

ENERGY-SAVING HYDRAULIC POWER UNIT TOYOPAC "ECO" TP20E SERIES

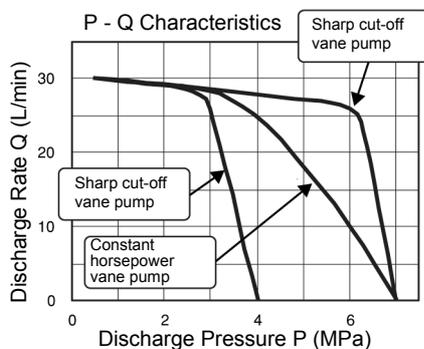


FEATURES

1. Resource and Energy Saving Design
A resource and energy saving hydraulic unit has been developed by increasing the efficiency of the variable displacement vane pump. Efficiency is further improved by adopting a constant horsepower type pump.
2. Light and Compact
The floor space requirement for installation has been reduced by adopting a compact reservoir that features a low fluid temperature rise.
3. Environmentally Friendly Low-noise Operation
Adoption of a low-noise variable displacement vane pump and pump installation that takes vibration suppression into consideration further reduce noise during operation.
4. Globally Accepted Design
All models of the TP series pumps are CE compatible.

ENERGY SAVING DESIGN

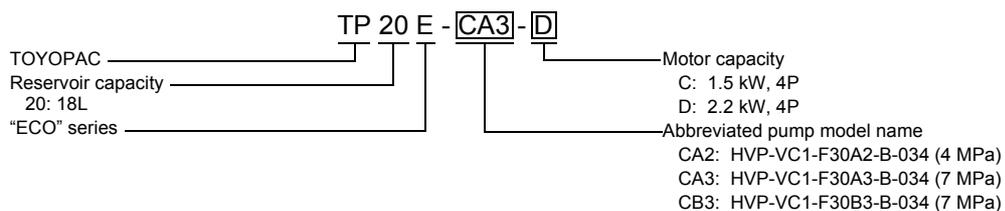
- High Efficiency Variable Displacement Vane Pump



PRECAUTIONS FOR USING THE HYDRAULIC POWER UNIT

- Eyebolts of a motor are provided for hoisting the motor itself. Do not use them when hoisting the hydraulic power unit. If you do, there is a danger that the hydraulic power unit will be damaged or fall.
- Always ground the hydraulic power unit. Failure to ground it will cause electrocution or fire. You are recommended to install an earth leakage breaker to prevent electric shock accidents and fire with certainty.
- The water content of the hydraulic fluid must be 0.1% or less. Water in the hydraulic fluid causes hydraulic power unit failure.
- Use petroleum base fluid (equivalent to ISO VG22 or VG32) within the specified fluid temperature range (VG22: 0 to 50°C, VG32: 0 to 60°C). Using hydraulic fluid outside the specified temperature range may cause failure of the hydraulic power unit and deterioration of the fluid. Fire-resistant fluid (water-glycol, w/o emulsion, ester phosphate) cannot be used. When replacing the fluid, use fluid of the same brand.
- Control the contamination level of fluid to achieve better than Class 12 of NAS1638. Using contaminated fluid will shorten the service life of the hydraulic devices and damage them.
- The direction of rotation of the pump must be clockwise when viewed from the motor fan side.
- Clean the interior of the reservoir after hoisting the cover.
- The exterior coating is Munsell No. 10.0 GY9.0/1. Note that the pump, the motor, the radiator, the oil level gauge, the pressure gauge and the oil filler port/breather are coated with the manufacturer's standard color.
- Connect TOYOPAC "ECO" with an external manifold using hoses with sufficient slackness.
- If the setting pressure of the hydraulic power unit exceeds 5 MPa, you are recommended to install a relief valve at the circuit side to suppress surge pressure.

