

**WAFER BALL VALVE ISO PN 16**



- Size :** DN 15 to 150 mm
- Ends :** Between flanges ISO PN16 R.F.
- Min Temperature :** -20°C
- Max Temperature :** + 180°C
- Max Pressure :** 16 Bars
- Specifications :** ISO 5211 mounting pad  
PTFE filled with glass seat  
Anti blow-out stem
- Materials :** Stainless steel

**WAFER BALL VALVE ISO PN 16**

**SPECIFICATIONS :**

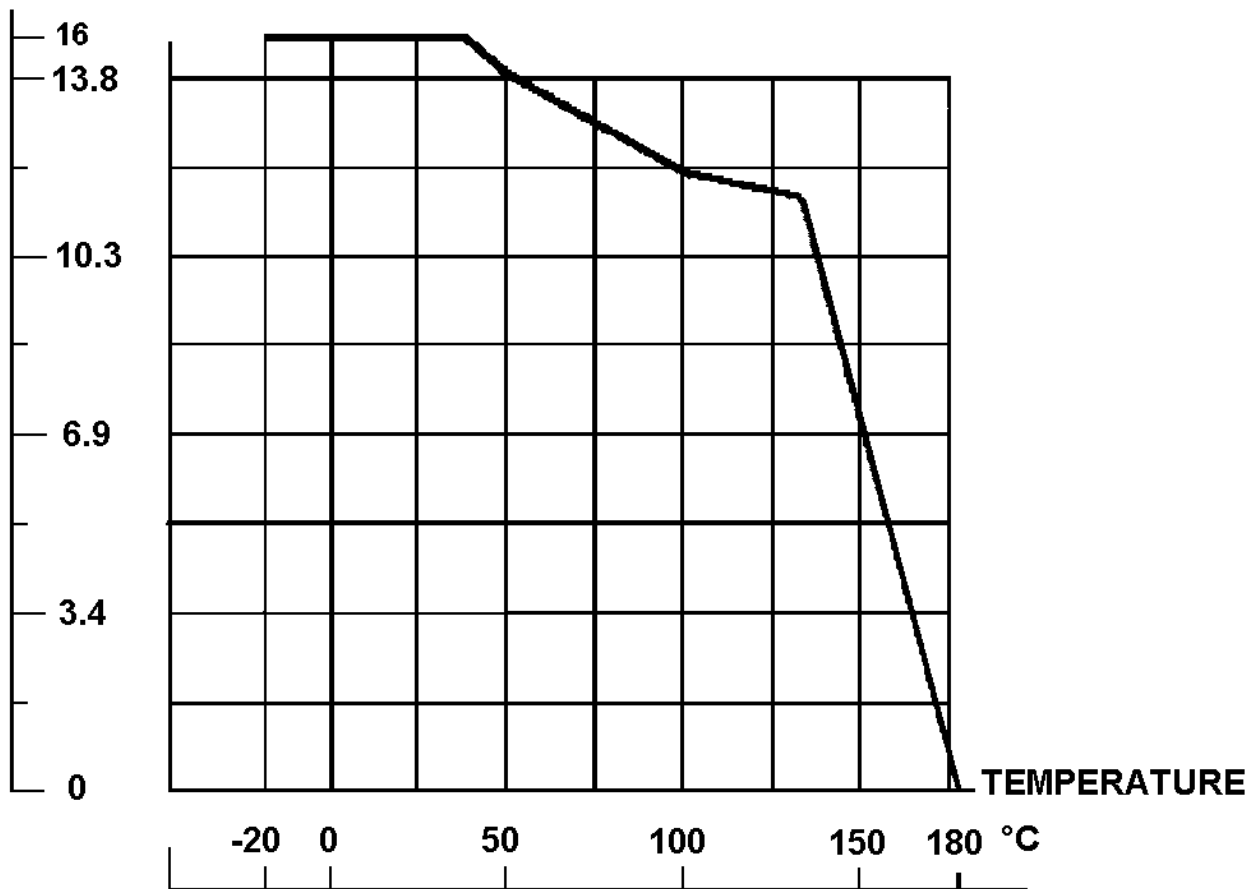
- Full bore
- Anti blow-out stem
- PTFE filled with glass stem
- ISO 5211 mounting pad
- Threaded holes flanges
- Hollow body
- Locking device from DN 25 to DN 100

**USE :**

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Min and max Temperature Ts : -20°C to + 180°C
- Max Pressure PN : 16 bars ( see graph )

