

# STOP VALVE (GLOBE VALVE)

## Features

- Plastic body with high resistance to corrosion, chemicals and wear.
- Compact size and affordable type.
- Also available for FLOW CONTROL or NEEDLE VALVE (special order).



## Basic specifications

- Valve Type : Stop Valve (Globe Valve)
- Size : 15mm (1/2") - 100mm (4")
- Body Material : U-PVC (Conforming to ASTM D1784 Cell Classification 12454A)  
: PP (Conforming to ASTM D4101 Cell Classification PP0110B67272)
- Seal Material / O-ring : EPDM, etc.
- Connection / Flanged : JIS B2220 5K, JIS B2220 10K, DIN/EN1092-1 PN10, ANSI B16.5 CLASS150  
Socket : JIS, DIN, ASTM D2466 SCH40  
Threaded : Rc, Rp, NPT

Body Material	FLUID TEMPERATURE °C {F}	Maximum working pressure (Normal temperature) MPa {psi}	CONNECTION METHOD		
			FLANGED	SOCKET	THREADED
U-PVC	0 ~ 50 { 30 ~120 }	1.0 { 150 }	○	○	○
PP	-20 ~ 80 { -5 ~175 }	0.75 { 110 }	○	-	○

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.

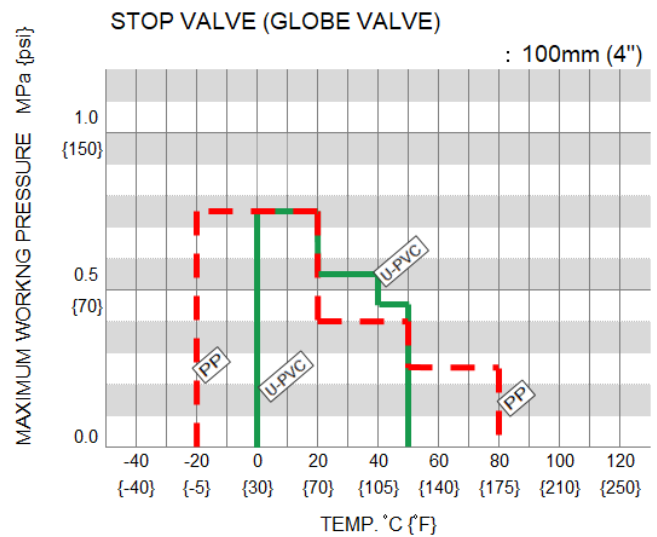
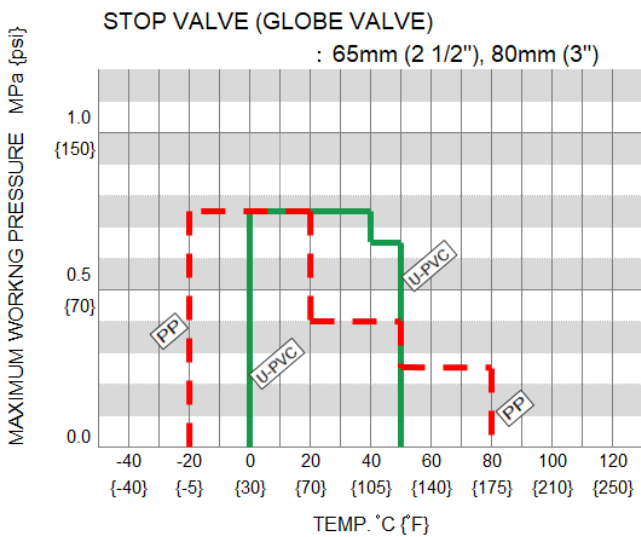
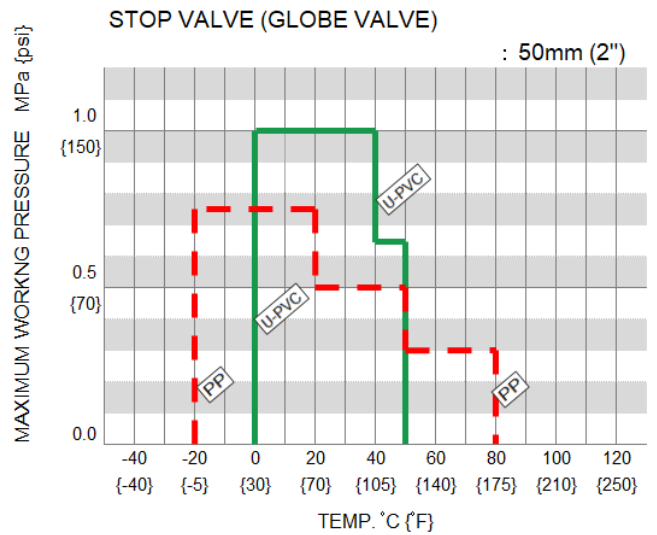
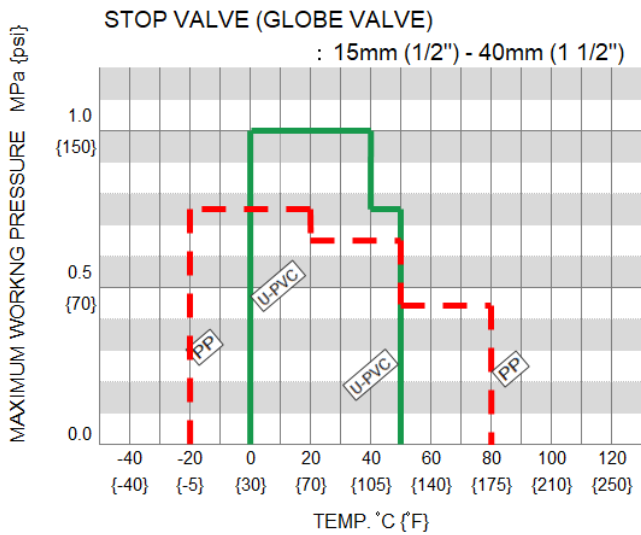
- \* Concerning the allowable pressure for each temperature and material, see the technical documents at the next page of this sheet.

