

WAFER STAINLESS STEEL BALL VALVE PN 16

**PRODUCT EVOLUTION**



**Be careful, our valves Ref.771 are changing**

**We currently have 2 different types available (according to DN)  
with different dimensions**

**At the end, only the new type will be available (from page 2 to 13)**

## WAFER STAINLESS STEEL BALL VALVE PN 16

Wafer 2 pieces stainless steel ball valve between flanges with full bore to open/close networks of chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air.  
PTFE packing and gasket, FKM gasket on stem and TFM1600 seat (or PTFE filled with 15% glass fiber seat for DN125-150).  
Locking device from DN25 to DN100.  
Thanks to the ISO 5211 plate, an actuator can be installed on the valve.

**NEW TYPE**

**Certificate**  
**3.1**



**Size :** DN15 to DN150  
**Connection :** Between flanges PN16 RF  
**Min Temperature :** -20°C  
**Max Temperature :** +180°C  
**Max Pressure :** 16 Bars  
**Specifications :** ISO 5211 mounting pad  
Anti blow-out stem  
TFM1600 seat (up to DN100)  
Wafer type  
Full bore (up to DN80)

**Materials :** Stainless steel ASTM A351 CF8M

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SPECIFICATIONS :**

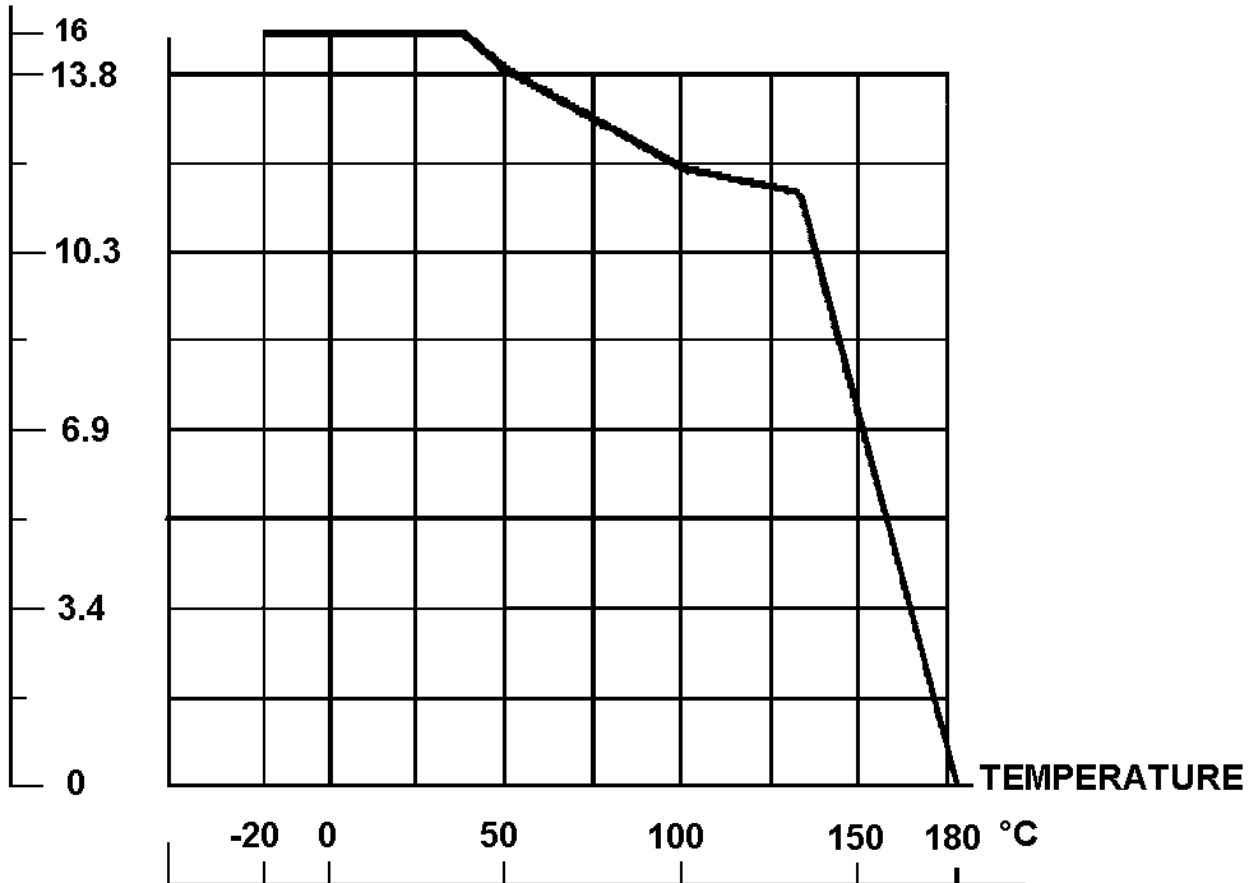
- Full bore (up to DN80)
- Anti blow-out stem
- TFM1600 seat up to DN100, PTFE filled with 15% glass seat over
- ISO 5211 mounting pad
- Threaded holes flanges
- Hollow body
- Locking device from DN 25 to DN 100
- With exhaust hole in the ball ( located in the top of the ball to avoid overpressure in it ) up to DN100
- Antistatic device up to DN100
- Roughness Ra 3.2 for the ball and the ends

**USE :**

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Min and max Temperature Ts : -20°C to + 180°C
- Max Pressure Ps : 16 bars ( see graph )

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

**PRESSURE  
BAR**



**WAFER STAINLESS STEEL BALL VALVE PN 16**

**FLOW COEFFICIENT Kvs ( M<sup>3</sup> / h ) :**

DN	15	20	25	32	40	50	65	80	100	125	150
Kvs ( m <sup>3</sup> /h )	21	48	84	162	201	314	530	804	1256	2510	3401

