

Ball Valve Type 21 (Pneumatic actuated Type TA) 15mm - 100mm (1/2inch - 2inch)

Body Material

PVC
C-PVC
PP
PVDF

O-ring Material

EPDM
FKM

Connection Standard

Socket End JIS
Socket End ASTM SCH80
Socket End DIN
Threaded End Rc
Threaded End NPT
Threaded End Rp
Flanged End JIS10K
Flanged End ANSI CLASS150
Flanged End DIN PN10

Action

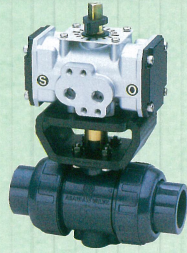
Double Acting
Air to Open
Air to Close

Equipment

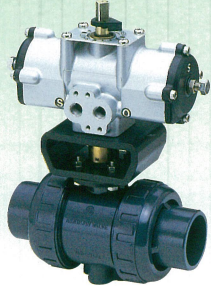
Opening Adjustment Stopper
(± 5 degree)
Indicator

Option

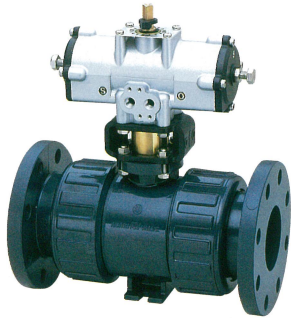
- Filter Regulator
- Solenoid Valve
- Limit Switch
- Speed Controller
- Manual Operation Mechanism
- ※only for Air to Open & Close
- Full Opening Adjustment Mechanism
- Positioner



(15mm - 32mm)



(40mm - 50mm)



(65mm - 100mm)

FEATURES

- Horizontal Type Actuator saves piping space.
- Spring unit for Air to Open & Close is detachable so that changeover between Double-Acting and Air to Open & Close can be done easily.
- Various options can be easily installed or removed and can be mounted later(except positioners).
- Stopper enables adjustment of an angle of ±5 degree at fully-Opened or Fully-Closed position. (for valve sizes larger than 40mm)

OPTIONAL EQUIPMENT

Combination No.	1	2	3	4	5	6	7	8	9
Solenoid Valve ※	○	-	-	○	○	-	○	-	-
Filter Regulator	-	-	-	○	-	-	○	-	○
Speed Controller	◎	○	-	◎	◎	○	◎	-	-
Limit Switch	-	-	○	-	○	○	○	-	-
Positioner (Electric-Air, Air-Air)	-	-	-	-	-	-	-	○	○

◎Indicates specialized for Solenoid Valve.

※With built-in speed controller and bypass valve.

* for the actuator with lubricant free valves consult near Asahi dealer.

ACTUATOR SPECIFICATION [Double Acting]

Nominal Size mm(inch)	15 - 32 (1/2inch - 1 1/4inch)	40-50 (1 1/2inch-2inch)	65-80 (2 1/2inch-3inch)	100(4inch)
Actuator Type	TA2A-0402D	TA2A-050D	TA2A-063D	TA2A-080D
Operating Pressure Mpa{kgf/cm ² }	0.4{4.1} - 0.7{7.1}			
Air Consumption NI /Open & Close (at operating pressure 0.4NPa)	0.5	0.9	1.7	3.2
Air Supply Bore	Rc 1/8	Rc 1/4		

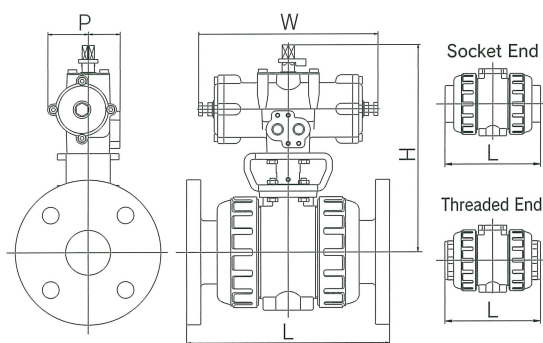
ACTUATOR SPECIFICATION [Air to Open, Air to Close]

