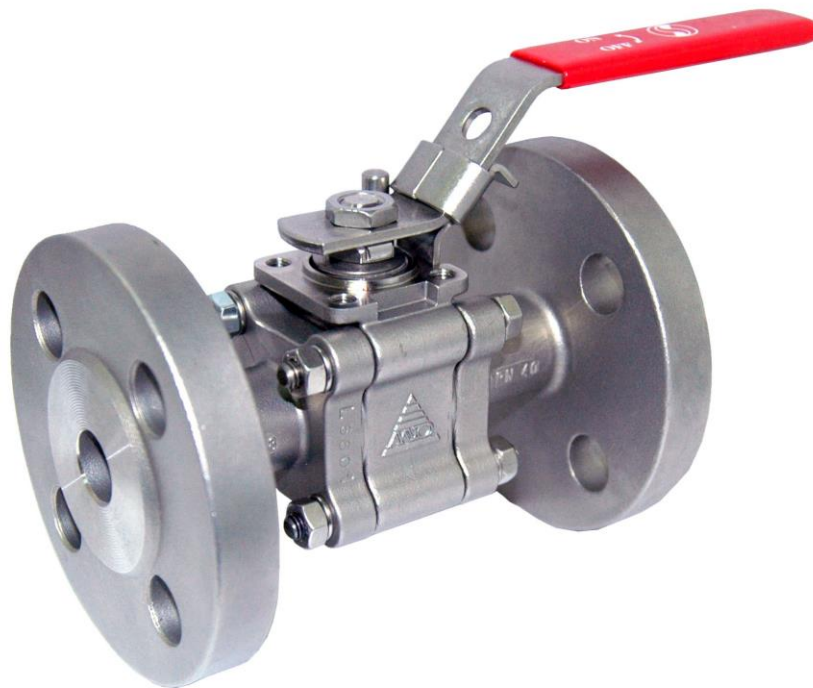


**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40
EXCELLENCE RANGE**



Lloyd's
Register
ISO 9001 : 2015



Lloyd's
Register
PED/2014/68/EU



Certificate 3.1

Size : DN 15 to 50 mm
Ends : Flanges R.F. PN40
Min Temperature : -30°C
Max Temperature : + 220°C
Max Pressure : 40 Bars
Specifications : Antistatic device
ISO 5211 mounting pad
Anti blow-out stem
Fully encapsulated bolts
Fire safe ISO 10497 :2010 and API 607 V.6
Atex

Materials : Stainless steel ASTM A351 CF8M



**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40
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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
- On request PEEK seat(optional) for high temperature
- Flanges RF PN40

USE :

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Steam : 18 bars maximum with PTFE filled with 25% carbon seat
- Steam : 30 bars maximum with PEEK seat
- Min and max Temperatures Ts : -30°C to + 220°C for stainless steel valve with PTFE filled with 25% carbon seat type **Ref. 7034**
- Min and max Temperatures Ts : -10°C to + 260°C for valve with PEEK seat (optional)
- 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

RANGE :

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

ENDS :

- Flanges R.F. PN40

OPTIONS :

