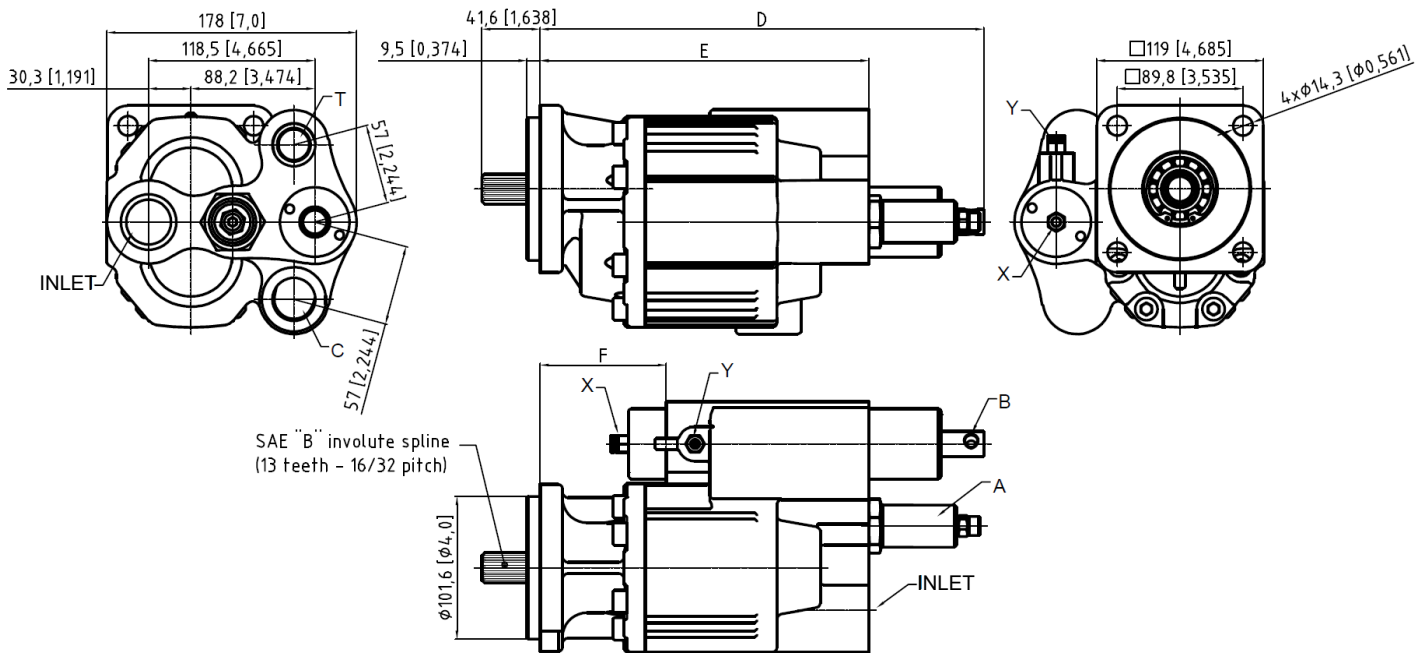
06	25	2500PSI
	30	3000PSI

Port Size

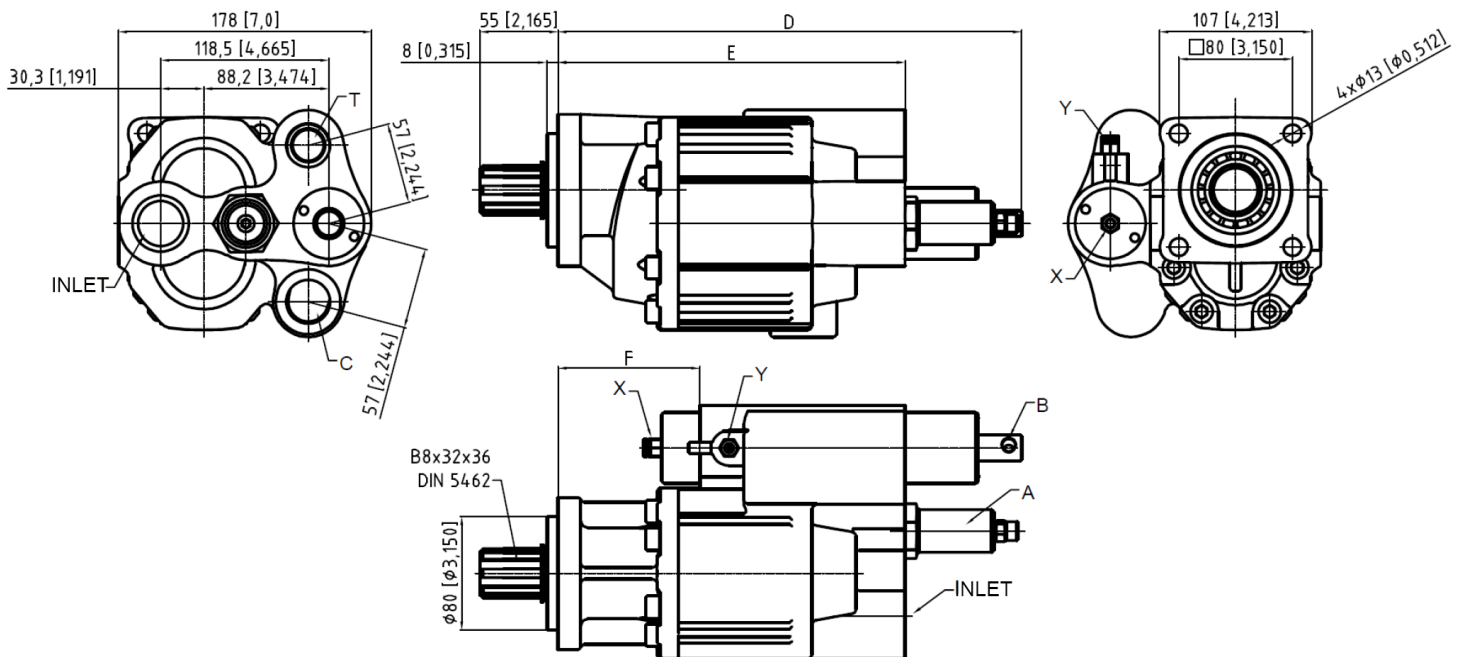
07	N16	1" NPT
	S16	ORB # 16

Dimensions

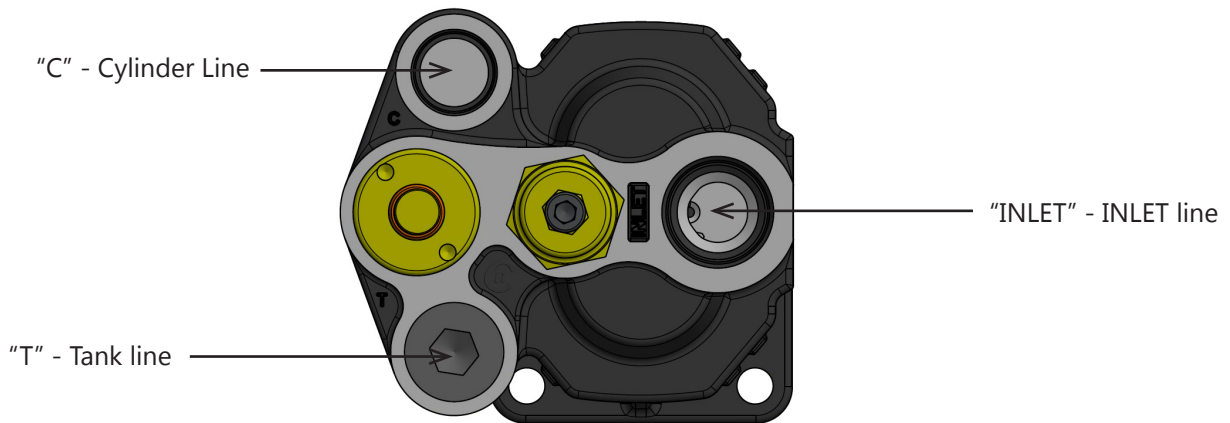
SAE B 4 Bolt 13T Shaft



ISO 7653 4 Bolt



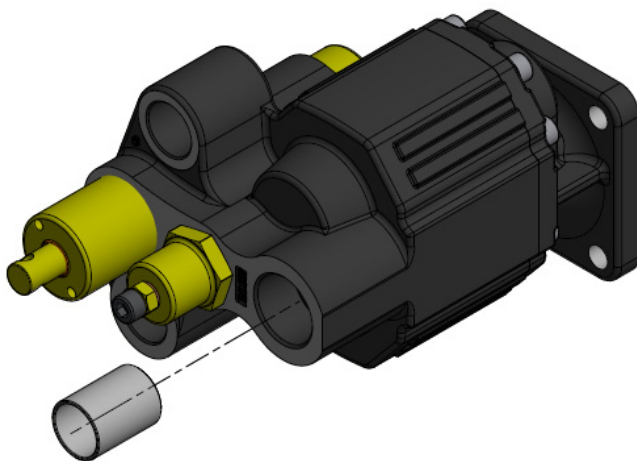
3 Lines Installation



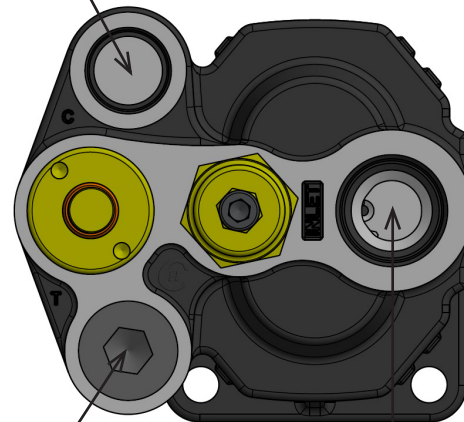
Three line installation

(continuous and intermittent operation)

one line to the cylinder, "C"
one line to the tank "INLET"
one line to the tank, "T"