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

DN	15	20	25	32	40	50	65	80	100	125	150
Torque ( Nm )	6	15	15	20	30	50	71-85	90-105	110-120	190	250

**TIGHTENING TORQUE FOR SCREWS ( TO FIX ON THE FLANGES ) ( in Nm ) :**

DN	15	20	25	32	40	50	65	80	100
Threading	M12	M12	M12	M16	M16	M16	M16	M16	M16
Torque ( Nm )	30-40			40-50			50-60		

**RANGE :**

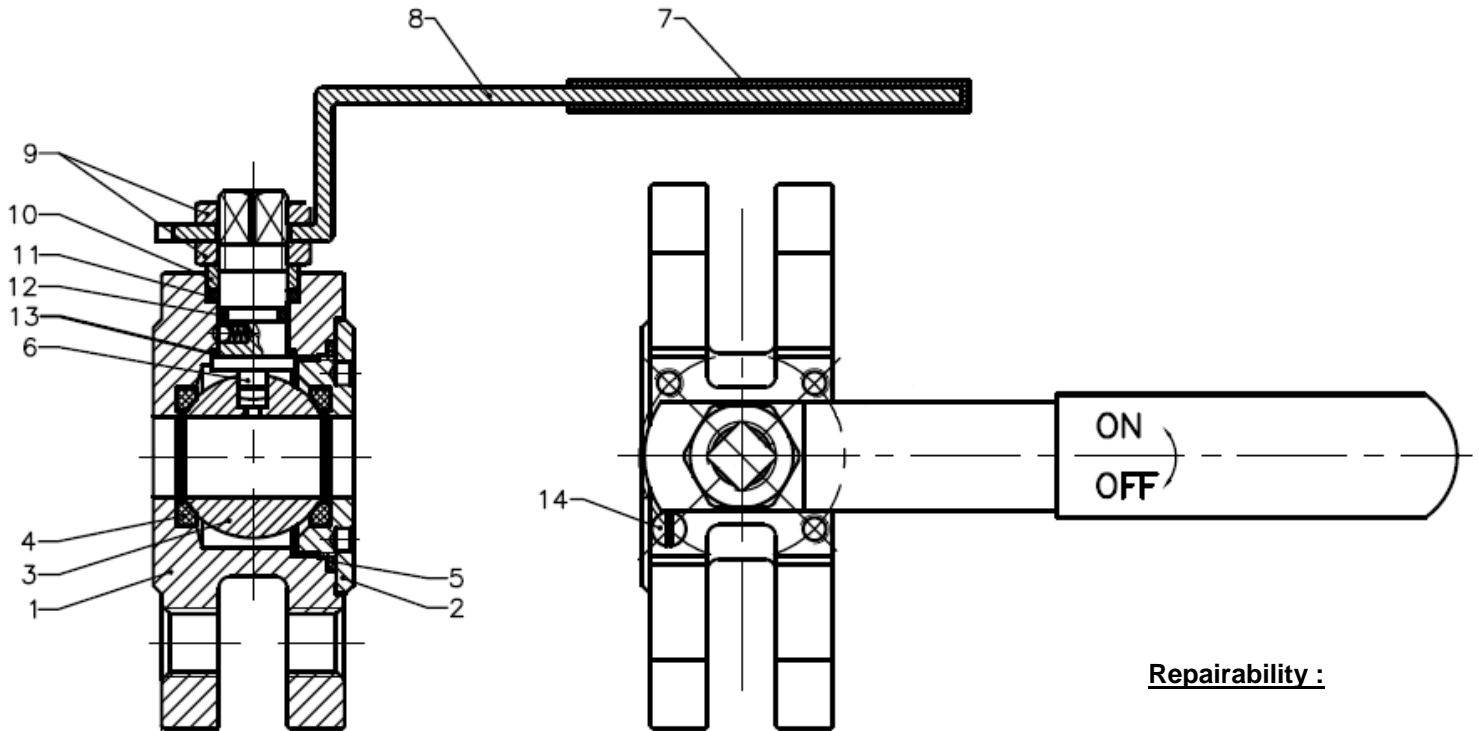
- Wafer stainless steel valve between flanges PN16 Ref. 771 from DN 15 to DN 150

**CONNECTION :**

- Between flanges PN16 R.F.