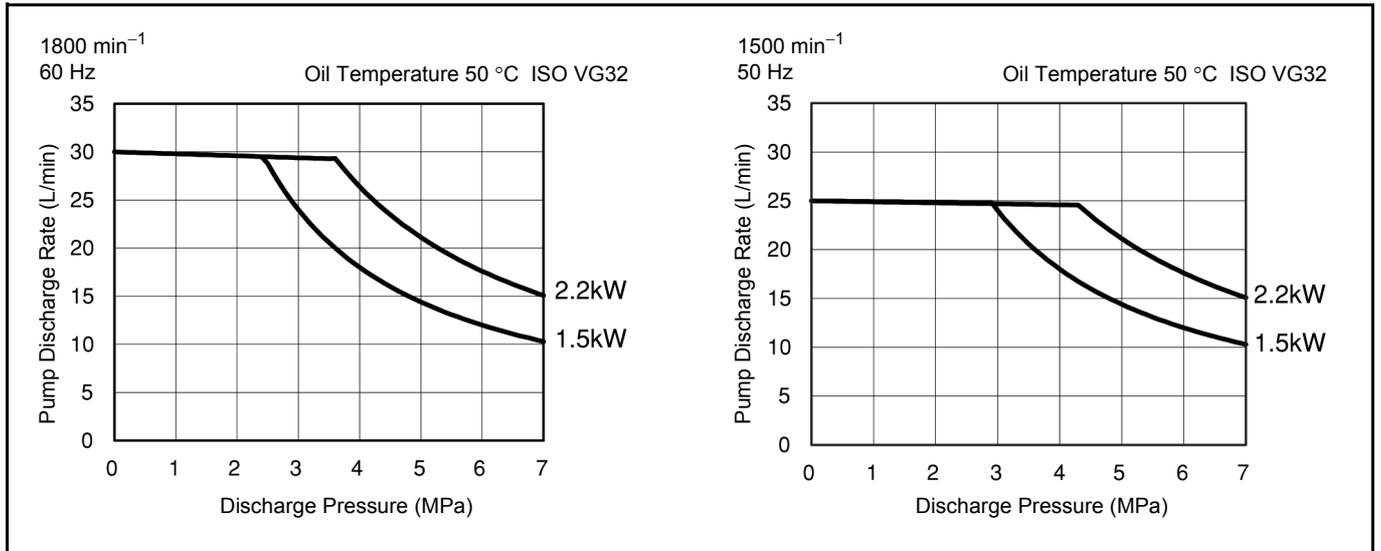
MODEL DESIGNATION



SPECIFICATIONS

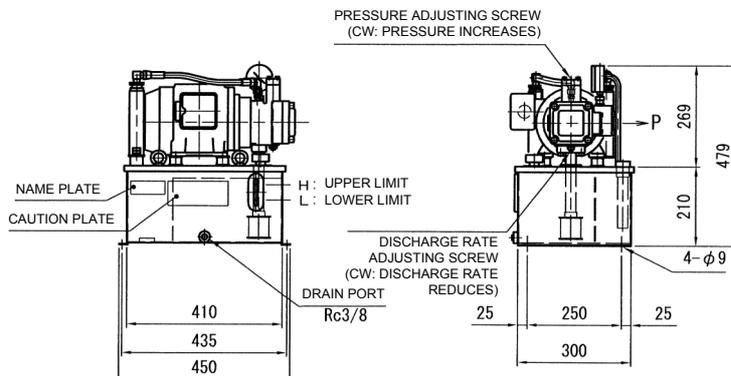
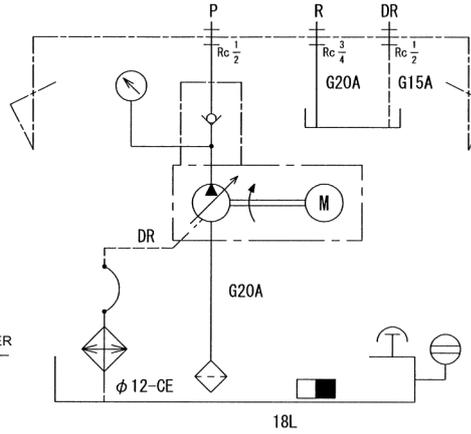
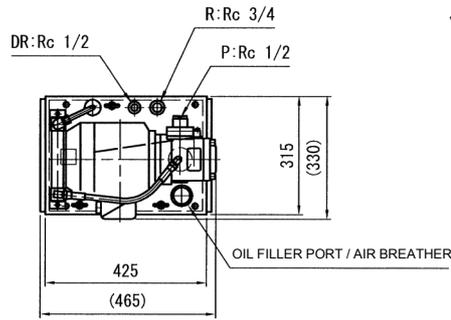
Model	TP20E-CA2-C	TP20E-CA3-D	TP20E-CB3-C
	Sharp Cut-off Type		Constant Horsepower Type
Motor Capacity kW	1.5 kW 4P	2.2 kW 4P	1.5 kW 4P
Reservoir Capacity L	18		18
Pump Capacity cm ³ /rev	16.7		16.7
Max. Operating Pressure MPa	4	7	7
Pressure Adjustment Range MPa	2 to 4	4 to 7	4 to 7
Voltage	200 VAC 50/60 Hz 220 VAC 60 Hz		200 VAC 50/60 Hz 220 VAC 60 Hz
Mass kg (Fluid not included)	43	49	43

MOTOR SELECTION CHART



EXTERNAL VIEW

- TP20E-CA2-C
- TP20E-CB3-C



- TP20E-CA3-D

