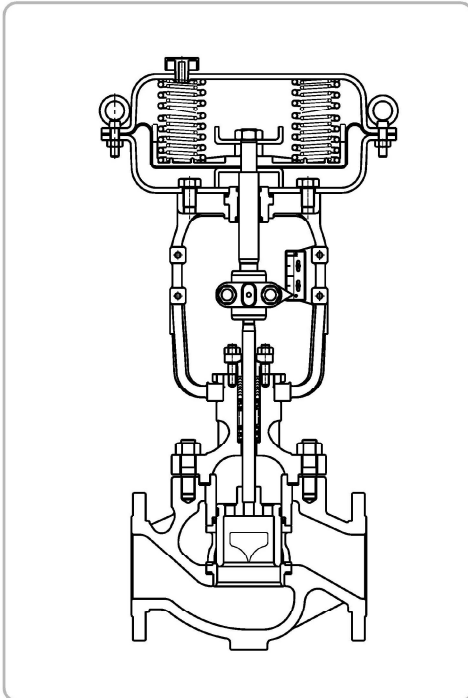


GLOBE VALVE

2 WAY CAGE GUIDE TYPE



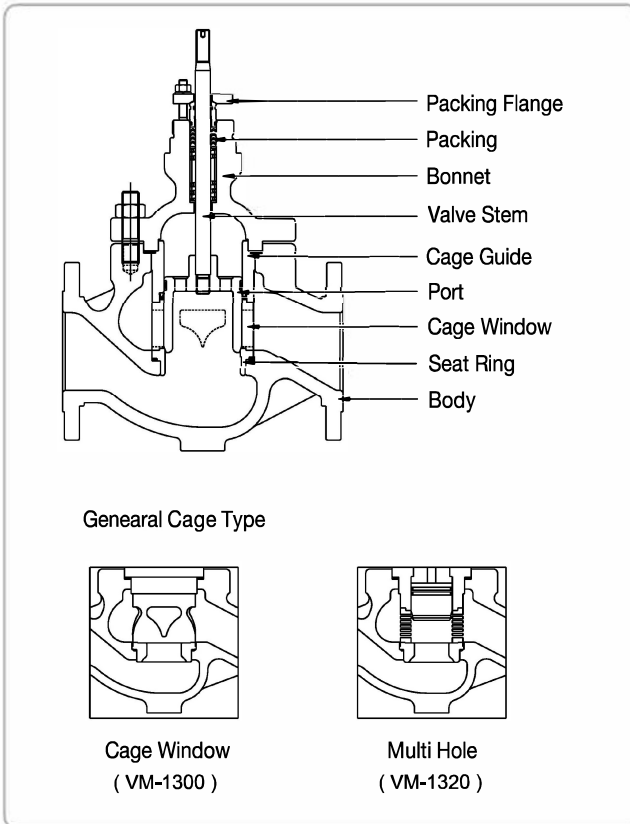
1. INTRODUCTION : CAGE TYPE

1300 /1400 Series : Pressure balanced cage type control valve can be applied to relatively large sized valves and has been designed and manufactured to control the flow of high temperature, high differential pressure fluids in extreme process lines.

By maintaining ideal balance between plug and cage, it has less moving parts and its quick change type of top entry structure allows simple maintenance and repair.

It is exceptional at coping with changes in fluid amount and characteristics in process lines. It is economical because it does not require many accessories or additional parts.

Wide selection of plug seals will achieve tight shut-off and it can be applied to systems that requires quick cut-off during emergencies. In addition, It is designed to minimize pressure loss at low temperatures due to its "S" type design from the IEC standards thus allowing greater amount of fluids to flow.



2. INNER STRUCTURE & STANDARD SPECIFICATIONS

Pressure Rating

Ansi Class 150, 300, 600, 900, 1500

End Connection

Flange End : FF, RF, RTJ, SW, BW, etc.

Material

Body : A216-WCB, A351-CF8/CF8M/CF3/CF3M, etc.

Trim : A276-304/316/304L/316L, etc.

Gasket : A240-316 + Graphite Spiral Wound, etc.

