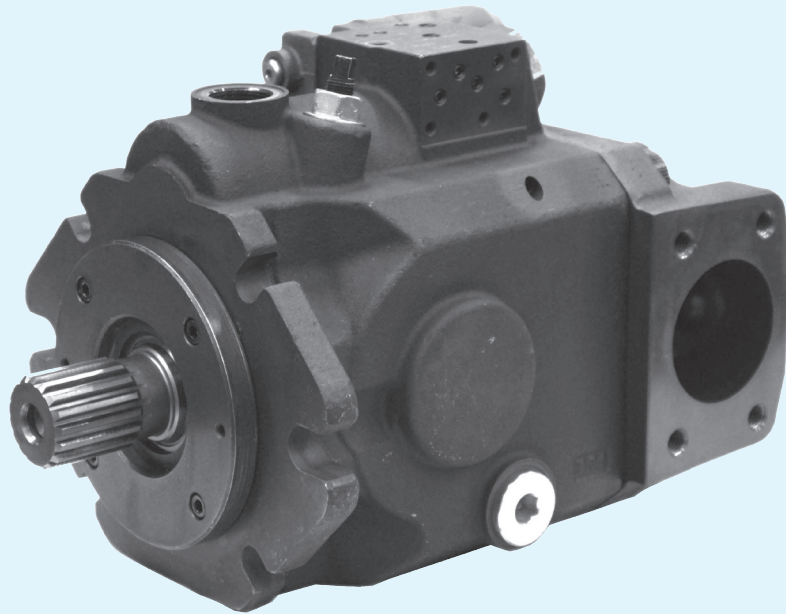




A3HM Series High Pressure Variable Displacement Piston Pumps



"A3HM" Series Variable Displacement Piston Pumps

Pump Type	Graphic Symbol	Geometric Displacement cm ³ /rev								Maximum Operating Pressure MPa	Page		
		1	2	5	10	20	50	100	200			300	
					A3HM18						35	A-203	
					A3HM28								
					A3HM45								
					A3HM63								
					A3HM85								
					A3HM100								

★ Three control methods are available:
 Pressure Compensator Type/Pilot Pressure Control Type Pressure Compensator/Load Sensing Type

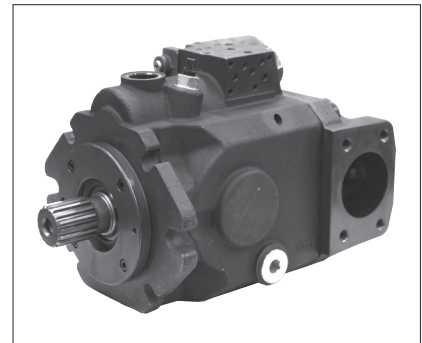
● Consult Yuken for "A3HM" Series High Pressure Variable Displacement Piston Pumps details.

A3HM Series Variable Displacement Piston Pumps - Single Pump

"A3HM" series piston for open circuit pumps match the requirements of construction machinery and mobile equipment. Drastically compact and lightweight. Suitable for mobile products.

Features

- Compact and lightweight compared with conventional pumps.
- Applicable for medium pressure hydraulic systems: Rated Pressure 31.5 MPa and Max. Pressure 35 MPa.
- We offer 6 models in the geometric displacement range from 18.6 to 100.7 cm³/rev. Available for a wide range of applications.
- Through-drive type is employed for standard models. Driven side pumps with displacement volume up to the same displacement as that of the driving pump can be connected. Wide range of maximum flow due to it.



Specifications

Model Numbers		A3HM18	A3HM28	A3HM45	A3HM63	A3HM85	A3HM100
Geometric Displacement	cm ³ /rev	18.6	28.7	45.7	63.5	85.6	100.7
Minimum Adj. Flow	cm ³ /rev	—	17.8	27.5	44.0	61.3	70.5
Rated Pressure	MPa	31.5					
Max. Pressure ^{★1}	MPa	35					
Pressure Adj. Range	MPa	3.0 - 31.5					
Allowable Shaft Speed r/min	Max. ^{★2}	3400	3200 (3600)	2700 (3300)	2600 (2700)	2500 (2700)	2300 (2600)
	Min.	600					
Suction Pressure		-20 kPa - +400 kPa					
Drain Pressure		Normal Pressure : 0.1 MPa or less Surge Pressure : 0.4 MPa or less (Allowable duration for surge pressure 0.1 sec or less)					
Hydraulic Fluid		Petroleum Based Oils ^{★3}					
Seal Material		FKM (Fluoro Rubber)					
Mass ^{★4}		12	14	21	24.5/25	36	36

★1. If operating pressure exceeds the rated pressure due to surge pressure, make sure that it does not exceed the max. pressure. Please contact Yuken for further information.

★2. Minimum flow values are shown in brackets.

★3. Please contact Yuken regarding the use of non-petroleum based oils.

★4. Pressure Compensator Control Type

Control Type

Control Type	Graphic Symbols	Performance Characteristics	Explanation
"01" Pressure Compensator Type			<ul style="list-style-type: none"> ● 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. ● The output flow and full cut-off pressure can be manually adjusted.
"07" Pilot Pressure Control Type Pressure Compensator			<ul style="list-style-type: none"> ● The pump is used in combination with a pilot relief valve or proportional pressure control valve. ● By controlling the pilot pressure, the full cut-off pressure can be remote-controlled according user requirements.
"14" Load Sensing Type			<ul style="list-style-type: none"> ● This is an energy-saving type control which maintains the pump flow 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.

★1. Flow adjustment function is not available on A3HM18.

★2. Pilot relief valve/ proportional pressure control valve is not supplied with the pump. Please arrange it separately.

★3. Flow control valve is not supplied with the pump. Please arrange it separately.