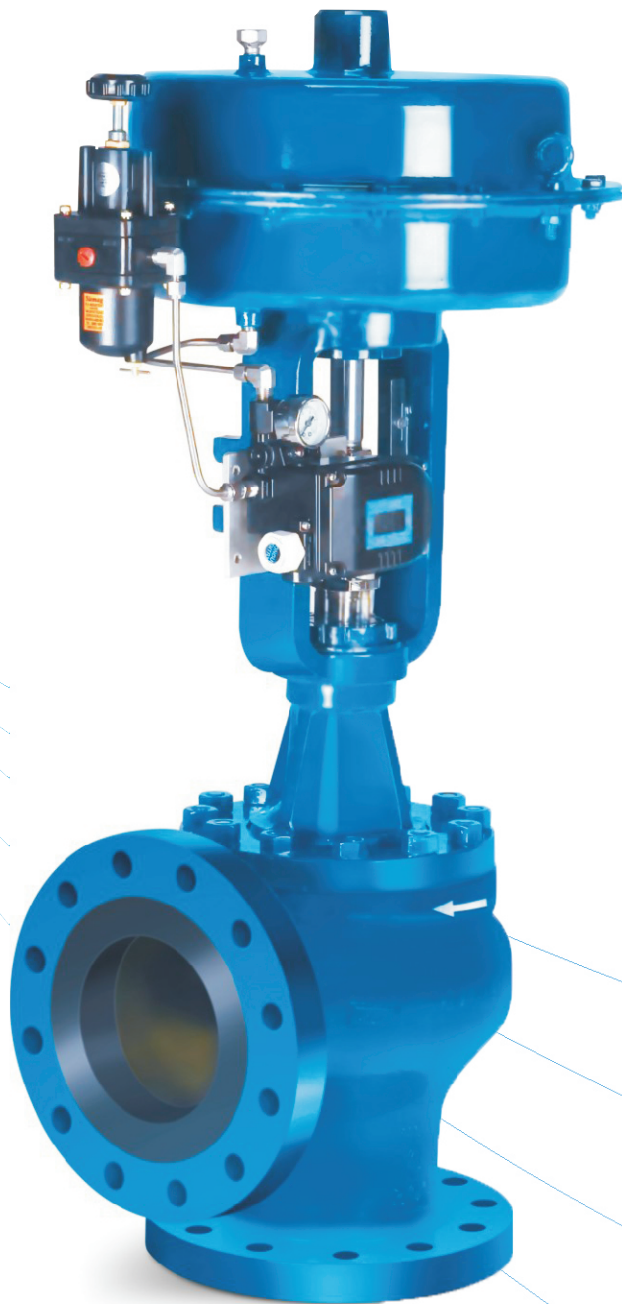




## GLOBE ANGLE VALVE



### **SERIES 5000**

Sizes : ½" TO 36"

DN 15 TO 900

## Specifications

<b>Valve sizes &amp; Ratings</b>	:	DN15 thru DN600 1/2"NB thru 24"NB 150#,300#,600#,PN10,PN16,PN40 Valve Bodies	Casted
		DN250 thru DN900 10"NB thru 36"NB PN-2.5,PN6,PN10	Fabricated Valve Bodies.
<b>End Connection</b>	:	Flanged	
<b>Valve Body MOC</b>	:	Carbon Steel ASTM A216Gr. WCB Stainless steel ASTM A351Gr. CF8,CF8M & Other Materials available on request.	
		Carbon steel IS2062(for fabricated valve bodies.)	
<b>Trim MOC</b>	:	Stainless Steel ASTM A479 Type SS316,SS304,SS316L,SS304L,SS904L Other Materials available on request.	
		Carbon steel with 13% Cr. Overlay (On fabricated Valve only)	
<b>Gland Packing</b>	:	V-Teflon -150°C to +200°C Graphite -150°C to +600°C	
<b>Flow Characteristics</b>	:	On-Off Equal % Linear	
<b>Bonnet Type</b>	:	Standard Extended Plain Extended Finned	
<b>Manual Overrides</b>	:	Top mounted Side mounted	
<b>Accessories</b>	:	Pneumatic Valve Positioner , Electro Pneumatic (E/P) Valve Positioner ,Air Filter Regulator,Air Lock Relay, Air Volume Booster, Limit Switch , Proximity Switch, Solenoid Valve ,Position Transmitter, Quick exhaust Valve, etc	