Certificate / Approval / Directive

PED

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

Working pressure vs. Temperature

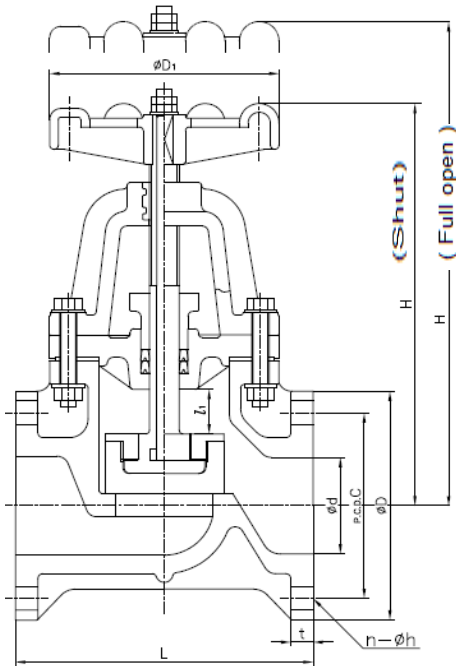


Note:

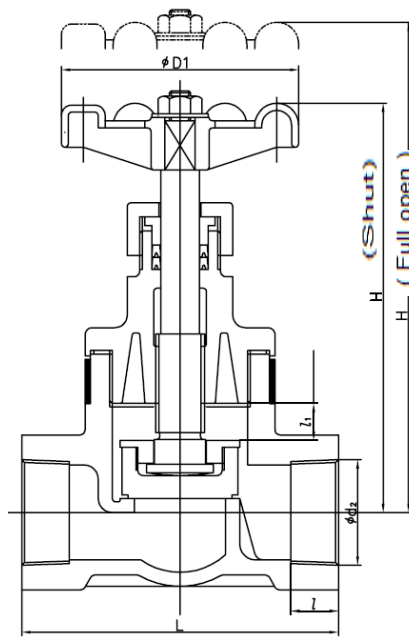
Make sure that the temperature and pressure are within the working range during operation.  
(If the tolerance range is exceeded during use, the valve may be damaged.)

Product dimension

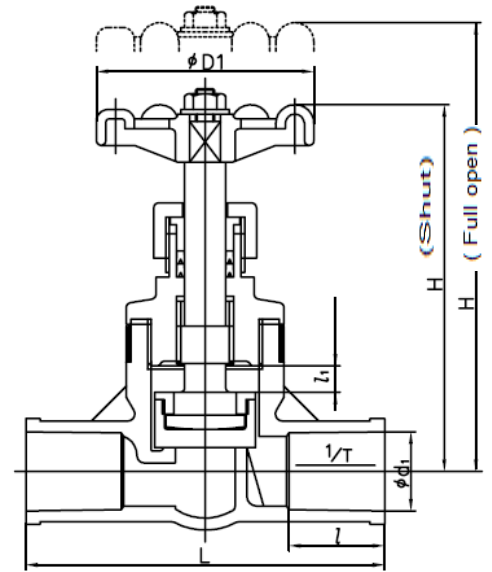
FLANGED



THREADED



SOCKET



■ JIS, DIN (Unit: mm)

