

Plug valve

Pt4 & Pt6 series

Total 316 stainless steel structure

Max. working pressure 20.6 Mpa (3000psi)

The highest permissible temperature 204°C (400°F)

Connector type: 1/8 to 1/2 in. and 6 to 12 mm

Bite type tube fittings or NPT threaded connector

Plug valve

Structural features

Parts details

Pressure-temperature
rated value

Test

Data on flows

Operation

Coding rule for item No.

Order info & size



Structural features

With small torque, 1/4 circle operation, simple structure and compact design, it can be cut off reliably in the forward direction under the rated pressure.

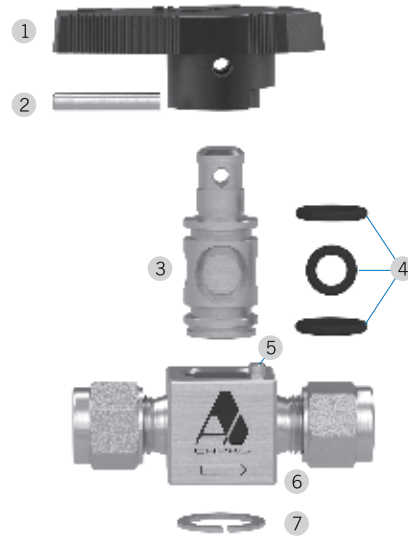
- Straight-through type
- Simple structure, which is easy to clean and maintain
- Replaceable plug elements
- Positive throttling
- One-piece type valve body
- Has O-ring sealing towards atmosphere

Parts details

Parts details		Material/ASTM standard
1	Handle	Polyetherimide (PEI)
2	Pin	316 SS
3	Cock	316 SS / A479 coated by PTFE
4	O-ring	Fluorocarbon FKM coated by PTFE

Parts details		Material/ASTM standard
5	Pin	316 SS
6	Valve body	316 SS / A479
7	Elastic check ring	632 SS

Note: Other structural materials can be customized.



Pressure-temperature rated value

Temperature °C (°F)	Working pressure MPa(psi)
-23(-10) to 37(100)	20.6(3000)
93(200)	20.6(3000)
148(300)	6.9(1000)
204(400)	6.9(1000)

Test

Before leaving the factory, each plug valve has passed the 7MPa nitrogen pressure test. There is no bubble producing in the shell within 1min.



1. If contraflow occurs, the max. differential pressure should exceed 1MPa (150psi).
2. The throttling of contraflow may damage the O-ring.

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Data on flows (20°C)

Connector		Cv	Series	Pressure drop relative to the atmosphere KPa (psi)					
				6.9 (1)	34 (5)	69 (10)	6.9 (1)	34 (5)	69 (10)
Inlet/outlet	Size			Air mass flow, std L/min			Water flow, L/min		
Bite type tube fittings	1/8 in.	0.10	PT4	8.4	22	31	0.37	0.75	1.1
	1/4 in.	1.6	PT4	160	360	500	6.0	13	19
	3/8 in.	1.1	PT4	110	250	330	4.1	9.4	13
		6.4	PT6	650	1470	2030	24	52	75
	1/2 in.	4.4	PT6	450	990	1380	16	37	49
	6 mm	1.6	PT4	160	360	500	6.0	13	19
	8 mm	6.4	PT6	650	1470	2030	24	52	75
	10 mm								
12 mm	4.8	PT6	480	1100	1520	18	37	56	
NPT internal thread	1/8 in.	1.2	PT4	120	270	360	4.5	10	14
	1/4 in.	0.9	PT4	93	200	280	3.4	7.5	10
		4.3	PT6	450	960	1350	16	36	49
	1/2 in.	2.7	PT6	280	590	840	10	22	32
NPT external thread	1/8 in.	1.0	PT4	100	220	310	3.7	8.3	12
	1/4 in.								
	1/2 in.	2.4	PT6	250	530	760	9.0	20	28
NPT external thread/ bite type tube fittings	1/4 in.	0.9	PT4	93	200	280	3.4	7.5	10
NPT external thread/ NPT internal thread	1/4 in.	1.0	PT4	100	220	310	3.7	8.3	12

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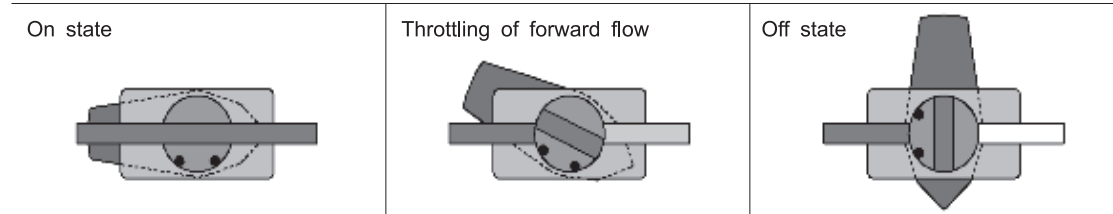
Data on flows

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Coding rule for item No.

