

**SOLAR 2 PIECES BALL VALVE**



ISO 9001:2008

BUREAU VERITAS  
Certification





PED 97/23/CE



**BUREAU  
VERITAS**  
TA LUFT



**Size :** DN 1/4" to 2"  
**Ends :** Female BSP  
**Min Temperature :** - 20°C  
**Max Temperature :** + 200°C  
**Max Pressure :** 63 Bars  
**Specifications :** For solar use  
PTFE filled with graphite seat  
Anti blow-out stem  
Tightness according to TA LUFT

**Materials :** Stainless steel

## SOLAR 2 PIECES BALL VALVE

### SPECIFICATIONS :

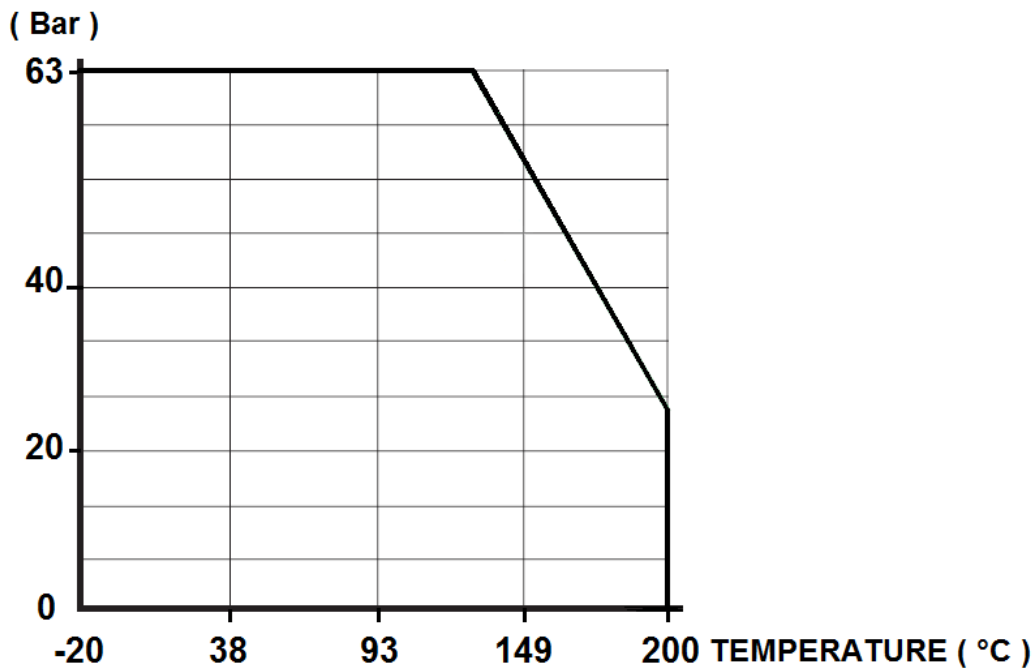
- Full bore
- Anti blow-out stem
- PTFE filled with graphite seat
- Locking handle
- Tightness according to TA LUFT
- 2 pieces type
- Solid ball

### USE :

- For solar use
- Steam : 11 bars maxi
- Min and max Temperatures Ts : -20°C to + 200°C
- Max Pressure Ps : 63 bars ( see graph )

