TRUE UNION BALL CHECK VALVE

- THE VALVE PARTS CAN BE REMOVED WITHOUT DISCONNECTING THE PIPES, BY LOOSENING THE UNIONS ON BOTH SIDES

BASIC SPECIFICATIONS

VALVE TYPE — **TRUE UNION BALL CHECK VALVE**

SIZE — **15 mm—50 mm (1/2 inch—2 inch)**

BODY MATERIAL — **U-PVC** **C-PVC** **PP** **PVDF**

SEAL MATERIAL / SEAT — **EPDM** **FKM** **etc.**

CONNECTION / FLANGED — **JIS5K,JIS10K,DIN, ANSI**

SOCKET — **JIS,DIN, ANSI**

THREADED — **Rc,Rp, NPT**

SPIGOT — **DIN**

	FLUID TEMPERATURE	MAXIMUM WORKING PRESSURE (NORMAL TEMPERATURE) MPa{kgf/cm²}	CONNECTION METHOD		
			FLANGED	SOCKET	THREADED
PVDF	-20℃～100℃	1.0 {10.2}	○	○	○
PP	-20℃～ 80℃	1.0 {10.2}	○	○	○

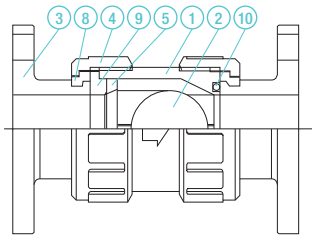
NOTES The maximum working pressure is the value including the water hammer pressure. Be careful that the maximum working pressure is not exceeded during use.
* Concerning the allowable pressure for each temperature and material, see the technical documents at the end of this catalog.

MANUAL

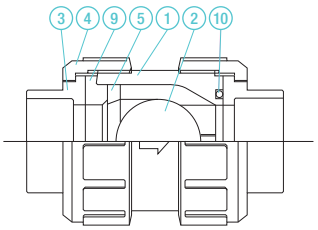


PARTS LIST MANUAL

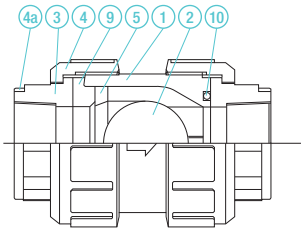
FLANGED



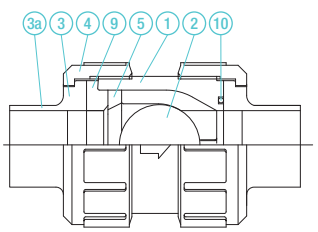
SOCKET



THREADED



SPIGOT



PART NO. / NAME	QTY	MATERIAL
① BODY	1	
② BALL	1	
③ END CONNECTOR	2	U-PVC, C-PVC, PP, PVDF
④ UNION NUT	2	
⑤ STOP RING (A)	1	

PART NO. / NAME	QTY	MATERIAL
⑧ STOP RING (B)(2)	2	PVDF
⑨ SEAT	1	EPDM, FKM, etc.
⑩ O-RING	1	EPDM, FKM, etc.
④a RING (1)	2	SUS304

NOTES (1) Used for 15 to 25 mm for C-PVC threaded type. (2) Used for flanged type.

PRODUCT MODEL CODE LIST

MANUAL

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
V	TC	ZZ	*	*	*	*	***
V MANUAL VALVE	TC TRUE UNION BALL CHECK	ZZ NONE	U U-PVC C C-PVC P PP F PVDF	E EPDM V FKM	S SOCKET N THREADED F FLANGED P SPIGOT	D DIN A ANSI	015 15mm ~ 050 50mm

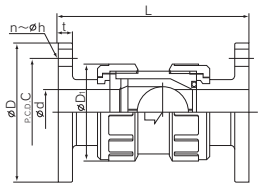
MANUAL

TRUE UNION BALL CHECK VALVE

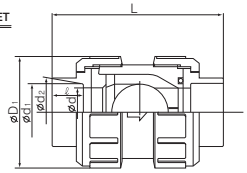
TYPE——VTCZZ

CONNECTION / FLANGED, SOCKET, THREADED, SPIGOT——DIN

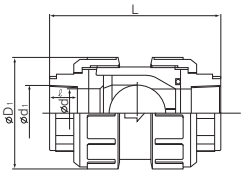
FLANGED



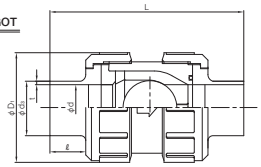
SOCKET



THREADED



SPIGOT



■ JIS (Unit: mm)