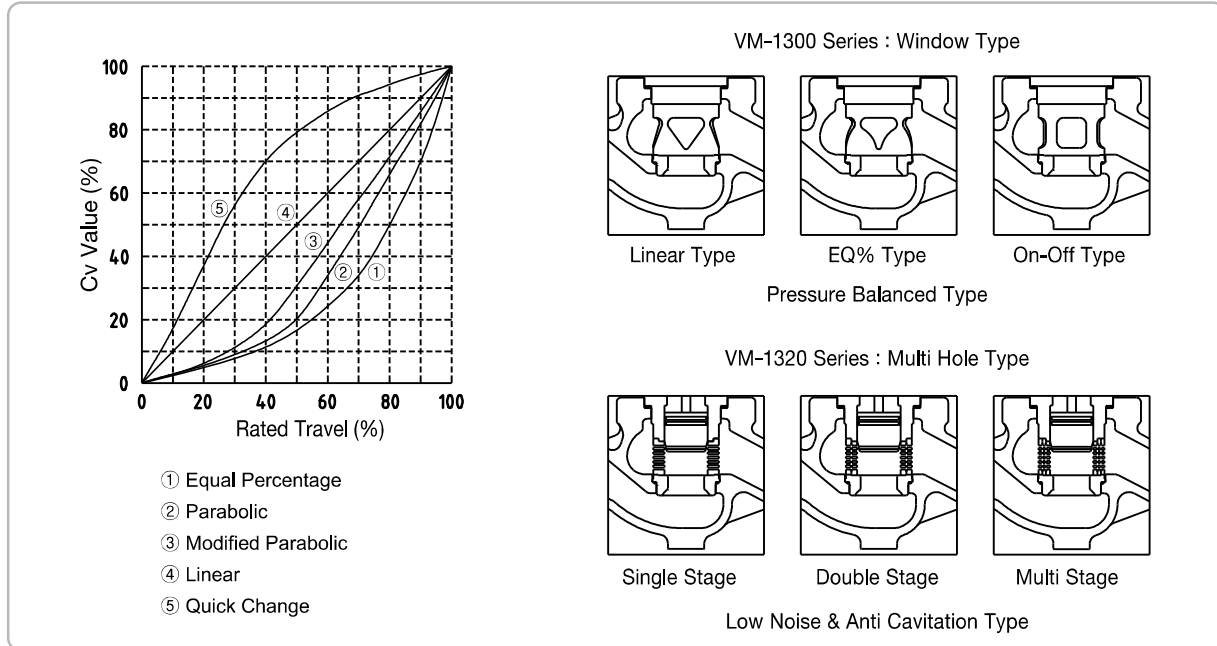
Flow Direction

FTC : Flow action to close

GLOBE VALVE

2 WAY CAGE GUIDE TYPE

3. CAGE TYPE



4. COMBINING THE VALVE BODY, BONNET AND TRIM MATERIAL.

| Parts Name | | Materials | | |
|-----------------|---------------|---|------------------|--------------------------|
| Body, Bonnet | | ASTM A216-WCB | ASTM A351-CF8 | ASTM A351-CF8M |
| TRIM | Seat Ring | A351CF8M(+Stellite), A351CF8(+Stellite) | | A351CF8M(+Stellite) |
| | Valve Plug | | | |
| | Valve Stem | SUS316 (Hard Chromium Plated) | | |
| | Guide Bushing | A276-420J2 (Hard Face) | | A351CF8M(Hard Cr Plated) |
| Stud Bolt & Nut | | SNB7 / S45C(H) S45(H) / S45C(N) | A193-B8 / A194-8 | |

