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AHP Pump with
on board chart recorder

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Up to 1000 Bar working pressure

Suitable for use with a wide variety of fluids

Two stage design with easy push button changeover

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The Hi-Force HMP series of manually operated two speed hydraulic pumps is suitable for use with a wide variety of fluids including water. Manufactured predominantly from high quality aluminium alloy, the HMP series are lightweight and extremely versatile. The pump's two stage piston design offers a superb 49 cm³ delivery per stroke at low pressure (up to 52 Bar) with a push button changeover valve for operating the high pressure piston. The pump unit is available with a choice of seven high pressure capacities ranging from 110 to 1000 Bar working pressure, and is supplied complete with a 610mm operating lever. For optional adjustable pressure relief valve suffix the model number with 'R'.

- >> Lightweight aluminium design with stainless steel pistons
- >> Needle type design release valve for precise pressure control
- >> Low cost replaceable valve seats
- >> Easily accessible fluid system filter
- >> Standard 10 litre capacity fluid reservoir (see page 43 for options)
- >> Optional, factory fitted, externally adjustable pressure relief valve
- >> Ideally suited for pressure testing valves, pipework and vessels
- >> Optional pressure gauges available (see page 43)

Model number	Working pressure bar	Valve type	Displacement per stroke cm ³		Changeover pressure bar	Outlet port	Suction port	Weight kg
			1 st stage	2 nd stage				
HMP160	110	2-way	49	20	52	1/2" BSP	3/8" BSP	15
HMP250	172	2-way	49	13	52	1/2" BSP	3/8" BSP	15
HMP450	310	2-way	49	7	52	1/2" BSP	3/8" BSP	15
HMP650	448	2-way	49	5	52	1/2" BSP	3/8" BSP	15
HMP800	552	2-way	49	4	52	1/2" BSP	3/8" BSP	15
HMP100	700	2-way	49	3	52	1/2" BSP	3/8" BSP	15
HMP150	1000	2-way	49	2	52	3/8" BSP	3/8" BSP	15

HMP - MANUALLY OPERATED HYDROTEST PUMPS



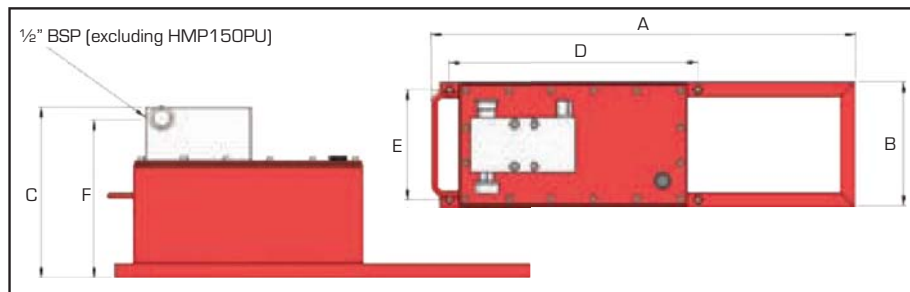
HMP250PU

The Hi-Force HMP-PU series offers the same features as the HMP range on page 42 however these are supplied without a fluid reservoir. Ideally suited for applications where a large volume of fluid is required, the pump unit is supplied complete with mounting kit for easy attachment to any specially designed fluid reservoir. For optional pressure relief valve, please add suffix 'R' to model number.

Model number	Working pressure bar	Valve type	Displacement per stroke cm ³		Changeover pressure bar	Outlet port(s)	Suction port(s)	Weight kg
			1 st stage	2 nd stage				
HMP160PU	110	2-way	49	20	52	1/2" BSP	3/8" BSP	5.9
HMP250PU	172	2-way	49	13	52	1/2" BSP	3/8" BSP	5.9
HMP450PU	310	2-way	49	7	52	1/2" BSP	3/8" BSP	5.9
HMP650PU	448	2-way	49	5	52	1/2" BSP	3/8" BSP	5.9
HMP800PU	552	2-way	49	4	52	1/2" BSP	3/8" BSP	5.9
HMP100PU	700	2-way	49	3	52	1/2" BSP	3/8" BSP	5.9
HMP150PU	1000	2-way	49	2	52	3/8" BSP	3/8" BSP	5.9

Dimensions :

	Reservoir capacity	
	10 litres	20 litres
A	714	929
B	210	210
C	286	286
D	420	615
E	185	185
F	264	264



RESERVOIRS

Choice of standard 10 or 20 litre capacity reservoirs. Alternative capacity reservoirs available on request.

