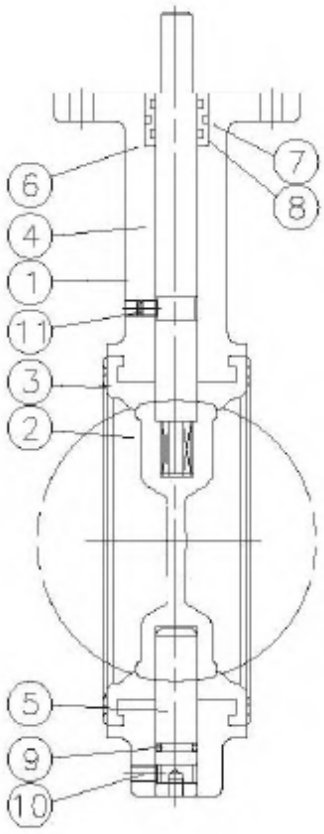
# SPECIFICATIONS

- Standard: According to ISO 5752, BS 5155 ,MSS Sp 67 , API 609
- Sizes: 1.5” through 48.0”
- Design Pressure : 16 Bar ( 240 psi )
- Type: Wafer, Lug, and Double Flanged
- Body: Cast Iron, Ductile Iron, Carbon Steel , 304SS or 316SS
- Disc : Ductile Iron + Cr Coated, Aluminum Bronze, 304SS or 316SS
- Seat: EPDM , Buna N, Viton, Neoprene
- Stems: 416SS, 304SS, 316SS, K-MONEL
- Test : Bi - directional Shutoff, Hydro Test Certificate Available Tight Shut Off
  Body : 1.5 Times . Seat : 1.1 Times according to API 598
- Top Flange: According to ISO 5211
- Face To Face : ISO 5752 Series 20
- Connection : ANSI 150, DIN PN10, PN16, and JIS10K BS D E Configuration
- Operator : Lever , Gear , Pneumatic , Motor etc.

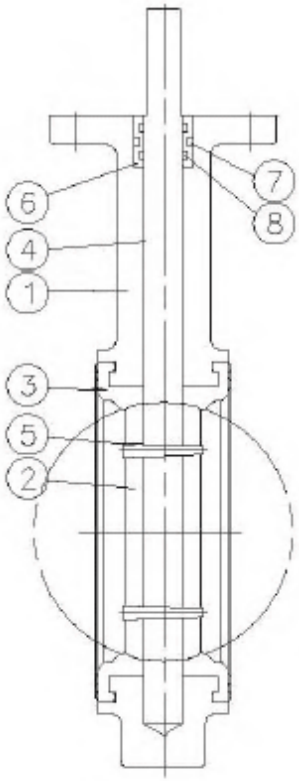
# FEATURES

## 2"~14"




## STANDARD

| | |
|---|---|
| 1 | BODY |
| 2 | D:SC |
| 3 | SEAT R:NG |
| 4 | MA:N STEM |
| 5 | STUB STEM |
| 6 | O R:NG HOLDER |
| 7 | O R:NG |
| 8 | O R:NG |
| 9 | O R:NG |
| 10 | STOP BOLT |
| 11 | BOLT/O R:NG/BOLT |

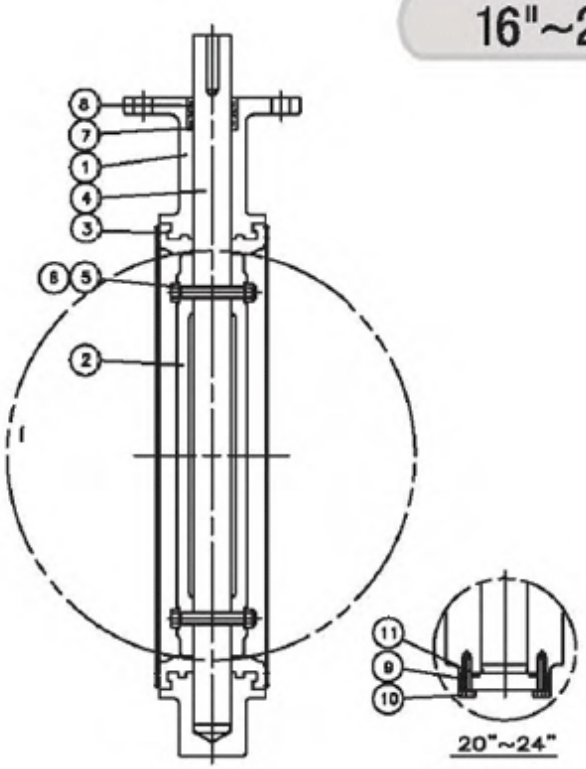



## DUCTILE IRON DISC

| | |
|---|---|
| 1 | BODY |
| 2 | D:SC |
| 3 | SEAT RING |
| 4 | STEM |
| 5 | DISC PIN |
| 6 | O R:NG HOLDER |
| 7 | O R:NG |
| 8 | O R:NG |