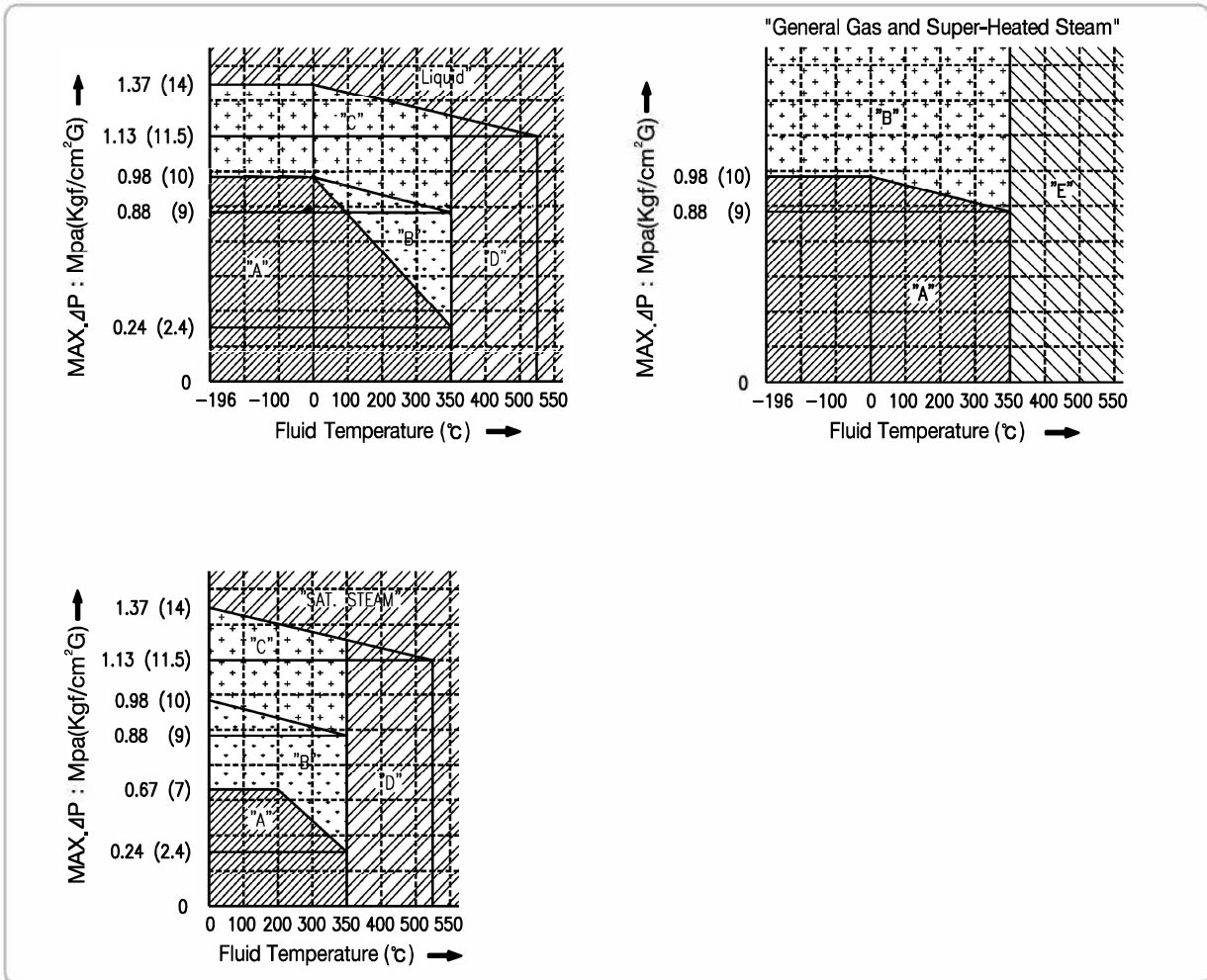
5. STANDARD SIZE & Cv VALUE

| Valve Type | | 2 Way Globe For Cage Seated Type | | | | | | | | | | | Remark | |
|-------------------|--------------|----------------------------------|----|-------|-----|-----|-----|-----|-----|------|------|------|--------|------|
| Size | inch | 1/2 | 2 | 2 1/2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | | |
| | mm | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | | |
| Rated Travel (mm) | | 25 | 25 | 25 | 38 | 38 | 50 | 50 | 75 | 100 | 100 | 100 | | |
| Cv Value (Full) | Control Type | 28 | 40 | 55 | 70 | 90 | 130 | 180 | 280 | 480 | 660 | 1200 | 1600 | 2000 |
| | On-off Type | 50 | 60 | 80 | 140 | 190 | 300 | 500 | 700 | 1250 | 1680 | 2100 | | |

