

## FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE

3 pieces stainless steel ball valve fully encapsulated bolts with full bore for Chemical industries, petrochemical industries, hydraulic installation, heating, water distribution, compressed air.

Ball valve with firesafe certificate ISO 10497 and API 607 to reduce risks in case of fire.

Graphite packing and PTFE filled with glass seat gasket on stem, PTFE filled with carbon seat.

Compatible with explosive atmosphere, ATEX Zone 1&21 and Zone 2&22 thanks to the antistatic device.

Handling with locking device, on request possible with handwheel or stem extension.

Thanks to the ISO 5211 plate, an actuator can be installed on the valve.



**Certificate**  
**3.1**



**LRQA**  
PED/2014/68/UE



**Size :** DN 15 to 50

**Connection :** Flanges RF PN40

**Min Temperature :** -30°C

**Max Temperature :** +220°C

**Max Pressure :** 40 Bars

**Specifications :** Antistatic device, ATEX

ISO 5211 mounting pad

Anti blow-out stem, full bore

Fully encapsulated bolts

Fire safe ISO 10497 : 2010 and API 607 V.6

**Materials :** Stainless Steel EN 1.4408



## FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE

### SPECIFICATIONS :

- Full bore
- Anti blow-out stem
- Special gland pack with elastic washer
- Double antistatic device (ball between body-stem and ball-stem)
- Fire safe according to ISO 10497:2010 and API 607 V.6
- Locking device
- Handwheel and stem extension ( optional )
- ISO 5211 mounting pad
- Fully encapsulated bolts
- Flanges RF PN40

### USE :

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Steam : 18 bars maximum
- Min and max Temperatures Ts : -30°C to + 220°C
- Max Pressure Ps : 40 bars

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

| DN           | 15   | 20    | 25    | 32    | 40    | 50    |
|--------------|------|-------|-------|-------|-------|-------|
| Kvs ( m3/h ) | 31.3 | 57.86 | 94.25 | 157.9 | 227.9 | 414.8 |

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

| DN              | 15  | 20 | 25   | 32 | 40   | 50 |
|-----------------|-----|----|------|----|------|----|
| Pressure (bar)  |     |    |      |    |      |    |
| Breaking torque | 10  | 12 | 19.2 | 25 | 28.7 | 50 |
| 17              | 9.5 | 10 | 16   | 17 | 18   | 36 |
| 34              | 10  | 10 | 17   | 18 | 18   | 36 |

### BOLT TIGHTENING TABLE ( in Nm ) :

| DN            | 15  | 20    | 25    | 32   | 40   | 50   |
|---------------|-----|-------|-------|------|------|------|
| Torque ( Nm ) | 9.8 | 22.07 | 22.07 | 39.2 | 39.2 | 58.8 |

**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE**

**RANGE :**

- 3 pieces stainless steel fire safe ball valve flanged PN40 Ref. **7034** from DN 15 to DN 50

