

INDEX - PUMPS

Hydraulic Pumps

Selection table

Page
22

HP Range

Manually operated pumps

Page
23

HEP Range

General information on electric driven pumps

Page
24

HEP1 Range

Electric driven mini pumps

Page
24

HEP103 Range

Electric driven two stage compact pumps

Page
25

HEP2 Range

Electric driven two stage pumps - standard flow

Page
26

HEP3 Range

Electric driven two stage pumps - medium flow

Page
27

HEP5 Range

Electric driven two stage pumps - high flow

Page
28

AHP11 Range

Air driven single stage pumps

Page
29

HAP Range

Air driven two stage pumps

Page
30

HPP Range

Petrol engine driven pumps

Page
31

HSP Range

Electric driven split flow pumps

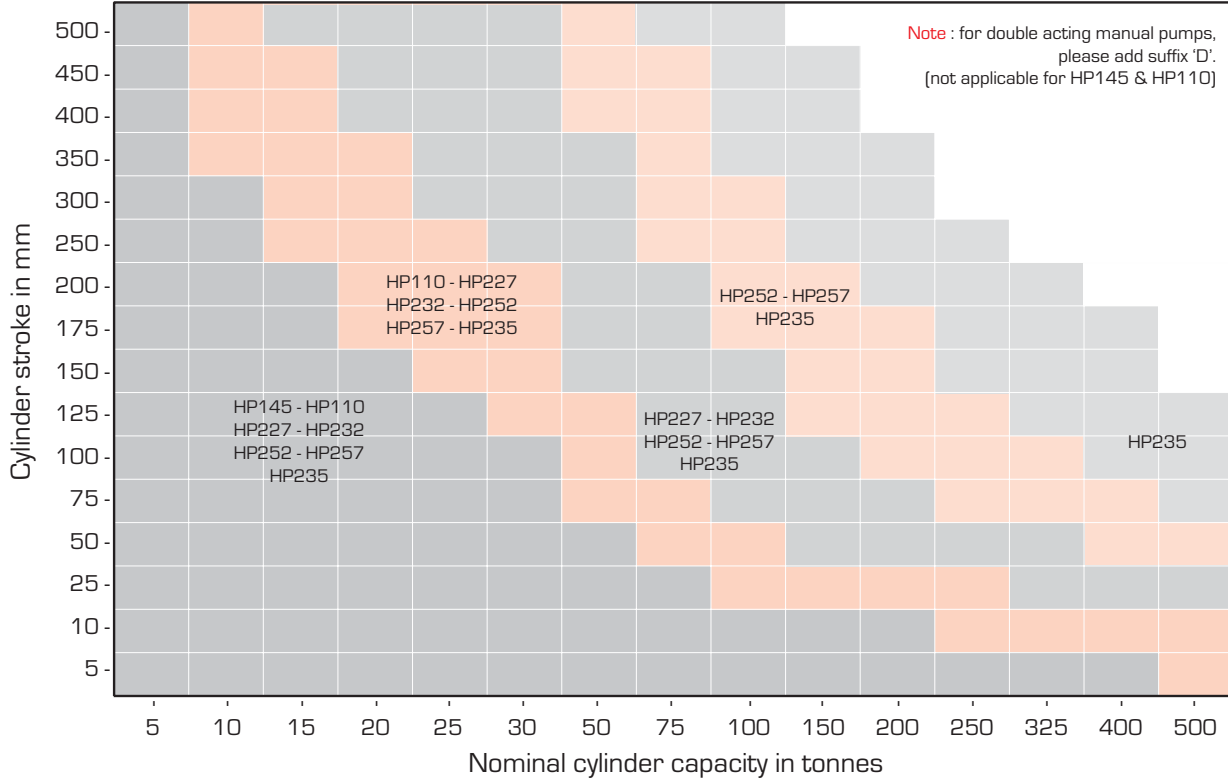
Page
32

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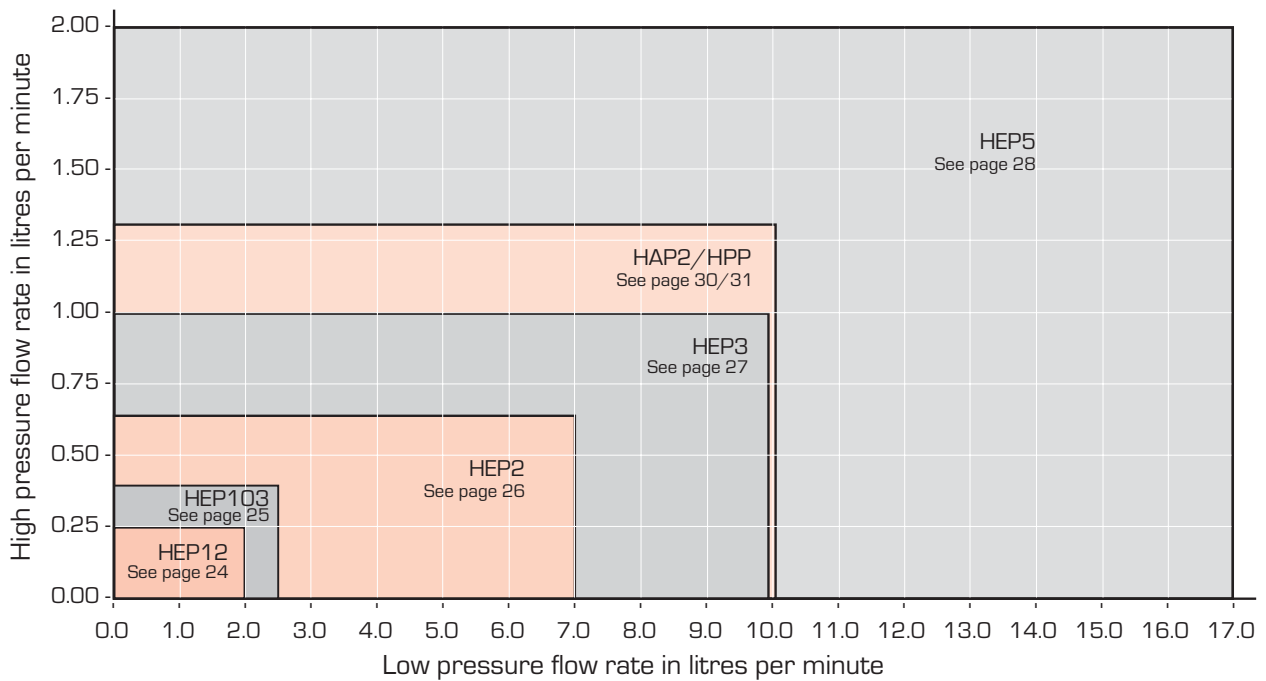
SELECTION TABLE FOR HI-FORCE HYDRAULIC PUMPS

MANUAL PUMPS

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POWERED PUMPS





Single or two speed operation

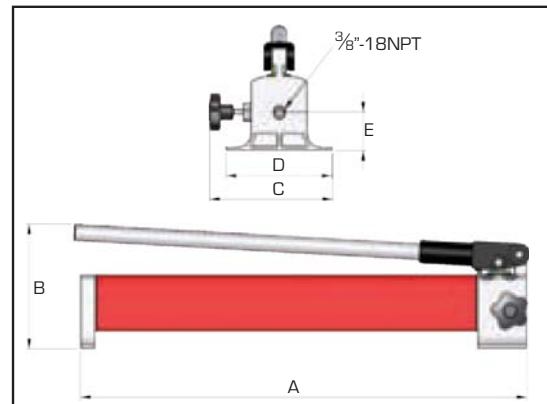
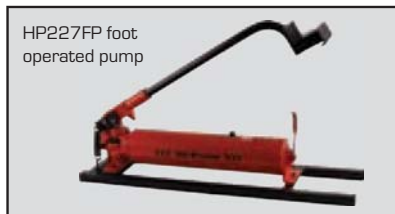
Choice of control valves

Working pressure 700 Bar

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The HP manually operated pump range offers a choice of single or two speed operation, and all models are supplied complete with a pre-filled oil reservoir, ready for immediate use. All models have a maximum working pressure of 700 bar and the range includes pump models suitable for use with either single or double acting cylinders. The HP range offers the ideal solution for applications where completely independent, portable hydraulic power is required. With low handle effort characteristics for easy operation and