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

**PRESSURE  
BAR**

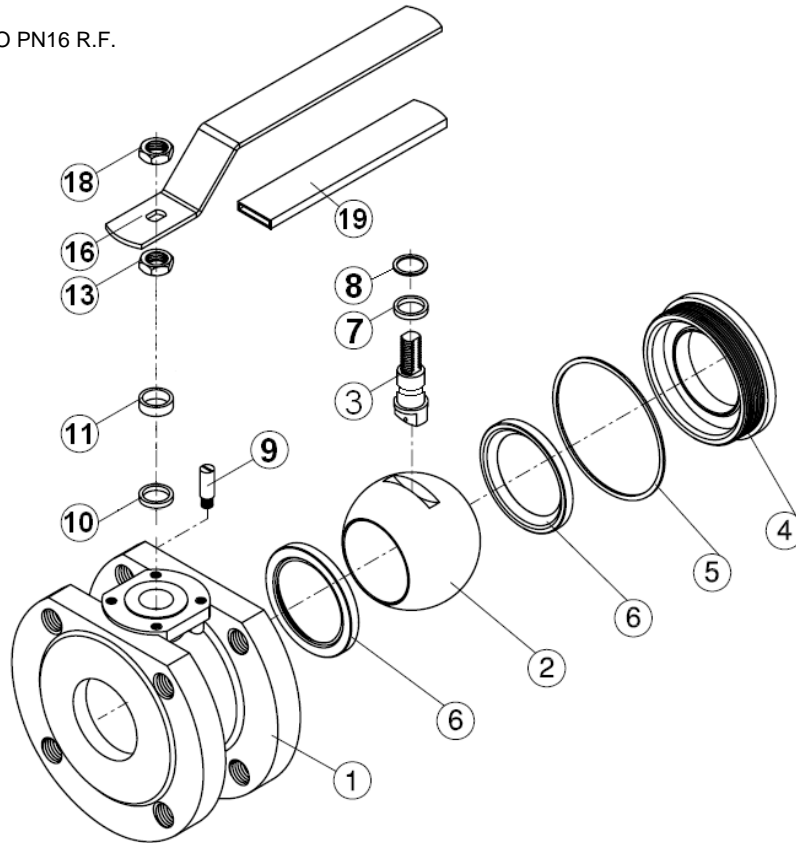


**WAFER BALL VALVE ISO PN 16**
**RANGE :**

- Stainless steel body Ref. 771 from DN 15 to DN 150

**ENDS :**

- Between flanges ISO PN16 R.F.

