



FEATURES

The floating ball valve **SFA** has Carbon steel body and alloy steel trim suitable for high temperature. Thanks to a new patented innovative seat and to Carbon reinforced PTFE sealings, the valve is suitable for hot media under pressure, as steam or superheated water. Besides, this ball valve is designed to avoid leakages and fugitive emissions in the environment as well as to maintain a safe tightness also in case of fire, so being suitable for dangerous or flammable media too.

The innovative feature of this valve is the "double sealing system", that is the capability to grant sealing both by downstream seating, as in usual floating ball valves, and also by upstream seating (see Fig. 1).

SFS ball valve has identical features, but it is manufactured with body and trim in austenitic stainless steel. Therefore it is the ideal solution for corrosive media or corrosive atmosphere. Those valves are bi-directional and could be fitted with electric or pneumatic actuator. Valves are suitable with full or reduced bore

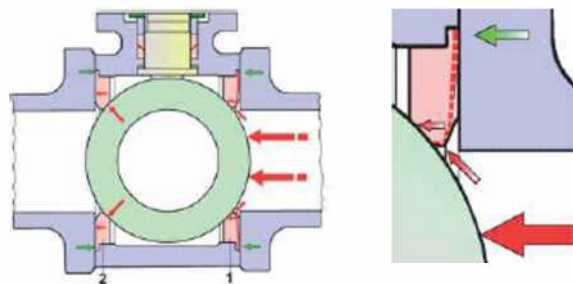


Fig. 1

Working condition

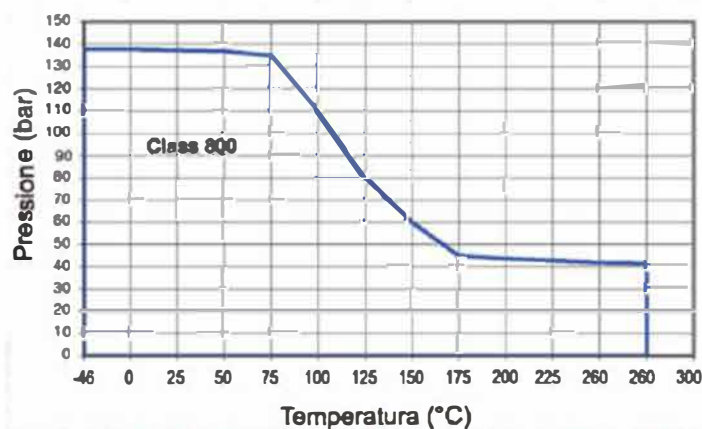


Fig. 2

Fig. 2 shows operating range of valves

Note: for temperatures under -46 °C, please apply to our Technical or Sales Department.

Reference Standards

PED Directive (97/23/CE)

ASME B1.20.1 for NPT threaded ends

ASME B16.11 for SW ends

ISO 12209-2 for GAS threaded ends

DIN 3202 M3 for end to end dimensioni

ISO 15848-1 ("fugitive emission")

API607 ("fire safe")

Technical data

| | |
|-------------------|---|
| Bore | : Reduced or full |
| On line tightness | : Grade A according to ISO 5208 |
| Antistatic device | : According to ISO7121 and Bs5351 |
| Connections | : Socket Weld (SW); Threaded according to NPT or GAS with end to end to DIN 3202 M3 |

Operating starting torque (Nm) at 138 Bar

| DN | ½" | ¾" | 1" | 1¼" | 1½" | 2" | 2½" |
|--------------|----|----|----|-----|-----|----|-----|
| Reduced bore | - | 15 | 20 | 31 | 36 | 48 | 88 |
| Full bore | 15 | 20 | 31 | 36 | 48 | 88 | - |

Above values refer to a frequently operated valve.

