

# Modular Hydraulic Power Pumps - 700 Bar (10,000 Psi)

## MM - ME - MP - MS Series



### 700 bar Hydraulic Power Pump models consisting of:

- **Motor Types** – Available in 4 versions:
  1. **MM Series** - Single-phase Electric (230V/50Hz).
  2. **ME Series** - 3-phase Electric (400V/50Hz).
  3. **MP Series** - Air Motor
  4. **MS Series** - Petrol Engine

Electric Motors are equipped with magneto-thermal cut-out with 0 voltage disconnection, complete with 5m power cord, plug and provides Class IP54 protection. Motors are totally enclosed fan-cooled (TEFC) Induction Type.

- **Pump Types** – Available in 12 versions:
  - Ranging from 0,45 to 10,0 l/min.
  - Single-stage and Two-stage pumps configurations.
- **Pressure Relief Valves** are externally adjustable on all pumps.
- **Valve Types** – Available choice of Manual, Electric Solenoid, Air-operated and Spring-centred for single-acting & double-acting cylinder or tool operations.  
(Refer Page: 42 - 43)
- **Electric Remote Motor & Solenoid Valve Control Switches** are wired 24VAC & 'deadman' design for added safety.
- **Reservoir Tank Size** ranging from 5 to 50 litres capacity.
- **Accessories** to customise power units and extending its application needs.



**Accessories**  
(Refer Page: 44)



**'C' Protection Cage**  
(Refer Page: 44)

### FEATURES

- Hydraulic Power Pumps are designed in modular concept for complete interchangeability of components and ensure customising options.
- Top cover plate serves as a base to mount all modular components, valves and accessories.
- Valves are also mounted on the plate to allow pressure adjustment on the return line.
- These power pumps are manufactured under strict quality controls to ensure:

#### - Safety

Valves are set at factory and each component is in compliance with "2006/42/CE Machine Directive" and its latest amendments.

#### - Life

Careful choice of components ensure excellent pump performance, weight/power ratio, limited dimensional requirements and provide easy maintenance.

#### - Environment

Easy to use, quiet, reliable and guarantee maximum performance.



### Applications

- Offered indispensable needs for wide applications like lifting and jacking systems with single-acting and double-acting cylinders and for all heavy duty or complex operations that cannot be performed with manual pumps.

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## ME - MM - MP - MS Series

### MODEL CODING

ME	A	05	M21	G
1. Motor Type	2. Pump Type	3. Reservoir Capacity	4. Valve Type	5. Accessories and Customisation

### MODEL COMPOSITION CHART

	Type	Description	Model	1. Motor Type					
				Power	400V/50Hz 3-phase	230V/50Hz Single-phase	Air Motor	Petrol Engine	
2. Pump	2-Speed	Delivery l/min BP/AP 0,9 / 0,45	Axial piston pump	A	•	•	-	-	
	2-Speed	" 4,7 / 0,45	Axial piston pump	B	•	•	-	-	
	Single-Speed	" - / 0,9	Axial piston pump	C	•	•	-	-	
	2-Speed	" 1,8 / 0,9	Axial piston pump	D	•	•	•	•	
	2-Speed	" 2,4 / 0,9	Axial piston pump	H	•	•	-	-	
	2-Speed	" 9,4 / 0,9	Axial piston pump	E	•	•	•	•	
	Single-Speed	" - / 1,8	Axial piston pump	F	•	-	-	•	
	2-Speed	" 4,7 / 1,8	Axial piston pump	G	•	-	-	•	
	Single-Speed	" - / 1,6	Axial piston pump	L	•	-	-	-	
	2-Speed	" 11,6 / 1,6	Combined piston/gear pump	K*	•	-	-	-	
	2-Speed	" 10 / 1,8	Combined piston/gear pump	T**	•	-	-	-	
	2-Speed	" 10 / 2,5	Radial piston pump	V*	•	-	-	-	
3. Reservoir	5 litres			05	•	•	•	-	
	10 litres high			10	•	•	•	-	
	10 litres low			11	•	•	•	•	
	20 litres			20	•	•	•	•	
	30 litres	* Tank available for K and V pumps only		30	•	•	•	•	
	40 litres			40	•	-	-	-	
	50 litres	* Tank available for V pumps only		50	•	-	-	-	
4. Valve	Version 'S' (Spring Centred Valve)	P and T outlet with by pass		M20	•	•	•	•	
		Manual controlled valve 3 way 2 pos.		M21	•	•	•	•	
		Manual controlled valve 3 way 3 pos.		M31	•	•	•	•	
		Manual controlled valve 3 way 3 pos. with check		M32	•	•	•	•	
		Manual controlled valve 4 way 3 pos.		M41	•	•	•	•	
		Manual controlled valve 4 way 3 pos. with check		M42	•	•	•	•	
		Manual controlled valve 4 way 3 pos. return 150 bar		M51	•	•	•	•	
		Manual controlled valve 4 way 3 pos. with check, return 150 bar		M52	•	•	•	•	
		Version 'P' (Air Valve)	Solenoid valve 3 way 2 pos. normally open		E21	•	•	P•	-
			Solenoid valve 3 way 2 pos. normally closed		E22	•	•	P•	-
	Solenoid valve 3 way 3 pos.			E31	•	•	P•	-	
	Solenoid valve 4 way 3 pos.			E41	•	•	P•	-	
	Solenoid valve 4 way 3 pos. with check			E42	•	•	P•	-	
	Solenoid valve 4 way 3 pos. return 150 bar		E51	•	•	P•	-		
	Solenoid valve 4 way 3 pos. with check, return 150 bar		E52	•	•	P•	-		
5. Accessories	Pressure gauge ***			G	•	•	•	•	
	Protective housing (standard for air motor type MS)			C	•	•	•	•	
	Protective housing with 4 pivoting wheels Ø 80x25 mm			W	•	•	•	•	
	Hand activated remote control			R	•	•	•	-	
	Pedal activated remote control			F	•	•	•	-	
	Pressure sensor and pressure gauge			P	•	•	-	-	
	Compressed air lubricator reduction filter			L	-	-	•	-	
	Unidirectional flow regulator			U	•	•	•	•	
	Unidirectional flow regulator with fine regulation			H	•	•	•	•	
	Counterbalance valve			B	•	•	•	•	
	Heat exchanger			E	•	•	-	-	
	Filter on return line ****			S	•	•	•	•	
Customisation	Without hand wheel adjustable max. pressure valve			Z	•	•	•	•	
	Without magneto-thermal cut-out			Y	•	•	-	-	
				Refer Pg.	38 & 39	36 & 37	40	41	

BP: Before Pressurisation (1<sup>st</sup> Stage/Speed)  
AP: After Pressurisation (2<sup>nd</sup> Stage/Speed)

Electric Motors with different voltage available upon request.

\* Tank available for V pumps only (50 litres tank) and for K and V pumps only (30 litres tank)

\*\* Pump T available with 20 and 40 litres tanks only

\*\*\* Gauge Ø 100 with hand operated valves - Ø 63 with solenoid valves and hand operated valves with pilot check.  
Digital gauges upon request.

\*\*\*\* Filter not available for 5 litres and 10 litres tank high.

Examples: **MEG20M42E** Power pump electric motor (400V/50Hz/3ph), pump 4,7/1,8 l/min, tank 20 litres, manual control valve 4-way/3-position with check, heat exchanger.

**MPE10P41R** Power pump air motor, pump 9,4/0,9 l/min, tank 10 litres high, air control valve 4-way/3-position, remote control.

**NOTE:** For the accessories, fill the letters in alphabetic order. *Refer Page 44 for details.*