

3 WAY BALL VALVE TYPE 23H(Manual Type)

Features

- Horizontal 3 way ball valve.
- T-shaped flow path allows for easy switching of flow channel.
- End connector and union nut are compatible with 3 way ball valve type 23.



Basic specifications

- Valve Type : 3 Way Ball Valve Type 23H (manual type)
- Size : 25 mm — 40 mm (1 inch — 1 1/2 inch)
- Body Material : PP (Conforming to ASTM D4101 Cell Classification PP0110B67272)
- Seal Material / Seat : PTFE
- O-ring : EPDM, FKM etc.
- Connection / Flanged : JIS B2220 10K, DIN/EN1092-1 PN10, ANSI B16.5 CLASS150
- Socket : JIS , DIN, ANSI
- Threaded : Rc, Rp, NPT
- Spigot : DIN
- Port / T Port : 25 mm — 40 mm (1 inch — 1 1/2 inch)

Body Material	FLUID TEMPERATURE °C {°F}	Maximum working pressure (Normal temperature) MPa {psi }	Connection method			
			Flanged	Socket	Threaded	Spigot
PP	-20 ~ 80 { -5~175 }	1.0 { 150 }	○	○	○	○

Note: The maximum working pressure is the value including the water hammer pressure.
 Be careful that the maximum working pressure is not exceeded during use.
 The socket and spigot types are weld type.
 Not available with 32-mm spigot type and JIS socket type.

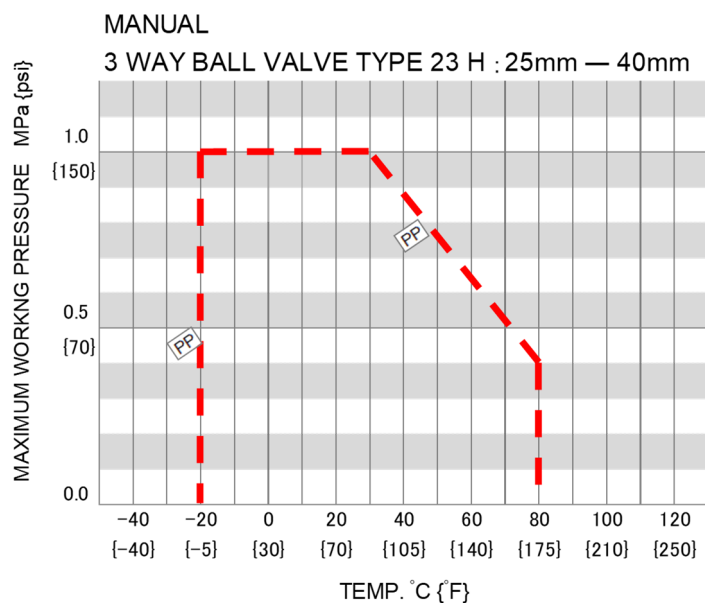
* Concerning the allowable pressure for each temperature and material, see the technical documents at the next page of this sheet.

Certificate / Approval / Directive

PED

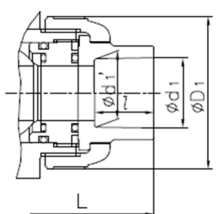
“For details of applicable products, please consult us.”

Working pressure vs. Temperature

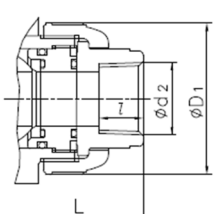


Product dimension

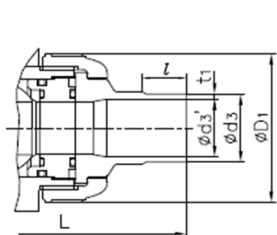
SOCKET



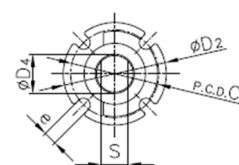
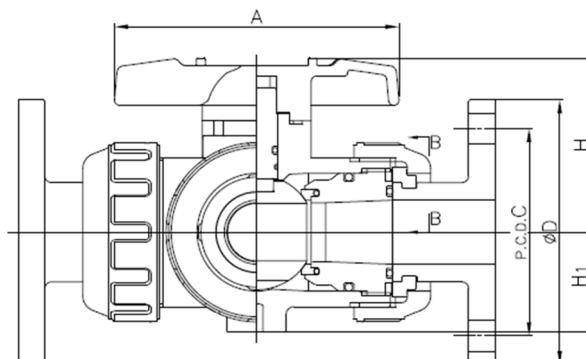
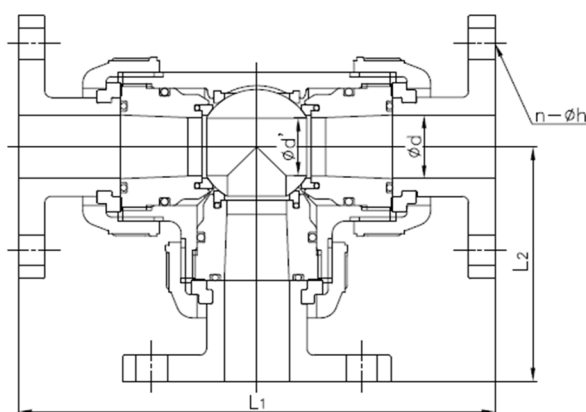
THREADED



