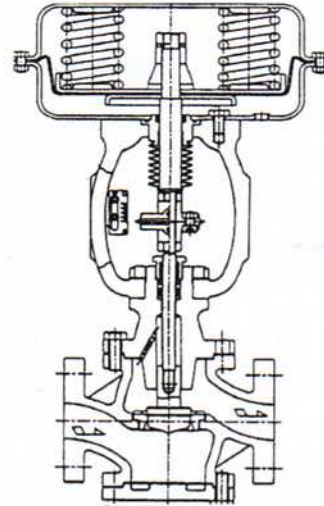


- *The actuators are designed compactly as multi-spring diaphragm operated type, ease of adjustment and permit high trust.*
- *Provide compact design and high performance in conformity with general fluid service, i.e., steam, water, oil, gases.*
- *Provide lower seat leakage.*
- *Produce high operational economy and saving of space.*
- *Molded in packing ring which are spring loaded and self-adjusting in the packing box.*

Diaphragm (RA)  
Actuated Control Valve



Model: D02GS

## Specification

### BODY

- Type : Single seated, direct or reverse type, globe valve.  
 Material : Cast iron(FC250), Carbon steel(SCPH2)  
 Stainless steel(SCS13A, SCS14A, SCS16A)  
 Cast hastelloy C, B,  
 End connections : Flanged end (FF, RF) or Butt-welded type  
 Pressure rating : JIS10K, 20K, 30K, 40K , ANSI Class150, 300, 600.  
 DIN PN10, PN16, PN25, PN40.  
 Bonnet : Standard (-17°C ~ +210°C)  
 Radiator fin (-20°C ~ +300°C)  
 Extension (-196°C ~ +280°C)  
 Bellows seal (-196°C ~ +350°C)  
 Gland packing : V-teflon, Grafoil.  
 Gaskets : Non-asbestos, Teflon, Gylon, SUS304/Grafoil, SUS316/Grafoil  
 Guiding : Top guide, Top and bottom guide.

### Trim

- Stem : SUS304, SUS316, SUS316L  
 Valve plug : Single seated  
 Plug characteristics : Equal percentage, linear and on-off.  
 Plug action : Push-down close  
 Materials : SUS304, SUS316, SUS316L, SUS440C, Hastelloy C, B

**Actuator**

Type : Multi-spring type single diaphragm actuated,direct or reverse.

Diaphragm material : Neoprene with fabric insert.

Air supply : 1.4 , 2.4 , 2.8 , 3.2kg/cm<sup>2</sup>

Spring range : 0.2~1.0 kg/cm<sup>2</sup> , 0.4~2.0 kg/cm<sup>2</sup>  
0.6~2.2 kg/cm<sup>2</sup> , 0.8~2.4 kg/cm<sup>2</sup>

Pneumatic tubing connection : 1/4" female tap.

Ambient temperature : -20°C~+70°C

**Valve action**

Air to open or air to close by using direct or reverse actuator.

**Accessory**

Handwheel,Positioner,Solenoid Valve,Limit Switch,Air Set or Others.

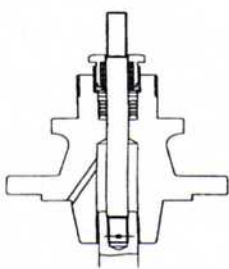
**Performance**

Rangeability: 1/2" through 1" 30:1 , 1-1/2" through 6" 50:1

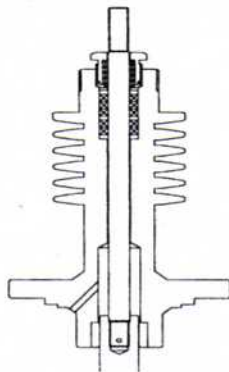
Allowable seat leakage:

Metal seat: Less than 0.01% of rated Cv (ANSI B16.104 ClassIV)

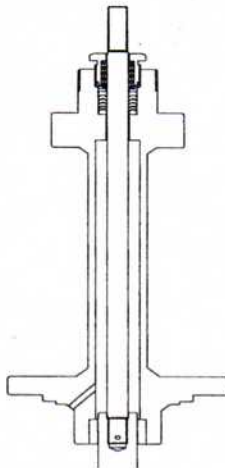
Soft seat:ANSI 16.104 Calss VI

**Type of Bonnets**

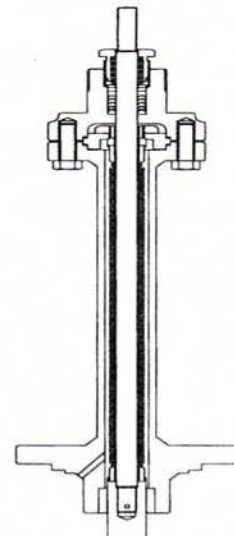
**Standard**  
Temperature:  
-17°C~+210°C



