

## 2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20

2 pieces carbon steel Split body ball valve with full bore for Chemical industries, petrochemical industries, hydraulic installation, heating, water distribution, compressed air.

Ball valve with firesafe certificate API 607 to reduce risks in case of fire.

PTFE filled with 15% glass seat for a temperature up to +200°C.

Compatible with explosive atmosphere, ATEX Zone 1&21 and Zone 2&22 thanks to the antistatic device.

Handling possible with gearbox.

Thanks to the ISO 5211 plate, an actuator can be installed on the valve.



**Certificate**  
**3.1**



**Size :** DN15 to DN200 (NPS 1/2" to 8")

**Connection :** Flanged Class 150 PN20 RF

**Min Temperature :** -20°C

**Max Temperature :** +200°C

**Max Pressure :** 20

**Specifications :** Double Antistatic device, ATEX  
ISO 5211 mounting pad  
Anti blow-out stem, full bore  
PTFE filled with 15% glass seat  
Fire Safe API 607

**Materials :** Carbon Steel ASTM A216 WCB



**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

**SPECIFICATIONS :**

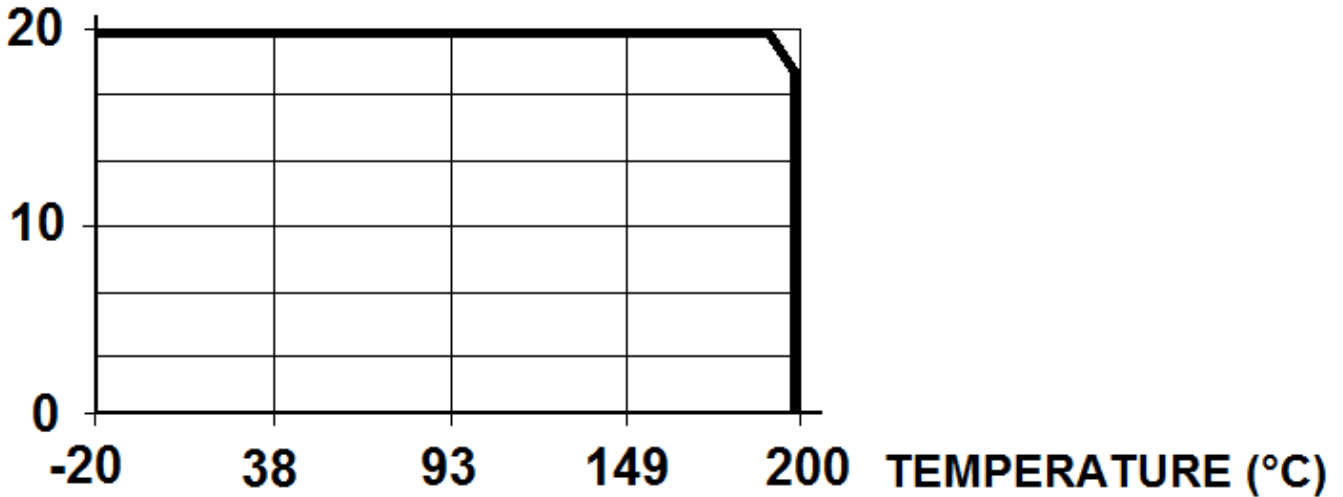
- Full bore
- Anti blow-out stem
- Double antistatic device
- PTFE filled with 15% glass seat
- Locking device
- ISO 5211 mounting pad
- 2 pieces type ( Split body )
- Hollowed ball from DN125 to DN200
- With exhaust hole in the ball ( located in the top of the ball to avoid overpressure in it )
- Primer coating by blackening process 0.5-1.5µ thickness

**USE :**

- Chemical industries, petrochemical industries, hydraulic installation, compressed air, heating and water distribution
- Steam : 11 bars maximum
- Min and max Temperatures Ts : -20°C to + 200°C
- Max Pressure Ps : 20 bars ( see graph under )

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

**PRESSURE  
( Bar )**



**FLOW COEFFICIENT Kvs ( M3 / h ) :**

<b>DN (mm)</b>	15	20	25	32	40	50	65	80	100	125	150	200
<b>NPS (")</b>	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"	8"
<b>Kvs ( m3/h )</b>	31	58	86	139	229	415	698	983	1686	2824	3953	7225

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

<b>DN ( mm )</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>32</b>	<b>40</b>	<b>50</b>	<b>65</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>200</b>
<b>NPS ( " )</b>	<b>1/2"</b>	<b>3/4"</b>	<b>1"</b>	<b>1"1/4</b>	<b>1"1/2</b>	<b>2"</b>	<b>2"1/2</b>	<b>3"</b>	<b>4"</b>	<b>5"</b>	<b>6"</b>	<b>8"</b>
<b>Torque ( Nm )</b>	<b>8</b>	<b>10</b>	<b>12</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>60</b>	<b>90</b>	<b>130</b>	<b>160</b>	<b>250</b>	<b>500</b>

**RANGE :**

- 2 pieces carbon steel body valve Class 150 (PN20) **Ref. 778** from DN 15 to DN 200 ( NPS 1/2" to 8" )
- Gearbox possible **Ref. 9830296-9830297** from DN 150 to DN 200 ( NPS 6" to 8" )

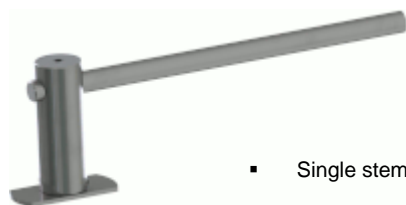
**CONNECTION :**

- R.F. Flanged Class 150 (PN20)

