

# 3WAY BALL VALVE Type 23

## (Pneumatic Type AR)

### Features

- Compact & light weight
- All-plastic design ensures excellent corrosion resistance.
- Easy to mount and unmount the actuator (one-touch connection)
- Comes with bottom stand to facilitate mounting on racks and panels  
Handy tab-hole attachment.
- Air supply compatible with NAMUR standard
- (By the use of conversion adapter <Actuator type: AR032, AR040>)  
4 colors available for immediate line identification.
- (Red<Standard>, Blue, Yellow, White)

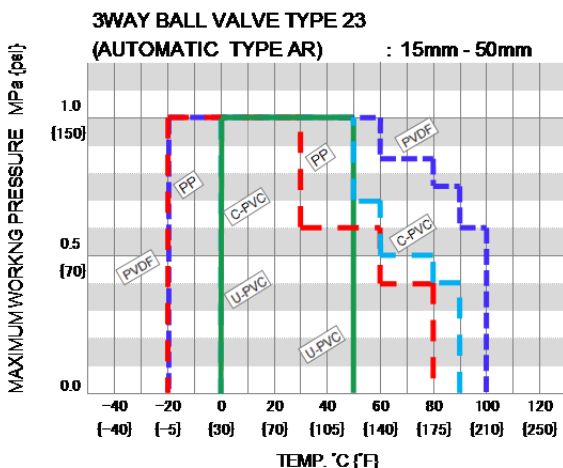


### Basic specifications

- Valve Type : 3way Ball Valve Type 23 (Type AR)
- Size : 15 mm — 50 mm (1/2 inch — 2 inch)
- Body Material : U-PVC (Conforming to ASTM D1784 Cell Classification 12454A)  
C-PVC (Conforming to ASTM D1784 Cell Classification 23567-A)  
PP (Conforming to ASTM D4101 Cell Classification PP0210B67272)  
PVDF (Conforming to ASTM D3222 Cell Classification Type II)
- Seal Material / O-ring : EPDM, FKM etc.
- Connection / Flanged end : JIS B2220 10K, DIN/EN1092-1 PN10, ANSI B16.5 CLASS150  
Socket : JIS, DIN, ANSI  
Threaded : Rc, Rp, NPT
- Port : DOUBLE L PORT

Body Material	Fluid Temperature °C {°F}	Maximum working pressure (Normal temperature) MPa {psi}	Connection method		
			Flanged	Socket	Threaded
U-PVC	0 ~ 50 { 30~120 }	1.0 { 150 }	○	○	○
C-PVC	0 ~ 90 { 30~195 }	1.0 { 150 }	○	○	○
PP	-20 ~ 80 { -5~175 }	1.0 { 150 }	○	○	○
PVDF	-20 ~ 100 { -5~210 }	1.0 { 150 }	○	○	○

### Working pressure vs. Temperature



#### Note:

- (1) The ball-type valves have dead spaces for structural reasons. Note that volatile liquids, such as hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and sodium hypochlorite (NaClO), vaporize in those dead spaces, which may cause abnormal pressure increase in the valve. (When the internal pressure abnormally increases due to vaporization, the gas will be compressive fluid. If the valve breaks in this state, it will be very dangerous, causing explosion and scattering of fragments.)
- (2) The maximum working pressure is the value including the water hammer pressure. Be careful that the maximum working pressure is not exceeded during use.