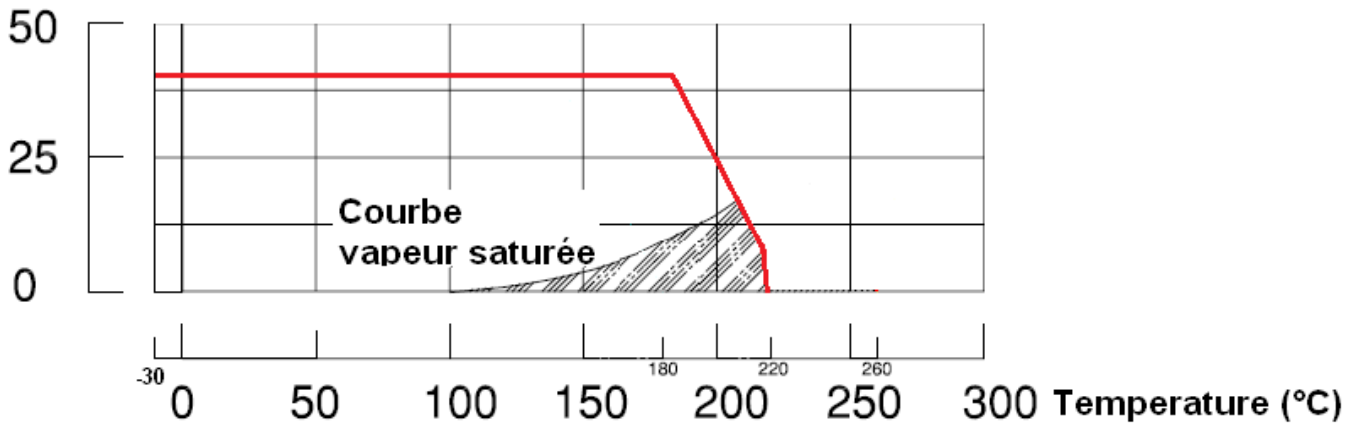
- AISI 304 handwheel Ref. **9830441-9830475**
- AISI 304 stem extension Ref. **9830471-9830474**
- **PEEK** gasket kits (including Grafoil body gasket and packing, PTFE filled 15% glass fiber stem gasket + Grafoil and PEEK seat)
Ref. **9804381-9804386**

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PRESSURE / TEMPERATURE GRAPH WITH PTFE FILLED WITH CARBON SEATS :

PRESSURE

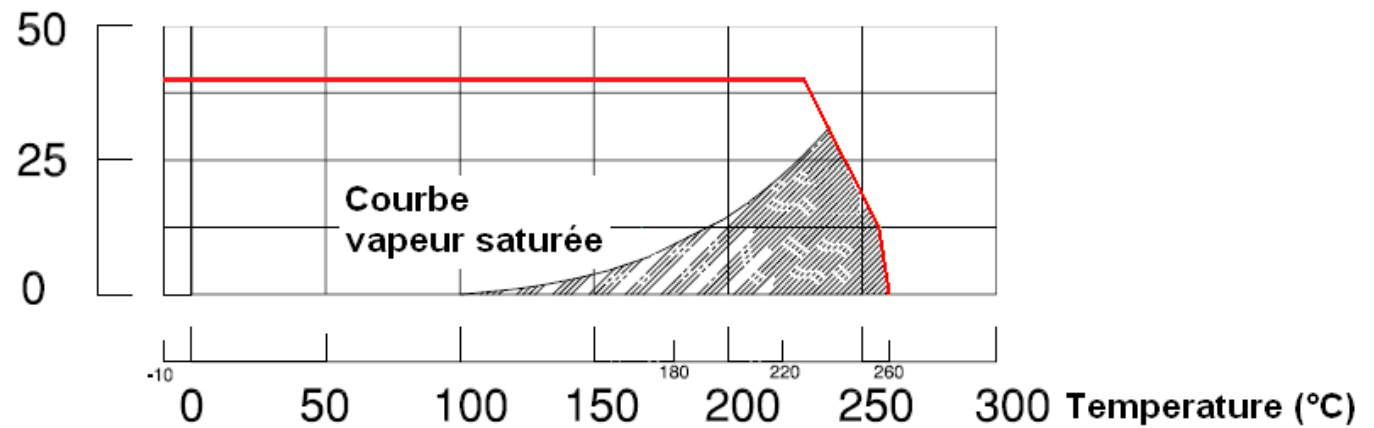
(Bar)



PRESSURE / TEMPERATURE GRAPH WITH PEEK SEATS :