**GEARBOX SPECIFICATIONS :**

<b>DN ( mm )</b>	<b>150</b>	<b>200</b>
<b>NPS ( " )</b>	<b>6"</b>	<b>8"</b>
<b>Ref.</b>	<b>9830296</b>	<b>9830297</b>
<b>Ratio factor</b>	<b>30 :1</b>	<b>50 :1</b>
<b>Output torque ( Nm )</b>	<b>700</b>	<b>1200</b>

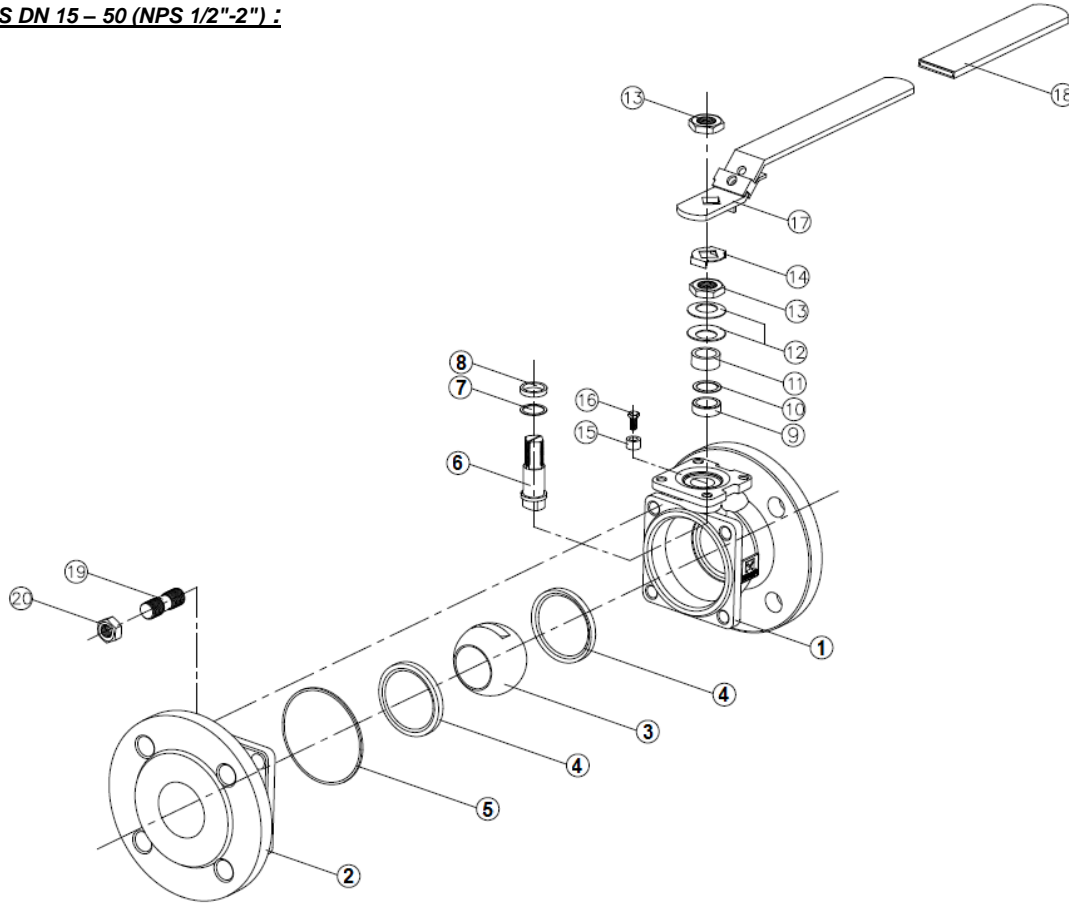
**ACCESSORIES :**



- Single stem extension AISI 304 from DN15 to DN100 (NPS 1/2" to 4") Ref.9810730 to 9810733

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

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



(\* : Included in gaskets kit )

Item	Designation	Materials
1	Body	ASTM A216 WCB
2	Ends	
3	Ball	ASTM A351 CF8M
4*	Seat	PTFE filled with 15 % glass
5*	Body seal	Graphite
6	Stem	ASTM A276 316
7*	Ring	PTFE filled with 25% carbon
8*	Ring	
9*	Packing	Graphite
10*	Packing	PTFE filled with 25% carbon
11	Packing gland	AISI 304
12	Elastic ring	AISI 301
13	Nut	AISI 304
14	Washer	
15	Pin	
16	Pin screw	
17	Handle	PVC
18	Handle cover	
19	Stud	ASI 304
20	Nut	