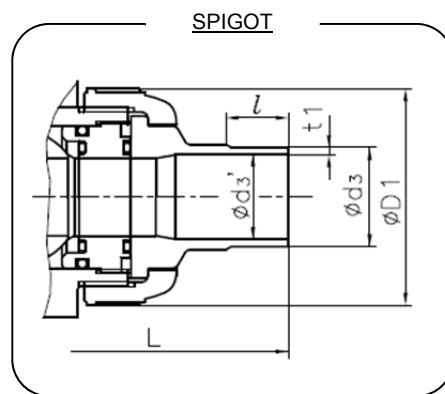
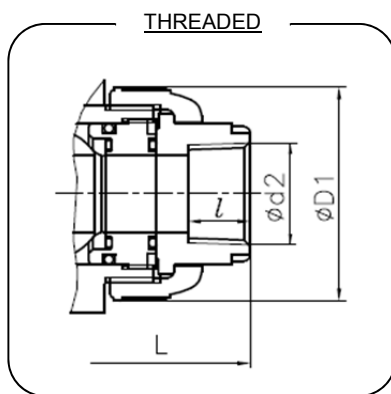
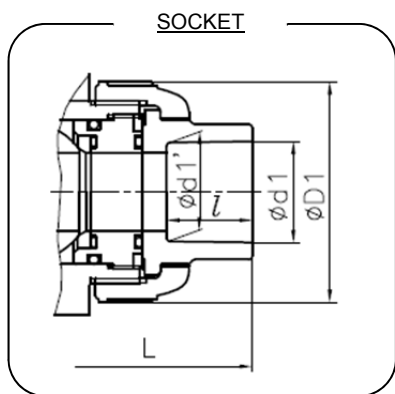
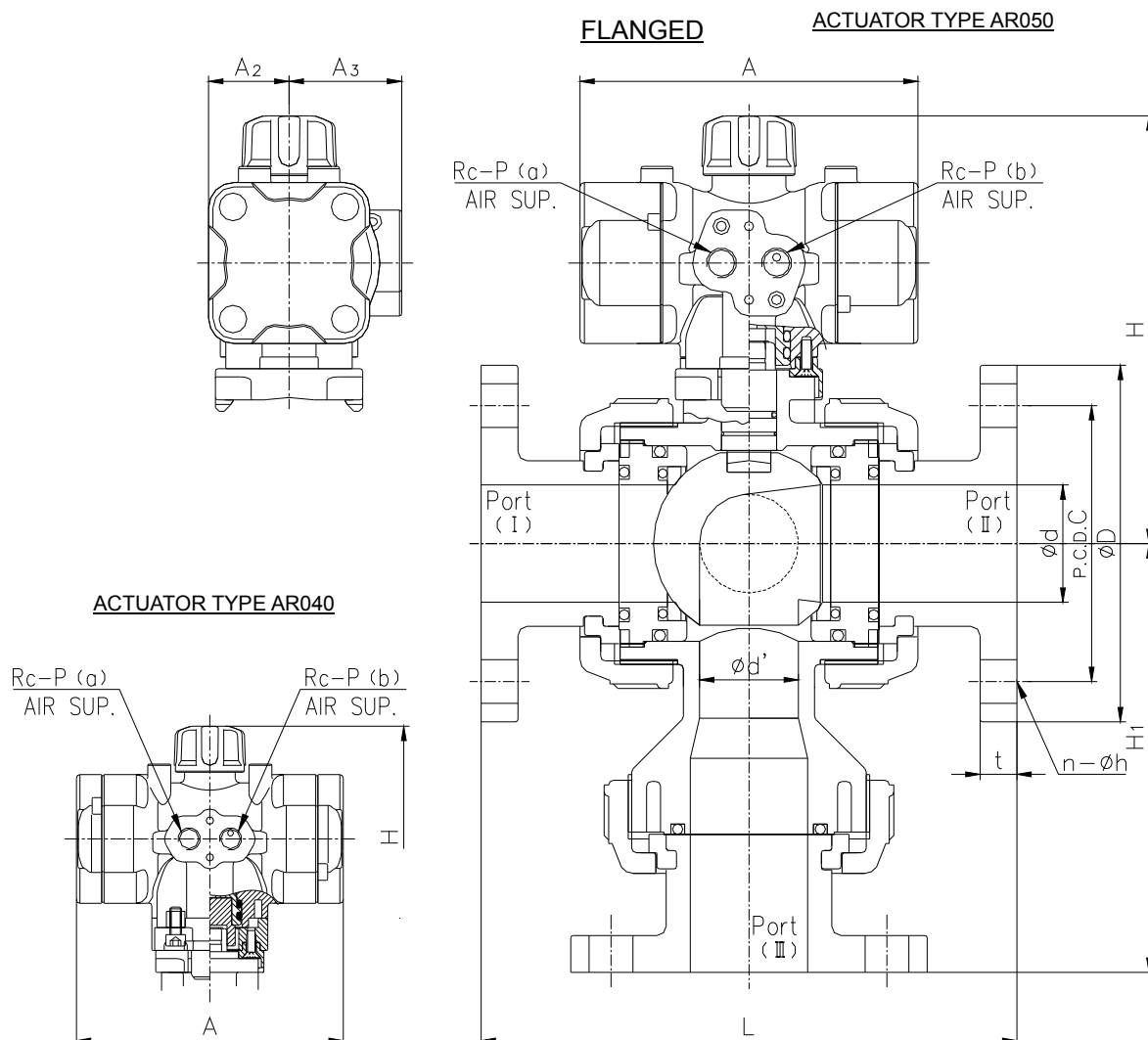
### Certificate / Approval / Directive

PED, ABS, NSF/ANSI61

"For details of applicable products, please consult us."

**Product dimension**

[DOUBLE ACTING]



The shape and appearance of assembly differ a little with nominal size and material compared to this drawing.



DATASHEET

■JIS, DIN (Unit: mm)

mm	inch	d	D <sub>1</sub>	H	A	A <sub>2</sub>	A <sub>3</sub>	P
15	1/2	15	48	131	116	28	38	1/8
20	3/4	20	60	137.5	116	28	38	1/8
25	1	25	70	144.5	116	28	38	1/8
32	1 1/4	40	100	174.5	147	35	49	1/4
40	1 1/2	40	100	174.5	147	35	49	1/4
50	2	51	126	186.0	147	35	49	1/4

ACTUATOR SELECTION CHART

mm	inch	ACTUATOR TYPE
15	1/2	AR040DA20CN
20	3/4	AR040DA20CN
25	1	AR040DA20CN
32	1 1/4	AR050DA30NN
40	1 1/2	AR050DA30NN
50	2	AR050DA30NN

■JIS (Unit: mm)

