

Easy-to-connect stop valve integrated with Super 300 Type PILLAR Fitting™



■ Features

■ Excellent chemical resistance

The wetted parts are made of PFA or PTFE, enabling this product to cope with various types of liquid chemicals.

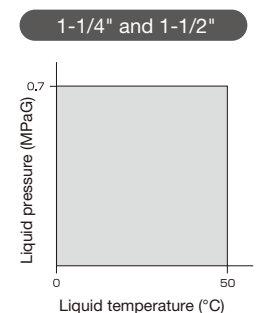
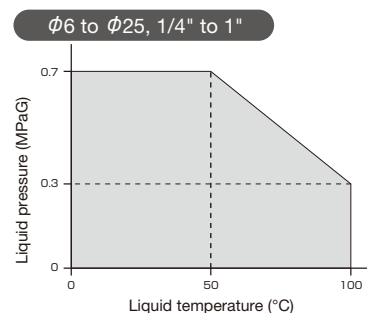
■ Rich lineup of products in different sizes

Our products support 6 to 25 mm or 1/4" to 1-1/2" diameter tubes.

Specifications

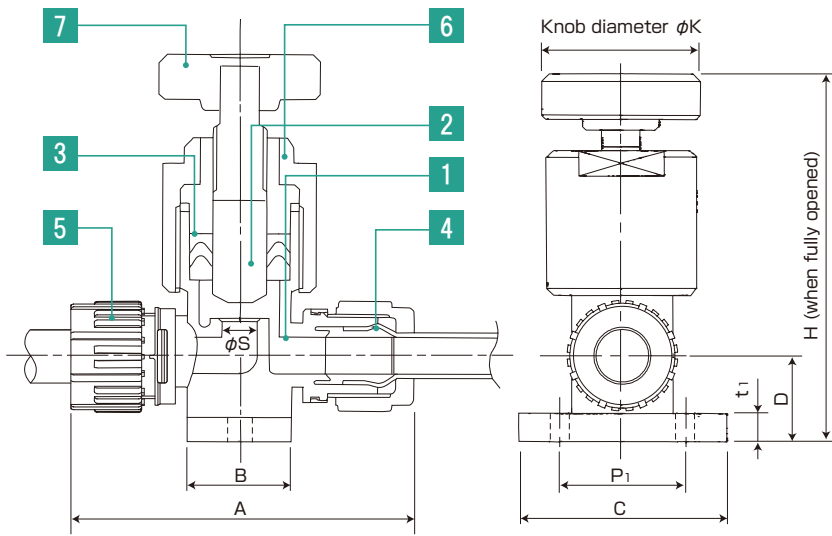
- ▶ Maximum operating temperature: 100°C
(50°C for 1-1/4" and 1-1/2" diameter tubes)
- ▶ Maximum operating pressure: 0.7 MPaG
- ▶ Applicable fluid: Liquid
- ▶ Ambient temperature range: 0 to 60°C
(0 to 50°C for 1-1/4" and 1-1/2" diameter tubes)
- ▶ Operating method: Manual

■ Operating range

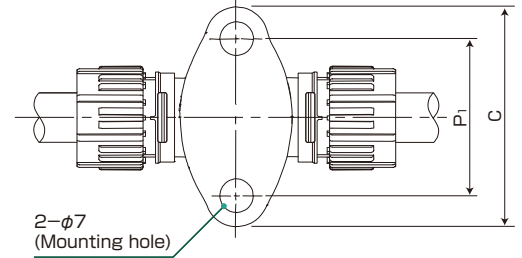


PILAFLON™ Stop Valve PSV series

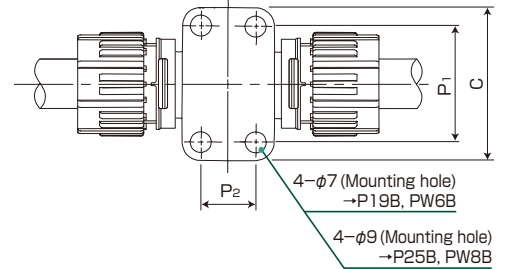
Cross-sectional structural drawing ($\phi 6$ to $\phi 25$, 1/4" to 1")



