

2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE



ISO 9001 : 2015



TÜVRheinland
PED/2014/68/UE



Certificate 3.1

Size : DN 15 to 150 mm (NPS 1/2" to 6")
Ends : Flanges Class 150 (PN20) R.F.
Min Temperature : - 10°C
Max Temperature : + 180°C
Max Pressure : 20 Bars
Specifications : ISO 5211 mounting pad
PTFE filled with glass seat
Anti blow-out stem
Double antistatic device

Materials : Carbon steel ASTM A216 WCB

2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE

SPECIFICATIONS :

- Full bore
- Anti blow-out stem
- Double antistatic device
- PTFE filled with glass seat
- Handle with locking device up to DN50 (NPS 2")
- ISO 5211 mounting pad
- 2 pieces type (Split body)
- Hollow ball for DN150 (NPS 6")
- Black anti-corrosive finish, 3-5µ thickness

USE :

- Chemical industries, petrochemical industries, hydraulic installation, heating and water distribution
- Min and max Temperature Ts : -10°C to + 180°C
- Max pressure Ps : 20 bars

RANGE :

- Ball valve with carbon steel body **Ref. 793** from DN 15 to DN 150 (NPS 1/2" to 6")

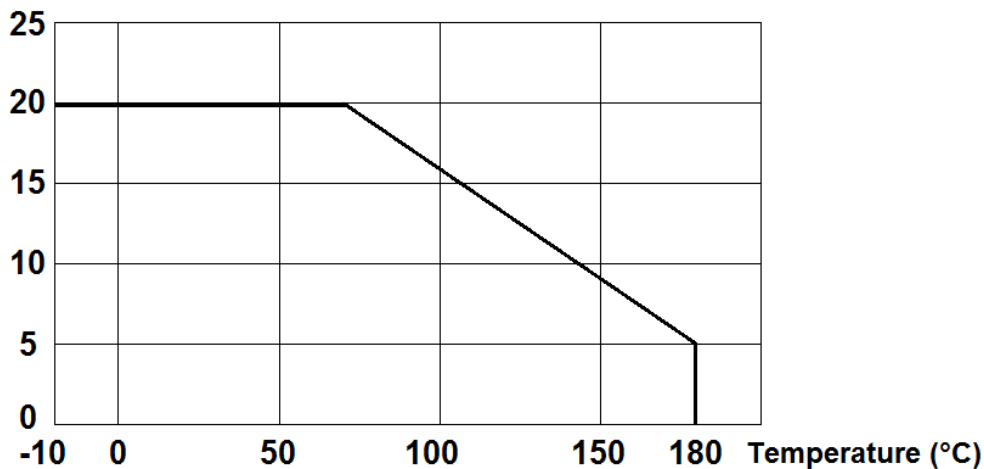
ENDS :

- R.F. flanges Class 150 PN20

PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :

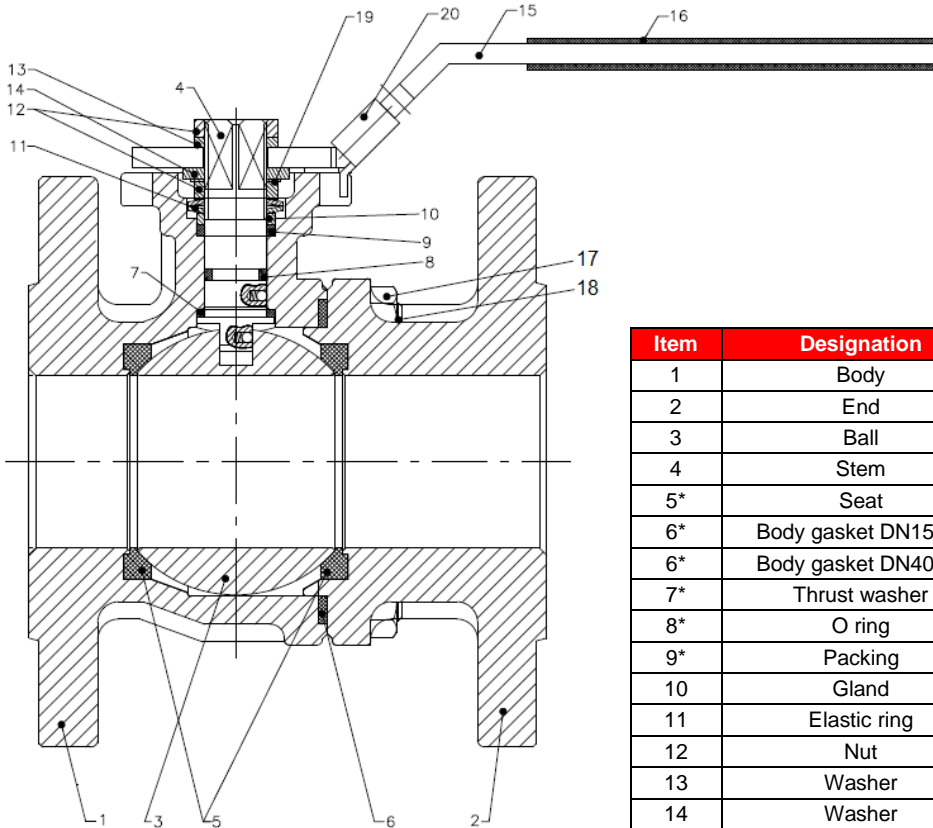
Pressure

(Bar)



