

ZHP Series

Max. Operates: Capable up to 10,000 psi (70 Mpa).
 Flow At Rated Pressure: 0.08 - 7.69 cubic inches/stroke.
 Reservoir Capacity: 18 to 453 cubic inches.



Model: ZHP-19



Model: ZHP-29



Models: ZHP-18 & ZHP-28

Industrial Grade Hand Pumps

1. Lightweight for maximum portability.
2. Chrome-plated piston rods resist wear and corrosion.
3. Plungers are hard coat anodized.
4. Single & Two-speed pumps available for use in a variety of applications.
5. Two-speed pumps are faster, reducing handle strokes and operator fatigue.
6. Internal overload valve prevents pump from being used beyond its rated capacity.
7. External adjustable relief valve with anti-losing mechanism design.
8. Optional 6 ft, 8 ft, 12 ft hose, coupler, and pressure gauge available upon request (Refer to page 30 for accessories).
9. Pump, cylinder, and pressure gauge can be assembled as a set to fit any special application (Fig.10). (Refer to page 27 for order options).
10. All steel body for durability and long life. Sealed body enables the pump to be used on any direction with head down position. This is designed for tough jobs.
11. Widely use for applications where composite reservoirs may not be suitable. The steel material won't burn through in welding environments.
12. Large release knob for controlled lowering speed.

Automotive Grade Hand Pumps

1. Threaded cast iron pump head with steel reservoir and all-metal construction for durability.
2. Comes with 1/4" NPTF output port for use with spreader, push, puller, or cylinders where 1/4" NPT coupler required.

*Single-speed & two-speed models available.

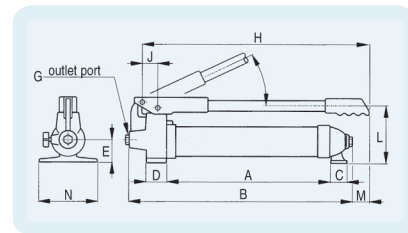


Fig.10



ZR-258 195212 (hydraulic hose)

55-1511 (pressure gauge)

ZHP-55A

ZPS-258-55A (combo set)



Model: ZHP-150

Model Number	Speed	Usable Oil Capacity (in ³)	Pressure Rating (psi)		Oil Displacement Per Stroke (in ³)	
			1 st Stage	2 nd Stage	1 st Stage	2 nd Stage
Aluminum Hand Pump						
ZHP-25A	2	25	300	10,000	0.345	0.086
ZHP-42A	2	42	300	10,000	0.345	0.086
ZHP-55A	2	55	300	10,000	0.345	0.086
ZHP-80A	2	80	300	10,000	0.345	0.134
ZHP-150A	2	150	350	10,000	0.79	0.17
Industrial Grade Hand Pump						
ZHP-19	1	19	N/A	10,000	N/A	0.19
ZHP-20	1	20	N/A	10,000	N/A	0.19
ZHP-29	1	29	N/A	10,000	N/A	0.19
ZHP-30	2	30	N/A	10,000	N/A	0.19
ZHP-41	1	42	N/A	10,000	N/A	0.19
ZHP-42	2	42	200	10,000	0.79	0.17
ZHP-90	2	90	350	10,000	0.79	0.17
ZHP-120	2	120	350	10,000	0.79	0.17
ZHP-150	2	150	350	10,000	0.79	0.17
ZHP-180	2	183	200	10,000	0.95	0.17
High Flow Hand Pump						
ZHP-462	2	453	200	10,000	7.69	0.29
ZHP-464	2	453	200	10,000	7.69	0.29
Automotive Application Hand Pump						
ZHP-18	1	18	N/A	10,000	N/A	0.19
ZHP-28	1	30	N/A	10,000	N/A	0.19

"A" for lightweight alloy construction.

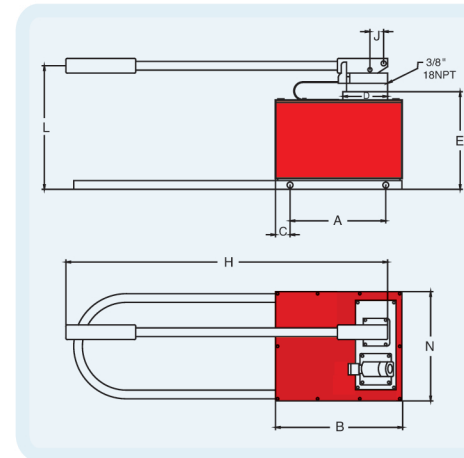
Aluminum Hand Pumps

1. The strongest aluminum alloys are used and heat treated to provide the maximum combination of strength and fracture resistance.
2. Super lightweight aluminum reservoir for portability.
3. The best choice for applications where composite reservoirs may not be suitable.
4. Large oil capacity to power a wide range of cylinders.
5. Two speed pumps provide rapid cylinder's stroke at 1st stage minimizing effort. At 2nd stage, the pumps automatically switch when a load is applied. This allows operation for faster fills and reduces cycle times for many testing operations.