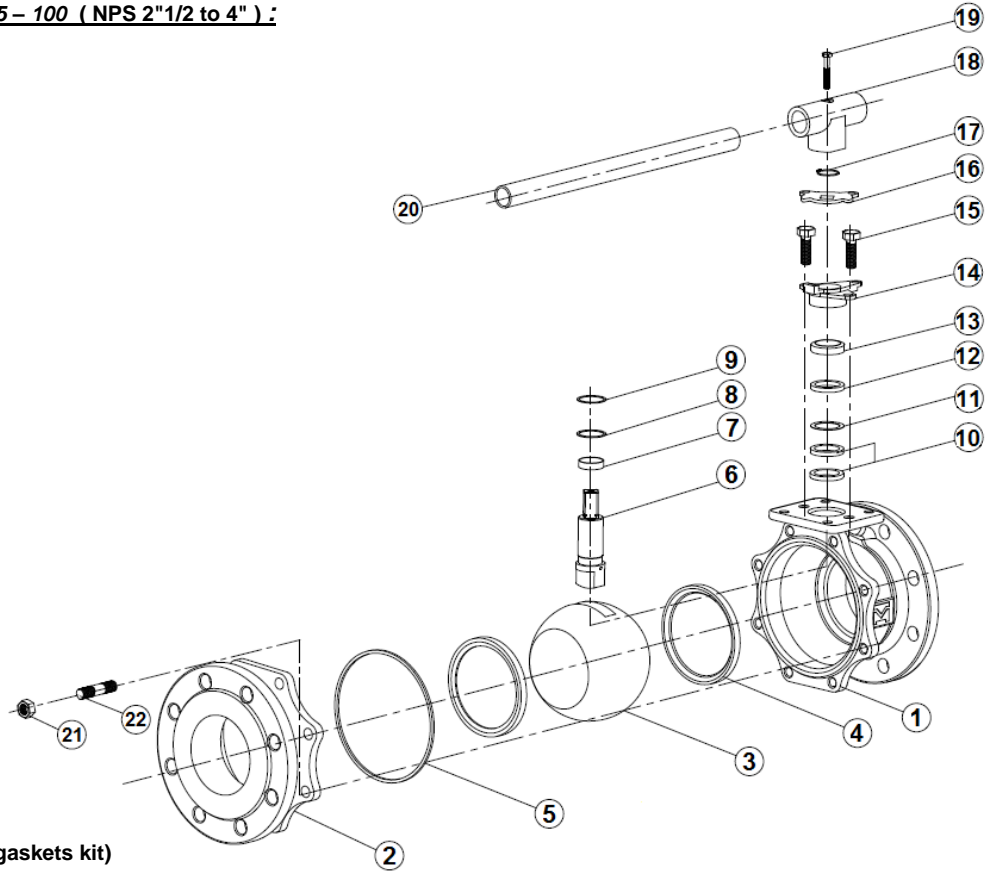
**Repairability :**



Gaskets Kit (item 4, 5, 7, 8, 9 and 10)	
DN15	9804252
DN20	9804253
DN25	9804254
DN32	9804255
DN40	9804256
DN50	9804257

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

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



(\* : included in gaskets kit)

Item	Designation	Materials
1	Body	ASTM A216 WCB
2	Ends	
3	Ball	ASTM A351 CF8M
4*	Seat	PTFE filled with 15% glass
5*	Body seal	Graphite
6	Stem	ASTM A276 316
7*	Ring	PTFE filled with 25% carbon
8*	Ring	
9*	Ring	
10*	Packing	Graphite
11*	Packing	PTFE filled with 25% carbon
12	Ring	AISI 304
13	Ring	
14	Packing gland	ASTM A351 CF8
15	Packing gland screw	AISI 304
16	Pin	
17	Circlips	
18	Handle adaptor	ASTM A351 CF8
19	Screw	AISI 304
20	Handle	
21	Nut	
22	Stud	

