

## 2 PIECES HIGH PRESSURE CARBON STEEL BALL VALVE FEMALE BSP

2 pieces high pressure carbon steel ball valve for closing networks of fluids in hydraulic installation.

POM and NBR gaskets.

Compatible with explosive atmosphere, ATEX Zone 1&21 and Zone 2&22.



PED 2014/68/UE



**Size :** DN1/4" to DN2"

**Connection :** Female BSP

**Min Temperature :** -20°C (-30°C for DN1"1/2 and 2")

**Max Temperature :** +100°C

**Max Pressure :** 350-500 Bars

**Specifications :** ATEX

Reduced bore

High pressure

Hydraulic type

**Materials :** Galvanized Carbon steel 1.0737

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### SPECIFICATIONS :

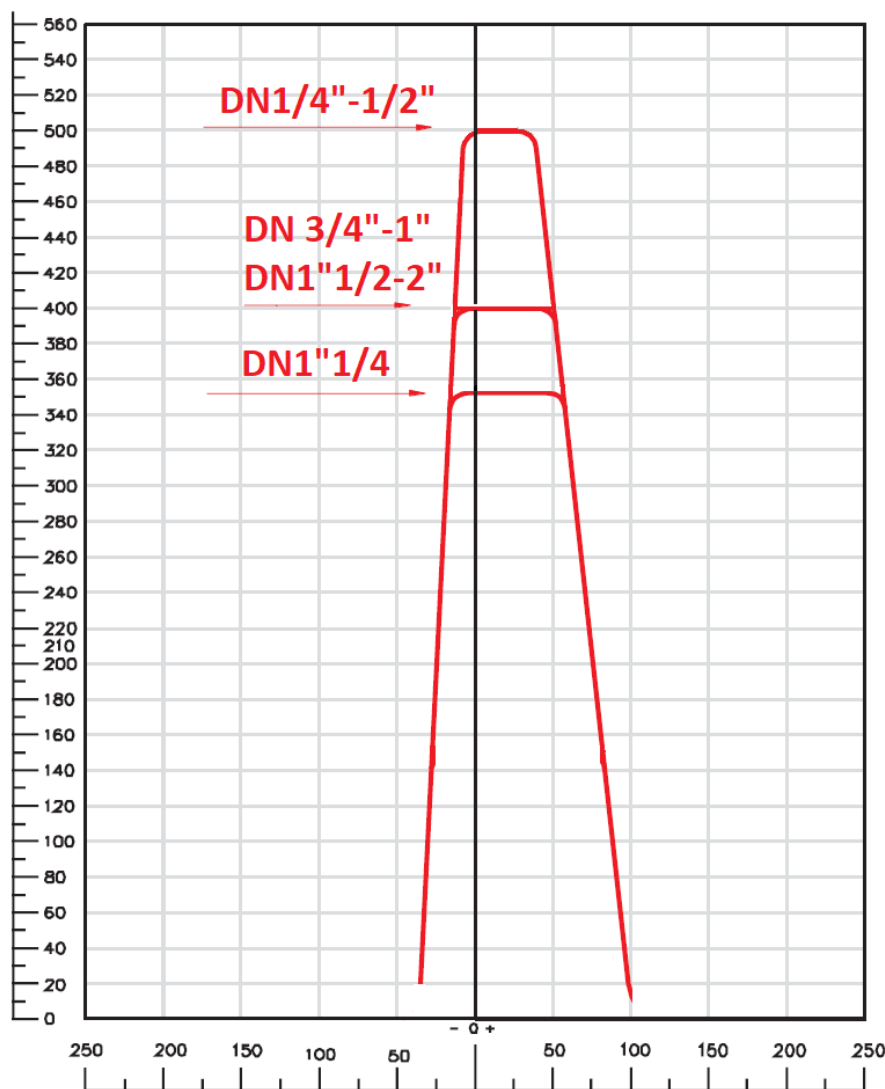
- Reduced bore
- Galvanized steel
- High pressure
- Hydraulic type

