

**2 PIECES BALL VALVE PN63**



**Size :** DN 1/4" to 4"  
**Ends :** Threaded BSP or NPT  
**Min Temperature :** -30°C in SS and -20°C in carbon steel  
**Max Temperature :** + 180°C  
**Max Pressure :** 63 Bars ( up to DN 3/4" )  
**Specifications :** Anti blow-out stem  
Locking device  
Full bore

**Materials :** Carbon steel or Stainless steel

## 2 PIECES BALL VALVE PN63

### SPECIFICATIONS :

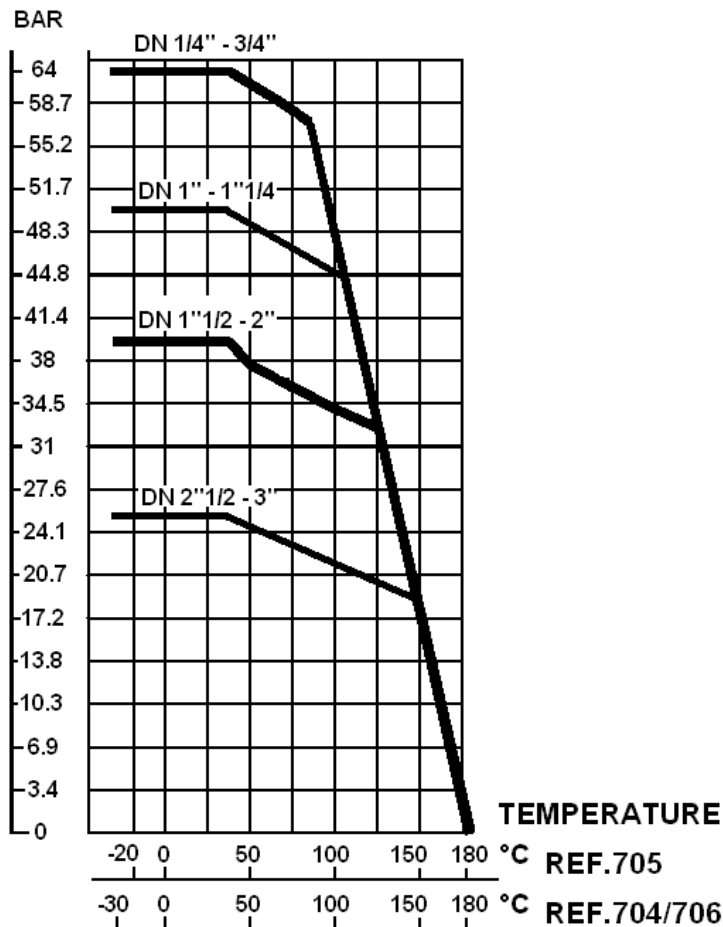
- Full bore
- Anti blow-out stem
- PTFE packing
- Locking device
- Solid ball
- 2 pieces type
- Black oxide finish for Ref.705

### USE :

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Min and max Temperature Ts : -20°C to + 180°C for carbon steel type **Ref. 705**
- Min and max Temperature Ts : -30°C à + 180°C for stainless steel types **Ref. 704-706**
- Max Pressure Ps : 63 bars up to DN3/4", 50 bars from DN 1" to 1"1/4, 40 bars from DN 1"1/2 to 2" , 25 bars from DN 2"1/2 to 3" , 16 bars for DN4" ( see graph )

### PRESSURE / TEMPERATURE GRAPH ( STEAM EXCLUDED ) :

#### PRESSURE



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RANGE :



- Stainless steel body NPT threaded with red handle **Ref. 704** DN 1/4" to DN 2"



- Carbon steel body BSP threaded with red handle **Ref. 705** DN 1/4" to DN 3"



- Stainless steel body BSP threaded with red handle **Ref. 706** DN 1/4" to DN 4"



- Stainless steel body BSP threaded with red SS304 butterfly handle **Ref. 7061** DN 1/4" to DN 1"



