

SINGLE SEATED VALVES VS SERIES

Technical Data

• ACTUATOR •

Type: Spring type pneumatic diaphragm actuator

Diaphragm Material: Neoprene with fabric reinforced

Input Signal: Pneumatic: 0.2~1.0 kg/cm² / 3~15 psi
Electric: DC 4~20mA

Valve Action: Air-to-close (Direct action)
Air-to-open (Reverse action)

• BODY •

Type: Single Seated Straight-through globe valve, Non-reversible

Body Material: Cast Iron, Cast Steel, SS304 and SS316 available

Conneciton Size: ½" to 8"; and size up to 12" by special order

End Conenction: Flanged end FF, RF and RTJ available

Flange Rating: JIS: 10, 20 kg/cm²; and option available
ANSI: 150, 300LB; and option available
DIN: by special order

Bonnet Type: Standard Type

Radiator finned bonnet (200°C or over)

Extended bonnet (under 0°C)

Bellows seal bonnet (-30~+350°C, less than 10 kg/cm²)

Shaft Seal Material: V-Teflon, Non-Asbestos; and others option available

• TRIM •

Valve Plug: – Equal percentage contoured or V-port

– Linear contoured

– On-off plug (quick open)

Trim Material: SS304, SS316 or with Stellite coating available

Soft-Seat: Tight shut off, ANSI Class IV

• ACCESSORIES •

– Pneumatic P/P positioner w/air set

– Electric I/P positioner w/air set

– Solenoid valve

Plugs for On-Off Service

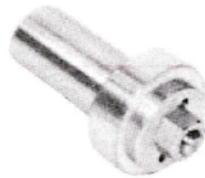
The plugs for this purpose are available in two type; with soft seat (Such as teflon seat) and with metal seat (Such as stellite seat). Both type can be made bubble-tight shut-off, it is also used for quick open service.

On-off plug with soft seat (Teflon seat):

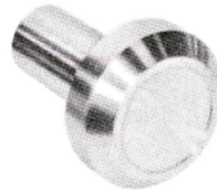
This type is used when the temperature is under 120°C.

On-off plug with metal seat:

This type is used when the use of teflon seat plug is infeasible (Such as high temperature or high pressure drop process). The metal surface is finished with careful lapping.



On-Off with Soft Seat



On-Off Plug with Metal Seat

Throttling Plugs

Plugs for throttling service are divided into those having "Equal Percentage" or "Linear" characteristics. They are also classified by shape into contoured type (C), V-port type (V).

Contoured Plugs (LC, %C)

Contoured plugs are divided into those having equal percentage contoured (%C) and linear contoured (LC) characteristics.

SINGLE SEAT



Equal Percentage
Contoured (%C)



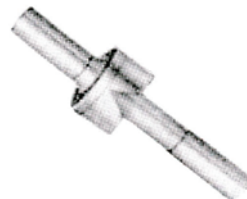
Linear Contoured (LC)



V-Port Plugs (%V, LV)

A V-port plugs also divided into those having equal percentage (%V) and linear (LV) same as contoured plugs but difference in shape.

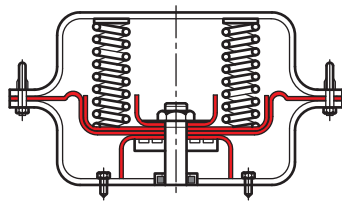
SINGLE SEAT



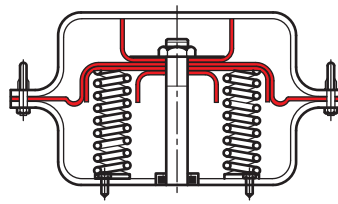
%V Port



Valve Action Type

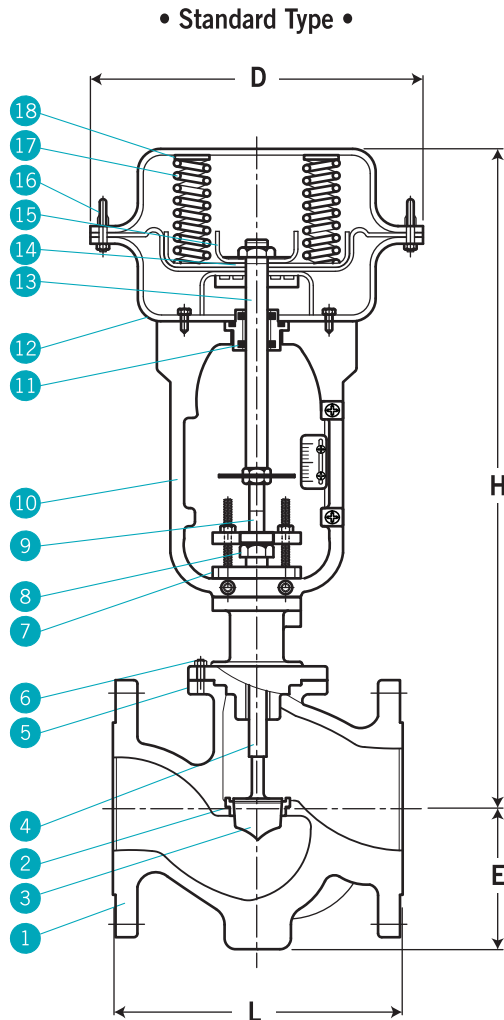


Air-to-Open (Reverse Action)