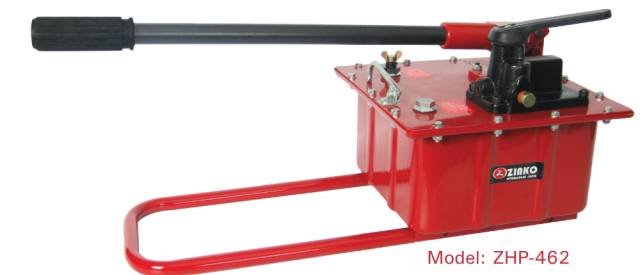
Model: ZHP-25A

High Flow Hand Pumps



Usage

These two-speed high flow hand pumps provide large oil capacity to power a large range of cylinders. The pumps also come with a lightweight aluminum reservoir for portability and provide internal pressure relief valve for overload protection.



Model: ZHP-462

Max Handle Effort (lbs)	Piston Stroke (in)	Dimensions (in)											Ship Weight (lbs)
		A	B	C	D	E	G	H	J	L	M	N	
Aluminum Hand Pump													
100	1.00	9.76	13.11	1.85	1.61	1.48	3/8" NPT	12.13	0.95	5.63	---	4.04	9
71.5	1.00	16.65	20.00	1.85	1.61	1.48	3/8" NPT	19.02	0.95	6.26	---	4.04	13
93	1.00	19.80	23.14	1.85	1.61	1.48	3/8" NPT	22.17	0.95	6.42	---	4.04	14
92.4	1.00	26.00	29.44	1.85	1.64	1.48	3/8" NPT	24.50	0.95	6.65	---	4.04	18
87	1.10	16.73	25.87	1.85	1.77	2.20	3/8" NPT	26.97	1.12	6.69	2.17	5.43	27
Industrial Grade Hand Pump													
181	0.50	8.25	11.00	1.75	1.50	2.19	3/8" NPT	12.00	1.13	6.13	1.88	4.38	12
181	0.47	8.31	13.00	0.81	1.50	2.13	3/8" NPT	12.00	1.13	5.13	0.19	3.50	14
102	0.50	15.88	19.25	1.75	1.75	2.19	3/8" NPT	20.00	1.13	6.00	2.25	4.38	15
102	0.47	15.63	20.50	0.81	1.50	2.13	3/8" NPT	20.13	1.13	4.50	0.75	4.75	17
98	0.50	17.38	22.75	1.5	1.38	2.25	3/8" NPT	24.25	1.13	5.25	2.50	5.50	19
87	1.10	17.38	22.75	1.5	1.38	2.25	3/8" NPT	24.25	1.13	1.25	2.50	5.50	21
87	1.10	16.73	22.83	1.85	1.77	2.20	3/8" NPT	23.90	1.12	6.50	1.97	5.43	27
87	1.10	16.73	22.28	1.85	1.77	2.13	3/8" NPT	21.85	1.12	6.90	0.39	5.71	31
87	1.10	16.73	25.87	1.85	1.77	2.20	3/8" NPT	24.25	1.12	6.69	2.17	5.43	32
100	1.10	17.16	20.90	1.76	1.87	2.15	3/8" NPT	23.44	1.13	5.54	2.54	5.34	33
High Flow Hand Pump													
110	1.50	6.42	12.63	3.13	---	7.68	3/8" NPT	26.44	0.98	10.63	3.63	12.13	70
110	1.50	6.42	12.63	3.13	3.50	7.68	3/8" NPT	26.44	0.98	10.63	3.63	12.13	70
Automotive Application Hand Pump													
181	0.47	8.31	13.00	0.81	1.50	2.13	1/4" NPT	12.00	1.13	5.13	0.19	3.50	14
102	0.47	15.63	20.50	0.81	1.50	2.13	1/4" NPT	20.13	1.13	4.50	0.75	4.75	16

"D" for integrated 4-way valve for use with double-acting cylinder.