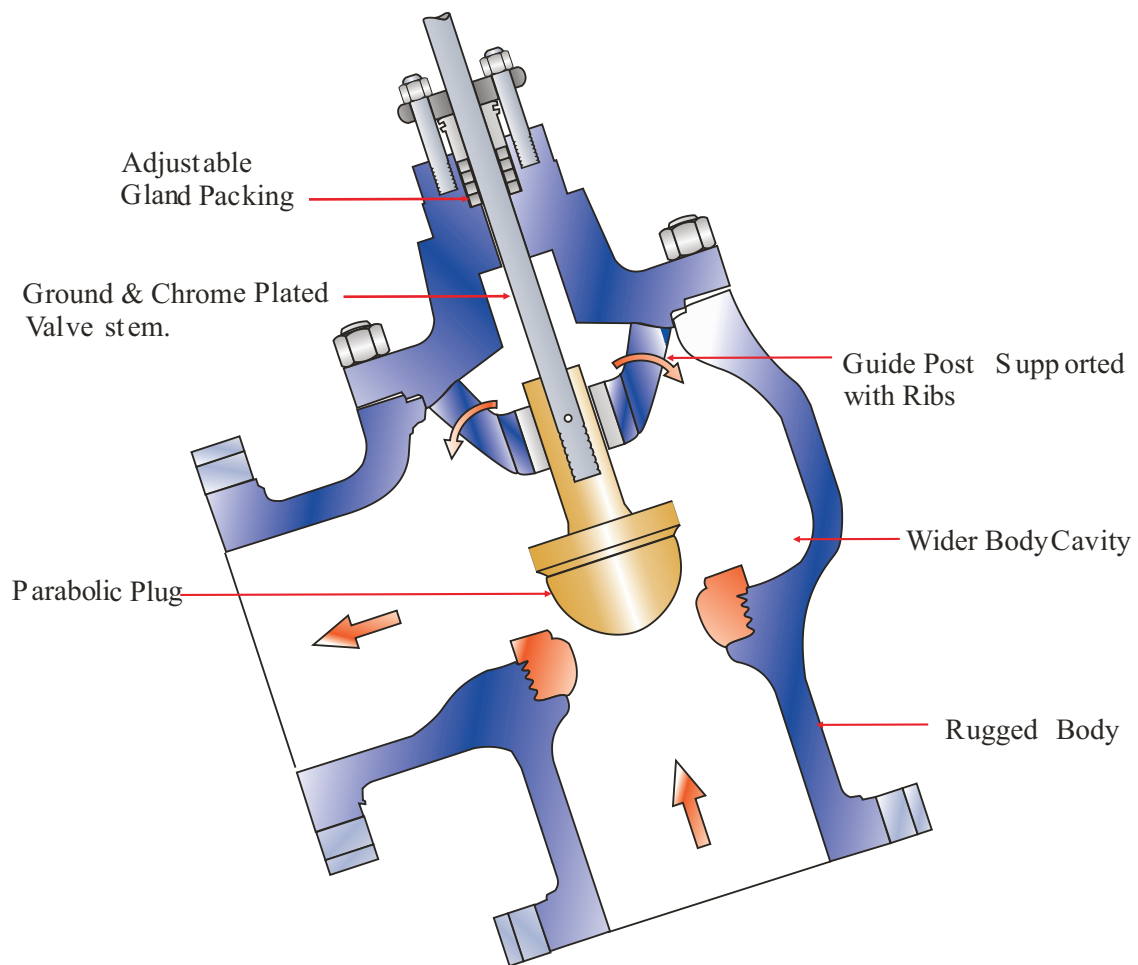
## Globe Angle Valves

### Series 5000

Series 5000 Globe Angle Valves are well suited for high viscous fluids, all type of slurries, sugar cane juice, masecute & powder applications. Valves are available for on-off & control duty applications.

- Wide body cavity provides easy flow & higher capacity.
- Trim options available to satisfy variety of applications.
- Cage Trims are available for pressure balancing effect providing economical choice for high pressure applications, reducing the actuator size and operating air pressure.
- Valves are available in various material combinations including conformance to NACE MR-01-75.
- Option of Hardened trim material provide excellent wear resistance & longer trim life.

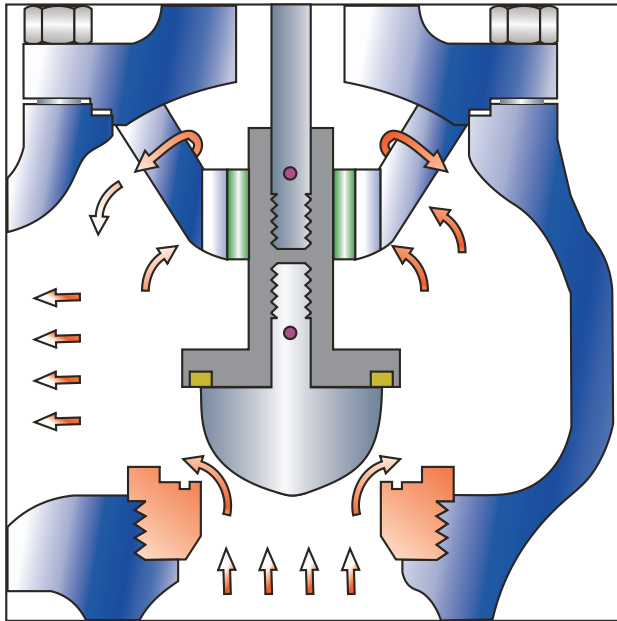
## Various Trim Options



This construction provides free flow of fluid over the guide & plug shank to avoid seizing of guide post when used for powder applications.