### USE :

- For hydraulic installation
- Min and max Temperature Ts from DN1/4" to DN1"1/4: -20°C to + 100°C
- Min and max Temperature Ts from DN1"1/2 to DN2": -30°C to + 100°C
- Max Pressure Ps : 500 bars from DN1/4" to 1/2", 420 bars over, excepted DN1"1/4 :350 bars ( see graph )

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

**PRESSURE (Bar)**



**Temperature (°C)**

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### FLOW COEFFICIENT Kvs ( M3 / h ) :

| DN           | 1/4" | 3/8" | 1/2" | 3/4" | 1"   | 1"1/4 | 1"1/2 | 2"    |
|--------------|------|------|------|------|------|-------|-------|-------|
| Kvs ( m3/h ) | 4.2  | 6    | 30.2 | 53.7 | 90.6 | 90.6  | 245.2 | 364.5 |

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

| DN            | 1/4" | 3/8" | 1/2" | 3/4" | 1" | 1"1/4 | 1"1/2 | 2"  |
|---------------|------|------|------|------|----|-------|-------|-----|
| Torque ( Nm ) | 16   | 18   | 25   | 45   | 72 | 90    | 160   | 250 |

### RANGE :

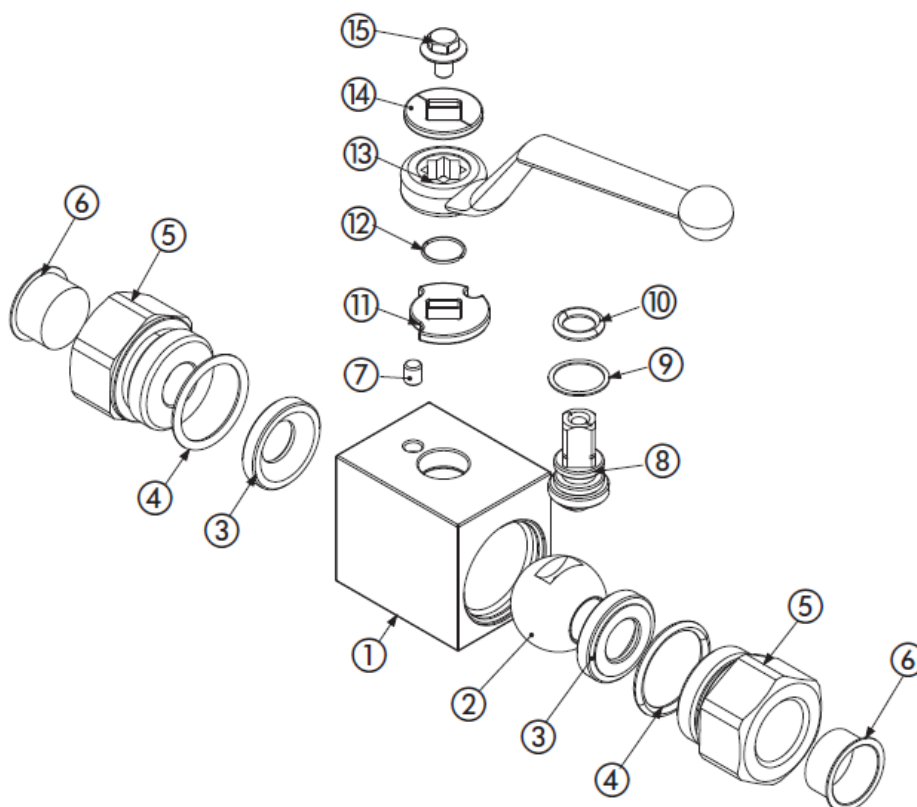
- High pressure ball valve with galvanized steel body **Ref. 799** from DN1/4" to DN2"