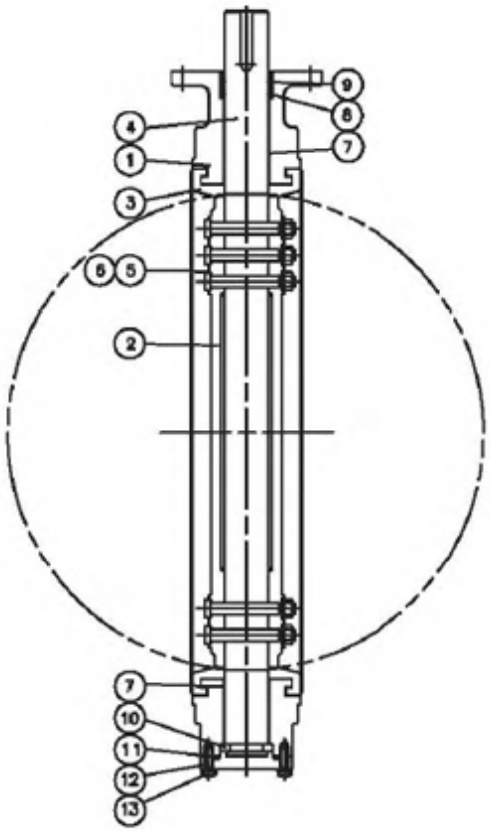
# FEATURES

## 16"~24"



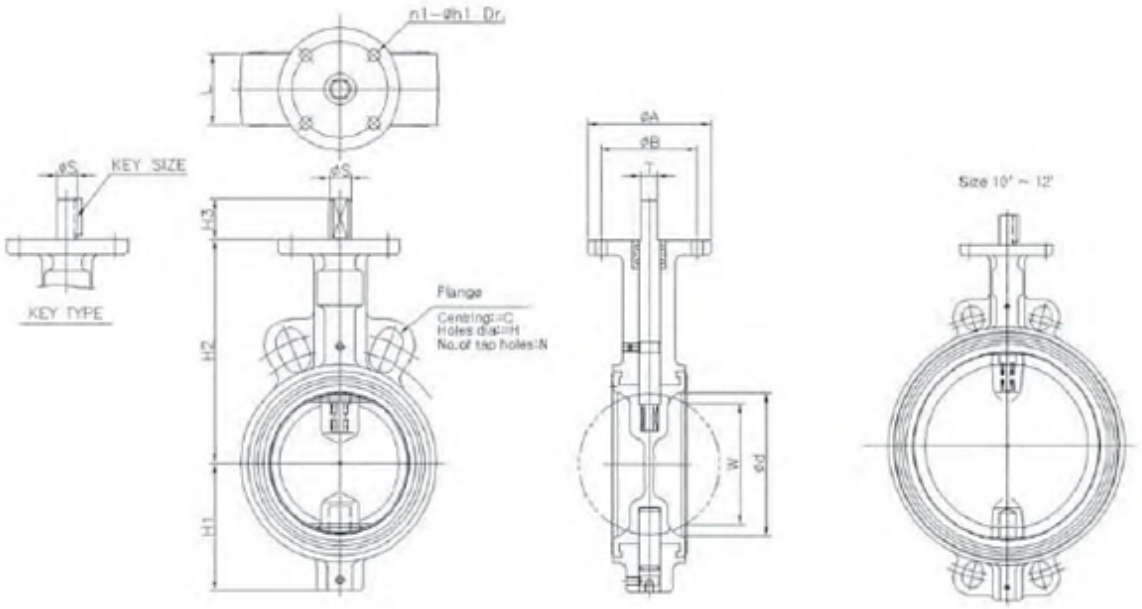

| | |
|---|---|
| 1 | BODY |
| 2 | D:SC |
| 3 | SEAT R:NG |
| 4 | STEM |
| 5 | D:SC BOLT |
| 6 | NUT |
| 7 | O-R:NG HOLDER |
| 8 | O-R:NG |
| 9 | END COVER |
| 10 | BOLT |
| 11 | O-R:NG |

## 28"~48"




| | |
|---|---|
| 1 | BODY |
| 2 | D:SC |
| 3 | SEAT R:NG |
| 4 | STEM |
| 5 | D:SC P:N |
| 6 | NUT |
| 7 | BUSH |
| 8 | O-R:NG HOLDER |
| 9 | O-R:NG |
| 10 | COLLAR |
| 11 | O-R:NG |
| 12 | END COVER |
| 13 | BOLT |

# DIMENSION
## WAFER TYPE




## • Dimensions

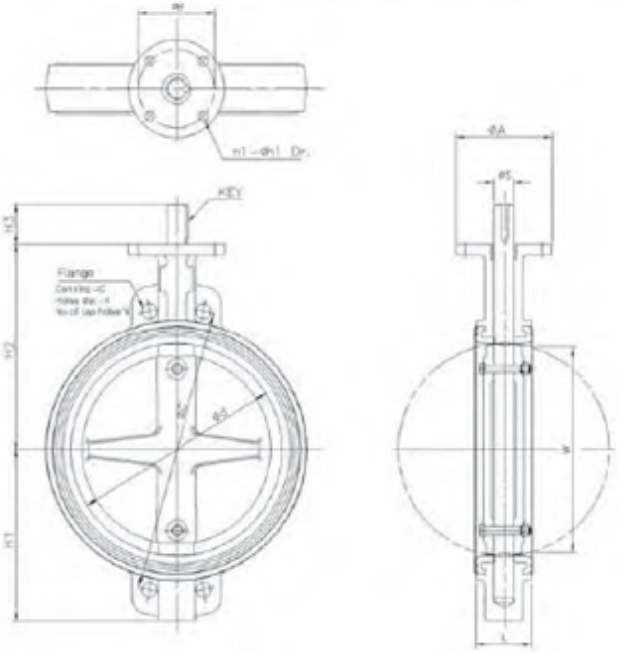
(Unit : mm)