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

#### PRESSURE



### RANGE :

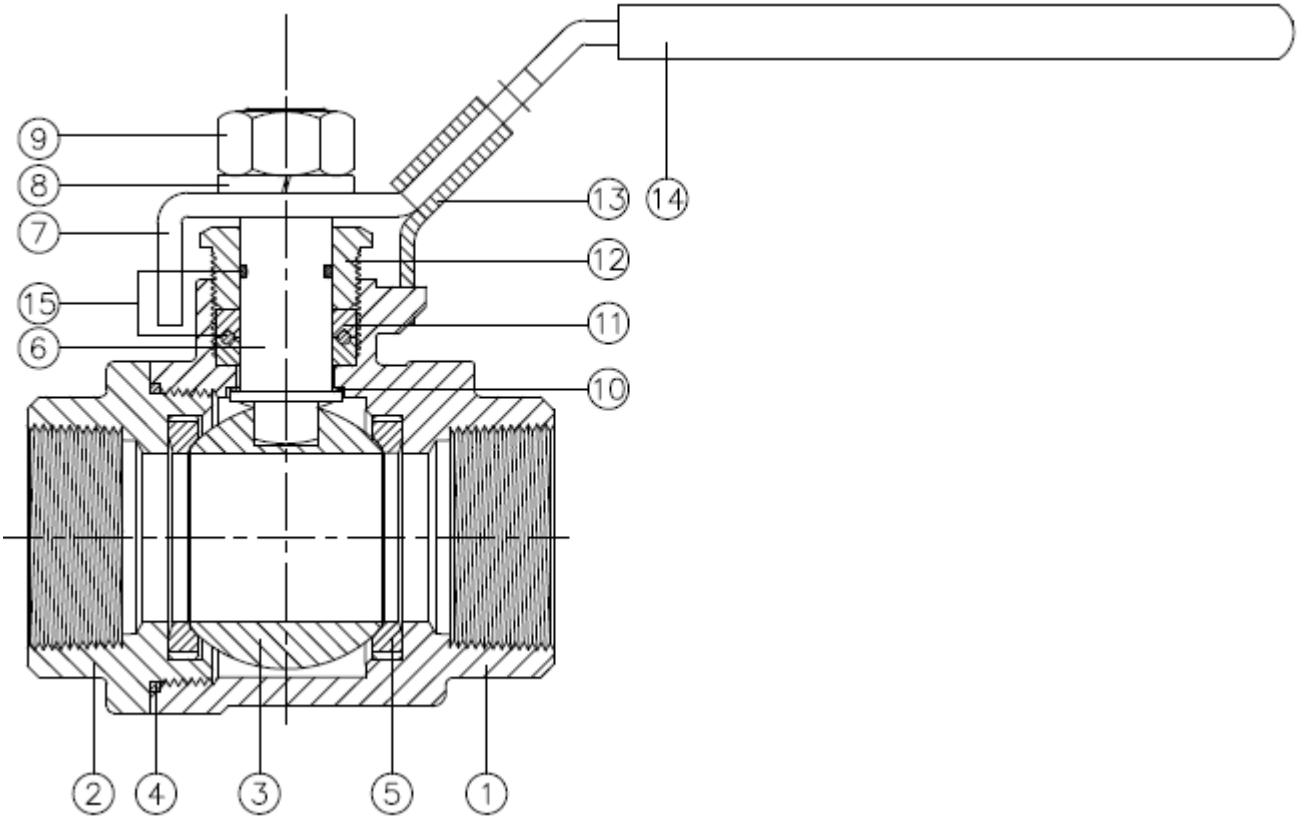
- Stainless steel ball valve for solar use **Ref. 714** from DN 1/4" to DN 2"