Nominal Size mm(inch)	15 - 32 (1/2inch - 1 1/4inch)	40-50 (1 1/2inch-2inch)	65-80 (2 1/2inch-3inch)	100(4inch)
Actuator Type	TA2A-0402R	TA2A-050R	TA2A-063R	TA2A-080R
Operating Pressure Mpa{kgf/cm ² }	0.4{4.1} - 0.7{7.1}			
Air Consumption NI /Open & Close (at operating pressure 0.4NPa)	0.8	1.7	3.3	6.1
Air Supply Bore	Rc 1/4			

DIMENSIONS FIGURE

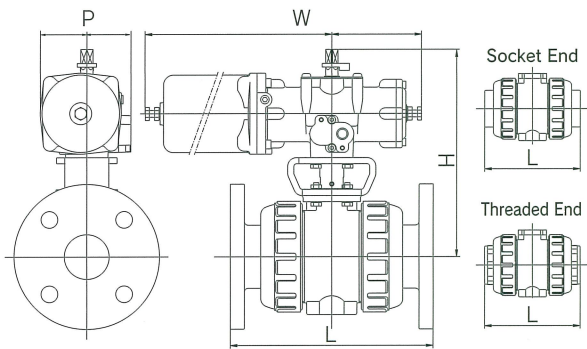
Double Acting

Flanged End

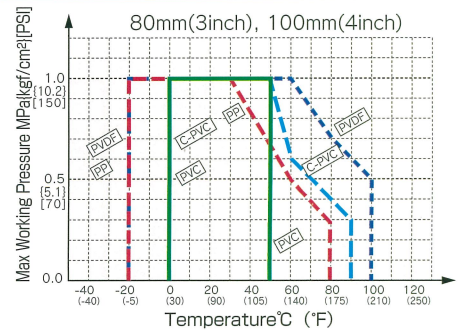
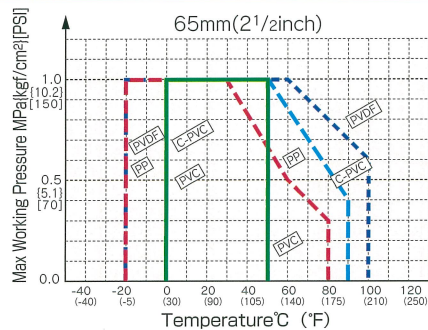
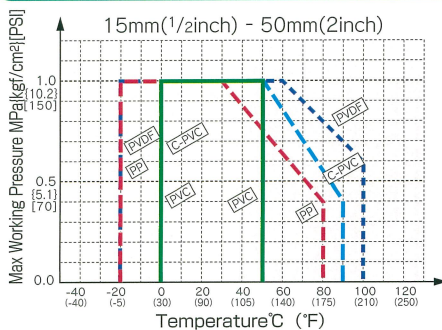