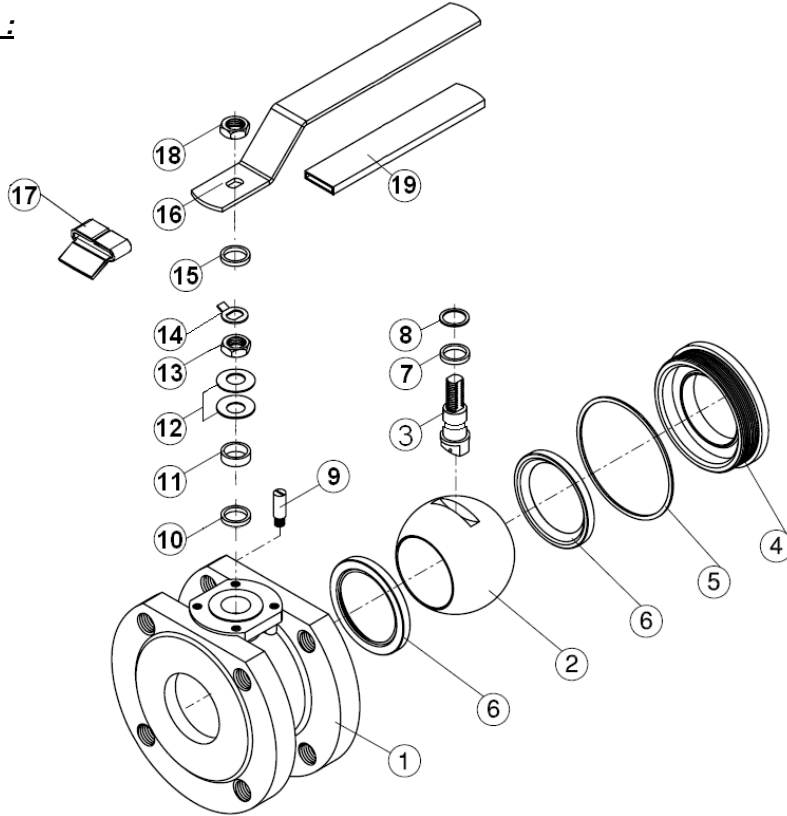
**MATERIALS DN 15 - 20 :**


| Item | Designation   | Materials 771             |
|------|---------------|---------------------------|
| 1    | Body          | ASTM A351 CF8M            |
| 2    | Ball          | ASTM A351 CF8M            |
| 3    | Stem          | SS 304                    |
| 4    | Insert        | ASTM A351 CF8M            |
| 5*   | Body seal     | PTFE                      |
| 6*   | Seat          | PTFE filled with 3% glass |
| 7*   | Thrust washer | PTFE                      |
| 8*   | O ring        | FKM                       |
| 9    | Stop pin      | SS 304                    |
| 10*  | Packing       | PTFE                      |
| 11   | Gland         | SS 304                    |
| 13   | Gland nut     | SS 304                    |
| 16   | Handle        | SS 304                    |
| 18   | Handle nut    | SS 304                    |
| 19   | Handle cover  | Plastic                   |

(\* : Included in gaskets kit )

**WAFER BALL VALVE ISO PN 16**

MATERIALS DN 25 - 50 :

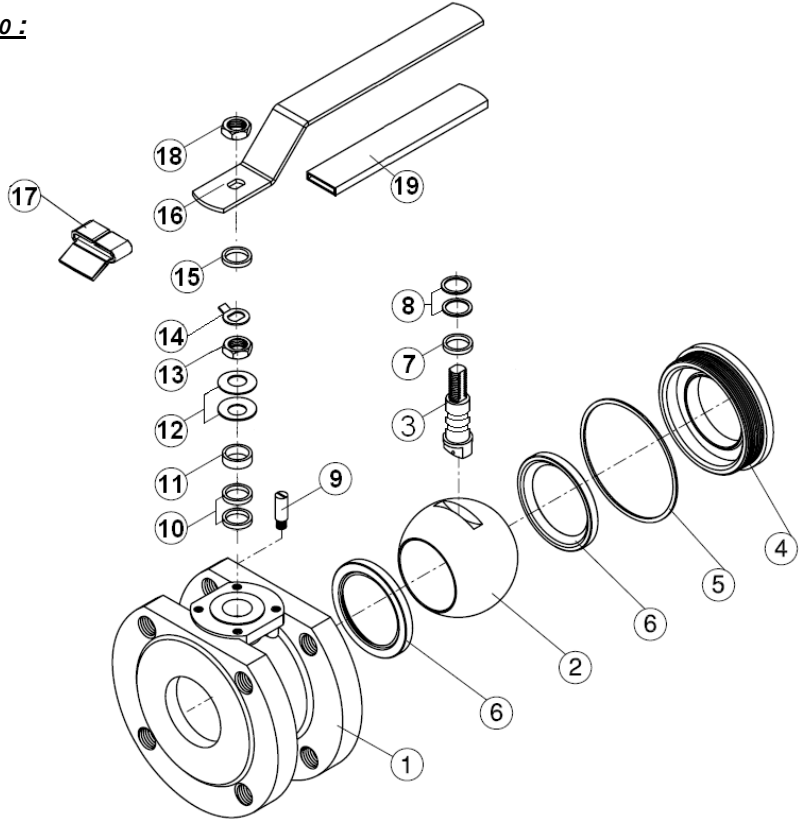


| Item | Designation    | Materials 771             |
|------|----------------|---------------------------|
| 1    | Body           | ASTM A351 CF8M            |
| 2    | Ball           | ASTM A351 CF8M            |
| 3    | Stem           | SS 304                    |
| 4    | Insert         | ASTM A351 CF8M            |
| 5*   | Body seal      | PTFE                      |
| 6*   | Seat           | PTFE filled with 3% glass |
| 7*   | Thrust washer  | PTFE                      |
| 8*   | O ring         | FKM                       |
| 9    | Stop pin       | SS 304                    |
| 10*  | Packing        | PTFE                      |
| 11   | Gland          | SS 304                    |
| 12   | Elastic ring   | SS 301                    |
| 13   | Gland nut      | SS 304                    |
| 14   | Tab washer     | SS 304                    |
| 15   | Washer         | SS 304                    |
| 16   | Handle         | SS 304                    |
| 17   | Locking device | SS 304                    |
| 18   | Handle nut     | SS 304                    |
| 19   | Handle cover   | Plastic                   |