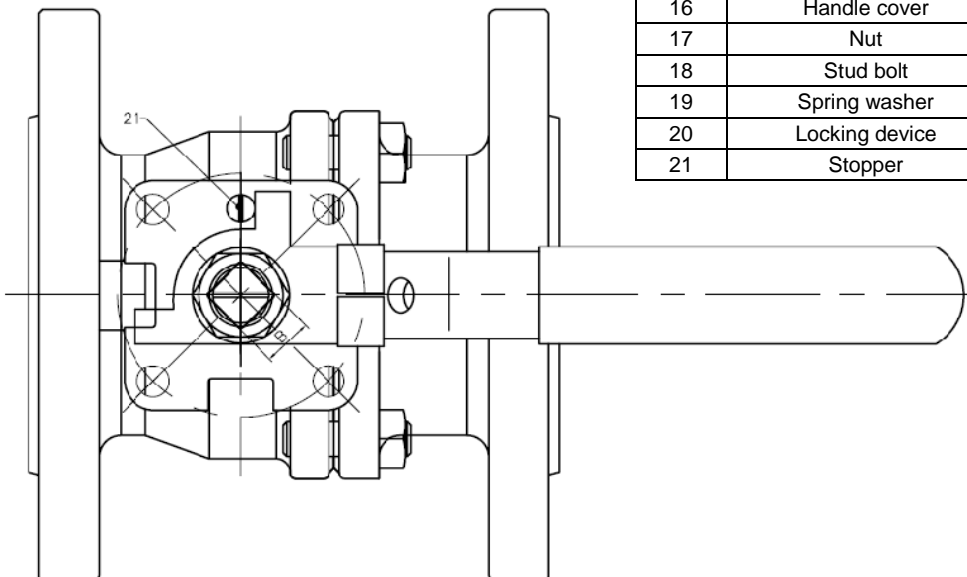
2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE

MATERIALS DN 15 – 50 (NPS 1/2" to 2") :



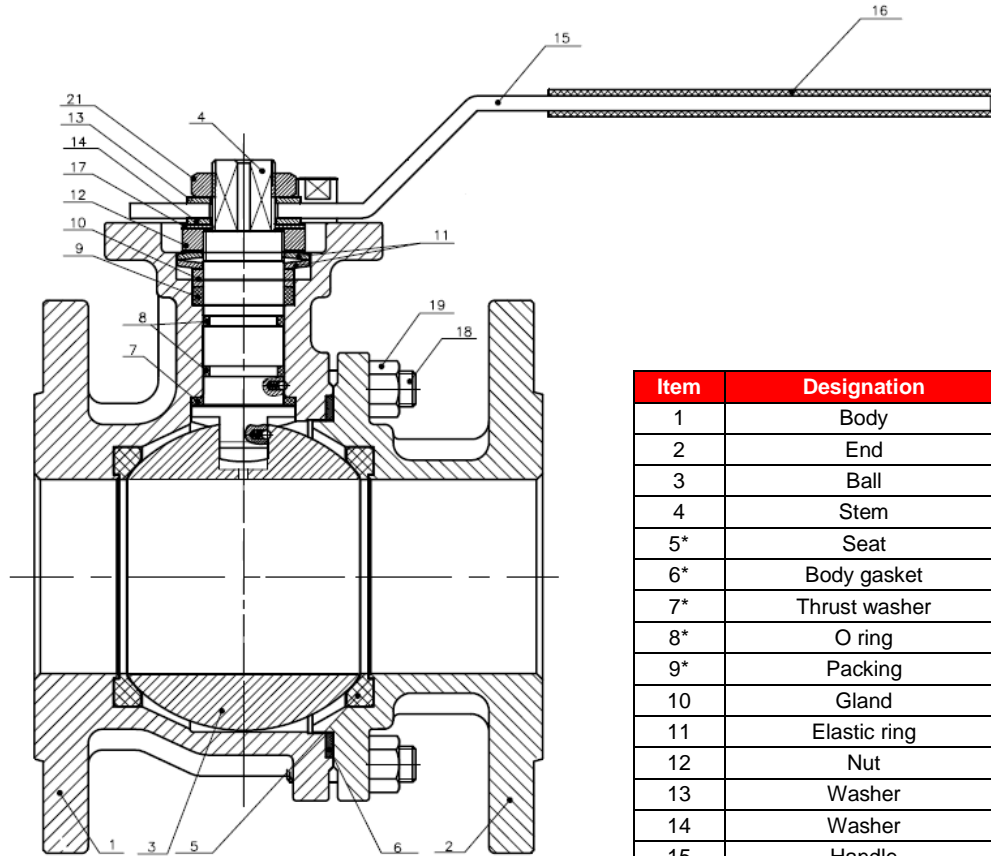
Item	Designation	Materials
1	Body	ASTM A216 WCB
2	End	
3	Ball	AISI 304
4	Stem	AISI 316
5*	Seat	PTFE filled with 3% glass fiber
6*	Body gasket DN15-32	PTFE filled with 15% graphite
6*	Body gasket DN40-50	AISI 304 + graphite
7*	Thrust washer	PTFE filled with 15% graphite
8*	O ring	FKM
9*	Packing	PTFE
10	Gland	AISI 304
11	Elastic ring	AISI 301
12	Nut	AISI 304
13	Washer	
14	Washer	
15	Handle	
16	Handle cover	Plastic
17	Nut	AISI 304
18	Stud bolt	
19	Spring washer	
20	Locking device	
21	Stopper	