"C" - Cylinder Line

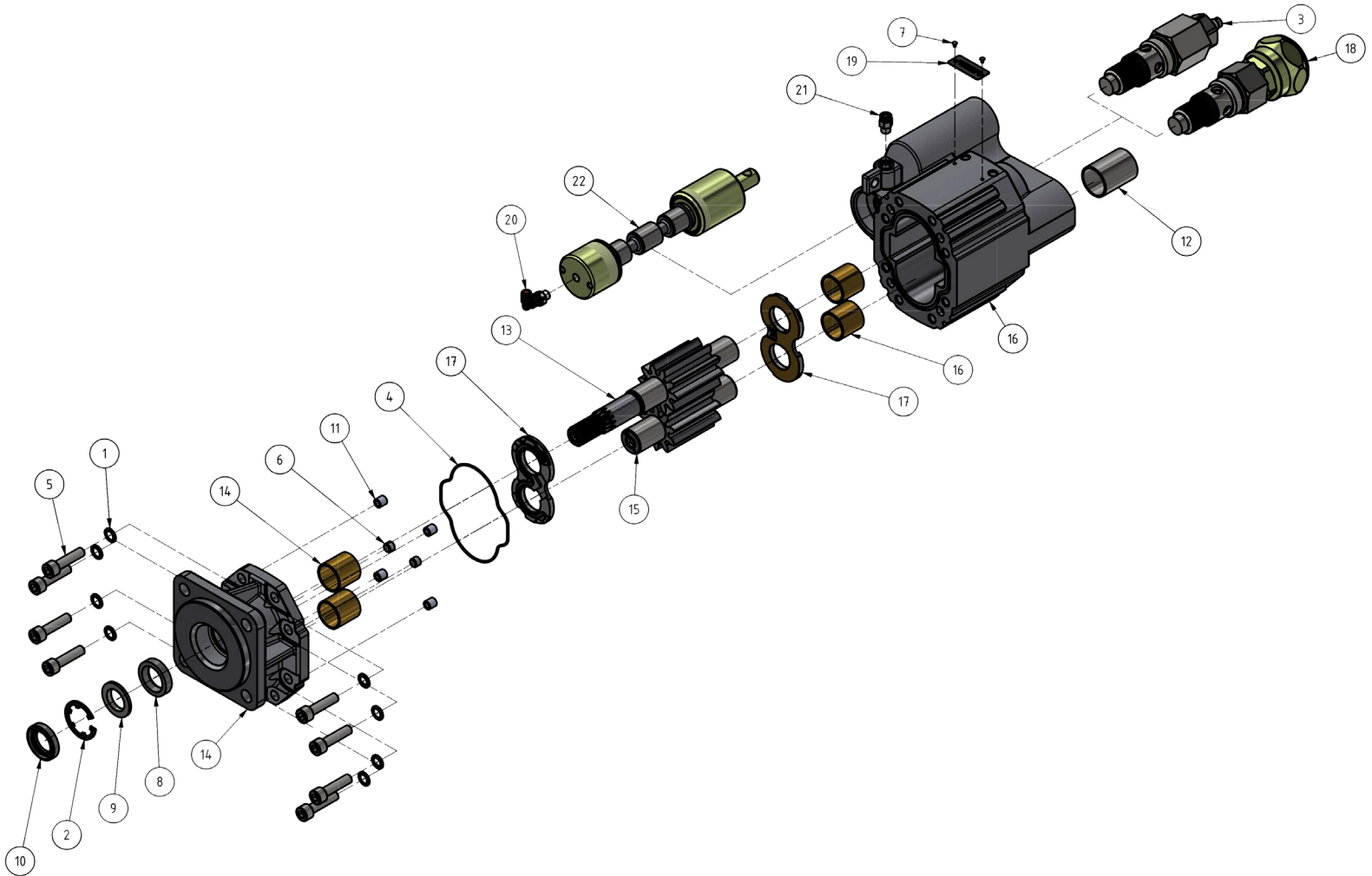


Connect the return hose to the tank line connection, "T"

Install the sleeve in the inlet port, "INLET"

Parts List

LG FLANGE AND SHAFT B4 and S4 SPARE PARTS



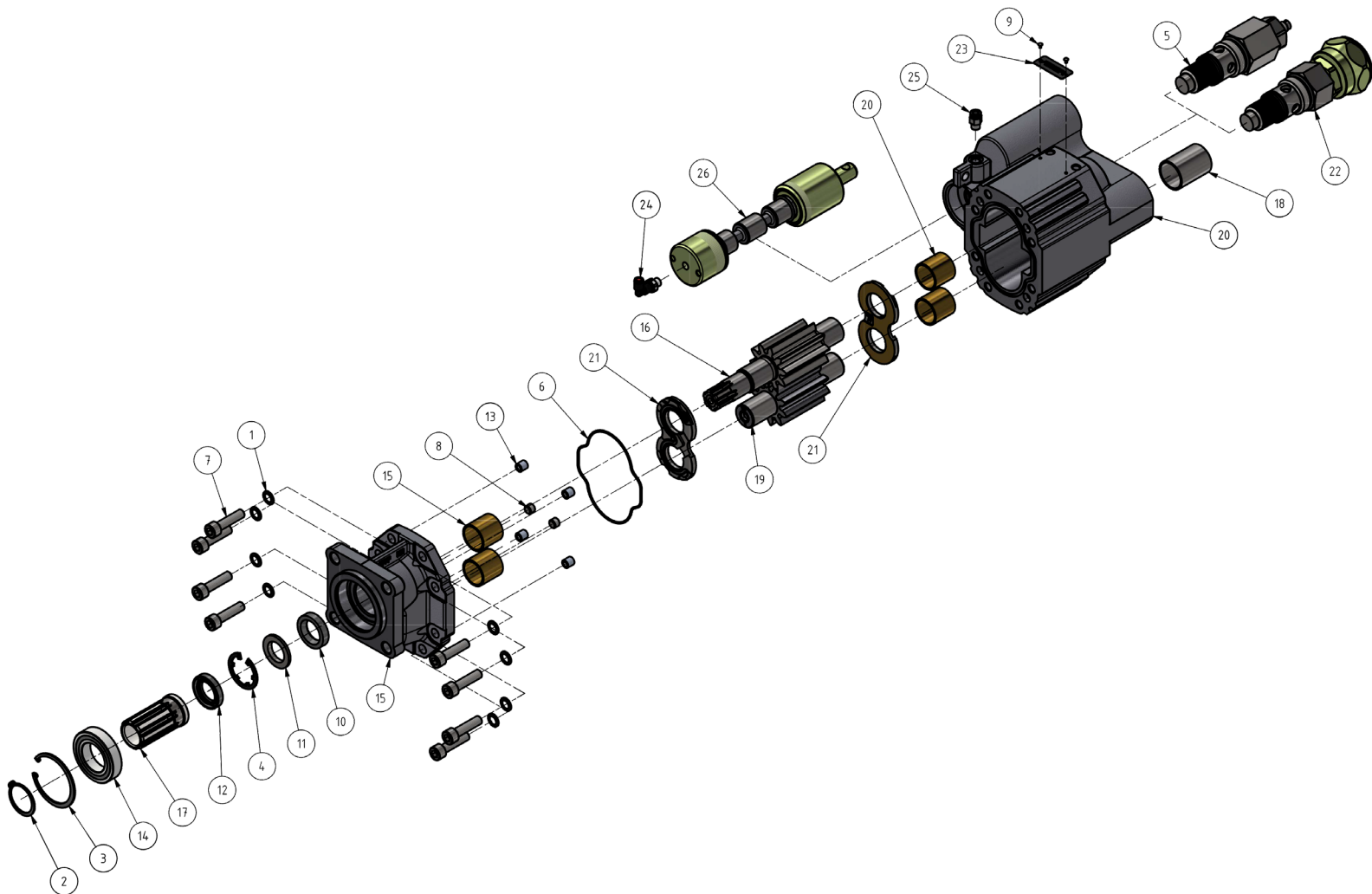
Item	Qty	Part Number	Description
1	8	HCCANI68	Washer
2	1	HCCFRE35	Internal Circlip
3	1	See table on the next page	Relief Valve Single Pressure
4	1	HCCORI66	O-ring
5	8	HCCPAR227	Socket Head Screw
6	2	HCCPER19	Socket Set Screw
7	2	HCCREB01	Rivet
8	1	HCCRET15	Radial Shaft Seal
9	1	HCCRET17	Seal Protection
10	1	HCCRET37	Radial Shaft Seal
11	4	HCCRLS02	Pin
12	1	HCFBG352	Admission Sleeve
13	1	See table on the next page	Drive Shaft
14	1	HCFBG429	Cover - contains 2 bushings code: (HCCCQ01)
15	1	See table on the next page	Driven Shaft
16	1	See table on the next page	Housing - contains 2 bushings code: (HCCCQ01)

Item	Qty	Part Number	Description
17	2	HCFBG475	Unidirectional Plate code: (HCFBG146) + seal (HCCVED13)
18	1	See table below	Relief Valve Double Pressure
19	1	HCIAB001	Identification Plate
20	1	HR618CCR	90° Air Fitting
21	1	HR618DCR	Straight Air Fitting
22	1	HSPPVVD	Air Shift Valve Assembly

Item	LG22SB4R25N16 LG22SB4L25N16	LG22DB4R2530N16 LG22DB4L2530N16	LG27SB4R25N16 LG27SB4L25N16	LG27DB4R2530N16 LG27DB4L2530N16	LG27SS4R25N16 LG27SS4L25N16	LG27DS4R2530N16 LG27DS4L2530N16
3	HCCL150280	N/A	HCCL150280	N/A	HCCL150280	N/A
13	HCFBG111	HCFBG111	HCFBG428	HCFBG428	HCFBG427	HCFBG427
15	HCFBG003	HCFBG003	HCFBG459	HCFBG459	HCFBG459	HCFBG459
16	HCFBG483	HCFBG483	HCFBG470	HCFBG470	HCFBG470	HCFBG470
18	N/A	HCFBG481	N/A	HCFBG481	N/A	HCFBG481

Parts List

LG FLANGE AND SHAFT D4 SPARE PARTS



Item	Qty	Part Number	Description
1	8	HCCANI68	Washer
2	1	HCCFRE02	Internal Circlip
3	1	HCCFRE24	Internal Circlip
4	1	HCCFRE35	Internal Circlip
5	1	See table below	Relief Valve Single Pressure
6	1	HCCORI66	O-ring
7	8	HCCPAR227	Socket Head Screw
8	2	HCCPER19	Socket Set Screw
9	2	HCCREB01	Rivet
10	1	HCCRET15	Radial Shaft Seal
11	1	HCCRET17	Seal Protection
12	1	HCCRET37	Radial Shaft Seal
13	4	HCCRLS02	Pin
14	1	HCCROL48	Bearing
15	1	HCFBG022	Cover - contains 2 bushings code: (HCCCQ001)
16	1	See table below	Drive Shaft
17	1	HCFBG098	Adapter Shaft
18	1	HCFBG352	Admission Sleeve
19	1	See table below	Driven Shaft
20	1	See table below	Housing - contains 2 bushings code: (HCCCQ001)
21	2	HCFBG475	Unidirectional Plate code: (HCFBG146) + seal (HCCVED13)
22	1	See table below	Relief Valve Double Pressure
23	1	HCIAB001	Identification Plate
24	1	HR618CCR	90° Air Fitting
25	1	HR618DCR	Straight Air Fitting
26	1	HSPDVD	Air Shift Valve Assembly