(\* : Included in gaskets kit )

**WAFER BALL VALVE ISO PN 16**

MATERIALS DN 65 - 100 :

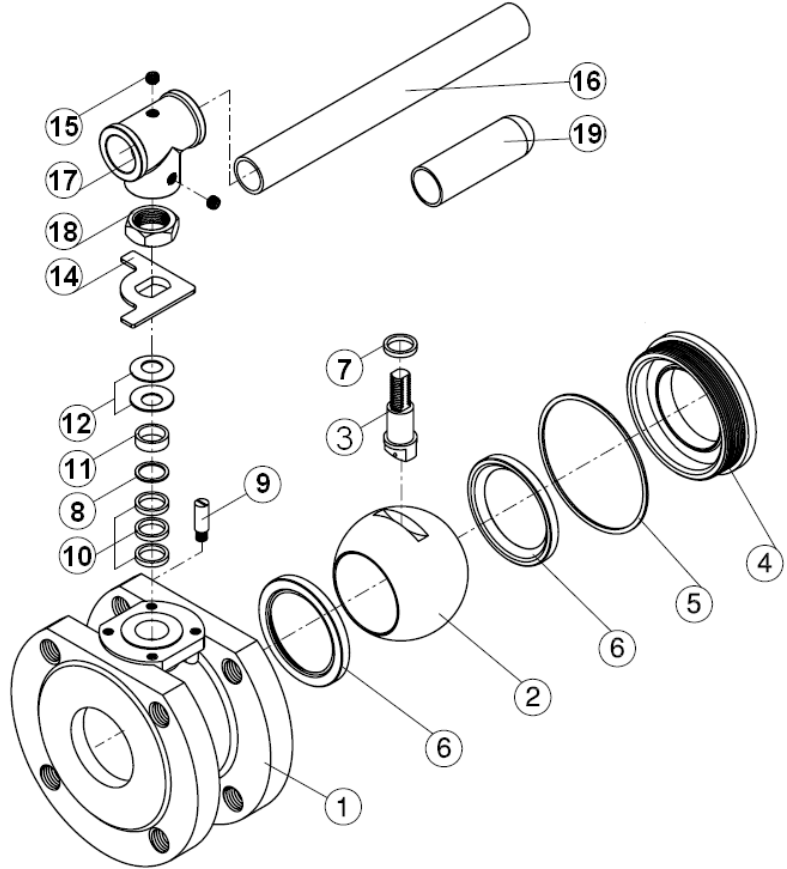


| Item | Designation    | Materials 771             |
|------|----------------|---------------------------|
| 1    | Body           | ASTM A351 CF8M            |
| 2    | Ball           | ASTM A351 CF8M            |
| 3    | Stem           | SS 304                    |
| 4    | Insert         | ASTM A351 CF8M            |
| 5*   | Body seal      | PTFE                      |
| 6*   | Seat           | PTFE filled with 3% glass |
| 7*   | Thrust washer  | PTFE                      |
| 8*   | O ring         | FKM                       |
| 9    | Stop pin       | SS 304                    |
| 10*  | Packing        | PTFE                      |
| 11   | Gland          | SS 304                    |
| 12   | Elastic ring   | SS 301                    |
| 13   | Packing        | SS 304                    |
| 14   | Tab washer     | SS 304                    |
| 15   | Washer         | SS 304                    |
| 16   | Handle         | SS 304                    |
| 17   | Locking device | SS 304                    |
| 18   | Handle nut     | SS 304                    |
| 19   | Handle cover   | Plastic                   |

(\* : Included in gaskets kit )

**WAFER BALL VALVE ISO PN 16**

MATERIALS DN 125 - 150 :