| Size | | Φd | L | H1 | H2 | H3 | W | Stem | | Top Flange | | | KEY SIZE | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | | | | | | | ΦS | T | ΦA | ΦB | n1-Φh1 | | |
| 2" | 50 | 50 | 43 | 61 | 128 | 33 | 28 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 3.2 |
| 2.5" | 65 | 67 | 46 | 73 | 139 | 33 | 51 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 4.1 |
| 3" | 80 | 79 | 46 | 80 | 150 | 33 | 67 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 4.5 |
| 4" | 100 | 101 | 52 | 93 | 164 | 33 | 89 | 16 | 11.8 | 90 | 70 | 4-10 | 5×5 | 5.8 |
| 5" | 125 | 124 | 56 | 113 | 176 | 33 | 113 | 18 | 13.8 | 90 | 70 | 4-10 | 6×6 | 7.8 |
| 6" | 150 | 147 | 56 | 126 | 190 | 33 | 139 | 18 | 13.8 | 90 | 70 | 4-10 | 6×6 | 9.5 |
| 8" | 200 | 197 | 60 | 157 | 230 | 40 | 191 | 22 | 16.8 | 125 | 102 | 4-12 | 8×7 | 17.0 |
| 10" | 250 | 248 | 68 | 205 | 270 | 40 | 242 | 22 | 16.8 | 125 | 102 | 4-12 | 8×7 | 24.0 |
| 12" | 300 | 297 | 78 | 240 | 305 | 40 | 290 | 28 | 21.8 | 125 | 102 | 4-12 | 8×7 | 40.0 |
| 14" | 350 | 332 | 78 | 267 | 335 | 50 | 327 | 32 | 23.8 | 150 | 125 | 4-15 | 10×8 | 55 |

## • Flange Drilling

| Size | | JIS 5K | | | JIS 10K | | | PN 10 | | | PN 16 | | | ANSI 150# | | | TABLE E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH |
| 2" | 50 | 105 | 4 | 15 | 120 | 4 | 19 | 125 | 4 | 18 | 125 | 4 | 18 | 120.5 | 4 | 19 | 114 | 4 | 18 |
| 2.5" | 65 | 130 | 4 | 15 | 140 | 4 | 19 | 145 | 4 | 18 | 145 | 4 | 18 | 139.5 | 4 | 19 | 127 | 4 | 18 |
| 3" | 80 | 145 | 4 | 19 | 150 | 8 | 19 | 160 | 8 | 18 | 160 | 8 | 18 | 152.5 | 4 | 19 | 146 | 4 | 18 |
| 4" | 100 | 165 | 8 | 19 | 175 | 8 | 19 | 180 | 8 | 18 | 180 | 8 | 18 | 190.5 | 8 | 19 | 178 | 8 | 18 |
| 5" | 125 | 200 | 8 | 19 | 210 | 8 | 23 | 210 | 8 | 18 | 210 | 8 | 18 | 216 | 8 | 22 | 210 | 8 | 18 |
| 6" | 150 | 230 | 8 | 19 | 240 | 8 | 23 | 240 | 8 | 18 | 240 | 8 | 23 | 241.5 | 8 | 22 | 235 | 8 | 22 |
| 8" | 200 | 280 | 8 | 23 | 290 | 12 | 23 | 295 | 8 | 23 | 295 | 12 | 23 | 298.5 | 8 | 22 | 292 | 8 | 22 |
| 10" | 250 | 345 | 12 | 23 | 355 | 12 | 25 | 350 | 12 | 23 | 355 | 12 | 27 | 362 | 12 | 25 | 356 | 12 | 22 |
| 12" | 300 | 390 | 12 | 23 | 400 | 16 | 25 | 400 | 12 | 23 | 410 | 12 | 27 | 432 | 12 | 25 | 406 | 12 | 26 |
| 14" | 350 | 435 | 12 | 25 | 445 | 16 | 25 | 460 | 16 | 23 | 470 | 16 | 27 | 476 | 12 | 29 | 470 | 12 | 26 |

# DIMENSION
## WAFER TYPE



### • Dimensions

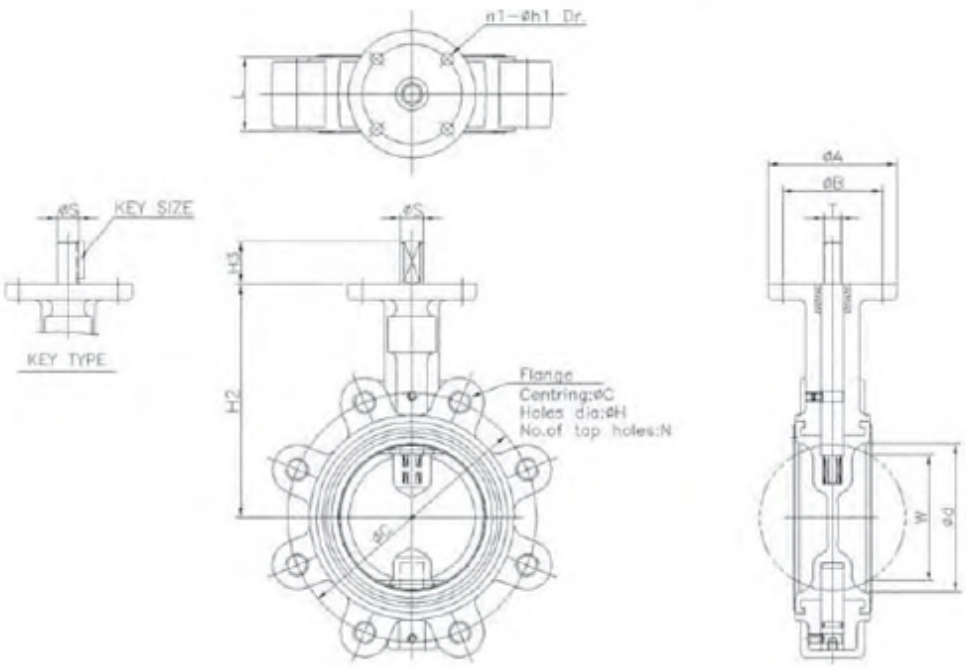
(Unit : mm)