(* : Included in gaskets kit)



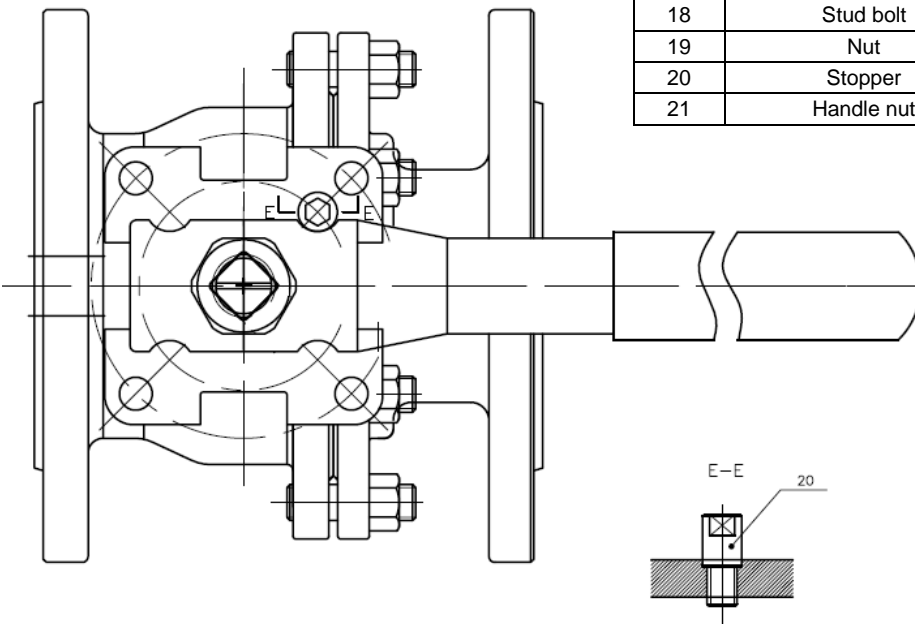
2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE

MATERIALS DN 65 - 100 (NPS 2"1/2 to 4") :



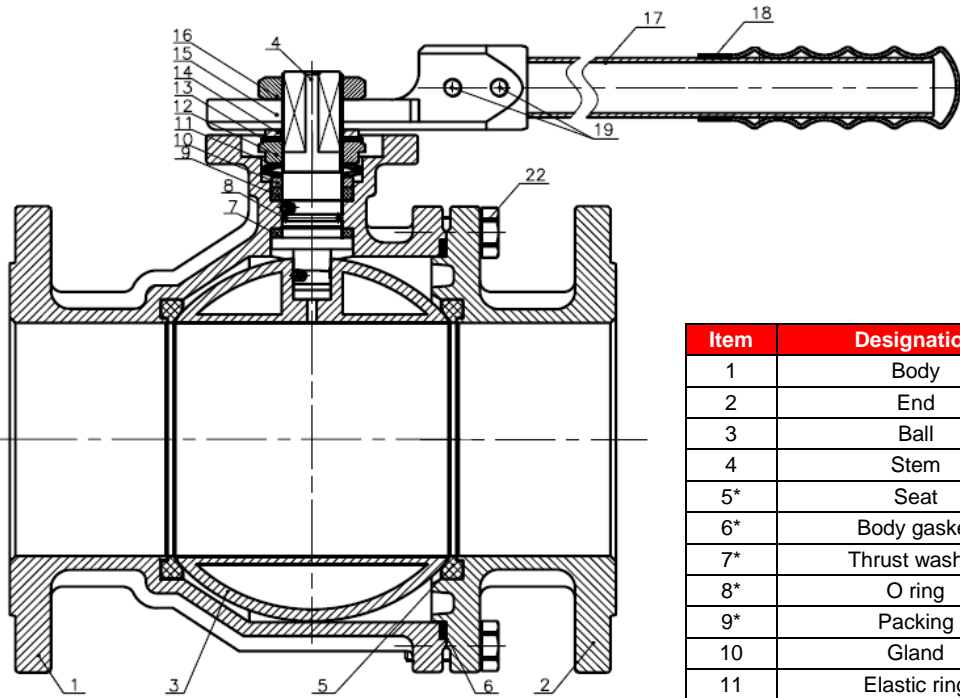
Item	Designation	Materials
1	Body	ASTM A216 WCB
2	End	
3	Ball	AISI 304
4	Stem	AISI 316
5*	Seat	PTFE filled with 3% glass fiber
6*	Body gasket	AISI 304 + graphite
7*	Thrust washer	PTFE filled with 15% graphite
8*	O ring	FKM
9*	Packing	PTFE
10	Gland	AISI 304
11	Elastic ring	AISI 301
12	Nut	AISI 304
13	Washer	
14	Washer	
15	Handle	
16	Handle cover	Plastic
17	Spring washer	AISI 304
18	Stud bolt	
19	Nut	
20	Stopper	
21	Handle nut	