lightweight design, all models are of strong durable construction. Hi-Force HP manually operated pumps have a proven track record industry wide and offer excellent value for money in portable hydraulic power. A full range of system components suitable for use with HP manually operated pumps is detailed on pages 35 - 40.

- >> Oil reservoir capacity up to 10 litres
- >> Durable steel or lightweight aluminium
- >> External pressure release valve
- >> Factory set safety relief valve



Model number	Valve type	Displacement per stroke cm ³		Usable oil cap. litres	Handle effort kg	Material	Weight kg
		1 st stage	2 nd stage				
HP145	2-way	2.4	-	0.45	50	Steel	4.6
HP110	2-way	2.4	-	1.0	50	Steel	5.6
HP227	2-way	11.7	2.1	2.3	38	Steel	10.5
HP232	2-way	14.2	2.0	2.0	40	Alum.	6.9
HP235	2-way	103.0	3.5	10.0	40	Steel	27.0
HP252	2-way	14.2	2.1	5.0	40	Alum.	11.6
HP257	2-way	11.7	2.1	5.0	38	Steel	15.2
HP227D	4-way	11.7	2.1	2.3	38	Steel	12.3
HP232D	4-way	14.2	2.0	2.0	40	Alum.	8.7
HP235D	4-way	103.0	3.5	10.0	40	Steel	27.2
HP252D	4-way	14.2	2.0	5.0	40	Alum.	13.6
HP257D	4-way	11.7	2.1	5.0	38	Steel	17.2
HP227FP	2-way	11.7	2.1	2.3	38	Steel	12.5

Dimensions in mm				
A	B	C	D	E
360	135	145	130	45
560	135	145	130	45
547	170	142	136	53
587	160	155	140	50
705	245	206	206	220
587	160	150	140	50
570	170	155	136	53
650	170	142	136	53
700	160	155	140	50
705	245	206	206	240
700	160	150	140	50
675	170	142	136	53
716	170	142	200	53

HEP - GENERAL INFORMATION

Hi-Force offers a full range of electric driven pumps with either a 110 or 240 Volt single phase motor, or a 380/440 Volt three phase motor. Depending on the required usage, please refer to following guidelines for correct pump range selection.