| Size | | Φd | L | H1 | H2 | H3 | W | Stem | Top Flange | | | KEY SIZE | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | | | | | | | ΦS | ΦA | ΦB | n1-Φh1 | | |
| 16" | 400 | 376 | 102 | 303 | 370 | 60 | 366 | 38 | 175 | 140 | 4-18 | 12×8 | 84 |
| 18" | 450 | 430 | 114 | 325 | 390 | 60 | 419 | 38 | 175 | 140 | 4-18 | 12×8 | 97 |
| 20" | 500 | 483 | 127 | 360 | 430 | 75 | 475 | 45 | 210 | 165 | 4-22 | 14×9 | 142 |
| 22" | 550 | 535 | 154 | 410 | 455 | 80 | 516 | 55 | 210 | 165 | 4-22 | 16×10 | 170 |
| 24" | 600 | 568 | 154 | 445 | 495 | 80 | 551 | 55 | 210 | 165 | 4-22 | 16×10 | 195 |
| 28" | 700 | 674 | 165 | 510 | 560 | 100 | 655 | 65 | 250 | 205 | 8-19 | 20×12 | 260 |
| 30" | 750 | 748 | 170 | 550 | 590 | 120 | 730 | 80 | 250 | 205 | 8-19 | 22×14 | 310 |
| 32" | 800 | 774 | 190 | 585 | 635 | 120 | 750 | 80 | 300 | 254 | 8-19 | 20×12 | 350 |
| 36" | 900 | 897 | 203 | 645 | 680 | 130 | 874 | 90 | 300 | 254 | 8-19 | 25×14 | 470 |
| 40" | 1000 | 975 | 216 | 705 | 750 | 140 | 951 | 105 | 300 | 254 | 8-19 | 28×16 | 600 |
| 48" | 1200 | 1200 | 276 | 830 | 880 | 160 | 1168 | 130 | 350 | 298 | 8-23 | 32×18 | 910 |

### • Flange Drilling

| Size | | JIS 5K | | | JIS 10K | | | PN 10 | | | PN 16 | | | ANSI 150# | | | TABLE E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH |
| 16" | 400 | 495 | 16 | 25 | 510 | 16 | 27 | 515 | 16 | 27 | 525 | 16 | 30 | 539.5 | 16 | 29 | 521 | 12 | 26 |
| 18" | 450 | 555 | 16 | 25 | 565 | 20 | 27 | 565 | 20 | 27 | 585 | 20 | 30 | 578 | 16 | 32 | 584 | 16 | 26 |
| 20" | 500 | 605 | 20 | 25 | 620 | 20 | 27 | 620 | 20 | 27 | 650 | 20 | 33 | 635 | 20 | 32 | 641 | 16 | 26 |
| 22" | 550 | 665 | 20 | 27 | 680 | 20 | 33 | – | – | – | – | – | – | 692 | 20 | 35 | 699 | 16 | 30 |
| 24" | 600 | 715 | 20 | 27 | 730 | 24 | M30 | 725 | 20 | 30 | 770 | 20 | 36 | 749.5 | 20 | 35 | 756 | 16 | 33 |
| 28" | 700 | 820 | 24 | M24 | 840 | 24 | M30 | 840 | 24 | M30 | 840 | 24 | M33 | 863.6 | 28 | 11/4" | 845 | 20 | M30 |
| 32" | 800 | 930 | 24 | M30 | 950 | 28 | M30 | 950 | 24 | M30 | 950 | 24 | M36 | 978 | 28 | 11/2" | 984 | 20 | M33 |
| 36" | 900 | 1030 | 24 | M30 | 1050 | 28 | M30 | 1050 | 28 | M30 | 1050 | 28 | M36 | 1085.9 | 32 | 11/2" | 1092 | 24 | M33 |
| 40" | 1000 | 1130 | 28 | M30 | 1160 | 28 | M36 | 1160 | 28 | M36 | 1160 | 28 | M39 | 1200 | 36 | 11/2" | 1175 | 24 | M36 |
| 48" | 1200 | 1350 | 32 | M30 | 1380 | 32 | M36 | 1380 | 32 | M36 | 1390 | 32 | M45 | 1422.4 | 44 | 11/2" | 1410 | 32 | M36 |