Air-to-Close (Direct Action)

Dimensions & Parts List



Parts & Material List:

NO.	Parts Name	Material
1	Body	SCS14
2	Seat Ring	SUS316L
3	Plug	SUS316L
4	Guide Bushing	SUS316L
5	Bonnet	SUS316
6	Bolt	SUS316
7	Yoke Nut	SS41
8	Gland Packing Nut	SUS316
9	Plug Stem	SUS316
10	Yoke	Cast Iron
11	Seal (V-Ring)	Teflon
12	Actuator	SS41
13	Actuator Stem	C.S
14	Diaphragm	Neoprene
15	Diaphragm Plate	SS41
16	Nut	SUS304
17	Spring	Sup-6
18	Spring Seat	SS41

Dimensions Data:

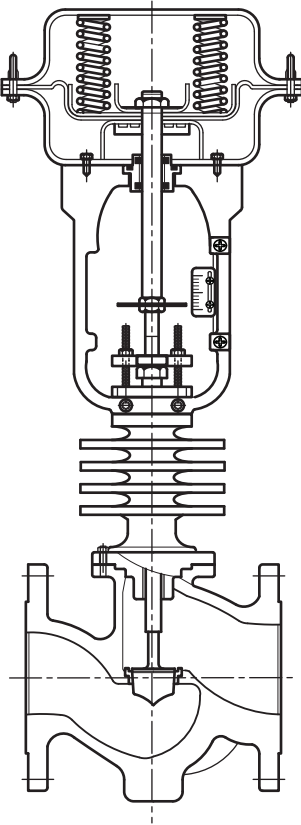
unit=mm

Size	15A	20A	25A	32A	40A	50A	65A	80A	100A
Length									
D	250	250	250	250	300	300	350	350	350
H	390	390	390	440	440	465	550	560	570
E	45	65	80	80	80	100	110	120	130
L	184	184	184	222	222	254	276	298	352

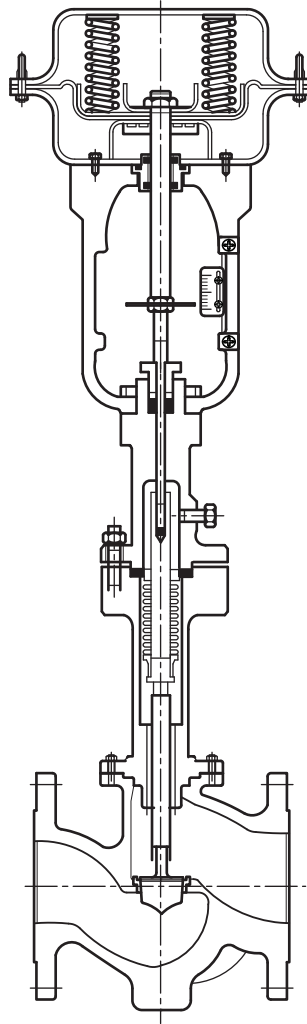
NOTE. Please consult with the manufacturer for the size bigger than 100A.