C	Light HEP1 Page 24	The HEP1 series two stage electric driven hydraulic mini pump range offers a choice of 110 or 240 Volt motor, with both models being suitable for 700 bar maximum working pressure. The two stage design offers a low pressure flow rate up to 2 litres/min with automatic changeover to high pressure, with a flow rate up to 0.25 litres/min. Incorporating a 2-way solenoid valve, internal safety overload valve, both models are extremely compact & lightweight, suitable for use with single acting Hi-Force cylinders or tools.
	Standard HEP103 Page 25	The HEP103 series two stage powered hydraulic pump range offers a choice of 110 or 240 Volt electric driven motors. All models are suitable for 700 bar maximum working pressure. The two stage design offers a low pressure flow rate up to 2.5 litres/min with automatic changeover to high pressure, with a flow rate up to 0.35 litres/min. Available with manual or solenoid valve options, suitable for both single acting and double acting cylinders and tools in a wide variety of applications
	Intermediate HEP2 Page 26	The HEP2 series two stage electric driven hydraulic pump range offers a low pressure flow rate of 7 litres/min with automatic changeover to 700 bar high pressure flow rate of 0.65 litres/min. Choice of 110, 240 or 380/440 Volt motor options with 2, 3 or 4-way manual or electric solenoid valve options. Suitable for a wide range of applications, the HEP2 series is the most commonly selected Hi-Force electric pump. Fitted with an externally adjustable pressure relief valve, for easy adjustment of working pressure up to 700 bar maximum.
	Continuous HEP3 Page 27	The HEP3 series two stage electric driven hydraulic pump range has all the features of the HEP2 series, but with an increased flow of 10 litres/min in low pressure and 1 litres/min in high pressure (up to 700 bar). Particularly useful when operating high tonnage or long stroke cylinders. Both HEP2 and HEP3 range electric pumps are fitted with totally enclosed, fan cooled, low noise, electric motors, making them ideal for quiet in-works operation or outdoor site use in most environments.
	Heavy duty HEP5 Page 28	The HEP5 series two stage electric driven hydraulic pump range offers the highest flow rate combination in the Hi-Force range. Offering a low pressure flow rate of 17 litres/min with automatic changeover to a superb high pressure flow rate of 2 litres/min. The HEP5 offers all the features of the HEP2 and HEP3 series with the addition of a 2.2 kW high speed, heavy duty motor, making it the ideal pump unit for all heavy duty applications, requiring a high flow and intensive usage over longer time periods.

Note : see page 32 for HSP series split-flow pumps for synchronised lifting

HEP1 - ELECTRIC DRIVEN MINI PUMPS



Working pressure 700 Bar

Two-stage design, changeover pressure 10 Bar

Extremely compact, lightweight & powerful

- >> 110 or 240V single phase motor options
- >> Internal safety overload valve
- >> Supplied with carrying strap

Model number	Motor voltage	Maximum pressure bar	Maximum flow rate l/min		Valve type	Usable oil cap. litres	Weight kg
			1 st stage	2 nd stage			
HEP1211S	110 V	700	2.00	0.25	2-way	0.8	5.8
HEP1212S	240 V	700	2.00	0.25	2-way	0.8	5.8

Dimensions in mm		
Length	Width	Height
322	125	111
322	125	111



Working pressure 700 Bar

Choice of valve options

Compact, lightweight & powerful

C

- >> Integrated carrying handle
- >> Pressure gauge and remote control fitted as standard
- >> Suitable for single acting and double acting cylinders, tools and torque wrenches
- >> Dimensions 245 x 260 x 350 mm (LxWxH)



Did you know

Hi-Force manufactures powered pumps with flow rates up to 17 litres per minute in low pressure and 2 litres per minute up to 700 bar. See pages 26 to 32 for more details

Specifications :

Model number	Motor voltage	Maximum pressure bar	Maximum flow rate l/min		Changeover pressure bar	Remote pendant functions	Usable oil capacity litres	Weight kg
			1 st stage	2 nd stage				
HEP103241LS	110 V	700	2.50	0.35	70	advance/retract	4	19.2
HEP103242LS	240 V	700	2.50	0.35	70	advance/retract	4	19.2
HEP103241S	110 V	700	2.50	0.35	70	advance/retract	4	20.5
HEP103242S	240 V	700	2.50	0.35	70	advance/retract	4	20.5
HEP103341	110 V	700	2.50	0.35	70	motor on/off	4	18.1
HEP103342	240 V	700	2.50	0.35	70	motor on/off	4	18.1
HEP103441	110 V	700	2.50	0.35	70	motor on/off	4	18.1
HEP103442	240 V	700	2.50	0.35	70	motor on/off	4	18.1
HEP103441LS	110 V	700	2.50	0.35	70	advance/retract	4	20.5
HEP103442LS	240 V	700	2.50	0.35	70	advance/retract	4	20.5

Directional control valve options and typical usage [* denotes 110/240V motor options]:

Model number	Control valve type	Typical usage
HEP10324*LS	2-way solenoid valve, normally closed (hold function)	Single acting cylinders and tools, requiring hold
HEP10324*S	2-way solenoid valve, normally open (auto retract)	Single acting cylinders and tools, requiring auto-retract
HEP10334*	3-way manual valve	Single acting cylinders and tools
HEP10344*	4-way manual valve	Double acting cylinders and tools
HEP10344*LS	4-way solenoid valve, locking feature on A & B port	Double acting cylinders and tools, requiring hold

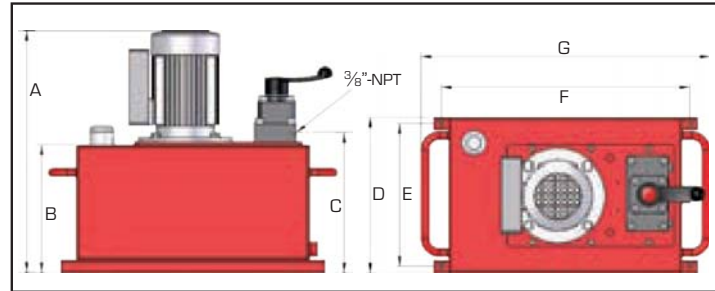
Note : Add suffix 'PS' to model number for adjustable pressure switch for automatic pressure control.
Add suffix 'HB' to model number for pendant control with self-hold button.



Low pressure flow rate 7 litres/min. up to 70 Bar

High pressure flow rate 0.65 litres/min.

Working pressure 700 Bar



- >> Two stage hydraulic pump unit
- >> Compact & heavy duty
- >> Externally adjustable pressure relief valve
- >> Manual or solenoid valve options

Model number	Valve type	Oil cap. litres	Motor kW	Motor voltage	Weight kg
HEP207111	P-T Plate	10	1.5	110 / 115	47.0
HEP207112	P-T Plate	10	1.5	220 / 240	47.0
HEP207114	P-T Plate	10	1.5	380 / 440	47.0
HEP207121	P-T Plate	25	1.5	110 / 115	63.0
HEP207122	P-T Plate	25	1.5	220 / 240	63.0
HEP207124	P-T Plate	25	1.5	380 / 440	63.0
HEP207211	2-way	10	1.5	110 / 115	47.5
HEP207212	2-way	10	1.5	220 / 240	47.5
HEP207214	2-way	10	1.5	380 / 440	47.5
HEP207221	2-way	25	1.5	110 / 115	63.5
HEP207222	2-way	25	1.5	220 / 240	63.5
HEP207224	2-way	25	1.5	380 / 440	63.5
HEP207311	3-way	10	1.5	110 / 115	47.5
HEP207312	3-way	10	1.5	220 / 240	47.5
HEP207314	3-way	10	1.5	380 / 440	47.5
HEP207321	3-way	25	1.5	110 / 115	63.5
HEP207322	3-way	25	1.5	220 / 240	63.5
HEP207324	3-way	25	1.5	380 / 440	63.5
HEP207411	4-way	10	1.5	110 / 115	47.5
HEP207412	4-way	10	1.5	220 / 240	47.5
HEP207414	4-way	10	1.5	380 / 440	47.5
HEP207421	4-way	25	1.5	110 / 115	63.5
HEP207422	4-way	25	1.5	220 / 240	63.5
HEP207424	4-way	25	1.5	380 / 440	63.5

Dimensions in mm						
A	B	C	D	E	F	G
498	198	230	246	221	368	438
498	198	230	246	221	368	438
498	198	230	246	221	368	438
527	227	259	306	281	490	570
527	227	259	306	281	490	570
527	227	259	306	281	490	570
498	198	230	246	221	368	438
498	198	230	246	221	368	438
498	198	230	246	221	368	438
527	227	259	306	281	490	570
527	227	259	306	281	490	570
527	227	259	306	281	490	570
498	198	230	246	221	368	438
498	198	230	246	221	368	438
498	198	230	246	221	368	438
527	227	259	306	281	490	570
527	227	259	306	281	490	570
527	227	259	306	281	490	570

Notes: All 3-way and 4-way manual valves are supplied with load holding feature as standard.
 Add suffix 'H' to model number for 60 Hz electric motor.
 Add suffix 'P' to model number for protective roll frame.
 Add suffix 'S' to model number for 3-way and 4-way low voltage solenoid valve including pendant control.

HEP3 - ELECTRIC DRIVEN TWO STAGE PUMPS - MEDIUM FLOW



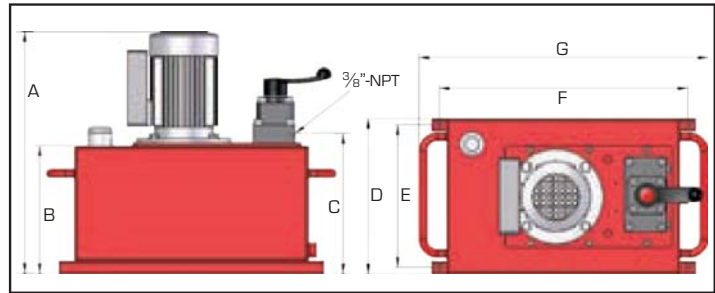
HEP310444

Low pressure flow rate 10 litres/min up to 70 Bar

High pressure flow rate 1 litres/min

Working pressure 700 Bar

- >> Two stage hydraulic pump unit
- >> Heavy duty pump for continuous usage
- >> Externally adjustable pressure relief valve
- >> Manual or solenoid valve options