(* : Included in gaskets kit)

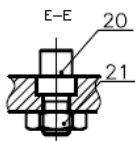
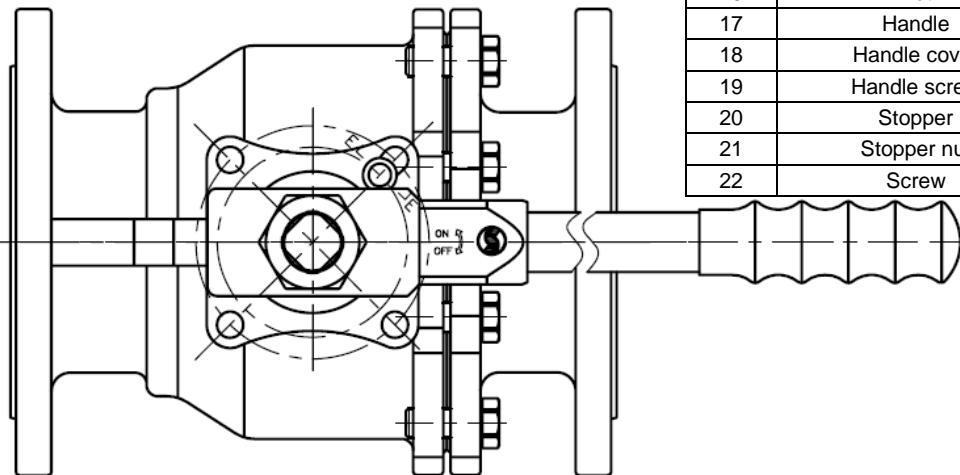


2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE

MATERIALS DN 150 (NPS 6") :



Item	Designation	Materials
1	Body	ASTM A216 WCB
2	End	
3	Ball	AISI 304
4	Stem	AISI 316
5*	Seat	PTFE filled with 3% glass fiber
6*	Body gasket	AISI 304 + graphite
7*	Thrust washer	PTFE filled with 15% graphite
8*	O ring	FKM
9*	Packing	PTFE
10	Gland	AISI 304
11	Elastic ring	AISI 301
12	Nut	ASTM A351 CF8
13	Spring washer	AISI 304
14	Washer	AISI 304
15	Handle adaptor	ASTM A351 CF8
16	Nut	ASTM A351 CF8
17	Handle	AISI 304
18	Handle cover	Plastic
19	Handle screw	AISI 304
20	Stopper	
21	Stopper nut	
22	Screw	