Item	LG22SD4R25N16 LG22SD4L25N16	LG22DD4R2530N16 LG22DD4L2530N16	LG27SD4R25N16 LG27SD4L25N16	LG27DD4R2530N16 LG27DD4L2530N16
5	HCCL150280	N/A	HCCL150280	N/A
16	HCFBG004	HCFBG004	HCFBG094	HCFBG094
19	HCFBG003	HCFBG003	HCFBG067	HCFBG067
20	HCFBG483	HCFBG483	HCFBG470	
22	N/A	HCFBG481	N/A	

Walking Floor Dump Pumps

Part Number	Rotation	Flange	Shaft	GPM@ 1000 RPM	NPTF Pressure	NPTF Return	NPTF Inlet	LP Setting	HP Setting
LG22DB4R2530N16	CW	4 B	7/8-13 Tooth	22	1"	1"	1-1/4"	2500PSI	3000PSI
LG22DB4L2530N16	CCW	4B	7/8-13 Tooth	22	1"	1"	1-1/4"	2500PS	3000PS
LG22DD4R2530N16	CW	DIN 5462		22	1"	1"	1-1/4"	2500PSI	3000PSI
LG22DD4L2530N16	CCW	DIN 5462		22	1"	1"	1-1/4"	2500PSI	3000PSI
LG27DB4R2530N16	CW	4 B	7/8-13 Tooth	27	1"	1"	1-1/4"	2500PSI	3000PSI
LG27DB4L2530N16	CCW	4 B	7/8-13 Tooth	27	1"	1"	1-1/4"	2500PSI	3000PSI
LG27DD4R2530N16	CW	DIN 5462		27	1"	1"	1-1/4"	2500PSI	3000PSI
LG27DD4L2530N16	CCW	DIN 5462		27	1"	1"	1-1/4"	2500PSI	3000PSI
LG27DS4R2530N16	CW	4 B	7/8-13 Tooth	27	1"	1"	1-1/4"	2500PSI	3000PSI

NOTE: All pumps have sleeves installed in the inlet ports

LG 22 series weigh approximately 48 lbs.

LG 27 series weigh approximately 53 lbs.

Dump Pumps

Part Number	Rotation	Flange	Shaft	GPM@ 1000 RPM	NPTF Pressure	NPTF Return	NPTF Inlet	Relief Valve Setting
LG22SB4R25N16	CW	4B	7/8-13 Tooth	22	1"	1"	1-1/4"	2500PSI
LG22SB4L25N16	CCW	4 B	7/8-13 Tooth	22	1"	1"	1-1/4"	2500PSI
LG22SD4R25N16	CW	DIN 5462		22	1"	1"	1-1/4"	2500PSI
LG27SB4R25N16	CW	4 B	7/8-13 Tooth	27	1"	1"	1-1/4"	2500PSI
LG27SB4L25N16	CCW	4 B	7/8-13 Tooth	27	1"	1"	1-1/4"	2500PSI
LG27SS4R25N16	CW	4 B B	1"-15 Tooth	27	1"	1"	1-1/4"	2500PSI
LG27SS4L25N16	CCW	4 B B	1"-15 Tooth	27	1"	1"	1-1/4"	2500PSI
LG27SD4R25N16	CW	DIN 5462		27	1"	1"	1-1/4"	2500PSI
LG27SD4L25N16	CCW	DIN 5462		27	1"	1"	1-1/4"	2500PSI

LG 22 series weigh approximately 48 lbs.

LG 27 series weigh approximately 53 lbs.

Seal Kits

SKB3U		
Qty	Part Number	Description
1	CC0RI66	O-Ring
2	XXVED13	Thrust Plate - Uni-Directional Rubber
1	CCRET15	Radial Shaft Seal
1	CCRET17	Seal Protector
1	CCRET37	Radial Shaft Seal

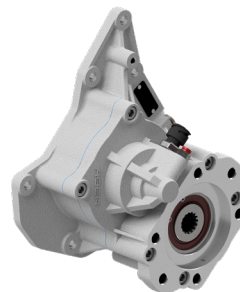
SKPVD		
Qty	Part Number	Description
1	CCRAS04	Seal
2	CCORI117	O-ring
1	CCORI20	O-ring
1	CCPORI82	O-ring
1	CCORI85	O-ring

Power Take-Offs



Mack®/Volvo®/Automatic Transmission

Part Number	Ratios	Shaft
HTF4033AMPZ	(1:1,01)	Standard 5462 DIN
HTF4036AMPZ	(1:1,35)	
HTF4035AMPZ	(1:1,56)	
HTF4034AMPZ	(1:1,73)	



Detroit®/Automatic Transmission

Part Number	Ratios
HTF8037AMP100ENZ	(1:1)
HTF8037AMP132ENZ	(1:1,32)
HTF8037AMP158ENZ	(1:1,83)
HTF8037AMP183ENZ	(1:1,83)

Parts

Part Number	Descriptions
HGMKDT12	Mounting Gasket O-ring and bolts
HCCJUN80	Mounting Gasket
HCCORI170	O-Ring
HCCPAR158	Mounting Bolts
HCCORI157	Lubrication O-Ring

PTO Adapters

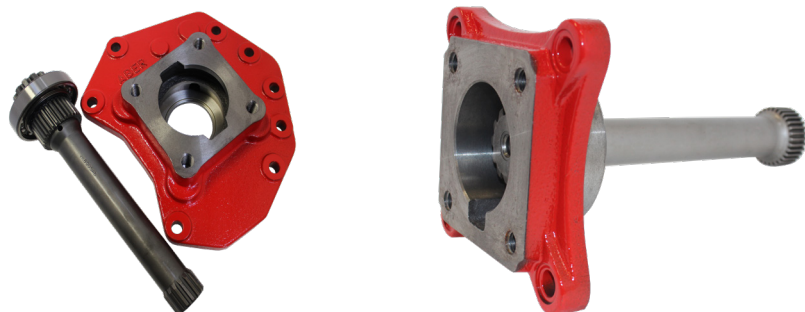
For Mack®/Volvo®/Detroit® Automatic Transmission



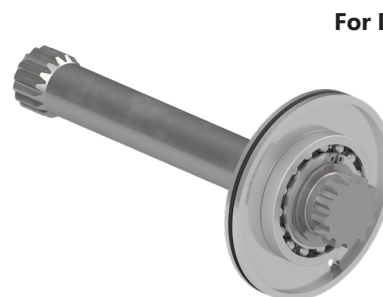
Part Number	Description
HADA1300 R	Companion Flange 1300 series
HADA1400 R	Companion Flange 1400 series
HADA4FB24	2/4 Bolt "B", 7/8-13 Tooth Adapter
HADA4FBB24	2/4 Bolt "BB", 1"-15 Tooth Adapter
HADA4FSE1RE	1-1/4" Key Shaft, 5/16 Key Adapter

Connecting Shaft Assembly

For Mack®/Volvo®/Detroit® Automatic Transmission



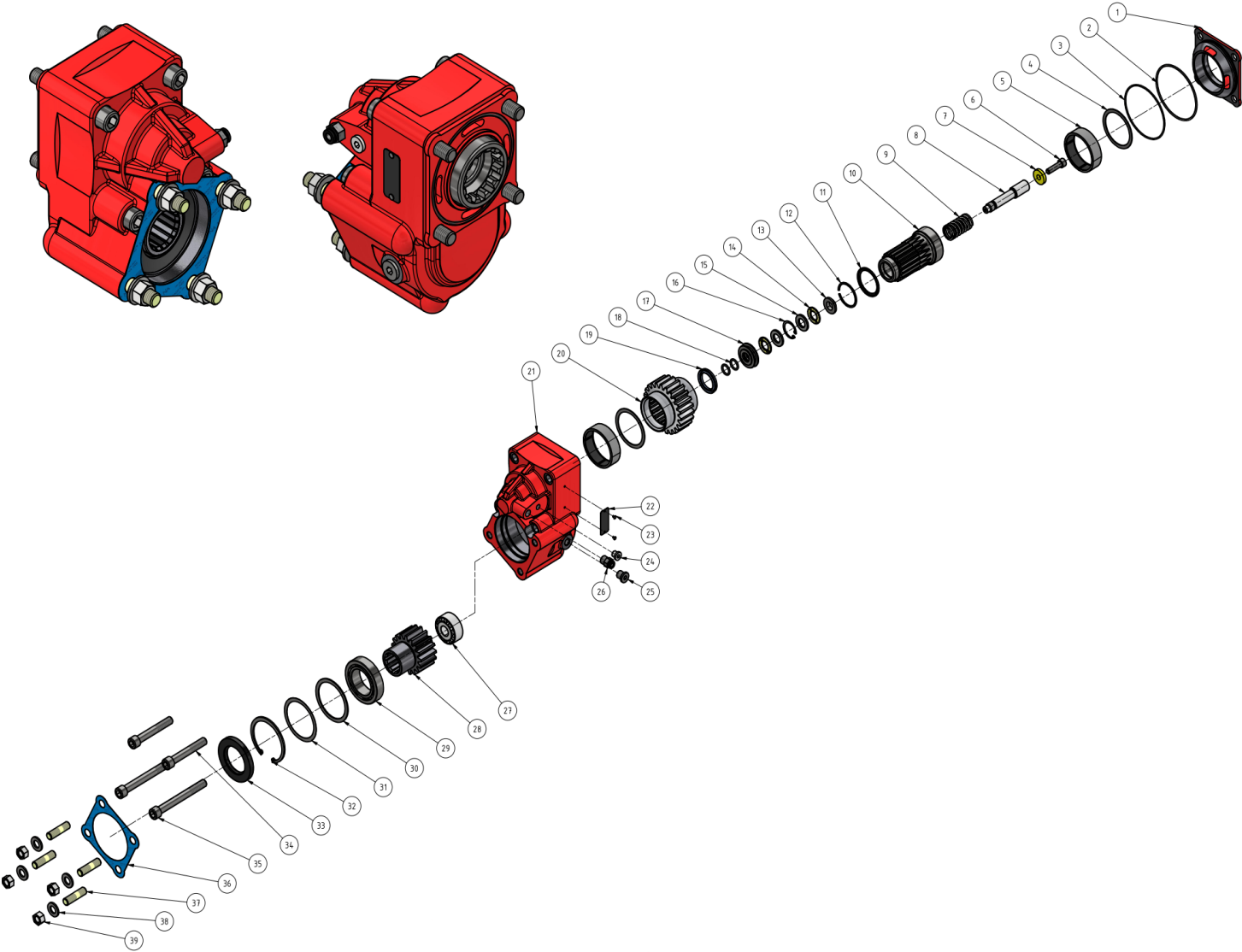
For Mack®/Volvo®



For Detroit®

Part Number	Description
HVK5006	Connecting Shaft for Mack®/Volvo®
HVK8038	Connecting Shaft for Detroit®
HVK8039	Connecting Shaft for Detroit®