# DIMENSION
## LUG YTPE




## • Dimensions

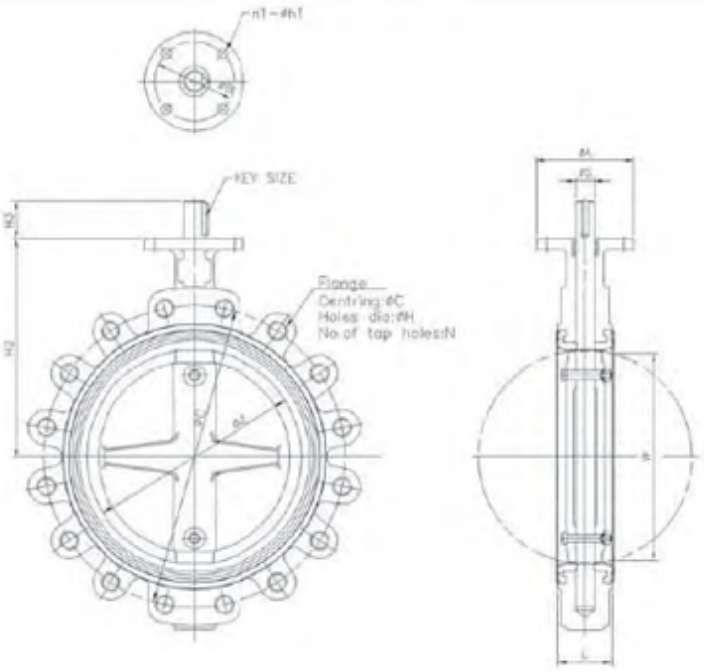
(Unit : mm)

| Size | | Φd | L | H2 | H3 | W | Stem | | Top Flange | | | KEY SIZE | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | | | | | | ΦS | T | ΦA | ΦB | n1-Φh1 | | |
| 2" | 50 | 50 | 43 | 126 | 33 | 28 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 3.9 |
| 2.5" | 65 | 67 | 46 | 139 | 33 | 51 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 4.8 |
| 3" | 80 | 79 | 46 | 150 | 33 | 67 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 5.5 |
| 4" | 100 | 101 | 52 | 164 | 33 | 89 | 16 | 11.8 | 90 | 70 | 4-10 | 5×5 | 8.2 |
| 5" | 125 | 124 | 56 | 176 | 33 | 113 | 18 | 13.8 | 90 | 70 | 4-10 | 6×6 | 9.5 |
| 6" | 150 | 147 | 56 | 190 | 33 | 139 | 18 | 13.8 | 90 | 70 | 4-10 | 6×6 | 12.5 |
| 8" | 200 | 197 | 60 | 230 | 40 | 191 | 22 | 16.8 | 125 | 102 | 4-12 | 8×7 | 19.5 |
| 10" | 250 | 248 | 68 | 270 | 40 | 242 | 22 | 16.8 | 125 | 102 | 4-12 | 8×7 | 28.0 |
| 12" | 300 | 297 | 78 | 305 | 40 | 290 | 28 | 21.8 | 125 | 102 | 4-12 | 8×7 | 50.0 |
| 14" | 350 | 332 | 78 | 335 | 50 | 327 | 32 | 23.8 | 150 | 125 | 4-15 | 10×8 | 64.0 |

## • Flange Drilling

| Size | | JIS 5K | | | JIS 10K | | | PN 10 | | | PN 16 | | | ANSI 150# | | | TABLE E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH |
| 2" | 50 | 105 | 4 | M12 | 120 | 4 | M16 | 125 | 4 | M16 | 125 | 4 | M16 | 120.5 | 4 | 5/8" | 114 | 4 | M16 |
| 2.5" | 65 | 130 | 4 | M12 | 140 | 4 | M16 | 145 | 4 | M16 | 145 | 4 | M16 | 139.5 | 4 | 5/8" | 127 | 4 | M16 |
| 3" | 80 | 145 | 4 | M16 | 150 | 8 | M16 | 160 | 8 | M16 | 160 | 8 | M16 | 152.5 | 4 | 5/8" | 146 | 4 | M16 |
| 4" | 100 | 165 | 8 | M16 | 175 | 8 | M16 | 180 | 8 | M16 | 180 | 8 | M16 | 190.5 | 8 | 5/8" | 178 | 8 | M16 |
| 5" | 125 | 200 | 8 | M16 | 210 | 8 | M20 | 210 | 8 | M16 | 210 | 8 | M16 | 216 | 8 | 3/4" | 210 | 8 | M16 |
| 6" | 150 | 230 | 8 | M16 | 240 | 8 | M20 | 240 | 8 | M20 | 240 | 8 | M20 | 241.5 | 8 | 3/4" | 235 | 8 | M20 |
| 8" | 200 | 280 | 8 | M20 | 290 | 12 | M20 | 295 | 8 | M20 | 295 | 12 | M20 | 298.5 | 8 | 3/4" | 292 | 8 | M20 |
| 10" | 250 | 345 | 12 | M20 | 355 | 12 | M22 | 350 | 12 | M20 | 355 | 12 | M24 | 362 | 12 | 7/8" | 356 | 12 | M20 |
| 12" | 300 | 390 | 12 | M20 | 400 | 16 | M22 | 400 | 12 | M20 | 410 | 12 | M24 | 432 | 12 | 7/8" | 406 | 12 | M24 |
| 14" | 350 | 435 | 12 | M22 | 445 | 16 | M22 | 460 | 16 | M20 | 470 | 16 | M24 | 476 | 12 | 1" | 470 | 12 | M24 |