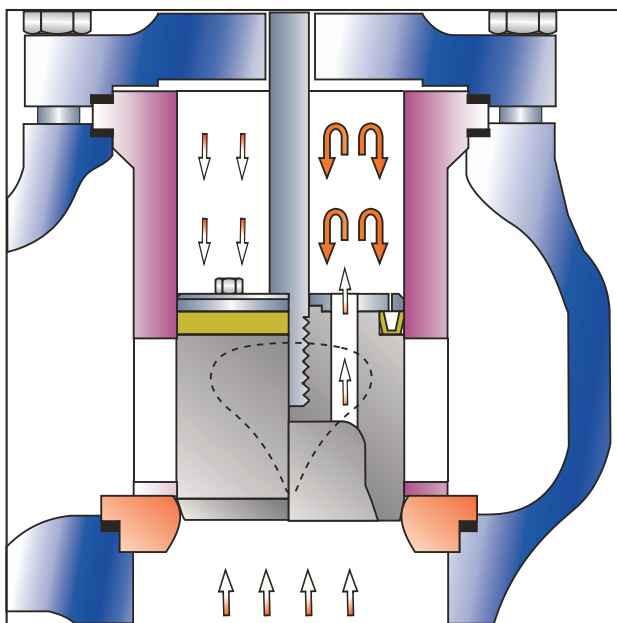
## Various Trim Options

### Contoured top guide with ptfе soft facing.



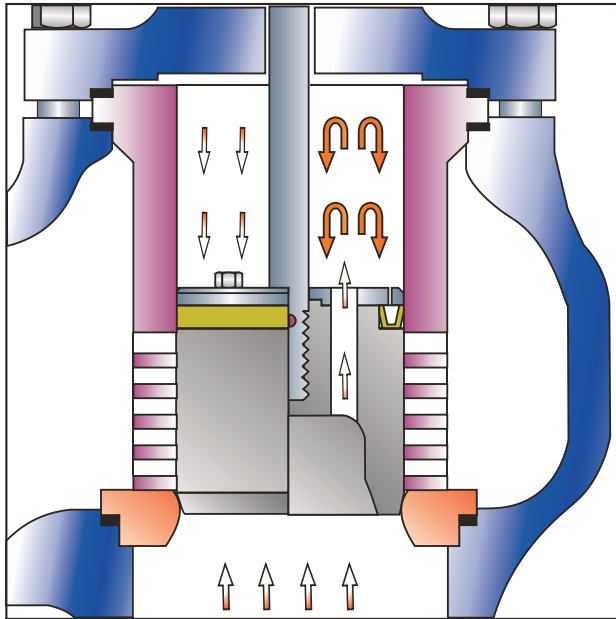
For tight shut off & for vacuum applications.

### V-Port cage guide



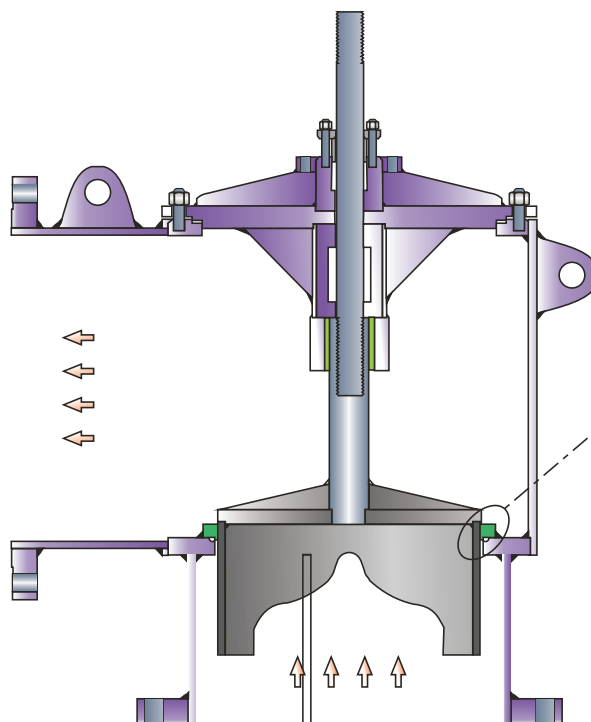
For high pressure with cost effective actuator requirements

## Various Trim Options Multi Hole Cage Guide.

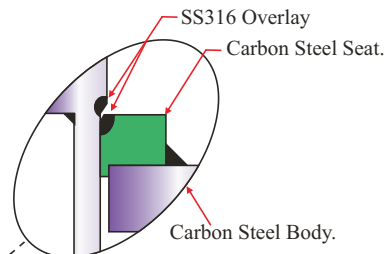


Ideal for high pressure drop application & where fluid is clear.

## Ported Plug Seat Ring.



Available with Fabricated valves only, Sizes DN 250 & above.  
Seat is integral with s.s. overlay.