mm	inch	d	D <sub>1</sub>	l <sub>1</sub>	H (Shut)	H (FULL OPEN)	L	t	JIS 5K				JIS 10K				DIN PN10			
									D	C	n	h	D	C	n	h	D	C	n	h
15	1/2	18	66	8	124	132	85	12	80	60	4	12	95	70	4	15	95	65	4	14
20	3/4	24	66	8	132	140	95	14	85	65	4	12	100	75	4	15	105	75	4	14
25	1	28	91	11	150	161	110	14	95	75	4	12	125	90	4	19	115	85	4	14
32	1 1/4	37	91	13	154	167	135	16	115	90	4	15	135	100	4	19	140	100	4	18
40	1 1/2	41	135	17	210	230	190	16	120	95	4	15	140	105	4	19	150	110	4	18
50	2	52	135	22	228	252	200	16	130	105	4	15	155	120	4	19	165	125	4	18
65	2 1/2	67	185	35	310	345	220	18	155	130	4	15	175	140	4	19	185	145	4	18
80	3	78	185	35	324	359	240	18	180	145	4	19	185	150	8	19	200	160	8	18
100	4	100	185	40	379	419	290	18	200	165	8	19	210	175	8	19	220	180	8	18

■ ANSI (Unit: inch)

inch	mm	d	D <sub>1</sub>	l <sub>1</sub>	H (Shut)	H (FULL OPEN)	L	t	ANSI Class150			
									D	C	n	h
1/2	15	0.71	2.60	0.31	4.88	5.20	3.35	0.47	3.50	2.38	4	0.62
3/4	20	0.94	2.60	0.31	5.20	5.51	3.74	0.55	3.88	2.75	4	0.62
1	25	1.10	3.58	0.43	5.91	6.34	4.33	0.55	4.25	3.12	4	0.62
1 1/4	32	1.46	3.58	0.51	6.06	6.57	5.31	0.63	4.62	3.50	4	0.62
1 1/2	40	1.61	5.31	0.67	8.58	9.25	7.48	0.63	5.00	3.88	4	0.62
2	50	2.05	5.31	0.87	9.33	10.20	7.87	0.63	6.00	4.75	4	0.75
2 1/2	65	2.64	7.28	1.38	12.20	13.58	8.66	0.71	7.00	5.50	4	0.75
3	80	3.07	7.28	1.38	12.76	14.13	9.45	0.71	7.50	6.00	4	0.75
4	100	3.94	7.28	1.57	14.92	16.50	11.42	0.71	9.00	7.50	8	0.75

## ■ JIS, DIN (Unit: mm)

inch	mm	D	$\ell_1$	H (SHUT)	H(FULL OPEN)	JIS							DIN									
						SOCKET				THREADED			SOCKET				THREADED					
						U-PVC				$d_2$	$\ell$	L	U-PVC			PP				$d_2$	$\ell$	L
						$d_1$	$\ell$	1/T	L				$d_1$	$\ell$	L	$d_1$	$d_1'$	$\ell$	L			
1/2	15	66	8	124	132	22.40	30	1/34	110	Rc 1/2	15	85	20	16	82	19.5	19.3	14.5	84	Rp 1/2	15	85
3/4	20	66	8	132	140	26.45	35	1/34	130	Rc 3/4	18	95	25	19	98	24.5	24.3	16	91	Rp 3/4	18	95
1	25	91	11	150	161	32.55	40	1/34	150	Rc 1	20	110	32	22	114	31.5	31.3	18	106	Rp 1	20	110
1 1/4	32	91	13	154	167	-	-	-	-	Rc 1 1/4	25	135	-	-	-	-	-	-	-	Rp 1 1/4	25	135
1 1/2	40	135	17	218	235	-	-	-	-	Rc 1 1/2	25	140	-	-	-	-	-	-	-	Rp 1 1/2	25	140
2	50	135	22	237	259	-	-	-	-	Rc 2	27	180	-	-	-	-	-	-	-	Rp 2	27	180