Model number	Description
HRS10	10 litre standard reservoir
HRS20	20 litre standard reservoir



PRESSURE GAUGES

Complete range of 100 mm diameter pressure gauges manufactured to EN837-1 and compatible for use with HMP series pumps. Supplied complete with gauge mounting kit.

Model number	Pressure range bar
HG16K	0-110
HG25K	0-172
HG45K	0-310
HG65K	0-448
HG80K	0-552
HG100K	0-700
HG150K	0-1000

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AHP58

Output pressures from 6 to 2931 Bar

Suitable for use with various fluids.

150 mm dual scale vibra pressure gauge

- >> Air consumption 28 scfm (0,79m³/minute)
- >> Infinitely variable output pressure and flow

The Hi-Force AHP series of lubricant free air driven hydrostatic pressure testing pumps offers a choice of eight models with output pressure capacities ranging from 69 Bar (1000 PSI) to 2931 Bar (42500 PSI). All models are suitable for use with various fluids, including water and are supplied with a 150mm diameter hydraulic pressure gauge (calibrated on request), inlet airline filter & pressure regulator unit, lightweight fluid reservoir, pump start/stop valve and a robust stainless steel skid mounted framework. Optional extras available also include stainless steel fluid reservoirs, stroke counter plunger assembly with IP65 microswitch & digital impulse counter, pressure isolation valve and onboard circular chart recorders. All units are of compact design with a maximum weight of 23 kg.

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Model number	Max. output pressure [bar] at airline input pressure			Oil volume displacement per stroke [cm ³]	Outlet port thread	Weight kg
	10 PSI 0.69 Bar	50 PSI 3.45 Bar	100 PSI 6.9 Bar			
AHP10	6	34	69	42.3	½" NPT	23
AHP26	14	90	181	16.0	½" NPT	21
AHP36	17	122	250	12.3	½" NPT	20
AHP58	28	200	400	7.6	½" NPT	20
AHP107	62	373	738	4.0	½" NPT	20
AHP187	97	638	1293	2.2	9/16"-18UNF	20
AHP275	155	931	1897	1.6	9/16"-18UNF	20
AHP425	345	1448	2931	1.0	9/16"-18UNF	20

Dimensions in mm		
Length	Width	Height
450	395	395
450	395	395
450	395	395
450	395	395
450	395	395
450	395	395
450	395	395
450	395	395

Hydraulic pressure PSI	Bar	Approximate rate of discharge [L/min] at air input pressure 100 PSI (7 Bar)							
		AHP10	AHP26	AHP36	AHP58	AHP107	AHP187	AHP275	AHP425
0	0	23.10	8.80	6.00	3.56	1.97	1.15	0.72	0.43
500	35	12.00	5.85	4.39	3.05	1.50	1.05	0.68	0.40
1000	69	*	4.72	3.80	2.51	1.28	1.00	0.65	0.38
1500	104	*	3.90	3.34	2.38	1.25	0.90	0.60	0.36
2000	138	*	3.00	3.00	2.25	1.21	0.78	0.55	0.34
2500	173	*	1.21	2.56	2.05	1.18	0.75	0.50	0.33
3000	207	*	*	1.95	1.85	1.16	0.73	0.48	0.31
4000	276	*	*	*	1.56	1.02	0.70	0.45	0.29
5000	345	*	*	*	1.02	0.95	0.67	0.42	0.26
7500	517	*	*	*	*	0.76	0.60	0.40	0.25
10000	690	*	*	*	*	0.44	0.52	0.37	0.24
15000	1034	*	*	*	*	*	0.39	0.33	0.21
20000	1379	*	*	*	*	*	*	0.30	0.20
25000	1724	*	*	*	*	*	*	0.21	0.16
30000	2069	*	*	*	*	*	*	*	0.13
40000	2760	*	*	*	*	*	*	*	0.05

* Pressure exceeds pump capacity.



Output pressures from 17 to 1634 Bar

Suitable for use with various fluids.

150 mm dual scale vibra pressure gauge

- >> Air consumption 56 scfm [1,59m³/minute]
- >> Infinitely variable output pressure and flow

The Hi-Force AHP2 series of lubricant free, air driven hydrostatic pressure testing pumps offers a choice of five models with output pressure capacities ranging from 248 Bar [3600 PSI] to 1634 Bar [23700 PSI]. All models are compact design and suitable for use with various fluids, including water and are supplied with a 150mm diameter hydraulic pressure gauge (calibrated on request), inlet airline filter and pressure regulator unit, lightweight fluid reservoir, pump start/stop valve and a robust stainless steel skid mounted framework. Optional extras available also include stainless steel fluid reservoirs, stroke counter plunger assembly with IP65 microswitch & digital impulse counter, pressure isolation valve and onboard circular chart recorders.