### CONNECTION :

- Threaded cylindrical female BSP

## 2 PIECES HIGH PRESSURE CARBON STEEL BALL VALVE FEMALE BSP

**MATERIALS DN1/4" - 1"1/4: :**



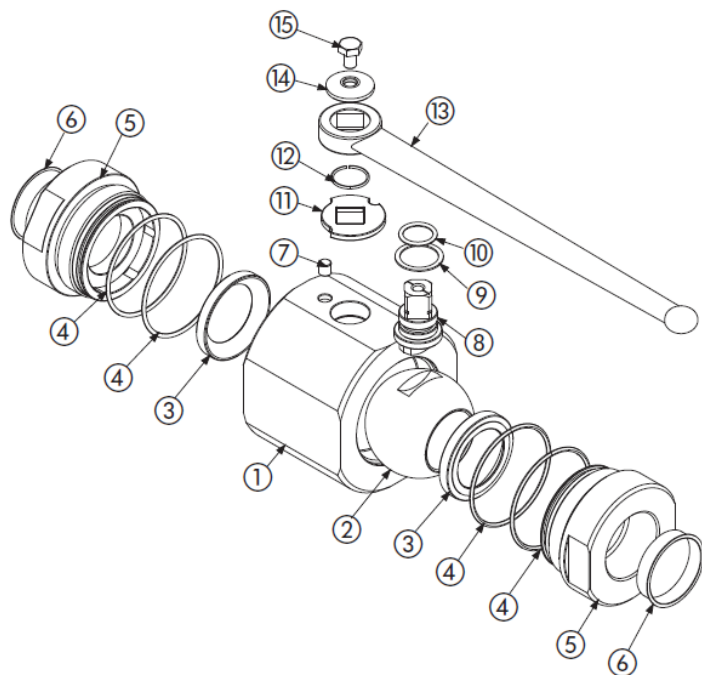
| Item | Designation   | Materials DN 1/4" - 1"1/4 |
|------|---------------|---------------------------|
| 1    | Body          | Galvanized 1.0737 steel   |
| 2    | Ball          | Chromed 1.0737 steel      |
| 3    | Seat          | POM                       |
| 4    | O-ring        | NBR                       |
| 5    | Ends          | Galvanized 1.0737 steel   |
| 6    | Caps          | PVC                       |
| 7    | Spine         | Steel 1.0737              |
| 8    | Stem          | Steel 1.0737              |
| 9    | Stem seal     | POM                       |
| 10   | O-ring        | NBR                       |
| 11   | Washer        | Steel 1.0116              |
| 12   | Seeger        | Steel 1.4301              |
| 13   | Handle        | Aluminium                 |
| 14   | Handle washer | Steel 1.0116              |
| 15   | Handle screw  | Steel DIN 6921 8.8        |