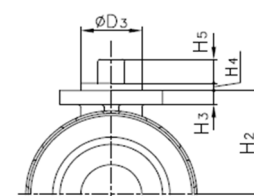
SPIGOT



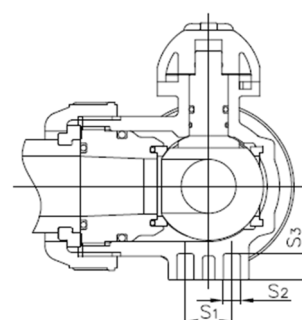
FLANGED



(Detail of stem part.)



B-B



■ JIS, DIN (Unit: mm)

mm	d	d'	D ₁	D ₂	D ₃	D ₄	C ₁	H	H ₁	H ₂	H ₃	H ₄	H ₅	A	S	S ₁	S ₂	S ₃	e
25	25	22	70	42	25	15	36	68	39	43.5	6	3	10	110	11	19	7.3	11	5.5
32	40	34	100	57	35	23	50	89	55	61	10	3	12	131	18	30	9	15	6.5
40	40	34	100	57	35	23	50	89	55	61	10	3	12	131	18	30	9	15	6.5

■ JIS (Unit: mm)

mm	FLANGED							SOCKET					THREADED			
	JIS 10K				t	L ₁	L ₂	d ₁	d ₁ '	l	L ₁	L ₂	d ₂	l	L ₁	L ₂
	D	C	n	h												
25	125	90	4	19	14	216	108	33.0	32.0	25	170	85	Rc 1	20	159	79.5
32	135	100	4	19	16	260	130	-	-	-	-	-	Rc1 1/4	22	208	104
40	140	105	4	19	16	260	130	47.0	46.0	28	219	109.5	Rc1 1/2	25	208	104

■ DIN (Unit: mm)

mm	FLANGED							SOCKET					THREADED				SPIGOT				
	DIN PN10				t	L ₁	L ₂	d ₁	d ₁ '	l	L ₁	L ₂	d ₂	l	L ₁	L ₂	d ₁	l	t	L ₁	L ₂
	D	C	n	h																	
25	115	85	4	14	14	189	94.5	31.5	31.3	18	152	76	Rp 1	20	159	79.5	32	22.5	3	183	91.5
32	140	100	4	16	16	260	130	39.45	39.2	20.5	197	98.5	Rp1 1/4	22	208	104	-	-	-	-	-
40	150	110	4	16	16	248	124	49.45	49.2	23.5	197	98.5	Rp1 1/2	25	208	104	50	32	4.6	242	121

■ ANSI (Unit: inch)

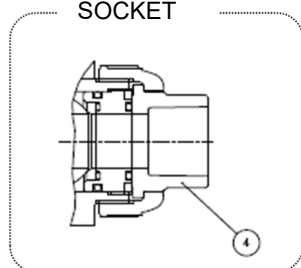
inch	mm	d	d'	D ₁	D ₂	D ₃	D ₄	C ₁	H	H ₁	H ₂	H ₃	H ₄	H ₅	A	S	S ₁	S ₂	S ₃	e
1	25	0.98	0.87	2.76	1.65	0.98	0.59	1.42	2.68	1.54	1.71	0.24	0.12	0.39	4.33	0.43	0.75	0.29	0.43	0.22
1 1/4	32	1.57	1.34	3.94	2.24	1.38	0.91	1.97	3.50	2.17	2.40	0.39	0.12	0.47	5.16	0.71	1.18	0.35	0.59	0.26
1 1/2	40	1.57	1.34	3.94	2.24	1.38	0.91	1.97	3.50	2.17	2.40	0.39	0.12	0.47	5.16	0.71	1.18	0.35	0.59	0.26

■ ANSI (Unit: inch)

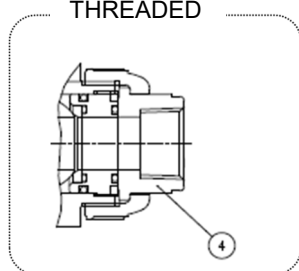
inch	mm	FLANGED							SOCKET				THREADED							
		ANSI Class 150				t	L ₁	L ₂	d ₁	l	L ₁	L ₂	d ₂	l	L ₁	L ₂				
		D	C	n	h															
1	25	4.25	3.13	4	0.62	0.55	8.50	4.25	1.30	1.13	6.77	3.39	1-11 1/2 NPT	0.79	6.26	3.13				
1 1/4	32	4.62	3.50	4	0.62	0.63	10.24	5.12	1.65	1.25	8.74	4.37	1 1/4-11 1/2 NPT	0.87	8.19	4.09				
1 1/2	40	5.00	3.88	4	0.62	0.63	10.24	5.12	1.89	1.37	8.94	4.47	1 1/2-11 1/2 NPT	0.98	8.19	4.09				