GLOBE VALVE

2 WAY CAGE GUIDE TYPE

6. TRIM TREATMENT & MATERIAL VS OPERATING PRESSURE-TEMPERATURE RATINGS



NOTE

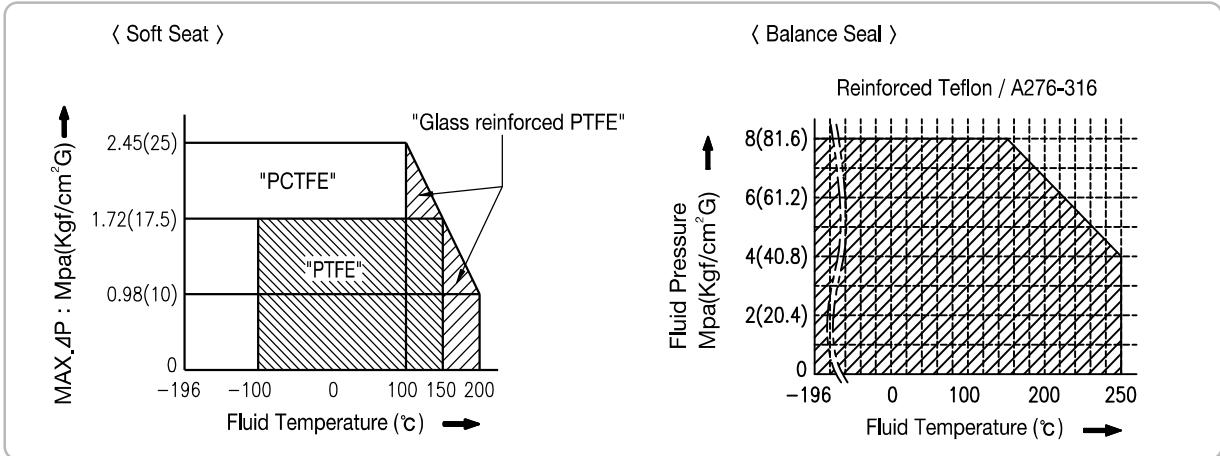
- (1) Seat ring of on-off control valve and of throttling control valve for tight shut off is hard faced at the area of Stellite seat and cover.
- (2) In case of flushing fluid, seat ring is hard faced at the area of Stellite area.
- (3) In case of fluid sort, at 350 C and over, guide bushing and guide post is hard faced by Stellite treatment.
- (4) In case of saturated steam, if inlet pressure is 0.69Mpa (7Kgf/cm²G) and over, seat ring is hard faced at the area of Stellite seat and over.