PSV-P06B to P12B PSV-PW2B to PW4B



PSV-P19B, P25B PSV-PW6B, PW8B



Main parts list

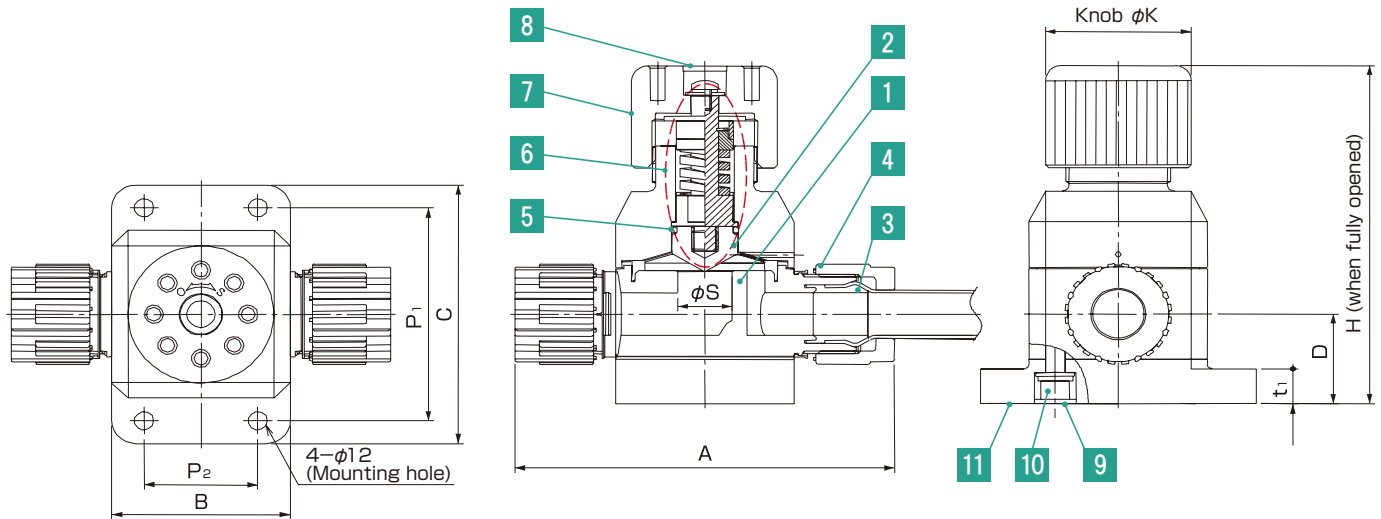
Parts	No.	Part name	Material	Parts	No.	Part name	Material
Wetted parts	1	Valve body	PFA	Non-wetted parts	5	Union nut	PFA
	2	Stem	PFA		6	Outer ring	P.P
	3	V-ring set	PTFE		7	Knob	P.P
	4	Sleeve	PFA				

Size table

Unit: mm

mm-based tube												
Product No.	Tube size (O.D×I.D)	H (when fully opened)	A	B	C	D	t ₁	P ₁	P ₂	Knob diameter φK	Orifice diameter φS	
PSV-P06B	6×4	79	64	17	43	16	5	31	—	30	4	
PSV-P08B	8×6	84.5	72	19	44	17.5	5	32	—	30	5	
PSV-P10B	10×8	94	84	24	51	21	7	38	—	35	7	
PSV-P12B	12×10	104	95	27	55	23	7	42	—	42	9	
PSV-P19B	19×15.8	121	119	36	60	28	7	46	22	50	14	
PSV-P25B	25×22	151	148	50	79	33	7	62	33	70	20	
Inch-based tube												
Product No.	Tube size (O.D×I.D)	H (when fully opened)	A	B	C	D	t ₁	P ₁	P ₂	Knob diameter φK	Orifice diameter φS	
PSV-PW2B	6.35×3.95	79	64	17	43	16	5	31	—	30	4	
PSV-PW3B	9.53×6.33	94	84	24	51	21	7	38	—	35	7	
PSV-PW4B	12.7×9.5	104	95	27	55	23	7	42	—	42	9	
PSV-PW6B	19 ×15.8	121	119	36	60	28	7	46	22	50	14	
PSV-PW8B	25.4×22.2	151	148	50	79	33	7	62	33	70	20	

