

# Two-Stage Electric Pump (1.5 kW)

Hydraulic Pumps

## ■ MP-10 series

- A pump combining both high- and low-pressure pumps to be driven by one motor to improve the work speed.
- Equipped with a double-safety mechanism of a safety valve and pressure switch to prevent overload.
- An exclusive plate (MPP-37) is required when installing an oil cooler.
- An exclusive block sub-plate (MBSP-32) is required when stacking Esperblock (MB-1, 2).
- A one-point push-button switch is set in the MP-10D-PA type package pump, and a two-point push-button switch and a control box are set in the MP-10SW-PA/SB-PA types. Simply connect the power and the pump is ready to use.
- See P. 73 and 74 for the description of each model and the instructions.

⚠ Power should not be supplied continuously to the solenoid valve of the MP-10SL/10SW/10SB types for more than one minute to prevent adhesion of the spool.

### Description of the type

MP

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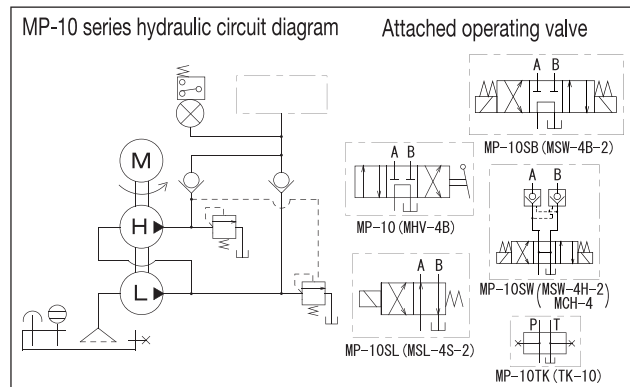
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Series No

Electric pump

- No mark : For double-acting cylinder (manual change valve)
- SL : For single-acting cylinder (solenoid operated directional valve)
- SW : For double-acting cylinder (solenoid operated directional valve, pressure maintenance included)
- SB : For double-acting cylinder (solenoid operated directional valve, w/o pressure maintenance)
- D-PA : Package pump for single-acting cylinder (solenoid operated directional valve)
- SW-PA : Package pump for double-acting cylinder (solenoid operated directional valve, pressure maintenance included)
- SB-PA : Package pump for double-acting cylinder (solenoid operated directional valve, w/o pressure maintenance)
- TK : For separately installed operating valve (w/o operating valve)



## ■ Motor specification

Insulation type	Voltage (number of phase) (V)	Output (kW)	Rated current (A)		Load current (A)		Number of revolutions (rpm)	
			50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
Type E, totally-enclosed fan-cooled type	200 (Three phase)	1.5	7.2	6.3	6.6	7.2	1500	1800

※The load current is a current value at 70 MPa.

## ■ Pump specification

Type	Maximum operating pressure (MPa)		Discharge volume (L/min) (50Hz/60Hz)		Tank oil level (L)	Effective oil level (L)	Attached operating valve	Approximate weight (kg)
	High pressure	Low pressure	High pressure	Low pressure				
MP-10	70	8	0.9/1.08	6.5/7.8	22.0	13.0	MHV-4B	90
MP-10SL							MSL-4S-2	89
MP-10SW							MSW-4H-2	95
MP-10SB							MCH-4	90
MP-10TK							None	86

### MP-10

±0.1  
5  
370  
P. C. D. 390 4-M12 depth 25

370

No.	Name	Remarks
1	Oil tank	
4	Motor	
5	Electromagnetic switch	
6	Start switch	
13	High-pressure safety valve	
18	Pressure switch	DPS-100
22	Direction-control valve	MHV-4B
27	Air breather	
29	Oil gauge	
34	Oil-drain port	Rc1/2
35	Return inlet	Rc1/2
36	Outlet port	Rc3/8

● The above numbers don't correspond to the part numbers of the product. See the operation manual for the part numbers of the product.

※The wiring of the direction-control valve isn't installed for the standard MP-10SL/10SW/10SB types.