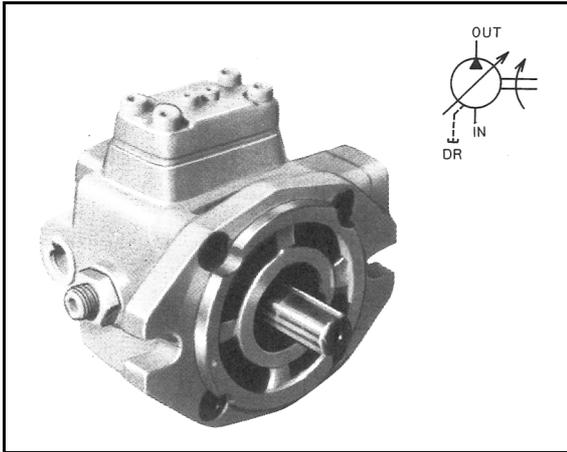


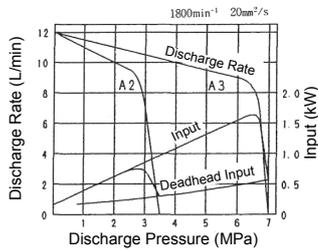
VARIABLE-DISPLACEMENT VANE PUMP (HVP-VB1 SERIES)



FEATURES

1. The pump provides a pressure and fluid flow appropriate for the load to save power and reduce fluid temperature rise, thus ensuring economical operation.
 2. Since the pump is equipped with a pressure compensation mechanism, components such as a relief valve and unloading valve are not necessary.
- The standard direction of rotation is clockwise, viewed from the shaft end.
 - The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
 - The permissible fluid temperature is as below:
Equivalent to ISO VG32: 0 to 60°C (350 to 15 mm²/sec)
Equivalent to ISO VG46: 6 to 65°C (350 to 18 mm²/sec)
 - The permissible operating ambient temperature range is from 0 to 60°C.
 - The permissible drain back pressure is 0.03 MPa max.
 - The pump cannot be used for water-glycol fluid.