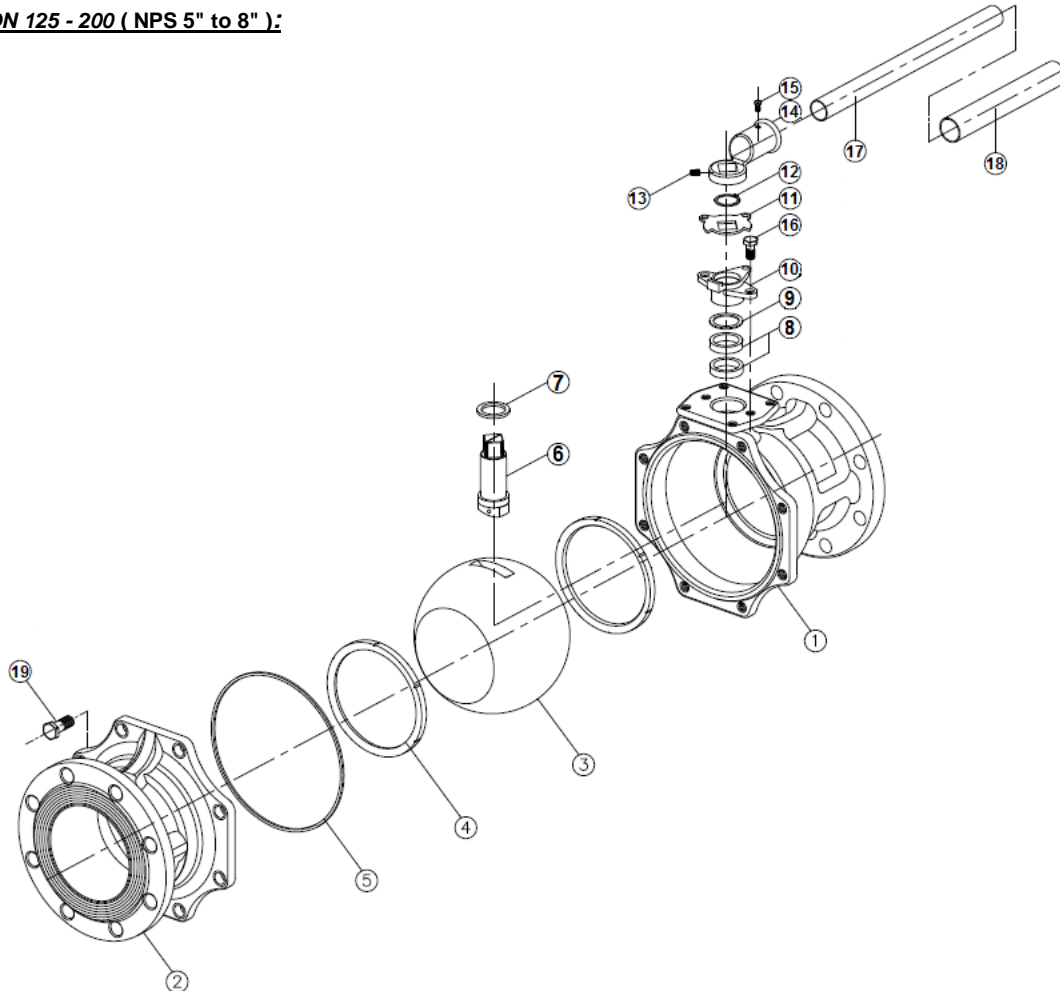
**Repairability :**



Gaskets Kit (item 4, 5, 7, 8, 9, 10 and 11)	
DN65	9804258
DN80	9804259
DN100	9804260

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

**MATERIALS DN 125 - 200 ( NPS 5" to 8" ):**



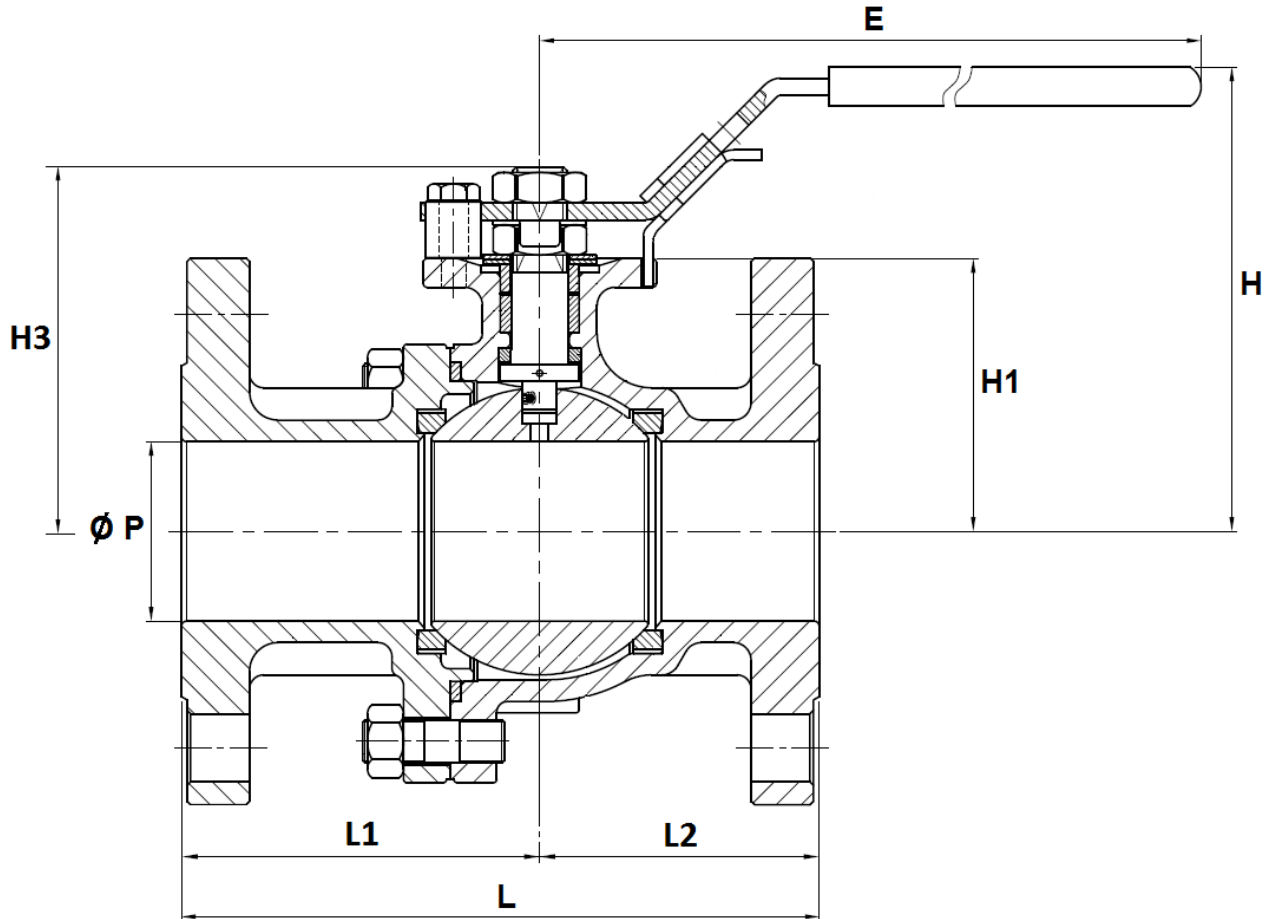
Item	Designation	Materials
1	Body	ASTM A216 WCB
2	Ends	
3	Ball	AISI 316
4*	Seat	PTFE filled with 15% glass
5*	Body seal	Graphite
6	Stem	ASTM A276 316
7*	Ring	PTFE filled with 25% carbon
8*	Packing	Graphite
9*	Packing	PTFE filled with 25% carbon
10	Packing gland	ASTM A351 CF8
11	Pin	AISI 304
12	Circlips	
13	Screw	
14	Handle adaptor	
15	Screw	
16	Packing gland screw	
17	Handle	PVC
18	Handle cover	
19	Body screw	AISI 304

