

GATE VALVE

Soft Seal Type S (Inside Screw Handle Type)

Features

- Equipped with opening indicator under the handle to allow for easy check of opening degree of the valve.
- For all the wetted parts, corrosion-resistant material is used.
- The channel surface free from irregularities allows for smooth flow. The rubber soft seal ensures excellent water tightness.
- Made of robust, lightweight and impact-resistant hard vinyl chloride (HI-PVC), with a weight of 1/3 to 1/5 compared to metal valves.



Basic specifications

- Valve Type : Gate Valve Soft Seal (Type S)
Inside Screw Round Handle Type
- Size : 50 mm — 200 mm (2 inch — 8 inch)
- Body Material : HI-PVC (Conforming to ASTM D1784)
- Seal Material / Seat : SBR, NBR
- / O-ring : EPDM
- Connection / Flanged : JIS B2220 10K, DIN/EN1092-1, ANSI B16.5

Body Material	FLUID TEMPERATURE °C {°F}	Maximum working pressure (Normal temperature) MPa {psi}	Connection method
			FLANGED
HI-PVC	-10 ~ 50 { 15~120 }	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.

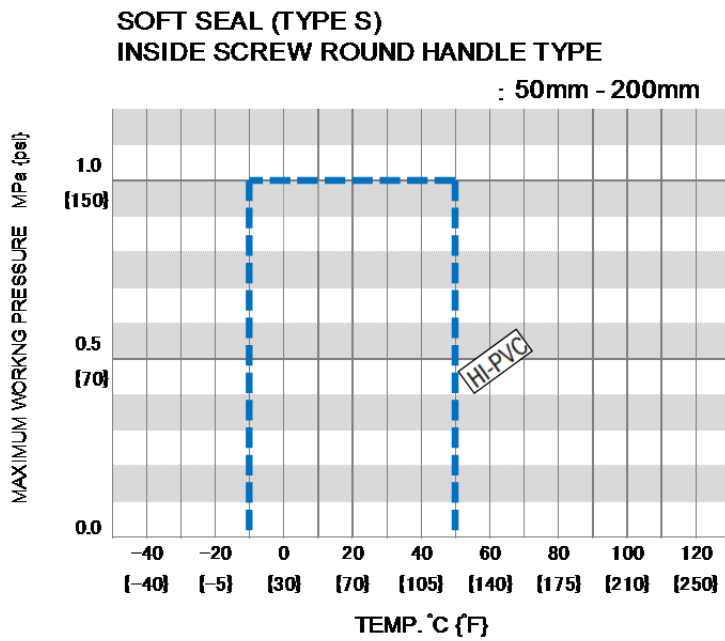
* Concerning the allowable pressure for each temperature and material, see the technical documents at the next page of this sheet.

Certificate / Approval / Directive

PED, ABS, NSF/ANSI61

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

Working pressure vs. Temperature

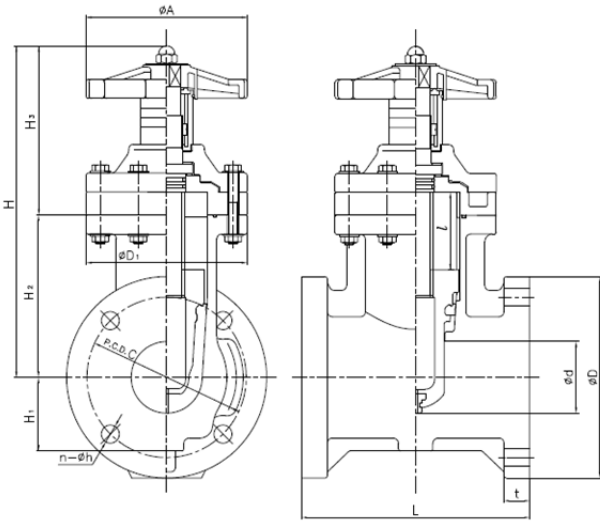


Note:

Make sure that the temperature and pressure are within the working range during operation.
(If the tolerance range is exceeded during use, the valve may be damaged.)

