

COMPACT BALL VALVE TYPE 27

- WITH A SMALL NUMBER OF COMPONENTS AND LIGHT WEIGHT, COMPACT DESIGN, SUITABLE FOR INSTALLATION IN A NARROW SPACE AND IDEAL FOR FACILITY PIPING IN PLANTS.
- THE SPHERICAL VALVE ELEMENT ALLOWS FOR A STRAIGHT FLOW PATH AND EXTREMELY SMALL FLUID RESISTANCE. (EXCELLENT WATER CHARACTERISTICS)
- NO RISK OF DIFFICULT HANDLE OPERATION DUE TO THERMAL EXPANSION OR CONTRACTION.
- USING PTFE, THE SEAT IS HIGHLY RESISTANT TO CORROSION, CHEMICALS AND ABRASION.

BASIC SPECIFICATIONS

VALVE TYPE ————— **COMPACT BALL VALVE**
SIZE ————— **13 mm—50 mm (3/8 inch—2 inch)**
BODY MATERIAL ————— **U-PVC C-PVC**
SEAL MATERIAL / SEAT ————— **PTFE**
O-RING ————— **EPDM etc.**
CONNECTION / SOCKET ————— **JIS, DIN, ANSI**
THREADED ————— **Rc, Rp, NPT**

	FLUID TEMPERATURE	MAXIMUM WORKING PRESSURE (NORMAL TEMPERATURE) (MPa)(kgf/cm ²)	CONNECTION METHOD	
			SOCKET	THREADED
U-PVC	0°C ~ 50°C	1.0 {10.2}	○	○
C-PVC	0°C ~ 90°C	1.0 {10.2}	○	○

NOTE (1) The maximum working pressure is the value including the water hammer pressure. Be careful that the maximum working pressure is not exceeded during use. (2) The ball-type valves have dead spaces for structural reasons. Note that volatile liquids, such as hydrogen peroxide (H₂O₂) 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.)

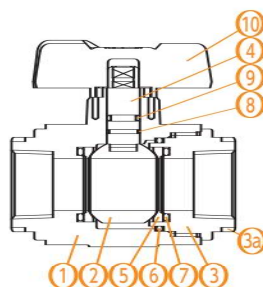
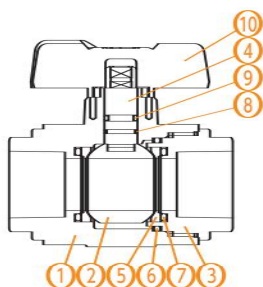
* Concerning the allowable pressure for each temperature and material, see the technical documents at the end of this catalog.

MANUAL



PARTS LIST

MANUAL



PART NO. / NAME	QTY	MATERIAL
① BODY	1	U-PVC, C-PVC
② BALL	1	U-PVC, C-PVC
③ END CONNECTOR	1	U-PVC, C-PVC
④ RING	2	SUS304 (Used for C-PVC 13 - 25 mm threaded type.)
④ STEM	1	U-PVC, C-PVC
⑤ SEAT	2	PTFE

PART NO. / NAME	QTY	MATERIAL
⑥ O-RING (B)	1	EPDM, etc.
⑦ O-RING (C)	2	EPDM, etc.
⑧ O-RING (D)	1	EPDM, etc.
⑨ O-RING (E)	1	EPDM, etc.
⑩ HANDLE	1	ABS

PRODUCT MODEL CODE LIST

MANUAL

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE	HIGH PURITY SERIES
V	7B	LV	*	*	*	*	***	1
V MANUAL VALVE	7B TYPE 27	LV LEVER TYPE	U U-PVC C C-PVC	E EPDM V FKM	S SOCKET N THREADED	J JIS D DIN A ANSI	013 13mm ? 050 50mm	1 LUBRICANT FREE