## 2 PIECES HIGH PRESSURE CARBON STEEL BALL VALVE FEMALE BSP

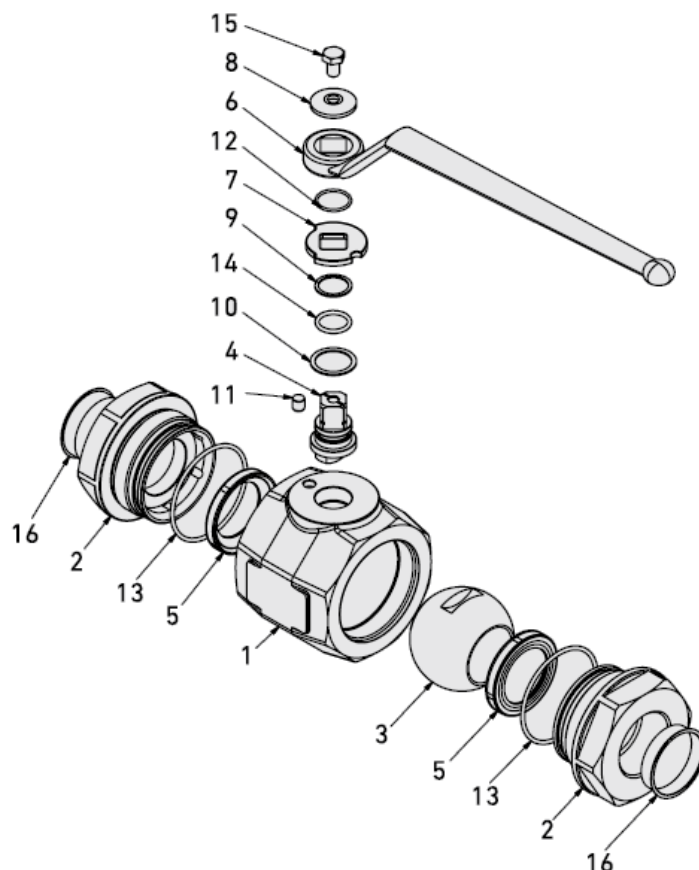
**MATERIALS DN1"1/2 - 2":**

**MODIFICATION IN PROGRESS**

**Actual type**



**New type**

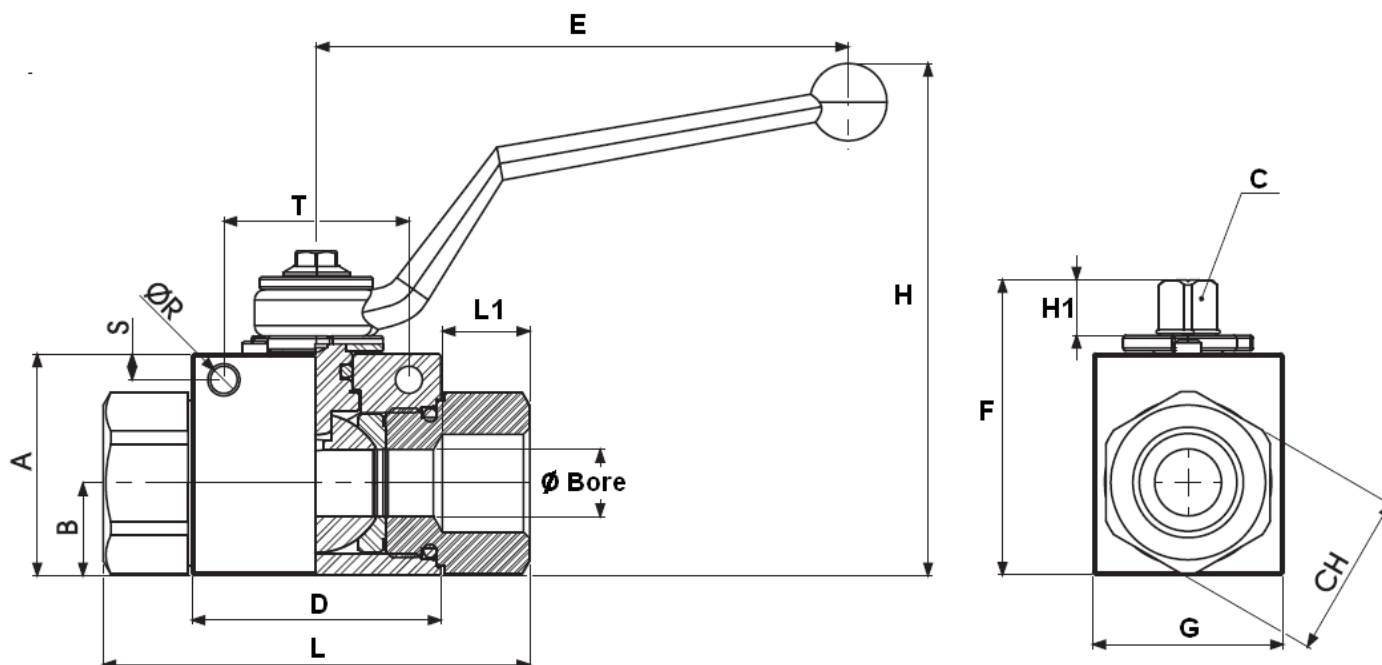


| ACTUAL TYPE |              |                         |
|-------------|--------------|-------------------------|
| Item        | Designation  | Materials DN 1"1/2 - 2" |
| 1           | Body         | Galvanized 1.0570 steel |
| 2           | Ball         | Chromed 1.0737 steel    |
| 3           | Seat         | POM                     |
| 4           | O ring       | NBR                     |
| 5           | Ends         | Galvanized 1.0570 steel |
| 6           | Caps         | PVC                     |
| 7           | Spine        | Steel 1.0737            |
| 8           | Stem         | Steel 1.0737            |
| 9           | Stem gasket  | POM                     |
| 10          | O ring       | NBR                     |
| 11          | Washer       | Steel 1.0116            |
| 12          | Seeger       | Stainless Steel 1.4301  |
| 13          | Handle       | Steel 1.0116            |
| 14          | Washer       | Steel 1.0737            |
| 15          | Handle screw | Steel ISO 4017 8.8      |