Optional Type of Globe Control Valve

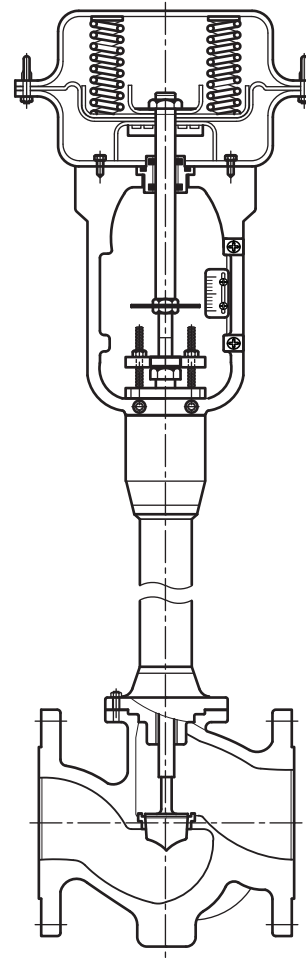
• Fin Type •



• Bellows Type •

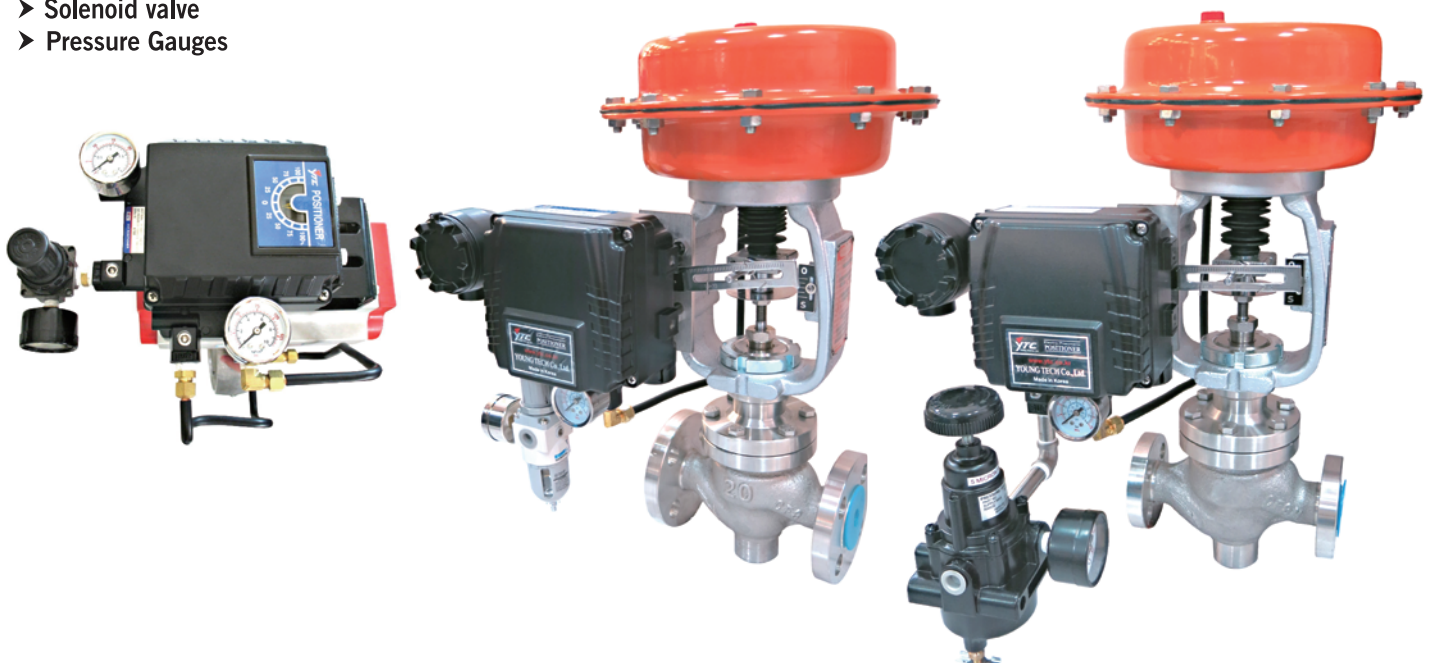


• Extension Type •



Optional Accessories

- Pneumatic P/P positioner w/air set
- Electric I/P positioner w/air set
- Solenoid valve
- Pressure Gauges



Ordering Information

VS	Code	Type									
	1	Single Seated									
		Code	Body Material								
			(Ci) Cast Iron (Cs) Cast Steel (S4) SS304 (S6) SS316 (O) Option								
		Code	Shaft Seal Material								
		Vf	V-Teflon	As	Asbestos Yarn	O	Option				
		Code	Connection Size								
			(A) 1/2" (B) 3/4" (C) 1" (D) 1 1/2" (E) 2" (F) 2 1/2" (G) 3" (H) 4" (I) 5" (J) 6" (K) 8" (O) Option								
		Code	Connection Rating								
			(10) JIS 10K (15) ANSI 150# (20) JIS 20K (30) ANSI 300# (O) Others								
		Code	Bonnet Type								
		1	Standard Type								
		2	Radiator finned bonnet (200°C or over)								
		3	Extended bonnet (under 0°C)								
		4	Bellows seal bonnet (-30~+350°C less than 10 kg/cm ²)								
		Code	Plugs for On-Off Service or Throttling Plugs								
		On-Off Service	(OS) On-off plug with soft seat (Teflon seat)								
			(OM) On-off plug with metal seat								
		Throttling Plugs	(TE) Equal percentage contoured (%C)								
			(TL) Linear contoured (LC)								
			(TV) %V port single seat								
		Code	Input Signal								
		A	Pneumatic: 0.2~1.0 kg/cm ² (3~15 psi)								
		B	Electric: 4~20mA								
		Code	Valve Action								
		C	Air-to-close (direct action)								
		O	Air-to-open (reverse action)								
		Code	Optional Accessories								
		1	Pneumatic P/P positioner w/air set								
		2	Electric I/P positioner w/air set								
		3	Solenoid valve (ON/OFF Type Only)								
		4	Option								
VS											Complete Ordering Code