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**MATERIALS DN 15 - 20 :**



**Repairability :**



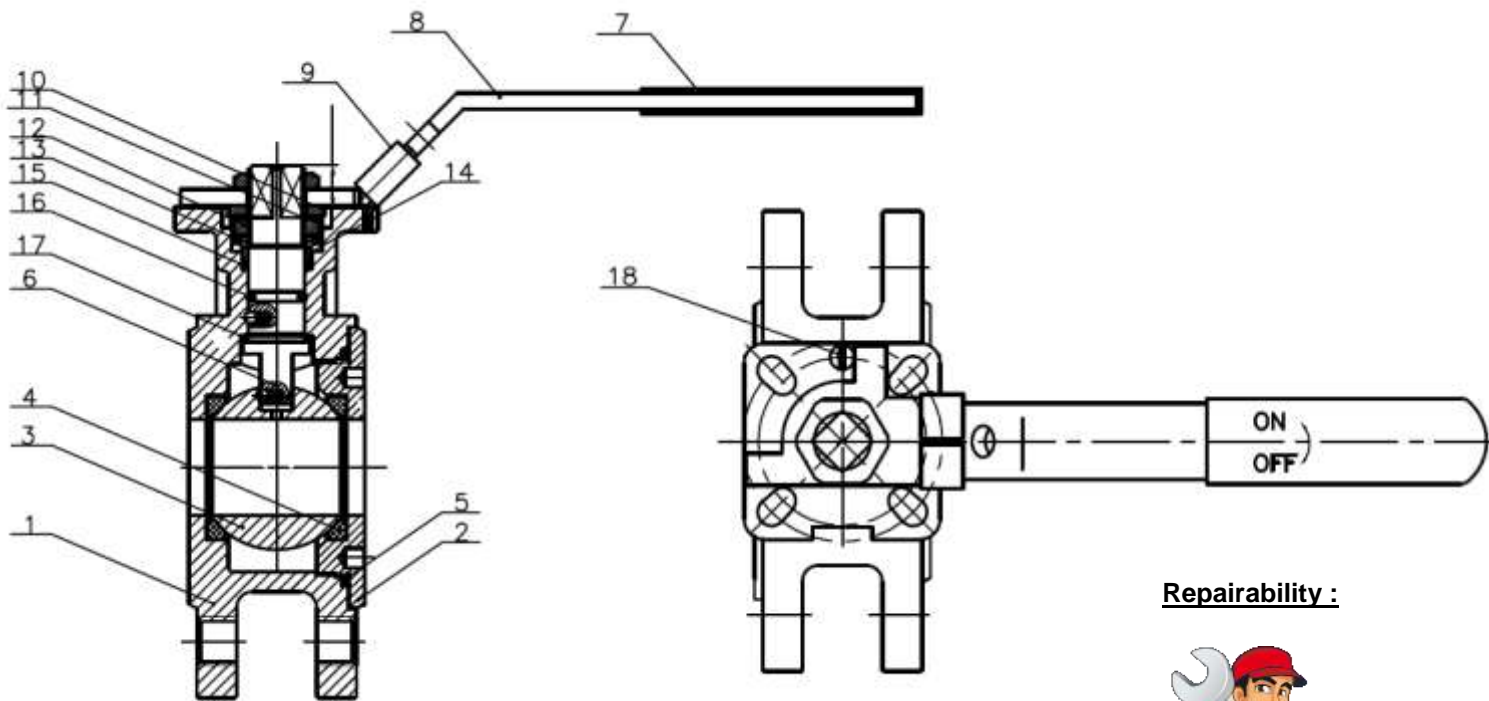
(\* : Included in gaskets kit)

Item	Designation	Materials
1	Body	ASTM A351 CF8M
2	Insert	
3	Ball	
4*	Seat	TFM1600
5*	Body gasket	PTFE
6	Stem	AISI 316
7	Handle cover	Plastic
8	Handle	AISI 304
9	Nut	
10	Gland	
11*	Packing	PTFE
12*	O ring	FKM
13*	Thrust washer	PTFE
14	Stop	AISI 304

*Gaskets kit (Items 4, 5, 11, 12 and 13)	
DN	Ref.
DN15	9804872
DN20	9804873

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**MATERIALS DN 25 - 50 :**



**Repairability :**



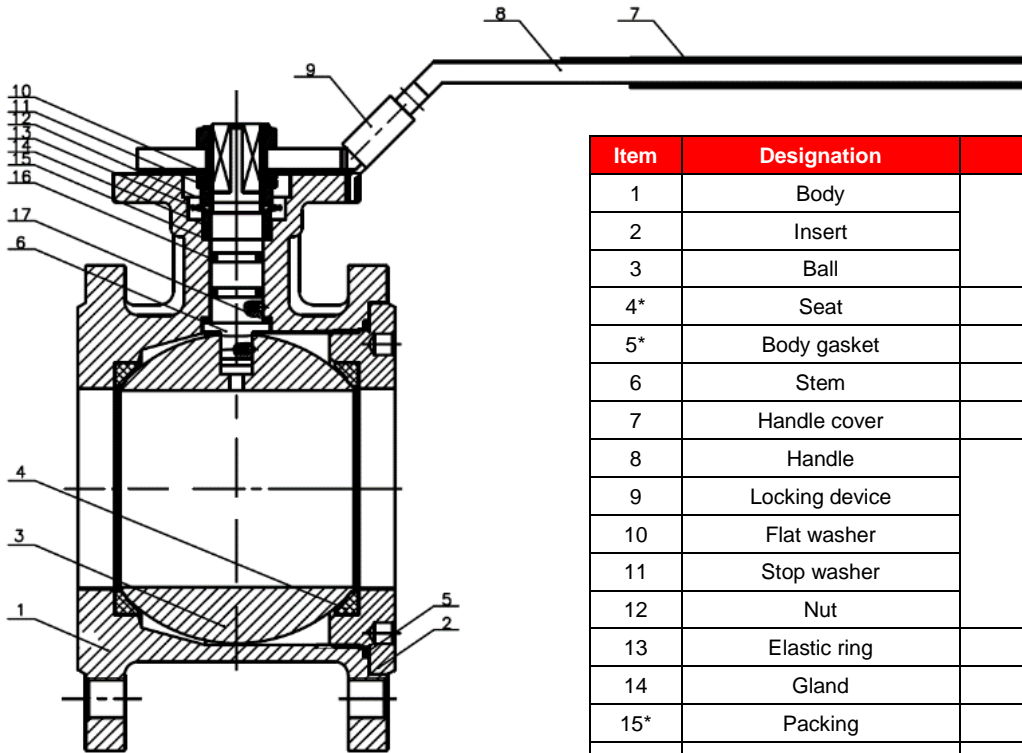
Item	Designation	Materials
1	Body	ASTM A351 CF8M
2	Insert	
3	Ball	
4*	Seat	TFM1600
5*	Body gasket	PTFE
6	Stem	AISI 316
7	Handle cover	Plastic
8	Handle	AISI 304
9	Locking device	
10	Flat washer	
11	Stop washer	
12	Nut	
13	Elastic ring	AISI 301
14	Gland	AISI 304
15*	Packing	PTFE
16*	O ring	FKM
17*	Thrust washer	PTFE
18	Stop	AISI 304

