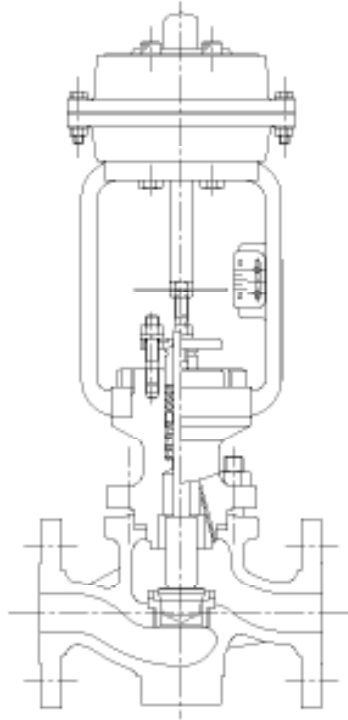
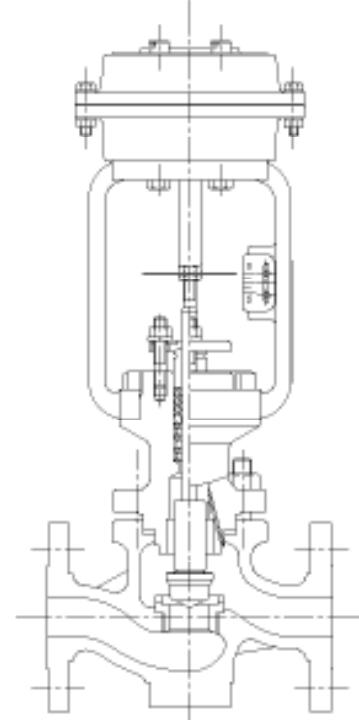


General Specifications	Glove Type Single-seated Control Valve	T-8110
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OT-8110 Glove Type Single-seated Control Valve

T-8110 (Air to Open·RA)

T-8110 (Air to Close·DA)
Feature

- The T-8110-series Single-seat Control Valve is a compact, lightweight high-performance device.
- The T-8110 incorporates a high-capacity S-type body that minimizes pressure loss, and have excellent quake resistance.
- This product combined with a compact, high-output multi-spring actuator works as a compact, lightweight control valve.

■ 1. Standard Specifications
Table·1 Standard specification table

Model number	T-8110
Model name	Two-way type
End connection standard	JIS10~63K,ANSI/ASME150~1500#
Nominal size(A)	15~300
Rated Cv	0.01~1440
Body materials	FCD450(JIS10K only),SCPH2,SCS13A,SCS14A
Bonnet materials	FCD450(JIS10K only),SCPH2,SCS13A,SCS14A
Valve plug materials	SUS316
Seat ring materials	SUS316
Flow characteristics	Equal percentage,linear,ON-OFF
Working pressure range	JIS10~40K,ANSI/ASME150~1500#
Temperature range	0~180°C
Allowable seat leakage volume	ANSI CLASS IV(0.01%Cv),ANSI CLASS V(0.0001%Cv)
Gland packing	V-PTFE,High-PressureV-PTFE,V-PTFE+O"Ring,Grahite
Gasket	PTFE,Grahite