## ■ ANSI (Unit: inch)

inch	mm	D	$\ell_1$	H (SHUT)	H(FULL OPEN)	ANSI						
						SOCKET				THREADED		
						U-PVC				$d_2$	$\ell$	L
						$d_1$	$d_1'$	$\ell$	L			
1/2	15	2.60	0.31	4.88	5.20	0.848	0.836	1.18	4.33	1/2-14NPT	0.59	3.35
3/4	20	2.60	0.31	5.20	5.51	1.058	1.046	1.38	5.12	1/4-14NPT	0.71	3.74
1	25	3.58	0.43	5.91	6.34	1.325	1.310	1.57	5.91	1-11 1/2NPT	0.79	4.33
1 1/4	32	3.58	0.51	6.06	6.57	1.670	1.655	0.94	5.31	1 1/4-11 1/2NPT	0.98	5.31
1 1/2	40	5.31	0.67	8.58	9.25	1.912	1.894	1.09	5.31	1 1/2-11 1/2NPT	0.98	5.51
2	50	5.31	0.87	9.33	10.20	2.387	2.369	1.16	7.09	2-11 1/2NPT	1.06	7.09

## Note:

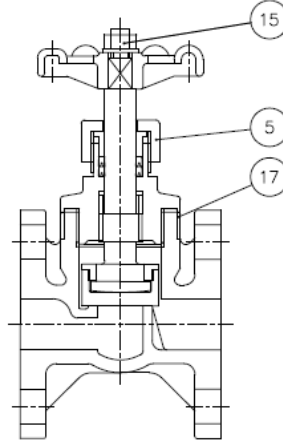
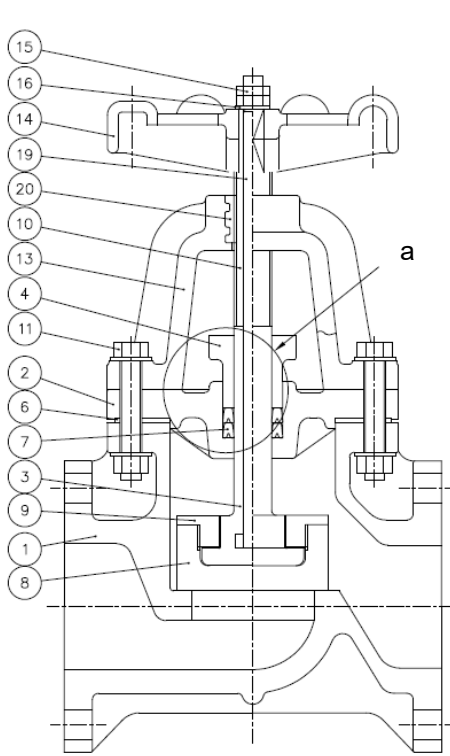
The shape and appearance of assembly differ a little with nominal size compared to this drawing.

## Parts list

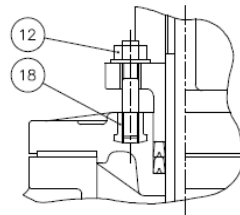
## FLANGED

65mm (2 1/2") - 100mm (4")

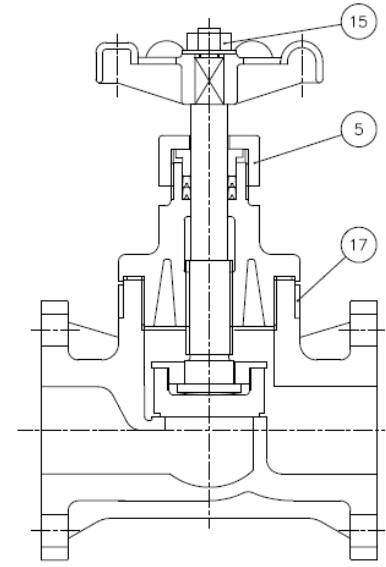
15mm (1/2") - 32mm (1 1/4")



Details of section "a"