Exploded View

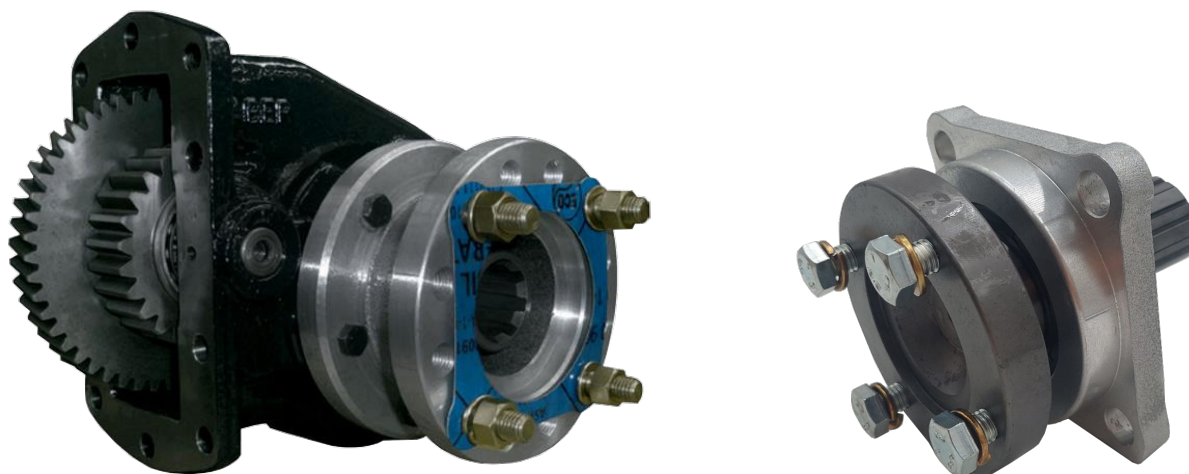


Parts Break Down

Item	Qty	Part Number	Description
1	1	HCFTF325	Cover Ring
2	1	HCCORI55	O Ring
3	1	HCCORI57	O Ring
4	2	HCFTF326	Washer
5	2	HCCROL50	Roller Bearing
6	1	HCCPAR11	Cap Screw
7	1	HCFTFO10	Washer
8	1	HCFTF112	Shaft
9	1	HCCMOL05	Spring
10	1	HCFTF316	Output Shaft
11	1	HCFTF372	Washer
12	1	HCCWR04	Retainer Ring
13	1	HCFTF057	Sleeve
14	2	HCCROL03	Flat Roller Bearing
15	2	HCCANI23	Washer
16	1	HCCFRE36	Retainer Ring
17	1	HCFTF063	Air Control Piston
18	2	HCCORI04	O Ring
19	1	HCCVED17	Retainer Seal
20	1	See Table Below	Output Gear
21	1	HCFTF688	Housing
22	1	HCIAB001	Identification Plate
23	2	HCCREB01	Rivet
24	1	HCCT01	Sensor Plug
25	1	HCCTAC01	Plug
26	1	HR614DCR	Pneumatic Fitting
27	1	HCCROL51	Roller Bearing
28	1	See Table Below	Input Gear
29	1	HCCROL34	Roller Bearing
30	1	HCFTF218	Washer
31	1	HCFTF689	Washer
32	1	HCCFRE08	Retainer Ring
33	1	HCCRET09	Retainer Seal
34	2	HCCPAR72	Cap Screw
35	2	HCCPAR161	Cap Screw
36	1	HCCJUN04	Gasket
37	4	HCFTF091	Stud
38	4	HCCANI09	Washer
39	4	HCFTF098	Nut

Item		
	20	28
HTF4033AMP	HCFTF311	HCFTF312
HTF4034AMP	HCFTF313	HCFTF314
HTF4035AMP	HCFTF307	HCFTF308
HTF4036AMP	HCFTF309	HCFTF310

267 Series Replacement



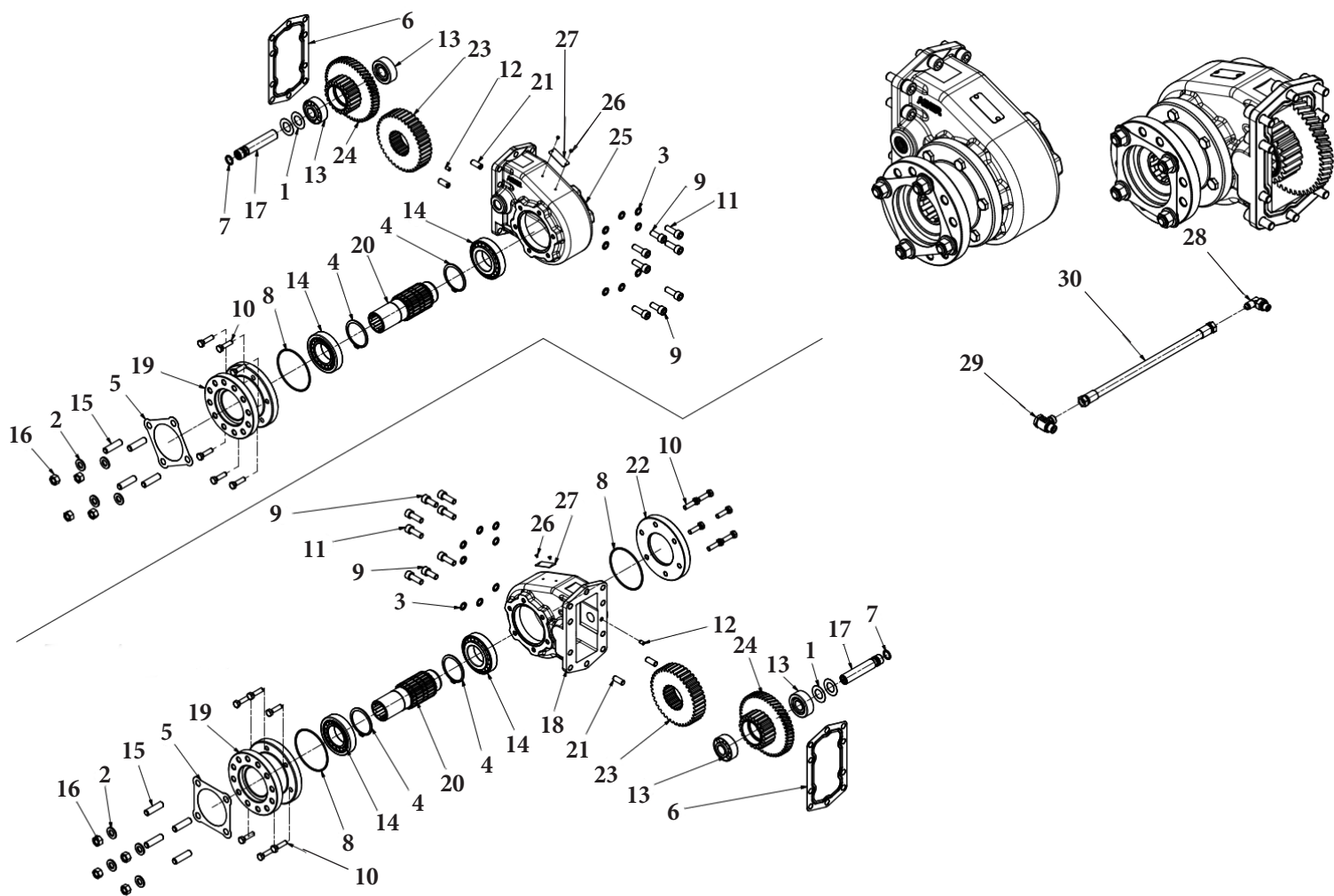
Part Number	Replacement for	Description
HTF10A53MLEN	267XBFJP-M5XY	5462 DIN shaft.
HTF10A65MLEN	267XDFJP-M5XY	5462 DIN shaft.
HTF10A74MLEN	267XGFJP-M5XY	5462 DIN shaft.
HTF10A105MLEN	287XPFJP-M5XY	5462 DIN shaft.