Model number	Valve type	Oil cap. litres	Motor kW	Motor voltage	Weight kg
HEP310121	P-T Plate	25	2.2	110 / 115	63.5
HEP310122	P-T Plate	25	2.2	220 / 240	63.5
HEP310124	P-T Plate	25	2.2	380 / 440	63.5
HEP310141	P-T Plate	40	2.2	110 / 115	88.5
HEP310142	P-T Plate	40	2.2	220 / 240	88.5
HEP310144	P-T Plate	40	2.2	380 / 440	88.5
HEP310221	2-way	25	2.2	110 / 115	64.0
HEP310222	2-way	25	2.2	220 / 240	64.0
HEP310224	2-way	25	2.2	380 / 440	64.0
HEP310241	2-way	40	2.2	110 / 115	89.0
HEP310242	2-way	40	2.2	220 / 240	89.0
HEP310244	2-way	40	2.2	380 / 440	89.0
HEP310321	3-way	25	2.2	110 / 115	64.0
HEP310322	3-way	25	2.2	220 / 240	64.0
HEP310324	3-way	25	2.2	380 / 440	64.0
HEP310341	3-way	40	2.2	110 / 115	89.0
HEP310342	3-way	40	2.2	220 / 240	89.0
HEP310344	3-way	40	2.2	380 / 440	89.0
HEP310421	4-way	25	2.2	110 / 115	64.0
HEP310422	4-way	25	2.2	220 / 240	64.0
HEP310424	4-way	25	2.2	380 / 440	64.0
HEP310441	4-way	40	2.2	110 / 115	89.0
HEP310442	4-way	40	2.2	220 / 240	89.0
HEP310444	4-way	40	2.2	380 / 440	89.0

Dimensions in mm						
A	B	C	D	E	F	G
527	227	259	306	281	490	570
527	227	259	306	281	490	570
527	227	259	306	281	490	570
636	336	368	306	281	490	560
636	336	368	306	281	490	560
636	336	368	306	281	490	560
527	227	259	306	281	490	570
527	227	259	306	281	490	570
527	227	259	306	281	490	570
636	336	368	306	281	490	560
636	336	368	306	281	490	560
636	336	368	306	281	490	560
527	227	259	306	281	490	570
527	227	259	306	281	490	570
527	227	259	306	281	490	570
636	336	368	306	281	490	560
636	336	368	306	281	490	560
636	336	368	306	281	490	560

Notes: All 3-way and 4-way manual valves are supplied with load holding feature as standard.
 Add suffix 'H' to model number for 60 Hz electric motor.
 Add suffix 'P' to model number for protective roll frame.
 Add suffix 'S' to model number for 3-way and 4-way low voltage solenoid valve including pendant control.





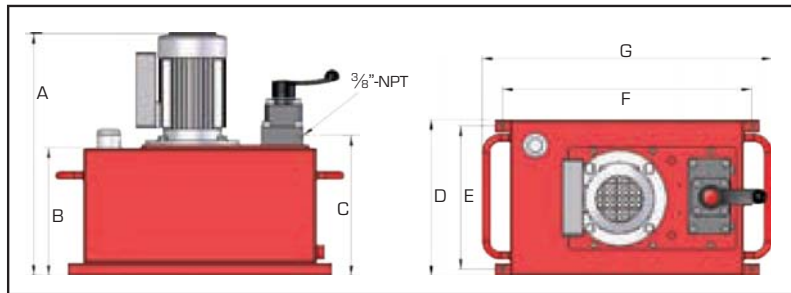
Low pressure flow rate 17 litres/min up to 70 Bar

High pressure flow rate 2 litres/min

Working pressure 700 Bar

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- >> Two stage hydraulic pump unit
- >> Durable, heavy duty & powerful
- >> Manual or solenoid valve options
- >> Externally adjustable pressure relief valve



Model number	Valve type	Oil cap. litres	Motor kW	Motor voltage	Weight kg
HEP517142	P-T Plate	40	2.2	220 / 240	88.5
HEP517144	P-T Plate	40	2.2	380 / 440	88.5
HEP517162	P-T Plate	60	2.2	220 / 240	120.0
HEP517164	P-T Plate	60	2.2	380 / 440	120.0
HEP517242	2-way	40	2.2	220 / 240	89.0
HEP517244	2-way	40	2.2	380 / 440	89.0
HEP517262	2-way	60	2.2	220 / 240	120.0
HEP517264	2-way	60	2.2	380 / 440	120.0
HEP517342	3-way	40	2.2	220 / 240	89.0
HEP517344	3-way	40	2.2	380 / 440	89.0
HEP517362	3-way	60	2.2	220 / 240	120.0
HEP517364	3-way	60	2.2	380 / 440	120.0
HEP517442	4-way	40	2.2	220 / 240	89.0
HEP517444	4-way	40	2.2	380 / 440	89.0
HEP517462	4-way	60	2.2	220 / 240	120.0
HEP517464	4-way	60	2.2	380 / 440	120.0

