

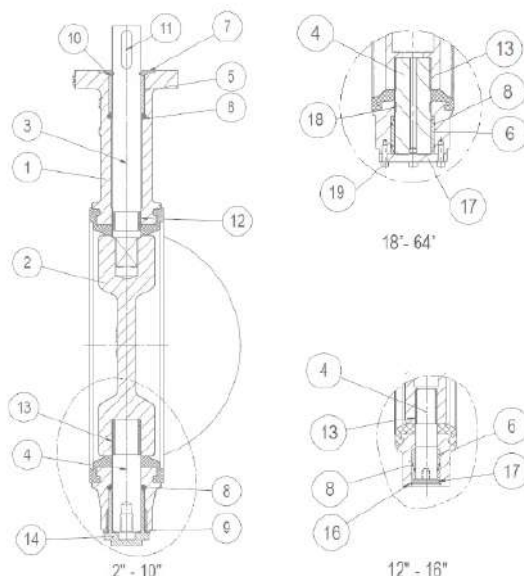
# DOUBLE FLANGED 116

- Body construction 116 Double Flanged 2"-64"
- Face to face ISO 5752 (series 20)/ API 609/ BS 5155  
BS EN593/ EN-558-1/(series 20)
- Flanges ISO 7005-2 PN 10/16 ( EN 1092-2 PN 10/16)  
ANSI B16.1 class 125/ B16.1 class 150
- Top flange EN ISO 5211
- Max working pressure PN 16
- Temperature range -20°C + 140°C according to material
- Operation Handwheel  
Lever  
Electric actuator  
Pneumatic actuator
- Coating Epoxy min 80 micron UV resistance
- Disc Worthite/ Duplex/ Super Duplex/ SS 316/ UB6  
Ductile Iron Enamel/ Halar/ Rilsan coated  
Ductile Iron rubber vulcanized EPDM/ NBR  
Hypalon/ Butyl
- Tightness test According to EN 12266-1:2003
- Material certificate EN 10204.3.1



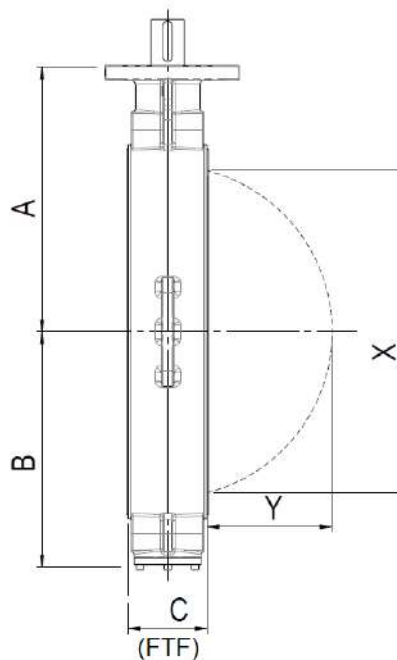
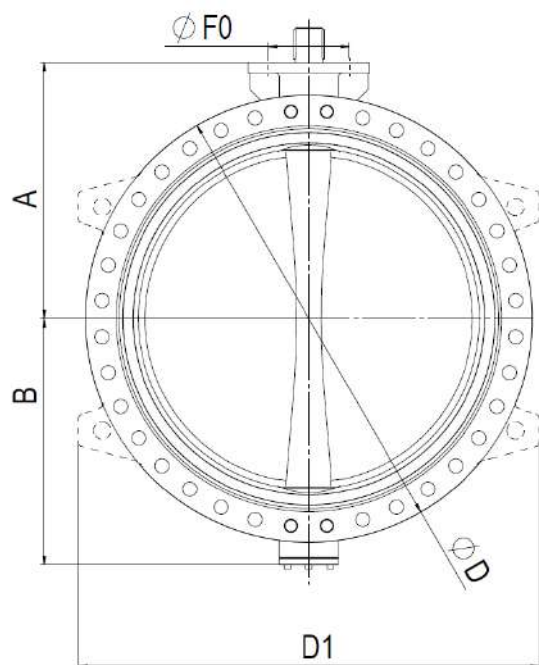
## Materials

| Item      | Description                   | Material                    |
|-----------|-------------------------------|-----------------------------|
| 1         | Body                          | Ductile Iron/ Cast Iron     |
|           | Seat (vulcanized)             | EPDM/ NBR/ Butyl/ Hypalon   |
| 2         | Disc                          | As specified above          |
| 3,4       | Shaft/ Axle                   | SS420/ SS316/ Duplex        |
| 5,6,14,18 | Bush                          | Brass/ Reinforced Nylon/ PP |
| 7         | Washer                        | Steel Galvanized            |
| 8         | O-Ring                        | NBR/ EPDM                   |
| 9         | Sealing Ring                  | Fiber                       |
| 10,16     | Circlip                       | Spring Steel                |
| 11        | Woodruff Key/ Rectangular Key | Steel                       |
| 12,13     | Bush                          | Reinforced Nylon            |
| 17        | Retaining Ring                | Steel                       |
| 19        | Screws                        | Carbon Steel Galvanized     |