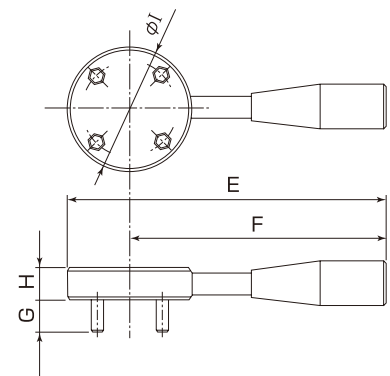
Cross-sectional structural drawing (1-1/4" and 1-1/2")



Main parts list

Parts	No.	Part name	Material
Wetted parts	1	Valve body	PTFE
	2	Diaphragm	PTFE
	3	Sleeve	PFA
Non-wetted parts	4	Union nut	PFA
	5	O-ring	FR
	6	Stem set	SUS
	7	Knob	P.P
	8	Cap A	FR
	9	Cap B	FR
	10	Through-bolt	SUS (Fluorine coating)
	11	Base	P.P


Valve open/close handle



Size table

Unit: mm

Product No.	Tube size		H (when fully opened)	A	B	C	D	t ₁	P ₁	P ₂	Knob diameter φK	Orifice diameter φS
	O.D×I.D	Tolerance O.D. Thickness										
PSV-PW10SA	31.8×28.0 (1-1/4" × 1-1/10")	±0.25 ±0.15	222	234	110	170	59	23	140	70	90	28.0
PSV-PW12SA	38.1×33.7 (1-1/2" × 1-21/64")	±0.25 ±0.15	228	234	110	170	62	23	140	70	90	33.7

Valve open/close handle		Handle size (mm)					Material Aluminum/stainless steel (Grip part: Phenolic resin)
		E	F	G	H	φ I	
P-VH		203	163	20	20	80	

Check valve integrated with Super 300 Type PILLAR FittingTM



■ Features

■ Excellent chemical resistance

The valve body is made of PFA, enabling this product to cope with various types of liquid chemicals.

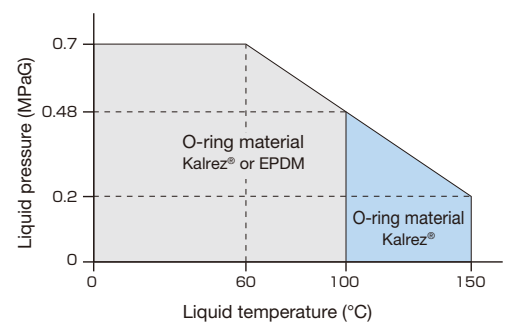
■ Smooth opening/closing movement

The opening pressure is as low as 0.01 MPa, allowing fluid to flow smoothly.