*Gaskets kit (Items 4, 5, 15, 16 and 17)	
DN	Ref.
DN25	9804874
DN32	9804875
DN40	9804876
DN50	9804877

(\* : Included in gaskets kit )

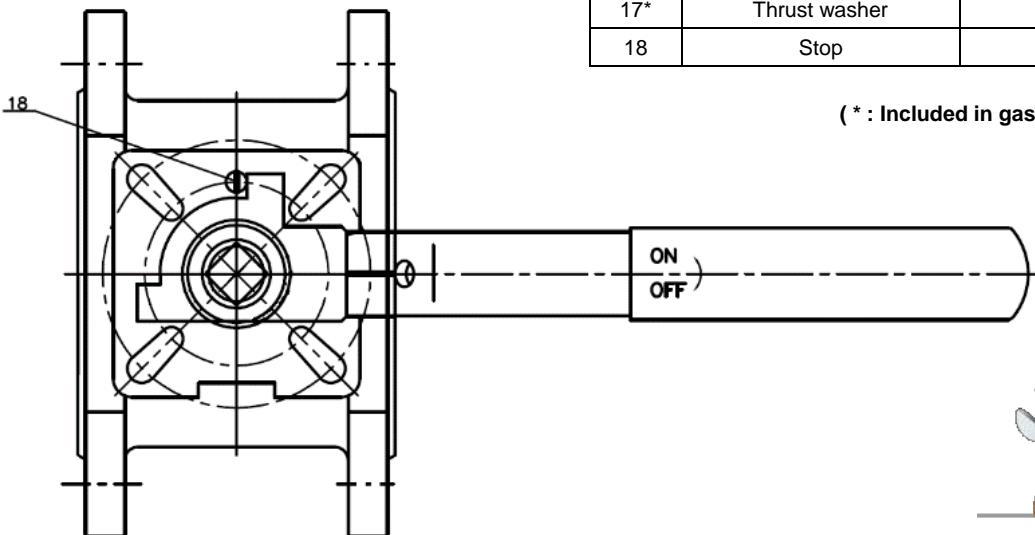
**WAFER STAINLESS STEEL BALL VALVE PN 16**

**MATERIALS DN 65 - 100 :**



Item	Designation	Materials
1	Body	ASTM A351 CF8M
2	Insert	
3	Ball	
4*	Seat	TFM1600
5*	Body gasket	PTFE
6	Stem	AISI 316
7	Handle cover	Plastic
8	Handle	AISI 304
9	Locking device	
10	Flat washer	
11	Stop washer	
12	Nut	
13	Elastic ring	AISI 301
14	Gland	AISI 304
15*	Packing	PTFE
16*	O ring	FKM
17*	Thrust washer	PTFE
18	Stop	AISI 304

(\* : Included in gaskets kit)

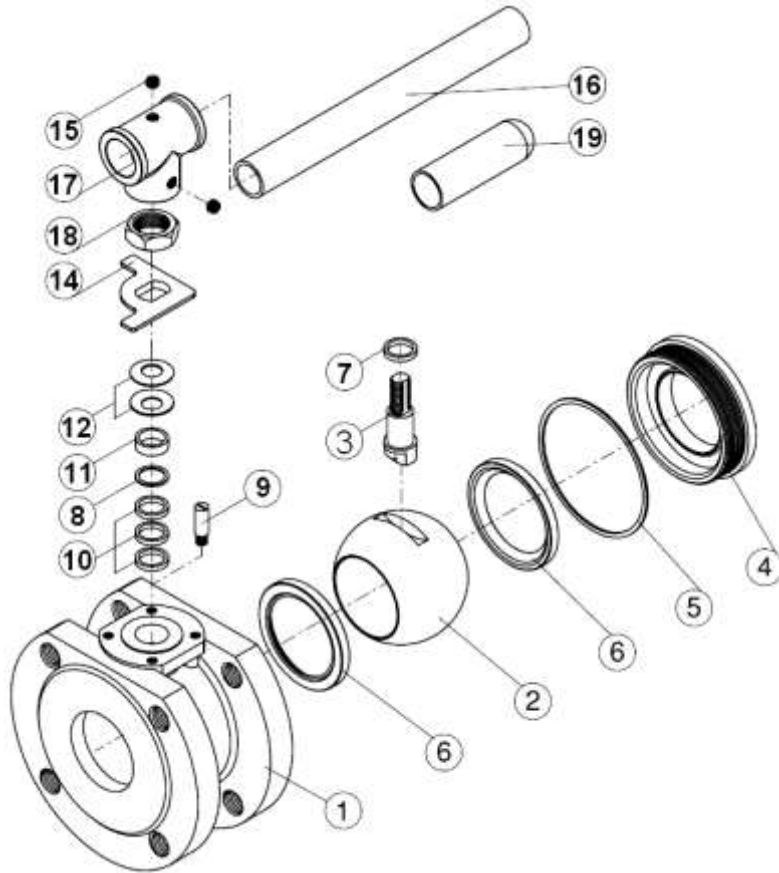


**Repairability :**

*Gaskets kit (Items 4, 5, 15, 16 and 17)	
DN	Ref.
DN65	9804878
DN80	9804879
DN100	9804880

**WAFER STAINLESS STEEL BALL VALVE PN 16**

MATERIALS DN 125 - 150 :



**Repairability :**



Item	Designation	Materials
1	Body	ASTM A351 CF8M
2	Ball	
3	Stem	AISI 316
4	Insert	ASTM A351 CF8M
5*	Body seal	PTFE
6*	Seat	PTFE filled with 15% glass fiber
7*	Thrust washer	PTFE
8*	Packing	PTFE
9	Stop pin	AISI 304
10*	Stem packing	PTFE
11	Gland	AISI 304
12	Elastic ring	AISI 301
14	Stop plate	AISI 304
15	Handle screw	AISI 304
16	Handle	Steel
17	Handle adapter	ASTM A351 CF8
18	Packing nut	AISI 304
19	Handle cover	Plastic