mm	inch	FLANGED												SOCKET										THREADED						
		JIS 5K				JIS 10K				L				PVC, C-PVC					PP					d <sub>2</sub>	l	L				
		D	C	n	h	D	C	n	h	U-PVC C-PVC	PP	PVDF	t	H <sub>1</sub>	d <sub>1</sub>	l	1/T	L	H <sub>1</sub>	d <sub>1</sub>	d <sub>1</sub>	l	L			H <sub>1</sub>	U-PVC C-PVC	PP	PVDF	H <sub>1</sub>
15	1/2	80	60	4	12	95	70	4	15	143	143	143	12	94	22.11	20	1/34	109	77	21.2	20.2	20	108	77	Rc 1/2	15	102	102	102	74
20	3/4	85	65	4	12	100	75	4	15	172	172	172	14	115	26.13	24	1/34	128	93	26.2	25.2	23	126	92	Rc 3/4	17	120	120	120	89
25	1	95	75	4	12	125	90	4	19	187	187	187	14	133	32.16	27	1/34	145	112	33.0	32.0	25	141	110	Rc 1	20	131	131	131	105
32	1 1/4	115	90	4	15	135	100	4	19	212	212	212	16	165	38.19	30	1/34	174	146.5	-	-	-	-	-	Rc 1 1/4	22	163	163	163	141
40	1 1/2	120	95	4	15	140	105	4	19	212	212	212	16	165	48.21	37	1/37	189	154	47.0	46.0	28	171	145	Rc 1 1/2	25	163	163	163	141
50	2	130	105	4	15	155	120	4	19	234	234	234	16	187	60.25	42	1/37	220	180	59.0	58.0	28	192	166	Rc 2	28	197	197	197	168

■DIN (Unit: mm)

mm	inch	FLANGED												SOCKET										THREADED					SPIGOT									
		DIN PN10				L				PVC, C-PVC				PP, PVDF				d <sub>2</sub>	l	L					PVC					PP, PVDF								
		D	C	n	h	U-PVC C-PVC	PP	PVDF	t	H <sub>1</sub>	d <sub>1</sub>	l	L	H <sub>1</sub>	d <sub>1</sub>	d <sub>1</sub>	l			L	H <sub>1</sub>	d <sub>3</sub>	l	t <sub>1</sub>	L	H <sub>1</sub>	d <sub>3</sub>	l	t <sub>1</sub>	L	H <sub>1</sub>							
15	1/2	95	65	4	14	130	130	130	12	88	20	16	102	72	19.5	19.3	14.5	99	99	71	Rp 1/2	15	102	102	102	74	20	15	18.5	124	83	20	18.5	2.5	1.9	124	124	83
20	3/4	105	75	4	14	150	150	150	14	104	25	19	120	85	24.5	24.3	16.0	114	114	83	Rp 3/4	17	120	120	120	89	25	20	24	144	99	25	22	2.7	1.9	144	144	99
25	1	115	85	4	14	160	160	160	14	120	32	22	131	104	31.5	31.3	18.0	123	123	100	Rp 1	20	131	131	131	105	32	25	24.5	154	115	32	22.5	3.0	2.4	154	154	115
32	1 1/4	140	100	4	16	212	212	212	16	165	40	26	173	147	39.5	39.2	20.5	148	148	131	Rp 1 1/4	22	163	163	163	141	-	-	-	-	-	-	-	-	-	-	-	
40	1 1/2	150	110	4	18	200	200	200	16	159	50	31	163	142	49.5	49.2	23.5	148	148	131	Rp 1 1/2	25	163	163	163	141	50	40	34	194	153	50	32	4.6	3.0	194	194	153
50	2	165	125	4	18	230	230	230	16	185	63	38	197	170	62.5	62.1	27.5	176	176	154	Rp 2	28	197	197	197	168	63	51	38	224	178	63	36	5.8	3.0	224	224	178

■ANSI (Unit: inch)

inch	mm	d	D <sub>1</sub>	H	A	A <sub>2</sub>	A <sub>3</sub>	P
1/2	15	0.59	1.89	5.16	4.57	1.10	1.50	1/8
3/4	20	0.79	2.36	5.41	4.57	1.10	1.50	1/8
1	25	0.98	2.76	5.69	4.57	1.10	1.50	1/8
1 1/4	32	1.57	3.94	6.87	5.79	1.38	1.93	1/4
1 1/2	40	1.57	3.94	6.87	5.79	1.38	1.93	1/4
2	50	2.01	4.96	7.32	5.79	1.38	1.93	1/4

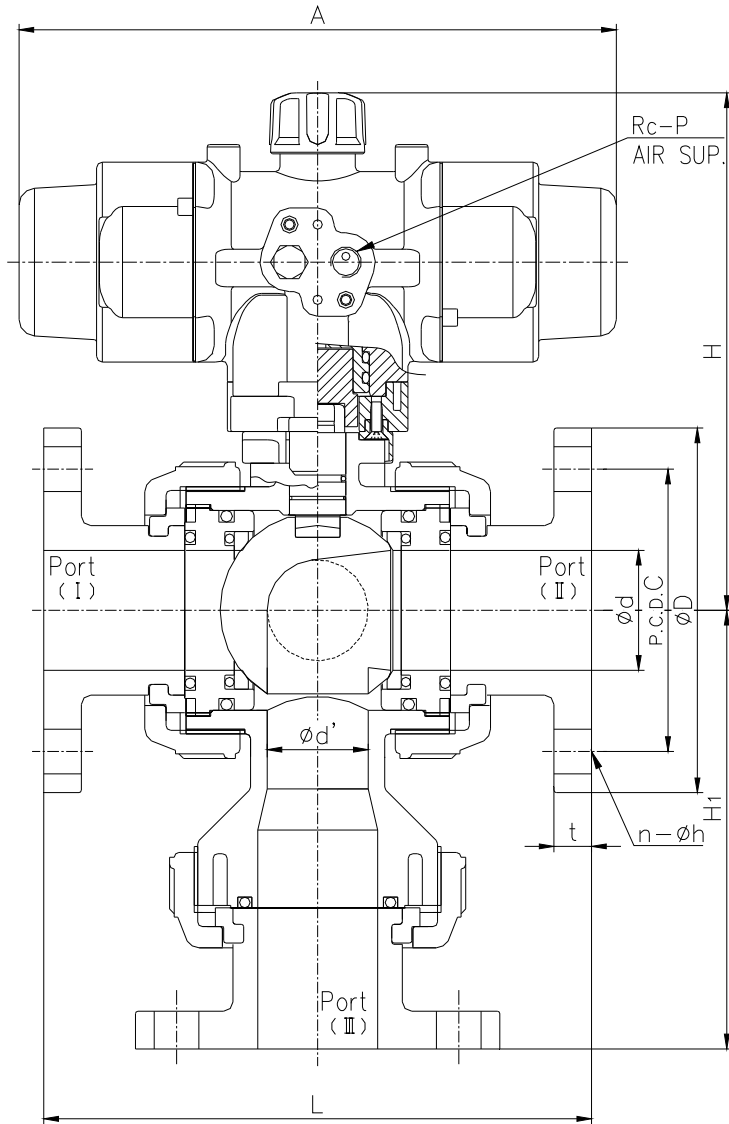
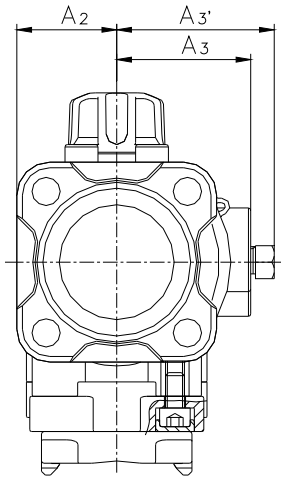
■ANSI (Unit: inch)

