ASAHI AV VALVE

SWING CHECK VALVE 15mm - 200mm(1/2inch - 8inch)

15mm(1/2inch),20mm(3/4inch)

25mm(1inch) – 200mm(8inch)

FEATURES

- The SWING CHECK VALVE prevents backflow, thus protecting equipment, such as a pump.
- Being of a swing arm type, the valve gives little resistance to flow.
- The SWING CHECK VALVE is highly resistant to corrosive chemicals, acid and alkaline, because of its plastic construction.
- To maintain the SWING CHECK VALVE, only the bonnet lid has to be removed, without taking the body out of pipeline.

MATERIAL AND WORKING TEMPERATURE RANGES

O-ring Type

Body material	Working Temperature ℃(°F)	Max. Working Pressure (at R.T.)MPa{kgf/cm²}[PSI]		
		15(1/2inch) - 80(3inch)	100(4inch) - 150(6inch)	200(8inch)
HI-PVC	0 - 50(30 - 120)	1.0{10.2}[150]	0.7{7.1}[100]	0.5{5.1}[70]
PP	−20 - 80(−5 - 175)	1.0{10.2}[150]	0.7{7.1}[100]	0.5{5.1}[70]
PVDF	−20 - 100(−5 - 210)	1.0{10.2}[150]	0.7{7.1}[100]	0.5{5.1}[70]

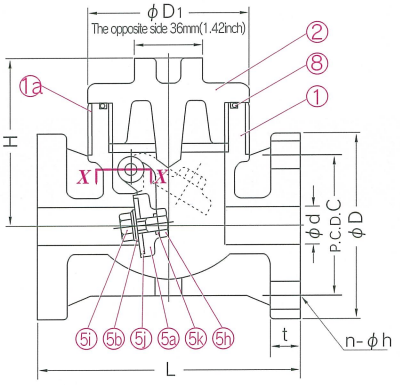
Gasket Type

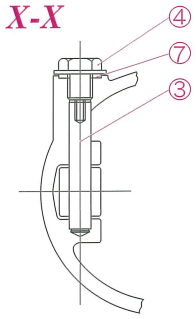
Body material	Working Temperature ℃(°F)	Max. Working Pressure (at R.T.)MPa{kgf/cm²}[PSI]			
		15(1/2inch) - 65(2 1/2inch)	80(3inch) - 100(4inch)	125(5inch)	150(6inch) - 200(8inch)
HI-PVC	0 - 50(30 - 120)	0.6{6.1}[85]	0.5{5.1}[70]	0.4{4.1}[55]	0.3{3.1}[40]
PP	−20 - 80(−5 - 175)	0.6{6.1}[85]	0.5{5.1}[70]	0.4{4.1}[55]	0.3{3.1}[40]
PVDF	−20 - 100(−5 - 210)	0.6{6.1}[85]	0.5{5.1}[70]	0.4{4.1}[55]	0.3{3.1}[40]

O-ring Type

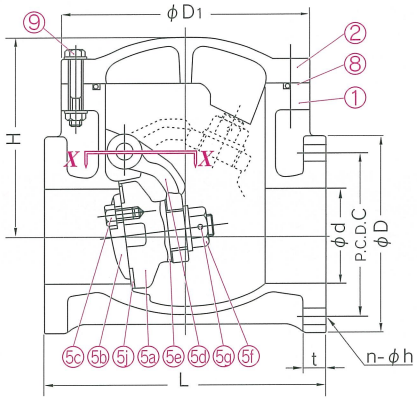
In case SEAT material of No.⑤ is Rubber

● 15mm(1/2inch) · 20mm(3/4inch)





● 25mm(1inch) – 200mm(8inch)



PARTS & MATERIALS O-ring Type

● 15mm(1/2inch) · 20mm(3/4inch)

No.	DESCRIPTION	Pcs.	MATERIAL
①	BODY	1	HI-PVC,PP,PVDF
②	BONNET	1	HI-PVC,PP,PVDF
③	SHAFT	1	HI-PVC,PP,PVDF
④	PLUG	1	HI-PVC,PP,PVDF
⑤a	DISC	1	HI-PVC,PP,PVDF
⑤b	SEAT HOLDER	1	HI-PVC,PP,PVDF
⑤h	BOLT(B)	1	HI-PVC,PP,PVDF
⑤i	NUT(B)	1	HI-PVC,PP,PVDF
⑤j	SEAT	1	EPDM,others
⑤k	O-RING(A)	1	EPDM,others
⑦	GASKET	1	EPDM,others
⑧	O-RING(B)	1	EPDM,others
⑩a	BODY RING	1	STAINLESS STEEL304

Note : 1)⑩a Body-ring is available for PP Body 15mm(1/2inch)·20mm(3/4inch).
2)PP body design uses PVDF components on the swing arm assemble.