■ **2、Main body structure**

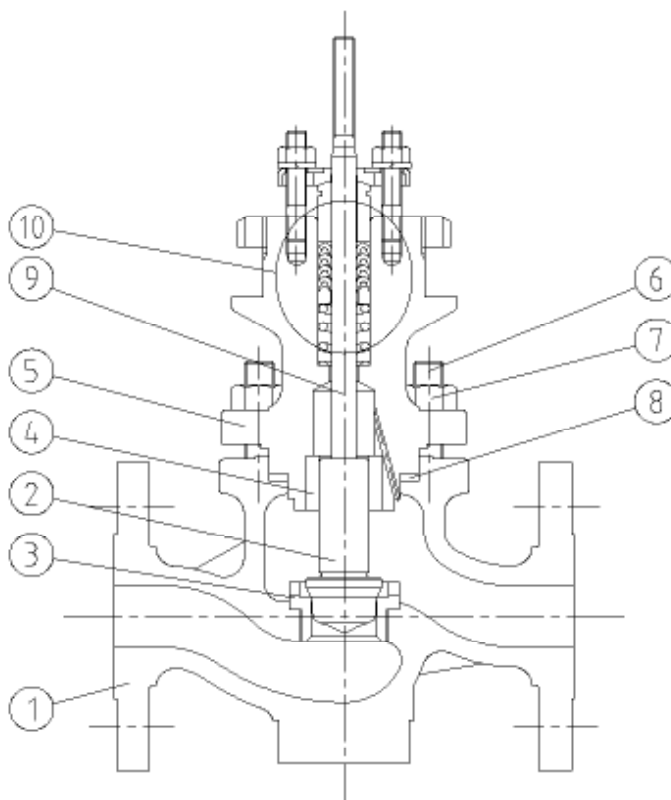


Fig.1 Body structural chart

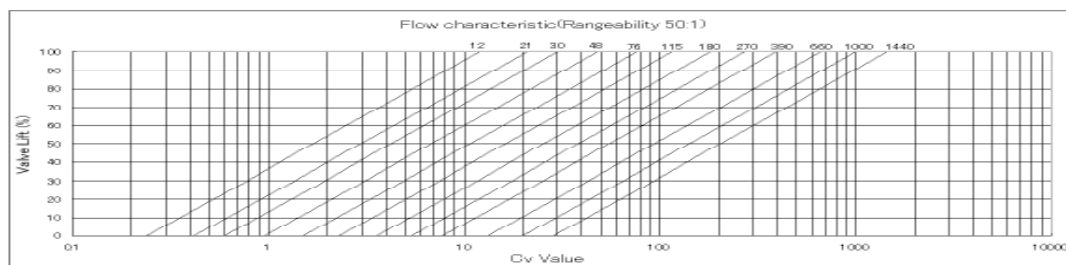
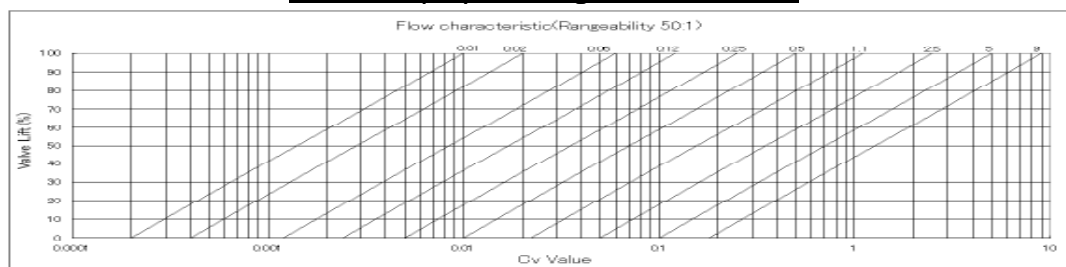
Table·2 Main part material

Number	Parts name	Standard material
1	Body	FCD450,SCPH2,SCS13ASCS14A
2	Valve plug	SUS316
3	Seat ring	SUS316
4	Guide bush	SUS630,SUS316
5	Bonnet	FCD450,SCPH2,SCS13ASCS14A
6	Stud bolt	SUS304
7	Hexagonal nut	SUS304
8	Gasket	PTFE,P#4003,Grahite
9	Valve stem	SUS316
10	Gland parts	※

※We will report by 'Gland structure' later.

■ **3、Flow characteristic**

Table·3 Equalpercentage characteristics



■ 4. Rated Cv value

Table-4 Rated Cv Value

Nominal size	Port size	Equalpercentage		on-off	
		Rated Cv value	Stroke	Rated Cv value	Stroke
15A~25A	4A No.5	0.01	13mm	-	8mm
	4A No.4	0.02		-	
	4A No.3	0.06		-	
	4A No.2	0.12		-	
	4A No.1	0.25		0.4	
	5A	0.5		0.7	
	7A	1.1		1.3	
	10A	2.5		2.8	
	15A	5		6.3	
	20A	9		11	
	25A	12		13	
40A	20A	9	25mm	-	13mm
	25A	12		-	
	32A	21		-	
	40A	30		35	
50A	25A	12	13mm	-	25mm
	32A	21	-		
	40A	30	-		
	50A	48	54		
65A	32A	21	25mm	-	25mm
	40A	30		-	
	50A	48		-	
	65A	76		85	
80A	40A	30	40mm	-	40mm
	50A	48		-	
	65A	76		-	
	80A	115		130	
100A	50A	48	25mm	-	40mm
	65A	76	-		
	80A	115	-		
	100A	180	205		
125A	80A	115	40mm	-	60mm
	100A	180	-		
	125A	270	60mm	270	
150A	100A	180	40mm	-	60mm
	125A	270	-		
	150A	390	410		
200A	125A	270	60mm	-	75mm
	150A	390		-	
	200A	660		680	
250A	150A	390	75mm	-	75mm
	200A	660		-	
	250A	1000		1100	
300A	200A	660	60mm	-	75mm
	250A	1000	75mm	-	
	300A	1440		1600	