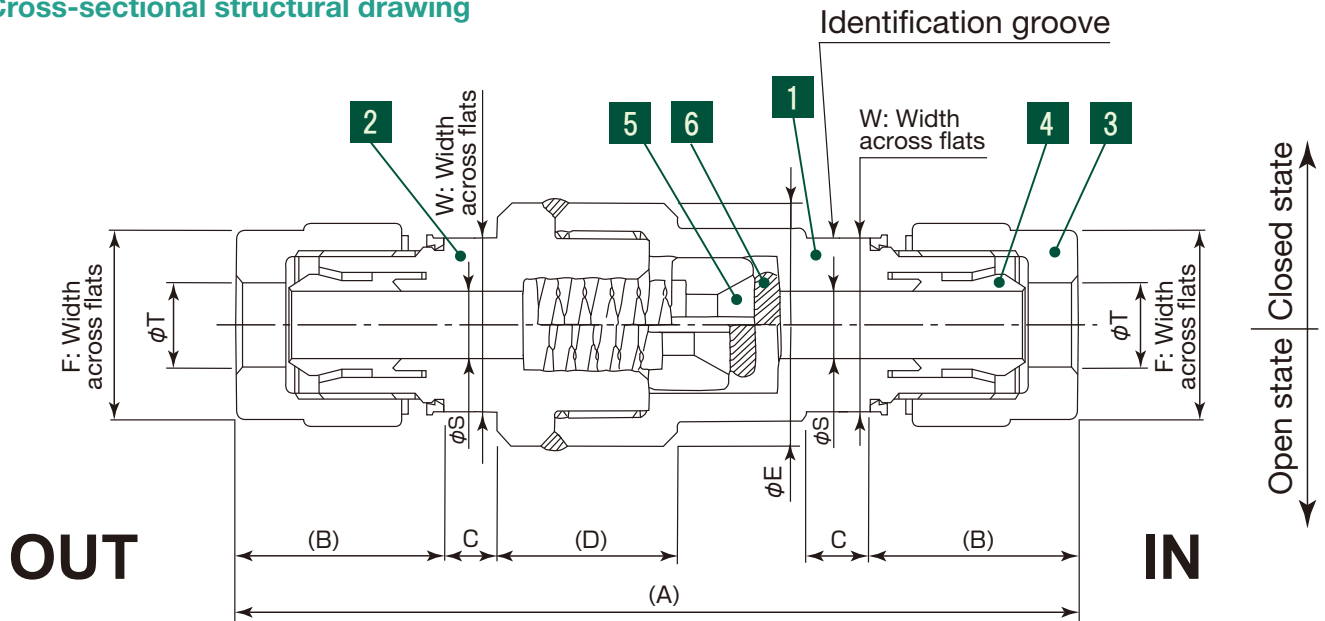
Specifications

- ▶ Maximum operating temperature:
O-ring material Kalrez[®] 150°C
O-ring material EPDM 100°C
- ▶ Maximum operating pressure: 0.7 MPaG
- ▶ Opening pressure: 0.01 MPaG
- ▶ Sealing pressure: 0.05 MPaG
- ▶ Applicable fluid: Liquid
- ▶ Ambient temperature range: 0 to 60°C

■ Operating range



Cross-sectional structural drawing



Main parts list

No.	Part name	Material
1	Body 1	P F A
2	Body 2	P F A
3	Union nut	P F A
4	Sleeve	P F A
5	Check assembly	P F A
6	O-ring	Kalrez® or EPDM

Size table

Unit: mm

mm-based tube									
Product No.	Tube size ϕ_T (O.D×I.D)	(A)	(B)	C	(D)	ϕ_E	F	W	Orifice diameter ϕ_S
PGB P4-4B-*	4 × 3	77	14.7	7	20	26	12	12	3.1
PGB P6-6B-*	6 × 4	85.5	19	7	20	26	16	15	4
PGB P8-8B-*	8 × 6	91.5	22	7	20	26	19	18	6
Inch-based tube									
Product No.	Tube size ϕ_T (O.D×I.D)	(A)	(B)	C	(D)	ϕ_E	F	W	Orifice diameter ϕ_S
PGB PW2-W2B-*	6.35 × 3.95	85.5	19	7	20	26	16	15	4

*" in each product No. indicates one of the O-ring material symbols shown below.

O-ring material symbol	Material	Valve body 1 identification groove
K	Kalrez®	Nonexistent
E	EPDM	Present

Note: The fitting cross-sectional structure of PGB P4-4B-* differs from the one shown in the figure above.

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Safety precaution

● When using this product, please use correctly and pay sufficient attention to safety.

* Please understand that this catalog may change without prior notice.
* The values shown on this catalog are reference values, not guaranteed values.

Flow control valve integrated with Super 300 Type PILLAR FittingTM



■ Features

■ Excellent chemical resistance

The valve body is made of PFA, enabling this product to cope with various types of liquid chemicals.

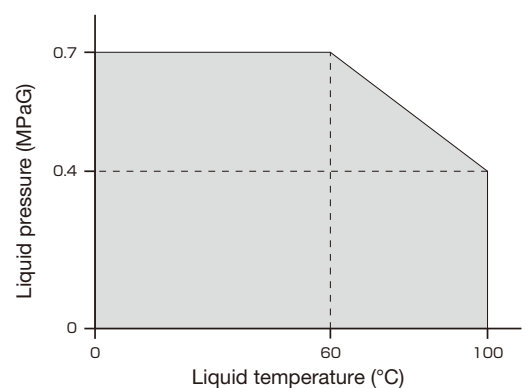
■ Combination of orifice shape and needle shape

In addition to the features of being compact and lightweight, this product allows slight flow rate adjustment.