## Multispring Diaphragm Actuators

### Series - M



The 'M' Series control valve actuators are diaphragm actuators with pre-compressed multispring construction. They are compact, comparatively with less number of parts, easy to maintain, quickly reversible. The actuators are suitable for regulating and on-off applications. Various models are available covering small to larger thrust requirements.

The increasing air pressure supply moves the diaphragm and actuator stem opposing the spring force, while with decreasing air pressure supply the spring force moves the diaphragm in the opposite direction and back to normal position. To get various loading capacities the number of springs are altered.

The actuator can be mounted on shoulder of control valve bonnet with the help of locking ring. The connection between valve stem and actuator stem can be achieved with the help of stem connector made out of two halves. The travel indicator is coupled with the stem connector which matches with travel scale indicating the position of inner valve stem.

### Cv Values(usgpm)

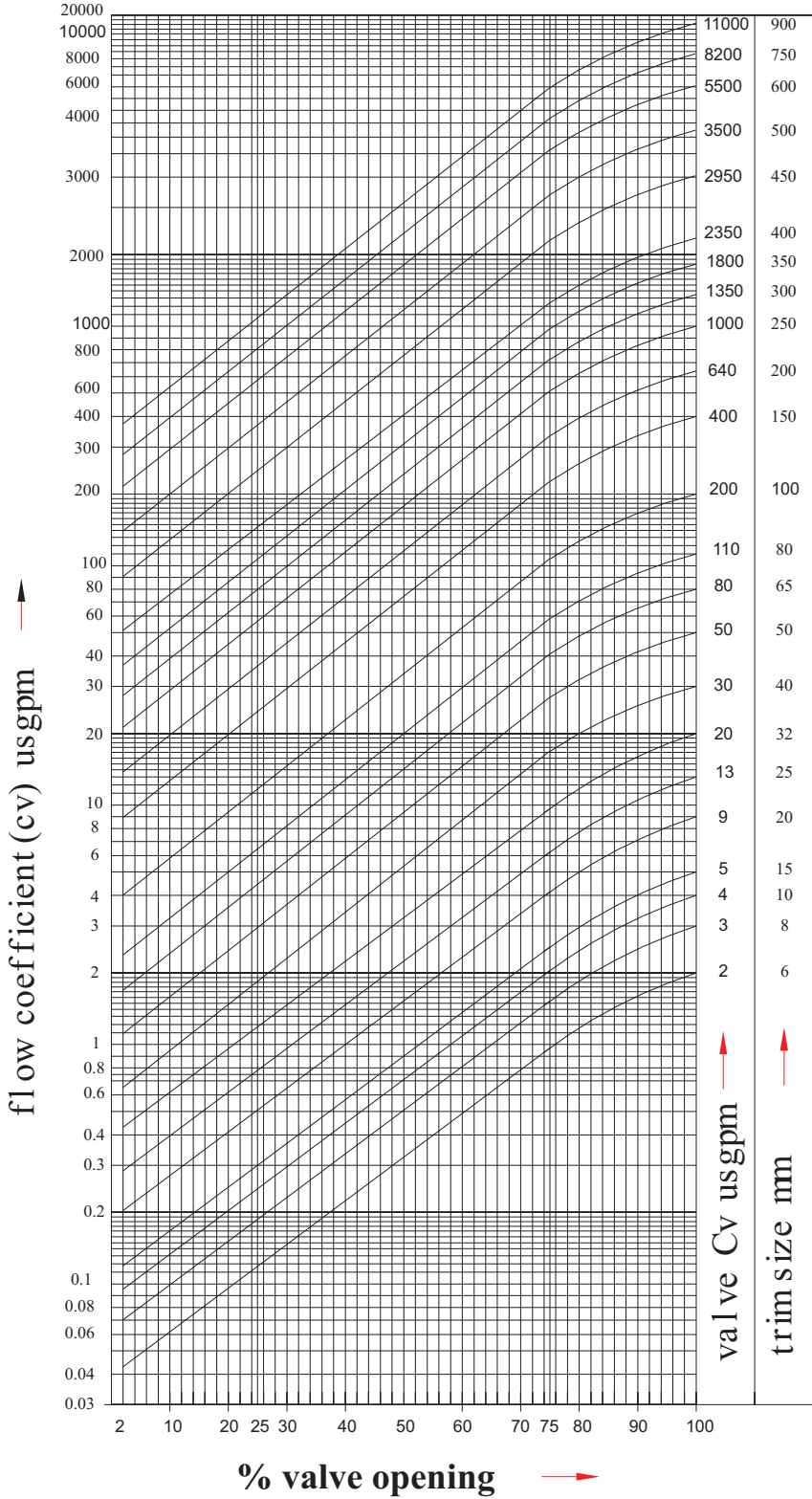
VALVE SIZE		PORT SIZE		TRIM CONSTRUCTION				
INCH	MM	INCH	MM	CONTURSED	PORTED CAGE PR. BALANCE	MULTIHOLE CAGE PR. BALANCE		
1/2"	15	1/4"	6	2				
		5/16"	8	3				
3/4"	20	3/8"	10	4				
		1/2"	15	5				
1"	25	3/4"	20	9				
		1"	25	13				
		1.1/2"	40	20				
1.1/2"	40	1.1/2"	40	30			30	24
2"	50	1.1/2"	40	30			30	24
		2"	50	50			45	40
2.1/2"	65	2.1/2"	65	80	72	64		
3"	80	3"	80	110	100	90		
4"	100	4"	100	200	180	160		
6"	150	6"	150	400	360	320		
8"	200	8"	200	640	580	510		
10"	250	10"	250	1000	900	800		
12"	300	12"	300	1350	1200	1100		
14"	350	14"	350	1800	1620	1440		
16"	400	16"	400	2350	2100	1950		
18"	450	18"	450	2950	2750	2360		
20"	500	20"	500	3500	3150	2800		
24"	600	24"	600	5500	4950	4400		
30"	750	30"	750	8200	7380	6560		
36"	900	36"	900	11000	10000	8000		