*Gaskets kit (Items 5, 6, 7, 8 and 10)	
DN	Ref.
DN125	9804139
DN150	9804140

(\* : Included in gaskets kit)

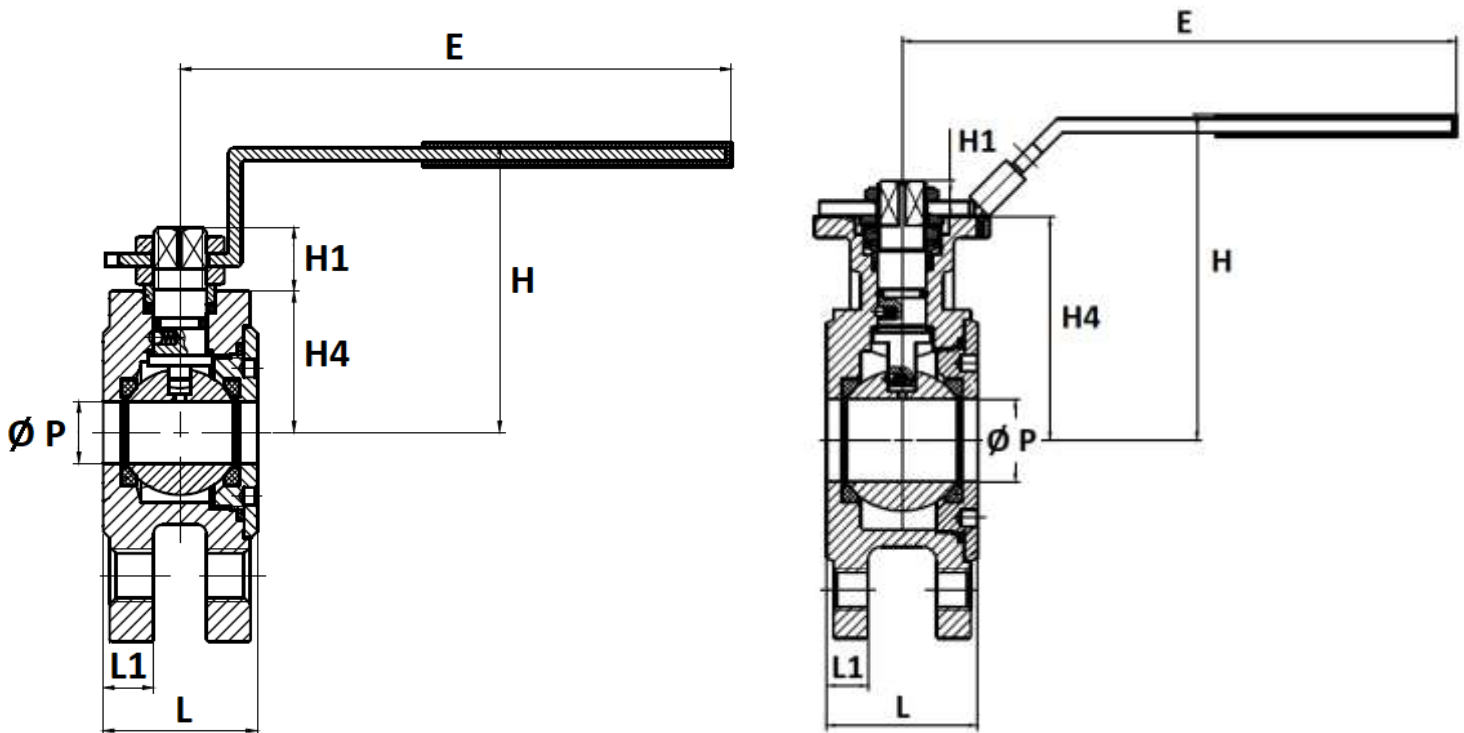


**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SIZE ( in mm ) :**

**DN 15 - 20**

**DN 25 - 50**

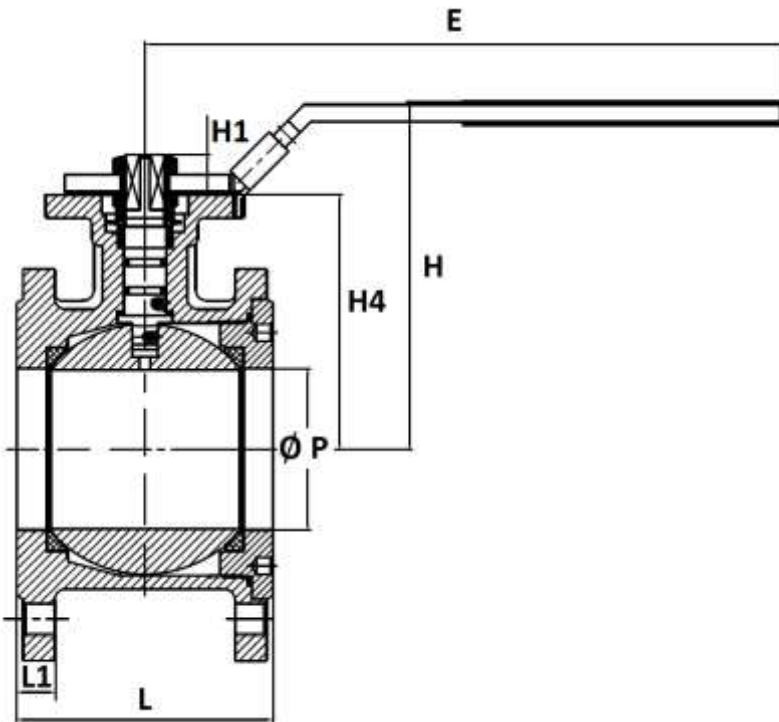


DN	15	20	25	32	40	50
Ø P	14	19	24	30	38	48
L	35	39	44	52	64	83
L1	11.5	12	12	14	16	16
E	125	125	186.5	186.5	276.5	276.5
H	65.7	69	94.5	101	123.5	122
H1	14.5	13.5	10.5	9	13.5	14
H4	32	35.5	65	71.5	85	83.5
Weight (in Kg)	1.09	1.45	1.99	3.08	4.73	6.24
Ref.	771015	771020	771025	771032	771040	771050