267 Adapters

Part Number	Description
HADA4FSE1RE	DIN Shaft Output, 1-1/4" keyed shaft, 5/16 Keyed
HADA4FB24	DIN Shaft Output, 7/8-13, 2/4 Bolt B
HADA4FBB24	DIN Shaft Output, 1"-15 tooth 2/4 Bolt BB
HADA1300R	DIN Shaft Output, 1300 series companion flange
HADA1400R	DIN Shaft Output, 1400 series companion flange



267 Exploded View



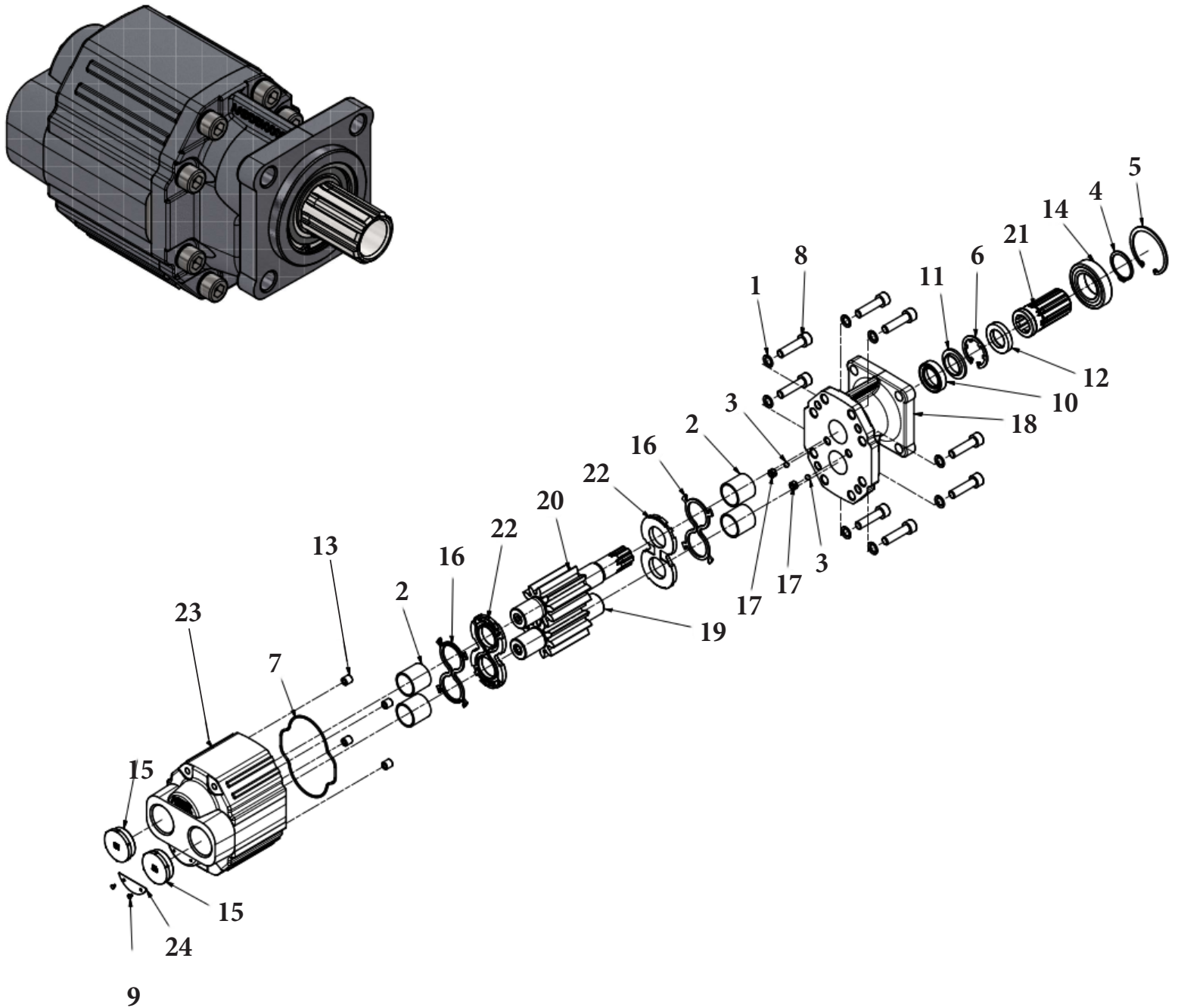
Parts Break Down

Item	Qty	Part Number	Description
1	2	HCCANI01	Washer
2	4	HCCANI09	Pressure Washer
3	8	HCCANI68	Washer
4	2	HCCFRE48	Circlip
5	1	HCCJUN04	Gasket
6	1	HCCJUN60	Gasket
7	1	HCC0RI05	O-ring
8	2	HCC0RI122	O-ring
9	2	HCCPAR06	Screw
10	12	HCCPAR19	Screw
11	6	HCCPAR111	Screw
12	1	HCCPER18	Stud
13	2	HCCR0L53	Bearing
14	2	HCCR0L68	Bearing
15	4	HCFTF091	Plug
16	4	HCFTF098	Nut
17	1	HCFTF206	Idler Shaft
18	1	HCFTF495	Housing (Left Assembly)
19	1	HCFTF497	Output Flange
20	1	HCFTF498	Output Shaft
21	2	HCFTF558	Plug
22	1	HCFTF571	Cover
23	1	See Table Below	Output Gear
24	1	See Table Below	Input Gear
25	1	HCFTF557	Housing (Right Assembly)
26	2	HCCREB01	Rivet
27	1	HCIAB001	Identification Plate
28	1	HCCCKH037	Coupling
29	1	HCCCKH067	Coupling
30	1	HCCMAN008	Hose

Item	HTF10A53_EN	HTF10A65_EN	HTF10A74_EN	HTF10A103_EN
23	HCFTF840	HCFTF838	HCFTF499	HCFTF842
24	HCFTF841	HCFTF837	HCFTF500	HCFTF843

Series 3 Hydraulic Bi-Directional Gear Pump

Series 3 - 5462 DIN Shaft & Flange Exploded View

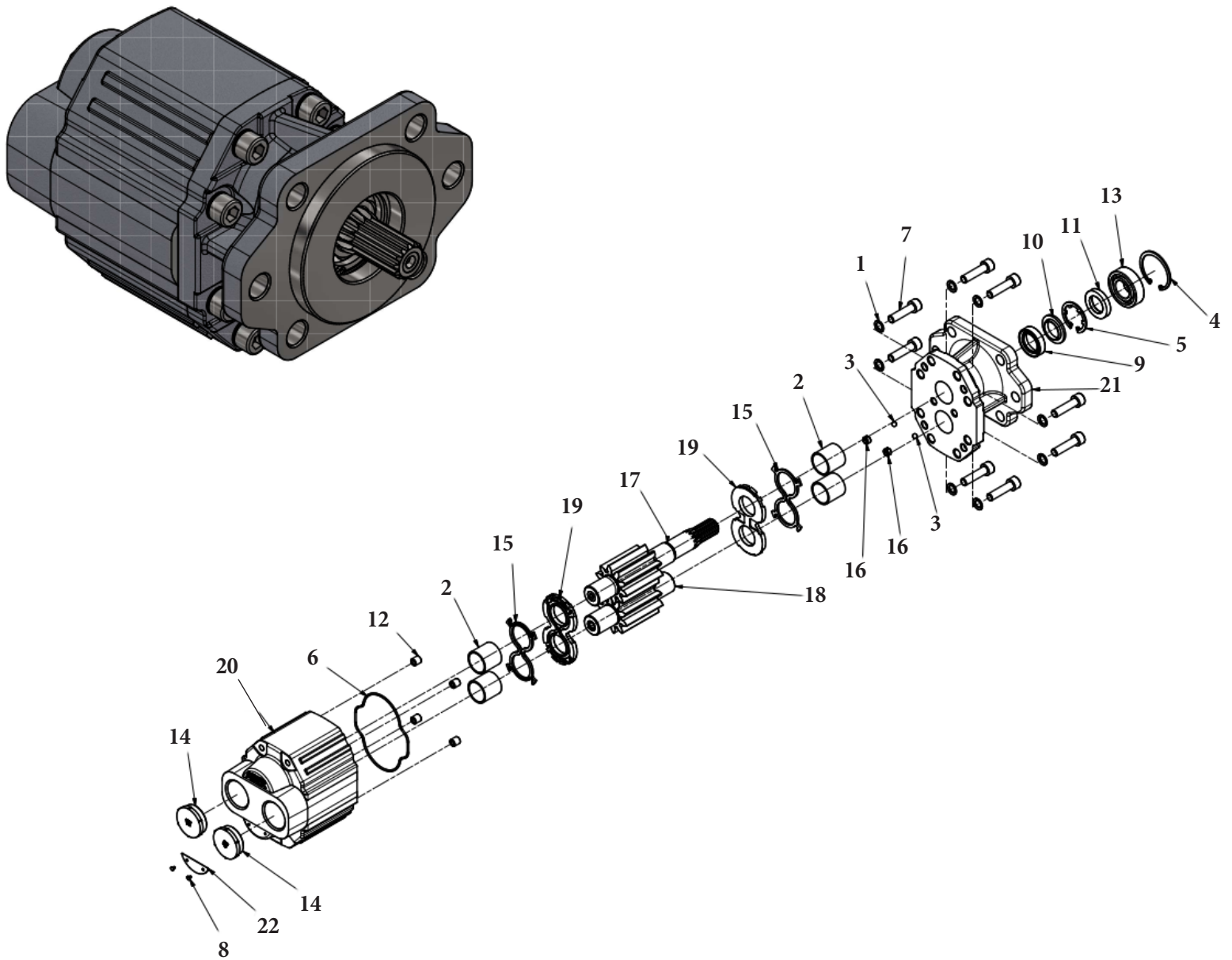


Parts Break Down

Item	Qty	Part Number	Description
1	8	HCCANI68	Pressure Washer
2	4	HCCCQ01	Bushing
3	2	HCCESF12	Sphere
4	1	HCCFRE02	Circlip
5	1	HCCFRE24	Circlip
6	1	HHCFRE35	Circlip
7	1	HCCOR166	O-Ring
8	8	HCCPAR227	Screw
9	2	HCCREB01	Rivet
10	1	HCCRET15	Radial Shaft Seal
11	1	HCCRET17	Protection Washer Seal
12	1	HCCRET37	Radial Shaft Seal
13	4	HCCRLS02	Pin
14	1	HCCROL48	Bearing
15	2	See Table Below	Plastic Plug
16	2	HCCVED07	Seal Bi-Directional
17	2	HCFBG014	Plug
18	1	HCFBG022	Cover 4 Hole
19	1	See Table Below	Driven Shaft
20	1	See Table Below	Drive Shaft
21	1	HCFBG098	Adapter Shaft
22	2	HCFBG100	Plate Bi-Directional
23	1	See Table Below	Housing
24	1	HCIAB002	Identification Plate

Item	HB34CT10	HB34CT516	HB34CT19	HB34CT22	HB34CT27
15	HCCTPR100	HCCTPR100	HCCTPR100	HCCTPR114	HCCTPR114
19	HCFBG009	HCFBG002	HCFBG196	HCFBG003	HCFBG067
20	HCFBG010	HCFBG001	HCFBG195	HCFBG004	HCFBG094
23	HCFBG399	HCFBG415	HCFBG392	HCFBG391	HCFBG347