Order info & size

Operation



Coding rule for item No.

SS – PT4 – M 4 – K4

1 2 3 4 5

1	Material type SS — 316 stainless steel
2	Series PT4 — The Cv of this series is less than 2 PT6 — The Cv of this series is more than 2
3	Upstream connector type K — Bite type tube fittings F — NPT internal thread M — NPT external thread

4	Size of upstream connector British system: size value (Unit: in ×16) For example: 1/2×16=8, 1/2in. NPT internal thread is indicated by F8 Metric system: size value (Unit: mm) + "mm"
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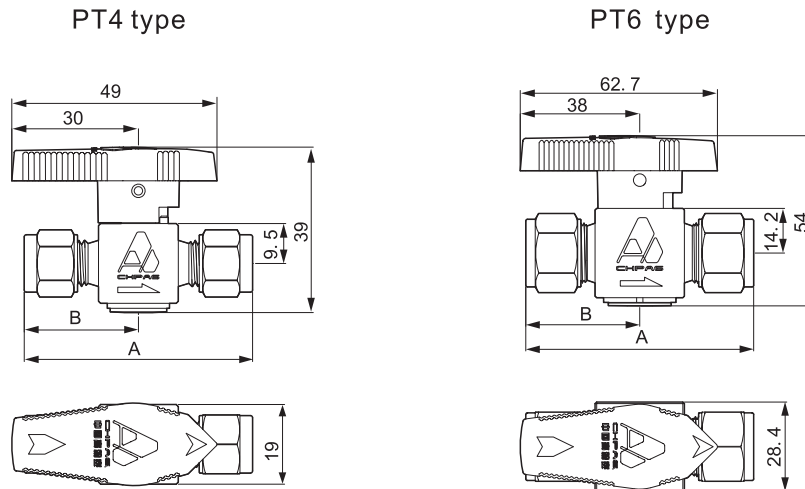
5	Type & size of downstream connector If the types and sizes of upstream and downstream connectors are the same, the type and size codes of downstream connector can be omitted. If the upstream and down stream connectors are different, add the type and size of downstream connector according to the coding rule of upstream connector.
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For example: SS - PT4 - M 4 - K4

It means PT4 series plug valve, whose structural material is 316SS. The upstream connector is 1/4 in. external thread and the downstream connector is 1/4 in. bite type tube fittings.

Order info & size

The displayed sizes are the specifications when screwing up the nuts of bite type tube fitting (The sizes are only for reference.)



Connector		Item No.	Series	Size (mm)		
Upstream/downstream	Size			Aperture	A	B
Bite type tube fittings	1/8 in.	SS-PT4-K2	PT4	2.3	50.5	25
	1/4 in.	SS-PT4-K4	PT4	4.4	55	27.5
	3/8 in.	SS-PT4-K6	PT4	4.4	58	29
		SS-PT6-K6	PT6	7.2	67.5	33.5
	1/2 in.	SS-PT6-K8	PT6	7.2	73	36.5
	6 mm	SS-PT4-K6mm	PT4	4.4	55	27.5
	8 mm	SS-PT6-K8mm	PT6	7.2	67.5	33.5
	10 mm	SS-PT6-K10mm	PT6	7.2	68	34
NPT internal thread	12 mm	SS-PT6-K12mm	PT6	7.2	75	37.5
	1/8 in.	SS-PT4-F2	PT4	4.4	45	22.5
		SS-PT4-F4	PT4	4.4	53	26.5
		SS-PT6-F4	PT6	7.2	60.5	30
NPT external thread	1/2 in.	SS-PT6-F8	PT6	7.2	73	36.5
	1/8 in.	SS-PT4-M2	PT4	4.4	39	19.5
		SS-PT4-M4	PT4	4.4	48	24
NPT external thread/ Bite type tube fittings	1/4 in.	SS-PT6-M8	PT6	7.2	67	33.5
	1/4 in.	SS-PT4-M4-K4	PT4	4.4	51	25.5
NPT internal thread/ NPT external thread	1/4 in.	SS-PT4-M4-F4	PT4	4.4	51	25.5

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