**CONNECTION :**

- Flanges R.F. PN40

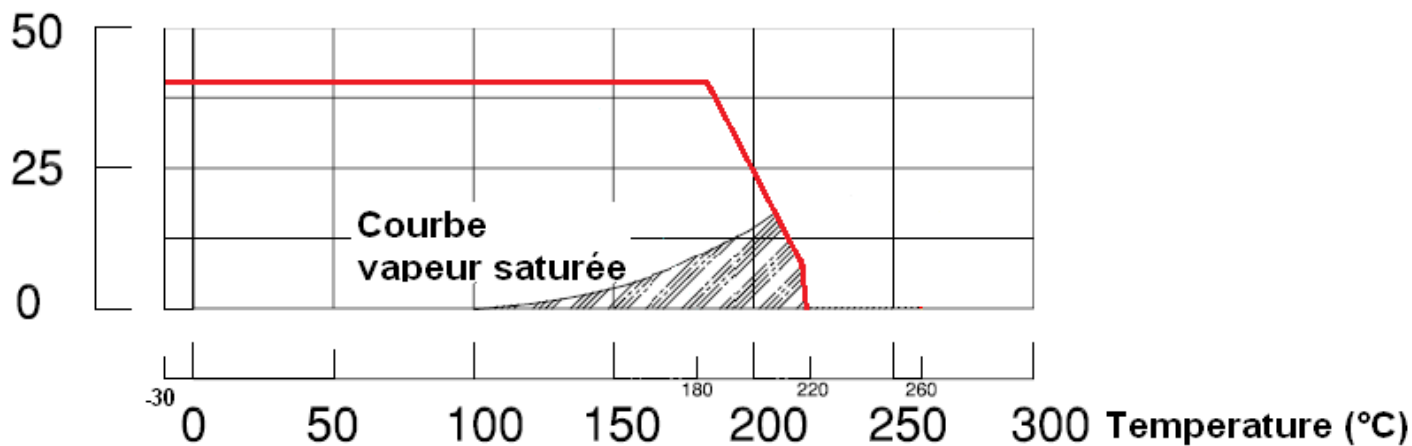
**OPTIONS :**

- AISI 304 handwheel Ref. **9830441-9830475**
- AISI 304 stem extension Ref. **9830471-9830474**

**PRESSURE / TEMPERATURE GRAPH :**

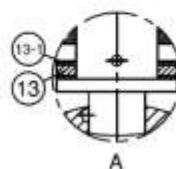
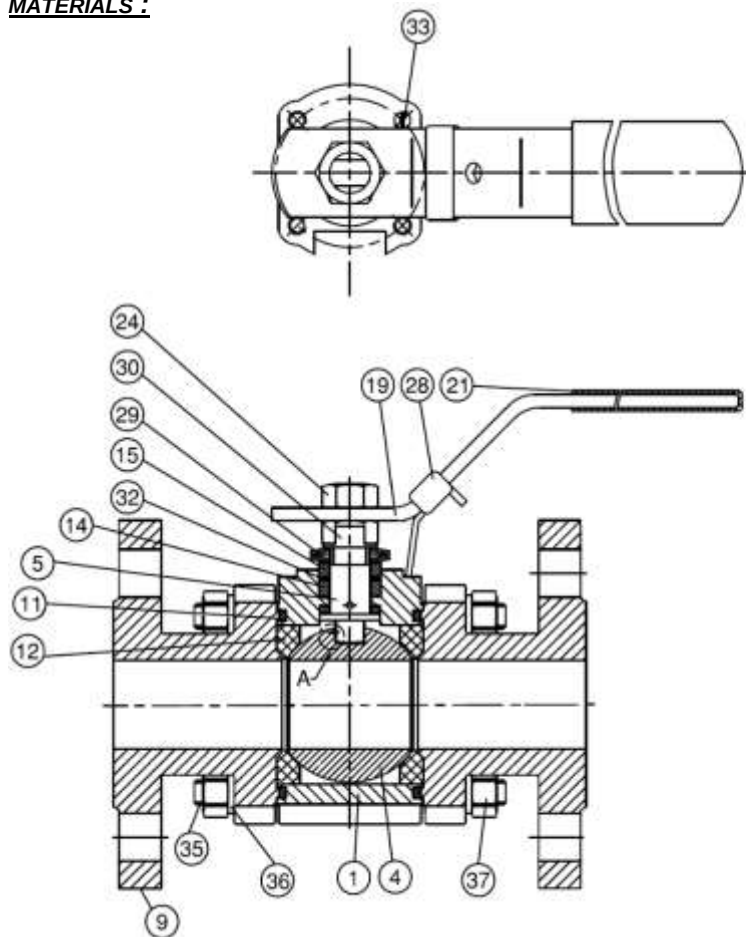
**PRESSURE**

