



# BONETTI

## FLOATING BALL VALVES

ASME Class 800

1/2" ÷ 2.1/2" (DN 15 ÷ 65) - SW, NPT, GAS Ends

**SFA**  
**SFS**

### 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

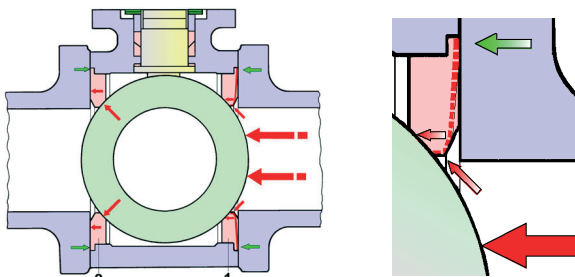


Fig. 1

### 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")



### Working condition

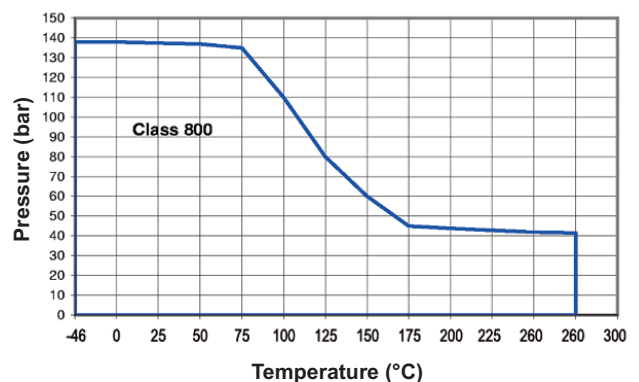


Fig. 2

Fig. 2 shows operating range of valves  
Note: for temperatures under -46 °C, please apply to our Technical or Sales Department.

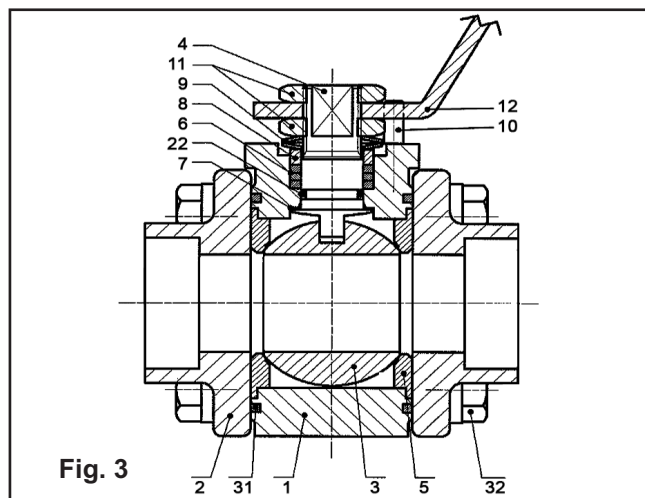
## Technical data

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	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"
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



## Option

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

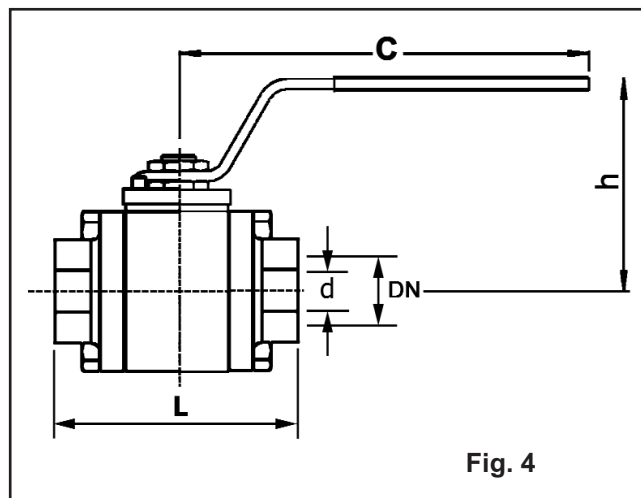
## Safety informations for installation and maintenance

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

## Spare parts

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

## Dimension and weight



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 polimerized	CS galvanized and polimerized
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

DN	L mm	C mm	h mm	d mm	Top mounting	weight Kg	Cv
1/2"	75	145	87	15	F03	1.1	12
3/4"	80	170	98	20	F04	1.6	32
1"	90	170	103	25	F04	2.5	46
1.1/4"	110	212	107	32	F05	4.2	77
1.1/2"	120	212	113	40	F05	5.9	113
2"	140	303	142	50	F07	9.5	260

DN	L mm	C mm	h mm	d mm	Top mounting	weight Kg	Cv
3/4"	80	145	87	15	F03	1.3	13
1"	90	170	98	20	F04	1.8	33
1.1/4"	110	170	103	25	F04	2.8	50
1.1/2"	120	212	107	32	F05	4.5	80
2"	140	212	113	40	F05	6.4	118
2.1/2"	185	303	142	50	F07	10.6	275

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