(\* : included in gaskets kit)

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

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

**DN 15 – 50 ( NPS 1/2" to 2" )**

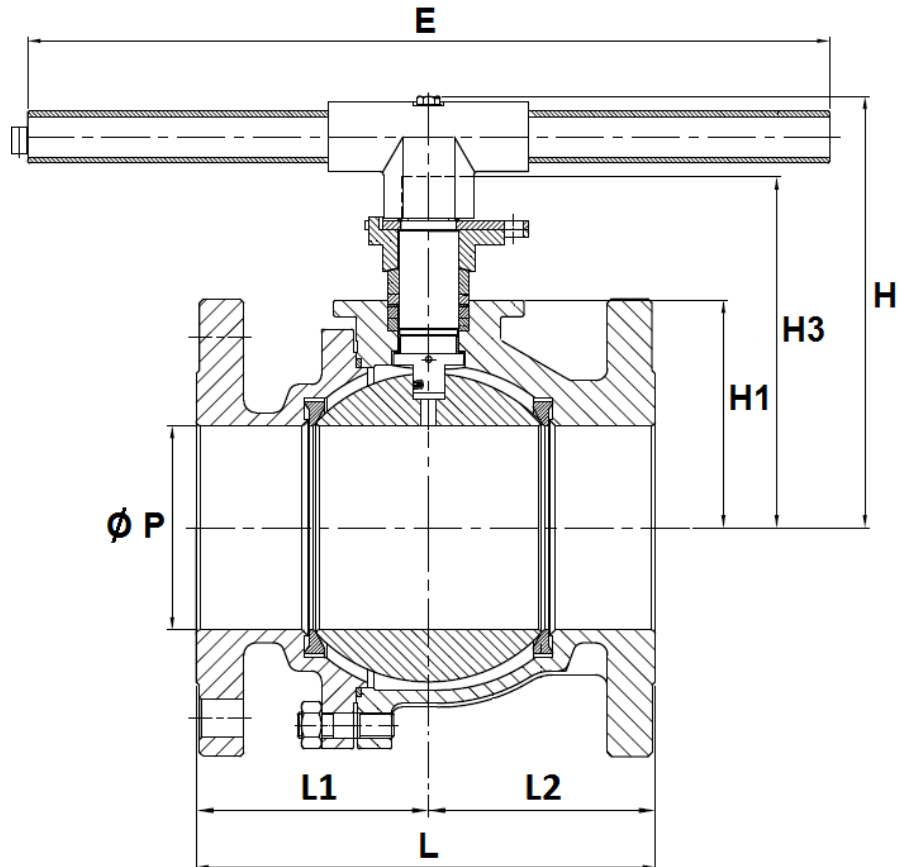


DN ( mm )	15	20	25	32	40	50
NPS ( " )	1/2"	3/4"	1"	1"1/4	1"1/2	2"
Ø P	15	20	24	30	38	50
L	108	117	127	140.2	165	178
L1	61	65	72.5	78.2	90.8	98
L2	47	52	54.5	62	74.2	80
E	158	158	196	196	245	261
H	76.6	79.1	92	96	121.1	127.6
H1	39	42.5	52	56	66	73
H3	53.5	56.5	70	73	88	94.5
Weight (in Kg)	1.9	2.4	3.4	4.2	6.1	8.8
Ref.	778015	778020	778025	778032	778040	778050

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

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

**DN 65 – 100 ( NPS 2"1/2 to 4" )**



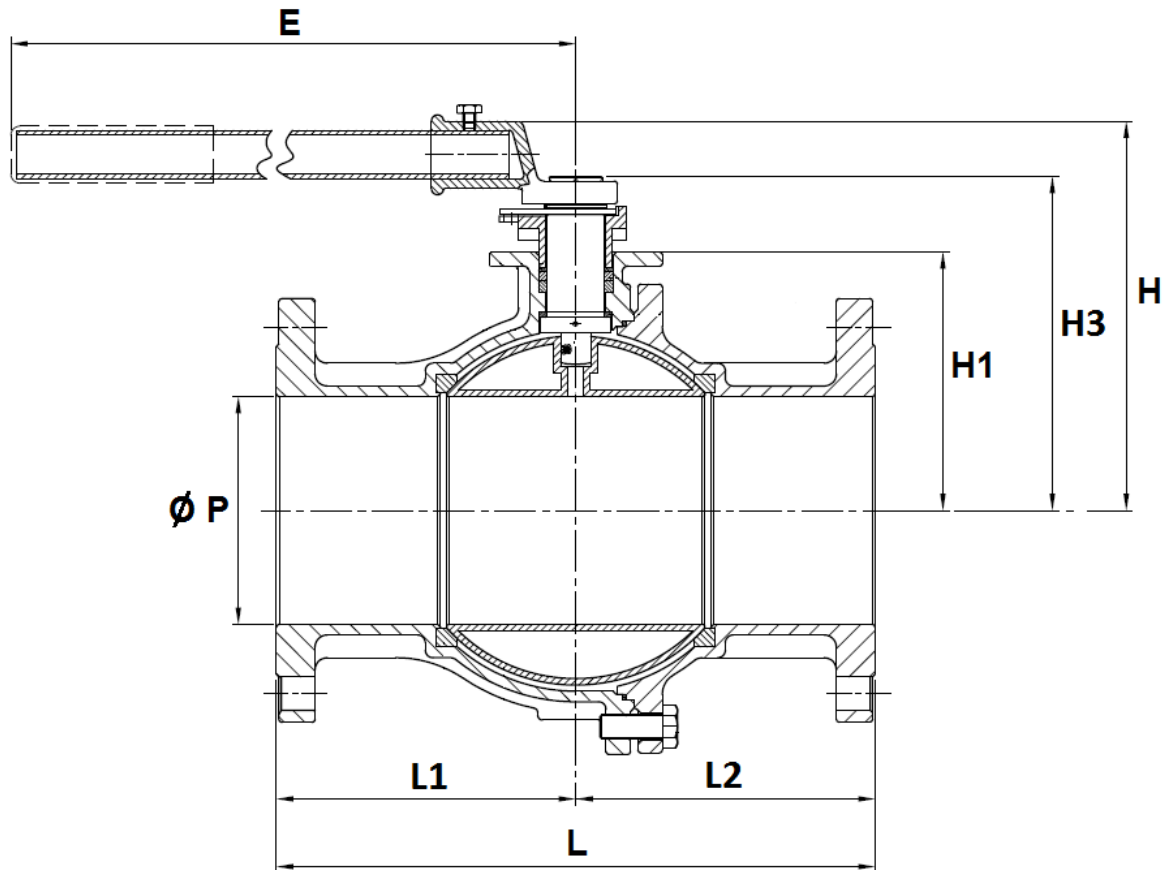
DN (mm)	65	80	100
NPS (")	2"1/2	3"	4"
Ø P	64	76	98
L	190	203	229
L1	100.3	109.2	119.3
L2	89.7	93.8	109.7
E	400	400	400
H	188	194	215
H1	86.5	91.5	113.5
H3	152	158	179
Weight (in Kg)	16.4	19.5	28.1
Ref.	778065	778080	778100