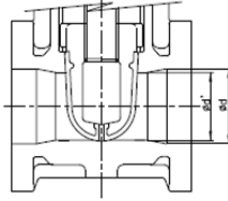
Product dimension

50mm (2") - 150mm (6")



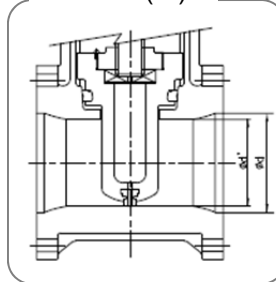
Conventional type:

65mm (2 1/2"), 125mm (5")

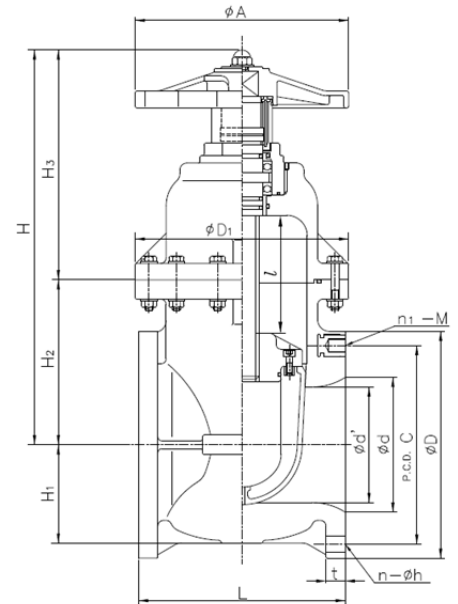


* 65 mm has a full-bore structure.
* $\phi d'$ is 125 mm only.

150mm (6")



200mm (8")



■ JIS, DIN (Unit: mm)

mm	inch	d	d'	D ₁	l	H ₁	H ₂	STEM				A
								U-PVC		SUS		
								H ₃	H	H ₃	H	
50	2	50	-	130	52	58	134	159	293	134	287	130
65	2 1/2	65	-	155	67	68	152	150	302	152	306	155
80	3	75	-	170	77	77	170	180	350	170	361	170
100	4	100	-	195	102	89	207	203	410	207	418	195
125	5	125	110	235	112	89	227	180	407	227	417	230
150	6	150	130	270	132	117	263	224	487	263	497	270
200	8	196	168	310	175	143	240	337	577	337	577	310

mm	inch	JIS 10K FLANGED							
		D	C	n	h	n ₁	M	L	t
50	2	155	120	4	19	-	-	180	23
65	2 1/2	175	140	4	19	-	-	190	24
80	3	185	150	8	19	-	-	200	25
100	4	210	175	8	19	-	-	230	27
125	5	250	210	8	23	-	-	260	27
150	6	280	240	8	23	-	-	270	28
200	8	330	290	10	23	2	M20	290	28

mm	inch	DIN PN10 FLANGED							
		D	C	n	h	n ₁	M	L	t
50	2	165	125	4	18	-	-	180	23
65	2 1/2	185	145	4	18	-	-	210	24
80	3	200	160	8	18	-	-	240	25
100	4	220	180	8	18	-	-	250	27
125	5	250	210	8	18	-	-	260	27
150	6	285	240	8	23	-	-	280	27
200	8	340	295	6	23	2	M20	300	28

■ ANSI (Unit: inch)