inch	mm	FLANGED												SOCKET (PS)										THREADED				
		ANSI Class 150				L				PVC, C-PVC				PP, PVDF				d <sub>2</sub>	l	L								
		D	C	n	h	U-PVC C-PVC	PP	PVDF	t	H <sub>1</sub>	ASTM SCH80		L	H <sub>1</sub>	d <sub>1</sub>	l	PP			PVDF	H <sub>1</sub>	U-PVC C-PVC	PP	PVDF	H <sub>1</sub>			
1/2	15	3.50	2.38	4	0.62	5.63	5.63	5.63	0.47	3.70	0.848	0.836	0.875	4.45	3.08	0.83	0.87	4.45	4.45	3.09	1/2 - 14NPT	0.59	4.02	4.02	4.02	2.89		
3/4	20	3.88	2.75	4	0.62	6.77	6.77	6.77	0.55	4.50	1.058	1.046	1.000	5.08	3.56	1.03	1.00	5.08	5.08	3.61	3/4 - 14NPT	0.67	4.72	4.72	4.72	3.48		
1	25	4.25	3.12	4	0.62	7.36	7.36	7.36	0.55	5.24	1.325	1.310	1.125	5.75	4.32	1.30	1.13	5.75	5.75	4.37	1 - 11 1/2NPT	0.79	5.16	5.16	5.16	4.13		
1 1/4	32	4.62	3.50	4	0.62	8.35	8.35	8.35	0.63	6.50	1.670	1.655	1.250	6.85	5.51	1.65	1.25	7.04	7.04	5.75	1 1/4 - 11 1/2NPT	0.87	6.42	6.42	6.42	5.53		
1 1/2	40	5.00	3.88	4	0.62	8.35	8.35	8.35	0.63	6.50	1.912	1.894	1.375	7.24	5.71	1.89	1.37	7.24	7.24	5.85	1 1/2 - 11 1/2NPT	0.98	6.42	6.42	6.42	5.53		
2	50	6.00	4.75	4	0.75	9.21	9.21	9.21	0.63	7.34	2.387	2.369	1.500	8.23	6.66	2.36	1.50	8.23	8.23	6.76	2 - 11 1/2NPT	1.10	7.76	7.76	7.76	6.61		

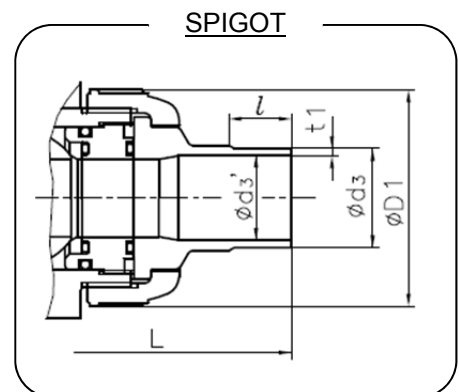
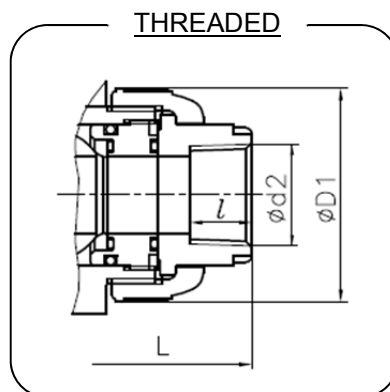
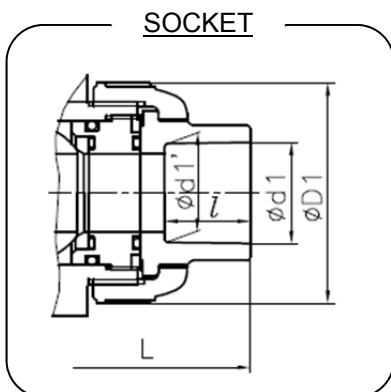
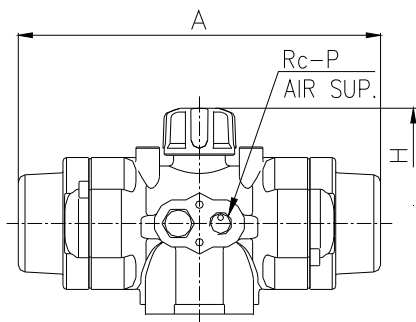
\* For detailed specifications, see page 7.

