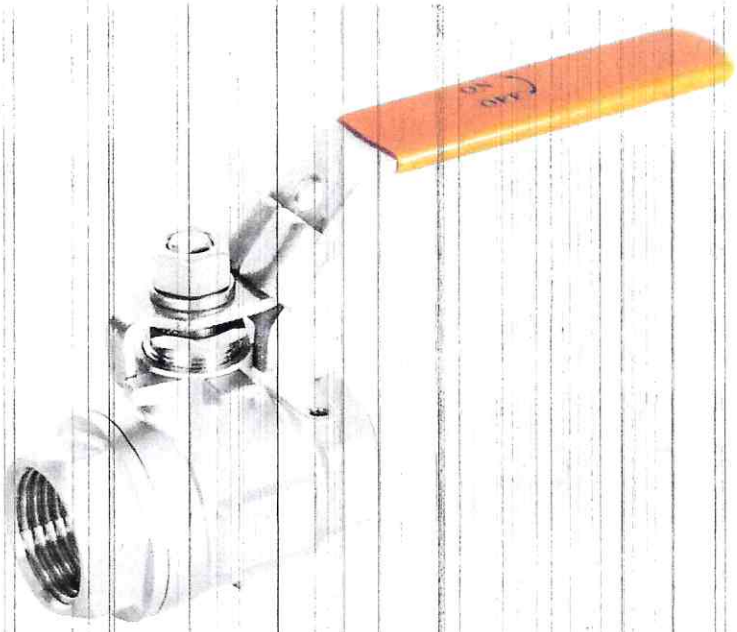
SOLAR 2 PIECES BALL VALVE

BUREAU VERITAS
TA LUFT

K2I S21



TÜVRheinland®
ISO 9001 : 2015

TÜVRheinland®
PED/2014/68/UE

CE

Ex

Certificate 3.1

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 15% graphite seat Anti blow-out stem Atex Tightness according to TA LUFT
Materials :	Stainless steel EN 1.4408

SOLAR 2 PIECES BALL VALVE

SPECIFICATIONS :

- Full bore
- Anti blow-out stem
- PTFE filled with 15% graphite seat
- Locking handle
- Atex
- Double antistatic device
- 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) :

RANGE :

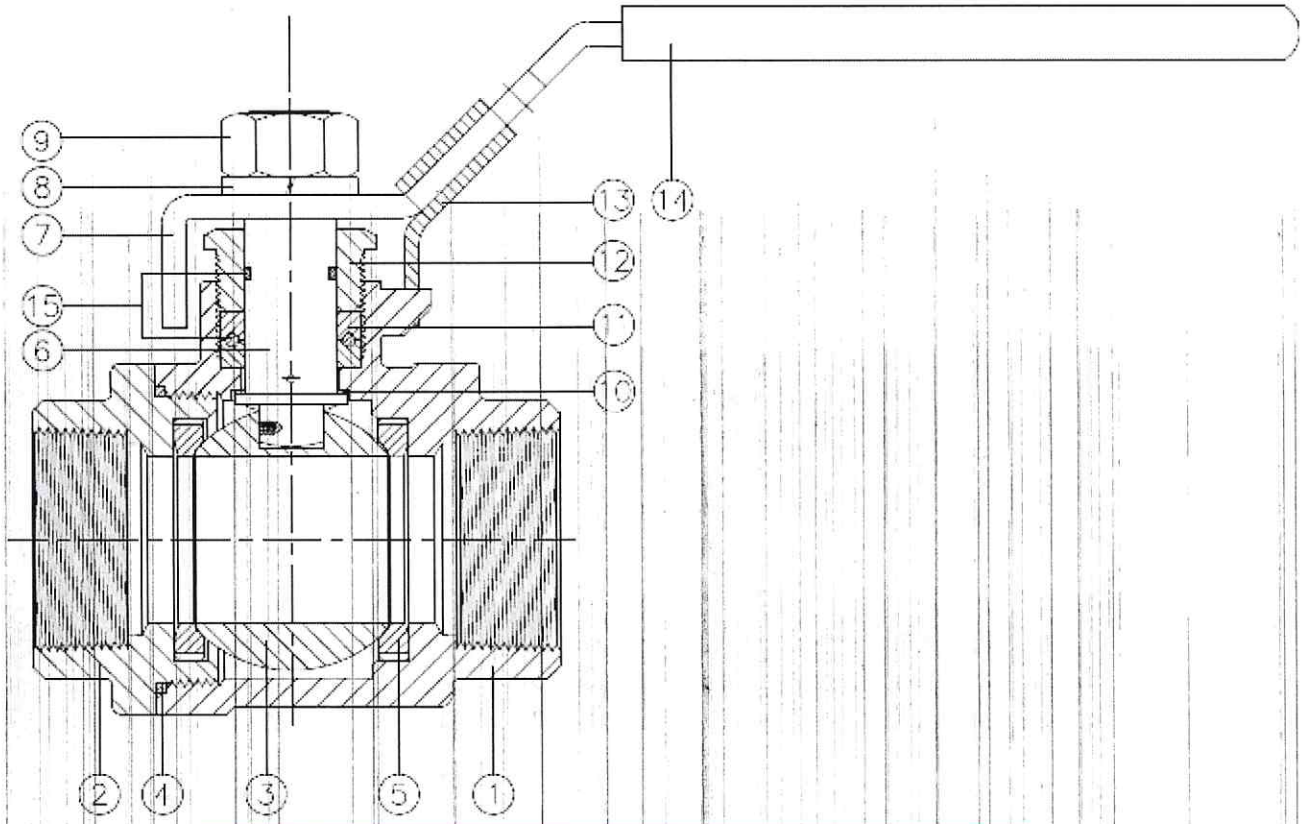
- Stainless steel ball valve for solar use from DN 1/4" to DN 2"