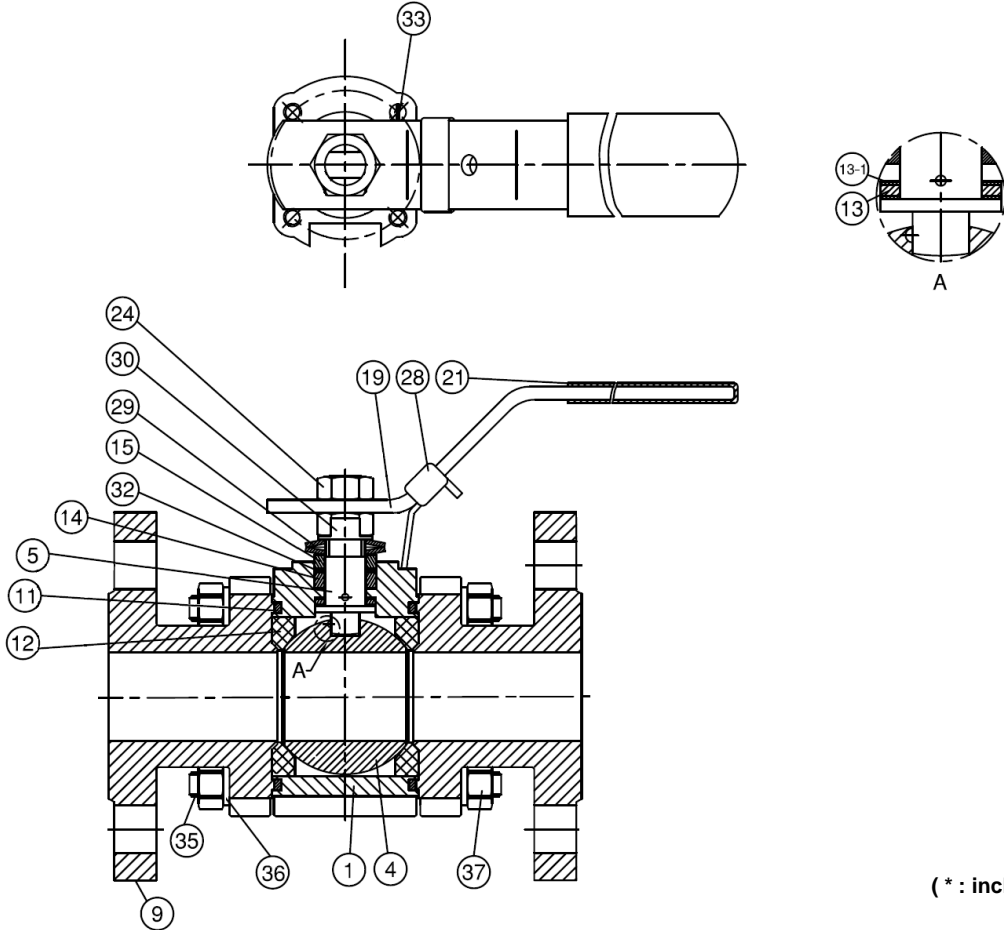
PRESSURE

(Bar)



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MATERIALS :