[AIR TO OPEN]  
[AIR TO CLOSE]

FLANGED      ACTUATOR TYPE (AR050, AR063)



ACTUATOR TYPE (AR040)



The shape and appearance of assembly differ a little with nominal size and material compared to this drawing.

DATASHEET

■JIS, DIN (Unit: mm)

mm	inch	d	D <sub>1</sub>	H	A	A <sub>2</sub>	A <sub>3</sub>	A <sub>3</sub> '	P
15	1/2	15	48	131	154	28	38	46	1/8
20	3/4	20	60	137.5	154	28	38	46	1/8
25	1	25	70	169	194	35	49	59	1/4
32	1 1/4	40	100	208.5	254	42.5	57	67	1/4
40	1 1/2	40	100	208.5	254	42.5	57	67	1/4
50	2	51	126	220	254	42.5	57	67	1/4

ACTUATOR SELECTION CHART \*

mm	inch	ACTUATOR TYPE	
		AIR TO OPEN	AIR TO CLOSE
15	1/2	AR040NC20CN	
20	3/4	AR040NC20CN	
25	1	AR050NC30CN	
32	1 1/4	AR063NC40CN	
40	1 1/2	AR063NC40CN	
50	2	AR063NC40CN	

■JIS (Unit: mm)

mm	inch	FLANGED													SOCKET										THREADED					
		JIS 5K				JIS 10K				L					PVC, C-PVC					PP					d <sub>2</sub>	l	L			
		D	C	n	h	D	C	n	h	U-PVC C-PVC	PP	PVDF	t	H <sub>1</sub>	d <sub>1</sub>	l	1/T	L	H <sub>1</sub>	d <sub>1</sub>	d <sub>1</sub> '	l	L	H <sub>1</sub>			U-PVC C-PVC	PP	PVDF	H <sub>1</sub>
15	1/2	80	60	4	12	95	70	4	15	143	143	143	12	94	22.11	20	1/34	109	77	21.2	20.2	20	108	77	Rc 1/2	15	102	102	102	74
20	3/4	85	65	4	12	100	75	4	15	172	172	172	14	115	26.13	24	1/34	128	93	26.2	25.2	23	126	92	Rc 3/4	17	120	120	120	89
25	1	95	75	4	12	125	90	4	19	187	187	187	14	133	32.16	27	1/34	145	112	33.0	32.0	25	141	110	Rc 1	20	131	131	131	105
32	1 1/4	115	90	4	15	135	100	4	19	212	212	212	16	165	38.19	30	1/34	174	146.5	-	-	-	-	-	Rc 1 1/4	22	163	163	163	141
40	1 1/2	120	95	4	15	140	105	4	19	212	212	212	16	165	48.21	37	1/37	189	154	47.0	46.0	28	171	145	Rc 1 1/2	25	163	163	163	141
50	2	130	105	4	15	155	120	4	19	234	234	234	16	187	60.25	42	1/37	220	180	59.0	58.0	28	192	166	Rc 2	28	197	197	197	168

■DIN (Unit: mm)

mm	inch	FLANGED										SOCKET										THREADED					SPIGOT											
		DIN PN10				L						PVC, C-PVC					PP, PVDF					d <sub>2</sub>	l	L					PVC					PP, PVDF				
		D	C	n	h	U-PVC C-PVC	PP	PVDF	t	H <sub>1</sub>	d <sub>1</sub>	l	L	H <sub>1</sub>	d <sub>1</sub>	d <sub>1</sub> '	l	L	H <sub>1</sub>	U-PVC C-PVC	PP			PVDF	H <sub>1</sub>	d <sub>3</sub>	d <sub>3</sub> '	l	L	H <sub>1</sub>	d <sub>3</sub>	d <sub>3</sub> '	l	L	H <sub>1</sub>	U-PVC C-PVC	PP	PVDF
15	1/2	95	65	4	14	130	130	130	12	88	20	16	102	72	19.5	19.3	14.5	99	99	71	Rp 1/2	15	102	102	102	74	20	15	18.5	124	83	20	18.5	2.5	1.9	124	124	83
20	3/4	105	75	4	14	150	150	150	14	104	25	19	120	85	24.5	24.3	16.0	114	114	83	Rp 3/4	17	120	120	120	89	25	20	24	144	99	25	22	2.7	1.9	144	144	99
25	1	115	85	4	14	160	160	160	14	120	32	22	131	104	31.5	31.3	18.0	123	123	100	Rp 1	20	131	131	131	105	32	25	24.5	154	115	32	22.5	3.0	2.4	154	154	115
32	1 1/4	140	100	4	16	212	212	212	16	165	40	26	173	147	39.5	39.2	20.5	148	148	131	Rp 1 1/4	22	163	163	163	141	-	-	-	-	-	-	-	-	-	-	-	-
40	1 1/2	150	110	4	18	200	200	200	16	159	50	31	163	142	49.5	49.2	23.5	148	148	131	Rp 1 1/2	25	163	163	163	141	50	40	34	194	153	50	32	4.6	3.0	194	194	153
50	2	165	125	4	18	230	230	230	16	185	63	38	197	170	62.5	62.1	27.5	176	176	154	Rp 2	28	197	197	197	168	63	51	38	224	178	63	36	5.8	3.0	224	224	178