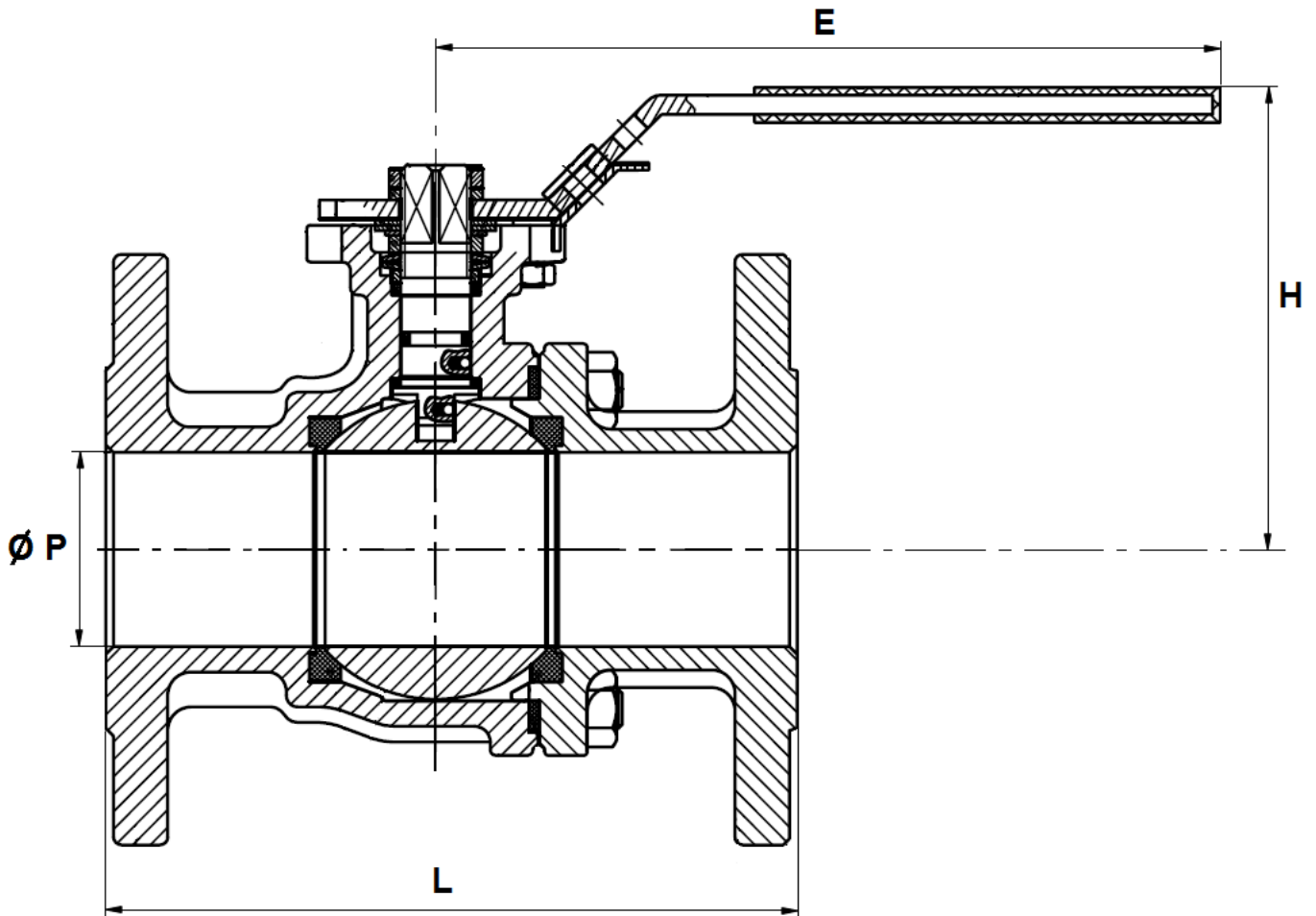


(* : Included in gaskets kit)

2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE

SIZE DN 15 – 50 (NPS 1/2" to 2") (in mm) :

DN 15 – 50 (NPS 1/2" to 2")