### ENDS :

- Female / female threaded BSP cylindrical ends

**SOLAR 2 PIECES BALL VALVE**

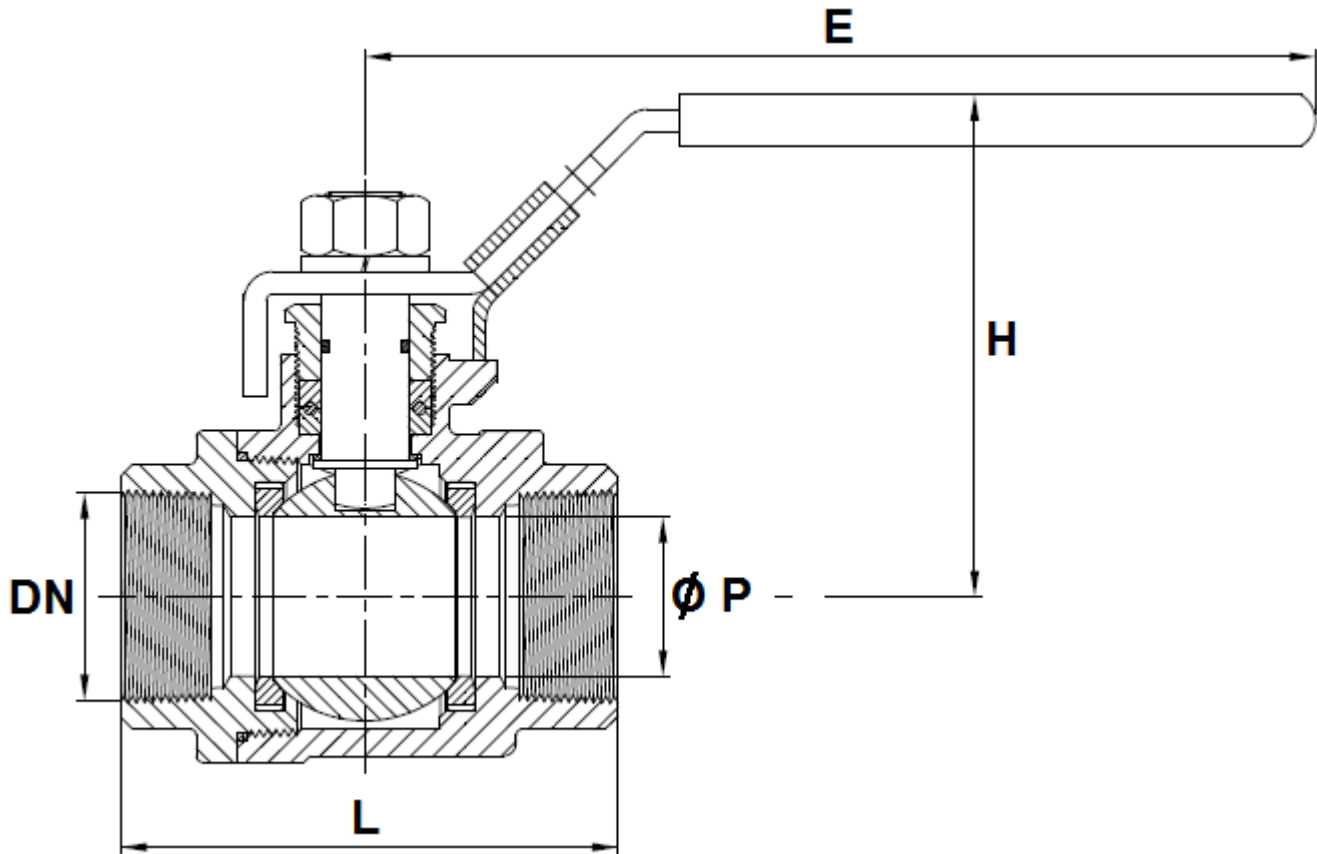
**MATERIALS :**



Item	Designation	Materials
1	Body	ASTM A351 CF8M
2	Ends	ASTM A351 CF8M
3	Ball	ASTM A351 CF8M
4	Body gasket	PTFE filled with graphite
5	Seat	PTFE filled with graphite
6	Stem	SS 316
7	Handle	SS 304
8	Handle washer	SS 304
9	Handle nut	SS 304
10	Gasket	PTFE filled with graphite
11	Packing	PTFE filled with graphite
12	Packing nut	SS 304
13	Locking device	SS 304
14	Handle cover	PVC
15	O ring	FKM

**SOLAR 2 PIECES BALL VALVE**

**SIZE ( in mm ) :**



Ref.	DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4"	1"1/2"	2"
714	Ø P	11.6	12.5	15	20	25	32	38	50
	L	50.8	50.8	58	65.6	78.7	90	105	124
	E	100	100	100	125	149	149	190	190
	H	58.5	58.5	58.5	63.5	78	83	102	108
	Weight ( Kg )	0.200	0.200	0.300	0.470	0.760	1.1	1.8	2.7

**SOLAR 2 PIECES BALL VALVE**
**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 )	19	22	34	62	98	170	247	427

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

DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
Couple ( Nm )	3.5	4	5.5	7.5	11	15	20	40

**STANDARDS :**

- Fabrication according to ISO 9001 : 2008
- DIRECTIVE 97/23/CE : CE N° 0035  
Risk category III Module H
- Tests according to API 598, table 6
- Female cylindrical BSP threaded ends according to ISO 7/1 Rp
- Tightness according to TA LUFT/5.2.6.4 & VDI 2440/3.3.1.3

**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.

**SOLAR 2 PIECES BALL VALVE****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.

**When the valve is under pressure :**

If there's a leakage at the packing, tighten it slightly so that the leakage disappears.