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Model number	Max. output pressure (bar) at airline input pressure			Oil volume displacement per stroke [cm ³]	Outlet port thread	Weight kg
	10 PSI 0.69 Bar	50 PSI 3.45 Bar	100 PSI 6.9 Bar			
AHP2-036	17.2	124.1	248.2	40.8	½" NPT	24
AHP2-060	31.0	199.9	413.7	24.6	½" NPT	24
AHP2-097	51.7	327.5	668.8	15.2	½" NPT	24
AHP2-144	75.8	489.5	992.8	10.2	½" NPT	24
AHP2-237	131.0	799.8	1634.1	6.1	¾"-18UNF	24

Dimensions in mm		
Length	Width	Height
450	390	465
450	390	465
450	390	465
450	390	465
450	390	465

Hydraulic pressure PSI	Bar	Approximate rate of discharge (L/min) at air input pressure 100 PSI (7 Bar)				
		AHP2-036	AHP2-060	AHP2-097	AHP2-144	AHP2-237
0	0	10.20	6.20	3.90	2.70	1.57
500	35	8.60	5.50	3.55	2.50	1.52
1000	69	7.25	4.80	3.19	2.35	1.47
1500	104	6.15	4.50	3.00	2.16	1.42
2000	138	5.40	4.20	2.87	2.15	1.38
3000	207	3.05	3.50	2.55	1.88	1.29
4000	276	*	2.75	2.28	1.75	1.22
5000	345	*	2.16	2.10	1.64	1.20
7500	517	*	*	1.45	1.35	1.10
10000	690	*	*	*	1.15	0.98
15000	1034	*	*	*	*	0.78
20000	1379	*	*	*	*	0.51
23700	1634	*	*	*	*	0.34

* Pressure exceeds pump capacity.

ATDP - AIR DRIVEN TWIN DOUBLE ACTING HYDROTEST PUMPS



ATDP125

Output pressures from 87 to 1489 Bar

Suitable for use with various fluids.

Twin double acting design offering high volume flow

The Hi-Force ATDP series of twin double acting air driven hydrostatic pressure testing pumps offers a choice of 3 models with output pressure capacities ranging from 434 Bar (6300 PSI) to 1489 Bar (21600 PSI). The twin double acting design offers a much higher displacement volume per stroke than the smaller AHP & AHP2 series, making it ideal for prefill as well as pressure testing. All models are supplied with a 150mm diameter vibra-gauge, air inlet filter regulator lubricator unit, pump start/stop valve and fluid strainer. Viton and ethylene propylene seals for handling special fluids or chemicals can be factory fitted prior to delivery if required. Other seal materials are available on request.

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- >> Air consumption 212 scfm (6m³/minute)
- >> Suitable for use with various fluids including water
- >> 150 mm diameter dual scale gauge
- >> Infinitely variable output pressure and flow
- >> Fitted with inlet air filter, regulator & lubricator
- >> Optional extras include stainless steel framework, stroke counter, digital impulse counter, onboard chart recorder, pressure isolation valve, wheel mounting and framework painted to offshore specifications.

Model number	Max. output pressure (bar) at airline input pressure			Oil volume displacement per stroke (cm ³)	Outlet port thread	Weight kg
	20 PSI 1.38 Bar	60 PSI 4.14 Bar	100 PSI 6.9 Bar			
ATDP63	87	260	434	275	½" NPT	96
ATDP125	172	517	862	140	½" NPT	96
ATDP216	298	894	1489	79	1½"-12UNF	96

Dimensions in mm		
Length	Width	Height
765	570	700
765	570	700
765	570	700

Hydraulic pressure PSI	Bar	Approximate rate of discharge (L/min) at air input pressure 100 PSI (7 Bar)		
		ATDP63	ATDP125	ATDP216
0	0	32.2	16.9	9.5
1000	69	25.7	14.0	8.8
2000	138	20.5	12.3	8.0
3000	207	16.2	10.6	7.4
4000	276	12.5	9.4	6.9
5000	345	8.0	8.3	6.4
6000	414	2.8	7.3	6.1
8000	552	*	4.8	5.5
10000	690	*	3.0	4.9
12000	828	*	0.4	4.3
16000	1103	*	*	3.2
20000	1379	*	*	1.6

* Pressure exceeds pump capacity