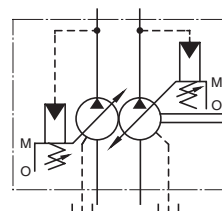




"A" Series Variable Displacement Piston Pumps – Double Pumps, Pressure Compensator Type



Graphic Symbol



Specifications

Model Numbers		Geometric Displacement cm ³ /rev (cu.in./rev)	Min. Adj. Flow cm ³ /rev (cu.in./rev)	Operating Pressure MPa (PSI)		Shaft Speed Range r/min		Approx. Mass kg (lbs.)	
				Rated	Intermittent	Max.	Min.	Flange Mtg.	Foot Mtg.
A1616-*R01*01**K-32*	Outboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)	1800	600	35.5 (98.3)	37.7 (83.1)
	Inboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)				
A1622-*R01*01**K-32*	Outboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)	1800	600	35.5 (98.3)	37.7 (83.1)
	Inboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)				
A2222-*R01*01**K-32*	Outboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)	1800	600	35.5 (98.3)	37.7 (83.1)
	Inboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)				
A1637-*R01*01**K-32*	Outboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)	1800	600	50 (110)	54.3 (120)
	Inboard Pump	36.9 (2.25)	10 (.610)	16 (2320)	21 (3050)				
A2237-*R01*01**K-32*	Outboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)	1800	600	50 (110)	54.3 (120)
	Inboard Pump	36.9 (2.25)	10 (.610)	16 (2320)	21 (3050)				
A1656-*R01*01**K-32*	Outboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)	1800	600	54.5 (120)	58.8 (130)
	Inboard Pump	56.2 (3.43)	12 (.732)	16 (2320)	21 (3050)				
A2256-*R01*01**K-32*	Outboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)	1800	600	54.5 (120)	58.8 (130)
	Inboard Pump	56.2 (3.43)	12 (.732)	16 (2320)	21 (3050)				
A1670-*R01*01**-60*	Outboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)	1800	600	77.5 (171)	89.5 (197)
	Inboard Pump	70.0 (4.27)	30 (1.831)	25 (3630)	28 (4060)				
A2270-*R01*01**-60*	Outboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)	1800	600	77.5 (171)	89.5 (197)
	Inboard Pump	70.0 (4.27)	30 (1.831)	25 (3630)	28 (4060)				
A3770-*R01*01**-60*	Outboard Pump	36.9 (2.25)	10 (.610)	16 (2320)	21 (3050)	1800	600	86.5 (191)	98.5 (217)
	Inboard Pump	70.0 (4.27)	30 (1.831)	25 (3630)	28 (4060)				
A1690-*R01*01**-60*	Outboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)	1800	600	88 (194)	108.5 (239)
	Inboard Pump	91.0 (5.55)	56 (3.42)	25 (3630)	28 (4060)				
A2290-*R01*01**-60*	Outboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)	1800	600	88 (194)	108.5 (239)
	Inboard Pump	91.0 (5.55)	56 (3.42)	25 (3630)	28 (4060)				
A3790-*R01*01**-60*	Outboard Pump	36.9 (2.25)	10 (.610)	16 (2320)	21 (3050)	1800	600	100.5 (222)	121 (267)
	Inboard Pump	91.0 (5.55)	56 (3.42)	25 (3630)	28 (4060)				
A5690-*R01*01**-60*	Outboard Pump	56.2 (3.43)	12 (.732)	16 (2320)	21 (3050)	1800	600	107.5 (237)	128 (282)
	Inboard Pump	91.0 (5.55)	56 (3.42)	25 (3630)	28 (4060)				
A16145-*R01*01**-60*	Outboard Pump	15.8 (.964)	4 (.244)	16 (2320)	21 (3050)	1800	600	109 (240)	134 (295)
	Inboard Pump	145 (8.85)	83 (5.06)	25 (3630)	28 (4060)				
A22145-*R01*01**-60*	Outboard Pump	22.2 (1.355)	6 (.366)	16 (2320)	16 (2320)	1800	600	109 (240)	134 (295)
	Inboard Pump	145 (8.85)	83 (5.06)	25 (3630)	28 (4060)				
A37145-*R01*01**-60*	Outboard Pump	36.9 (2.25)	10 (.610)	16 (2320)	21 (3050)	1800	600	121.5 (268)	146.5 (323)
	Inboard Pump	145 (8.85)	83 (5.06)	25 (3630)	28 (4060)				
A56145-*R01*01**-60*	Outboard Pump	56.2 (3.43)	12 (.732)	16 (2320)	21 (3050)	1800	600	128.5 (283)	153.5 (338)
	Inboard Pump	145 (8.85)	83 (5.06)	25 (3630)	28 (4060)				

Consult Yuken when detailed material such as dimensions figures is required.