■ANSI (Unit: inch)

inch	mm	d	D <sub>1</sub>	H	A	A <sub>2</sub>	A <sub>3</sub>	A <sub>3</sub> '	P
1/2	15	0.59	1.89	5.16	6.06	1.10	1.50	1.81	1/8
3/4	20	0.79	2.36	5.41	6.06	1.10	1.50	1.81	1/8
1	25	0.98	2.76	6.65	7.64	1.38	1.93	2.32	1/4
1 1/4	32	1.57	3.94	8.21	10.00	1.67	2.24	2.64	1/4
1 1/2	40	1.57	3.94	8.21	10.00	1.67	2.24	2.64	1/4
2	50	2.01	4.96	8.66	10.00	1.67	2.24	2.64	1/4

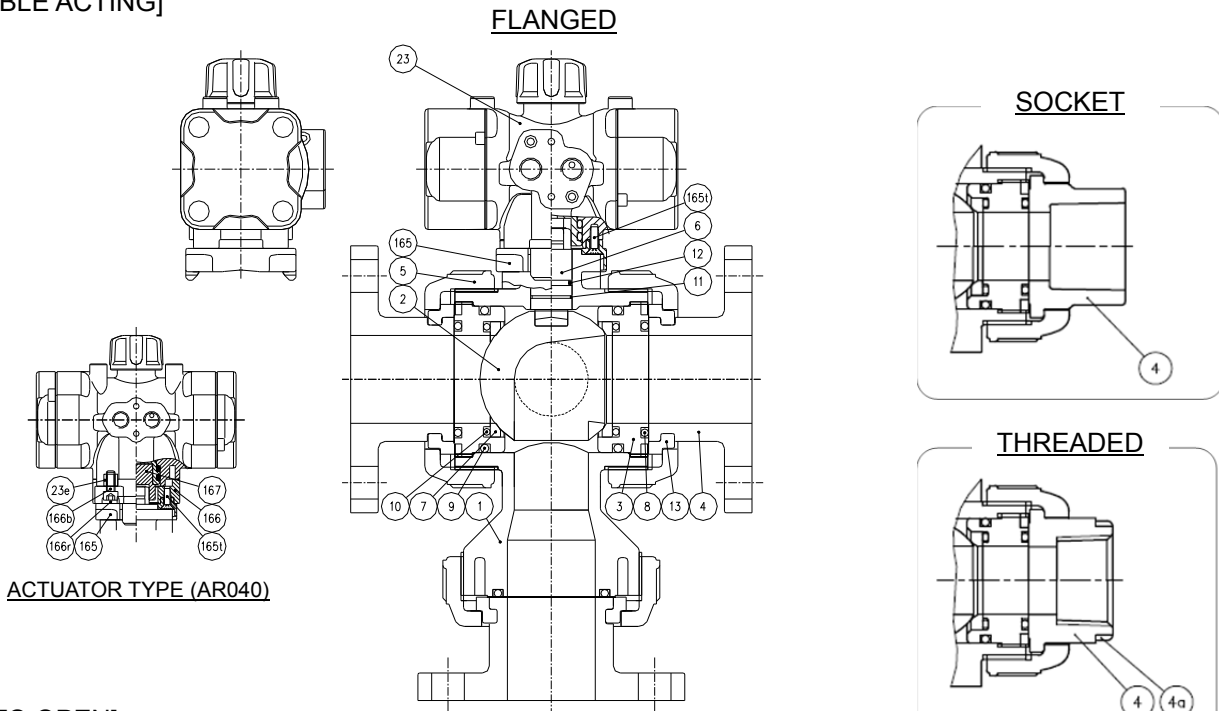
■ANSI (Unit: inch)

inch	mm	FLANGED										SOCKET (PS)										THREADED					
		ANSI Class 150				L						PVC, C-PVC					PP, PVDF					d <sub>2</sub>	l	L			
		D	C	n	h	U-PVC C-PVC	PP	PVDF	t	H <sub>1</sub>	ASTM SCH80	L	H <sub>1</sub>	d <sub>1</sub>	l	L	H <sub>1</sub>	U-PVC C-PVC	PP	PVDF	H <sub>1</sub>			U-PVC C-PVC	PP	PVDF	H <sub>1</sub>
1/2	15	3.50	2.38	4	0.62	5.63	5.63	5.63	0.47	3.70	0.848	0.836	0.875	4.45	3.08	0.83	0.87	4.45	4.45	3.09	1/2 - 14NPT	0.59	4.02	4.02	4.02	2.89	
3/4	20	3.88	2.75	4	0.62	6.77	6.77	6.77	0.55	4.50	1.058	1.046	1.000	5.08	3.56	1.03	1.00	5.08	5.08	3.61	3/4 - 14NPT	0.67	4.72	4.72	4.72	3.48	
1	25	4.25	3.12	4	0.62	7.36	7.36	7.36	0.55	5.24	1.325	1.310	1.125	5.75	4.32	1.30	1.13	5.75	5.75	4.37	1 - 11 1/2NPT	0.79	5.16	5.16	5.16	4.13	
1 1/4	32	4.62	3.50	4	0.62	8.35	8.35	8.35	0.63	6.50	1.670	1.655	1.250	6.85	5.51	1.65	1.25	7.04	7.04	5.75	1/4 - 11 1/2NPT	0.87	6.42	6.42	6.42	5.53	
1 1/2	40	5.00	3.88	4	0.62	8.35	8.35	8.35	0.63	6.50	1.912	1.894	1.375	7.24	5.71	1.89	1.37	7.24	7.24	5.85	1/2 - 11 1/2NPT	0.98	6.42	6.42	6.42	5.53	
2	50	6.00	4.75	4	0.75	9.21	9.21	9.21	0.63	7.34	2.387	2.369	1.500	8.23	6.66	2.36	1.50	8.23	8.23	6.76	2 - 11 1/2NPT	1.10	7.76	7.76	7.76	6.61	