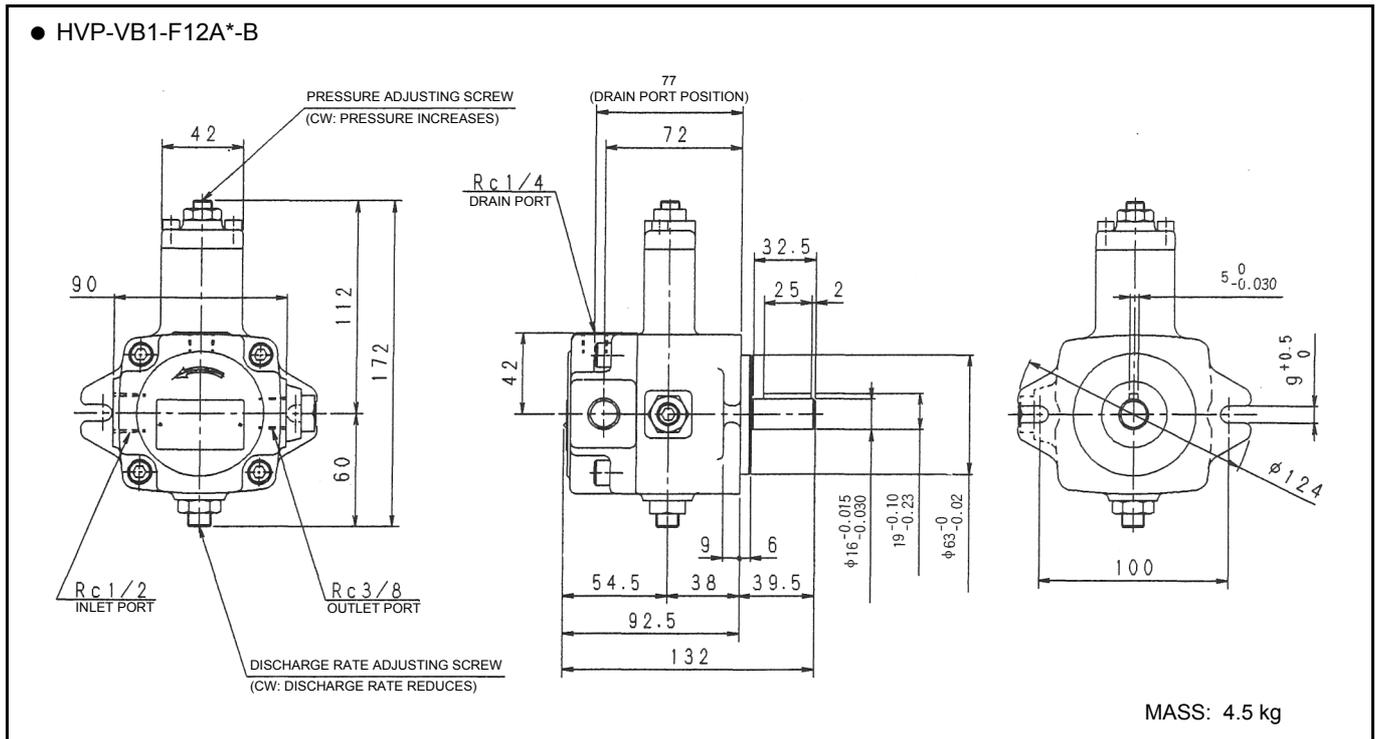
GENERAL PERFORMANCE CHARACTERISTICS



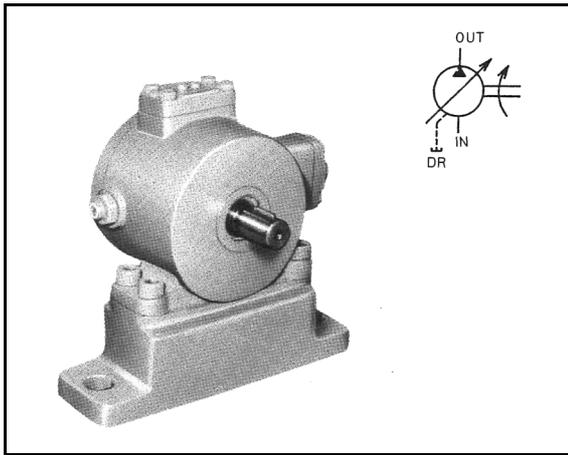
SPECIFICATIONS

Model	Rated Pressure (MPa)	Discharge Rate at No-load (L/min)		Pressure Adjustment Range (MPa)	Speed (min ⁻¹)		
		1,200 min ⁻¹	At Rated Speed		Rating	Max.	Min.
HVP-VB1-F12A2-B	7	8	12	0.8 to 3.5	1,800	1,800	720
HVP-VB1-F12A3-B							

EXTERNAL DIMENSIONS



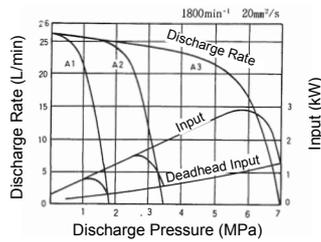
VARIABLE-DISPLACEMENT VANE PUMP (HVP-VC1 SERIES)



FEATURES

- The pump provides a pressure and fluid flow appropriate for the load to save power and reduce fluid temperature rise, thus ensuring economical operation.
 - Since the pump is equipped with a pressure compensation mechanism, components such as a relief valve and unloading valve are not necessary.
- The standard direction of rotation is clockwise, viewed from the shaft end.
 - The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
 - The permissible fluid temperature is as below:
Equivalent to ISO VG32: 0 to 60°C (350 to 15 mm²/sec)
Equivalent to ISO VG46: 6 to 65°C (350 to 18 mm²/sec)
 - The permissible drain back pressure is 0.03 MPa max.
 - The standard pump can be used for water-glycol fluid. In this case, the maximum speed is 1,200 min⁻¹. Please consult us about the applicable brand of water-glycol fluid.
 - The permissible operating ambient temperature range is from 0 to 60°C.