**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

**SIZE DN 125 - 200 ( NPS 5" to 8" ) ( in mm ) :**

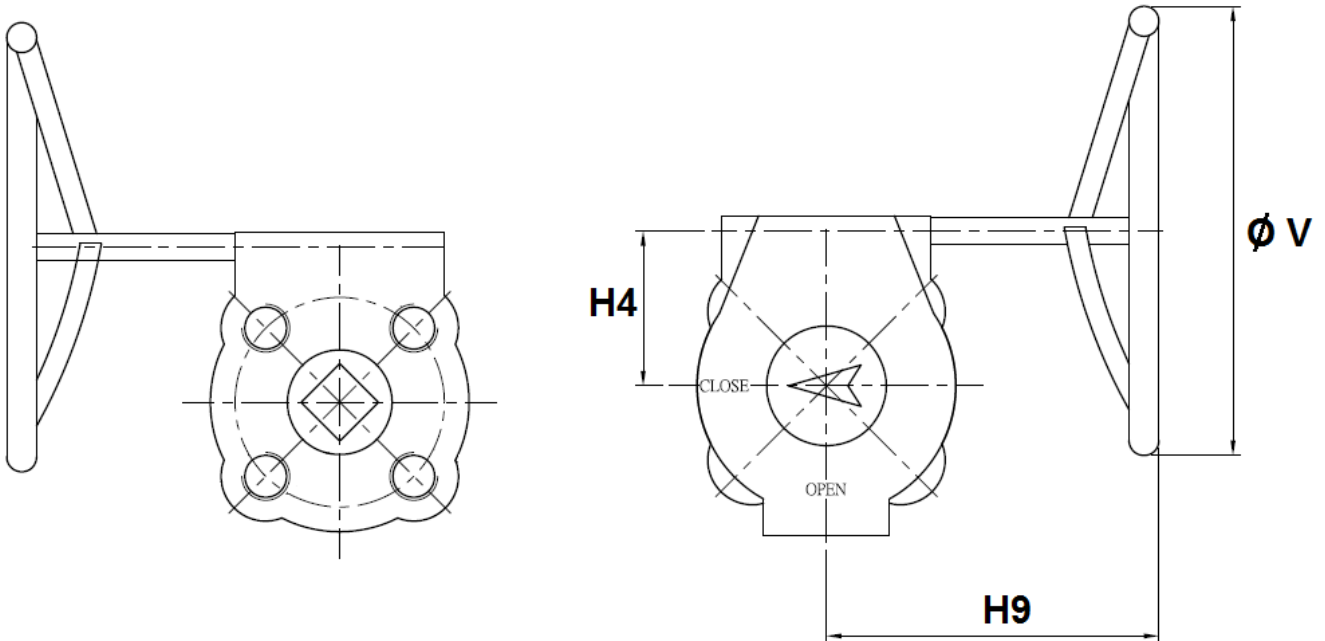
**DN 125 – 200 ( NPS 5" to 8" )**



DN (mm)	125	150	200
NPS ( " )	5"	6"	8"
Ø P	125	150	200
L	356	394	457
L1	176.7	197	226
L2	179.3	197	231
E	743	743	840
H	239.6	256.5	334
H1	147	170	215
H3	199	220	300.5
Weight (in Kg)	40	54	88
Ref.	778125	778150	778200

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

**GEARBOX SIZE ( in mm ) :**



<b>DN ( mm )</b>	<b>150</b>	<b>200</b>
<b>NPS ( " )</b>	<b>6"</b>	<b>8"</b>
<b>H4</b>	<b>63</b>	<b>78</b>
<b>H9</b>	<b>238</b>	<b>226</b>
<b>Ø V</b>	<b>300</b>	<b>300</b>
<b>Weight ( Kg )</b>	<b>12.5</b>	<b>15</b>
<b>Ref.</b>	<b>9830296</b>	<b>9830297</b>