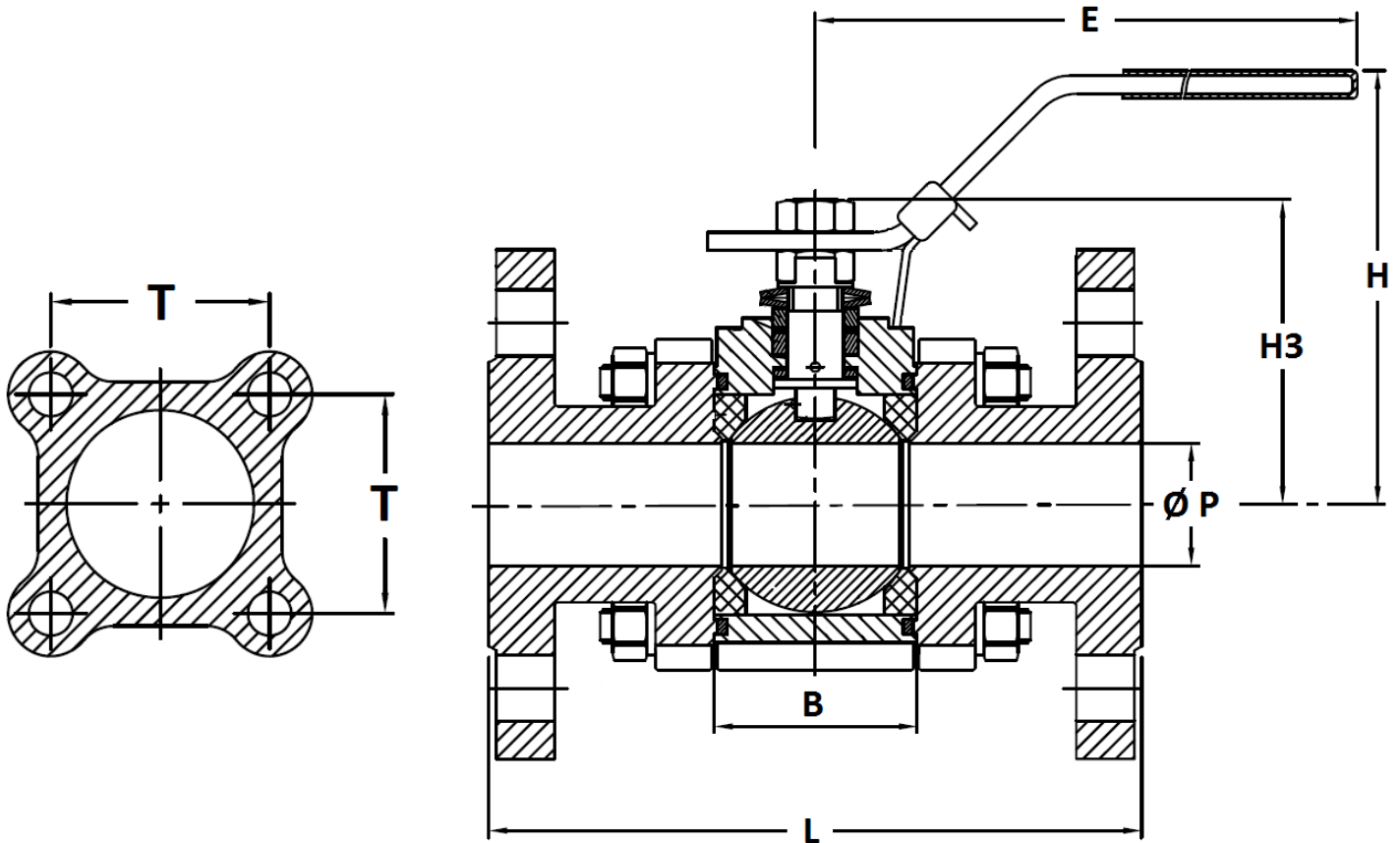


(* : included in gaskets kit)

Item	Designation	Materials
1	Body	ASTM A351 CF8M
4	Ball	ASTM A351 CF8M
5	Stem	AISI 316
9	Ends	ASTM A351 CF8M
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	AISI 304
21	Handle cover	Plastic
24	Handle nut	AISI 304
28	Locking device	AISI 304
29	Elastic washer	AISI 301
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	ASTM A194 Gr.B8