# DOUBLE FLANGED 116

## Dimensions



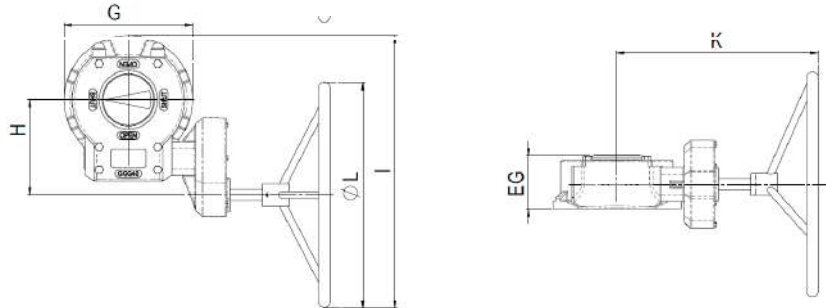
| mm   | 300   | 350 | 400   | 450 | 500 | 600 | 700 | 750   | 800  | 900   | 1000 | 1050 | 1100 | 1200 | 1300  | 1400  | 1600 |
|------|-------|-----|-------|-----|-----|-----|-----|-------|------|-------|------|------|------|------|-------|-------|------|
| inch | 12"   | 14" | 16"   | 18" | 20" | 24" | 28" | 30"   | 32"  | 36"   | 40"  | 42"  | 44"  | 48"  | 52"   | 56"   | 64"  |
| A    | 301.5 | 315 | 360.5 | 390 | 450 | 510 | 560 | 590   | 610  | 690   | 740  | 800  | 820  | 860  | 940   | 1000  | 1180 |
| B    | 243.5 | 259 | 295.5 | 342 | 367 | 426 | 490 | 525   | 550  | 615   | 710  | 762  | 770  | 860  | 930   | 985   | 1145 |
| C    | 78    | 78  | 102   | 114 | 127 | 152 | 165 | 190   | 190  | 203   | 216  | 216  | 240  | 254  | 254   | 279   | 318  |
| X    | 293   | 327 | 370   | 425 | 474 | 574 | 675 | 720   | 767  | 840   | 966  | 1003 | 1061 | 1144 | 1247  | 1356  | 1557 |
| Y    | 112.5 | 129 | 141   | 163 | 182 | 221 | 265 | 277.5 | 300  | 330.5 | 387  | 405  | 424  | 459  | 509.5 | 553.5 | 632  |
| D    | 460   | 520 | 580   | 640 | 715 | 840 | 925 | 985   | 1060 | 1175  | 1290 | 1345 | 1405 | 1510 | 1625  | 1745  | 1930 |
| D1   | -     | -   | -     | -   | -   | -   | -   | -     | -    | -     | -    | 1350 | 1410 | 1550 | 1675  | 1785  | 1980 |

Note: Due to company's policy of continuous improvement, Hakohav Valves reserves the right to change specification without prior notice.

# ACTUATION DATA

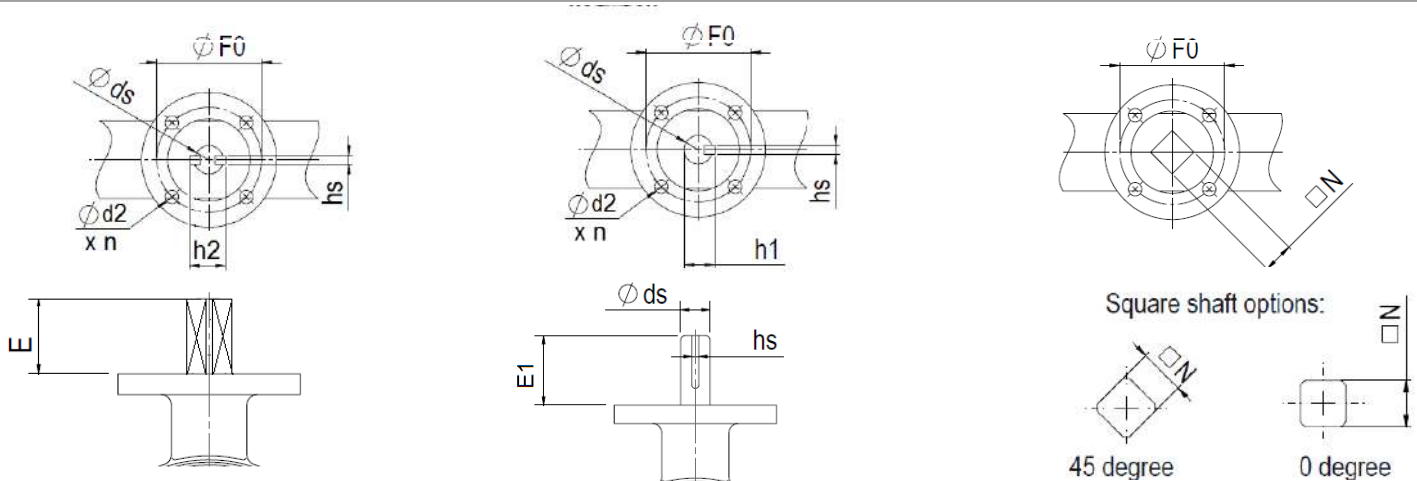
Hakohav Valves offers a wide selection of operating systems ,levers, handwheels gearboxes , pneumatic and electric actuators.  
All actuators are calibrated and cycle tested before shipment to ensure safe and precise operation.