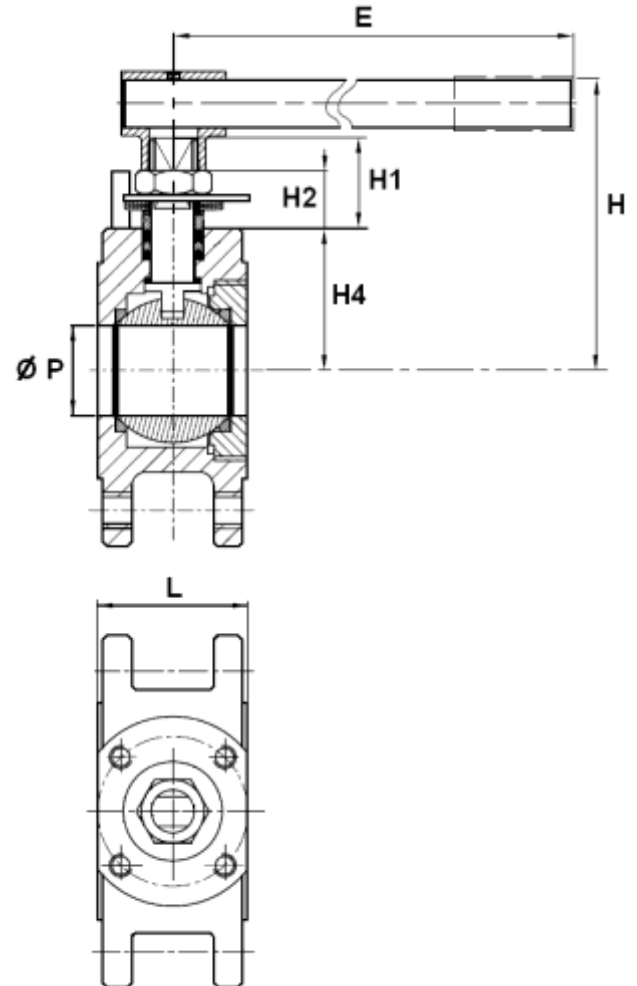
**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SIZE ( in mm ) :**

**DN 65 - 100**



**DN 125 - 150**

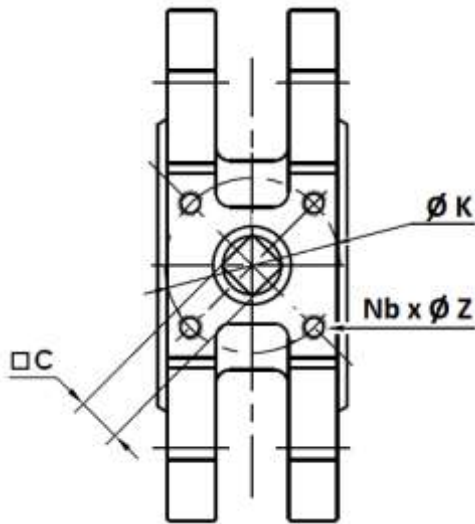


DN	65	80	100	125	150
Ø P	64	76	94	118	135
L	105	121	152	179	202
L1	16	18	18	-	-
E	381.5	381.5	441.5	400	600
H	148	164	173.5	205	220
H1	19	19	20	50	50
H2	-	-	-	31	31
H4	104	120	130	117	130
Weight (in Kg)	10.37	13.89	20.3	30	41
Ref.	771065	771080	771100	771125	771150

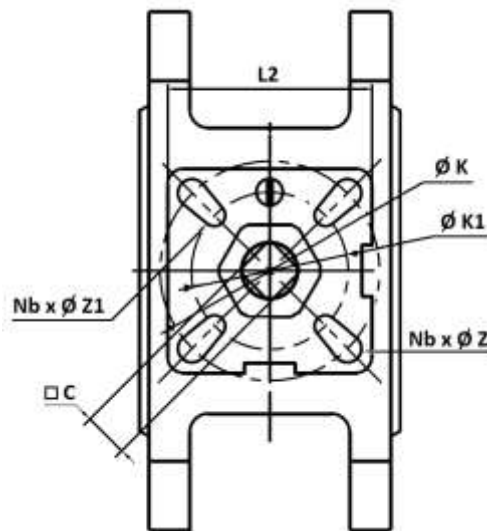
**WAFER STAINLESS STEEL BALL VALVE PN 16**