Note : Pressure balance trims are not available below size 40mm



# Characteristics Curve(eq.%)

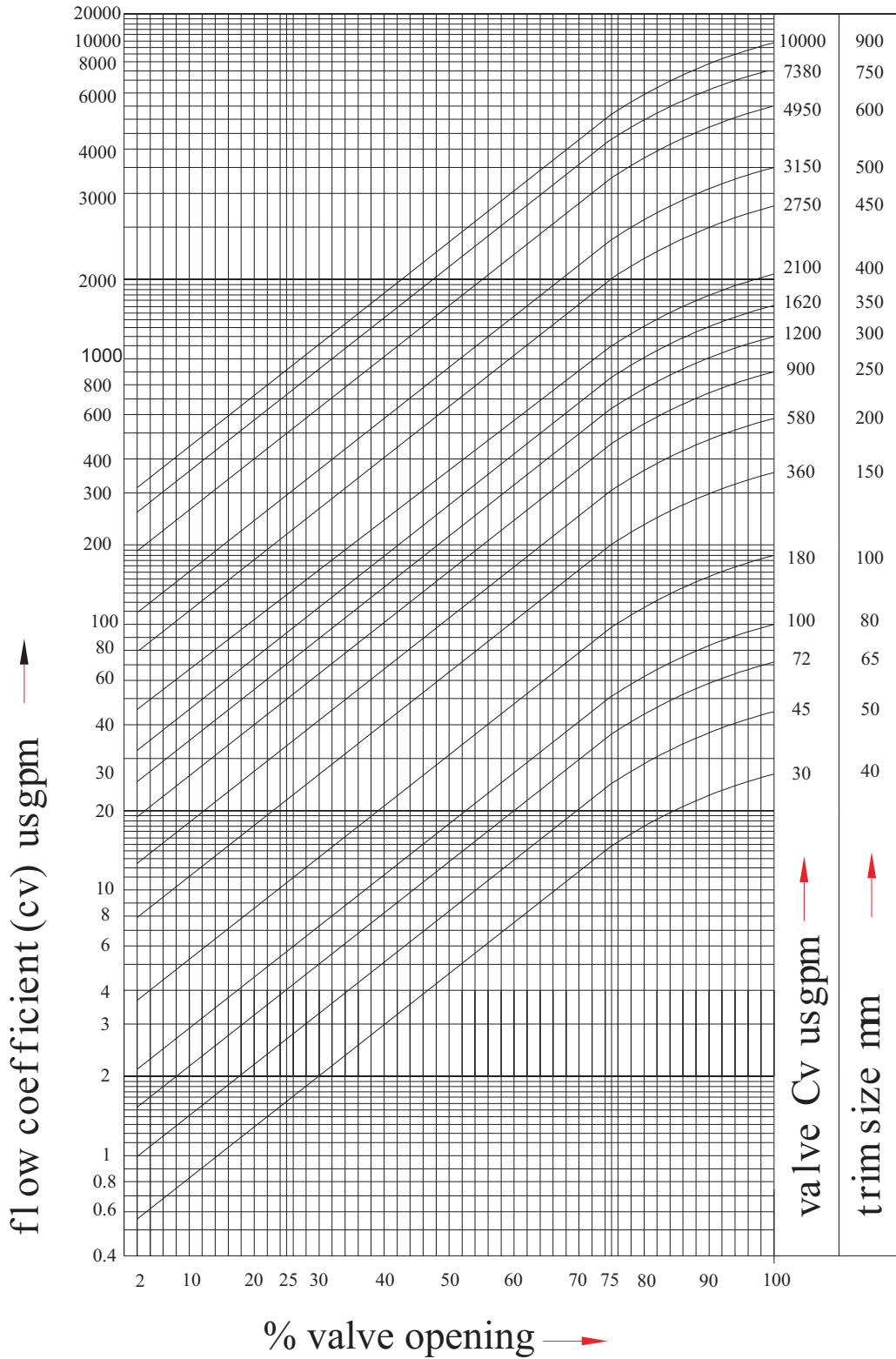
**Trim :contoured Top Guide.**  
**TRIM:CONTURED PTFESOFT SEATED**