GLOBE VALVE

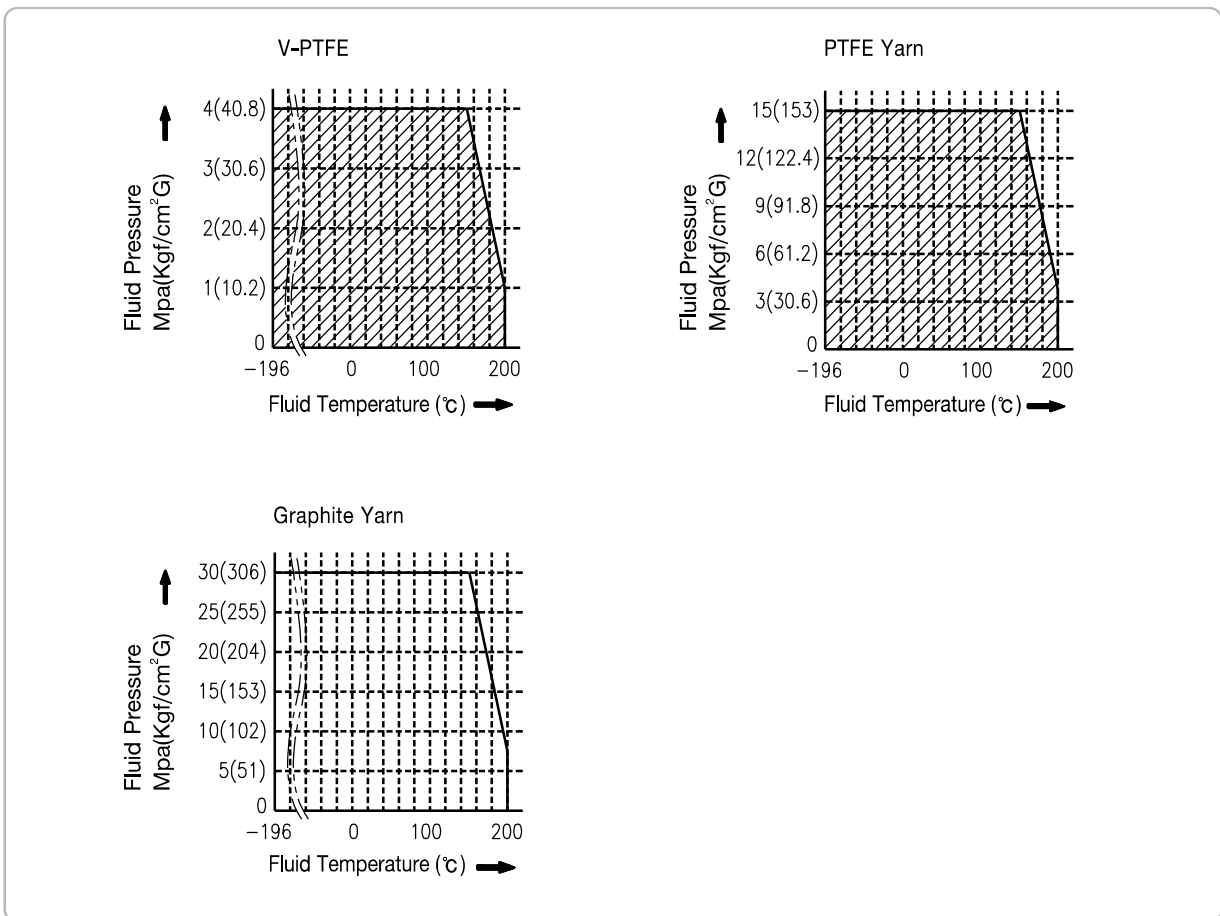
2 WAY CAGE GUIDE TYPE

GLOBE VALVE

7. OPERATING PRESSURE-TEMPERATURE RATINGS



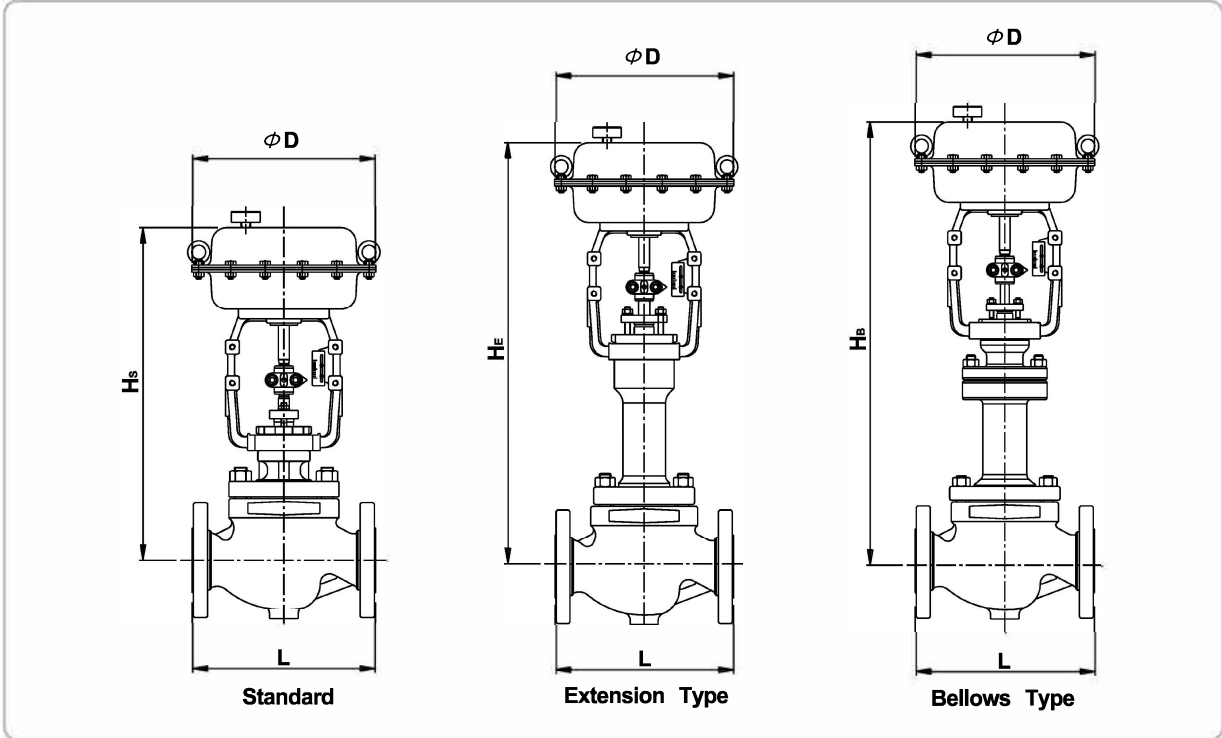
8. GRAND PACKING OPERATING PRESSURE-TEMPERATURE RATINGS