# DIMENSION
## LUG YTPE




## • Dimensions

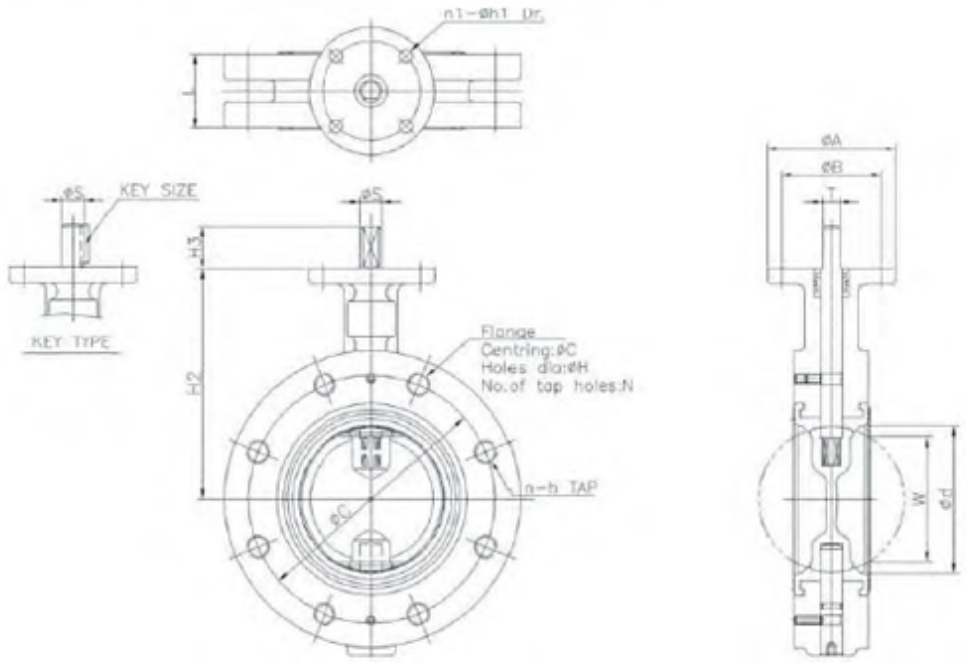
(Unit : mm)

| Size | | Φd | L | H2 | H3 | W | Stem | Top Flange | | | KEY SIZE | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | | | | | | ΦS | ΦA | ΦB | n1-Φh1 | | |
| 16" | 400 | 376 | 102 | 370 | 60 | 366 | 38 | 175 | 140 | 4-18 | 12×8 | 107 |
| 18" | 450 | 430 | 114 | 390 | 60 | 419 | 38 | 175 | 140 | 4-18 | 12×8 | 115 |
| 20" | 500 | 488 | 127 | 430 | 75 | 475 | 45 | 210 | 165 | 4-22 | 14×9 | 160 |
| 22" | 550 | 535 | 154 | 455 | 80 | 516 | 55 | 210 | 165 | 4-22 | 16×10 | 220 |
| 24" | 600 | 568 | 154 | 495 | 80 | 551 | 55 | 210 | 165 | 4-22 | 16×10 | 270 |
| 28" | 700 | 674 | 165 | 560 | 100 | 655 | 65 | 250 | 205 | 8-19 | 20×12 | 340 |
| 30" | 750 | 748 | 170 | 590 | 120 | 730 | 80 | 250 | 205 | 8-19 | 22×14 | 400 |
| 32" | 800 | 774 | 190 | 635 | 120 | 750 | 80 | 300 | 254 | 8-19 | 20×12 | 460 |
| 36" | 900 | 897 | 203 | 680 | 130 | 874 | 90 | 300 | 254 | 8-19 | 25×14 | 580 |
| 40" | 1000 | 975 | 216 | 750 | 140 | 951 | 105 | 300 | 254 | 8-19 | 28×16 | 770 |
| 48" | 1200 | 1200 | 276 | 880 | 160 | 1168 | 130 | 350 | 298 | 8-23 | 32×18 | 1200 |

## • Flange Drilling

| Size | | JIS 5K | | | JIS 10K | | | PN 10 | | | PN 16 | | | ANSI 150# | | | TABLE E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| inch | mm | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH |
| 16" | 400 | 495 | 16 | M22 | 510 | 16 | M24 | 515 | 16 | M24 | 525 | 16 | M27 | 539.5 | 16 | 1" | 521 | 12 | M24 |
| 18" | 450 | 555 | 16 | M22 | 565 | 20 | M24 | 565 | 20 | M24 | 585 | 20 | M27 | 578 | 16 | 11/8" | 584 | 16 | M24 |
| 20" | 500 | 605 | 20 | M22 | 620 | 20 | M24 | 620 | 20 | M24 | 650 | 20 | M30 | 635 | 20 | 11/8" | 641 | 16 | M24 |
| 22" | 550 | 665 | 20 | M24 | 680 | 20 | M30 | ... | ... | ... | ... | ... | ... | 692 | 20 | 11/4" | 699 | 16 | M27 |
| 24" | 600 | 715 | 20 | M24 | 730 | 24 | M30 | 725 | 20 | M27 | 770 | 20 | M33 | 749.5 | 20 | 11/4" | 756 | 16 | M30 |
| 28" | 700 | 820 | 24 | M24 | 840 | 24 | M30 | 840 | 24 | M30 | 840 | 24 | M33 | 863.6 | 28 | 11/4" | 845 | 20 | M30 |
| 32" | 800 | 930 | 24 | M30 | 950 | 28 | M30 | 950 | 24 | M30 | 950 | 24 | M36 | 978 | 28 | 11/2" | 984 | 20 | M33 |
| 36" | 900 | 1030 | 24 | M30 | 1050 | 28 | M30 | 1050 | 28 | M30 | 1050 | 28 | M36 | 1085.9 | 32 | 11/2" | 1092 | 24 | M33 |
| 40" | 1000 | 1130 | 28 | M30 | 1160 | 28 | M36 | 1160 | 28 | M36 | 1160 | 28 | M39 | 1200 | 36 | 11/2" | 1175 | 24 | M36 |
| 48" | 1200 | 1350 | 32 | M30 | 1380 | 32 | M36 | 1380 | 32 | M36 | 1390 | 32 | M45 | 1422.4 | 44 | 11/2" | 1410 | 32 | M36 |