# Characteristics Curve(eq.%)

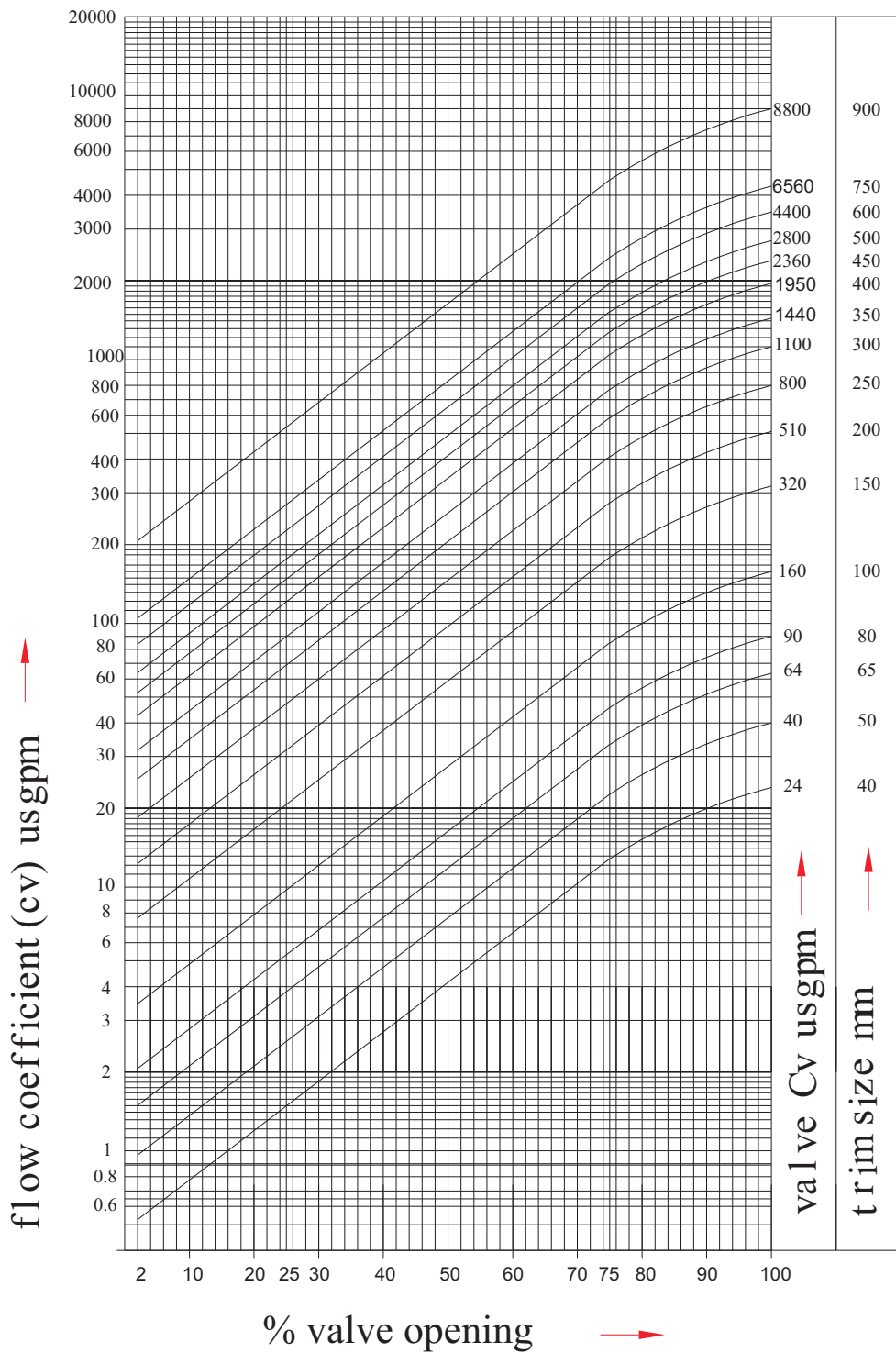
Trim :v-port Cage Guide.