**ISO PLATE AND STEM SIZE ( in mm ) :**

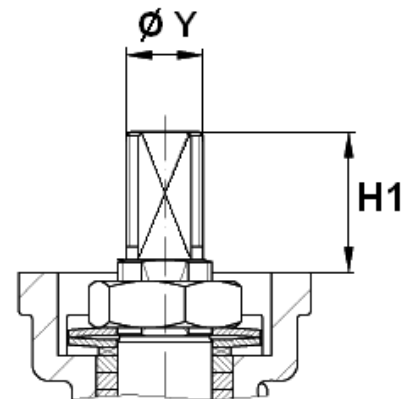
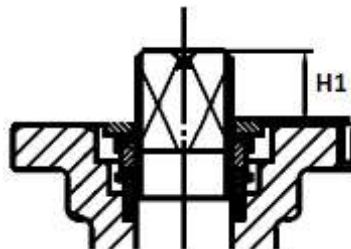
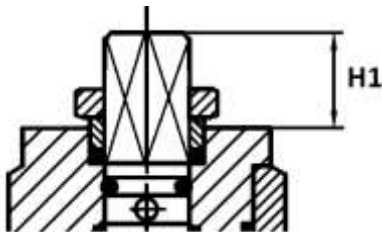
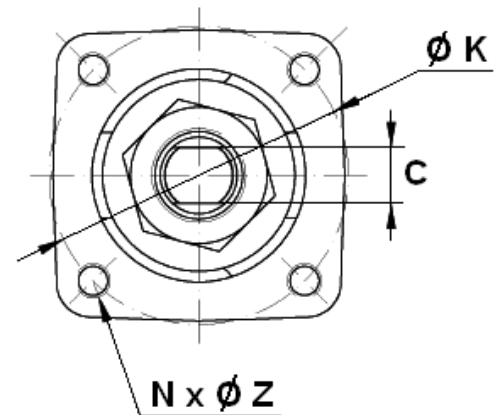
**DN 15- 20**



**DN25- 100**



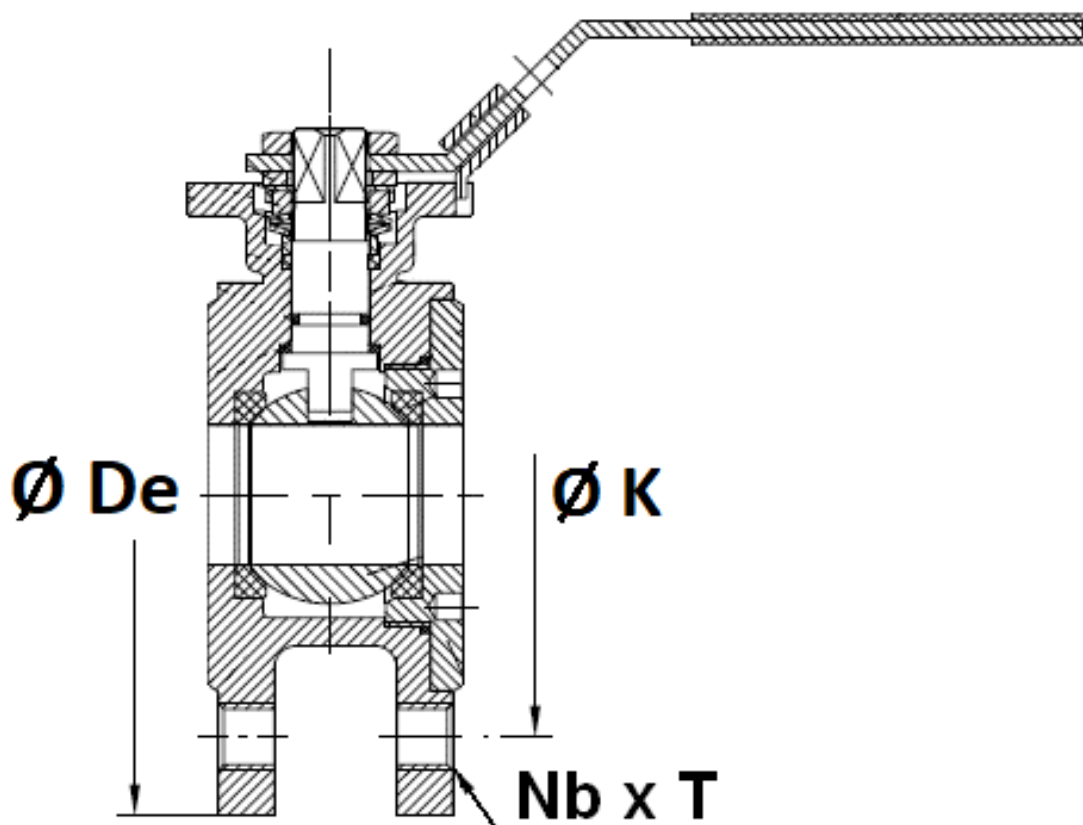
**DN 125 - 150**



DN	15	20	25	32	40	50	65	80	100	125	150
C	9		11		14		17				
L2	-		49		65		94			-	
Ø Y	-									28	28
H1	14.5	13.5	10.5	9	13.5	14	19	20	50	50	
Ø K	36		42		50		70			102	125
ISO	F03		F04		F05		F07			F10	F12
Nb x Ø Z	4 x M5		4 x 6.4		4 x 7		4 x 9			4 x M10	4 x M12
Ø K1	-		50		70		102			-	
ISO 1	-		F05		F07		F10			-	
Nb x Ø Z1	-		4 x 7		4 x 9		4 x 11			-	

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SIZE THREADED FLANGES HOLES ( FOR PN16 FLANGES in mm ) :**



DN	15	20	25	32	40	50	65	80	100	125	150
Ø De	95	105	115	140	150	165	185	200	220	250	285
Ø K	65	75	85	100	110	125	145	160	180	210	240
Nb x Ø L	4 x M12	4 x M12	4 x M12	4 x M16	4 x M16	4 x M16	4 x M16	8 x M16	8 x M16	8 x M16	8 x M20

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**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
  - DN32-100 : Risk Category II, marking CE0035
  - DN125-150 : Risk Category II, marking CE0038 or CE0343
- Certificate 3.1 on request
- Construction according to EN 12516
- Designing according to ASME B16.34
- Pressure tests according to EN 12266-1, Rate A
- ISO 5211 mounting pad
- PN16 R.F. flanges according to EN 1092-1 PN16
- Length according to EN 558 series 100 up to DN100

**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.

## WAFER STAINLESS STEEL BALL VALVE PN 16

Wafer 2 pieces stainless steel ball valve between flanges with full bore to open/close networks of chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air.  
PTFE packing and gasket, FKM gasket on stem and PTFE filled with 15% glass fiber seat.  
Locking device from DN25 to DN100.  
Thanks to the ISO 5211 plate, an actuator can be installed on the valve.