GLOBE VALVE

2 WAY CAGE GUIDE TYPE

9. STANDARD EXTERNAL DIMENSIONS



Unit : mm

| Size(Inch) | 150Lb RF | | | | 300Lb RF | | | | ϕD |
|------------|----------|-----------|---------|--------------|----------|-----------|---------|--------------|----------|
| | Hs | HE | Hb | L | Hs | HE | Hb | L | |
| | Standard | Extension | Bellows | Face To Face | Standard | Extension | Bellows | Face To Face | |
| 1/2 | 500 | 590 | 730 | 222 | 500 | 590 | 730 | 235 | 270 |
| 2 | 500 | 600 | 750 | 254 | 500 | 600 | 750 | 267 | 270 |
| 2 1/2 | 630 | 730 | 900 | 276 | 630 | 730 | 900 | 292 | 365 |
| 3 | 635 | 755 | 925 | 298 | 635 | 755 | 925 | 318 | 365 |
| 4 | 660 | 780 | 970 | 352 | 660 | 780 | 970 | 368 | 365 |
| 5 | 860 | 990 | 1170 | 403 | 860 | 990 | 1170 | 425 | 450 |
| 6 | 955 | 1095 | 1270 | 450 | 955 | 1095 | 1270 | 473 | 450 |
| 8 | 1025 | 1140 | 1140 | 543 | 1025 | 1140 | 1140 | 568 | 550 |
| 10 | 1095 | 1280 | 1280 | 673 | 1095 | 1280 | 1280 | 708 | 550 |
| 12 | 1125 | 1505 | 1505 | 737 | 1125 | 1505 | 1505 | 775 | 620 |
| 14 | 1320 | 1570 | 1570 | 889 | 1320 | 1570 | 1570 | 927 | 620 |