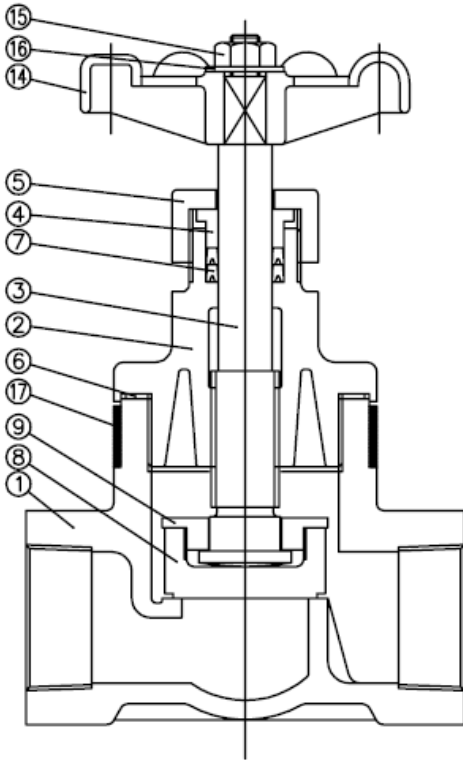
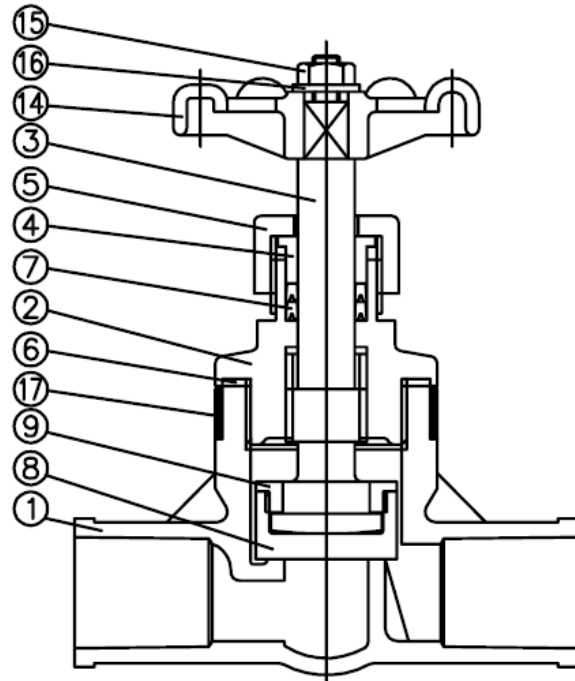
40mm (1 1/4") - 50mm (2")



PART NO./NAME	QTY	MATERIAL	PART NO./NAME	QTY	MATERIAL
1 BODY	1	U-PVC, PP	15 NUT ( A )	1	U-PVC Used for 15 to 50mm (1/2" - 2").
2 BONNET	1	U-PVC, PP		2	STAINLESS STEEL Used for 65 to 100mm (2 1/2" - 4").
3 STEM <sup>(1)</sup>	1	U-PVC, PP	16 WASHER	1	U-PVC Used for 15 to 50mm (1/2" - 2").
4 PACKING GLAND	1	U-PVC, PP		1	STAINLESS STEEL Used for 65 to 100mm (2 1/2" - 4").
5 GLAND NUT <sup>(2)</sup>	1	U-PVC	17 REINFORCEMENT RING	1	STAINLESS STEEL Used for 15 to 50mm (1/2" - 2") for body material of PP.
6 PACKING <sup>(3)</sup>	1	EPDM, etc.	18 STUD NUT	2	COPPER ALLOY Used for 65 to 100mm (2 1/2" - 4").
7 GLAND PACKING	1Set	EPDM, PTFE	19 EMBEDDED STEM PITTING	1	Chromized STEEL Used for 65 to 100mm (2 1/2" - 4").
8 DISC	1	PP	20 EMBEDDED SUPPORT PITTING	1	BRONZE CASTING Used for 65 to 100mm (2 1/2" - 4").
9 STEM HOLDER	1	PP			
10 STEM WITH TRAPEZOIDAL SCREW	1	COPPER ALLOY Used for 65 to 100mm (2 1/2" - 4").			
11 HEX BOLT/NUT	8	STAINLESS STEEL Used for 65 to 100mm (2 1/2" - 4").			
12 STUD BOLT/NUT	2	STAINLESS STEEL Used for 65 to 100mm (2 1/2" - 4").			
13 STEM SUPPORT	1	PP Used for 65 to 100mm (2 1/2" - 4").			
14 HANDLE WHEEL	1	PP			

(1) For 65 to 100 mm, PP only. (2) Used for 15 to 50 mm.

(3) In case that GLAND PACKING is PTFE; EPDM coated with PTFE.

**THREADED, SOCKET**
THREADED

SOCKET


PART NO./NAME	QTY	MATERIAL
1 BODY <sup>(1)</sup>	1	U-PVC, PP
2 BONNET	1	U-PVC, PP
3 STEM	1	U-PVC, PP
4 GLAND	1	U-PVC, PP
5 GLAND NUT	1	U-PVC, PP
6 SHEET GASKET <sup>(2)</sup>	1	EPDM, etc.
7 GLAND PACKING	1Set	EPDM, PTFE

PART NO./NAME	QTY	MATERIAL
8 DISC	1	PP
9 STEM HOLDER	1	PP
14 HAND WHEEL	1	PP
15 NUT ( A )	1	U-PVC
16 WASHER	1	U-PVC
17 RING FOR REINFORCING	1	STAINLESS STEEL Used for PP body.