| NEW TYPE |               |                         |
|----------|---------------|-------------------------|
| Item     | Designation   | Materials DN 1"1/2 - 2" |
| 1        | Body          | Galvanized 1.0570 steel |
| 2        | Ends          |                         |
| 3        | Ball          | Chromed 1.0737 steel    |
| 4        | Stem          | Steel 1.0737            |
| 5        | Seat          | POM                     |
| 6        | Handle        | Steel 1.0116            |
| 7        | Washer        |                         |
| 8        | Handle washer | Steel 1.0737            |
| 9        | Ring          | PTFE                    |
| 10       | Stem gasket   | POM                     |
| 11       | Stop          | Steel 1.0737            |
| 12       | Washer        | 1.4301                  |
| 13       | Body O-ring   | NBR                     |
| 14       | Stem O-ring   |                         |
| 15       | Screw         | Steel ISO 4017 8.8      |
| 16       | Caps          | PVC                     |

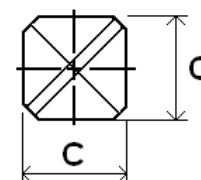
## 2 PIECES HIGH PRESSURE CARBON STEEL BALL VALVE FEMALE BSP

SIZE DN1/4" - 1"1/4 ( in mm ) :



| DN          | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4  |
|-------------|--------|--------|--------|--------|--------|--------|
| Ø Bore      | 6      | 10     | 13     | 20     | 25     | 25     |
| L           | 71     | 73     | 83     | 95     | 112    | 120    |
| L1          | 15.5   | 15.5   | 17     | 21     | 24     | 24     |
| E           | 110    | 110    | 110    | 180    | 180    | 180    |
| H           | 91.5   | 96.5   | 99.5   | 106.5  | 116.5  | 116.5  |
| H1          | 11     | 11     | 11     | 14     | 14     | 14     |
| A           | 35     | 40     | 43     | 55     | 65     | 65     |
| B           | 14.5   | 17.4   | 18     | 23.4   | 29.5   | 29.5   |
| C           | 9      | 9      | 9      | 14     | 14     | 14     |
| CH          | 24     | 30     | 32     | 41     | 50     | 55     |
| D           | 42.4   | 44.4   | 48.4   | 62.5   | 66.5   | 66.5   |
| F           | 49     | 54.25  | 57     | 73.5   | 83.5   | 83.5   |
| G           | 30     | 35     | 37     | 45     | 55     | 55     |
| Ø R         | 5.25   | 5.25   | 5.25   | 6.25   | 6.25   | 6.25   |
| S           | 4.5    | 4.5    | 5      | 6      | 6      | 6      |
| T           | 34     | 34     | 36     | 50     | 50     | 50     |
| Weight (Kg) | 0.49   | 0.64   | 0.76   | 1.44   | 2.22   | 2.27   |
| Ref.        | 799002 | 799003 | 799004 | 799005 | 799006 | 799007 |

Stem size :

