

# TECHNICAL DOCUMENT

|                   |       |          |
|-------------------|-------|----------|
| Ra                | 0.2   | ▽▽▽▽     |
|                   | 1.6   | ▽▽▽      |
|                   | 6.3   | ▽▽       |
|                   | 25    | ▽        |
| GENERAL TOLERANCE | ± 0.1 | 0.5~5    |
|                   | ± 0.2 | 6~30     |
|                   | ± 0.3 | 9~100    |
|                   | ± 0.5 | 121~320  |
|                   | ± 0.8 | 321~1000 |

PCD  $\varnothing$ D2  
PCD  $\varnothing$ D1  
R1  
R2

FEATURES :

- FACE TO FACE : EN 558-1 R27
- FLANGE END : EN 1092-1
- WALL THICKNESS : EN 12516-1
- API 607 FIRE SAFE APPROVED
- TEST : EN 12266-1

| ITEM | PARTS             | MATERIAL       |            |
|------|-------------------|----------------|------------|
|      |                   | 1.4408         | 1.0619     |
| 1    | BODY              | KH2FD16AIT     | KH2FD16IIT |
| 2    | CAP               |                |            |
| 3    | BALL              | ASTM A351-CF8M |            |
| 4    | STEM              | ASTM A276-316  |            |
| 5    | SEAT              | RTFE / TFM1600 |            |
| 6    | SEAL              | GRAPHITE       |            |
| 7    | THRUST WASHER     | CTFE           |            |
| 8    | O-RING            | VITON          |            |
| 9    | PACKING A         | GRAPHITE       |            |
| 10   | PACKING B         | CTFE           |            |
| 11   | GLAND RING        | AISI 304       |            |
| 12   | BELLEVILLE WASHER | AISI 301       |            |
| 13   | NUT               | AISI 304       |            |
| 14   | LOCK WASHER       |                |            |
| 15   | STOPPER           |                |            |
| 16   | HANDLE            |                |            |
| 17   | STUD              |                |            |
| 18   | NUT               |                |            |
| 19   | SOCKET SET SCREWS |                |            |

  

| DN      | d  | G   | C   | D   | L   | H     | W   | T  | f | D1  | D2  | R1   | R2   | N | M  | Torque (N-m) |           | Weight (kg) |
|---------|----|-----|-----|-----|-----|-------|-----|----|---|-----|-----|------|------|---|----|--------------|-----------|-------------|
|         |    |     |     |     |     |       |     |    |   |     |     |      |      |   |    | Action       | Breakaway |             |
| PN16-40 |    |     |     |     |     |       |     |    |   |     |     |      |      |   |    |              |           |             |
| 15      | 15 | 45  | 65  | 95  | 115 | 87    | 190 | 16 | 2 | 36  | 42  | 2.75 | 2.75 | 4 | 14 | 3            | 5.2       | 2.3         |
| 20      | 20 | 58  | 75  | 105 | 120 | 90.5  | 190 | 18 | 2 | 36  | 42  | 2.75 | 2.75 | 4 | 14 | 4.7          | 8         | 2.9         |
| 25      | 24 | 68  | 85  | 115 | 125 | 92.4  | 190 | 18 | 2 | 42  | 50  | 2.75 | 3.5  | 4 | 14 | 9            | 12.5      | 3.9         |
| 32      | 30 | 78  | 100 | 140 | 130 | 106.9 | 190 | 18 | 2 | 42  | 50  | 2.75 | 3.5  | 4 | 18 | 11           | 14        | 5.5         |
| 40      | 38 | 88  | 110 | 150 | 140 | 121.9 | 235 | 18 | 3 | 50  | 70  | 3.5  | 4.5  | 4 | 18 | 18           | 24.5      | 7.3         |
| 50      | 50 | 102 | 125 | 165 | 150 | 129.9 | 235 | 20 | 3 | 50  | 70  | 3.5  | 4.5  | 4 | 18 | 23           | 32        | 10          |
| PN16    |    |     |     |     |     |       |     |    |   |     |     |      |      |   |    |              |           |             |
| 65      | 64 | 122 | 145 | 185 | 170 | 155.8 | 325 | 18 | 3 | 70  | 102 | 4.5  | 5.5  | 4 | 18 | 27           | 36        | 15.3        |
| 80      | 76 | 138 | 160 | 200 | 180 | 162.3 | 325 | 20 | 3 | 70  | 102 | 4.5  | 5.5  | 8 | 18 | 30           | 45        | 19.4        |
| 100     | 98 | 158 | 180 | 220 | 190 | 190.9 | 325 | 20 | 3 | 102 | 125 | 5.5  | 6.5  | 8 | 18 | 37           | 55        | 25.7        |