**( Bar )**



**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE**

**MATERIALS :**



**Repairability :**



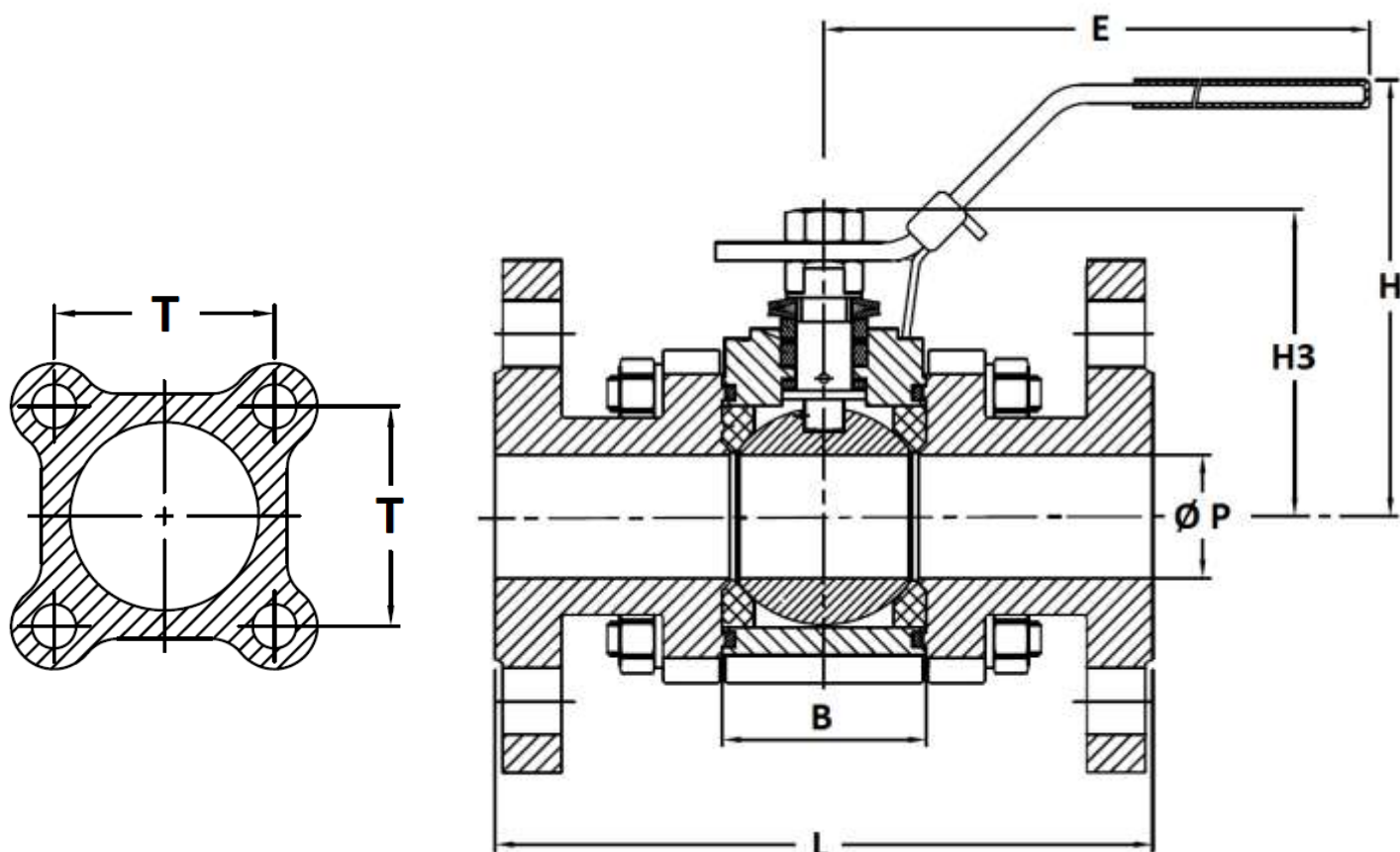
| *Gaskets kit<br>(Items 11, 12, 13, 13-1, 14 and 32) |         |
|-----------------------------------------------------|---------|
| DN                                                  | Ref.    |
| DN15                                                | 9804173 |
| DN20                                                | 9804174 |
| DN25                                                | 9804175 |
| DN32                                                | 9804176 |
| DN40                                                | 9804177 |
| DN50                                                | 9804178 |