GENERAL PERFORMANCE CHARACTERISTICS

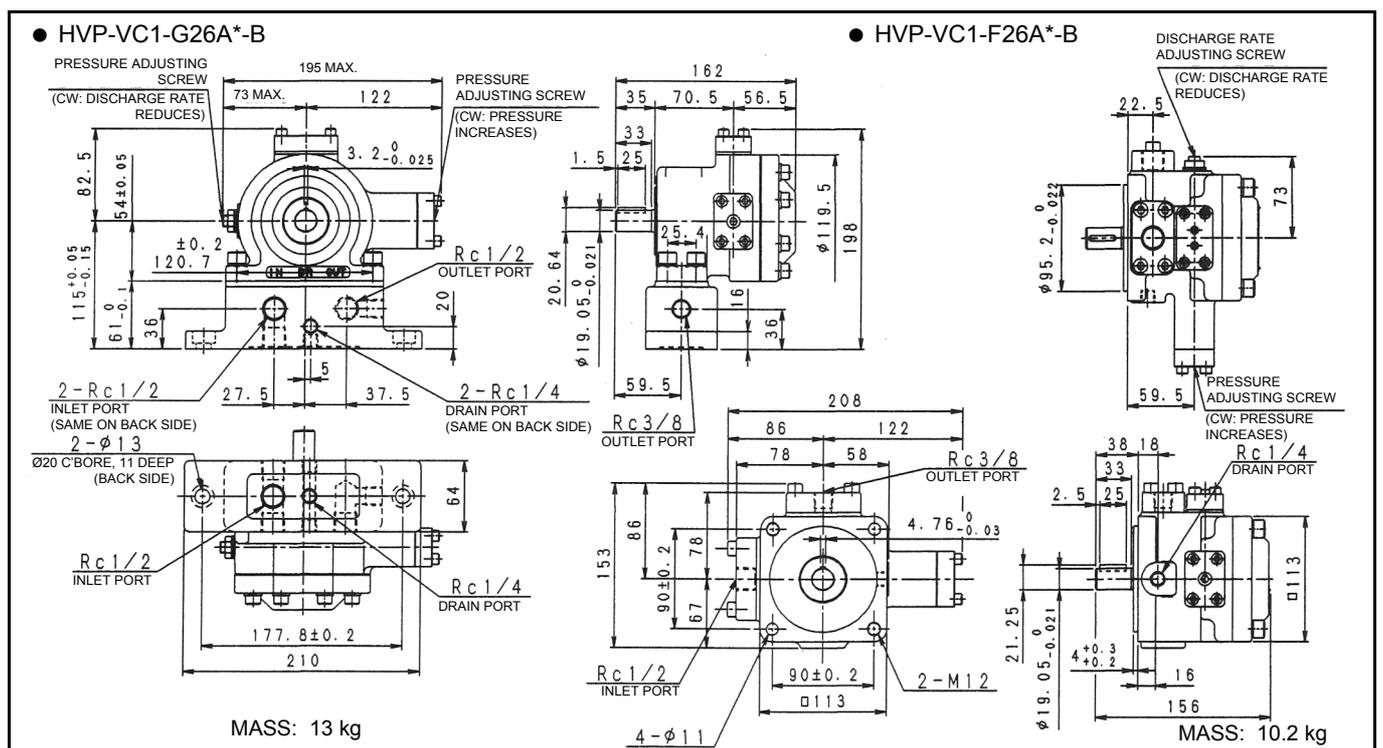


SPECIFICATIONS

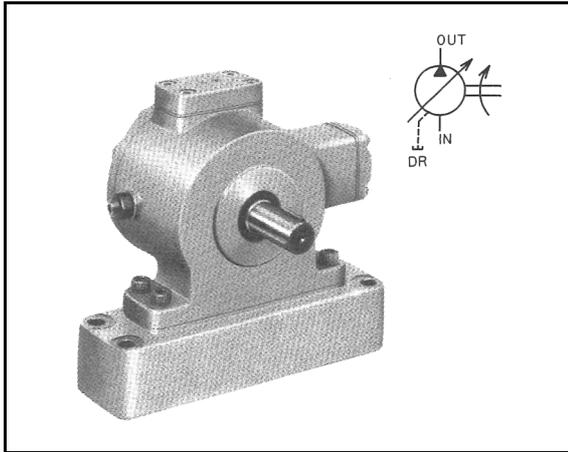
20 mm²/s

Model		Rated Pressure (MPa)	Discharge Rate at No-load (L/min)		Pressure Adjustment Range (MPa)	Speed (min ⁻¹)		
Gasket Type	Flange Type		1,200 min ⁻¹	At Rated Speed		Rating	Max.	Min.
HVP-VC1-G26A1-B	HVP-VC1-F26A1-B	7	17	26	0.8 to 1.8	1,800	1,800	750
HVP-VC1-G26A2-B	HVP-VC1-F26A2-B				1.4 to 3.5			
HVP-VC1-G26A3-B	HVP-VC1-F26A3-B				3 to 7			