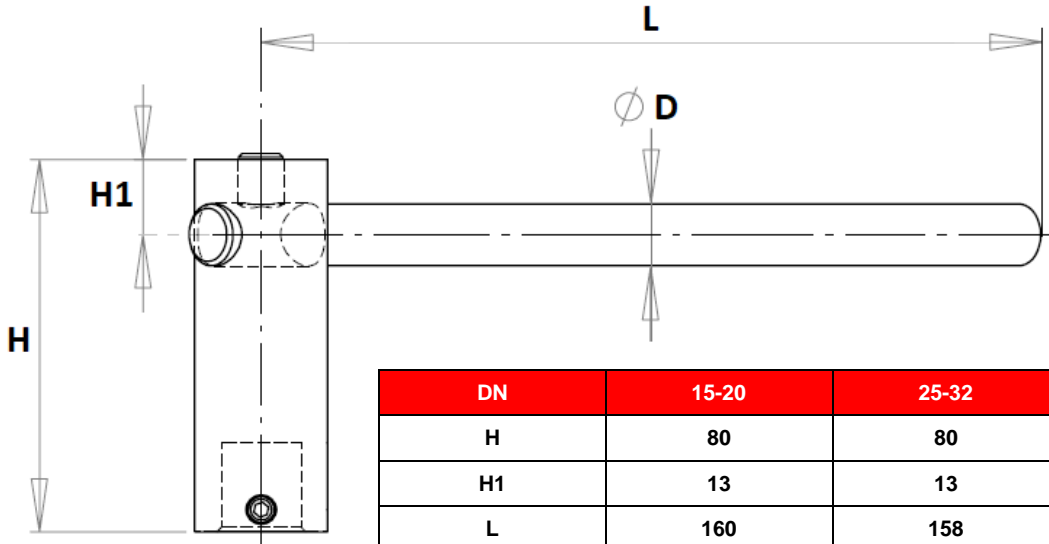
**GEARBOX SPECIFICATIONS :**

<b>DN ( mm )</b>	<b>150</b>	<b>200</b>
<b>NPS ( " )</b>	<b>6"</b>	<b>8"</b>
<b>Ref.</b>	<b>9830296</b>	<b>9830297</b>
<b>Ratio factor</b>	<b>30 :1</b>	<b>50 :1</b>
<b>Output torque ( Nm )</b>	<b>700</b>	<b>1200</b>

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

**STEM EXTENSION ( in mm ) :**

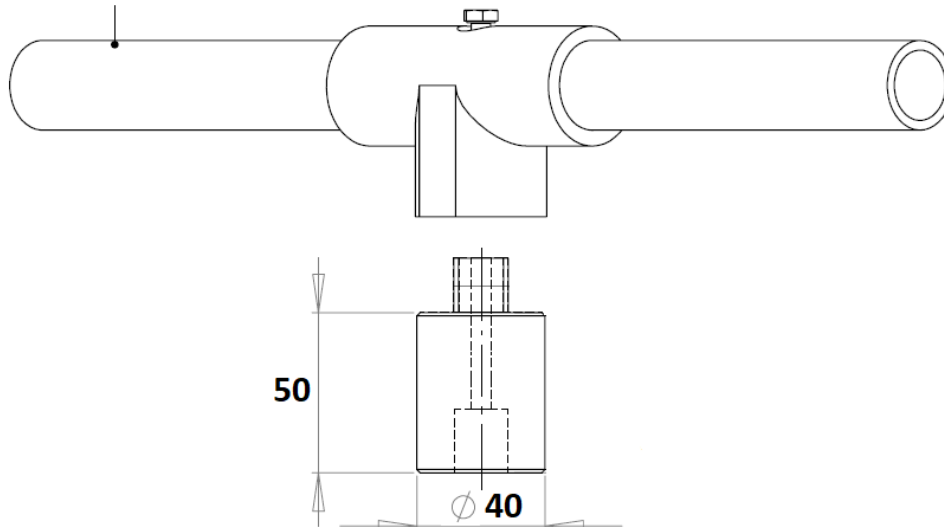
**DN 15 – 50 (NPS 1/2"-2")**



DN	15-20	25-32	40-50
H	80	80	84
H1	13	13	17
L	160	158	245
Ø D	10	10	14
Ref.	9810730	9810731	9810732
Weight (Kg)	0.18	0.22	0.26

**DN 65–80-100 (NPS 2"1/2-4") Ref.9810733**

**VALVE HANDLE**



**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

ISO MOUNTING PAD AND STEM SIZE ( in mm ) :

