

## THE P-SERIES MANUAL HAND PUMPS OFFER A WIDE CHOICE OF STEEL AND ALUMINIUM BODIED MODELS.

Ideally suited for applications where portable manual hydraulic power is required. All models feature low handle effort for easy operation and are engineered for demanding industrial applications. Models are available to operate single and double acting cylinders and tools.

All P-Series hand pumps include a factory set safety pressure relief valve and come pre-filled with hydraulic oil.

### SPECIFIC MODEL ADVANTAGES

- Drop forged pump head on models **P-170** and **P-270** for superior durability
- Unique oil reservoir breather incorporating a pressure relief valve to guard against accidental over pressurisation of the oil reservoir on models **P-2200**, **P-2200D** and **P-2260**
- Sealed bladder reservoir design on models **P-235A** and **P-235AT** allows operation in any position
- Twin outlet design pump head incorporating two needle valves on model **P-235AT**
- 2,800 bar working pressure model **P-2100H** can be used for bolt tensioning, bearing removal and high pressure testing

### CYLINDER PISTON ROD SPEED TABLE

Model Number	Usable Oil (mL)	Pressure Stage	mm of movement for each stroke of the pump handle	Cylinder Capacity (ton)											
				5	10	15	20	25	30	50	75	100	150	200	250
P-170	700	1st		5.0	2.1	1.5	1.1	0.9	0.7	-	-	-	-	-	-
		2nd		1.6	0.7	0.5	0.4	0.3	0.2	0.1	-	-	-	-	-
P-235	350	1st		11.2	4.8	3.4	2.5	2.1	1.7	1.0	-	-	-	-	-
		2nd		1.6	0.7	0.5	0.4	0.3	0.2	0.1	-	-	-	-	-
P-2200A	2,000	1st		20.6	8.9	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		4.5	1.9	1.4	1.0	0.8	0.7	0.4	0.3	0.2	0.1	-	-
P-2200AD	2,000	1st		20.6	8.9	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		3.7	1.6	1.1	0.8	0.7	0.5	0.3	0.2	0.2	0.1	-	-
P-2100H	1,000	1st		20.8	9.0	6.4	4.6	3.9	3.1	1.8	-	-	-	-	-
		2nd		1.0	0.4	0.3	0.2	0.2	0.2	0.1	-	-	-	-	-
P-2200	2,000	1st		20.8	9.0	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		4.5	1.9	1.4	1.0	0.8	0.7	0.4	0.3	0.2	0.1	-	-
P-2200D	2,000	1st		20.8	9.0	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		4.5	1.9	1.4	1.0	0.8	0.7	0.4	0.3	0.2	0.1	-	-
P-235A	350	1st		20.8	9.0	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		4.5	1.9	1.4	1.0	0.8	0.7	0.4	0.3	0.2	0.1	-	-
P-235AT	350	1st		20.8	9.0	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		4.5	1.9	1.4	1.0	0.8	0.7	0.4	0.3	0.2	0.1	-	-
P-235L	350	1st		20.8	9.0	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		4.5	1.9	1.4	1.0	0.8	0.7	0.4	0.3	0.2	0.1	-	-
P-270	700	1st		20.8	9.0	6.4	4.6	3.9	3.1	1.8	1.3	1.0	0.6	-	-
		2nd		4.5	1.9	1.4	1.0	0.8	0.7	0.4	0.3	0.2	0.1	-	-
P-2260	2,600	1st		48.0	20.7	14.8	10.6	9.0	7.1	4.2	2.9	2.3	1.5	1.0	-
		2nd		4.8	2.1	1.5	1.1	0.9	0.7	0.4	0.3	0.2	0.2	0.1	-
P-2800	8,000	1st		180.8	78.1	55.7	40.0	34.0	26.9	15.9	11.0	8.5	5.6	4.0	3.1
		2nd		6.4	2.8	2.0	1.4	1.2	1.0	0.6	0.4	0.3	0.2	0.2	0.1
P-2800D	8,000	1st		180.8	78.1	55.7	40.0	34.0	26.9	15.9	11.0	8.5	5.6	4.0	3.1
		2nd		6.4	2.8	2.0	1.4	1.2	1.0	0.6	0.4	0.3	0.2	0.2	0.1



OIL CAPACITY

**350-8,000 cc**

1ST STAGE FLOW RANGE

**3.1-113 cc**

MAXIMUM OPERATING PRESSURES

**240/700/2,800 bar**

**B**

**PUMPS**