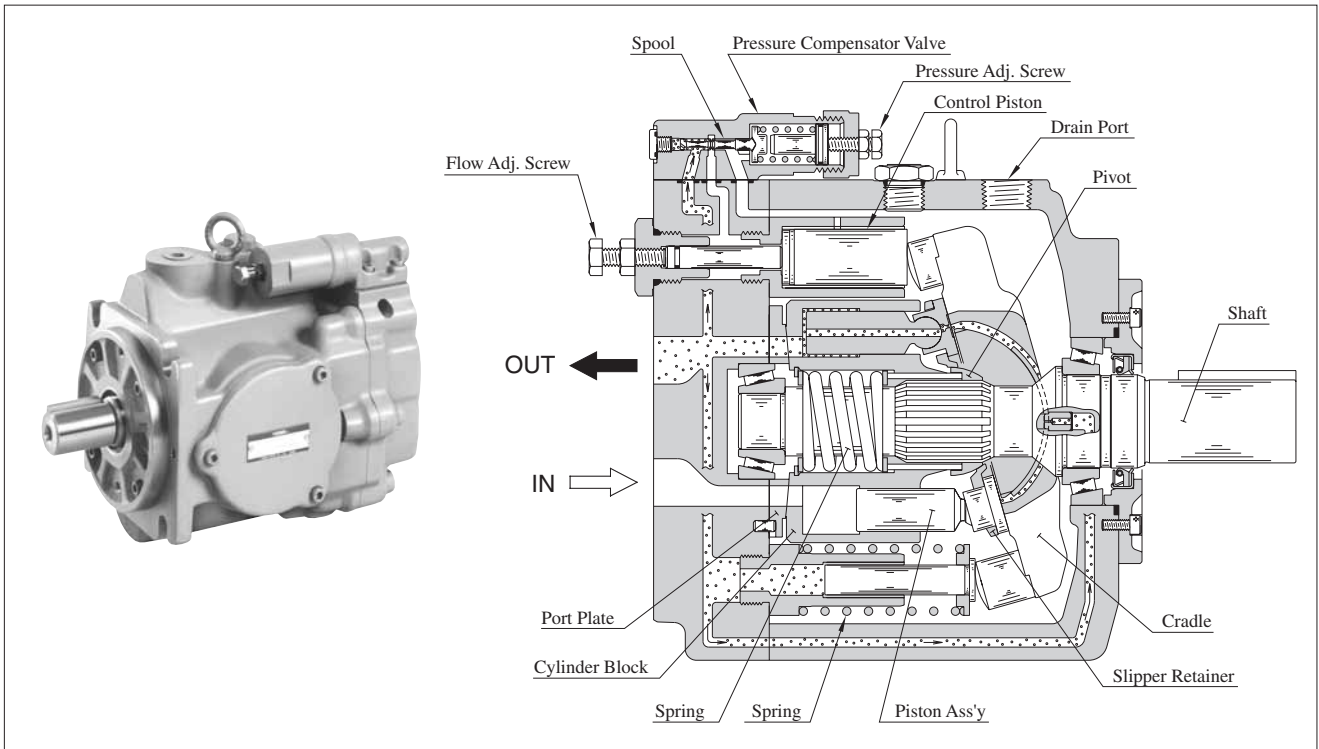
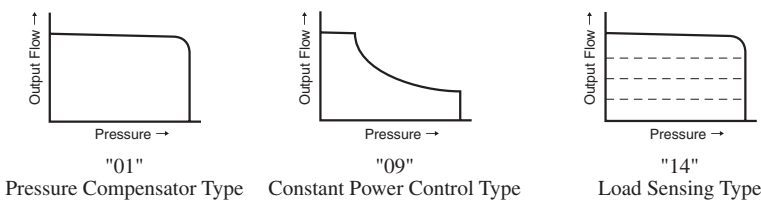
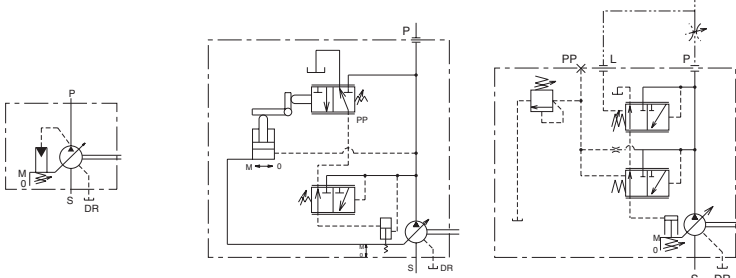
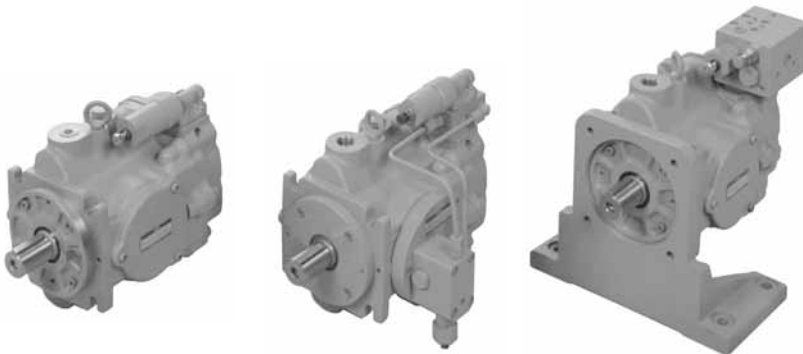