(\* : included in gaskets kit)

| Item  | Designation      | Materials                   |
|-------|------------------|-----------------------------|
| 1     | Body             | EN 1.4408                   |
| 4     | Ball             | ASTM A351 CF8M              |
| 5     | Stem             | AISI 316                    |
| 9     | Ends             | EN 1.4408                   |
| 11*   | Body gasket      | Graphite                    |
| 12*   | Seat             | PTFE filled with 25% carbon |
| 13*   | Thrust washer    | Graphite                    |
| 13-1* | Thrust washer    | PTFE with 15% Glass fiber   |
| 14*   | Packing          | Graphite                    |
| 15    | Gland bush       | AISI 304                    |
| 19    | Handle           |                             |
| 21    | Handle cover     |                             |
| 24    | Handle nut       | AISI 304                    |
| 28    | Locking device   |                             |
| 29    | Elastic washer   |                             |
| 30    | Tab washer       | AISI 304                    |
| 32*   | Packing follower | PTFE with 15% Glass fiber   |
| 33    | Stop pin         | AISI 304                    |
| 35    | Stud             | ASTM A193 Gr.B8             |
| 36    | Washer           | AISI 304                    |
| 37    | Bolt nut         | A194 Gr.8                   |

**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE**

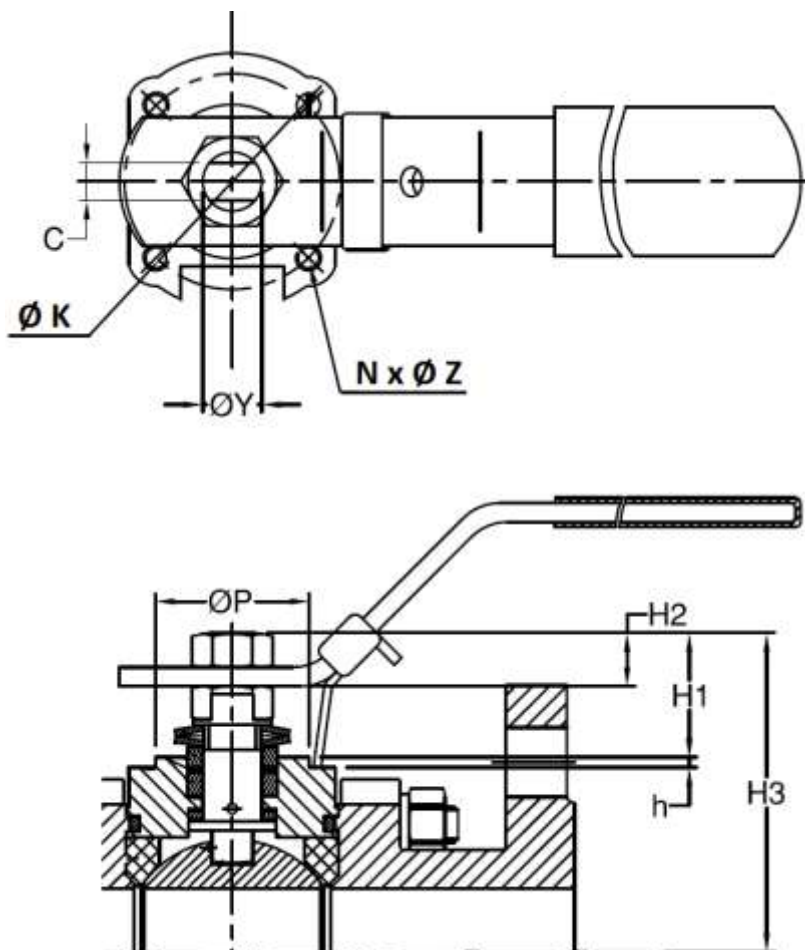
SIZE ( in mm ) :



| DN          | 15     | 20     | 25     | 32     | 40     | 50     |
|-------------|--------|--------|--------|--------|--------|--------|
| Ø P         | 15     | 20     | 25     | 32     | 38     | 50     |
| L           | 130    | 150    | 160    | 180    | 200    | 230    |
| E           | 154.9  | 154.9  | 199.7  | 199.7  | 232.2  | 211    |
| H           | 86.6   | 93.5   | 105.3  | 111.2  | 122.1  | 130    |
| H3          | 46.1   | 50.9   | 61.4   | 66.8   | 80     | 99.4   |
| B           | 24.5   | 31.4   | 41.3   | 48.4   | 56.3   | 72     |
| T           | 35     | 41.3   | 48     | 56.2   | 63.6   | 79.2   |
| Weight (Kg) | 2.32   | 3.37   | 4.53   | 6.58   | 8.24   | 13     |
| Ref.        | 703415 | 703420 | 703425 | 703432 | 703440 | 703450 |