Series 3 - SAE B Shaft & 2/4 Bolt Flange Exploded View

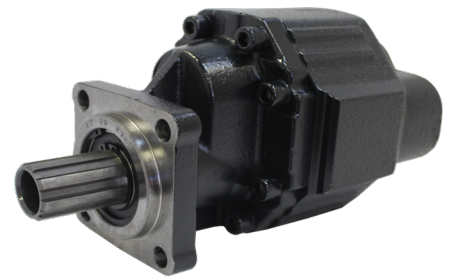


Parts Break Down

Item	Qty	Part Number	Description
1	8	HCCANI68	Pressure Washer
2	4	HCCCQ01	Bushing
3	2	HCCESF12	Sphere
4	1	HCCFRE05	Internal Circlip
5	1	HCCFRE35	Internal Circlip
6	1	HCCOR166	O-Ring
7	8	HCCPAR227	Screw
8	2	HCCREB01	Rivet
9	1	HCCRET15	Radial Shaft Seal
10	1	HCCRET17	Protection Washer
11	1	HCCRET37	Radial Shaft Seal
12	4	HCCRLS02	Pin
13	1	HCCROL31	Bearing
14	2	See Table Below	Plastic Plug
15	2	HCCVEO07	Seal Bi-Directional
16	2	HCFBG014	Plug
17	1	See Table Below	Drive Shaft
18	1	HCFBG067	Driven Shaft
19	2	HCFBG100	Plate Bi-Directional
20	1	See Table Below	Housing
21	1	HCFBG361	Cover SAE B2/B4
22	1	HCIAB002	Identification Plate

Item	HB3B24CT10	HB3B24CT16	HB3B24CT19	HB3B24CT22	HB3B24CT27
14	HCCTPR100	HCCTPR100	HCCTPR100	HCCTPR114	HCCTPR114
17	HCFBG158	HCFBG154	HCFBG254	HCFBG111	HCFBG045
20	HCFBG399	HCFBG415	HCFBG392	HCFBG391	HCFBG347

Part Numbers

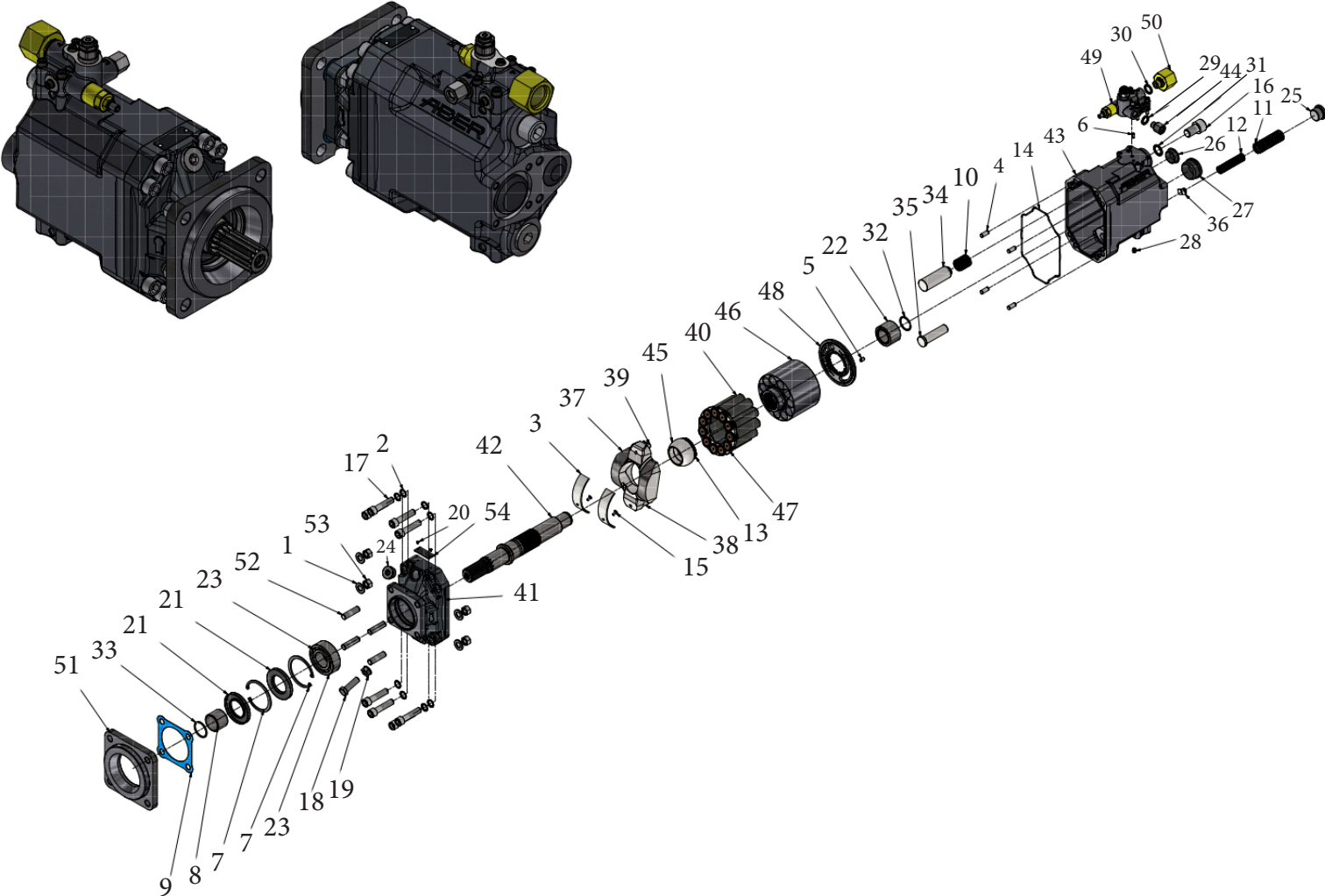


Part Number	SEC	Port Size (Rear Ports)	Cubic Inch Dis.	PSI	Max RPM	CC CM	GPM @ 100	Bar
HB3B24CT10	2/4 Bolt B 7/8-13	1" NPTF	2.3	4350	2500	38	10	300
HB3B24CT12	2/4 Bolt B 7/8-13	1" NPTF	2.8	4350	2500	46	12	300
HB3B24CT14	2/4 Bolt B 7/8-13	1" NPTF	3.2	4050	2200	52	14	280
HB3B24CT16	2/4 Bolt B 7/8-13	1" NPTF	3.7	3750	2000	61	16	260
HB3B24CT19	2/4 Bolt B 7/8-13	1" NPTF	4.3	3500	1900	70	19	240
HB3B24CT22	2/4 Bolt B 7/8-13	1-1/4 NPTF	5.0	3350	1800	82	22	230
HB3B24CT27	2/4 Bolt B 7/8-13	1-1/4 NPTF	6.3	3050	1600	102	27	210
HB3B24OT38	2/4 Bolt B 7/8-13	#12 ORB	2.3	4350	2500	38	10	300
HB3B24OT45	2/4 Bolt B 7/8-13	#12 ORB	2.8	4350	2500	46	12	300
HB3B24OT52	2/4 Bolt B 7/8-13	#16 ORB	3.2	4050	2200	52	14	280
HB3B24OT61	2/4 Bolt B 7/8-13	#16 ORB	3.7	3750	2000	61	16	260
HB3B24OT70	2/4 Bolt B 7/8-13	#16 ORB	4.3	3500	1900	70	19	240
HB3B24OT82	2/4 Bolt B 7/8-13	#20 ORB	5.0	3350	1800	82	22	230
HB3B24OT105	2/4 Bolt B 7/8-13	#20 ORB	6.2	3050	1600	105	27	210
HB3B24OT115	2/4 Bolt B 7/8-13	#24 ORB	7.0	2900	1600	116	31	200
HB3BB24CT10	2/4 Bolt BB 1" 15	1" NPTF	2.3	4350	2500	38	10	300
HB3BB24CT12	2/4 Bolt BB 1" 15	1" NPTF	2.8	4350	2500	46	12	300
HB3BB24CT14	2/4 Bolt BB 1" 15	1" NPTF	3.2	4050	2200	52	14	280
HB3BB24CT16	2/4 Bolt BB 1" 15	1" NPTF	3.7	3750	2000	61	16	260
HB3BB24CT19	2/4 Bolt BB 1" 15	1" NPTF	4.3	3500	1900	70	19	240
HB3BB24CT22	2/4 Bolt BB 1" 15	1-1/4 NPTF	5.0	3350	1800	82	22	230
HB3BB24CT27	2/4 Bolt BB 1" 15	1-1/4 NPTF	6.3	3050	1600	102	27	210
HB3BB4CT16	4 Bolt BB 1" 15	1" NPTF	3.7	3750	2000	61	16	260
HB3BB4CT19	4 Bolt BB 1" 15	1" NPTF	4.3	3500	1900	70	19	240
HB3BB4CT22	4 Bolt BB 1" 15	1-1/4" NPTF	5.0	3350	1800	82	22	230
HB3BB4CT27	4 Bolt BB 1" 15	1-1/4" NPTF	6.2	3050	1600	102	27	210
HB3BB4OT38	4 Bolt BB 1" 15	#12 ORB	2.3	4350	2500	38	10	300
HB3BB4OT45	4 Bolt BB 1" 15	#12 ORB	2.8	4350	2500	46	12	300
HB3BB4OT52	4 Bolt BB 1" 15	#16 ORB	3.2	4050	2200	52	14	280
HB3BB4OT61	4 Bolt BB 1" 15	#16 ORB	3.7	3750	2000	61	16	260
HB3BB4OT70	4 Bolt BB 1" 15	#16 ORB	4.3	3500	1900	70	19	240
HB3BB4OT82	4 Bolt BB 1" 15	#20 ORB	5.0	3350	1800	82	22	230
HB3BB4OT105	4 Bolt BB 1" 15	#20 ORB	6.2	3050	1600	102	27	210

Part Numbers cont.

