

CLASS

150/300/600

IVM ENGINEERING

SWING  
CHECK VALVE

## TECHNICAL DATA

MANUFACTURING STD.: API 6D / BS 1868

TESTING &amp; INSPECTION STD.: API 598 / API 6D

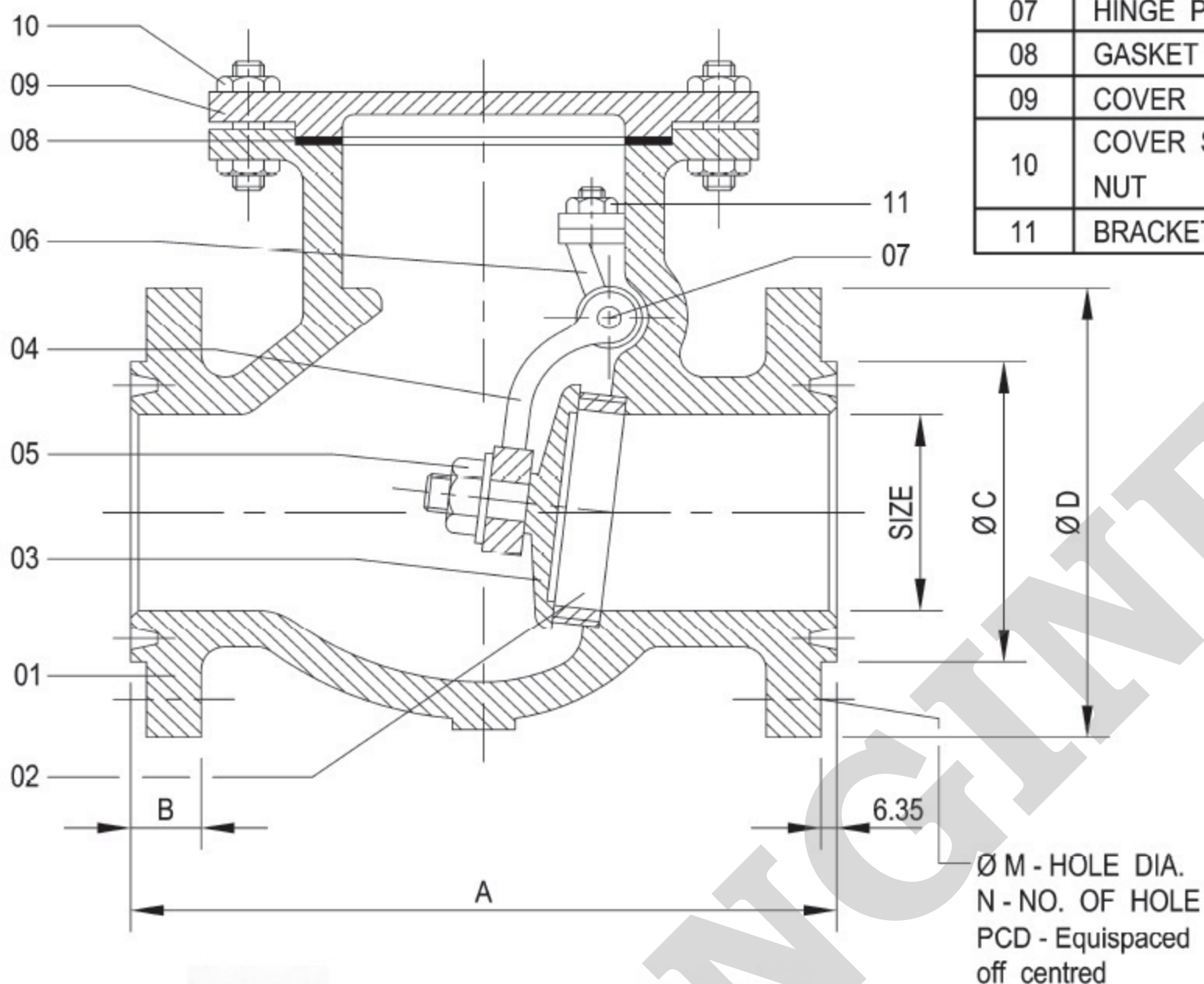
FACE TO FACE: AS PER ANSI B 16.10

SHELL WALL THICKNESS: ANSI B 16.34

END CONNECTIONS: FLANGED AS PER ANSI B 16.5

RING GROOVE: ANSI B 16.20

| NO. | DESCRIPTION        | MATERIAL                               | QTY. |
|-----|--------------------|----------------------------------------|------|
| 01  | BODY               | ASTM A 216 Gr. WCB                     | 1    |
| 02  | SEAT RING          | CARBON STEEL WITH 13% CR.              | 1    |
| 03  | DISC               | ASTM A 216 Gr. WCB WITH 13% CR.        | 1    |
| 04  | HINGE              | ASTM A 216 Gr. WCB                     | 1    |
| 05  | DISC NUT           | ASTM A 193 Gr. B7<br>ASTM A 194 Gr. 2H | 1    |
| 06  | BRACKET            | ASTM A 216 Gr. WCB                     | 1    |
| 07  | HINGE PIN          | S.S. AISI 410                          | 1    |
| 08  | GASKET             | COMPRESSED ASBESTOS FIBRE              | 1    |
| 09  | COVER              | ASTM A 216 Gr. WCB                     | 1    |
| 10  | COVER STUD & NUT   | ASTM A 193 Gr. B7<br>ASTM A 194 Gr. 2H | --   |
| 11  | BRACKET STUD / NUT | ASTM A 216 Gr. WCB                     | 1    |