"A3H" Series Variable Displacement Piston Pumps



Control Type

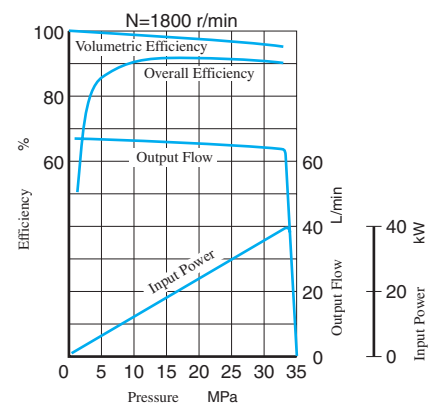


Features

- **High performance at maximum pressure 35MPa**

Volumetric efficiency is over 95% and overall efficiency is more than 90% at 1800 r/min.


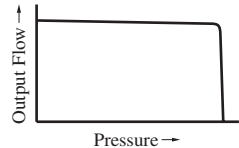
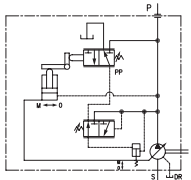
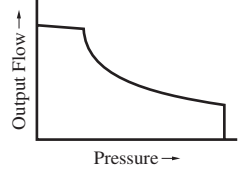
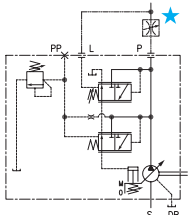
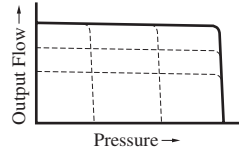
"A3H37" type performance characteristics



- **Compact size**

A3H series are compact in size because output / mass ratio is large.

Control Type

| Control Type | Graphic Symbols | Performance Characteristics | Explanation | Page |
|---|--|---|---|------|
| "01" Pressure Compensator Type |  |  | When the system pressure increases and comes close to the preset cut-off pressure, the pump flow decreases automatically while maintaining the set pressure as it is. | 122 |
| "09" Constant Power (Torque) Control Type |  |  | <ul style="list-style-type: none"> This type of control can control the pump input power according to the motor output. When the system pressure increases, the pump swash plate tilt angle (output flow) decreases, in correspondence to predetermined shaft input values. This type of control can enable one pump to act as two pumps (low-pressure and large-flow/high-pressure and small-flow). Therefore, the motor capacity can be reduced. | 141 |
| "14" Load Sensing Type |  |  | <ul style="list-style-type: none"> This is an energy-saving type control which maintains the pump flow and load pressure at the absolute minimum necessary level to operate the actuator. This type of control automatically regulates the output flow so that the inlet-outlet differential pressure of the flow control valve at the output side is constant. To do so, the load pressure must be introduced to the load sensing port "L" of the pump through the external piping. This type of control provides the remote control of the full cut-off pressure by connecting a remote control relief valve to the pilot port "PP". | 150 |

★ A flow control valve is not included with the pump. Install the valve separately.

Availability of Control Type

Mark "○" in the table below refers to standard model.

| Model Numbers | Geometric Displacement cm ³ /rev (cu. in./rev) | "01" Pressure Compensator Type | "09" Constant Power (Torque) Control Type | "14" Load Sensing Type |
|---------------|--|-----------------------------------|---|---------------------------|
| A3H 16 | 16.3 (.995) | ○ | | ○ |
| A3H 37 | 37.1 (2.26) | ○ | ○ | ○ |
| A3H 56 | 56.3 (3.44) | ○ | ○ | ○ |
| A3H 71 | 70.7 (4.31) | ○ | ○ | ○ |
| A3H100 | 100.5 (6.13) | ○ | ○ | ○ |
| A3H145 | 145.2 (8.86) | ○ | ○ | ○ |
| A3H180 | 180.7 (11.03) | ○ | ○ | ○ |