■ 5. Standard Specifications of drive part

【T-5000-series multi-spring diaphragm actuator】

Model name	: Multi springs type diaphragm actuator T-5000 series
Model number	: T-57□□、T-58□□、T-59□□、T-50□□
Action	: Direct action(DA),Reverse action(RA)
Diaphragm case materials	: Aluminum casting product (alumite processing)
Diaphragm materials	: CR rubber with base fabric
Yoke materials	: FC200
Actuator air pressure	: See Table 7,8,9,10
Drive part tightening pressure	: See Table 7,8,9,10
Ambient temperature	: -30~60°C
Coating color	: Yellow (Munsell 2.5Y 8/13)
Air piping connection	: Rc1/4

6. Option

[Body]

Body(Bonnet) materials	: HastelloyR,SCS19A,TB340,
Valve plug Additional specification	: See Figure 2
Valve plug Shape	: V-port,One-Side Cut
Gland Structure	: See Figure 4
Jacket structure	: Full-Jacket,Semi-Jacket
Guide flame/bush materials	: All-in-one design,Chrysanthemum Type, Prevention-gnaw
End connection standard	: FF,SW,BW,
Seat ring	: All-Round Welding,Gasket

[Yoke]

Yoke materials : SCPH2,SCS13A

[Actuator]

Manual Hand Wheel	: Top Handle
Coating color	: Each color We might be impossible.
Mechanical stopper	: Maximum/Minimum Stopper
Urgent exhaust function	: In specified time We might be impossible.

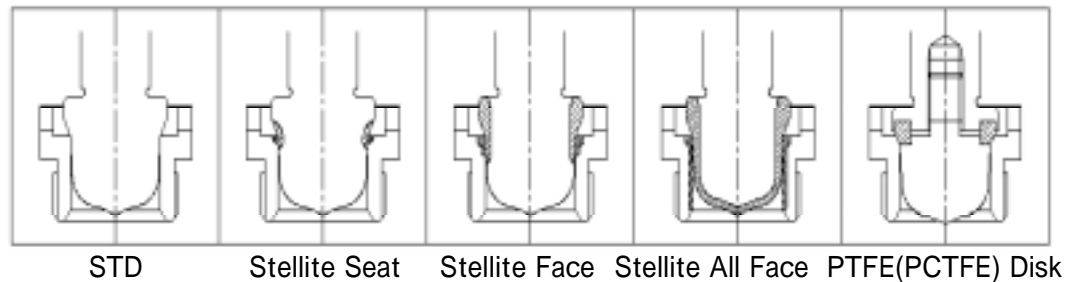
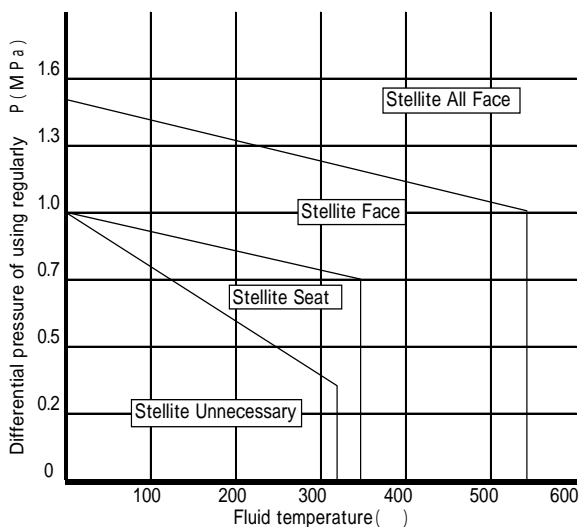