EXTERNAL DIMENSIONS



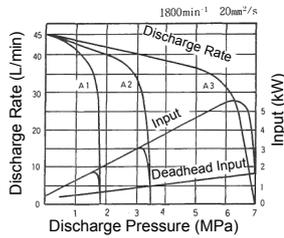
VARIABLE-DISPLACEMENT VANE PUMP (HVP-VD1 SERIES)



FEATURES

1. The pump provides a pressure and fluid flow appropriate for the load to save power and reduce fluid temperature rise, thus ensuring economical operation.
2. Since the pump is equipped with a pressure compensation mechanism, components such as a relief valve and unloading valve are not necessary.
 - The standard direction of rotation is clockwise, viewed from the shaft end.
 - The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
 - The permissible fluid temperature is as below:
Equivalent to ISO VG32: 0 to 60°C (350 to 15 mm²/sec)
Equivalent to ISO VG46: 6 to 65°C (350 to 18 mm²/sec)
 - The permissible drain back pressure is 0.03 MPa max.
 - The standard pump can be used for water-glycol fluid. In this case, the maximum speed is 1,200 min⁻¹. Please consult us about the applicable brand of water-glycol fluid.
 - The permissible operating ambient temperature range is from 0 to 60°C.

GENERAL PERFORMANCE CHARACTERISTICS

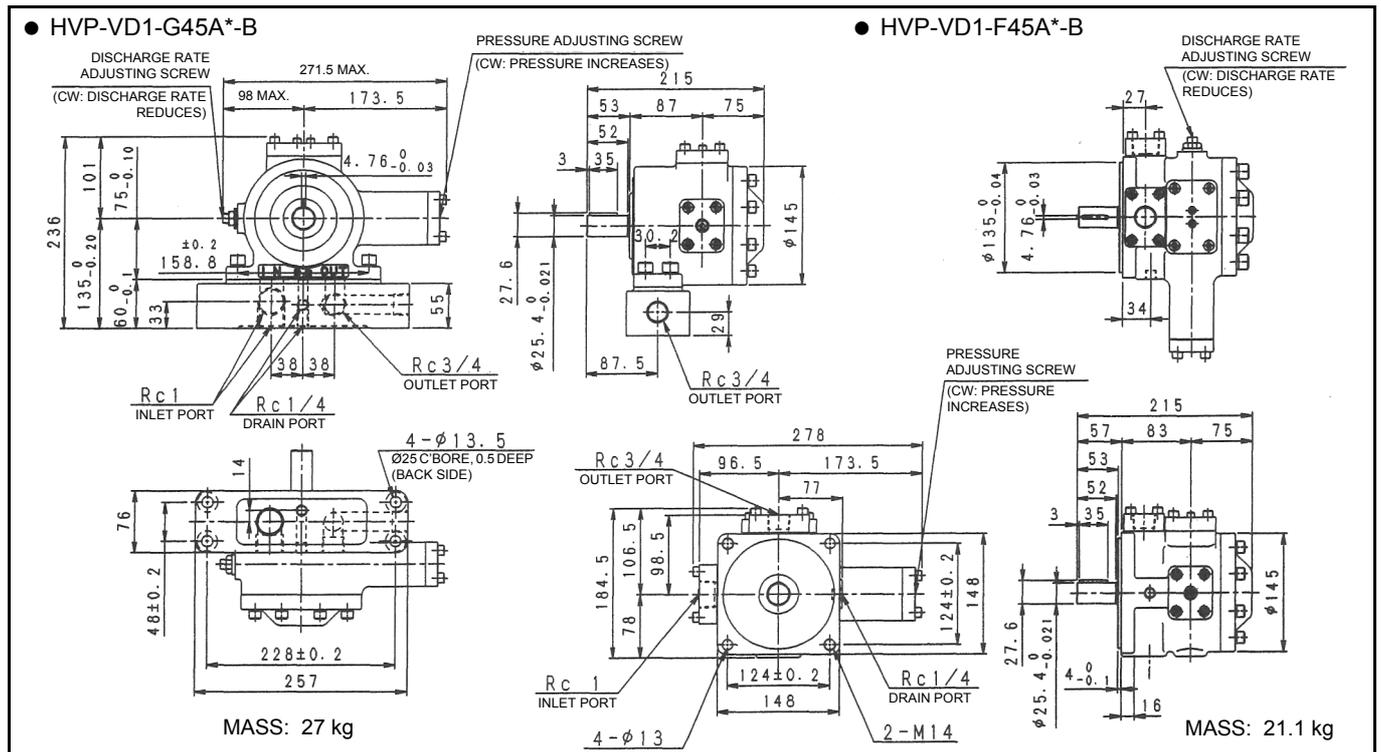


SPECIFICATIONS

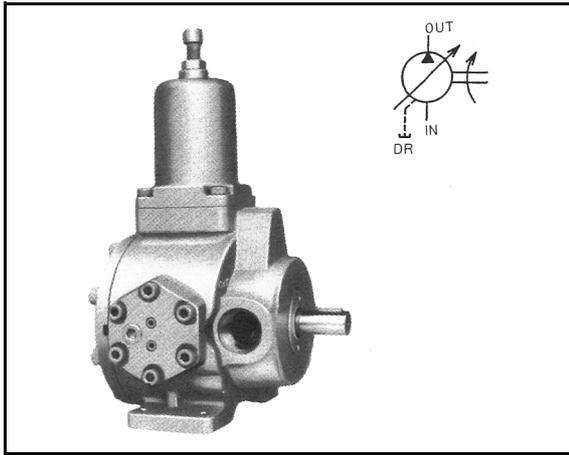
20 mm²/s

Model		Rated Pressure (MPa)	Discharge Rate at No-load (L/min)		Pressure Adjustment Range (MPa)	Speed (min ⁻¹)		