# DIMENSION
## FLANGE TYPE




### • Dimensions

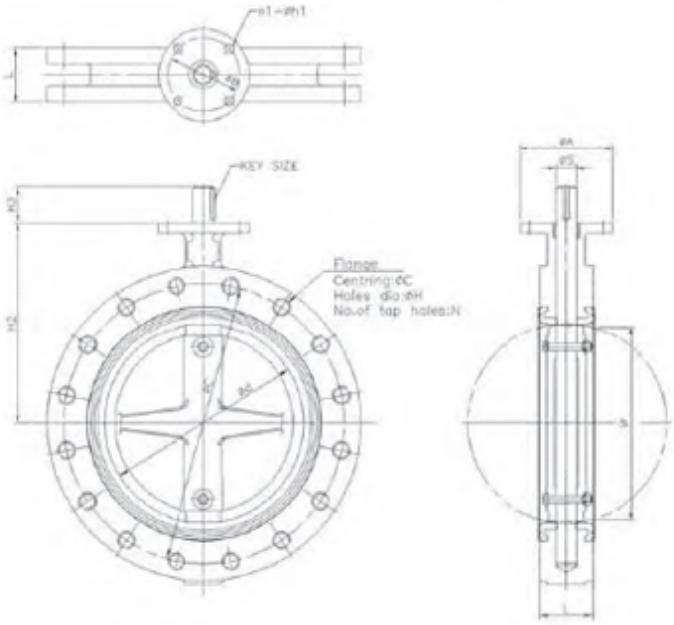
(Unit : mm)

| Size | | Φd | L | H2 | H3 | W | Stem | | Top Flange | | | KEY SIZE | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | | | | | | ΦS | T | ΦA | ΦB | n1-Φh1 | | |
| 2" | 50 | 50 | 43 | 128 | 33 | 28 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 4.7 |
| 2.5" | 65 | 67 | 46 | 139 | 33 | 51 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 5.8 |
| 3" | 80 | 79 | 46 | 150 | 33 | 67 | 14 | 9.8 | 90 | 70 | 4-10 | 5×5 | 6.6 |
| 4" | 100 | 101 | 52 | 164 | 33 | 89 | 16 | 11.8 | 90 | 70 | 4-10 | 5×5 | 10.0 |
| 5" | 125 | 124 | 56 | 176 | 33 | 113 | 18 | 13.8 | 90 | 70 | 4-10 | 6×6 | 11.5 |
| 6" | 150 | 147 | 56 | 190 | 33 | 139 | 18 | 13.8 | 90 | 70 | 4-10 | 6×6 | 15.0 |
| 8" | 200 | 197 | 60 | 230 | 40 | 191 | 22 | 16.8 | 125 | 102 | 4-12 | 8×7 | 23.0 |
| 10" | 250 | 248 | 68 | 270 | 40 | 242 | 22 | 16.8 | 125 | 102 | 4-12 | 8×7 | 34.0 |
| 12" | 300 | 297 | 78 | 305 | 40 | 290 | 28 | 21.8 | 125 | 102 | 4-12 | 8×7 | 60.0 |
| 14" | 350 | 332 | 78 | 335 | 50 | 327 | 32 | 23.8 | 150 | 125 | 4-15 | 10×8 | 98.0 |

### • Flange Drilling

| Size | | JIS 5K | | | JIS 10K | | | PN 10 | | | PN 16 | | | ANSI 150# | | | TABLE E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH |
| 2" | 50 | 105 | 4 | M12 | 120 | 4 | M16 | 125 | 4 | M16 | 125 | 4 | M16 | 120.5 | 4 | 5/8 | 114 | 4" | M16 |
| 2.5" | 65 | 130 | 4 | M12 | 140 | 4 | M16 | 145 | 4 | M16 | 145 | 4 | M16 | 139.5 | 4 | 5/8 | 127 | 4" | M16 |
| 3" | 80 | 145 | 4 | M16 | 150 | 8 | M16 | 160 | 8 | M16 | 160 | 8 | M16 | 152.5 | 4 | 5/8 | 146 | 4" | M16 |
| 4" | 100 | 165 | 8 | M16 | 175 | 8 | M16 | 180 | 8 | M16 | 180 | 8 | M16 | 190.5 | 8 | 5/8 | 178 | 8" | M16 |
| 5" | 125 | 200 | 8 | M16 | 210 | 8 | M20 | 210 | 8 | M16 | 210 | 8 | M16 | 216 | 8 | 3/4 | 210 | 8" | M16 |
| 6" | 150 | 230 | 8 | M16 | 240 | 8 | M20 | 240 | 8 | M20 | 240 | 8 | M20 | 241.5 | 8 | 3/4 | 235 | 8" | M20 |
| 8" | 200 | 280 | 8 | M20 | 290 | 12 | M20 | 295 | 8 | M20 | 295 | 12 | M20 | 298.5 | 8 | 3/4 | 292 | 8" | M20 |
| 10" | 250 | 345 | 12 | M20 | 355 | 12 | M22 | 350 | 12 | M20 | 355 | 12 | M24 | 362 | 12 | 7/8 | 356 | 12" | M20 |
| 12" | 300 | 390 | 12 | M20 | 400 | 16 | M22 | 400 | 12 | M20 | 410 | 12 | M24 | 432 | 12 | 7/8 | 406 | 12" | M24 |
| 14" | 350 | 435 | 12 | M22 | 445 | 16 | M22 | 460 | 16 | M20 | 470 | 16 | M24 | 476 | 12 | 1 | 470 | 12" | M24 |