Dimensions in mm						
A	B	C	D	E	F	G
636	336	368	306	281	490	560
636	336	368	306	281	490	560
657	357	389	406	381	513	583
657	357	389	406	381	513	583
636	336	368	306	281	490	560
636	336	368	306	281	490	560
657	357	389	406	381	513	583
657	357	389	406	381	513	583
636	336	368	306	281	490	560
636	336	368	306	281	490	560
657	357	389	406	381	513	583
657	357	389	406	381	513	583
636	336	368	306	281	490	560
636	336	368	306	281	490	560
657	357	389	406	381	513	583
657	357	389	406	381	513	583

Notes: All 3-way and 4-way manual valves are supplied with load holding feature as standard.
 Add suffix 'H' to model number for 60 Hz electric motor.
 Add suffix 'P' to model number for protective roll frame.
 Add suffix 'S' to model number for 3-way and 4-way low voltage solenoid valve including pendant control.

AHP11 - AIR DRIVEN SINGLE STAGE PUMPS



Working pressure 700 Bar

Operates from standard 7 bar air supply

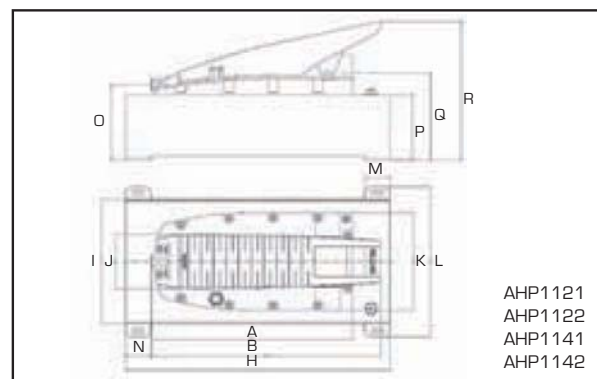
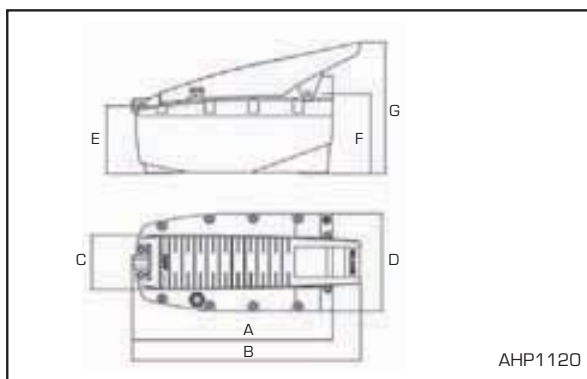
Compact, lightweight & powerful



The AHP11 single stage air powered hydraulic pump range provides an economical, portable alternative to manually operated hydraulic pumps. Designed to operate from a standard 7 bar compressed air supply, these versatile compact pumps are ideally suited for use with Hi-Force hydraulic cylinders and tools in maintenance and construction applications. The ergonomically designed pump treadle can be operated by hand or foot for better versatility. With a choice of reservoir capacities, all models are supplied pre-filled with hydraulic oil, ready for immediate use. A full range of system components suitable for use with AHP11 series pumps is detailed on pages 35 - 40.

- >> Choice of 2-way or 4-way control valves
- >> Internal safety overload valve
- >> Reservoir oil sight level gauge
- >> Standard oil reservoir capacities up to 10 litres

Model number	Maximum pressure bar	Maximum flow rate l/min	Valve type	Usable oil capacity litres	Air inlet connection G	Oil outlet connection NPTF	Weight kg
AHP1120	700	0.8	2-way	2.4	1/4"	3/8"	4.7
AHP1121	700	0.8	2-way	5.0	1/4"	3/8"	9.0
AHP1122	700	0.8	2-way	10.0	1/4"	3/8"	17.8
AHP1141	700	0.8	4-way	5.0	1/4"	3/8"	9.5
AHP1142	700	0.8	4-way	10.0	1/4"	3/8"	18.3



Note : AHP1141 & AHP1142 includes 4-way manual directional control valve (not pictured)

Model number	Dimensions in mm																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
AHP1120	319	364	87	155	108	127	209	-	-	-	-	-	-	-	-	-	-	-
AHP1121	319	364	-	-	-	-	-	420	198	87	155	240	40	41	120	104	139	221
AHP1122	319	364	-	-	-	-	-	460	210	87	155	-	-	-	171	155	180	271
AHP1141	319	364	-	-	-	-	-	420	198	87	155	240	40	41	120	104	139	221
AHP1142	319	364	-	-	-	-	-	460	210	87	155	-	-	-	171	155	180	271

HAP - AIR DRIVEN TWO STAGE PUMPS



HAP21042

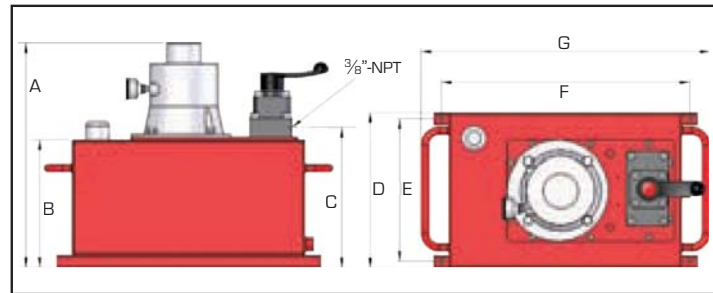
Low pressure flow rate 10 litres/min up to 70 Bar