ENDS :

- Female / female threaded BSP cylindrical ends

SOLAR 2 PIECES BALL VALVE

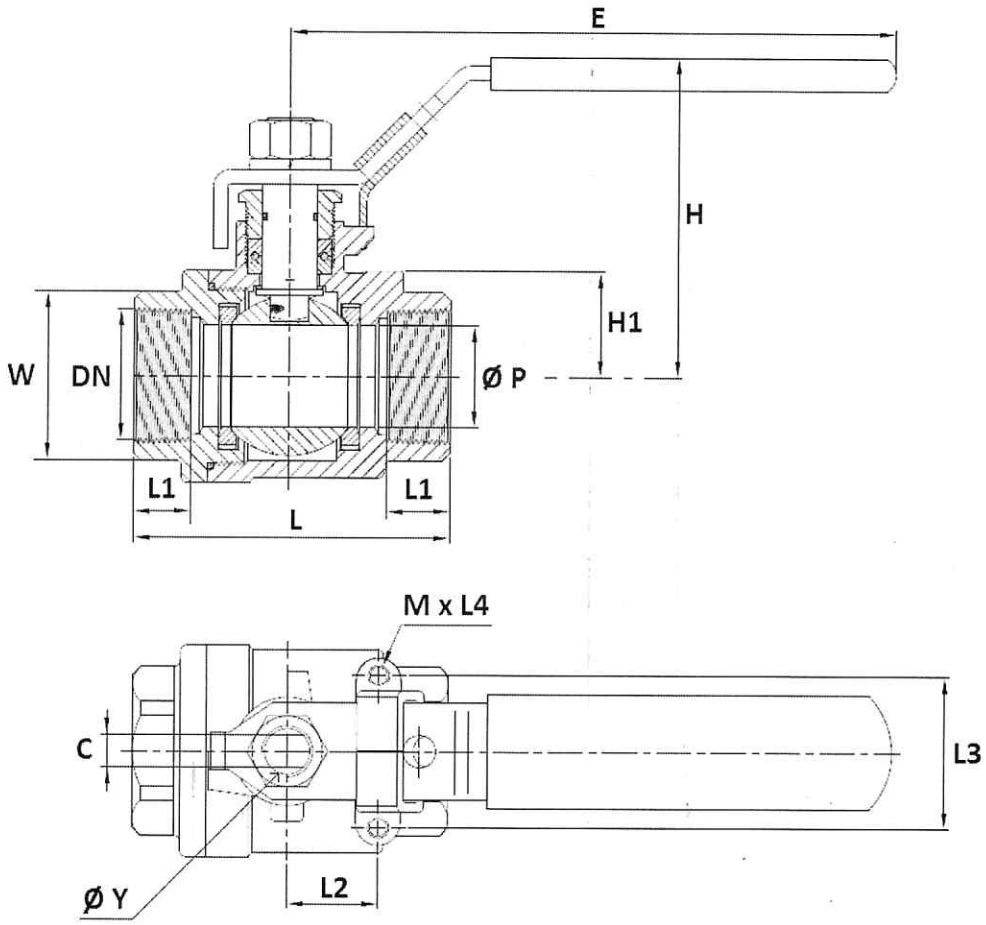
MATERIALS :



Item	Designation	Materials
1	Body	EN 1.4408
2	Ends	
3	Ball	
4	Body gasket	PTFE filled with 15% graphite
5	Seat	PTFE filled with 15% graphite
6	Stem	AISI 316
7	Handle	AISI 304
8	Handle washer	
9	Handle nut	
10	Gasket	PTFE filled with 15% graphite
11	Packing	PTFE filled with 15% graphite
12	Packing nut	AISI 304
13	Locking device	
14	Handle cover	PVC
15	O ring	FKM

SOLAR 2 PIECES BALL VALVE

SIZE (in mm) :



DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
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
L1	10	9	13	13	17	18	20	24
L2	12.7	12.7	12.7	12.7	22.4	22.4	23.2	23.2
L3	28.5	28.5	28.5	28.5	35	35	38.1	38.1
M x L4	M5 x 5.5			M5 x 6	M5 x 6.5	M6 x 5.5	M6 x 6	
E	100	100	100	125	149	149	190	190
H	58.5	58.5	58.5	63.5	78	83	102	108
H1	15.8	15.8	15.8	21.3	23.8	30.5	35.5	44.3
C	5	5	5	6.5	8	8	10	10
Ø Y	9.5 (3/8"-24UNF)			11.1 (7/16"-20UNF)			12.7 (1/2"-20UNF)	
W (on flat)	19	23	26	32	38	49	54	67
Weight (Kg)	0.2	0.2	0.3	0.5	0.8	1.1	1.8	2.7

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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 : 2015
- DIRECTIVE 2014/68/EU : CE N° 0035
  Risk category III Module H
- Certificate 3.1 on request
- Pressure tests according to API 598, table 6
- Female cylindrical BSP threaded ends according to ISO 7/1 Rp
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 &22 (optional marking)
- 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 St Steeltrade shall not be liable for the consequences of damages.
The customer must check the right choice of the products with the real service conditions.

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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.

- **For an installation in ATEX area, check the conductivity between the valve, the upstream pipe and the downstream pipe and make sure the pipe is connected to the earth.**

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.