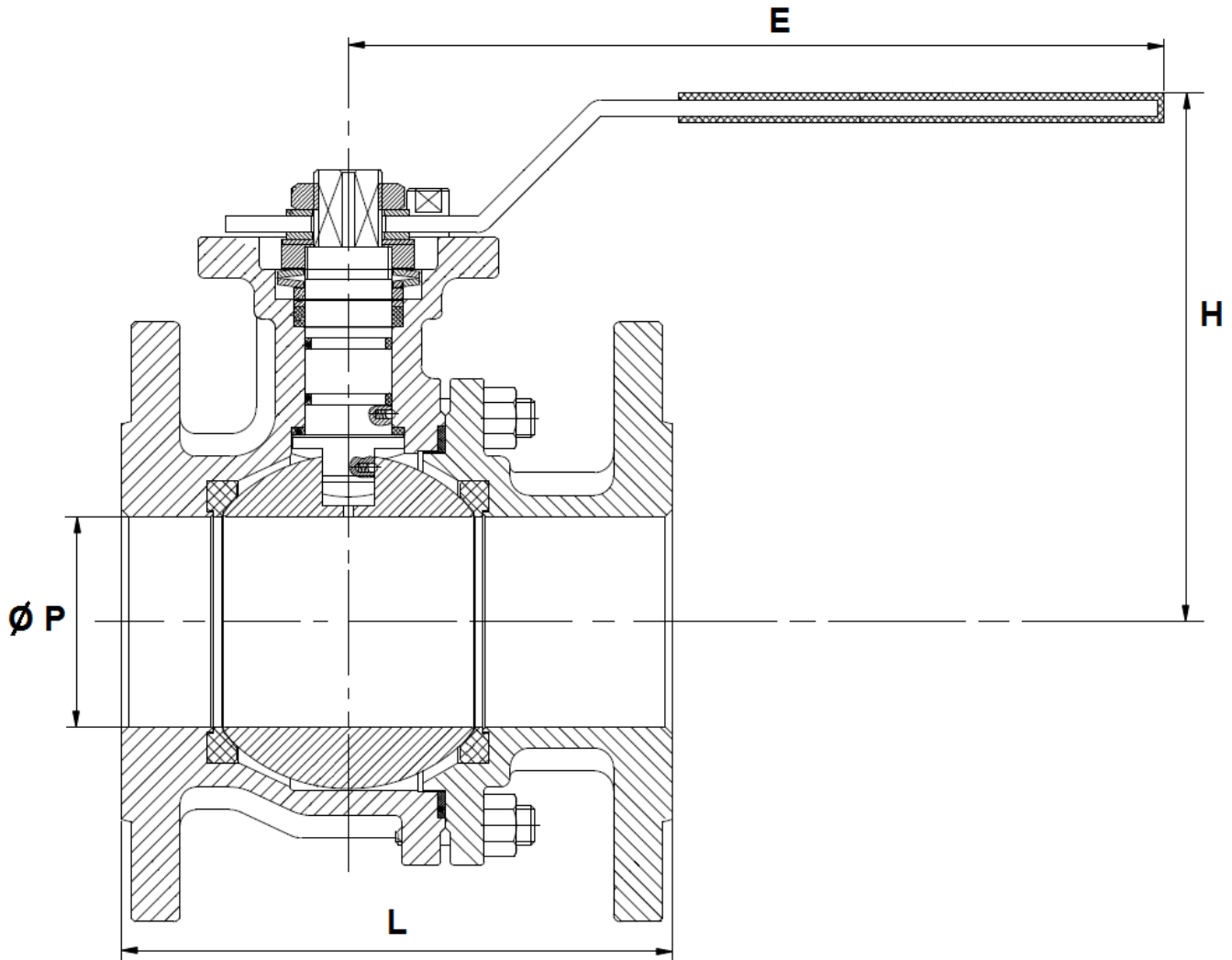


Ref.	DN	15	20	25	32	40	50
	NPS	1/2"	3/4"	1"	1"1/4	1"1/2	2"
793	Ø P	15	20	25	32	40	50
	L	108	117	127	140	165	178
	E	111.5	137.5	137.5	160	205	205
	H	75	82.5	87.5	107.5	108.5	116.5
	Weight (Kg)	1.58	1.84	2.85	3.65	6.3	8.15

2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE

SIZE DN 65 – 100 (NPS 2"1/2 to 4") (in mm):

DN 65 – 100 (NPS 2"1/2 to 4")