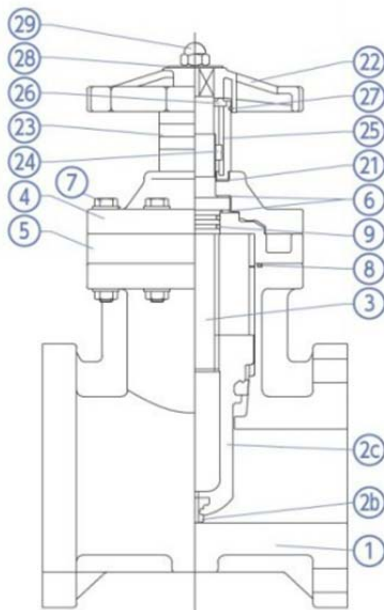
inch	mm	d	d'	D ₁	l	H ₁	H ₂	STEM				A
								U-PVC		SUS		
								H ₃	H	H ₃	H	
2	50	1.97	1.97	5.12	2.05	2.28	5.28	6.26	11.54	5.28	11.30	5.12
2 1/2	65	2.56	-	6.10	2.64	2.68	5.98	5.91	11.89	5.98	12.05	6.10
3	80	2.95	-	6.69	3.03	3.03	6.69	7.09	13.78	6.69	14.21	6.69
4	100	3.94	-	7.68	4.02	3.50	8.15	7.99	16.14	8.15	16.46	7.68
5	125	4.92	4.33	9.25	4.41	3.50	8.94	7.09	16.02	8.94	16.42	9.06
6	150	5.83	5.12	10.63	5.20	4.61	10.35	8.82	19.17	10.35	19.57	10.63
8	200	7.72	6.61	12.20	6.89	5.63	9.45	13.27	22.72	13.27	22.72	12.20

inch	mm	ANSI Class150 FLANGED							
		D	C	n	h	n ₁	M	L	t
2	50	6.00	4.75	4	0.75	-	-	7.01	0.91
2 1/2	65	7.00	5.50	4	0.75	-	-	7.48	0.94
3	80	7.50	6.00	4	0.75	-	-	7.99	0.98
4	100	9.00	7.50	8	0.75	-	-	9.02	1.06
5	125	10.00	8.50	8	0.88	-	-	10.24	1.06
6	150	11.00	9.50	8	0.88	-	-	10.51	1.06
8	200	13.50	11.75	6	0.88	2	W 3/4	11.50	1.30

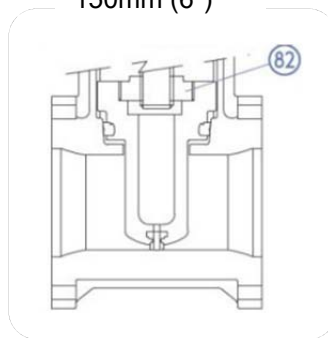
Note: The shape and appearance of assembly differ a little with nominal size compared to this drawing.

Parts list

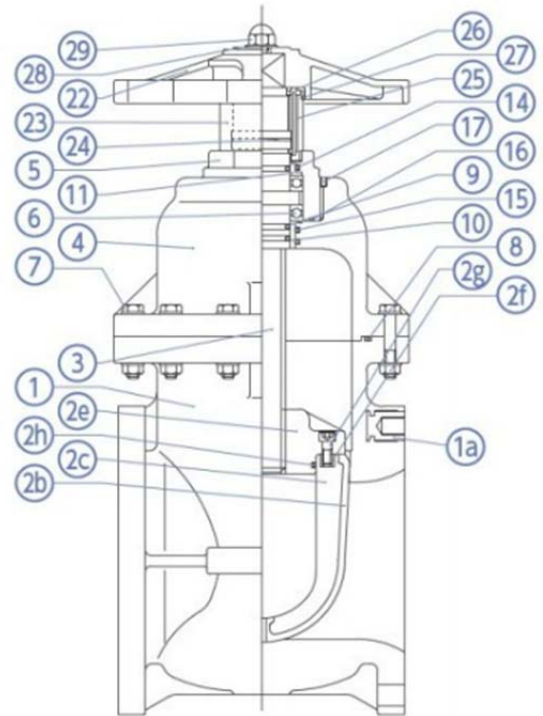
50mm (2") - 150mm (6") <Stem: U-PVC>



150mm (6")