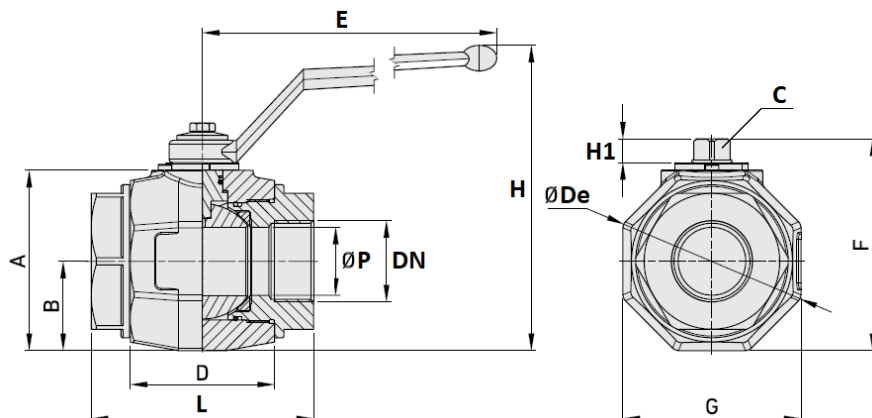


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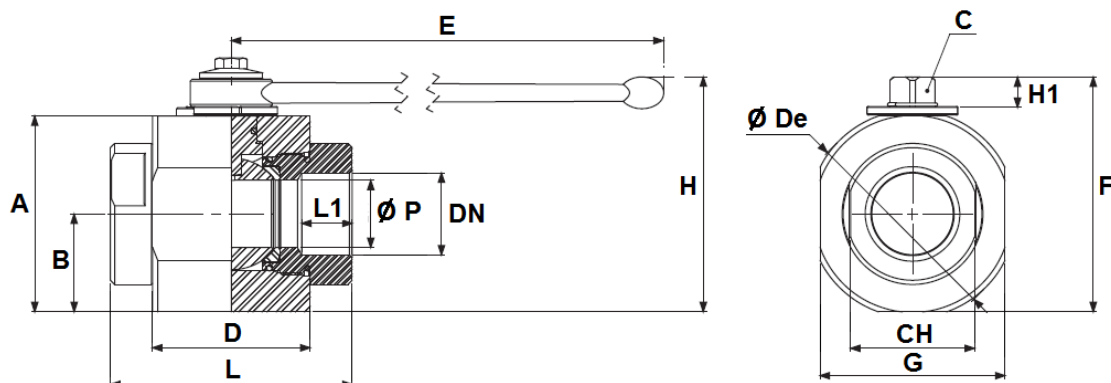
SIZE DN1"1/2 - 2" ( in mm ) :

**MODIFICATION IN PROGRESS**

**NEW TYPE**

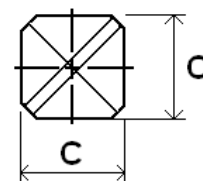
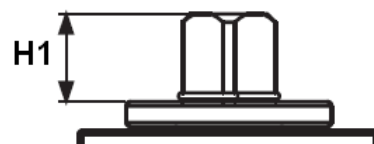


**ACTUAL TYPE**



| DN          | 1"1/2  | 1"1/2 NEW | 2"     | 2" NEW |
|-------------|--------|-----------|--------|--------|
| Ø P         | 40     |           | 50     |        |
| L           | 131    |           | 140    |        |
| L1          | 25     |           | 27     |        |
| E           | 300    | 310       | 300    | 310    |
| H           | 134.5  | 179.5     | 141.5  | 189    |
| H1          | 13.5   | 14        | 13.5   | 14     |
| A           | 107    | 106       | 114    | 115.5  |
| B           | 53.5   | 52.5      | 57     | 58.5   |
| C           | 17     |           | 17     |        |
| CH          | 75     |           | 85     |        |
| D           | 85     |           | 98     |        |
| F           | 125.5  | 124.5     | 132.5  | 134    |
| G           | 102    | 105       | 118    | 117    |
| Ø De        | 113    |           | 123    | 126    |
| Weight (Kg) | 7.39   | 6.75      | 9.05   | 8.71   |
| Ref.        | 799008 |           | 799009 |        |

Stem size :



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### STANDARDS :

- Manufacturer certified ISO 9001 : 2015
- DIRECTIVE 2014/68/EU : Products excluded from directive ( Article 4, § 3 ) up to DN1"
- DIRECTIVE 2014/68/EU : Risk category II Module A2, **CE N°0948** from DN1"1/4 to 2"
- Tests according to API 598
- Threaded cylindrical BSP ends according to ISO 228-1
- On request, ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 ( optional marking ) according to directive 2014/34/UE

**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 API 598.

### 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.