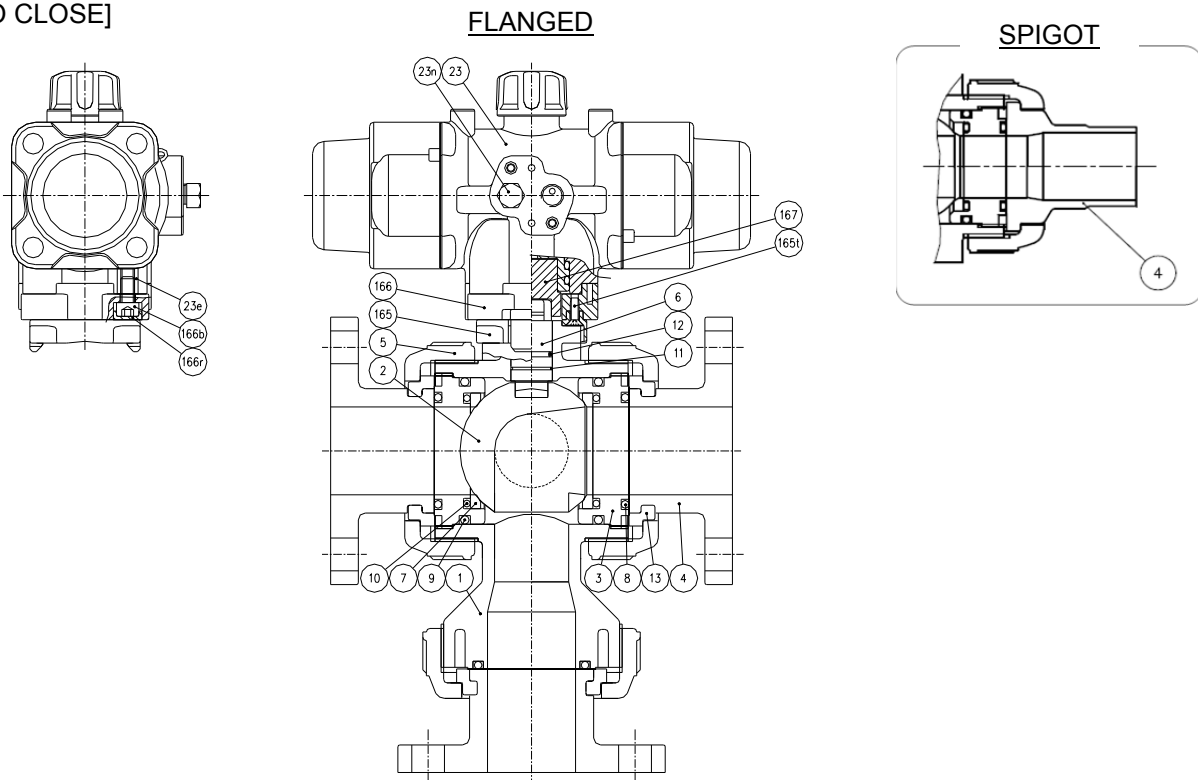
\* For detailed specifications, see page 7.

Parts list

[DOUBLE ACTING]



[AIR TO OPEN]  
[AIR TO CLOSE]



PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PVC, C-PVC, PP, PVDF	10 O-RING ( C )	2	EPDM, FKM ,others	165 BASE PLATE	1	PPG
2 BALL	1	PVC, C-PVC, PP, PVDF	11 O-RING ( D )	1	EPDM, FKM ,others	165t TAPPING ( No.165 )	2	STAINLESS STEEL
3 CARRIER	2	PVC, C-PVC, PP, PVDF	12 O-RING ( E )	1	EPDM, FKM ,others	166 CONNECTOR PLATE	1	PPG
4 END CONNECTOR	3	PVC, C-PVC, PP, PVDF	13 STOP RING	3	PVDF	166b BOLT (No.166)	4	STAINLESS STEEL
5 UNION NUT	3	PVC, C-PVC, PP, PVDF			Used for Flanged Type.	166r CAP(No.166)	4	EPDM
6 STEM	1	PVC, C-PVC, PP, PVDF	23 ACTUATOR	1	PPG, etc.	167 SHAFT ADAPTER	1	COPPER ALLOY
7 SEAT	2	PTFE	23e ENZAT(No.23)	4	COPPER ALLOY	4a RING	3	STAINLESS STEEL
8 O-RING ( A )	2	EPDM, FKM ,others	23n NIPPLE	1	PPG			Used for C-PVC Body. Threaded Type:15-25mm(1/2"-1")
9 O-RING ( B )	2	EPDM, FKM ,others						

## Compatible Actuator

Options are easily removable/ replaceable and can be mounted later.

Air piping is compatible with NAMUR standard. (AR040 use NAMUR conversion plate.)