Model Number Designation

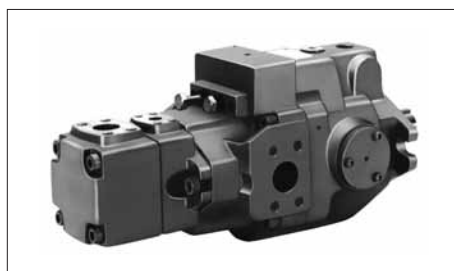
A1637	-F	R	Outboard Pump		Inboard Pump (Driven End)		S	K	-32	*	
			01	C	01	C					
Series Number	Mounting	Direction of Rotation	Control Type	Pres. Adj. Range MPa(PSI)	Control Type	Pres. Adj. Range MPa(PSI)	Port Position of Outboard Pump	Shaft Extension	Design Number	Design Std.	
A1616 (15.8/15.8 cm ³ /rev)	F: Flange Mtg. L: Foot Mtg.	(Viewed from Shaft End)	01: Pressure Compensator Type	B: 1.2- 7 (170-1020) C: 1.2-16 (170-2320) H: 1.2-21 (170-3050)	01: Pressure Compensator Type	B: 1.2- 7 (170-1020) C: 1.2-16 (170-2320) H: 1.2-21 (170-3050)	S: Side Port	K: Keyed Shaft	32	Refer to ★2	
A1622 (15.8/22.2 cm ³ /rev)											32
A2222 (22.2/22.2 cm ³ /rev)											32
A1637 (15.8/36.9 cm ³ /rev)											32
A2237 (22.2/36.9 cm ³ /rev)											32
A1656 (15.8/56.2 cm ³ /rev)											32
A2256 (22.2/56.2 cm ³ /rev)											32
A1670 (15.8/70.0 cm ³ /rev)											60
A2270 (22.2/70.0 cm ³ /rev)											60
A3770 (36.9/70.0 cm ³ /rev)							60				
A1690 (15.8/91.0 cm ³ /rev)							60				
A2290 (22.2/91.0 cm ³ /rev)							60				
A3790 (36.9/91.0 cm ³ /rev)							60				
A5690 (56.2/91.0 cm ³ /rev)							60				
A16145 (15.8/145 cm ³ /rev)							60				
A22145 (22.2/145 cm ³ /rev)							60				
A37145 (36.9/145 cm ³ /rev)							60				
A56145 (56.2/145 cm ³ /rev)							60				

★ 1. Available to supply pump with anti-clockwise rotation. Consult Yuken for details.

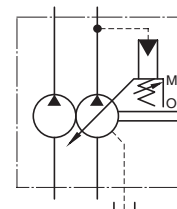
★ 2. Design Standards: None Japanese Standard "JIS"
80 European Design Standard
950 N. American Design Standard



"A" Series Piston Pumps – Variable / Fixed Double Pumps



Graphic Symbol



Model Number Designation

A16R1	-F	R	Inboard Pump (Driven End)		Outboard Pump			K	-32	*
			01	B	-23	A	A			
Series Number	Mounting	Direction of Rotation	Control Type	Pres. Adj. Range MPa(PSI)	Nominal Displacement cm ³ /rev	Discharge Port Position	Suction Port Position	Shaft Extension	Design Number	Design Std.
A16R1	F: Flange Mtg.	(Viewed from Shaft End)	01: Pressure Compensator Type	B: 1.2 - 7 (170 - 1020) C: 1.2 - 16 (170 - 2320) H: 1.2 - 21 (170 - 3050)	6, 8 10, 12 14, 17 19, 23 25, 31	(Viewed from Shaft End)	A: Up	K: Keyed Shaft	32	Refer to ★2
A22R1				B: 1.2 - 7 (170 - 1020) C: 1.2 - 16 (170 - 2320)					32	
A37R1				B: 1.2 - 7 (170 - 1020) C: 1.2 - 16 (170 - 2320) H: 1.2 - 21 (170 - 3050)					32	
A56R1				B: 1.2 - 7 (170 - 1020) C: 1.2 - 16 (170 - 2320) H: 1.2 - 21 (170 - 3050)					32	
A70R1	L: Foot Mtg.	R: ★1 Clockwise (Normal)	01: Pressure Compensator Type	B: 1.2 - 7 (170 - 1020) C: 1.5 - 16 (220 - 2320) H: 1.8 - 21 (260 - 3050) K: 2.0 - 28 (290 - 4060)	41, 47 53, 59 65	A: Up	A: Up	None: Keyed Shaft	60	
A90R1				B: 1.2 - 7 (170 - 1020) C: 1.5 - 16 (220 - 2320) H: 1.8 - 21 (260 - 3050) K: 2.0 - 28 (290 - 4060)					60	
A145R1				B: 1.2 - 7 (170 - 1020) C: 1.5 - 16 (220 - 2320) H: 1.8 - 21 (260 - 3050) K: 2.0 - 28 (290 - 4060)					60	
A70R2				B: 1.2 - 7 (170 - 1020) C: 1.5 - 16 (220 - 2320) H: 1.8 - 21 (260 - 3050) K: 2.0 - 28 (290 - 4060)					60	
A90R2				B: 1.2 - 7 (170 - 1020) C: 1.5 - 16 (220 - 2320) H: 1.8 - 21 (260 - 3050) K: 2.0 - 28 (290 - 4060)					60	
A145R2				B: 1.2 - 7 (170 - 1020) C: 1.5 - 16 (220 - 2320) H: 1.8 - 21 (260 - 3050) K: 2.0 - 28 (290 - 4060)					60	