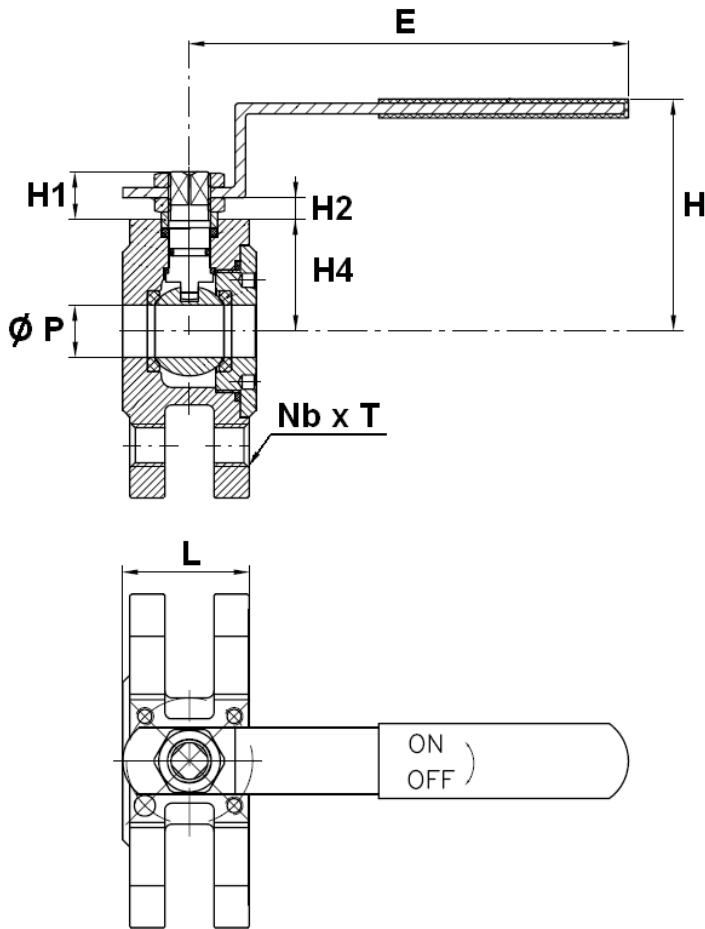
| Item | Designation    | Materials 771              |
|------|----------------|----------------------------|
| 1    | Body           | ASTM A351 CF8M             |
| 2    | Ball           | ASTM A351 CF8M             |
| 3    | Stem           | SS 316                     |
| 4    | Insert         | ASTM A351 CF8M             |
| 5*   | Body seal      | PTFE                       |
| 6*   | Seat           | PTFE filled with 15% glass |
| 7*   | Thrust washer  | PTFE                       |
| 8*   | Packing        | PTFE                       |
| 9    | Stop pin       | SS 304                     |
| 10*  | Stem packing   | PTFE                       |
| 11   | Gland          | SS 304                     |
| 12   | Elastic ring   | SS 301                     |
| 14   | Stop plate     | SS 304                     |
| 15   | Handle screw   | SS 304                     |
| 16   | Handle         | Steel                      |
| 17   | Handle adapter | ASTM A351 CF8              |
| 18   | Packing nut    | SS 304                     |
| 19   | Handle cover   | Plastic                    |

(\* : Included in gaskets kit )