200mm (8") <Stem: U-PVC>

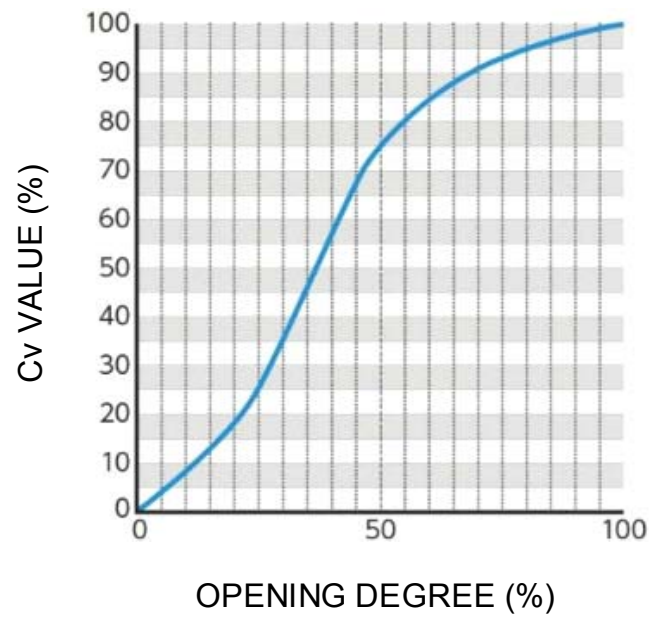


PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	HI-PVC	6a THRUST BEARING ⁽²⁾	1Set	HIGH CARBON CHROMIUM BEARING	21 PACKING	1	EPDM
1a EMBEDDED BODY FITTING ⁽¹⁾	4	COPPER ALLOY	7 BOLT/ NUT	-	STAINLESS STEEL	22 HANDLE	1	PP
2b SEAT	1	SBR	2h O-RING (A) ⁽²⁾	1	EPDM, NBR	23 OPENING COVER	1	PC
2c GATE (BODY) (A)	1	HI-PVC, C-PVC	8 O-RING (B)	1	EPDM, NBR	24 OPENING RING	1	U-PVC
2e GATE (BODY) (B) ⁽²⁾	1	HI-PVC	9 O-RING (C) ⁽³⁾	2,3 1	EPDM, NBR	25 GUIDE PIN	1	STAINLESS STEEL
2f GATE (BODY) EMBEDDED FITTING (B) ⁽²⁾	4	STAINLESS STEEL	10 BUSH (A) ⁽²⁾	1	PP	26 GUIDE PIN SUPPORT PLATE	1	U-PVC
2g BOLT (A) ⁽²⁾	4	STAINLESS STEEL	11 BUSH (B) ⁽²⁾	1	PP	27 O-RING (G)	1	EPDM
3 STEM	1	U-PVC, STAINLESS STEEL	15 O-RING (F) ⁽²⁾	1	EPDM, NBR	28 WASHER	1	U-PVC
4 BONNET (LID) (A)	1	HI-PVC	16 O-RING (D) ⁽²⁾	1	EPDM, NBR	29 UNION NUT	1	STAINLESS STEEL
5 BONNET (LID) (B)	1	HI-PVC, U-PVC	17 SET SCREW (A) ⁽²⁾	1	STAINLESS STEEL	82 SCREW HOLDER	1	U-PVC
6 THRUST RING ⁽⁴⁾	2	PP						* For 150 mm

(1) is used for sizes of 10K 200mm. (2) is used only for 200 mm. (3) The quantity of use is 3 pieces for 150 mm or less and 2 pieces for 200 mm. (4) is used for sizes of 150 mm or less.

* The parts list above is applicable when the stem is made of U-PVC.