Gasket Type	Flange Type		1,200 min ⁻¹	At Rated Speed		Rating	Max.	Min.
HVP-VD1-G45A1-B	HVP-VD1-F45A1-B	7	38	45	0.8 to 1.8	1,800	1,800	750
HVP-VD1-G45A2-B	HVP-VD1-F45A2-B				1.4 to 3.5			
HVP-VD1-G45A3-B	HVP-VD1-F45A3-B				3 to 7			

EXTERNAL DIMENSIONS



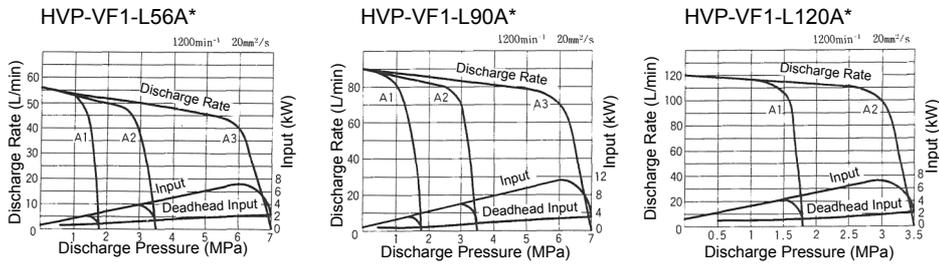
VARIABLE-DISPLACEMENT VANE PUMP (HVP-VF1 SERIES)



FEATURES

1. The pump provides a pressure and fluid flow appropriate for the load to save power and reduce fluid temperature rise, thus ensuring economical operation.
 2. Since the pump is equipped with a pressure compensation mechanism, components such as a relief valve and unloading valve are not necessary.
- The standard direction of rotation is clockwise, viewed from the shaft end.
 - The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
 - The permissible fluid temperature is as below:
Equivalent to ISO VG32: 0 to 60°C (35 to 15 mm²/sec)
Equivalent to ISO VG46: 6 to 65°C (35 to 18 mm²/sec)
 - The permissible drain back pressure is 0.03 MPa max.
 - When fire-resistant fluid is used, specify "G" (water-glycol fluid) at the end of model designation. Please consult us about the applicable brand of water-glycol fluid.
 - The permissible operating ambient temperature range is from 0 to 60°C.