● 25mm(1inch) – 200mm(8inch)

No.	DESCRIPTION	Pcs.	MATERIAL
①	BODY	1	HI-PVC,PP,PVDF
②	BONNET	1	HI-PVC,PP,PVDF
③	SHAFT	1	HI-PVC,PP,PVDF
④	PLUG	1	HI-PVC,PP,PVDF
⑤a	DISC	1	HI-PVC,PP,PVDF
⑤b	SEAT HOLDER	1	HI-PVC,PP,PVDF
⑤c	BOLT(A)	–	HI-PVC,PP,PVDF
⑤d	ARM	1	HI-PVC,PP,PVDF
⑤e	WASHER	1	HI-PVC,PP,PVDF
⑤f	NUT(A)	1	HI-PVC,PP,PVDF
⑤g	PIN	1	HI-PVC,PP,PVDF
⑤j	SEAT	1	EPDM,others
⑦	GASKET(B)	1	EPDM,others
⑧	O-RING(B)	1	EPDM,others
⑨	BOLT.NUT	–	STAINLESS STEEL304

Note : 1)In the case of nom. size with more than 65mm(2 1/2inch), part "5g" is available.
2)PP body design uses PVDF components on the swing arm assemble.

Gasket Type

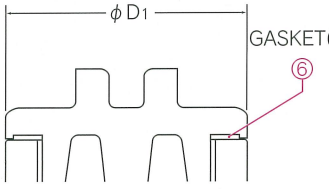
In case SEAT material of No.⑤ is PTFE

Material of gasket(A)is PVDF(cushion:EPDM)

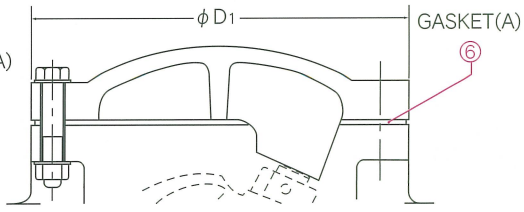
PARTS & MATERIALS Gasket Type

No.	DESCRIPTION	Pcs.	MATERIAL
⑤j	SEAT	1	PTFE
⑤k	O-RING(A)	1	PTFE
⑥	GASKET(A)	1	PVDF(cushon EPDM)
⑦	GASKET(B)	1	PTFE

Note : Parts not shown above are common to "o-ring Type".



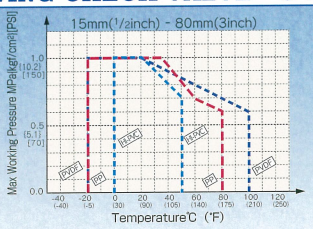
15mm(1/2inch),20mm(3/4inch)

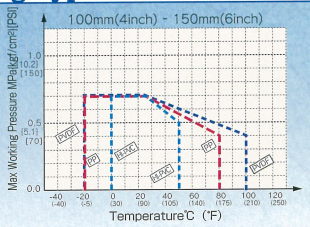


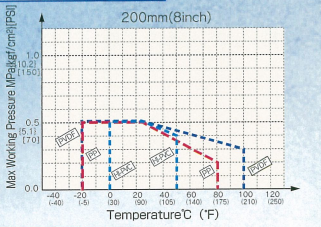
25mm(1inch) – 200mm(8inch)