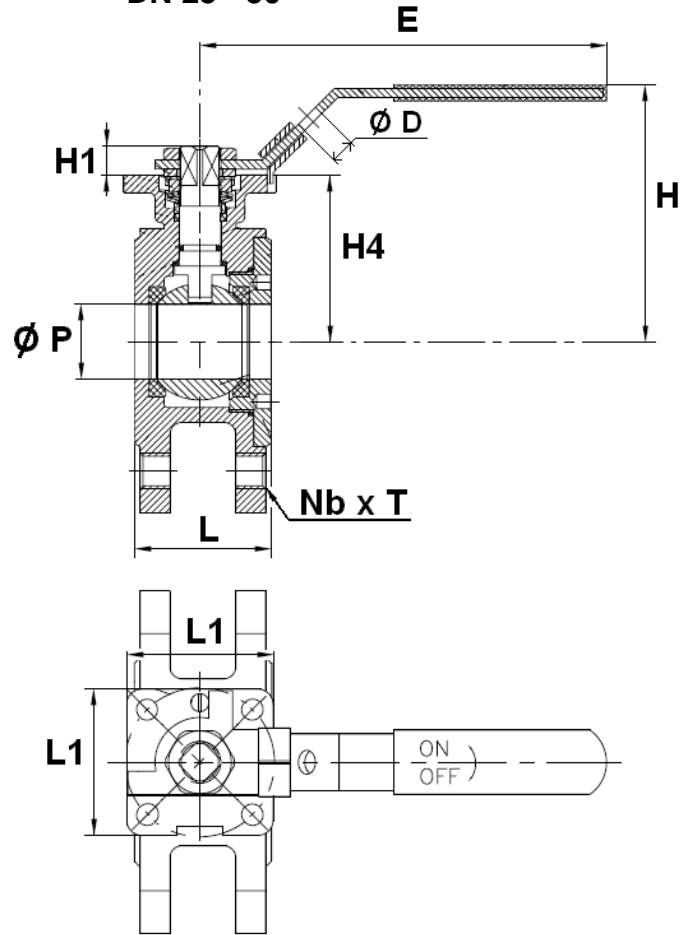
**WAFER BALL VALVE ISO PN 16**

**SIZE ( in mm ) :**

**DN 15 - 20**



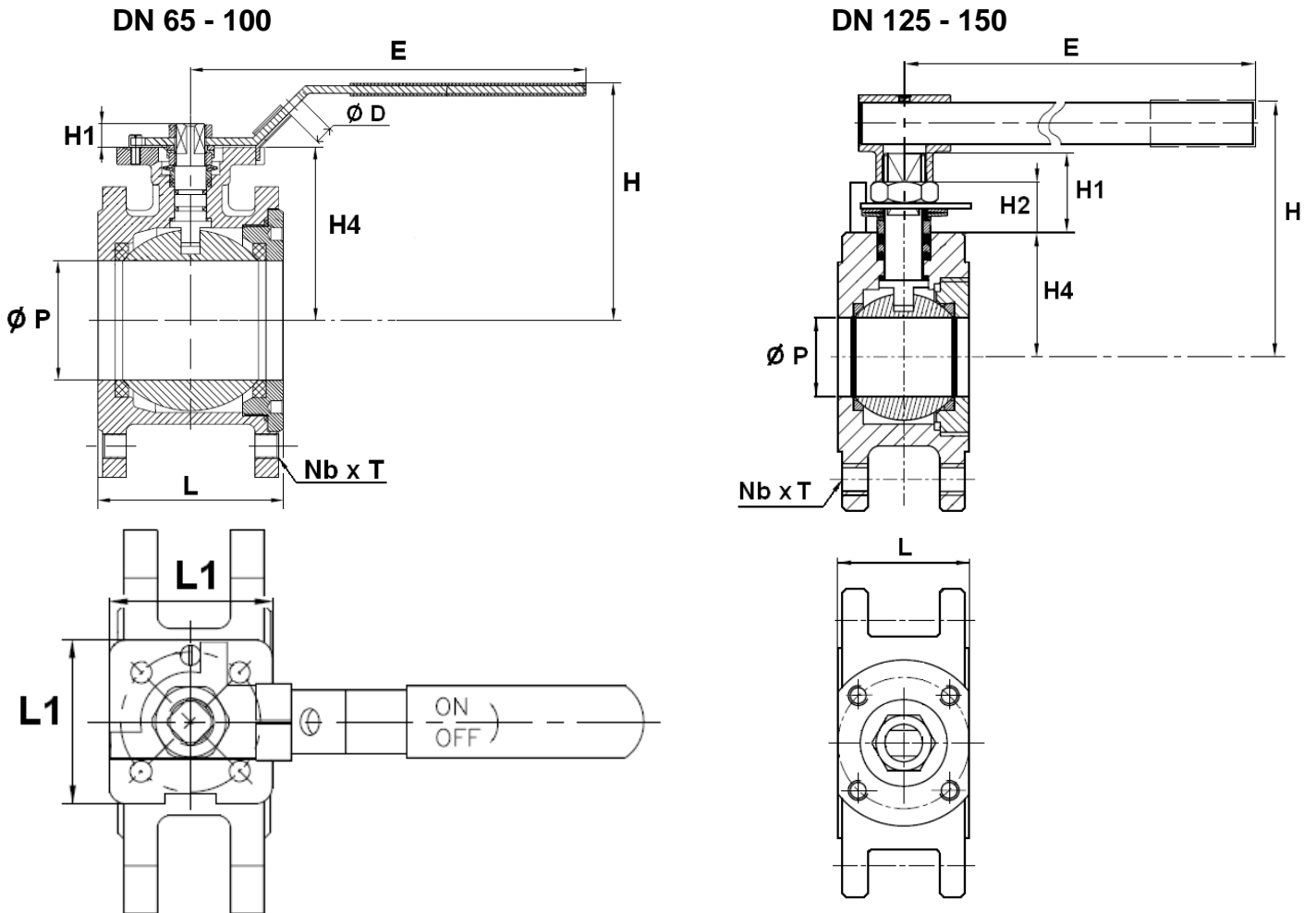
**DN 25 - 50**



| Ref. | DN            | 15      | 20      | 25      | 32      | 40      | 50      |
|------|---------------|---------|---------|---------|---------|---------|---------|
| 771  | Ø P           | 15      | 20      | 25      | 32      | 38      | 50      |
|      | L             | 35      | 39      | 44      | 52      | 64      | 83      |
|      | L1            | -       | -       | 49      | 49      | 65      | 65      |
|      | E             | 125.2   | 125.2   | 136.2   | 136.2   | 204.5   | 204.5   |
|      | H             | 75      | 80      | 95      | 101.5   | 122.5   | 121.5   |
|      | H1            | 13.5    | 13.5    | 12      | 10      | 13.5    | 14      |
|      | H2            | 6       | 6       | -       | -       | -       | -       |
|      | H4            | 32      | 35.5    | 65      | 71.5    | 85      | 83.5    |
|      | Ø D           | -       | -       | 8       | 8       | 8       | 8       |
|      | Nb x T        | 4 x M12 | 4 x M12 | 4 x M12 | 4 x M16 | 4 x M16 | 4 x M16 |
|      | Weight ( Kg ) | 1.1     | 1.41    | 1.82    | 3       | 4.3     | 5.9     |

**WAFER BALL VALVE ISO PN 16**

SIZE ( in mm ) :