Part Number	SEC	Port Size (Rear Ports)	Cubic Inch Dis.	PSI	Max RPM	CC CM	GPM @ 100	Bar
HB34CT10	5462 DIN	1" NPTF	2.3	4350	2500	38	10	300
HB34CT12	5462 DIN	1" NPTF	2.8	4350	2500	46	12	300
HB34CT14	5462 DIN	1" NPTF	3.2	4050	2200	52	14	280
HB34CT16	5462 DIN	1" NPTF	3.7	3750	2000	61	16	260
HB34CT19	5462 DIN	1" NPTF	4.3	3500	1900	70	19	240
HB34CT22	5462 DIN	1-1/4" NPTF	5.0	3350	1800	82	22	230
HB34CT27	5462 DIN	1-1/4" NPTF	6.2	3050	1600	102	27	210
HB34OT38	5462 DIN	#12 ORB	2.3	4350	2500	38	10	300
HB34OT45	5462 DIN	#12 ORB	2.8	4350	2500	46	12	300
HB34OT52	5462 DIN	#16 ORB	3.2	4050	2200	52	14	280
HB34OT61	5462 DIN	#16 ORB	3.7	3750	2000	61	16	260
HB34OT70	5462 DIN	#16 ORB	4.3	3500	1900	70	19	240
HB34OT82	5462 DIN	#20 ORB	5.0	3350	1800	82	22	230
HB34OT105	5462 DIN	#20 ORB	6.2	3050	1600	102	27	210

Hydraulic Piston Exploded View



Parts Break Down

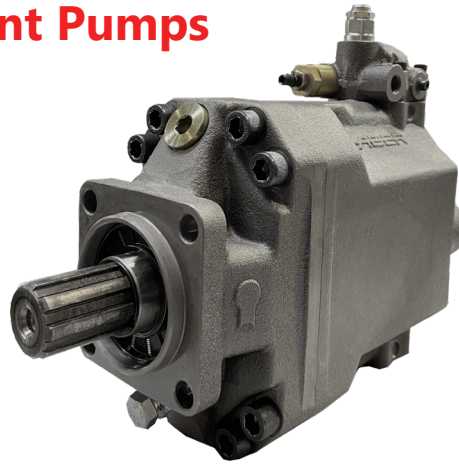
Item	Qty	Part Number	Description
1	4	HCCANIO9	Pressure Washer
2	8	HCCANI69	Presssure Washer
3	2	HCCCQ11	Self-Lubricating Guide
4	4	HCCCV006	Pin
5	1	HCCCV011	Pin
6	1	HCCCVE09	Pin
7	2	HCCFRE17	Circlip
8	1	HCCIR06	Inner Ring
9	1	HCCJUN04	Gasket
10	1	HCCMOL53	Piston Spring
11	1	HCCMOL53	Outer Spring
12	1	HCCMOL55	Inner Spring
13	1	HCCMOL80	Piston Housing Spring
14	1	HCCORI216	O-Ring
15	2	HCCPAR183	Screw
16	1	HCCPAR224	Screw
17	8	HCCPAR229	Screw
18	1	HCCPAR233	Screw
19	1	HCCPOR32	Nut
20	2	HCCREB01	Rivet
21	2	HCCRET50	Radial Shaft Seal
22	1	HCCROL78	Bearing
23	1	HCCROL90	Bearing
24	1	HCCT07	Plug
25	1	HCCT08	Pug
26	1	HCCT21	Plug
27	1	HCCT22	Plug

Item	Qty	Part Number	Description
28	1	HCCTAC08	Sphere Plug
29	1	HCCUS9	Sealing Washer
30	1	HCCUS11	Sealing Washer
31	1	HCCUS22	Sealing Washer
32	1	HCCWR01	Circlip
33	1	HCCWR02	Circlip
34	1	HCFCV008	Piston 27
35	1	HCFCV009	Piston 18
36	1	HCFCV010	Spring Guide
37	1	HCFCV021	Tilting Plate
38	1	HCFCV022	Long Pin
39	1	HCFCV023	Short Pin
40	11	HCFCV040	Piston
41	1	HCFCV057	Fixation Housing
42	1	HCFCV066	Shaft
43	1	HCFCV068	Housing
44	1	HCFCV070	LS Fitting
45	1	HCFCV074	Kneecap
46	1	HCFCV075	Piston Housing
47	1	HCFCV077	Piston Washer
48	1	HCFCV081	Plate
49	1	HCFCV089	Load Sensing Controller
50	1	HCFCV097	Drain Fitting
51	1	HCFFAC4	Flange SAE C4
52	4	HCFTF091	Stud
53	4	HCFTF098	Nut
54	1	HCIAB001	Identification Plate

Hydraulic Piston Pumps

VDP Series | Variable Displacement Pumps

Adjustable Pressure
Quick Response
Flow Reset
High Pressure
Long Service Life
Low Noise
Compact Design
High Efficiency
Efficient Cooling



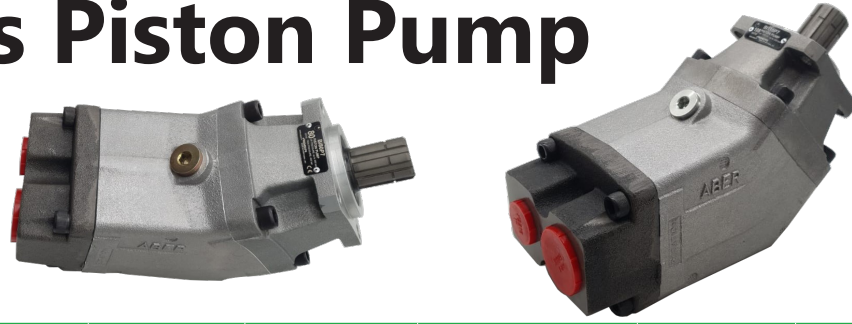
Part Number	Replacement for
VDP219-376/426	Heil® 219-2376 110CC
	Heil® 219-2426 130CC

Our piston pump has an adjustment screw in front which allows you to change the stroke and CC of the pump.

Service Parts

Part Number	Description
CFCV089	VDP Load Sense Valve; 120 cc/rotation
SKVVDP01	VDP Seal Kit for Pump; 120 cc/rotation
SKVLS01	VDP Seal Kit for load sense; 120 cc/rotation
CFCV081	VDP Right Valve Plate; 120 cc/rotation

Bent Axis Piston Pump



Part Number	SEC	Port Size (Inlet)	Port Size (Outlet)	Cubic Inch Dis.	PSI	Max RPM	GPM @ 1000
HBIF25M5B4R	4 Bolt B 7/8-13	1" BSP	3/4" BSP	1.6	5800	2500	6.92
HBIF25M5BB4R	4 Bolt BB 1"-15	1" BSP	3/4" BSP	1.6	5800	2500	6.92
HBIF40M5B4R	4 Bolt B 7/8-13	1" BSP	3/4" BSP	2.6	5800	2300	11.25
HBIF60M7B4R	4 Bolt B 7/8-13	1" BSP	3/4" BSP	3.7	5800	2000	16.01
HBIF80M7B4R	4 Bolt B 7/8-13	1-1/4" BSP	1" BSP	4.9	5080	1500	21.21
HBIF110M7B4R	4 Bolt B 7/8-13	1-1/4" BSP	1" BSP	6.5	4300	1500	28.13
HBIF60M7BB4R	4 Bolt BB 1"-15	1" BSP	3/4" BSP	3.7	5800	2000	16.01
HBIF80M7BB4R	4 Bolt BB 1"-15	1-1/4" BSP	1" BSP	4.9	5080	1500	21.21
HBIF110M7BBR	4 Bolt BB 1"-15	1-1/4" BSP	1" BSP	6.5	4300	1500	28.13
HBIF60M7R	5462 DIN	1" BSP	3/4" BSP	3.7	5800	2000	16.01
HBI80P7R	5462 DIN	1-1/4" BSP	1" BSP	4.9	5080	1500	21.21
HBI110P7R	5462 DIN	1-1/2" BSP	1" BSP	6.5	4300	1500	28.13

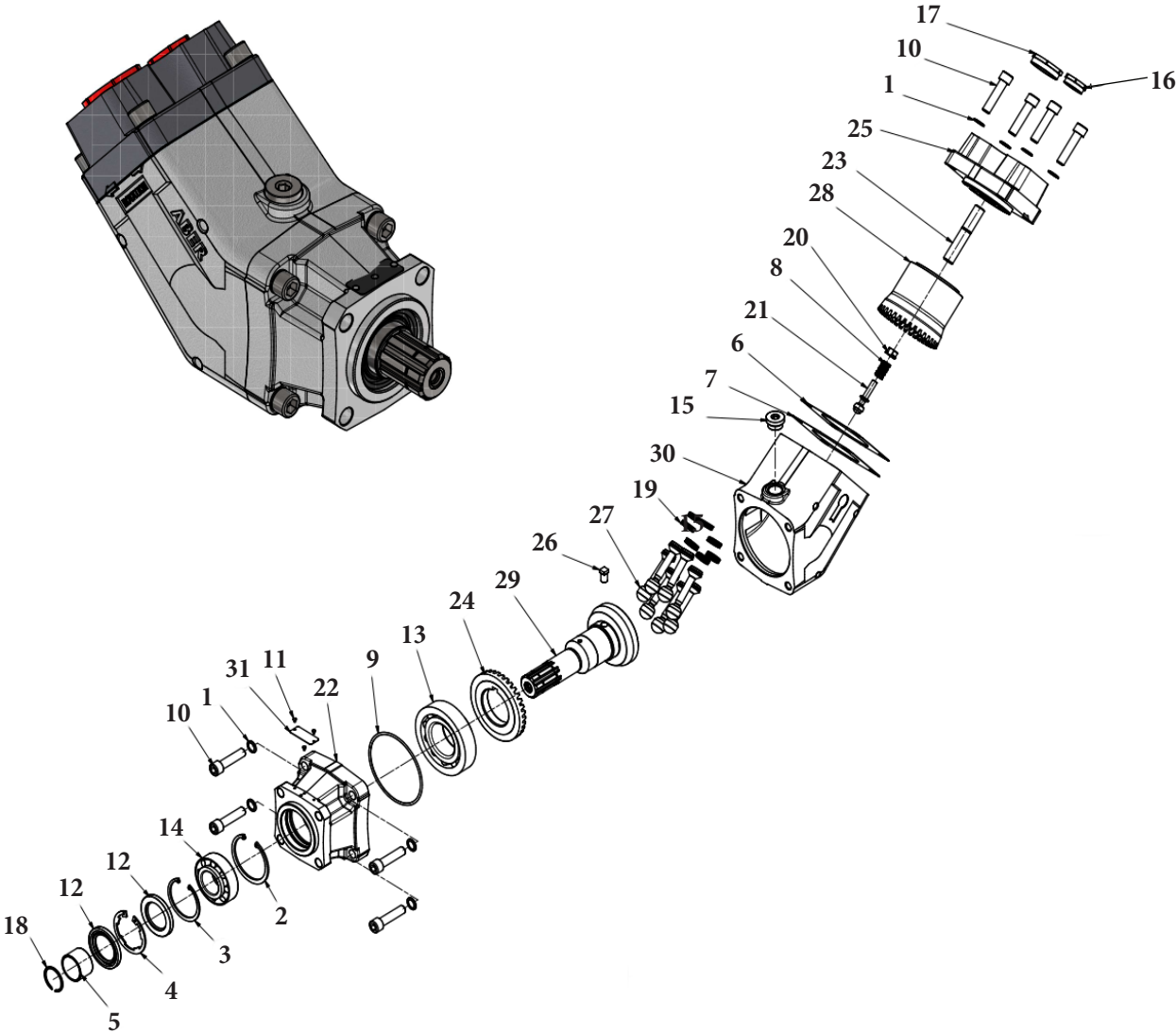
Entrance Connectors

	HA45	100	200
Degree Fitting	HA45= 45 Degree Fitting		
BSP Fitting Size	Port Size		
Hose Size		112	1-1/2"
		114	1-1/4"
		200	2"
		212	2-1/2"
		300	3"