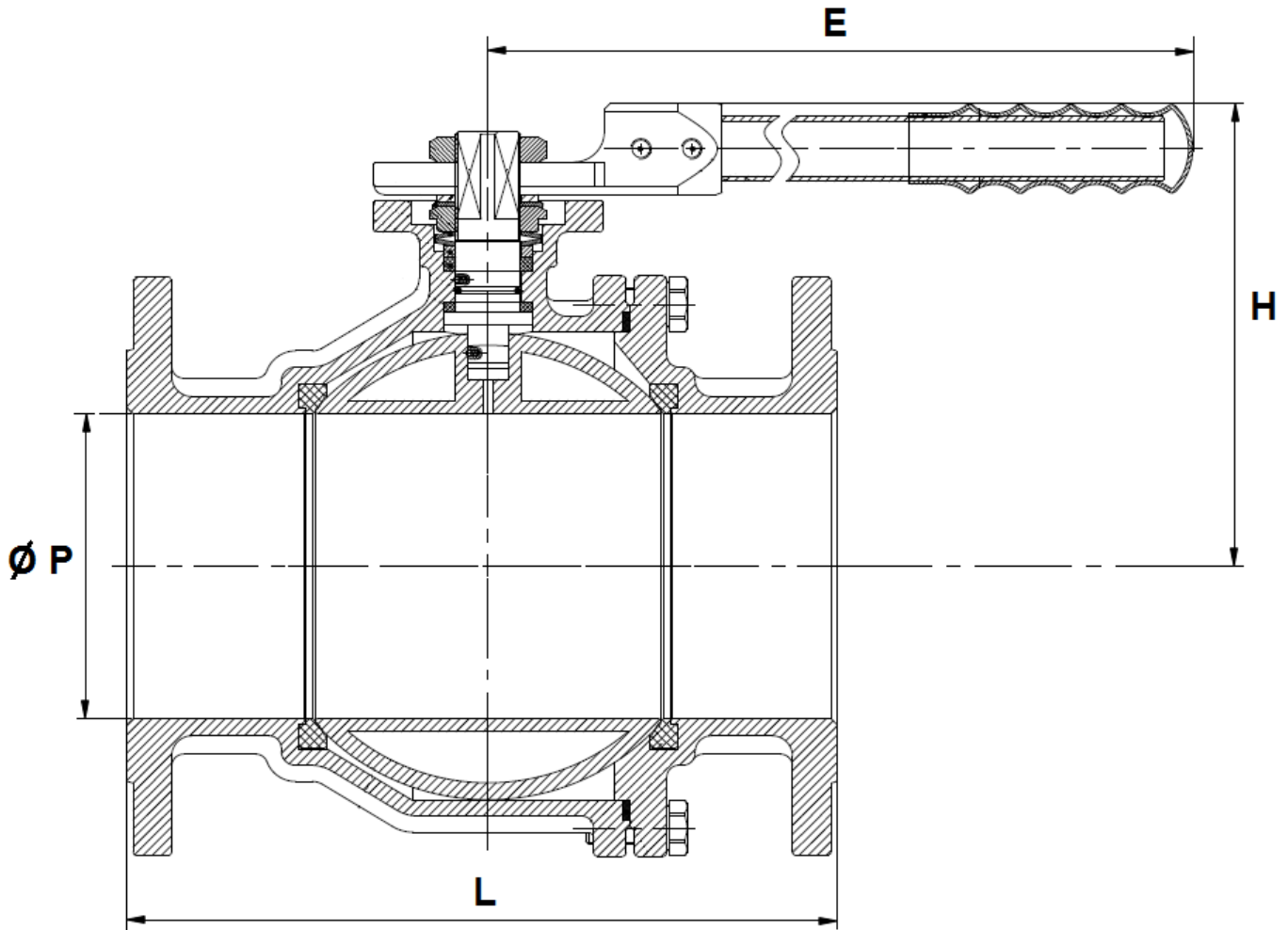


Ref.	DN	65	80	100
	NPS	2"1/2	3"	4"
793	Ø P	65	80	100
	L	190	203	229
	E	323	323	323
	H	160	170	186
	Weight (Kg)	12.81	16.97	29

2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE

SIZE DN 150 (NPS 6") (in mm) :

DN 150 (NPS 6")



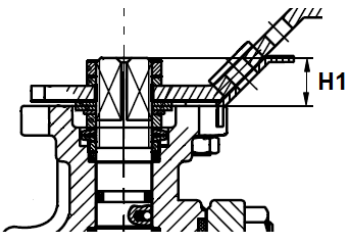
Ref.	DN	150
	NPS	6"
793	Ø P	150
	L	394
	E	620
	H	228
	Weight (in Kg)	55.8

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ISO MOUNTING PAD AND STEM SIZE (in mm) :

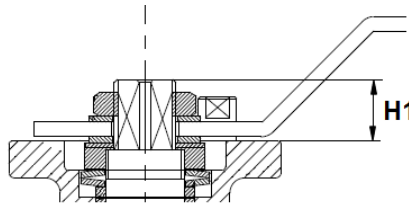
DN 15 – 50

(NPS 1/2" - 2")



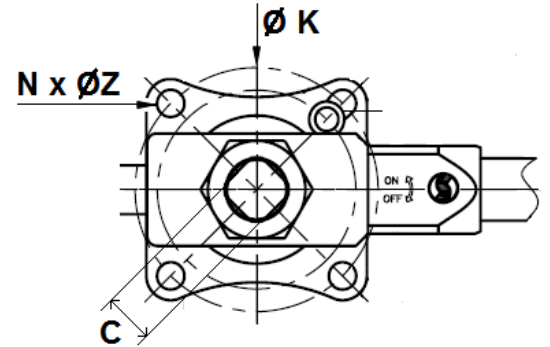
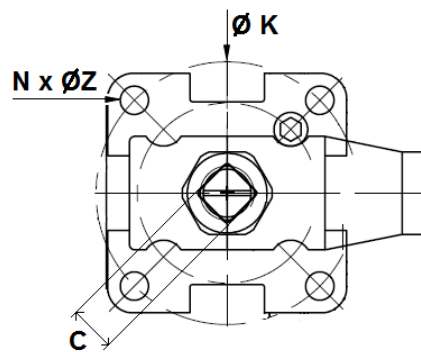
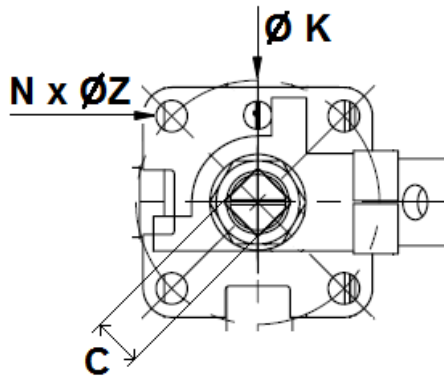
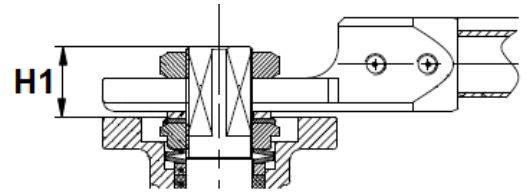
DN 65 – 100