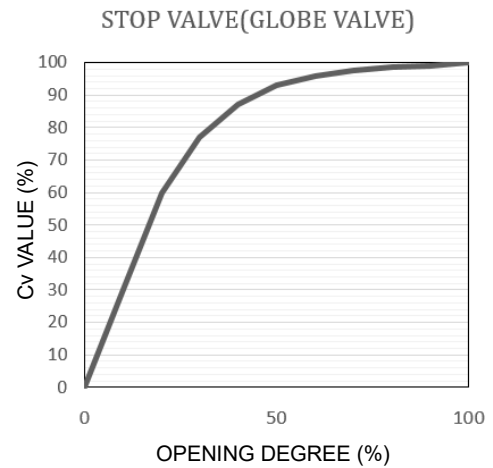
(1) In the case of socket end it is only U-PVC. (2) In case that GLAND PACKING is PTFE; EPDM coated with PTFE.

## Cv value for each opening degree

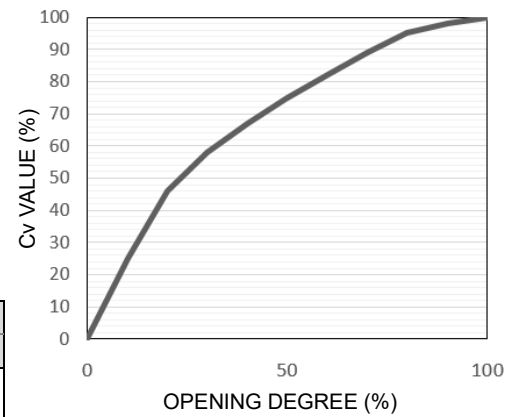
STOP VALVE (GLOBE VALVE)

mm	15	20	25	32	40	50	65	80	100
inch	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
FULL-OPEN Cv VALUE	4.1	6.4	9.7	18	22	29	57	78	115

The values shown are reference values, not guaranteed values.



STOP VALVE(GLOBE VALVE)  
#NEEDLE TYPE



STOP VALVE (GLOBE VALVE) #NEEDLE TYPE

mm	15	20	25	40	50	65	80	100
inch	1/2	3/4	1	1 1/2	2	2 1/2	3	4
FULL-OPEN Cv VALUE	3.3	5.2	7.5	19	28	58	85	109

The values shown are reference values, not guaranteed values.

## Operating torque at maximum working pressure

STOP VALVE (GLOBE VALVE)

UNIT : N · m

mm	inch	Operation torque (O→S)
15	1/2	3.0
20	3/4	3.0
25	1	8.0
32	1 1/4	10.0
40	1 1/2	12.0
50	2	14.0
65	2 1/2	18.0
80	3	24.0
100	4	36.0

## Product weight

STOP VALVE (GLOBE VALVE)

Unit: kg

mm	inch	FLANGED(JIS 10K)		SOCKET(JIS) THREADED	
		U-PVC	PP	U-PVC	PP
15	1/2	0.5	0.4	0.3	0.2
20	3/4	0.7	0.5	0.3	0.3
25	1	1.0	0.7	0.6	0.4
32	1 1/4	1.2	0.9	0.7	-
40	1 1/2	2.1	1.4	1.3	-
50	2	2.7	1.9	1.8	-
65	2 1/2	4.5	3.8	-	-
80	3	6.2	3.8	-	-
100	4	9.9	6.5	-	-

## Product model code list

STOP VALVE (GLOBE VALVE)

ACTUATION	TYPE	OPERATING SYSTEM	BODY MATERIAL	SEAL MATERIAL	CONNECTION	STANDARD	SIZE
<b>V</b>	<b>ST</b>	<b>MH</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>*</b>	<b>***</b>
: V MANUAL VALVE	: ST STOP VALVE	: MH ROUND HANDLE	: U U-PVC P PP	: E EPDM T PTFE	: S SOCKET N THREADED F FLANGED	: J JIS 1 JIS 10K 5 JIS 5K	: 015 15mm ? 100 100mm

## 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\\_6\\_01.pdf](http://www.asahi-yukizai.co.jp/en/product/mt_pdf/a_manual_Valve_6_01.pdf)