**Radiator Fin**  
Temperature:  
-20°C~+300°C



**Extension**  
Temperature:  
-196 °C~+280°C



**Bellows Seal**  
Temperature:  
-196°C~+350°C

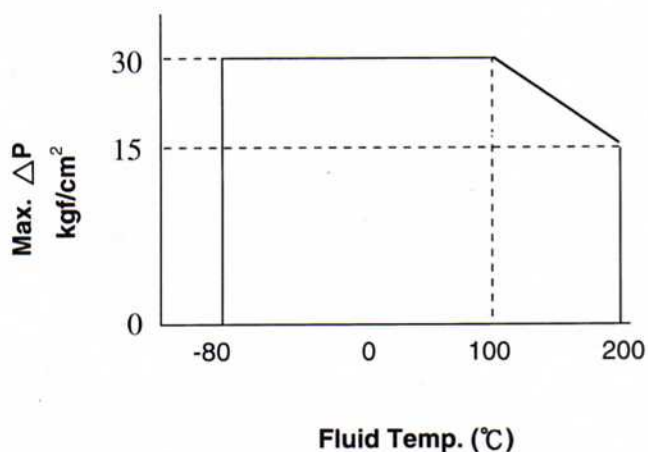
**Typical Combination of Materials**

Parts Name		Materials			
Body, Bonnet		FC250	SCPH2	SCS13A	SCS14A
Trim	Seat Ring	SUS304			SUS316
	Valve Plug	SUS304			SUS316
	Valve Stem	SUS316			SUS316
	Guide Bushing	SUS304			SUS316
Stud Bolt & Nut		SS400	S45C (H)	SUS304	SUS304

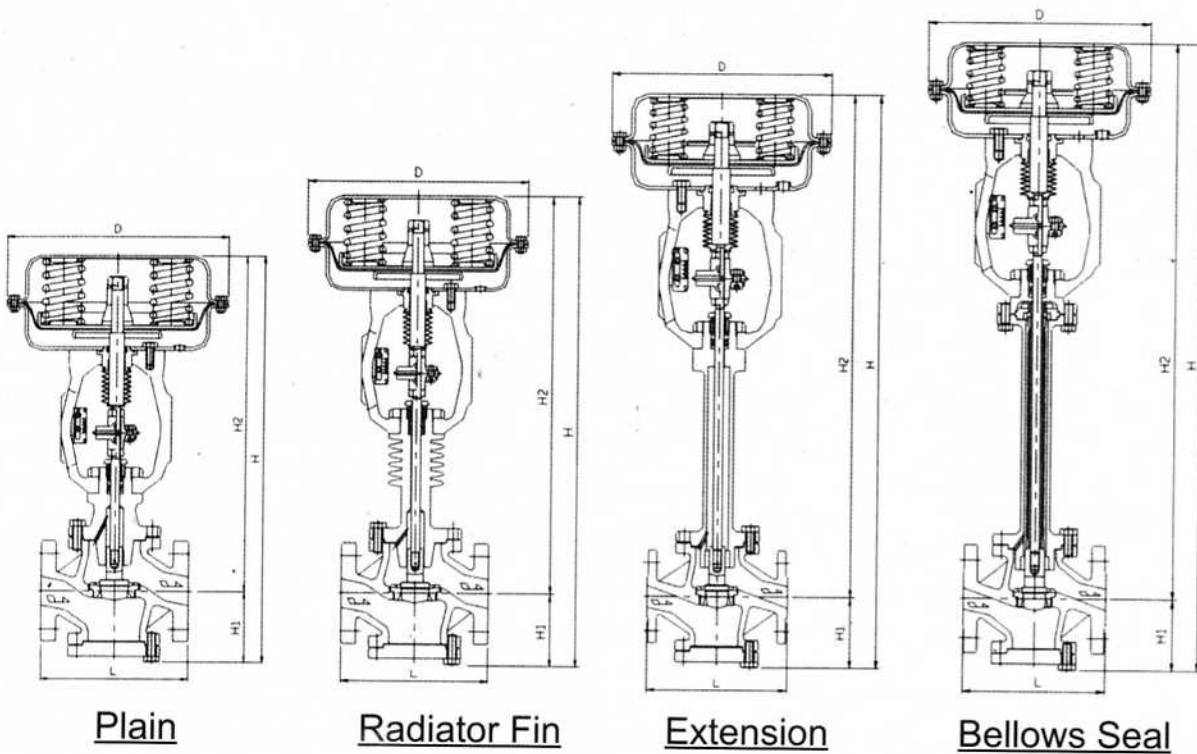
**Combination of Materials for Valve Body, Plug, And Operating Temperature Limit.**

Body Material	Plug Materials	Operating Tem.Limit
Cast iron FC250	Stainless steel SUS304	0°C ~ +230°C
Ductile iron FCD450	Stainless steel SUS304	0°C ~ +300°C
Carbon steel SCPH2	Stainless steel SUS304	-20°C ~ +350°C
Stainless steel SCS13A	Stainless steel SUS304	-196°C ~ +500°C
Stainless steel SCS14A	Stainless steel SUS316	-196°C ~ +500°C
Cast Hastelloy C	Hastelloy C	-200°C ~ +530°C

**Operating Temperature & Pressure Differential Limit of Soft Seat**



**Main Dimensions**



Unit: mm

Valve Size		D	L	H1	Plain		Radiator Fin		Extension		Bellows Seal	
mm	inch				H2	H	H2	H	H2	H	H2	H
15	1/2	250	130	83	414	497	489	572	585	668	648	731
20	3/4	250	150	83	414	497	489	572	585	668	648	731
25	1	250	160	83	414	497	489	572	585	668	648	731
32	1-1/4	250	180	93	426	519	557	656	635	734	690	789
40	1-1/2	300	200	99	469	568	557	656	635	734	690	789
50	2	300	230	106	477	583	564	670	642	748	697	803
65	2-1/2	300	290	119	492	611	580	699	671	790	723	842
80	3	350	310	132	556	688	651	783	743	875	761	893
100	4	350	350	150	575	725	670	820	762	912	780	930
125	5	460	400	179	769	948	908	1087	943	1122	1213	1392
150	6	460	480	211	801	1012	940	1151	975	1186	1213	1424
200	8	460	560	222	890	1112	1028	1250	1073	1295	1299	1521