**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40
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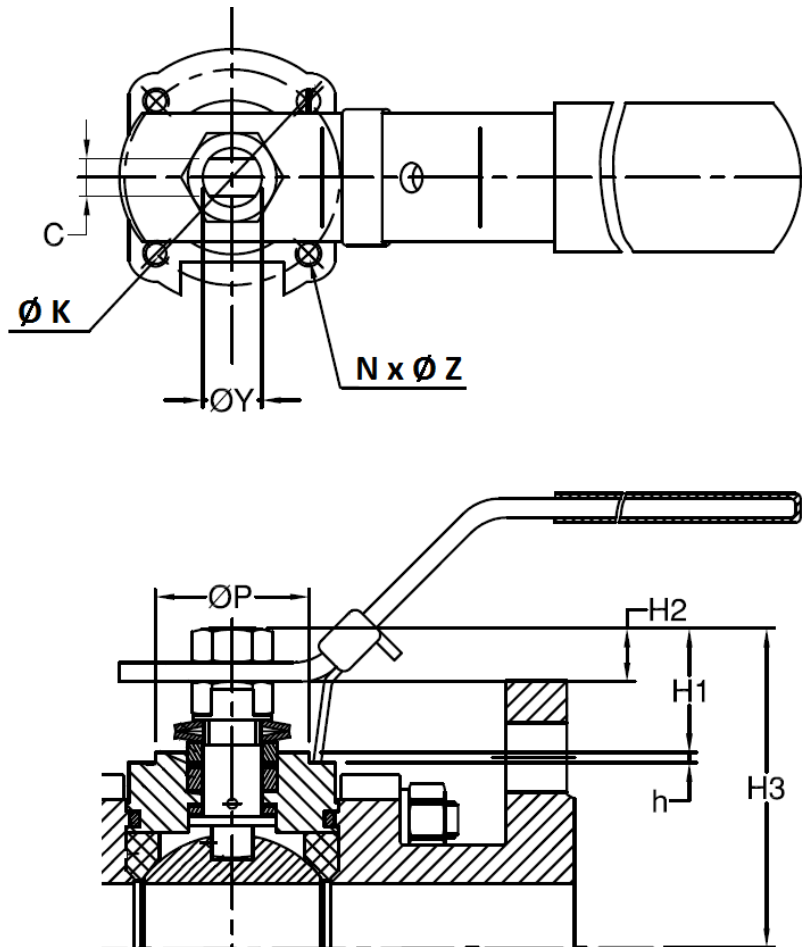
SIZE (in mm) :



Ref.	DN	15	20	25	32	40	50
7034	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

**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40
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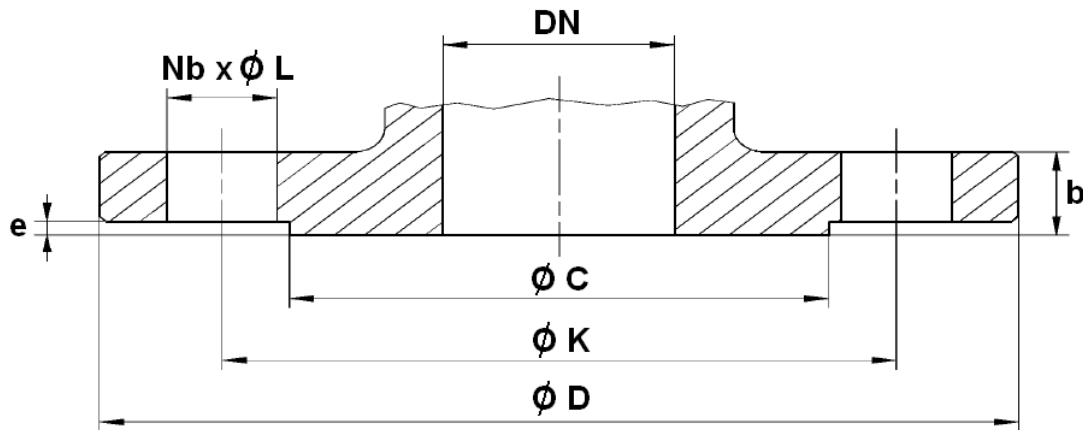
ISO 5211 MOUNTING PAD AND STEM SIZE (in mm) :



Ref.	DN	15	20	25	32	40	50
7034	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