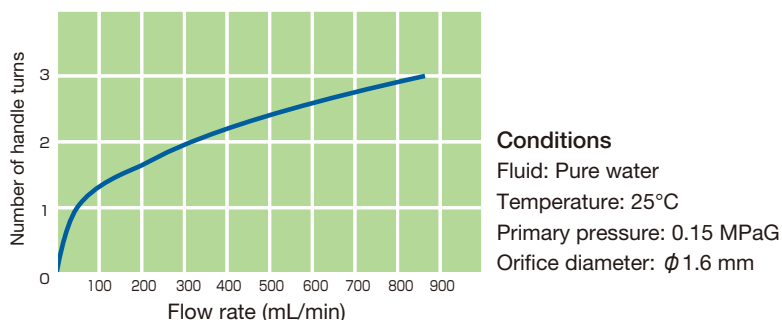
Specifications

- ▶ Maximum operating temperature: 100°C
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■ Operating range



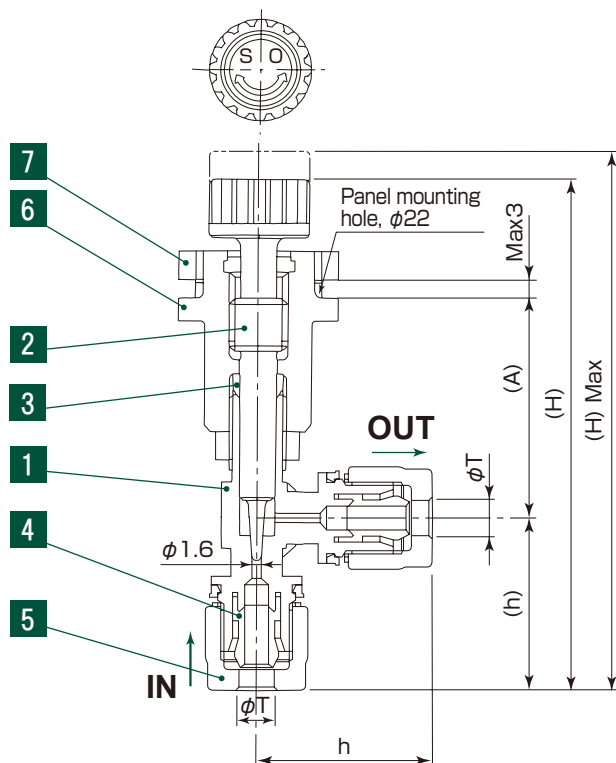
Performance curve



Conditions
 Fluid: Pure water
 Temperature: 25°C
 Primary pressure: 0.15 MPaG
 Orifice diameter: ϕ 1.6 mm

Note: This performance curve shows reference values, not specifications.

Cross-sectional structural drawing



Main parts list

Parts	No.	Part name	Material
Wetted parts	1	Valve body	PFA
	2	Needle	PFA
	3	Ferrule	PTFE
	4	Sleeve	PFA
Non-wetted parts	5	Union nut	PFA
	6	Outer nut	P.P
	7	Lock nut	PFA

Size table

Unit: mm

mm-based tube							
Product No.	Tube size ϕ T (O.D×I.D)	(H) (max)	(H)	Orifice diameter ϕ S	(h)	(A)	Panel mounting hole
PCAP-P3B	3 × 2	87.5	82.5	1.6	24	37	22
PCAP-P6B	6 × 4	92.2	87.5		29.5		
Inch-based tube							
Product No.	Tube size ϕ T (O.D×I.D)	(H) (max)	(H)	Orifice diameter ϕ S	(h)	(A)	Panel mounting hole
PCAP-PW1B	3.18×2.18	87.5	82.5	1.6	24	37	22
PCAP-PW2B	6.35×3.95	92.2	87.5		29.5		

Note: The fitting cross-sectional structure of PCAP-P3B and PCAP-PW1B differs from the one shown in the figure above.



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