

# Vane motors

Model Code	Max. Working Pressure MPa	Minimum Speed min <sup>-1</sup>	Maximum Speed min <sup>-1</sup>	Rated Torque N·m											Page		
				50	100	200	300	500	1000	2000	3000	5000	10000	20000			
25M	15.7	100	2600	42	55	66											N1-1
35M			2600	80	96	115											
45M			2600	130	155	185											
MHT24/32	14	10	400	24	32												N2-1
MHT50			350														
MHT70/90			300	70	90												
MHT150			250														
MHT190/250			200	190	250												
MHT380/500			200	380	500												
MHT750			100														
MHT1000			75														

See page N3-1 for multi-torque motors

## Vane Motor Notes on Operation

- Mounting
  - Base for motor should be sufficiently rigid.
  - Motor can be mounted at any direction.
  - Flatness of mounting surface and squareness tolerance should be less than 0.025 mm.
  - Mating of mounting flange should be clearance fit.
- Drive method
  - MHT motor should be direct drive. Avoid external thrust loads.  
Consult Tokyo Keiki when using high speed \*\*M motors for indirect drive.
  - MHT motors cannot function as brake. Consult Tokyo Keiki when considering braking function with high speed \*\*M motors.
- Hydraulic oil and filtration
  - Use JIS K 2213-2 type (additive) ISO VG32 to 68 antiwear oil or SAE application class SC, SD, SE and SF crankcase oil. Diesel engine oil cannot be used.
  - Water-glycol, phosphate ester, etc., fire resistant fluids cannot be used.
- Viscosity of oil used should be 13~54 mm<sup>2</sup>/s, with starting viscosity up to 110 mm<sup>2</sup>/s (\*\*M motor 860 mm<sup>2</sup>/s) allowed.
- Full volume filter 25 μm or less or bypass filter 10 μm or less should be incorporated in inlet and return lines.