| NPS     | d    | G    | C    | D    | L    | H    | W    | T    | f    | D1   | D2   | R1   | R2   | N | M    | Torque (in-lb) |           | Weight (lb) |
|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|------|----------------|-----------|-------------|
|         |      |      |      |      |      |      |      |      |      |      |      |      |      |   |      | Action         | Breakaway |             |
| PN16-40 |      |      |      |      |      |      |      |      |      |      |      |      |      |   |      |                |           |             |
| 1/2"    | 0.59 | 1.77 | 2.56 | 3.74 | 4.53 | 3.43 | 7.48 | 0.63 | 0.08 | 1.42 | 1.65 | 0.11 | 0.11 | 4 | 0.55 | 26.6           | 46        | 5.1         |
| 3/4"    | 0.79 | 2.28 | 2.95 | 4.13 | 4.72 | 3.56 | 7.48 | 0.71 | 0.08 | 1.42 | 1.65 | 0.11 | 0.11 | 4 | 0.55 | 41.6           | 70.8      | 6.4         |
| 1"      | 0.94 | 2.68 | 3.35 | 4.53 | 4.92 | 3.64 | 7.48 | 0.71 | 0.08 | 1.65 | 1.97 | 0.11 | 0.14 | 4 | 0.55 | 79.7           | 110.6     | 8.5         |
| 1-1/4"  | 1.18 | 3.07 | 3.94 | 5.51 | 5.12 | 4.21 | 7.48 | 0.71 | 0.08 | 1.65 | 1.97 | 0.11 | 0.14 | 4 | 0.71 | 97.4           | 123.9     | 12.1        |
| 1-1/2"  | 1.5  | 3.46 | 4.33 | 5.91 | 5.51 | 4.8  | 9.25 | 0.71 | 0.12 | 1.97 | 2.76 | 0.14 | 0.18 | 4 | 0.71 | 159.3          | 216.8     | 16          |
| 2"      | 1.97 | 4.02 | 4.92 | 6.5  | 5.91 | 5.11 | 9.25 | 0.79 | 0.12 | 1.97 | 2.76 | 0.14 | 0.18 | 4 | 0.71 | 203.6          | 283.2     | 22          |
| 2-1/2"  | 2.52 | 4.8  | 5.71 | 7.28 | 6.69 | 6.13 | 12.8 | 0.71 | 0.12 | 2.76 | 4.02 | 0.18 | 0.22 | 4 | 0.71 | 239            | 336.3     | 33.7        |
| 3"      | 2.99 | 5.43 | 6.3  | 7.87 | 7.09 | 6.39 | 12.8 | 0.79 | 0.12 | 2.76 | 4.02 | 0.18 | 0.22 | 8 | 0.71 | 265.5          | 398.3     | 42.9        |
| 4"      | 3.86 | 6.22 | 7.09 | 8.66 | 7.48 | 7.52 | 12.8 | 0.79 | 0.12 | 4.02 | 4.92 | 0.22 | 0.26 | 8 | 0.71 | 327.5          | 486.8     | 56.7        |

  

|          |            |             |               |                                     |
|----------|------------|-------------|---------------|-------------------------------------|
| CHECK BY | DRAWING BY | DATE        | SPECIFICATION | 2-PC Flanged End Ball Valve PN16/40 |
|          |            | Jul.22.2014 | MATERIAL      | CF8M/WCB                            |
|          |            |             | PROCESS/Nr.   |                                     |
|          |            |             | UNIT / SCALE  | mm                                  |

|          |             |      |         |
|----------|-------------|------|---------|
| Revision | Description | Date | Approve |
|          |             |      |         |

DRAWING NO. KH2FD16AIT KH2FD16IIT



KH2FD16IIT



KH2FD16AIT

# PRESSURE-TEMPERATURE RATING

## TEMPERATURE °C