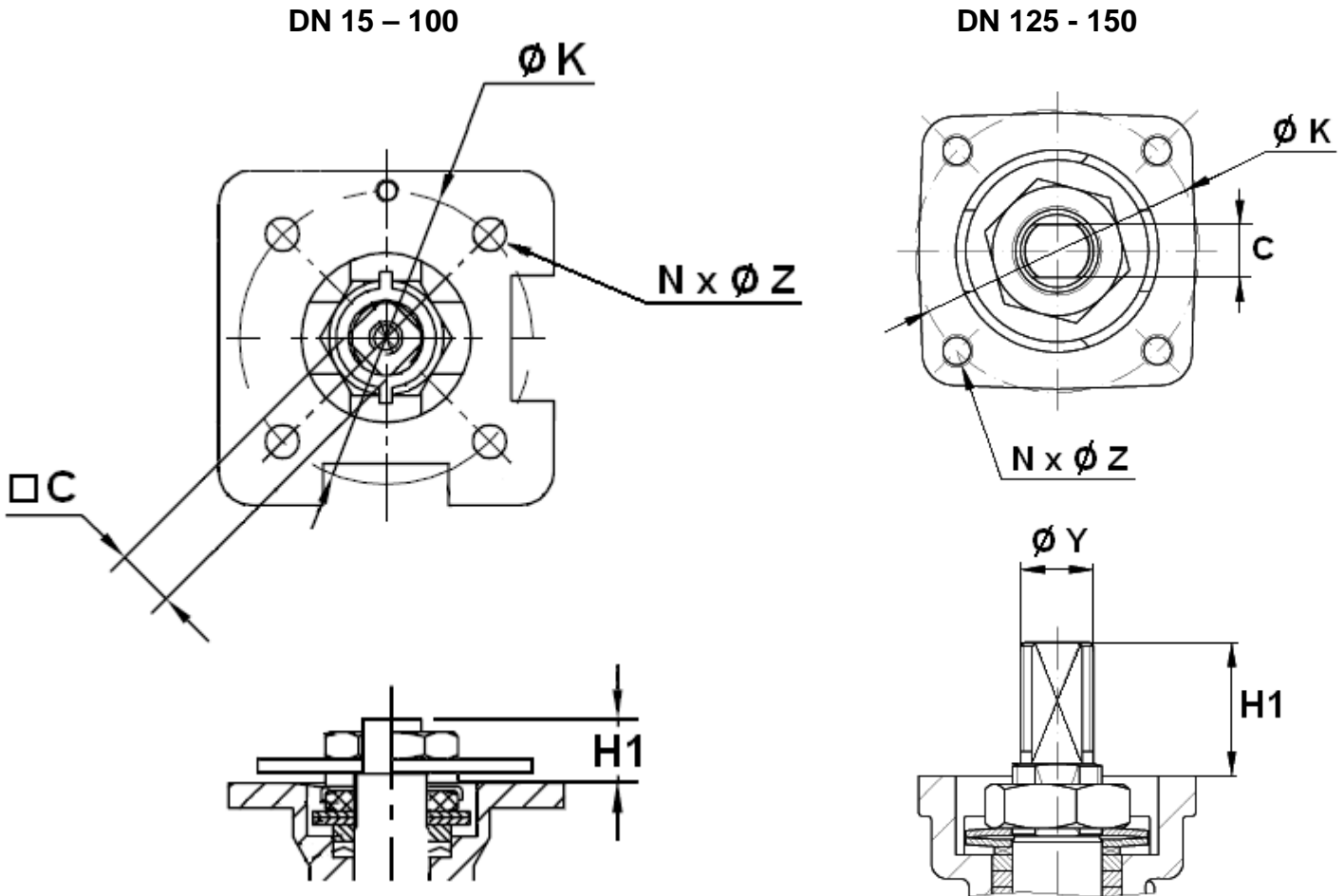


| Ref. | DN            | 65      | 80      | 100     | 125     | 150     |
|------|---------------|---------|---------|---------|---------|---------|
| 771  | Ø P           | 65      | 76      | 94      | 118     | 135     |
|      | L             | 100     | 121     | 152     | 179     | 202     |
|      | L1            | 94      | 94      | 94      | -       | -       |
|      | E             | 250     | 250     | 320     | 400     | 600     |
|      | H             | 142     | 161     | 174     | 205     | 220     |
|      | H1            | 18      | 18      | 20.5    | 50      | 50      |
|      | H2            | -       | -       | -       | 31      | 31      |
|      | H4            | 101     | 120     | 130     | 117     | 130     |
|      | Ø D           | 10      | 10      | 10      | -       | -       |
|      | Nb x T        | 4 x M16 | 8 x M16 | 8 x M16 | 8 x M16 | 8 x M20 |
|      | Weight ( Kg ) | 9       | 12.5    | 19.4    | 30      | 41      |



**WAFER BALL VALVE ISO PN 16**

ISO MOUNTING PAD AND STEM SIZE ( in mm ) :



| DN                       | 15    | 20    | 25      | 32      | 40    | 50    | 65    | 80    | 100    | 125     | 150     |
|--------------------------|-------|-------|---------|---------|-------|-------|-------|-------|--------|---------|---------|
| C                        | 9     | 9     | 11      | 11      | 14    | 14    | 17    | 17    | 17     | 17      | 17      |
| $\varnothing Y$          | -     | -     | -       | -       | -     | -     | -     | -     | -      | 28      | 28      |
| H1                       | 13.5  | 13.5  | 12      | 10      | 13.5  | 14    | 18    | 18    | 20.5   | 50      | 50      |
| $\varnothing K$          | 36    | 36    | 42      | 42      | 50    | 50    | 70    | 70    | 102    | 102     | 125     |
| ISO                      | F03   | F03   | F04     | F04     | F05   | F05   | F07   | F07   | F10    | F10     | F12     |
| $N \times \varnothing Z$ | 4 x 5 | 4 x 5 | 4 x 6.4 | 4 x 6.4 | 4 x 7 | 4 x 7 | 4 x 9 | 4 x 9 | 4 x 11 | 4 x M10 | 4 x M12 |

**WAFFER BALL VALVE ISO PN 16****TORQUE VALUES ( in Nm without safety coefficient ) :**

| DN            | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 |
|---------------|----|----|----|----|----|----|----|----|-----|-----|-----|
| Torque ( Nm ) | 7  | 9  | 13 | 19 | 27 | 40 | 60 | 85 | 150 | 190 | 250 |

**STANDARDS :**

- Fabrication according to ISO 9001 : 2008
- DIRECTIVE 97/23/CE : CE N° 0035  
Risk Category II
- Construction according to EN 12516
- Designing according to ASME B16.34
- Tests according to API 598 , EN 12266-1
- ISO 5211 mounting pad
- ISO PN16 R.F. flanges according to EN 1092-1 PN16
- Length according to EN 558 series 100 up to DN100

**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.

## WAFER BALL VALVE ISO PN 16

### INSTALLATION INSTRUCTIONS

#### GENERAL GUIDELINES :

- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

#### INSTALLATION INSTRUCTIONS :

- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned (if they're not, the valves may not work correctly).**
- **Make sure that the two sections of the pipe (upstream and downstream) match, the valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the valve and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.
- **If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the valve.**
- Tighten the bolts in cross.
- It's recommended to operate the valve ( open and close ) 1 to 2 times per year