## GEAR



|                  | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 750 | 800 | 900 | 1000  | 1050  | 1100  | 1200  | 1300  | 1400  | 1600 |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|------|
| Gear<br>Option A | 12" | 14" | 16" | 18" | 20" | 24" | 28" | 30" | 32" | 36" | 40"   | 42"   | 44"   | 48"   | 52"   | 56"   | 64"  |
|                  | 83  | 83  | 83  | 94  | 94  | 94  | 129 | 129 | 129 | 129 | 143.5 | 143.5 | 143.5 | 143.5 | 190   | 190   | 190  |
|                  | 201 | 201 | 201 | 330 | 330 | 330 | 360 | 360 | 360 | 360 | 455   | 455   | 455   | 455   | 648.5 | 648.5 | 639  |
|                  | 100 | 100 | 100 | 166 | 166 | 166 | 211 | 211 | 211 | 211 | 263   | 263   | 263   | 263   | 384   | 384   | 431  |
|                  | 410 | 410 | 410 | 491 | 566 | 566 | 604 | 604 | 654 | 654 | 733   | 733   | 733   | 733   | 941   | 941   | 1016 |
|                  | 235 | 330 | 330 | 420 | 420 | 420 | 447 | 447 | 457 | 457 | 500   | 859   | 500   | 500   | 571   | 571   | 611  |
| Gear<br>Option B | 215 | 400 | 400 | 400 | 600 | 600 | 500 | 500 | 600 | 600 | 600   | 600   | 600   | 600   | 700   | 700   | 700  |
|                  | 74  | -   | -   | 82  | 86  | 86  | -   | -   | -   | -   | -     | -     | -     | -     | -     | -     | -    |
|                  | 128 | -   | -   | 168 | 176 | 176 | -   | -   | -   | -   | -     | -     | -     | -     | -     | -     | -    |
|                  | 67  | -   | -   | 80  | 95  | 95  | -   | -   | -   | -   | -     | -     | -     | -     | -     | -     | -    |
|                  | 287 | -   | -   | 390 | 428 | 428 | -   | -   | -   | -   | -     | -     | -     | -     | -     | -     | -    |
|                  | 220 | -   | -   | 220 | 250 | 250 | -   | -   | -   | -   | -     | -     | -     | -     | -     | -     | -    |
|                  | 350 | -   | -   | 500 | 500 | 500 | -   | -   | -   | -   | -     | -     | -     | -     | -     | -     | -    |

## MOUNTING FLANGE (116)



|             | mm   | 300 | 350 | 400 | 450 | 500  | 600  | 700             | 750 | 800 | 900 | 1000 | 1050 | 1100 | 1200 | 1300 | 1400 | 1600 |
|-------------|------|-----|-----|-----|-----|------|------|-----------------|-----|-----|-----|------|------|------|------|------|------|------|
| Top flange  | inch | 12" | 14" | 16" | 18" | 20"  | 24"  | 28"             | 30" | 32" | 36" | 40"  | 42"  | 44"  | 48"  | 52"  | 56"  | 64"  |
|             | E1   | 60  | 60  | 60  | 90  | 90   | 90   | 98              | 110 | 93  | 100 | 100  | 100  | 100  | 110  | 170  | 141  | 140  |
|             | ds   | 35  | 35  | 35  | 45  | 60   | 60   | 70              | 70  | 80  | 80  | 80   | 90   | 90   | 100  | 108  | 115  | 125  |
|             | hs   | 8   | 8   | 8   | 10  | 12.7 | 12.7 | 20              | 20  | 20  | 22  | 22   | 22   | 22   | 28   | 32   | 32   | 32   |
|             | h1   | 39  | 39  | 39  | 50  | 66.3 | 66.3 | -               | -   | -   | -   | -    | -    | -    | -    | -    | -    | -    |
|             | h2   | -   | -   | -   | -   | -    | -    | 79              | 80  | 90  | 90  | 90   | 100  | 100  | 116  | 121  | 128  | 139  |
|             | d2   | 11  | 17  | 17  | 17  | 17   | 17   | 17              | 17  | 17  | 17  | 17   | 21   | 21   | 21   | 32   | 32   | 32   |
|             | n    | 4   | 4   | 4   | 4   | 4    | 4    | 8               | 8   | 8   | 8   | 8    | 8    | 8    | 8    | 8    | 8    | 8    |
|             | N    | 22  | 27  | 27  | 36  | 36   | 46   | Acc.to ISO 5211 |     |     |     |      |      |      |      |      |      |      |
|             | E    | 22  | 27  | 27  | 36  | 36   | 46   |                 |     |     |     |      |      |      |      |      |      |      |
| to ISO 5211 |      | F10 | F14 | F14 | F14 | F14  | F14  | F25             | F25 | F25 | F25 | F25  | F30  | F30  | F30  | F35  | F35  | F35  |