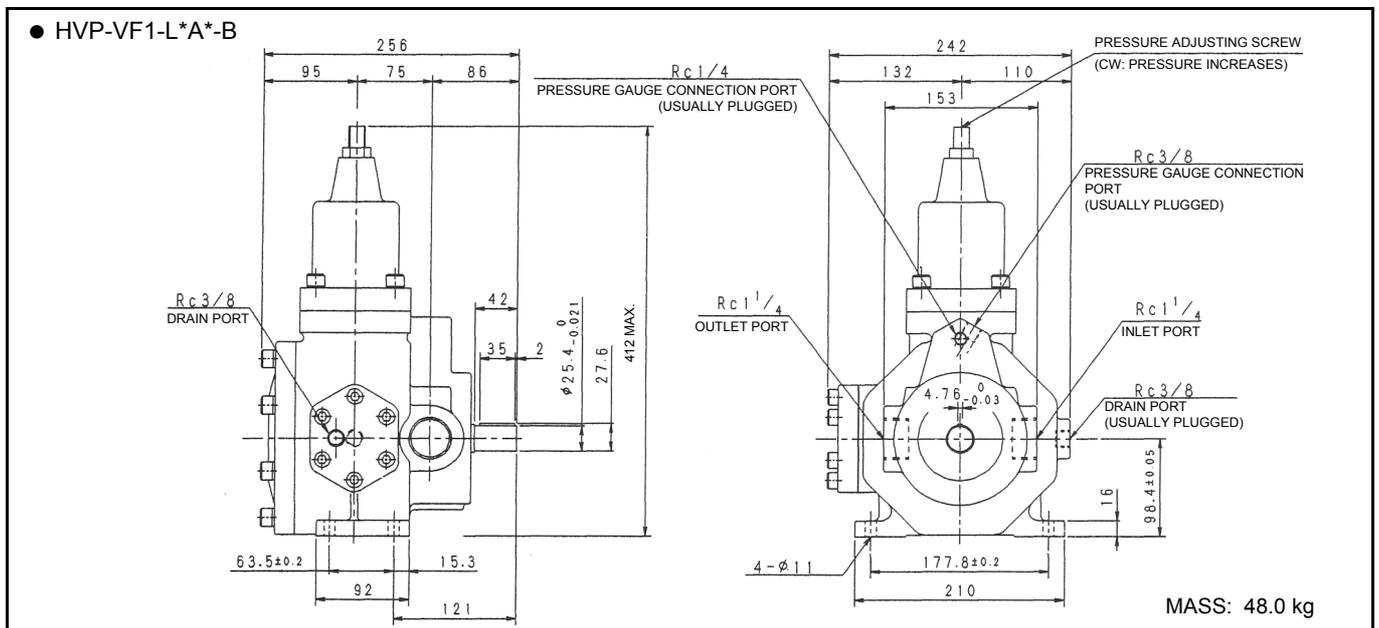
GENERAL PERFORMANCE CHARACTERISTICS



SPECIFICATIONS

Model	Rated Pressure (MPa)	Discharge Rate at No-load (L/min)		Pressure Adjustment Range (MPa)	Speed (min ⁻¹)		
		1,000 min ⁻¹	At Rated Speed		Rating	Max.	Min.
HVP-VF1-L56A1-B	7	47	56	0.8 to 1.8	1,200	1,200	750
HVP-VF1-L56A2-B				1.4 to 3.5			
HVP-VF1-L56A3-B				3 to 7			
HVP-VF1-L90A1-B	7	75	90	0.8 to 1.8	1,200	1,200	750
HVP-VF1-L90A2-B				1.4 to 3.5			
HVP-VF1-L90A3-B				3 to 7			
HVP-VF1-L120A1-B	3.5	100	120	0.8 to 1.8	1,200	1,200	750
HVP-VF1-L120A2-B				1.4 to 3.5			

EXTERNAL DIMENSIONS



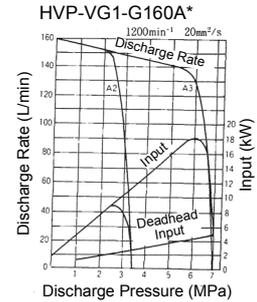
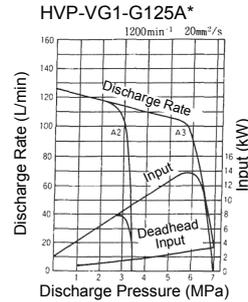
VARIABLE-DISPLACEMENT VANE PUMP (HVP-VG1 SERIES)

FEATURES

1. The pump provides a pressure and fluid flow appropriate for the load to save power and reduce fluid temperature rise, thus ensuring economical operation.
2. Since the pump is equipped with a pressure compensation mechanism, components such as a relief valve and unloading valve are not necessary.