Part Number	Entrance Connector Part Number		
HBIF25MB4R	HA45100114	HA4500112	HA45100200
HBIF110M7B4R	HA45114112	HA45114200	HA45114300
HBIF60M7BB4R	HA45100114	HA4500112	HA45100200
HBIF80M7BB4R	HA45114112	HA45114200	HA45114300
HBIF110M7BBR	HA45114112	HA45114200	HA45114300
HBIF60M7R	HA45100114	HA4500112	HA45100200
HBI80P7R	HA45114112	HA45114200	HA45114300
HBI110P7R	HA45112112	HA45112200	HA45112212
HBI110P7R	HA45112300		

Bent Axis Piston Pump - P Size Exploded View

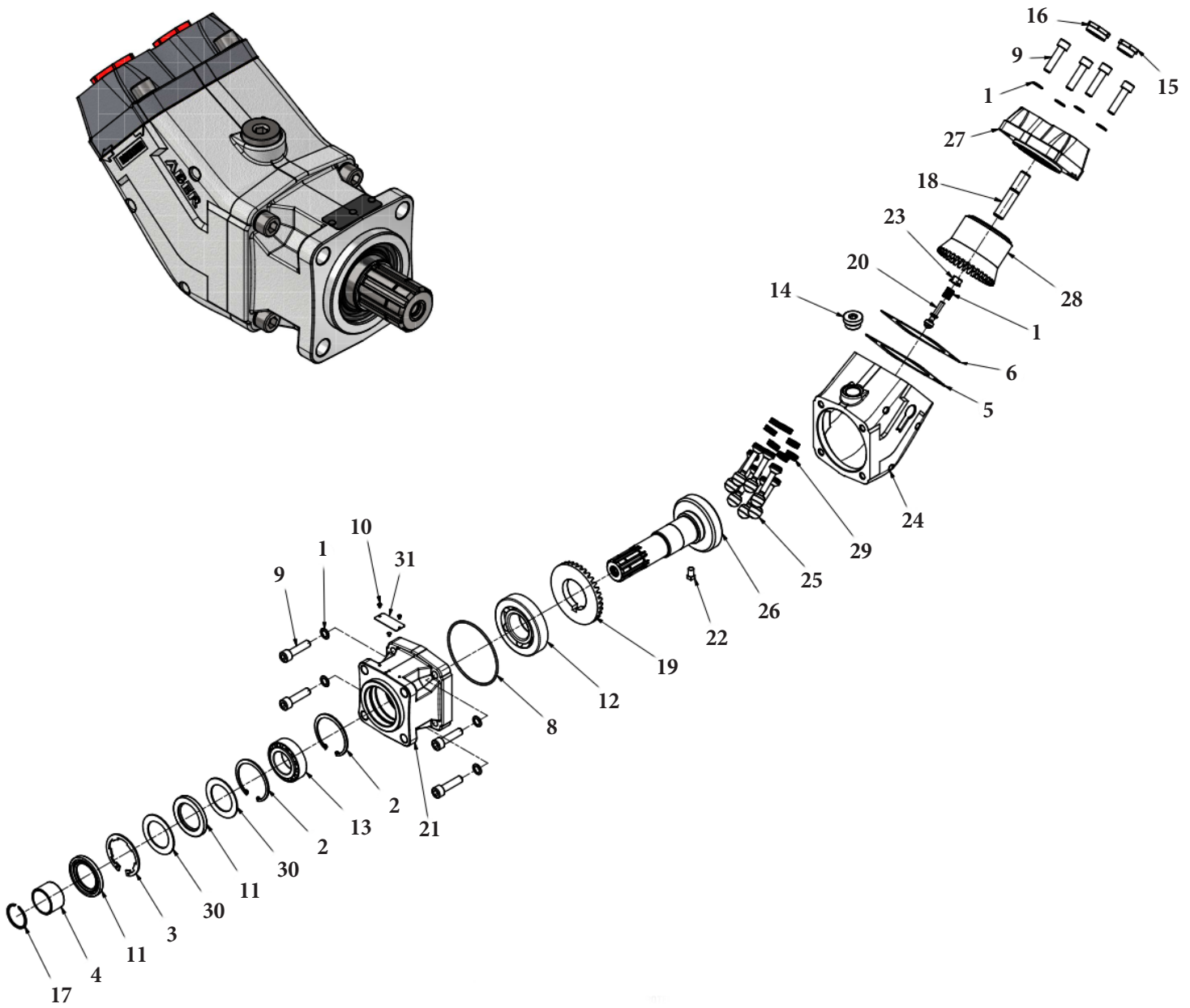


Parts Break Down

Item	Qty	Part Number	Description
1	8	HCCANI69	Pressure Washer
2	1	HCCFRE17	Internal Circlip
3	1	HCCFRE24	Internal Circlip
4	1	HCCFRE29	Internal Circlip
5	1	HCCIR01	Inner Ring
6	1	HCCJUN33	Gasket
7	1	HCCJUN38	Gasket
8	1	HCCMOL27	Pressure Spring
9	1	HCCORI51	O-ring
10	8	HCCPAR228	Screw
11	3	HCCREB01	Rivet
12	2	HCCRET12	Radial Shaft Seal
13	1	HCCROL47	Bearing
14	1	HCCROL61	Bearing
15	1	HCCT07	Plug
16	1	HCCTPR100	Plastic Plug
17	See Table Below	See Table Below	Plastic Plug
18	1	HCCWR02	Circlip
19	21	See Table Below	Piston Ring
20	1	HCFBI036	Pressure Washer
21	1	HCFBI037	Pressure Pin
22	1	HCFBI040	Fixation Housing
23	1	HCFBI042	Center Shaft
24	1	HCFBI044	Gear Plate
25	See Table Below	See Table Below	Rear Cover
26	1	HCFBI047	Pin
27	See Table Below	See Table Below	Piston
28	See Table Below	See Table Below	Piston Housing
29	See Table Below	See Table Below	Shaft
30	1	HCFBI129	Middle Housing
31	1	HCIAB001	Identification Plate

Item	HBI80P7	HBI110P7	HBI125P7	HBI135P7
17	HCCTPR114	HCCTPR112	HCCTPR112	HCCTPR112
19	HCFBI066	HCFBI026	HCFBI214	HCFBI138
25	HCFBI063	HCFBI045	HCFBI196	HCFBI102
27	HCFBI061	HCFBI048	HCFBI195	HCFBI128
28	HCFBI062	HCFBI049	HCFBI197	HCFBI127
29	HCFBI064	HCFBI050	HCFBI104	HCFBI104

Bent Axis Piston Pump - M Size Exploded View



Parts Break Down

Item	Qty	Part Number	Description
1	8	HCCANI68	Pressure Washer
2	2	HCCFRE24	Internal Circlip
3	1	HCCERE29	Internal Circlip
4	1	HCCIR01	Inner Ring
5	1	HCCJUN13	Gasket
6	1	HCCJUN16	Gasket
7	1	HCCMOL12	Pressure Spring
8	1	HCCORI26	O-ring
9	8	HCCPAR227	Screw
10	3	HCCREB01	Rivet
11	2	HHCRET12	Radial Shaft Seal
12	1	HCCROL08	Bearing
13	1	HCCROL60	Bearing
14	1	HCCT07	Plug
15	See Table Below	See Table Below	Plastic Plug
16	See Table Below	See Table Below	Plastic Plug
17	1	HCCWR02	Circlip
18	1	HCFBI002	Center Shaft
19	1	HCFBI005	Gear Plate
20	1	HCFBI007	Pressure Pin
21	1	HCFBI008	Fixation Housing
22	1	HCFBI023	Pin
23	1	HCFBI028	Pressure Washer
24	See Table Below	See Table Below	Middle Housing
25	See Table Below	See Table Below	Piston
26	See Table Below	See Table Below	Shaft
27	See Table Below	See Table Below	Rear Cover
28	See Table Below	See Table Below	Piston Housing
29	See Table Below	See Table Below	Piston Ring
30	2	HCFBI083	Protection Ring Shaft Seal
31	1	HCIAB001	Identification Plate

Item	HBI17M	Qty	HBI25M	Qty	HB130M	Qty	HB140M	Qty	HBI50M	Qty	HBI60M7	Qty	HBI80M7	Qty
15	HCCTPR34	1	HCCTPR34	1	HCCTPR34	1	HCCTPR34	1	HCCTPR34	1	HCCTPR34	1	HCCTPR100	1
16	HCCTPR100	1	HCCTPR100	1	HCCTPR100	1	HCCTPR100	1	HCCTPR100	1	HCCTPR100	1	HCCTPR114	1
24	HCFBI051	1	HCFBI051	1	HCFBI051	1	HCFBI051	1	HCFBI052	1	HCFBI052	1	HCFBI052	1
25	HFBI241	5	HCFBI192	5	HCFBI021	5	HCB1003	5	HCB1030	5	HCFBI053	5	HCFBI057	7
26	HCFBI255	1	HCFBI010	1	HCFBI010	1	HCFBI011	1	HCFBI031	1	HCFBI054	1	HCFBI058	1
27	HCFBI244	1	HCFBI193	1	HCFBI014	1	HCFBI015	1	HCFBI032	1	HCFBI055	1	HCFBI059	1
28	HCFBI237	1	HCFBI194	1	HCFBI006	1	HCFBI018	1	HCFBI033	1	HCFBI056	1	HCFBI060	1
29	HCFBI242	1	HCFBI117	1	HCFBI024	1	HCFBI025	1	HCFBI034	1	HCFBI065	1	HCFBI066	1

Heavy Motions Inc/ABER - LIMITED WARRANTY

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/Heavy Motions Inc. 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./Heavy Motions Inc. 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./Heavy Motions Inc. 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./Heavy Motions Inc. original customer to its customer.

A return authorization number must be obtained from authorized Heavy Motions Inc. 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 Heavy Motions Inc. 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./Heavy Motions Inc. 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./Heavy Motions Inc. 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 no 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./Heavy Motions Inc.

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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