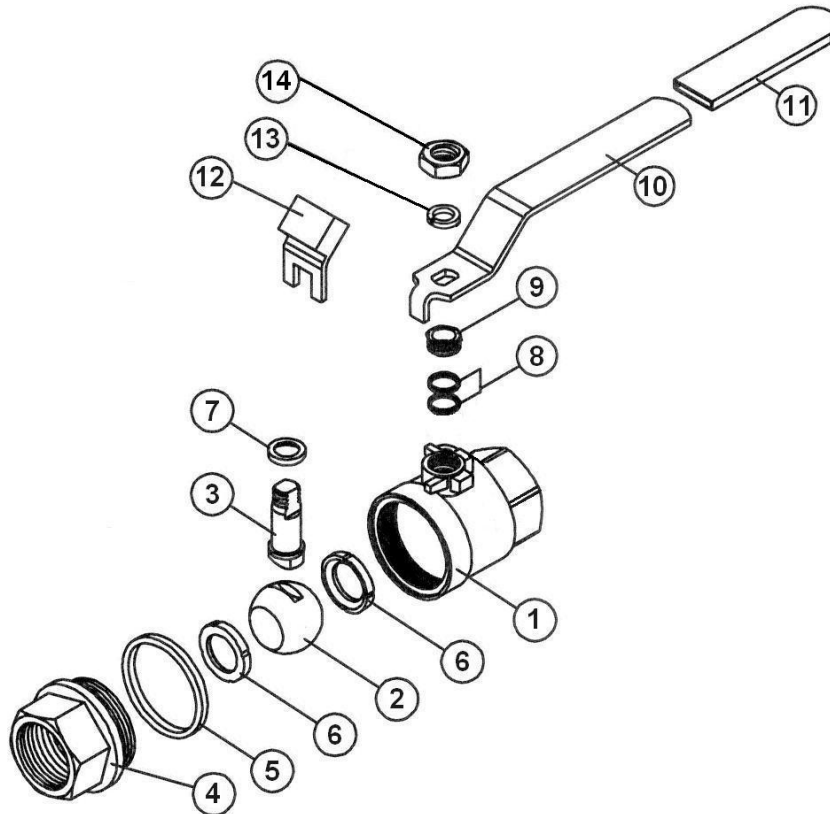
- Blue handle cover **Ref. 9830380 to 9830384** DN 1/4" to DN 3"



- S.S. 304 red butterfly handle **Ref. 9831131 to 9831134** DN 1/4" to DN 1"

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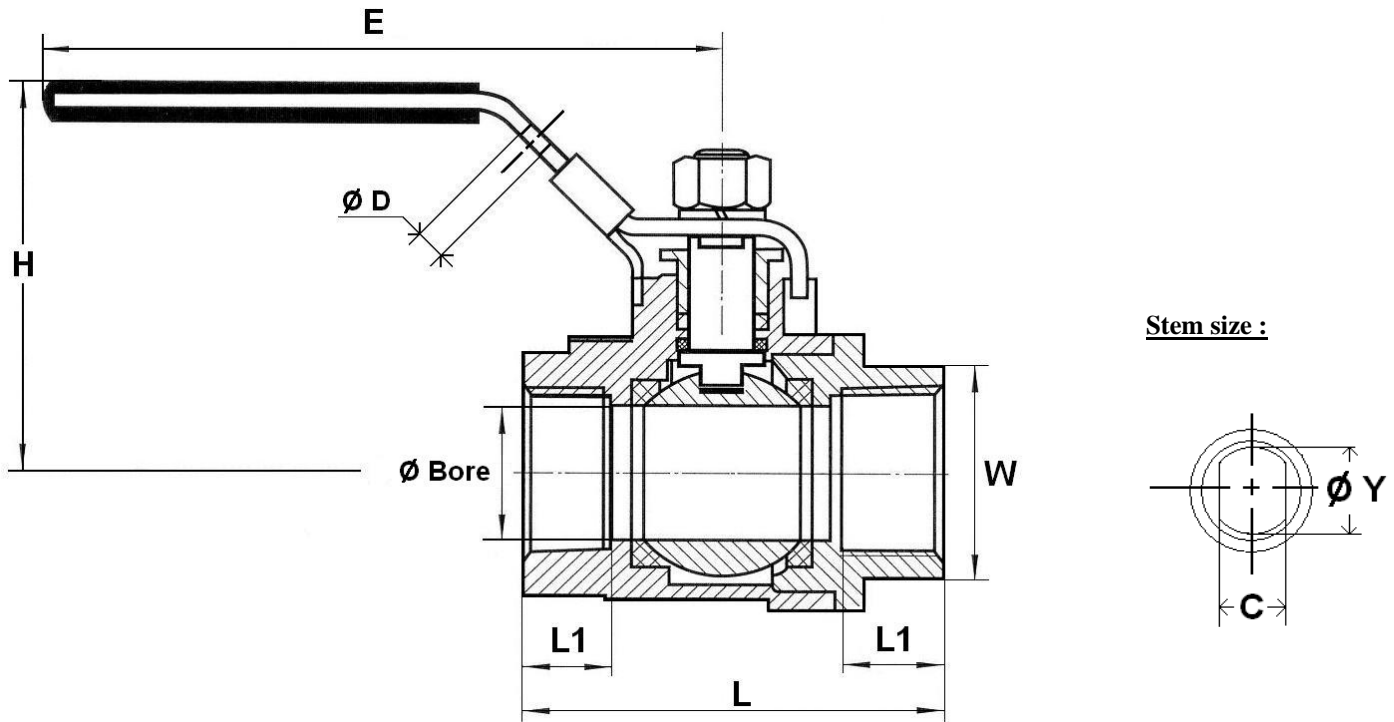
**MATERIALS :**