High pressure flow rate 1 litres/min

Working pressure 700 Bar

The HAP two stage air powered hydraulic pump range offers a low pressure flow of 10 litres/min with automatic changeover to 700 bar high pressure flow rate of 1.3 litres/min. Driven by a powerful 3 kW rotary air motor, with a maximum air consumption of 2.4 m³ per minute at 7 bar inlet air pressure, the HAP range offers a choice of pump mounted or remote control valves (page 40) and oil reservoirs, all fitted with filler and drain plugs. A full range of system components suitable for use with HAP pump units is detailed on pages 35 - 40.

- >> Two stage hydraulic pump unit
- >> Powerful air motor
- >> Externally adjustable pressure relief valve
- >> Choice of control valves



Model number	Valve type	Oil cap. litres	Motor kW	Weight kg
HAP21011	P-T Plate	10	3.0	41.5
HAP21012	P-T Plate	25	3.0	57.5
HAP21014	P-T Plate	40	3.0	71.5
HAP21016	P-T Plate	60	3.0	96.5
HAP21021	2-way	10	3.0	42.0
HAP21022	2-way	25	3.0	58.0
HAP21024	2-way	40	3.0	72.0
HAP21026	2-way	60	3.0	97.0
HAP21031	3-way	10	3.0	42.0
HAP21032	3-way	25	3.0	58.0
HAP21034	3-way	40	3.0	72.0
HAP21036	3-way	60	3.0	97.0
HAP21041	4-way	10	3.0	42.0
HAP21042	4-way	25	3.0	58.0
HAP21044	4-way	40	3.0	72.0
HAP21046	4-way	60	3.0	97.0

Dimensions in mm						
A	B	C	D	E	F	G
393	198	230	246	221	368	438
422	227	259	306	281	490	570
531	336	368	306	281	490	560
552	357	389	406	381	513	583
393	198	230	246	221	368	438
422	227	259	306	281	490	570
531	336	368	306	281	490	560
552	357	389	406	381	513	583
393	198	230	246	221	368	438
422	227	259	306	281	490	570
531	336	368	306	281	490	560
552	357	389	406	381	513	583

Notes: All 3-way and 4-way manual valves are supplied with load holding feature as standard.
 Add suffix 'P' to model number for protective roll frame.
 Add suffix 'R' to model number for 3-way and 4-way air operated valve including pendant control.

HPP - PETROL ENGINE DRIVEN PUMPS



HPP21042

Low pressure flow rate 10 litres/min up to 700 Bar

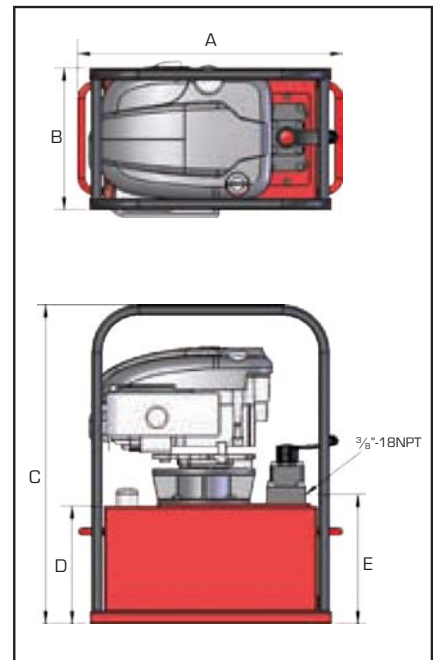
High pressure flow rate 1.3 litres/min

Working pressure 700 Bar

C

The HPP range of two stage petrol engine driven hydraulic pumps are ideally suited for applications in locations where there is no electricity or compressed air supply available. The range has similar valve and reservoir options as the electric pumps (pages 26 - 28) and the air powered pumps (page 30), with a low pressure flow rate of 10 litres/min and a high pressure flow rate of 1.3 litres/min up to 700 bar maximum working pressure. Powered by a 3.35 kW rated four stroke engine, the HPP range provides reliable, independent hydraulic power. All models are fitted with a protective roll bar carrying frame for easy transportation and handling. A full range of system components suitable for use with HPP pumps is detailed on pages 35 - 40.

- >> Two stage hydraulic pump unit
- >> Powerful 3.35 kW four stroke petrol engine
- >> Externally adjustable pressure relief valve
- >> Roll bar protection frame included



Model number	Valve type	Oil cap. litres	Motor kW	Weight kg
HPP21012	P-T Plate	25	3.35	70.5
HPP21014	P-T Plate	40	3.35	85.5
HPP21016	P-T Plate	60	3.35	113.5
HPP21022	2-way	25	3.35	71.0
HPP21024	2-way	40	3.35	86.0
HPP21026	2-way	60	3.35	114.0
HPP21032	3-way	25	3.35	71.0
HPP21034	3-way	40	3.35	86.0
HPP21036	3-way	60	3.35	114.0
HPP21042	4-way	25	3.35	71.0
HPP21044	4-way	40	3.35	86.0
HPP21046	4-way	60	3.35	114.0

Dimensions in mm				
A	B	C	D	E
570	306	686	227	259
560	306	795	336	368
583	406	816	357	389
570	306	686	227	259
560	306	795	336	368
583	406	816	357	389
570	306	686	227	259
560	306	795	336	368
583	406	816	357	389

Note: All 3-way and 4-way manual valves are supplied with load holding feature as standard.