Parts list

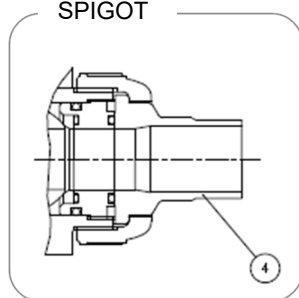
SOCKET



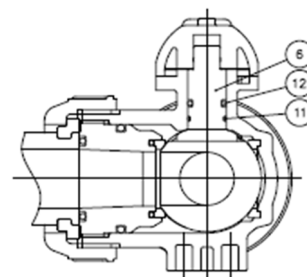
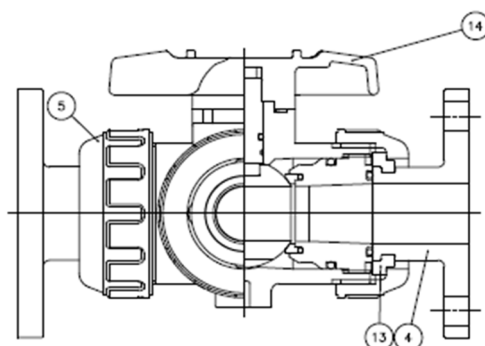
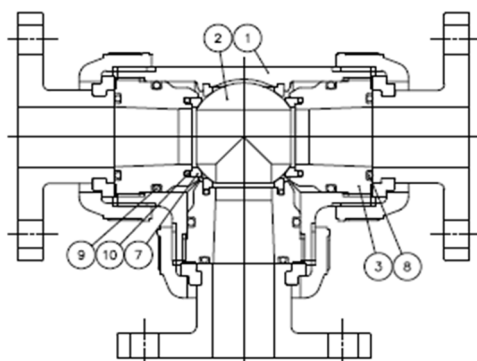
THREADED



SPIGOT



FLANGED



PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	PP	8 O-RING (A)	3	EPDM, FKM, Others
2 BALL	1	PP	9 O-RING (B)	3	EPDM, FKM, Others
		T Port Type	10 O-RING (C)	3	EPDM, FKM, Others
3 CARRIER	3	PP	11 O-RING (D)	1	EPDM, FKM, Others
4 END CONNECTOR	3	PP	12 O-RING (E)	1	EPDM, FKM, Others
5 UNION NUT	3	PPG	13 STOP RING	3	PVDF
6 STEM	1	PP			Used for Flanged
7 SEAT	4	PTFE	14 HANDLE	1	ABS

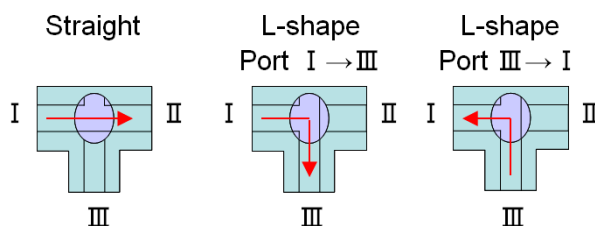
The shape and appearance of assembly differ a little with nominal size compared to this drawing.

Cv value

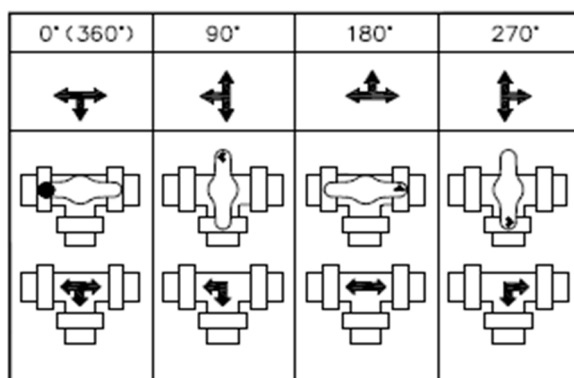
FULL-OPEN Cv VALUE

Nominal Size mm (inch)	Flow Direction	25 (1")	32 (1 1/4")	40 (1 1/2")
Cv value	Straight	31	53	79
	L-shape (Port I→III)	16	30	41
	L-shape (Port III→I)	17	29	38

The values shown are reference values, not guaranteed values.



FLOW DIRECTION DIAGRAM



Operating torque

Unit: N·m [lb·inch]

mm	25	32	40
inch	1	1 1/4	1 1/2
STANDARD	4.0	8.0	8.0
	{36}	{73}	{73}

Product weight

3 WAY BALL VALVE TYPE 23 H [MANUAL]

UNIT : kg

mm	inch	FLANGED	SOCKET, THREADED, SPIGOT
		PP	PP
25	1	0.9	0.4
32	1 1/4	1.7	1.1
40	1 1/2	1.7	1.1

Product model code list

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
V	3H	LV	P	*	*	***	***
:	:	:	:	:	:	:	:
V MANUAL VALVE	3H TYPE 23H	LV LEVER TYPE	P PP	E EPDM	S SOCKET	J JIS	025 25mm
				V FKM	N THREADED	D DIN	032 32mm
					P SPIGOT	A ANSI	040 40mm
					F FLANGED	1 10K	

Installation, Operation and Maintenance Manual

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