WORKING PRESSURE VS. TEMPERATURE

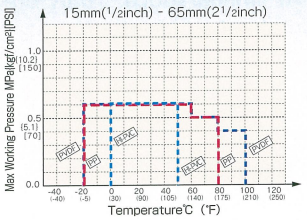
SWING CHECK VALVE O-ring Type

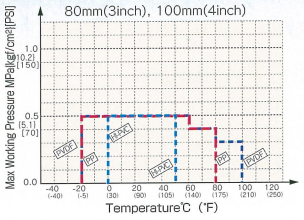


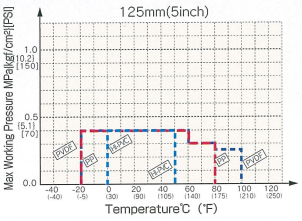


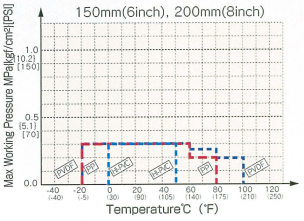


SWING CHECK VALVE Gasket Type









DIMENSIONS TABLE

JIS Unit:mm

Nominal Size		d	JIS 5K				JIS 10K				D_1	L	t		H	
mm	inch		D	C	n	h	D	C	n	h			HI-PVC	PP·PVDF	Rubber SEAT	PTFE SEAT
15	1/2	20	80	60	4	12	95	70	4	15	86	140	15	15	90	90
20	3/4	20	85	65	4	12	100	75	4	15	86	140	15	15	90	90
25	1	25	95	75	4	12	125	90	4	19	130	160	16	16	117	120
32	1 1/4	40	–	–	–	–	135	100	4	19	145	180	18	18	135	138
40	1 1/2	40	120	95	4	15	140	105	4	19	145	180	18	18	135	138
50	2	50	130	105	4	15	155	120	4	19	180	200	20	21	161	164
65	2 1/2	65	155	130	4	15	175	140	4	19	200	240	22	23	165	168
80	3	80	180	145	4	19	185	150	8	19	205	260	22	25	168	171
100	4	100	200	165	8	19	210	175	8	19	265	300	24	26	210	213
125	5	125	235	200	8	19	250	210	8	23	330	350	24	27	245	248
150	6	150	265	230	8	19	280	240	8	23	370	400	25	27	280	283
200	8	200	320	280	8	23	330	290	12	23	425	500	30	34	333	336

DIN Unit:mm

Nominal Size		d	DIN PN10				D_1	L	t		H	
mm	inch		D	C	n	h			HI-PVC	PP·PVDF	Rubber SEAT	PTFE SEAT
15	1/2	20	95	65	4	14	86	140	15	15	90	90
20	3/4	20	105	75	4	14	86	140	15	15	90	90
25	1	25	115	85	4	14	130	160	16	16	117	120
32	1 1/4	40	140	100	4	18	145	180	18	18	135	138
40	1 1/2	40	150	110	4	18	145	180	18	18	135	138
50	2	50	165	125	4	18	180	200	20	21	161	164
65	2 1/2	65	185	145	4	18	200	240	22	23	165	168
80	3	80	200	160	8	18	205	260	22	25	168	171
100	4	100	220	180	8	18	265	300	24	26	210	213
125	5	125	250	210	8	18	330	350	24	27	245	248
150	6	150	285	240	8	22	370	400	25	27	280	283
200	8	200	340	295	8	22	425	500	30	34	333	336

ANSI Unit:inch

Nominal Size		d	ANSI CLASS 150				D_1	L	t		H	
inch	mm		D	C	n	h			HI-PVC	PP·PVDF	Rubber SEAT	PTFE SEAT
1/2	15	0.79	3.50	2.38	4	0.62	3.39	5.51	0.59	0.59	3.54	3.54
3/4	20	0.79	3.88	2.75	4	0.62	3.39	5.51	0.59	0.59	3.54	3.54
1	25	0.98	4.25	3.12	4	0.62	5.12	6.30	0.63	0.63	4.61	4.72
1 1/4	32	–	–	–	–	–	–	–	–	–	–	–
1 1/2	40	1.57	5.00	3.88	4	0.62	5.71	7.09	0.71	0.71	5.31	5.43
2	50	1.97	6.00	4.75	4	0.75	7.09	7.87	0.79	0.83	6.34	6.46
2 1/2	65	2.56	7.00	5.50	4	0.75	7.87	9.45	0.87	0.91	6.50	6.61
3	80	3.15	7.50	6.00	4	0.75	8.07	10.24	0.87	0.98	6.61	6.73
4	100	3.94	9.00	7.50	8	0.75	10.43	11.81	0.94	1.02	8.27	8.39
5	125	4.92	10.00	8.50	8	0.88	12.99	13.78	0.94	1.06	9.65	9.76
6	150	5.91	11.00	9.50	8	0.88	14.57	15.75	0.98	1.06	11.02	11.14
8	200	7.87	13.50	11.75	8	0.88	16.73	19.69	1.18	1.34	13.11	13.23

* Important: The swing check valve can be used in both vertical and horizontal pipelines. However, when installing the valve, be sure to make the direction of the arrow embossed on the valve agree with that of flow.
* Swing check valves 15mm(1/2inch) and 30mm(1 1/4inch) mm in nominal size are made out of those in 20mm(3/4inch) and 40mm(1 1/2inch) in nominal size, respectively.

Note : For pressure limits by fluid temperature ranges and materials, see "WORKING PRESSURE VS. TEMPERATURE" in this catalog.