| Item | Designation    | Materials 704/706          | Materials 705 |
|------|----------------|----------------------------|---------------|
| 1    | Body           | ASTM A351 CF8M             | ASTM A216 WCB |
| 2    | Ball           | ASTM A351 CF8M             |               |
| 3    | Stem           | SS 316                     | SS 304        |
| 4    | Bonnet         | ASTM A351 CF8M             | ASTM A216 WCB |
| 5    | Body seal      | PTFE                       |               |
| 6    | Seat           | PTFE filled with 15% glass |               |
| 7    | Stem gasket    | PTFE                       |               |
| 8    | Packing        | PTFE                       |               |
| 9    | Packing nut    | SS 304                     |               |
| 10   | Handle         | SS 304                     |               |
| 11   | Handle cover   | Plastic                    |               |
| 12   | Locking device | SS 304                     |               |
| 13   | Washer         | SS 304                     |               |
| 14   | Handle nut     | SS 304                     |               |

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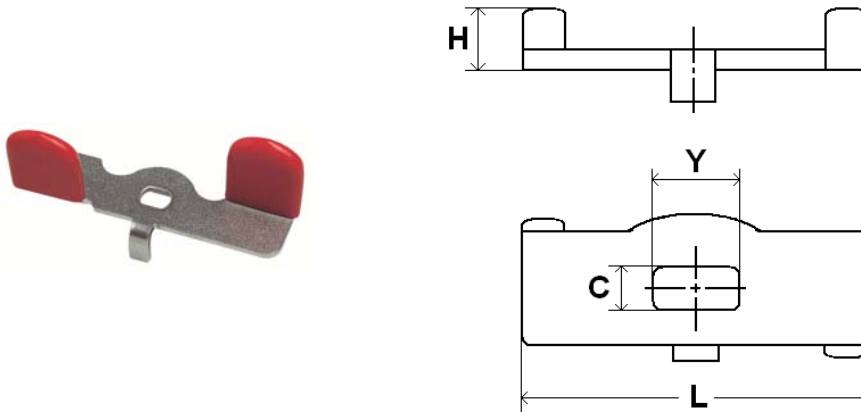
SIZE ( in mm ) :