★1. Available to supply pump with anti-clockwise rotation. Consult Yuken for details.

★2. Design Standards: None Japanese Standard "JIS"
80 European Design Standard
950 N. American Design Standard

Consult Yuken when detailed material such as dimensions figures is required.

Specifications

Model Numbers		Geometric Displacement cm ³ /rev (cu.in./rev)	Operating Pressure MPa (PSI)		Shaft Speed Range r/min		Approx. Mass kg (lbs.)	
			Rated	Intermittent	Max.	Min.	Flange Mtg.	Foot Mtg.
A16R1-*R01*-*AAK-32*	Outboard Pump	Refer to the following table			1800	750	28.8 (63.5)	31.0 (68.4)
	Inboard Pump	15.8 (.964)	16 (2320)	21 (3050)				
A22R1-*R01*-*AAK-32*	Outboard Pump	Refer to the following table			1800	750	28.8 (63.5)	31.0 (68.4)
	Inboard Pump	22.2 (1.355)	16 (2320)	16 (2320)				
A37R1-*R01*-*AAK-32*	Outboard Pump	Refer to the following table			1800	750	39 (86.0)	43.3 (95.5)
	Inboard Pump	36.9 (2.25)	16 (2320)	21 (3050)				
A56R1-*R01*-*AAK-32*	Outboard Pump	Refer to the following table			1800	750	47 (104)	51.3 (113)
	Inboard Pump	56.2 (3.43)	16 (2320)	21 (3050)				
A70R1-*R01*-*AA-60*	Outboard Pump	Refer to the following table			1800	750	66 (146)	78 (172)
	Inboard Pump	70.0 (4.27)	25 (3630)	28 (4060)				
A90R1-*R01*-*AA-60*	Outboard Pump	Refer to the following table			1800	750	82 (181)	105 (232)
	Inboard Pump	91.0 (5.55)	25 (3630)	28 (4060)				
A145R1-*R01*-*AA-60*	Outboard Pump	Refer to the following table			1800	750	102 (225)	129 (284)
	Inboard Pump	145 (8.85)	25 (3630)	28 (4060)				
A70R2-*R01*-*AA-60*	Outboard Pump	Refer to the following table			1800	600	72.5 (160)	84.5 (186)
	Inboard Pump	70.0 (4.27)	25 (3630)	28 (4060)				
A90R2-*R01*-*AA-60*	Outboard Pump	Refer to the following table			1800	600	91.5 (202)	112 (247)
	Inboard Pump	91.0 (5.55)	25 (3630)	28 (4060)				
A145R2-*R01*-*AA-60*	Outboard Pump	Refer to the following table			1800	600	112 (247)	137 (302)
	Inboard Pump	145 (8.85)	25 (3630)	28 (4060)				

● Geometric Displacement and Max. Pressure of Outboard Pump

Model Numbers	Geometric Displacement cm ³ /rev (cu.in./rev)	Max Pres. MPa (PSI)	
		Anti-Wear Type	R & O Type
A*R1-*R01*-6	5.8 (.354)	21 (3050)	16 (2320)
A*R1-*R01*-8	8.0 (.488)		
A*R1-*R01*-10	9.4 (.574)		
A*R1-*R01*-12	12.2 (.744)		
A*R1-*R01*-14	13.7 (.836)		
A*R1-*R01*-17	16.6 (1.013)		
A*R1-*R01*-19	18.6 (1.135)		
A*R1-*R01*-23	22.7 (1.385)	17.5 (2540)	15 (2180)
A*R1-*R01*-25	25.3 (1.544)	15 (2180)	
A*R1-*R01*-31	31.0 (1.892)	12 (1740)	
A*R2-*R01*-26	26.6 (1.623)	21 (3050)	14 (2030)
A*R2-*R01*-33	33.3 (2.03)		
A*R2-*R01*-41	41.3 (2.52)		
A*R2-*R01*-47	47.2 (2.88)	20 (2900)	
A*R2-*R01*-53	52.5 (3.20)	18 (2610)	
A*R2-*R01*-59	58.2 (3.55)	16 (2320)	
A*R2-*R01*-65	64.7 (3.95)	14 (2030)	