## Characteristics Curve(eq.%)

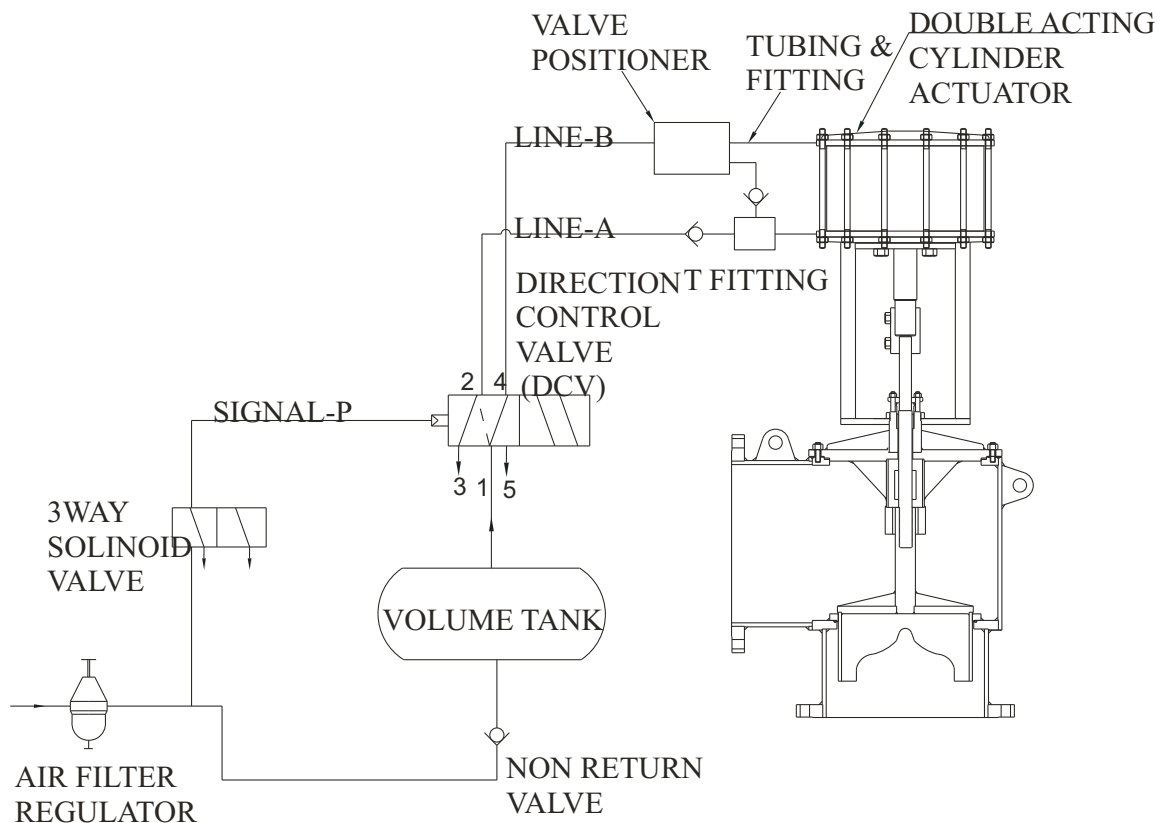
Trim :multi Hole Cage Guide.

FIG -TRM:MULTIHOLE PRESSURE BALANCE



## Fail Safe Operation With Double Acting Piston Cylinder Actuators.

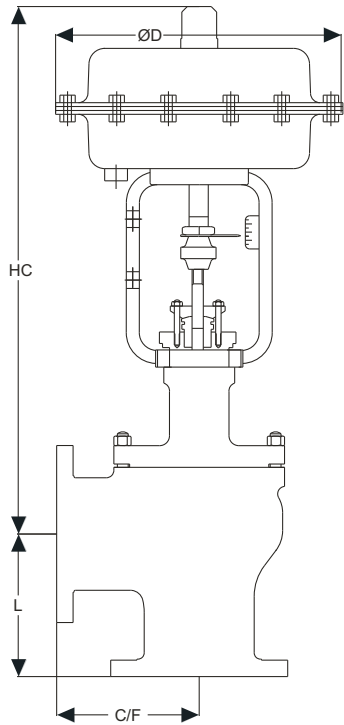
Schematic showing fail safe operation with double acting piston cylinder



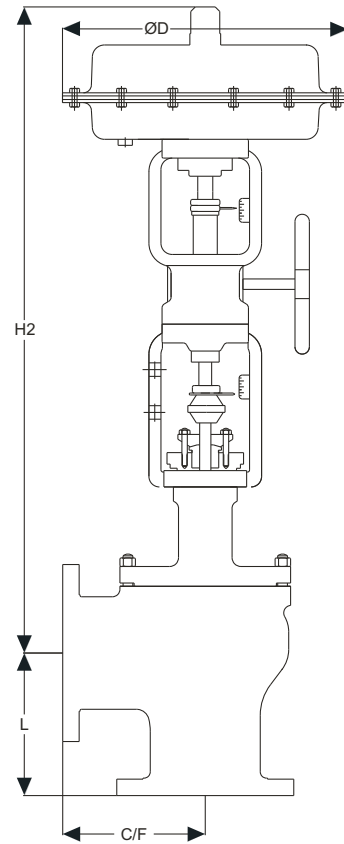
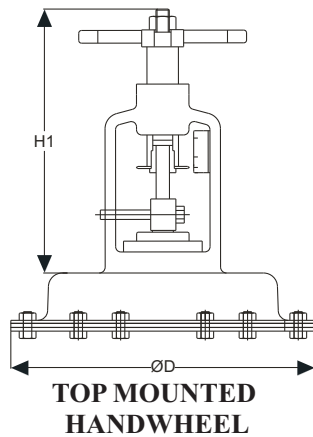
### FAIL SAFE OPERATION