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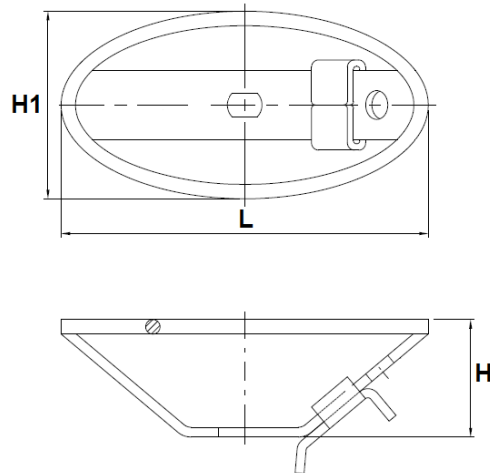
FLANGES SIZE (in mm) :



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

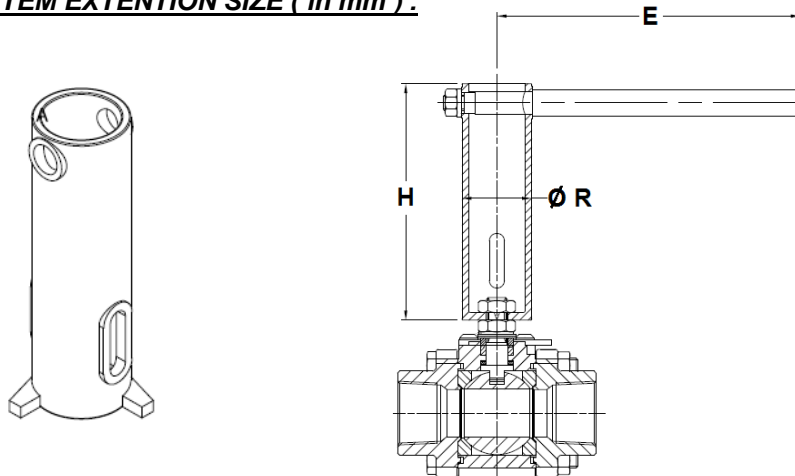
**FIRE SAFE 3 PIECES BALL VALVE FLANGED PN 40
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AISI 304 HANDWHEEL SIZE (in mm) :



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**

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

STANDARDS :

- Fabrication according to ISO 9001 : 2015
- DIRECTIVE 2014/68/EU : CE N° 0038
Risk category III module H
- 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 6th (only with PTFE filled with carbon seats)
- 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.

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

Check to use a produce compatible to the services conditions for the sealing of the threaded types.
To tighten the ends, use the appropriate tool.
Use the right bolt tightening so that the ends won't be damaged.

The welding of the ends for the SW and the BW types, must be done with the central part removed.
A gauge can be used to have the good length and alignment between the ends.

INSTALLATION OF THE CENTRAL PART

During the installation of the central part, tighten bolts according to the table below. Tighten bolts in cross.

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

CLEANING AND TESTS

Keep opened the valves during the cleaning operation so that there are 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 EN 12266-1.

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 between the body and the ends, tighten bolts according to the above table

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

MAINTENANCE OPERATION IN WORKSHOP**REPLACEMENT OF SEAT GASKETS AND PACKING.**

The central part must be removed.

Turn the ball at 45° and removed the seat gaskets.

Operate the valve in closed position to removed the ball. Verify the surface of the ball has no impacts and no scores.

If there are important scores or impacts, replace the ball.

Clean inside the body valve and remove the impurities.

To replace the packing, remove the handle, unscrew the gland nut, extract the stem by the inside of the valve.

Clean the packing seat.

Reassemble thrust washer on stem, introduce stem by the inside of the valve, reassemble packing with packing nut, reassemble hand washer, hand nut and the handle.

Turn stem in closed position and insert the ball.

Then turn the ball in opened position and reassemble the seat.

Place the valve on the installation, tighten bolts according to the above table.

Then proceed to the tests in the same way that the first installation.