# DIMENSION
## FLANGE TYPE




### • Dimensions

(Unit : mm)

| Size | | Φd | L | H2 | H3 | W | Stem | Top Flange | | | KEY SIZE | Weight (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | | | | | | ΦS | ΦA | ΦB | n1-Φh1 | | |
| 16" | 400 | 376 | 102 | 370 | 60 | 366 | 38 | 175 | 140 | 4-18 | 12×8 | 146 |
| 18" | 450 | 430 | 114 | 390 | 60 | 419 | 38 | 175 | 140 | 4-18 | 12×8 | 205 |
| 20" | 500 | 488 | 127 | 430 | 75 | 475 | 45 | 210 | 165 | 4-22 | 14×9 | 225 |
| 22" | 550 | 535 | 154 | 455 | 80 | 516 | 55 | 210 | 165 | 4-22 | 16×10 | 250 |
| 24" | 600 | 568 | 154 | 495 | 80 | 551 | 55 | 210 | 165 | 4-22 | 16×10 | 280 |
| 28" | 700 | 674 | 165 | 560 | 100 | 655 | 65 | 250 | 205 | 8-19 | 20×12 | 350 |
| 30" | 750 | 748 | 170 | 590 | 120 | 730 | 80 | 250 | 205 | 8-19 | 22×14 | 410 |
| 32" | 800 | 774 | 190 | 635 | 120 | 750 | 80 | 300 | 254 | 8-19 | 20×12 | 480 |
| 36" | 900 | 897 | 203 | 680 | 130 | 874 | 90 | 300 | 254 | 8-19 | 25×14 | 610 |
| 40" | 1000 | 975 | 216 | 750 | 140 | 951 | 105 | 300 | 254 | 8-19 | 28×16 | 870 |
| 48" | 1200 | 1200 | 276 | 880 | 160 | 1168 | 130 | 350 | 298 | 8-23 | 32×18 | 1250 |

### • Flange Drilling

| Size | | JIS 5K | | | JIS 10K | | | PN 10 | | | PN 16 | | | ANSI 150# | | | TABLE E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Inch | mm | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH | ΦC | N | ΦH |
| 16" | 400 | 495 | 16 | M22 | 510 | 16 | M24 | 515 | 16 | M24 | 525 | 16 | M27 | 539.5 | 16 | 1" | 521 | 12 | M24 |
| 18" | 450 | 555 | 16 | M22 | 565 | 20 | M24 | 565 | 20 | M24 | 585 | 20 | M27 | 578 | 16 | 11/8" | 584 | 16 | M24 |
| 20" | 500 | 605 | 20 | M22 | 620 | 20 | M24 | 620 | 20 | M24 | 650 | 20 | M30 | 635 | 20 | 11/8" | 641 | 16 | M24 |
| 22" | 550 | 665 | 20 | M24 | 680 | 20 | M30 | - | - | - | - | - | - | 692 | 20 | 11/4" | 699 | 16 | M27 |
| 24" | 600 | 715 | 20 | M24 | 730 | 24 | M30 | 725 | 20 | M27 | 770 | 20 | M33 | 749.5 | 20 | 11/4" | 756 | 16 | M30 |
| 28" | 700 | 820 | 24 | M24 | 840 | 24 | M30 | 840 | 24 | M30 | 840 | 24 | M33 | 863.6 | 28 | 11/4" | 845 | 20 | M30 |
| 32" | 800 | 930 | 24 | M30 | 950 | 28 | M30 | 950 | 24 | M30 | 950 | 24 | M36 | 978 | 28 | 11/2" | 984 | 20 | M33 |
| 36" | 900 | 1030 | 24 | M30 | 1050 | 28 | M30 | 1050 | 28 | M30 | 1050 | 28 | M36 | 1085.9 | 32 | 11/2" | 1092 | 24 | M33 |
| 40" | 1000 | 1130 | 28 | M30 | 1160 | 28 | M36 | 1160 | 28 | M36 | 1160 | 28 | M39 | 1200 | 36 | 11/2" | 1175 | 24 | M36 |
| 48" | 1200 | 1350 | 32 | M30 | 1380 | 32 | M36 | 1380 | 32 | M36 | 1390 | 32 | M45 | 1422.4 | 44 | 11/2" | 1410 | 32 | M36 |