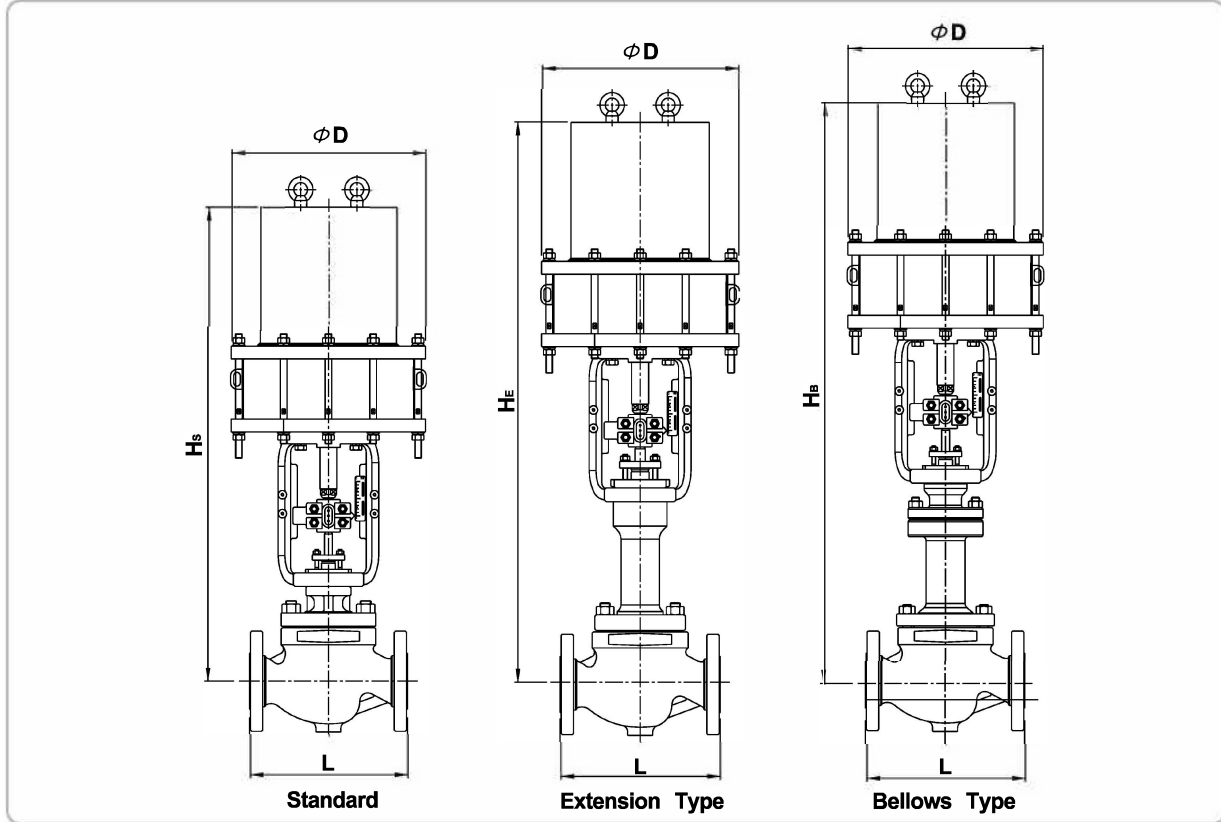
NOTE

Face to face dimensions conform to IEC 534-3 : 1976 Specifications.

GLOBE VALVE

2 WAY CAGE GUIDE TYPE

GLOBE VALVE



Unit : mm

| Size(Inch) | 600Lb RF | | | | 900Lb RF | | | | φ D |
|------------|----------|-----------|---------|--------------|----------|-----------|---------|--------------|-----|
| | Hs | He | Hb | L | Hs | He | Hb | L | |
| | Standard | Extension | Bellows | Face To Face | Standard | Extension | Bellows | Face To Face | |
| 1 1/2 | 536 | 626 | 730 | 251 | 536 | 626 | 730 | 311 | 220 |
| 2 | 550 | 650 | 750 | 286 | 550 | 650 | 750 | 340 | 280 |
| 2 1/2 | 680 | 780 | 900 | 311 | 680 | 780 | 900 | 365 | 280 |
| 3 | 711 | 831 | 925 | 337 | 711 | 831 | 925 | 387 | 320 |
| 4 | 736 | 856 | 970 | 394 | 736 | 856 | 970 | 464 | 320 |
| 5 | 923 | 1053 | 1170 | 457 | 923 | 1053 | 1170 | 587 | 380 |
| 6 | 1018 | 1158 | 1270 | 508 | 1018 | 1158 | 1270 | 600 | 380 |
| 8 | 1090 | 1320 | 1480 | 610 | 1090 | 1320 | 1480 | 781 | 480 |
| 10 | 1120 | 1480 | 1520 | 752 | 1120 | 1480 | 1520 | 864 | 480 |
| 12 | 1335 | 1505 | 1620 | 819 | 1353 | 1505 | 1620 | 1016 | 480 |
| 14 | 1390 | 1600 | 1750 | 972 | 1390 | 1600 | 1750 | 1257 | 480 |

NOTE

Face to face dimensions conform to IEC 534-3 : 1976 Specifications.