HSP - ELECTRIC DRIVEN SPLIT FLOW PUMPS



Working pressure 700 bar

Choice of control valves

Internal safety overload device

The HSP split flow pump range offers single speed operation with a choice of 2 or 4 split flow outlets and flow rates from 1.1 to 2.2 litres/min per outlet. Unique within the Hi-Force range, these latest technology pumps are designed to deliver equal amounts of oil from each outlet regardless of different pressures in the system. Ideally suited for lifting and positioning of heavy, unevenly distributed loads, from multiple jacking positions, the split flow design ensures an even lift regardless of the weight distribution amongst the chosen number of Hi-Force cylinders. Maximum working pressure is 700 bar however each valve outlet has an externally adjustable pressure relief valve fitted as standard. A full range of system components suitable for use with HSP pumps is detailed on pages 35 - 40.

- >> Reservoir capacity 100 litres
- >> Choice of manual or electric solenoid valves complete with push button pendant control
- >> Externally adjustable pressure relief valve fitted to each outlet
- >> Customized models are available on request

Model number	Valve configuration	Valve type	Oil flow per outlet l/min	Motor voltage	Weight kg
HSP23M104	2 x 3-way	manual	2.2	380 / 440	184
HSP23E104	2 x 3-way	solenoid	2.2	380 / 440	184
HSP24M104	2 x 4-way	manual	2.2	380 / 440	184
HSP24E104	2 x 4-way	solenoid	2.2	380 / 440	184
HSP43M104	4 x 3-way	manual	1.1	380 / 440	188
HSP43E104	4 x 3-way	solenoid	1.1	380 / 440	188
HSP44M104	4 x 4-way	manual	1.1	380 / 440	188
HSP44E104	4 x 4-way	solenoid	1.1	380 / 440	188

Dimensions in mm		
Length	Width	Height
720	570	740
720	570	740
720	570	740
720	570	740
720	570	740
720	570	740
720	570	740
720	570	740

Pump & Cylinder sets

Selection of pumps and cylinders
available as a ready to use set

Page
34

D



PCS502



Working pressure 700 bar

Capacities from 4.5 to 109 tonnes

Stroke lengths from 10 to 153mm

D Hi-Force PCS pump and cylinder sets provide the simplest and most cost effective way to start your job immediately. All sets comprise of a Hi-Force hydraulic cylinder (wide choice available), suitable Hi-Force manual pump and a two metre length interconnecting hose with high flow, quick release coupler.

- >> Eighteen standard sets
- >> Cylinders are spring assisted return design
- >> Manual pumps include factory set relief valve
- >> Optional piston rod (tilting) saddles are available for most cylinder models (see page 20)



Savings ...

Take advantage of the cost savings by selecting these PCS sets, which include standard components at reduced prices. Gauges and gauge blocks, suitable for use with PCS sets, are detailed on page 37.

Set		Pump		Cylinder			Hose		Weight kg
Model number	Cylinder capacity tonnes	Model number	Capacity litres	Model number	Stroke mm	Closed height mm	Model number	Length mm	
PCS50	4.5	HP110	1.0	HPS51	16	42	HC2	2.0	7.4
PCS53	4.5	HP110	1.0	HSS53	75	157	HC2	2.0	8.0
PCS100	10	HP110	1.0	HPS100	10	45	HC2	2.0	8.2
PCS101	10	HP110	1.0	HLS101	40	95	HC2	2.0	9.0
PCS102	10	HP110	1.0	HSS102	56	131	HC2	2.0	9.0
PCS106	10	HP110	1.0	HSS106	150	225	HC2	2.0	10.8
PCS200	20	HP110	1.0	HPS200	11	52	HC2	2.0	9.4
PCS201	20	HP110	1.0	HLS201	44	102	HC2	2.0	11.3
PCS256	25	HP110	1.0	HSS256	150	273	HC2	2.0	16.0
PCS300	32	HP110	1.0	HPS300	12	59	HC2	2.0	10.8
PCS302	32	HP110	1.0	HLS302	60	119	HC2	2.0	13.6
PCS502	50	HP110	1.0	HLS502	60	126	HC2	2.0	17.0
PCS506	50	HP227	2.3	HSS506	152	251	HC2	2.0	31.0
PCS1002	109	HP227	2.3	HLS1002	60	143	HC2	2.0	35.5
PCS1006	109	HP257	5.0	HSS1006	153	274	HC2	2.0	66.0
PCS202H	23	HP110	1.0	HHS202	50	160	HC2	2.0	13.9
PCS302H	33	HP110	1.0	HHS302	50	165	HC2	2.0	17.2
PCS603H	61	HP227	2.3	HHS603	76	226	HC2	2.0	34.6

Note : Models PCS202H, PCS302H & PCS603H include a hollow piston cylinder.