**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE**

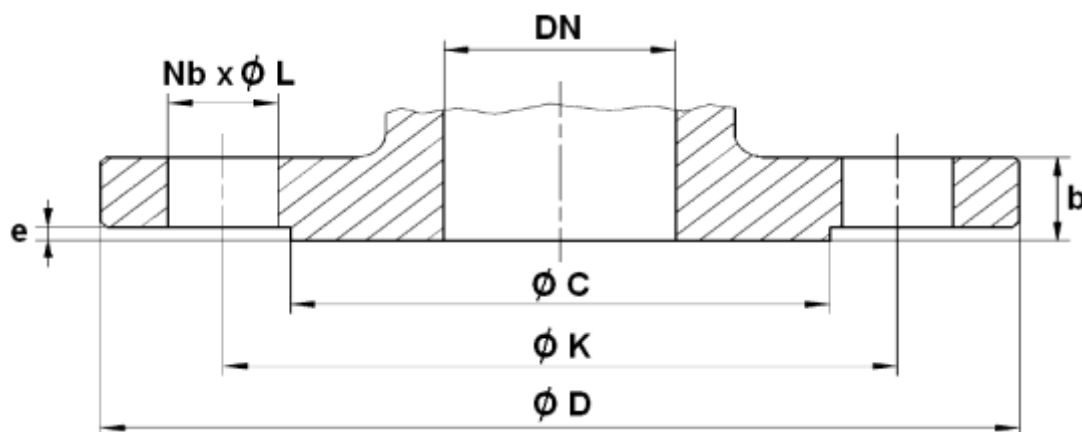
ISO 5211 MOUNTING PAD AND STEM SIZE ( in mm ) :



| DN      | 15    | 20    | 25    | 32    | 40     | 50     |
|---------|-------|-------|-------|-------|--------|--------|
| H1      | 17.1  | 18.1  | 25.4  | 26.2  | 32.4   | 28.5   |
| H2      | 11.1  | 9.1   | 13.1  | 12.6  | 14.9   | 15.5   |
| H3      | 46.1  | 50.9  | 61.4  | 66.8  | 80     | 99.4   |
| h       | 2     | 2     | 2     | 2     | 2,2    | 1,5    |
| C       | 6,5   | 6,5   | 8     | 8     | 9,7    | 12     |
| Ø Y     | 9,5   | 9,5   | 11,1  | 11,1  | 14,2   | 19     |
| Ø P     | 25    | 25    | 30    | 30    | 35     | 55     |
| Ø K     | 36    | 36    | 42    | 42    | 50     | 70     |
| ISO     | F03   | F03   | F04   | F04   | F05    | F07    |
| N x Ø Z | 4x M5 | 4x M5 | 4x M5 | 4x M5 | 4 x M6 | 4 x M8 |