- The standard direction of rotation is clockwise, viewed from the shaft end.
- The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
- The permissible fluid temperature is as below:
Equivalent to ISO VG32: 0 to 60°C (350 to 15 mm²/sec)
Equivalent to ISO VG46: 6 to 65°C (350 to 18 mm²/sec)
- The permissible drain back pressure is 0.03 MPa max.
- When fire-resistant fluid is used, specify "G" (water-glycol fluid) at the end of model designation. Please consult us about the applicable brand of water-glycol fluid.
- The permissible operating ambient temperature range is from 0 to 60°C.

GENERAL PERFORMANCE CHARACTERISTICS

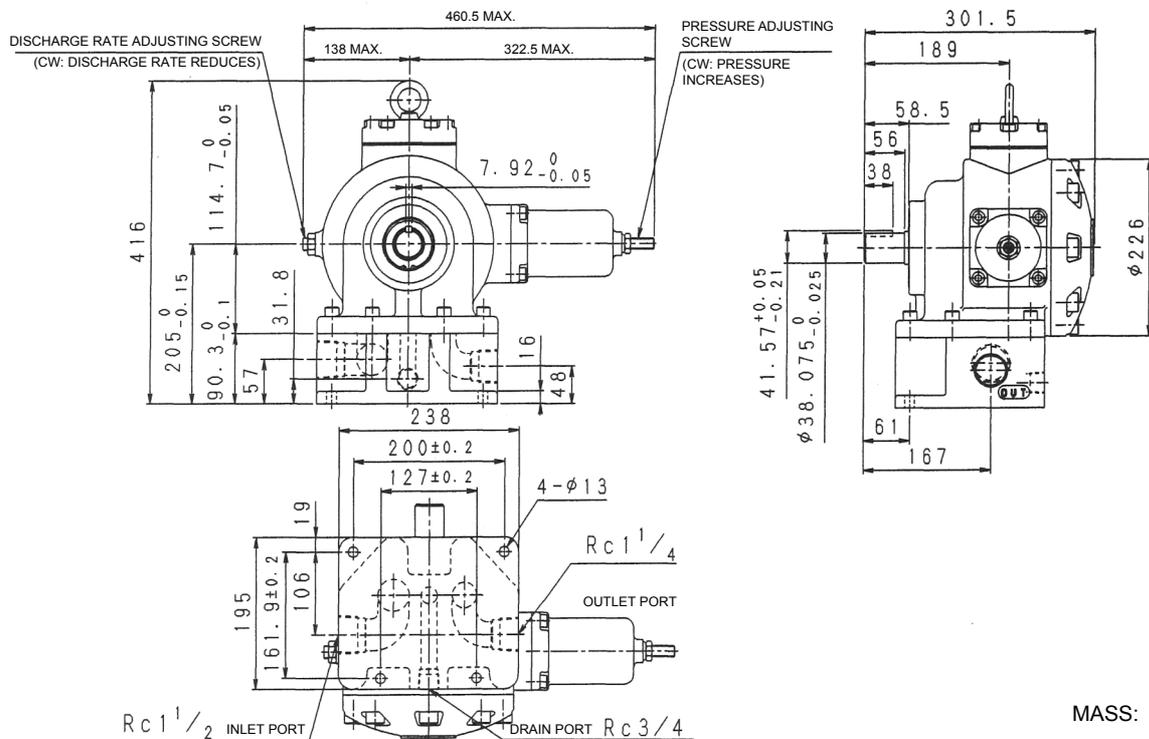


SPECIFICATIONS

Model	Rated Pressure (MPa)	Discharge Rate at No-load (L/min)		Pressure Adjustment Range (MPa)	Speed (min ⁻¹)		
		1,000 min ⁻¹	At Rated Speed		Rating	Max.	Min.
HVP-VG1-G125A2-B	7	104	125	1.4 to 3.5	1,200	1,200	600
HVP-VG1-G125A3-B				3 to 7			
HVP-VG1-G160A2-B	7	133	160	1.4 to 3.5			
HVP-VG1-G160A3-B				3 to 7			

EXTERNAL DIMENSIONS

● HVP-VG1-G*A*



MASS: 86 kg