**DN 15 – 50**

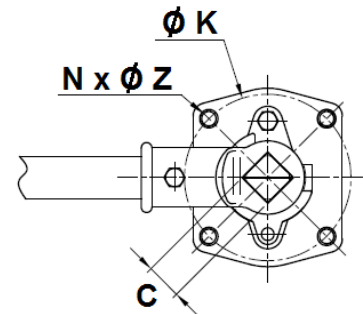
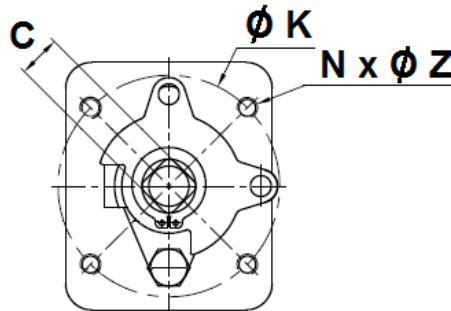
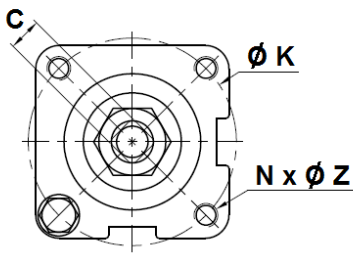
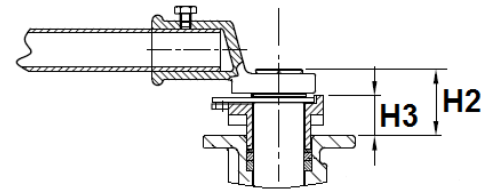
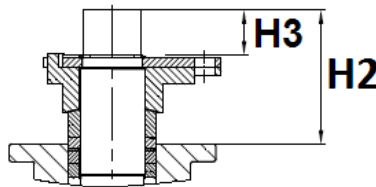
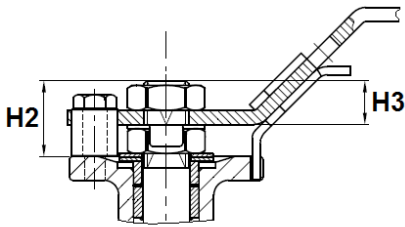
**DN 65 – 100**

**DN 125 - 200**

**NPS ( 1/2" - 2" )**

**NPS ( 2"1/2 - 4" )**

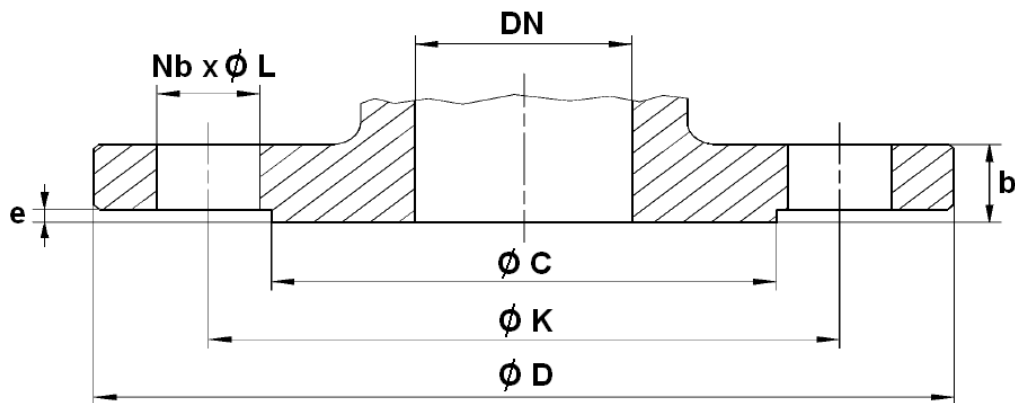
**NPS ( 5"- 8" )**



DN (mm)	15	20	25	32	40	50	65	80	100	125	150	200
NPS ( " )	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"	8"
C	9	9	11	11	14	14	17	17	17	27	27	36
Ø K	42	42	50	50	70	70	102	102	102	125	125	140
ISO	F04	F04	F05	F05	F07	F07	F10	F10	F10	F12	F12	F14
N x Ø Z	4xM5	4xM5	4xM6	4xM6	4xM8	4xM8	4xM10	4xM10	4xM10	4xM12	4xM12	4xM16
H2	14.5	14	18	17	22	21.5	65.5	66.5	65.5	52	50	85.5
H3	8.5	8.5	12	12	14	14	27	27	27	19	19	43.5

**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

**CLASS 150 (PN20) FLANGES SIZE ( in mm ) :**



DN (mm)	15	20	25	32	40	50	65	80	100	125	150	200
NPS ( " )	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"	8"
Ø C	35	42.9	50.8	63.5	73	92.1	104.8	127	157.2	186	216	270
Ø D	90	100	110	115	125	150	180	190	230	254	279	343
Ø K	60.3	69.9	79.4	88.9	98.4	120.7	139.7	152.4	190.5	216	241.5	298.5
Nb x Ø L	4 x 15.8	4 x 15.8	4 x 15.8	4 x 15.8	4 x 15.8	4 x 19	4 x 19	4 x 19	8 x 19	8 x 22	8 x 22	8 x 22.5
b	11.2	12.7	14.3	15.9	17.5	19	22.3	23.9	23.9	23.9	25.4	28.6
e	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6



**2 PIECES SPLIT BODY CARBON STEEL BALL VALVES FLANGED CLASS 150 PN20**

**STANDARDS :**

- Manufacturer certified ISO 9001 : 2015
- DIRECTIVE 2014/68/EU: For liquids and gas of Group 1
  - DN15-25: Article 4, §3 (SEP), no CE marking
  - DN32-50: Risk Category I, CE 0035 marking
  - DN65-150: Risk Category II, CE 0035 marking
  - DN200-250: Risk Category III, CE 0035 marking
- Certificate 3.1 on request
- Construction according to ASME B16.34
- Pressure 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 Table 1 Column 18 ( EN 558 series 3 up to DN100, series 12 from DN125 to 200 )
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 ( optional marking )
- Fire safe according to API 607 6<sup>th</sup> Edition 2010 up to DN200 (8")
- Foundry certified Bureau Veritas Marine & Offshore according to NR320 (BV Marine recognition Mode II)

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The customer must check the right choice of the products with the real service conditions.