Air to Open, Air to Close

Flanged End



WORKING PRESSURE VS. TEMPERATURE



DIMENSIONS TABLE

JIS, ANSI, DIN			Unit:mm(inch)								
Nominal Size			15 (1/2)	20 (3/4)	25 (1)	32 (1 1/4)	40 (1 1/2)	50 (2)	65 (2 1/2)	80 (3)	100 (4)
Flanged End	PVC, C-PVC	JIS	143 (5.63)	172 (6.77)	187 (7.36)	190 (7.48)	212 (8.35)	234 (9.21)	261 (10.28)	306 (12.05)	374 (14.72)
		DIN	130 (5.12)	150 (5.91)	160 (6.3)	180 (7.09)	200 (7.87)	230 (9.06)	290 (11.42)	312 (12.28)	352 (13.86)
		ANSI	143 (5.63)	172 (6.77)	187 (7.36)	190 (7.48)	212 (8.35)	234 (9.21)	259 (10.20)	306 (12.05)	374 (14.72)
	PP	JIS	143 (5.63)	172 (6.77)	187 (7.36)	190 (7.48)	212 (8.35)	234 (9.21)	257 (10.12)	305 (12.01)	374 (14.72)
		DIN	130 (5.12)	150 (5.91)	160 (6.30)	180 (7.09)	200 (7.87)	230 (9.06)	288 (11.34)	311 (12.24)	352 (13.86)
		ANSI	143 (5.63)	172 (6.77)	187 (7.36)	190 (7.48)	212 (8.35)	234 (9.21)	257 (10.12)	306 (12.05)	374 (14.72)
	PVDF	JIS	143 (5.63)	172 (6.77)	187 (7.36)	190 (7.48)	212 (8.35)	234 (9.21)	256 (10.08)	302 (11.89)	369 (14.53)
		DIN	130 (5.12)	150 (5.91)	160 (6.30)	180 (7.09)	200 (7.87)	230 (9.06)	287 (11.30)	308 (12.13)	347 (13.66)
		ANSI	143 (5.63)	172 (6.77)	187 (7.36)	190 (7.48)	212 (8.35)	234 (9.21)	256 (10.08)	302 (11.89)	369 (14.53)
Socket End	PVC, C-PVC	JIS	108 (4.25)	128 (5.04)	145 (5.71)	162 (6.38)	189 (7.44)	220 (8.66)	273 (10.75)	316 (12.44)	419 (16.50)
		DIN	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	233 (9.17)	284 (11.18)	351 (13.82)
		ANSI	113.0 (4.45)	129.0 (5.08)	146.1 (5.75)	164.1 (6.46)	184 (7.24)	209 (8.23)	240 (9.45)	283 (11.14)	352 (13.86)
	PP	JIS	108 (4.25)	126 (4.96)	141 (5.55)	—	171 (6.73)	192 (7.56)	219 (8.62)	257 (10.12)	341 (13.43)
		DIN	99 (3.90)	114 (4.49)	123 (4.84)	139 (5.47)	148 (5.83)	176 (6.93)	205 (8.07)	252 (9.92)	312 (12.28)
		ANSI	113 (4.45)	129 (5.08)	146 (5.75)	164 (6.46)	184 (7.24)	209 (8.23)	238 (9.37)	282 (11.10)	365 (14.37)
	PVDF	DIN	99 (3.90)	114 (4.49)	123 (4.84)	139 (5.47)	148 (5.83)	176 (6.93)	204 (8.03)	249 (9.80)	307 (12.09)
		ANSI	113 (4.45)	129 (5.08)	146 (5.75)	164 (6.46)	184 (7.24)	209 (8.23)	237 (9.33)	279 (10.98)	359 (14.13)
	Threaded End	PVC, C-PVC	JIS	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	215 (8.46)	265 (10.43)
DIN			102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	215 (8.46)	265 (10.43)	340 (13.39)
ANSI			102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	215 (8.46)	265 (10.43)	362 (14.25)
PP		JIS	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	213 (8.39)	264 (10.39)	362 (14.25)
		DIN	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	213 (8.39)	264 (10.39)	340 (13.39)
		ANSI	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	213 (8.39)	264 (10.39)	362 (14.25)
PVDF		JIS	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	212 (8.35)	261 (10.28)	357 (14.06)
		DIN	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	212 (8.35)	261 (10.28)	335 (13.19)
		ANSI	102 (4.02)	120 (4.72)	131 (5.16)	150 (5.91)	163 (6.42)	197 (7.76)	212 (8.35)	261 (10.28)	357 (14.06)
Spigot End	PP	DIN	124 (4.84)	144 (5.62)	154 (6.01)	174 (6.79)	194 (7.57)	224 (8.74)	245 (9.56)	296 (11.54)	355 (13.85)
	PVDF	DIN	124 (4.84)	144 (5.62)	154 (6.01)	174 (6.79)	194 (7.57)	224 (8.74)	245 (9.56)	293 (11.43)	350 (13.65)
Common	H	159.5 (6.28)	166 (6.54)	173 (6.81)	182 (7.17)	224 (8.82)	235.5 (9.27)	268 (10.55)	277 (10.91)	348 (13.70)	
Double Acting	W	110 (4.33)	110 (4.33)	110 (4.33)	110 (4.33)	210 (8.27)	210 (8.27)	250 (9.84)	250 (9.84)	292 (11.50)	
	P	57 (2.24)	57 (2.24)	57 (2.24)	57 (2.24)	82 (3.23)	82 (3.23)	95 (3.74)	95 (3.74)	116 (4.57)	
Air to Open, Air to Close	W	249 (9.81)	249 (9.81)	249 (9.81)	249 (9.81)	345 (13.58)	345 (13.58)	413 (16.26)	413 (16.26)	487 (19.17)	
	P	92 (3.62)	92 (3.62)	92 (3.62)	92 (3.62)	103 (4.06)	103 (4.06)	119 (4.69)	119 (4.69)	141.5 (5.57)	