| SIZE   |      | CLASS - 150 |      |     |       |     |    |       |
|--------|------|-------------|------|-----|-------|-----|----|-------|
| IN.    | M.M. | A           | B    | Ø C | Ø D   | Ø M | N  | PCD   |
| 1.1/2" | 40   | 165         | 14.2 | 73  | 127.0 | 16  | 4  | 98.5  |
| 2"     | 50   | 203         | 15.7 | 92  | 152.0 | 19  | 4  | 120.6 |
| 2.1/2" | 65   | 216         | 17.5 | 105 | 178.0 | 19  | 4  | 139.7 |
| 3"     | 80   | 241         | 19.0 | 127 | 190.5 | 19  | 4  | 152.4 |
| 4"     | 100  | 292         | 24.0 | 157 | 229.0 | 19  | 8  | 190.5 |
| 5"     | 125  | 330         | 24.0 | 186 | 254.0 | 22  | 8  | 215.9 |
| 6"     | 150  | 356         | 24.0 | 216 | 279.0 | 22  | 8  | 241.3 |
| 8"     | 200  | 495         | 28.5 | 270 | 343.0 | 22  | 8  | 298.4 |
| 10"    | 250  | 622         | 30.0 | 324 | 406.0 | 25  | 12 | 362.0 |
| 12"    | 300  | 699         | 32.0 | 381 | 483.0 | 25  | 12 | 431.8 |
| 14"    | 350  | 787         | 35.0 | 413 | 533.0 | 28  | 12 | 476.2 |
| 16"    | 400  | 864         | 36.5 | 470 | 597.0 | 28  | 16 | 539.8 |

| SIZE   |      | CLASS - 300 |      |     |       |     |    |       |
|--------|------|-------------|------|-----|-------|-----|----|-------|
| IN.    | M.M. | A           | B    | Ø C | Ø D   | Ø M | N  | PCD   |
| 1.1/2" | 40   | 241.3       | 20.5 | 73  | 156.0 | 22  | 4  | 114.3 |
| 2"     | 50   | 266.7       | 22.0 | 92  | 165.0 | 19  | 8  | 127.0 |
| 2.1/2" | 65   | 292.0       | 25.0 | 105 | 190.5 | 22  | 8  | 149.3 |
| 3"     | 80   | 317.5       | 28.5 | 127 | 209.5 | 22  | 8  | 168.0 |
| 4"     | 100  | 355.6       | 32.0 | 157 | 254.0 | 22  | 8  | 200.0 |
| 5"     | 125  | 400.0       | 35.0 | 186 | 279.4 | 22  | 8  | 235.0 |
| 6"     | 150  | 444.5       | 36.5 | 216 | 317.5 | 22  | 12 | 269.7 |
| 8"     | 200  | 533.4       | 41.0 | 270 | 381.0 | 25  | 12 | 330.2 |
| 10"    | 250  | 622.3       | 47.5 | 324 | 444.5 | 28  | 16 | 387.4 |
| 12"    | 300  | 711.2       | 51.0 | 381 | 521.0 | 32  | 16 | 450.8 |
| 14"    | 350  | 838.0       | 54.0 | 413 | 584.0 | 32  | 20 | 514.3 |
| 16"    | 400  | 863.6       | 57.0 | 470 | 648.0 | 35  | 20 | 571.5 |

| SUITABLE FOR |       |     |     |       |
|--------------|-------|-----|-----|-------|
| STEAM        | WATER | OIL | AIR | GASES |
| ●            | ●     | ●   |     |       |

| PRIMARY SERVICE RATING & TEST PRESSURE |                |       |                       |           |
|----------------------------------------|----------------|-------|-----------------------|-----------|
| CLASS                                  | WORKING PRESS. | TEMP. | HYD. TEST PRESS. BODY | SEAT      |
| 900                                    | 900 PSIG       | 800°F | 3250 PSIG             | 2400 PSIG |
| 1500                                   | 1500 PSIG      | 800°F | 5400 PSIG             | 4000 PSIG |
| 2500                                   | 2500 PSIG      | 800°F | 9000 PSIG             | 6600 PSIG |
| AIR TEST - SEAT 80 PSIG ±10 PSIG       |                |       |                       |           |

| SIZE   |      | CLASS - 600 |      |     |       |     |    |       |
|--------|------|-------------|------|-----|-------|-----|----|-------|
| IN.    | M.M. | A           | B    | Ø C | Ø D   | Ø M | N  | PCD   |
| 1.1/2" | 40   | 241.3       | 28.7 | 73  | 156.0 | 22  | 4  | 114.3 |
| 2"     | 50   | 292.0       | 31.7 | 92  | 165.0 | 19  | 8  | 127.0 |
| 2.1/2" | 65   | 330.2       | 34.8 | 105 | 191.0 | 22  | 8  | 149.3 |
| 3"     | 80   | 355.6       | 38.1 | 127 | 210.0 | 22  | 8  | 168.0 |
| 4"     | 100  | 431.8       | 44.5 | 157 | 273.0 | 25  | 8  | 216.0 |
| 5"     | 125  | 508.0       | 50.8 | 186 | 330.0 | 28  | 8  | 266.7 |
| 6"     | 150  | 558.8       | 54.1 | 216 | 356.0 | 28  | 12 | 292.0 |
| 8"     | 200  | 660.4       | 62.0 | 270 | 419.0 | 32  | 12 | 349.2 |
| 10"    | 250  | 787.4       | 69.8 | 324 | 508.0 | 35  | 16 | 431.8 |
| 12"    | 300  | 838.2       | 72.9 | 381 | 559.0 | 35  | 20 | 489.0 |

ALL DIMENSION ARE IN MM