mm	d	D1	FLANGED JIS5K D	C	n	h	JIS10K D	C	n	h	L U-PVC C-PVC	L PP PVDF	t	SOCKET U-PVC C-PVC d1	ℓ	1/T	L	PP d1	d1'	ℓ	L	THREADED d2	ℓ	L U-PVC C-PVC	L PP PVDF
15	15	48	80	60	4	12	95	70	4	15	130	128	12	22.11	20	1/34	92	21.2	20.2	22	94	Rc 1/2	15	86	83
20	20	60	85	65	4	12	100	75	4	15	155	154	14	26.13	24	1/34	110	26.2	25.2	23	107	Rc 4/3	17	103	98
25	25	70	95	75	4	12	125	90	4	19	165	163	14	32.16	27	1/34	123	33.0	32.0	25	117	Rc 1	20	113	109
40	40	96	120	95	4	15	140	105	4	19	192	190	16	48.21	37	1/37	170	47.0	46.0	28	151	Rc 1 1/2	25	151	147
50	51	106	130	105	4	15	155	120	4	19	214	211	16	60.25	42	1/37	199	59.0	58.0	28	168	Rc 2	28	177	171

■ DIN (Unit: mm)

mm	d	D1	FLANGED DIN PN10 D	C	n	h	L U-PVC C-PVC	L PP	t	SOCKET U-PVC C-PVC DIN 8063 d1	ℓ	L	PVDF PP DIN 16962 d1	d2	ℓ	L
15	15	48	95	65	4	14	130	128	12	20	16	84	19.50	19.30	14	79
20	20	60	105	75	4	14	155	154	14	25	19	100	24.50	24.30	16	93
25	25	70	115	85	4	14	165	163	14	32	22	113	31.50	31.30	18	103
40	40	96	150	110	4	18	192	190	16	50	31	158	49.45	49.20	23	141
50	51	106	165	125	4	18	214	211	16	63	38	190	62.50	62.10	27	167

mm	d3	SPIGOT DIN 3442 U-PVC t	ℓ	L	PP t	ℓ	L	PVDF t	ℓ	L	THREADED DIN 2999 d1	ℓ	L U-PVC C-PVC	L PVDF PP
15	20	2.5	16	113	2.5	19	102	1.9	19	102	Rp 1/2	15	86	83
20	25	2.5	18.5	127	2.7	19	110	1.9	19	110	Rp 3/4	17	103	98
25	32	3.5	22	132	3	19	118	2.4	19	118	Rp 1	20	113	109
40	50	5	31	174	4.6	19	145	2.9	19	145	Rp 1 1/2	25	151	147
50	63	6.5	37.5	204	5.8	19	164	3	19	164	Rp 2	28	177	171

ANSI (Unit: inch)

inch	mm	d	D1	FLANGED ANSI Class 150 D	C	n	h	L U-PVC C-PVC	L PP	t1	SOCKET U-PVC C-PVC ASTM SCH40 d1	d2	ℓ	L	PVDF PP d1	d1'	ℓ	L	THREADED ANSI/ASME B 1.20.1 d1	ℓ	L U-PVC C-PVC	L PP PVDF
1/2	15	0.59	1.89	3.50	2.38	4	0.62	5.12	5.04	0.47	0.848	0.836	0.688	3.43	0.831	-	0.630	3.23	1/2-14NPT	0.59	3.39	3.27
3/4	20	0.79	2.36	3.88	2.75	4	0.62	6.10	6.06	0.55	1.058	1.046	0.719	3.86	1.041	-	1.000	4.37	3/4-14NPT	0.67	4.06	3.86
1	25	0.98	2.76	4.25	3.12	4	0.62	6.50	6.42	0.55	1.325	1.310	0.875	4.37	1.305	-	0.827	4.29	1-11 1/2NPT	0.79	4.45	4.29
1 1/2	40	1.57	3.78	5.00	3.88	4	0.62	7.56	7.48	0.63	1.912	1.894	1.094	5.94	1.889	-	1.260	6.22	1 1/2-11 1/2NPT	0.98	5.94	5.79
2	50	2.01	4.17	6.00	4.75	4	0.75	8.43	8.31	0.63	2.387	2.369	1.156	6.77	2.364	-	1.260	6.93	2-11 1/2NPT	1.10	6.97	6.73