

Electric Pumps

■ List of the discharge volume by each model

Type		Maximum operating pressure (MPa)		Discharge volume (L/min) (50Hz)		Indicated page
One-stage type	MP-4	High pressure	70	0.4L/min		75
	MP-6			0.75L/min		77
	MP-12H			1.5L/min		79
	MP-15H			2.5L/min		81
	MP-17H			5.0L/min		83
	MP-20H			10.0L/min		85
	RP1.5			1.5L/min		89
	RP2.5			2.5L/min		
	RP5.0			5.0L/min		
RP10	10.0L/min					
Two-stage type	SMP-30	High pressure	70	0.2L/min		65 72
		Low pressure	1.5	2.0L/min		
	SMP-40	High pressure	70	0.4L/min		76
		Low pressure	1.5	3.0L/min		
	MP-5	High pressure	70	0.4L/min		78
		Low pressure	3	2.0L/min		
	MP-10	High pressure	70	0.9L/min		80
		Low pressure	8	6.5L/min		
	MP-12	High pressure	70	1.5L/min		82
		Low pressure	8	8.5L/min		
	MP-15	High pressure	70	2.5L/min		84
		Low pressure	6	20.0L/min		
	MP-17	High pressure	70	5.0L/min		86
		Low pressure	6	40.0L/min		
MP-20	High pressure	70	10.0L/min			
	Low pressure	6	70.0L/min			

※ The above table shows the figures at 50 Hz.

■ Precautions for electric pumps

- ⚠ Carefully check the increase in oil temperature when the pump is used continuously.
- ⚠ The oil temperature should be kept between 0°C and 60°C. Usage exceeding the appropriate oil temperature range could cause troubles and accidents. The optional oil cooler should be used depending on the conditions of use.
- ⚠ The ambient temperature should be kept between 0°C and 40°C.
- ⚠ When the pump is used continuously, the normal pressure should be set between 70% and 80% of the pump's maximum operating pressure.
- ⚠ ISO VG 32 hydraulic oil should be used for the pumps up to MP-15 (3.7 kW), and ISO VG 46 hydraulic oil should be used for large-size electric pumps of MP-17 (7.5 kW) or larger.
- ⚠ Consult us if using hydraulic oil other than general hydraulic oil.
- ⚠ The hydraulic oil should be replaced immediately if dust enters, or the oil smells, turns milk-white due to the inclusion of water, or turns blackish-brown due to deterioration. In other any cases, the oil should be replaced once a year in principle.
- ⚠ The electric pumps must not be used in places where serious damage could result if the hydraulic oil is dispersed. In particular, they must not be used near fire as this could cause injury or fire, etc.