

“A7H” Series High Pressure Piston Pumps

Enhancing variety of variable piston pumps, 350 Kgf/cm² high pressure variable piston pump “A7H Series” is now on market.

Features

- High Pressure-Large Volume Displacement**
 Adding to current A3H series, 180 + 270 cm³/rev displacement with rated pres. 350 Kgf/cm², Max. Pres. 400 Kgf/cm² pumps are now available.
- Optional Through Drive**
 Optional through drive allows an auxiliary or outboard pump (SAE Standard) to be directly mounted.
- Fire-Resistant Fluids**
 Water-Glycols and Polyol Ester Type are applicable under certain condition.



Specifications

Series Number	Geometric Displacement cm ³ /rev.	Operating Pressure Kgf/cm ²		Shaft Speed r/min.		Temp. Range °C	Viscosity Range mm ² /s ^{*3}	Approx. Mass Kg.	
		Rated	Intermittent ^{*1}	Min.	Max. ^{*2}			Flange Mtg.	Foot Mtg.
A7H180※※※-01	180	350	400	1800	1900	-20-80	10-200	150	220
A7H180※※※-09								154	224
A7H265※※※-01	270	350	400	1200	1600			220	310
A7H265※※※-09								224	314

*1 Consult YUKEN for Max. Pres. Operating condition.

*2 Max. allowable Shaft Speed is specified when the suction pressure is -0.1 Kgf/cm².

*3 When the viscosity is more than 200 mm²/s, system is required to be warmed up before operating at rated pressure.

Specifications for Special Fluids

Types of Fluids	Series Number	Operating Pressure Kgf/cm ²		Shaft Speed Range r/min.		Temperature Range °C	Viscosity Range mm ² /s ^{*3}
		Rated	Intermittent ^{*1}	Min.	Max. ^{*2}		
Water-Glycols	M-A7H180	210	250	1800	1800	10-50	20-200
	M-A7H265	210	250	1200	1200		
Polyol Ester Type	P-A7H180	350	400	1800	1900	10-70	10-200
	P-A7H265	350	400	1200	1600		

*1 Consult YUKEN for Max. Pres. Operating condition.

*2 Max. allowable Shaft Speed is specified when the suction pressure is -0.1 Kgf/cm².

*3 When the viscosity is more than 200 mm²/s, system is required to be warmed up before operating at rated pressure.

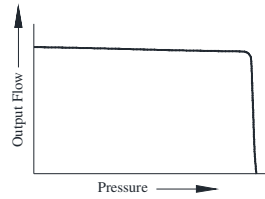
Application

Steel mill equipment, press machines and industrial machines

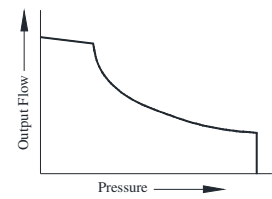
Control Type and Graphic Symbols

Model Number	Control Type
A7H※-※-R01S	Pressure Compensator Type
A7H※-※-R09S	Constant Power Control Type
A7H※-※-R09RS	Constant Power Control Type With External Pilot

Performance Characteristics

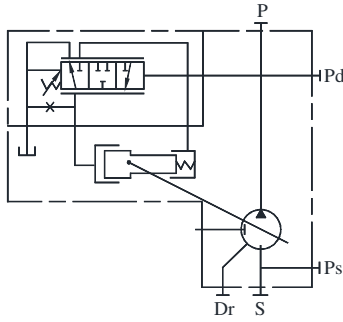


Pressure Compensator Type

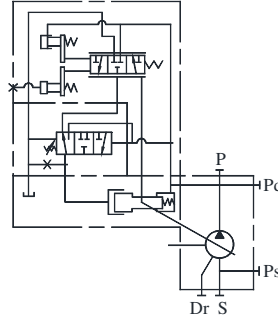


Constant Power Control Type
Constant Power Control Type With External Pilot

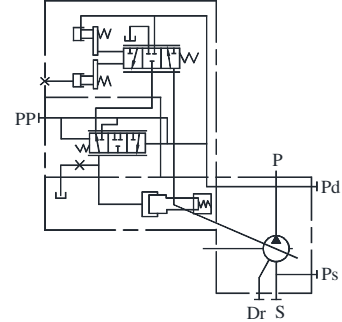
Graphic Symbols



Pressure Compensator Type



Constant Power Control Type



Constant Power Control Type With External Pilot Type

Model Number Designation

Pressure Compensator Type

M-	A7H265	-F	R	01	S	N	A	-10
Type of Fluids	Series Number	Mounting	Direction of Rotation	Control Type	Port Position	Pipe Flange	Outboard Pump Mounting Type	Design Number
<p>None: Petroleum Base Oils (Mineral oils)</p> <p>M: Water-Glycols</p> <p>P: Polyol EsterType</p>	<p>A7H180: (180cm³/rev)</p> <p>A7H265: (270cm³/rev)</p>	<p>F: Flange Mtg.</p> <p>L: Foot Mtg.</p>	<p>R: Clockwise (Viewed from shaft End)</p>	<p>01: Pressure Compensator Type (With Min. Flow Adj. Function)</p>	<p>S: Side Port</p>	<p>None: With Pipe Flange</p> <p>N: Without Pipe Flange</p>	<p>None: Without Mounting (With End Cover)</p> <p>A: SAE A</p> <p>B: SAE B</p> <p>C: SAE C</p> <p>CC: SAE CC</p> <p>D: SAE D</p>	<p>10</p>

● **Constant Power Control Type and Constant Power Control Type With External Pilot**

M-	A7H265	-F	R	09	R	S	N	A	M1	-10
Type of Fluids	Series Number	Mounting	Direction of Rotation	Control Type	External Pilot	Port Position	Pipe Flange	Outboard Pump Mounting Type	Code of Constant Power Control Type	Design Number
<p>None: Petroleum Base Oils (Mineral oils)</p> <p>M: Water Glycols</p> <p>P: Polyol Ester Type</p>	<p>A7H180: (180cm³/rev)</p> <p>A7H265: (270cm³/rev)</p>	<p>F: Flange Mtg.</p> <p>L: Foot Mtg.</p>	<p>R: Clockwise (Viewed from shaft End)</p>	<p>09: Constant Power Control Type</p>	<p>None: Without External Pilot</p> <p>R:With External Pilot</p>	<p>S: Side Port</p>	<p>None: With Pipe Flange</p> <p>N: Without Pipe Flange</p>	<p>None: Without Mounting (With End Cover)</p> <p>A: SAE A</p> <p>B: SAE B</p> <p>C: SAE C</p> <p>CC: SAE CC</p> <p>D: SAE D</p>	Refer to below Code table	10

Code table of constant power control type

<A7H180>

<A7H265>

Motor Power kW	970 r/min.	1150 r/min.	1450 r/min.	1750 r/min.	Motor Power kW	970 r/min.	1150 r/min.	1450 r/min.
30	M4	-	-	-	45	M5	-	-
37	M2	M3	-	-	55	M1	M5	-
45	H5	M2	M4	-	75	H3	M1	M4
55	H3	H5	M2	M4	90	H2	H3	M2
75	-	H1	H4	M1	110	-	H1	H4
90	-	-	H2	H4	132	-	-	H2
110	-	-	-	H2				