In case the valve is not operated for a long time, or in case of heavy media, the operating starting torque must be increased

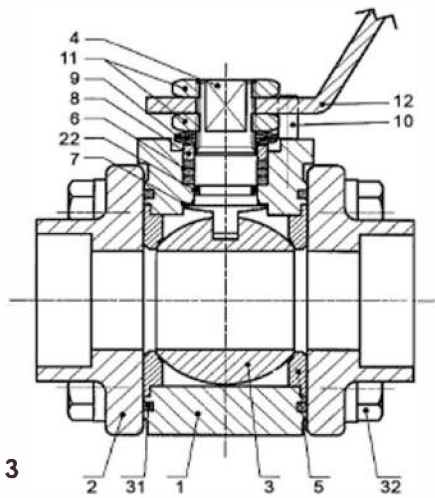


Fig. 3

Table 1

| No. | Item | Execution SFA | Execution SFS |
|-----|---------------------|-------------------------------|-------------------------------|
| 1 | Body | A105 / A350 LF2 | AISI 316 |
| 2 | Cap | A105 / A350 LF2 | AISI 316 |
| 3 | Ball | 1.4301/1.4086 (a) | AISI 316 |
| 4 | Stem | 1.4104 HT | AISI 316 |
| 5* | Seat ring | RPTFE (b) | RPTFE (b) |
| 6* | Packing ring | Graphite | Graphite |
| 7* | Antifriction washer | RPTFE (b) | RPTFE (b) |
| 8 | Packing gland | CS galvanized | AISI 316 |
| 9 | Belleville washer | Ck 70 | SS |
| 10 | Stop pin | CS galvanized | AISI 316 |
| 11 | Nut | CS galvanized | AISI 316 |
| 12 | Handle | CS galvanized and polymerized | CS galvanized and polymerized |
| 22* | O-ring | FKM | FKM |
| 31* | Body seal | Graphite | Graphite |
| 32 | Bolt | B7 galvanized | B8 |

(a) 1.4301(AISI 304) for ND≤1" (DN 25)
1.4086 (AISI 430F) for ND > 1" (DN 25)
(b) RPTFE = PTFE + 25% carbon

Option

- Depressurizing hole on the ball.
- Extended stem.
- Oval hand-wheel for application in small spaces.

Safety informations

for installation and maintenance

For detailed informations about installation, maintenance and safety criteria, please refer to Use and Maintenance Manual.

Spare parts

Suggested spare parts are evidenced by an asterisk on the Table of materials (Table 1).

Dimension and weight

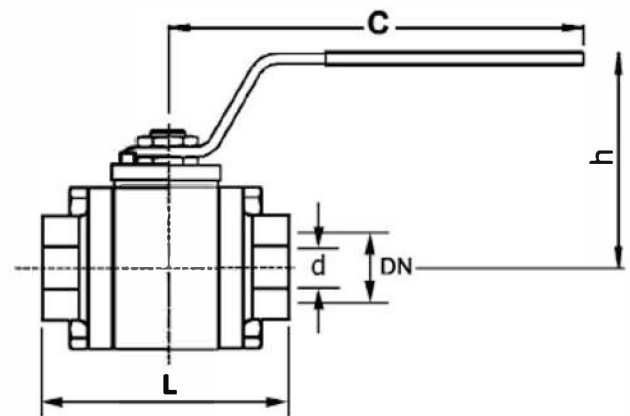


Fig. 4

Full bore valves

| DN | L mm | C mm | h mm | d mm | Top mounting | weight Kg | Cv |
|-----|------|------|------|------|--------------|-----------|-----|
| ½" | 75 | 145 | 87 | 15 | F03 | 1.1 | 12 |
| ¾" | 80 | 170 | 98 | 20 | F04 | 1.6 | 32 |
| 1" | 90 | 170 | 103 | 25 | F04 | 2.5 | 46 |
| 1¼" | 110 | 212 | 107 | 32 | F05 | 4.2 | 77 |
| 1½" | 120 | 212 | 113 | 40 | F05 | 5.9 | 113 |
| 2" | 140 | 303 | 142 | 50 | F07 | 9.5 | 260 |

Reduced bore valves

| DN | L mm | C mm | h mm | d mm | Top mounting | weight Kg | Cv |
|-----|------|------|------|------|--------------|-----------|-----|
| ¾" | 80 | 145 | 87 | 15 | F03 | 1.3 | 13 |
| 1" | 90 | 170 | 98 | 20 | F04 | 1.8 | 33 |
| 1¼" | 110 | 170 | 103 | 25 | F04 | 2.8 | 50 |
| 1½" | 120 | 212 | 107 | 32 | F05 | 4.5 | 80 |
| 2" | 140 | 212 | 113 | 40 | F05 | 6.4 | 118 |
| 2½" | 185 | 303 | 142 | 50 | F07 | 10.6 | 275 |