Fig. 2 Valve plug addition detailed specification

For Liquid and Steam



For Gas

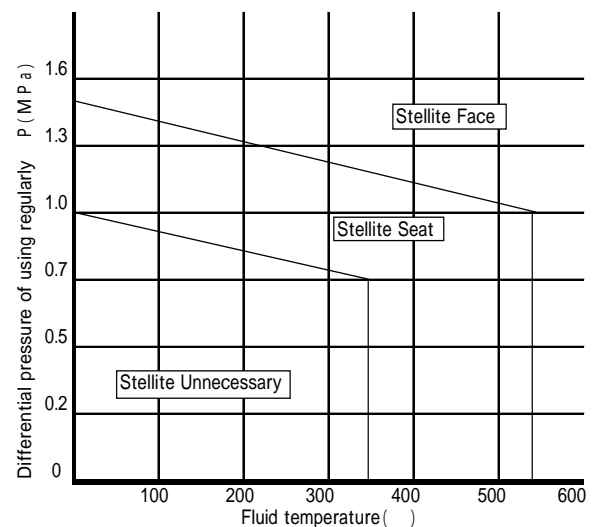


Fig.3 Relation between differential pressure and temperature that needs stellite welding

■ **7. Accessories**

Positioner : IP(TP351),PP(TP601)
 Air Set(Filter-tipped Reducing valve) : XR104,XR108,AW3000
 Solenoid-controlled valve : AG33,MOOU,M15G
 Limit switch : 1LS,1LX,ZE-** etc...
 Adjacent switch : E2F etc...

■ **8. Weight**

Table 5 Weight

JIS10K				JIS20K			
Body Size	STD	Cooling-Fin	Extension	Body Size	STD	Cooling-Fin	Extension
15A	22	23	23	15A	25	26	26
20A	22	23	23	20A	25	26	26
25A	23	24	24	25A	26	27	27
40A	36	37	38	40A	39	40	41
50A	43	46	46	50A	46	49	49
65A	58	61	61	65A	61	64	64
80A	82	88	89	80A	85	91	92
100A	91	102	103	100A	94	105	106
125A	120	131	132	125A	123	134	135
150A	230	252	274	150A	233	255	277
200A	350	390	395	200A	353	393	398
250A	470	520	525	250A	473	523	528
300A	670	740	745	300A	673	743	748

■ **9. Gland structure**

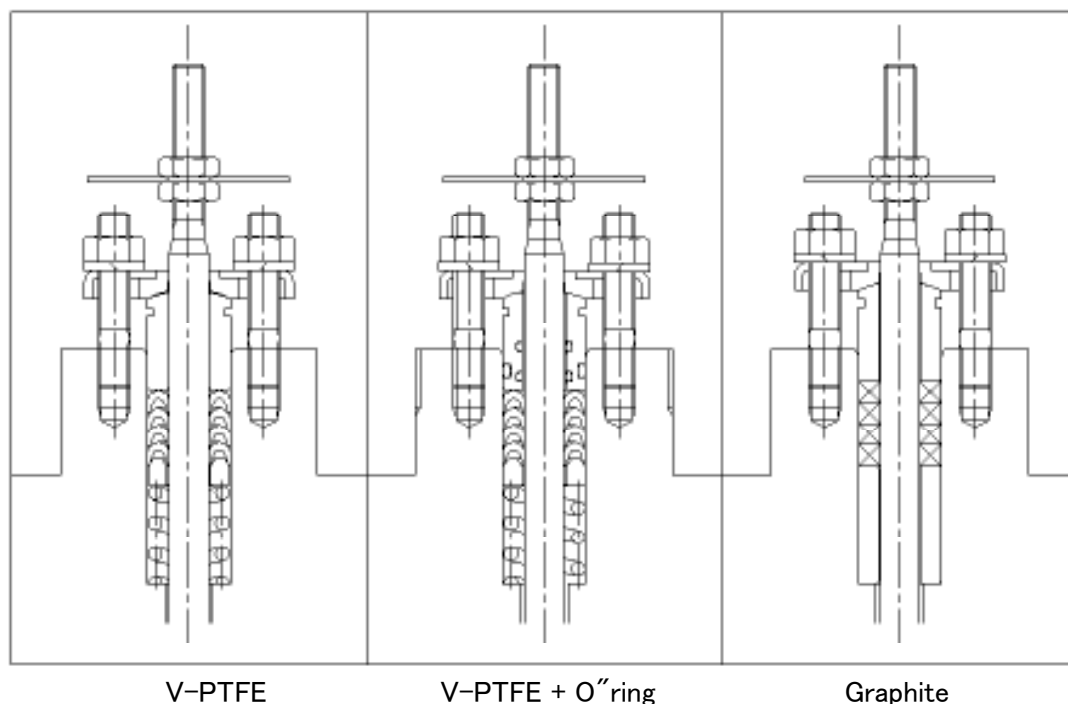
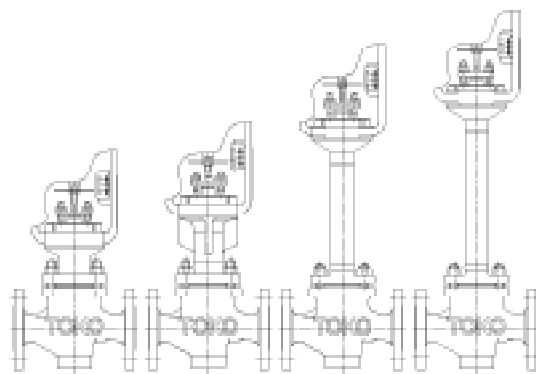