MANUAL

COMPACT BALL VALVE TYPE 27

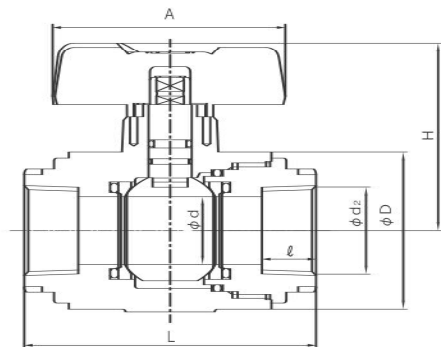
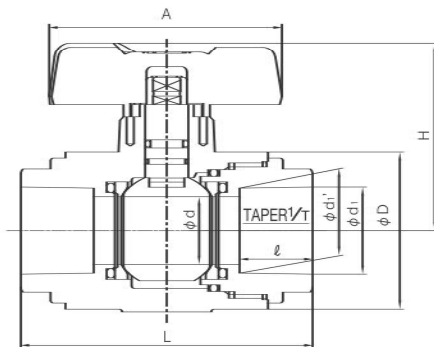
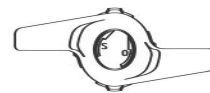
TYPE—V7BLV

CONNECTION / SOCKET, THREADED—JIS, DIN, ANSI

SOCKET



THREADED



■ JIS, DIN (Unit: mm)

mm	inch	d	A	D	H	SOCKET			THREADED			SOCKET			THREADED			
						d ₁	ℓ	1/T	L	d ₂	ℓ	L	d ₁	ℓ	L	d ₂	ℓ	L
13	3/8	15	75	40	52.5	18.20	17	1/30	69	-	-	-	16	14	69	Rp3/8	15	69
15	1/2	15	75	40	52.5	22.11	20	1/34	79	Rc1/2	15	69	20	16	79	Rp1/2	15	79
20	3/4	20	87	49	62.5	26.13	24	1/34	94	Rc3/4	17	94	25	19	94	Rp3/4	17	94
25	1	25	87	58	69.5	32.16	27	1/34	108	Rc1	20	108	32	22	108	Rp1	20	108
32	1 1/4	31	105	68	81.5	38.19	30	1/34	121	Rc1 1/4	22	121	40	26	121	Rp1 1/4	22	121
40	1 1/2	40	135	82.5	96.0	48.21	37	1/37	146	Rc1 1/2	25	146	50	31	146	Rp1 1/2	25	146
50	2	51	135	104	107.5	60.25	42	1/37	175	Rc2	28	175	63	38	175	Rp2	28	175

■ ANSI (Unit: inch)

inch	mm	d	A	D	H	SOCKET			THREADED			SOCKET			THREADED			
						d ₁	d ₁ '	ℓ	L	d ₂	ℓ	L	d ₁	ℓ	L	d ₂	ℓ	L
3/8	13	0.59	2.95	1.57	2.07	0.687	0.671	0.59	2.72	3/8-18NPT	0.59	2.72	3/8-18NPT	0.59	2.72	3/8-18NPT	0.59	2.72
1/2	15	0.59	2.95	1.57	2.07	0.848	0.836	0.69	3.11	1/2-14NPT	0.59	3.11	1/2-14NPT	0.59	3.11	1/2-14NPT	0.59	3.11
3/4	20	0.79	3.43	1.93	2.46	1.058	1.046	0.72	3.70	3/4-14NPT	0.67	3.70	3/4-14NPT	0.67	3.70	3/4-14NPT	0.67	3.70
1	25	0.98	3.43	2.28	2.74	1.325	1.310	0.87	4.25	1-11 1/2NPT	0.79	4.25	1-11 1/2NPT	0.79	4.25	1-11 1/2NPT	0.79	4.25
1 1/4	32	1.22	4.13	2.68	3.21	1.670	1.655	0.94	4.76	1 1/4-11 1/2NPT	0.87	4.76	1 1/4-11 1/2NPT	0.87	4.76	1 1/4-11 1/2NPT	0.87	4.76
1 1/2	40	1.57	5.31	3.25	3.78	1.912	1.894	1.09	5.75	1 1/2-11 1/2NPT	0.98	5.75	1 1/2-11 1/2NPT	0.98	5.75	1 1/2-11 1/2NPT	0.98	5.75
2	50	2.01	5.31	4.09	4.23	2.387	2.369	1.16	6.86	2-11 1/2NPT	1.10	6.86	2-11 1/2NPT	1.10	6.86	2-11 1/2NPT	1.10	6.86