1. Air supply through air filter regulator is given to volume tank using NRV. Same supply is connected to 3 way solenoid valve which is normally closed.
2. Normal Mode:- When SOV is energised the supply is fed to pilot of Direction control valve (DCV)
3. Air failure mode:-In case of air failure or Electric failure supply to pilot of DCV valve will be discharged.  
Port 1 will be connected to port 2 of DCV. The air pressure accumulated in the volume tank will be directed to LINE A.
4. When air resumes the system will be switched to Normal Mode automatically.

# DIMENSIONS



**ACTUATOR WITHOUT HANDWHEEL**



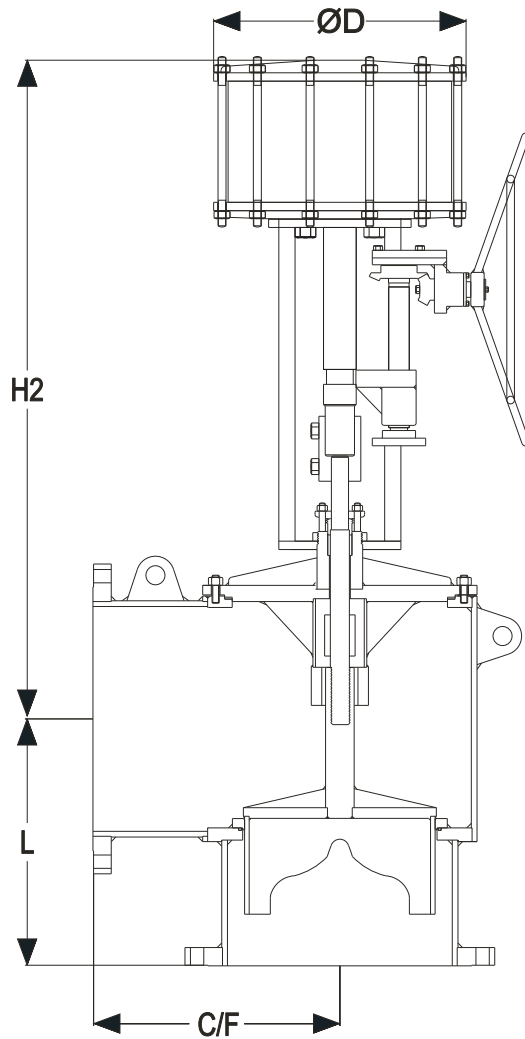
**ACTUATOR WITH SIDE MOUNTED HANDWHEEL**

## Dimension (mm)

VALVE SIZE		Actuator Modle	C / F (150#)	L (150#)	HC	H1	H2	ØD
INCH	mm							
1/2"	15mm	M - 01	88.9	88.9	441.0	255.0	740.0	240.0
1"	25mm	M - 01	92.2	92.2	592.0	255.0	973.0	240.0
1.1/2"	40mm	M - 11	111.0	111.0	606.0	255.0	997.0	290.0
2"	50mm	M - 11	127.0	127.0	616.0	255.0	1031.0	290.0
2.1/2"	65mm	M - 22	138.0	138.0	733.0	330.0	1145.0	380.0
3"	80mm	M - 22	149.25	149.25	792.0	335.0	1303.0	380.0
4"	100mm	M - 22	176.25	176.25	901.0	396.0	1385.0	380.0
6"	150mm	M - 33	225.5	225.5	999.0	425.0	1569.0	448.0
8"	200mm	M - 33	271.5	271.5	774.0	425.0	1677.0	448.0
10"	250mm	M - 44	336.5	336.5	978.5	N.A.	1741.0	600.0
12"	300mm	M - 44	368.3	368.3	1172.0	N.A.	1741.0	600.0
14"	350mm	M - 44	444.5	444.5	1172.0	N.A.	1741.0	600.0
16"	400mm	M - 44	508	508	1172.0	N.A.	1741.0	600.0

Note : Dimension here with standard bonnet

## DIMENSIONS



### Dimension (mm)

VALVE SIZE		Actuator Modle	C / F (150#)	L (150#)	H2	ØD
INCH	mm					
18"	450mm	PD - 300	489	489	1438	377
20"	500mm	PD - 400	489	489	1458	484
22"	550mm	PD - 400	533	533	1558	484
24"	600mm	PD - 500	648	648	1607	580
26"	650mm	PD - 500	648	648	1680	580
28"	700mm	PD - 500	724	724	1700	580
30"	750mm	PD - 500	762	762	1740	580
32"	800mm	PD - 600	800	800	1782	685
36"	900mm	PD - 600	978	978	1825	685

Note : Dimension here with standard bonnet