FIG.4 Gland structure

	V-PTFE	V-PTFE + O ring	Graphite
Material	PTFE	PTFE+CR, FPM, NBR	Graphite
Temperature	-15~180°C	CR:-40~110°C FPM:-15~230°C, NBR:-50~120°C	-200~400°C
Pressure	3.0MPa	3.0MPa or more is combined with the gland packing for the high pressure.	15.5MPa

FIG.7 Gland part structural chart

10. Bonnet Shape



STD Cooling fin Extension Log extension

Table 6 Bonnet temperature span for selection

•STD	: 0~180°C
•Cooling Fin	: 180°C以上
•Extension	: -50~0°C
•Long Extension	: -196~-50°C

FIG.8 Various bonnets

- ※When a wrong selection is done, it causes damage and gland leakiness of the gland packing.
- ※The gland-packing will be written later.
- ※So as not to damage Ground-packing when the fluid is a high temperature, it lowers the temperature with the fin.
- ※Extension-bonnet is a bonnet to prevent Gland-packing from freezing when the fluid is a low temperature.

11. Various sizes

Table 7 Size H ,A (Each bonnet shape)

Body Size	JIS	ANSI	A	Total Height H(mm)			
				STD	Cooling Fin	Extension	Long Extension
15	10K,20K	150,300	184,194	388	433	553	603
	30K,40K	600	206	388	433	555	605
	63K	1500	250	441	508	555	605
20	10K,20K	150,300	184,194	388	433	553	603
	30K,40K	600	206	388	433	555	605
	63K	1500	250	441	508	555	605
25	10K,20K	150,300	184,197	398	443	563	613
	30K,40K	600	210	398	443	656	615
	63K	1500	260	441	508	665	804
40	10K,20K	150,300	222,235	457	533	660	713
	30K,40K	600	251	479	614	664	728
	63K	1500	305	519	616	775	945
50	10K,20K	150,300	254,267	473	547	683	728
	30K,40K	600	286	497	667	674	738
	63K	1500	337	577	670	838	944
65	10K,20K	150,300	276,292	586	582	695	750
	30K,40K	600	311	508	678	704	748
	63K	1500	420	606	689	839	939
80	10K,20K	150,300	298,317	586	707	850	883
	30K,40K	600	337	628	818	868	918
	63K	1500	460	747	912	1003	1071
100	10K,20K	150,300	352,368	626	732	868	901
	30K,40K	600	394	862	883	985	1033
	63K	1500	530	810	958	1083	1254
125	10K,20K	150,300	403,425	888			
150	10K,20K	150,300	451,473	944			1272
200	10K,20K	150,300	543,568	962			1410
250	10K,20K	150,300	673,708	1042			
300	10K,20K	150,300	737,775	1035			

- ※There is no data in the blank now.
- ※The above table shows the respective 'standard','Cooling Fin','Extension' and 'Long Extension' heights of the models.
- ※A nonstandard actuator may be used depending on the specifications of the fluid or Gas.

Notes

- The supplied instrumentation air must use dry cleanly and enough air for instrumentation.
- We might change a part of the specification and externals without the refusal for the demand and the quality improvement.

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