(NPS 2"1/2 - 4")



DN 150

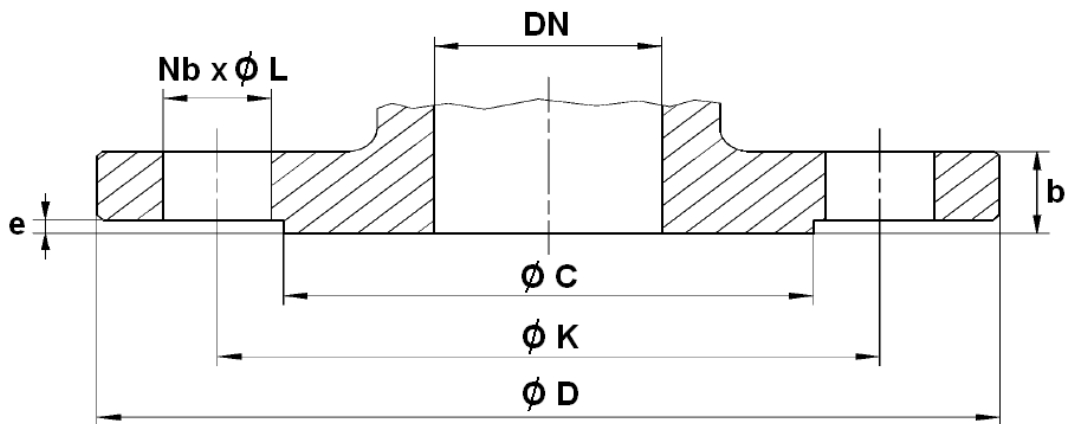
(NPS 6")



Ref.	DN	15	20	25	32	40	50	65	80	100	150
	NPS	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	6"
793	C	9	9	11	14	14	14	17	17	17	27
	Ø K	42	42	50	50	70	70	102	102	102	125
	ISO	F04	F04	F05	F05	F07	F07	F10	F10	F10	F12
	N x Ø Z	4 x 6	4 x 6	4 x 7	4 x 7	4 x 9	4 x 9	4 x 11	4 x 11	4 x 11	4 x 14
	H1	11	9	10.5	14.5	14.5	14.5	21	21	21	34

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FLANGES SIZE (in mm) :



Ref.	DN	15	20	25	32	40	50	65	80	100	150
	NPS	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	6"
793	Ø C	35	43	51	64	73	92	105	127	157	216
	Ø D	89	98	108	117	127	152	178	190	229	279.4
	Ø K	60.5	70	79.5	89	98.5	120.5	139.5	152.5	190.5	241.3
	Nb x Ø L	4 x 16	4 x 16	4 x 16	4 x 16	4 x 16	4 x 19	4 x 19	4 x 19	8 x 19	8 x 22.2
	b	11	11	12	13	15	16	18	19	24	26
	e	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6

2 PIECES BALL VALVES FLANGED CLASS 150 PN 20 INITIAL RANGE
TORQUE VALUES (in Nm without safety coefficient) :

DN	15	20	25	32	40	50	65	80	100	150
NPS	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	6"
Torque (Nm)	6	8	10	14	20	30	36	60	95	210

STANDARDS :

- Fabrication according to ISO 9001 : 2015
- DIRECTIVE 2014/68/EU : CE N° 0035
Risk Category II module D1
- Certificate 3.1 on request
- Designing according to EN 12516-1
- Tests according to API 598, table 6
- Class 150 PN20 R.F flanges according to ASME B16.5
- ISO 5211 mounting pad
- Length according to ASME B16.10 (EN 558 series 3 up to DN100, series 12 for DN150)

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.

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INSTALLATION INSTRUCTIONS

GENERAL GUIDELINES :

- Ensure that the valves to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the valves to be installed are of correct strength to be able to support the capacity of their usage.
- **Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).**

INSTALLATION INSTRUCTIONS :

- **Before installing the valves, clean and remove any objects from the pipes** (in particular bits of sealing and metal) which could obstruct and block the valves.
- **Ensure that both connecting pipes either side of the valve (upstream and downstream) are aligned (if they're not, the valves may not work correctly).**
- **Make sure that the two sections of the pipe (upstream and downstream) match, the valve unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the valve and can even cause a rupture.** To be sure, place the kit in position to ensure the assembling will work.
- **If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the valve.**
- Tighten the bolts in cross.
- It's recommended to operate the valve (open and close) 1 to 2 times per year