Cv value for each opening degree



FULL-OPEN Cv VALUE

mm	50	65	80	100	125	150	200
inch	2	2 1/2	3	4	5	6	8
GATE VALVE (TYPE S)	180	415	470	690	1000	1400	2900

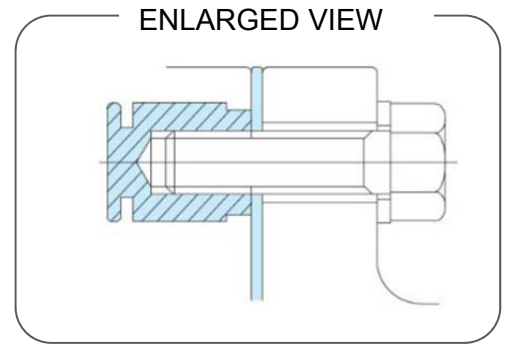
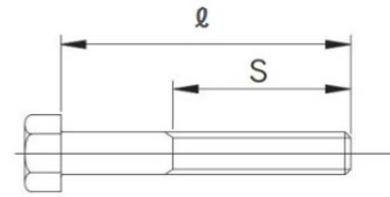
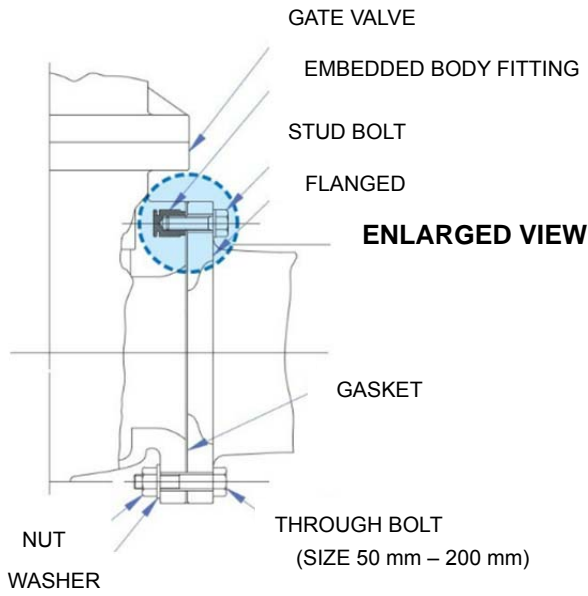
Product weight

SOFT SEAL (TYPE S)

UNIT : kg

mm	inch	INSIDE SCREW HANDLE TYPE
50	2	5.0
65	2 1/2	6.0
80	3	9.0
100	4	13.0
125	5	15.5
150	6	23.0
200	8	32.0

PIPE BOLT DIMENSIONS (REFERENCE)



	mm	inch	JIS 10K STANDARD AV TS FLANGE			
			BOLT NUT SIZE	WASHER SIZE	l	S
THROUGH BOLT	50	2	M16	16	75	38
	65	2 1/2	M16	16	75	38
	80	3	M16	16	80	38
	100	4	M16	16	80	38
	125	5	M20	20	85	46
	150	6	M20	20	90	46
	200	8	M20	20	90	46
STUD BOLT	200	8	M20	20	50	46

Product model code list

SOFT SEAL (TYPE S) INSIDE SCREW HANDLE TYPE

ACTUATION	TYPE	OPERATING SYSTEM	STEM MATERIAL / OPEN DIRECTION	BODY MATERIAL	SEAL MATERIAL	CONNECTION / STANDARD	SIZE
V	**	M	*	I	S	*	***
V : MANUAL VALVE	SG CONVENTIONAL TYPE TG T-SHAPED RUBBER	M : ROUND HANDLE	J U-PVC, LEFT R SUS, RIGHT	I : HI-PVC	S : SBR	F1 FLANGED, 10K FD FLANGED, DIN FA FLANGED, ANSI	050 50mm 5 200 200mm

Note:

The type of size 65 mm, 125 mm and 200 mm is "conventional". The type of other sizes is "T-shaped rubber".
 For the JIS 10K SUS stem model, right open type is also available.
 The price above is the set price for the valve, full-face gaskets (2pcs), and SUS plain washer.

Installation, Operation and Maintenance Manual

"For details of Installation, Operation and Maintenance, please refer IOM at below link"

http://www.asahi-yukizai.co.jp/en/product/mt_pdf/a_manual_valve_5_01.pdf