| Ref.      | DN             | 1/4"  | 3/8"  | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    | 2"1/2" | 3"    | 4"   |
|-----------|----------------|-------|-------|-------|-------|-------|--------|--------|-------|--------|-------|------|
| 704       | Ø Bore         | 9.2   | 12.5  | 15    | 20    | 25    | 32     | 38     | 50    | 65     | 80    | 100  |
|           | L              | 48.6  | 52.5  | 59    | 65    | 76    | 90     | 102    | 121.5 | 157    | 176   | 212  |
|           | Ø D            | 8     | 8     | 8     | 8     | 8     | 8      | 8      | 8     | 8      | 8     | 8    |
|           | E              | 81    | 81    | 100   | 100   | 148   | 148    | 190    | 190   | 280    | 280   | 280  |
| 705       | H              | 47.5  | 52    | 56.5  | 58.5  | 74    | 78     | 92     | 103   | 118    | 127   | 144  |
|           | L1             | 10    | 12    | 13.5  | 14.5  | 16.5  | 19     | 19     | 22    | 28     | 32    | 32   |
| 706       | W on flat      | 19    | 22    | 26    | 32    | 38    | 50     | 54     | 68    | 85     | 98    | 125  |
|           | C              | 4     | 5     | 6.5   | 6.5   | 8     | 8      | 8.5    | 8.5   | 12     | 12    | 12   |
|           | Ø Y            | 6     | 7     | 7.5   | 7.5   | 9     | 9      | 11     | 11    | 15.5   | 15.5  | 15.5 |
| 704 / 706 | Weight (in Kg) | 0.195 | 0.228 | 0.284 | 0.370 | 0.610 | 0.996  | 1.590  | 2.562 | 5.33   | 7.737 | 13   |
| 705       | Weight (in Kg) | 0.196 | 0.255 | 0.290 | 0.372 | 0.636 | 0.960  | 1.588  | 2.580 | 5.316  | 7.930 | -    |

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**BUTTERFLY HANDLE SIZE ( in mm ) :**



- **Ref. 983113 :**

| DN | 1/4" | 3/8" | 1/2" | 3/4" | 1"   |
|----|------|------|------|------|------|
| L  | 55   | 55   | 60   | 60   | 70   |
| H  | 20   | 20   | 22   | 22   | 28   |
| C  | 4    | 5    | 6.5  | 6.5  | 8    |
| Y  | 7    | 8    | 9.5  | 9.5  | 11.5 |

**TORQUE VALUES ( in Nm without safety coefficient ) :**

| DN          | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1"1/4" | 1"1/2" | 2" | 2"1/2" | 3" | 4"  |
|-------------|------|------|------|------|----|--------|--------|----|--------|----|-----|
| Torque (Nm) | 2.7  | 2.7  | 3    | 4    | 5  | 6      | 8      | 10 | 40     | 60 | 100 |

## **2 PIECES BALL VALVE PN63**

### **STANDARDS :**

- Fabrication according to ISO 9001 : 2008
- DIRECTIVE 97/23/CE : CE N° 0035  
Risk category II
- Tests according to EN 12266-1
- Threaded ends BSP cylindrical according to ISO 228-1
- Threaded ends NPT according to ANSI B1.20

**ADVICE :** Our opinion and our advice are not guaranteed and SFERACO shall not be liable for the consequences of damages. The customer must check the right choice of the products with the real service conditions.

## **INSTALLATION AND MAINTENANCE**

### **BEFORE INSTALLATION :**

Pipe-line must be cleaned and free from residual of weldings, rubbish, shaving and every kind of extraneous materials. Pipe-line must be perfectly aligned and their support properly dimensioned so that there's no external constraint.

Please use the right product according to the services conditions to seal the valve.  
Use the right bolt tightening so that the ends won't be damaged.

### **CLEANING AND TESTS**

Keep closed the valves during the cleaning operation so that there's no impurities between the ball and the body.

Tests under pressure must be done with a cleaned pipe-line.

Open partially the valve for tests. Pressure test do not exceed the valve specifications according to EN 12266-1.

### **MAINTENANCE**

It's recommended to operate the valve twice ( open and close ) 1 to 2 times per year.

When intervention on the valve, be sure there's no pressure in the pipe-line, there's no fluid in it, and that it is isolated. The temperature must be low enough to operate without risks.  
If there's a corrosive fluid, inert installation before intervention.

### **When the valve is under pressure :**

If there's a leakage at the packing, tighten it slightly so that the leakage disappears.