DOUBLE ACTING	ACTUATOR TYPE			UNIT
	AR040DA	AR050DA	AR063DA	
ANGLE ADJUSTMENT	No angle adjustment is available.			
OPERATING PRESSURE	0.4-0.7			MPa
AIR CONSUMPTION	0.6	1.3	2.4	NL/OPEN & CLOSE (0.4 MPa)
AIR SUPPLY BORE	Rc1/8	Rc1/4		

AIR TO OPEN AIR TO CLOSE	ACTUATOR TYPE			UNIT
	AR040NC	AR050NC	AR063NC	
ANGLE ADJUSTMENT	No angle adjustment is available.			
OPERATING PRESSURE	0.4-0.7			MPa
AIR CONSUMPTION	0.2	0.4	0.8	NL/OPEN & CLOSE (0.4 MPa)
AIR SUPPLY BORE	Rc1/8	Rc1/4		

## OPTION COMBINATION

COMBINATION NO.	1	2	3	4	5	6	7	8	9	10	11
SOLENOID VALVE *1	○	—	—	—	○	○	○	—	—	—	—
FILTER REGULATOR	—	—	—	—	○	—	○	—	—	○	—
SPEED CONTROLLER *2	◎	○	◎	—	◎	◎	◎	◎	○	—	—
BYPASS VALVE *2	◎	—	○	—	◎	◎	◎	○	—	—	—
LIMIT SWITCH BOX *3	—	—	—	○	—	○	○	○	○	—	—
PNEUMATIC COUNTER	—	—	—	—	—	—	—	—	—	—	○

\*1 Equipped with a built-in speed controller and bypass valve.

\*2 ◎ indicates solenoid valve-dedicated type.

\*3 When using the limit switch at 1 to 100 mA or 5 to 30V, contact our sales office in your area.

OPTION LIST	MANUFACTURER	BASIC SPECIFICATIONS
SOLENOID VALVE NAMUR	KONAN	<ul style="list-style-type: none"> <li>• WATER PROOF, EXPLOSION PROOF</li> <li>• POWER SOURCE AC100V, AC110V, AC200V, AC220V, DC24V</li> </ul>
FILTER REGULATOR	KONAN	
SPEED CONTROLLER	SMC	<ul style="list-style-type: none"> <li>• Since a solenoid valve has a built-in exhaust valve, when a solenoid valve is mounted, no speed controller is necessary.</li> </ul>
BYPASS VALVE (SPEED CONTROLLER)	KONAN	
LIMIT SWITCH BOX	PRISMA	<ul style="list-style-type: none"> <li>• WATER PROOF</li> </ul>
PNEUMATIC COUNTER	ASAHI YUKIZAI	
DISMOUNT LEVER	ASAHI YUKIZAI	

## Product weight

TYPE 23 Type AR (Standard)

UNIT : kg

mm	inch	DOUBLE ACTING											
		FLANGED				THREADED				SOCKET, SPIGOT			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	1.0	1.0	0.9	1.3	0.7	0.8	0.7	0.8	0.7	0.7	0.7	0.8
20	3/4	1.3	1.4	1.1	1.5	0.8	0.9	0.8	1.0	0.9	0.9	0.8	1.0
25	1	1.8	1.9	1.4	2.0	1.1	1.1	0.9	1.3	1.1	1.1	0.9	1.3
32	1 1/4	3.0	3.2	2.3	3.8	2.2	2.3	1.8	2.8	2.1	2.2	-	2.8
40	1 1/2	3.0	3.2	2.3	3.8	2.2	2.3	1.8	2.8	2.1	2.2	1.8	2.8
50	2	4.3	4.5	2.8	4.8	3.4	3.6	2.3	3.3	3.3	3.6	2.3	3.3

UNIT : kg

mm	inch	AIR TO OPEN / AIR TO CLOSE											
		FLANGED				THREADED				SOCKET, SPIGOT			
		U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF	U-PVC	C-PVC	PP	PVDF
15	1/2	1.1	1.1	1.0	1.4	0.8	0.9	0.8	0.9	0.8	0.8	0.8	0.9
20	3/4	1.4	1.5	1.2	1.6	0.9	1.0	0.9	1.1	1.0	1.0	0.9	1.1
25	1	2.4	2.5	2.0	2.6	1.7	1.7	1.5	1.9	1.7	1.7	1.5	1.9
32	1 1/4	4.2	4.4	3.5	5.0	3.4	3.5	3.0	4.0	3.3	3.4	-	4.0
40	1 1/2	4.2	4.4	3.5	5.0	3.4	3.5	3.0	4.0	3.3	3.4	3.0	4.0
50	2	5.5	5.7	4.0	6.0	4.6	4.8	3.5	4.5	4.5	4.8	3.5	4.5

## Product model code list

ACTUATION	TYPE	ACTUATOR TYPE	ACTION	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
A	**	L	*	*	*	*	***	***
: A AUTOMATIC VALVE	: 23 TYPE 23	: L TYPE AR	: F DOUBLE ACTING G AIR TO OPEN S AIR TO CLOSE	: U U-PVC C C-PVC P PP F PVDF	: E EPDM V FKM	: S SOCKET * N THREADED P SPIGOT F FLANGED	: J JIS D DIN A ANSI 1 JIS 10K 5 JIS 5K	: 015 15mm 5 050 50mm

\* PP and PVDF socket types are weld type.

## Installation, Operation and Maintenance Manual

"For details of Installation, Operation and Maintenance, please contact our nearest distribution agent or sales office.