**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE**

**FLANGES SIZE ( in mm ) :**

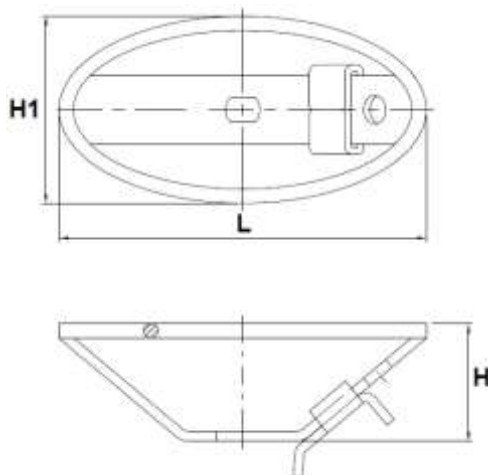


| DN       | 15     | 20     | 25     | 32     | 40     | 50     |
|----------|--------|--------|--------|--------|--------|--------|
| Ø C      | 45     | 58     | 68     | 78     | 88     | 102    |
| Ø D      | 95     | 105    | 115    | 140    | 150    | 165    |
| Ø K      | 65     | 75     | 85     | 100    | 110    | 125    |
| Nb x Ø L | 4 x 14 | 4 x 14 | 4 x 14 | 4 x 18 | 4 x 18 | 4 x 18 |
| b        | 16     | 18     | 18     | 18     | 18     | 20     |
| e        | 2      | 2      | 2      | 2      | 3      | 3      |



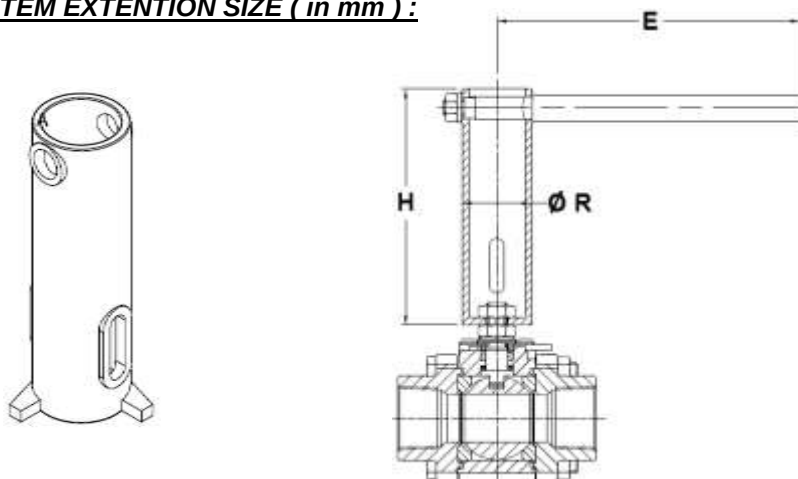
**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE**

**AISI 304 HANDWHEEL SIZE ( in mm ) :**



| DN            | 15      | 20      | 25      | 32      | 40      | 50      |
|---------------|---------|---------|---------|---------|---------|---------|
| L             | 116     | 116     | 130     | 130     | 147     | 194     |
| H             | 35      | 35      | 40      | 40      | 43      | 51      |
| H1            | 62      | 62      | 82      | 82      | 87      | 98      |
| Weight ( Kg ) | 0.12    | 0.12    | 0.18    | 0.18    | 0.22    | 0.34    |
| Ref.          | 9830441 | 9830441 | 9830442 | 9830442 | 9830443 | 9830475 |

**AISI 304 STEM EXTENTION SIZE ( in mm ) :**



| DN   | 15      | 20      | 25      | 32      | 40      | 50      |
|------|---------|---------|---------|---------|---------|---------|
| H    | 125.5   | 125.5   | 125.5   | 125.5   | 127.5   | 127.5   |
| E    | 126.5   | 126.5   | 161     | 161     | 194     | 198.5   |
| Ø R  | 31      | 31      | 37      | 37      | 43      | 52      |
| Ref. | 9830471 | 9830471 | 9830472 | 9830472 | 9830473 | 9830474 |





**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40 EXCELLENCE RANGE**

**STANDARDS :**

- Manufacturer certified ISO 9001 : 2015
- DIRECTIVE 2014/68/EU : For liquids and gas of Group 1
  - DN15-25 : Article 4, §3 (SEP), no CE marking
  - DN32-50 : Risk Category II, CE 0038 or CE 0343 marking
- Certificate 3.1 on request
- Construction according to EN 12516-1
- Designing according to ASME B16.34
- Pressure tests according to EN12266-1, rate A
- Fire safe according to ISO 10497:2010 and API 607 6<sup>th</sup>
- Flanges according to EN 1092-1 PN40
- ISO 5211 mounting pad
- Length according to EN 558 series 1 ( NF 29335 DIN 3202 F1 )
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 ( optional marking ) according to directive 2014/34/EU

**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.