**Certificate**  
**3.1**



**Size :** DN15 to DN150  
**Connection :** Between flanges PN16 RF  
**Min Temperature :** -20°C  
**Max Temperature :** +180°C  
**Max Pressure :** 16 Bars  
**Specifications :** ISO 5211 mounting pad  
Anti blow-out stem  
PTFE filled with 15% glass seat  
Wafer type  
Full bore (up to DN80)

**Materials :** Stainless steel ASTM A351 CF8M

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SPECIFICATIONS :**

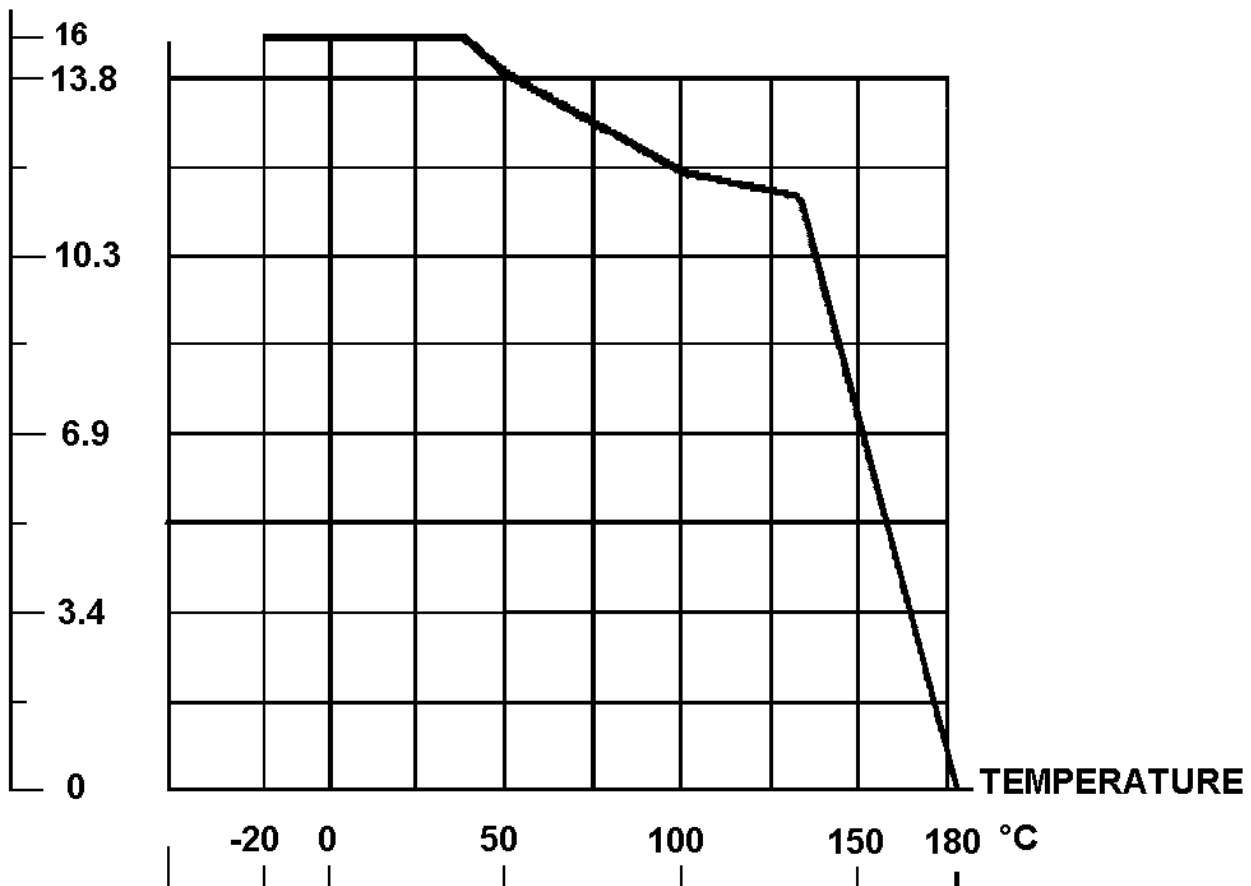
- Full bore (up to DN80)
- Anti blow-out stem
- PTFE filled with 15% glass seat
- ISO 5211 mounting pad
- Threaded holes flanges
- Hollow body
- Locking device from DN 25 to DN 100
- Roughness Ra 3.2 for the ball and the ends

**USE :**

- Chemical and pharmaceutical industries, petrochemical industries, hydraulic installation, compressed air
- Min and max Temperature Ts : -20°C to + 180°C
- Max Pressure Ps : 16 bars ( see graph )

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

**PRESSURE  
BAR**



**WAFER STAINLESS STEEL BALL VALVE PN 16**

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

DN	15	20	25	32	40	50	65	80	100	125	150
Torque ( Nm )	7	9	13	19	27	40	60	85	150	190	250

**TIGHTENING TORQUE FOR SCREWS ( TO FIX ON THE FLANGES ) ( in Nm ) :**

DN	15	20	25	32	40	50	65	80	100
Threading	M12	M12	M12	M16	M16	M16	M16	M16	M16
Torque ( Nm )	30-40			40-50			50-60		

**RANGE :**

- Wafer stainless steel valve between flanges PN16 **Ref. 771** from DN 15 to DN 150

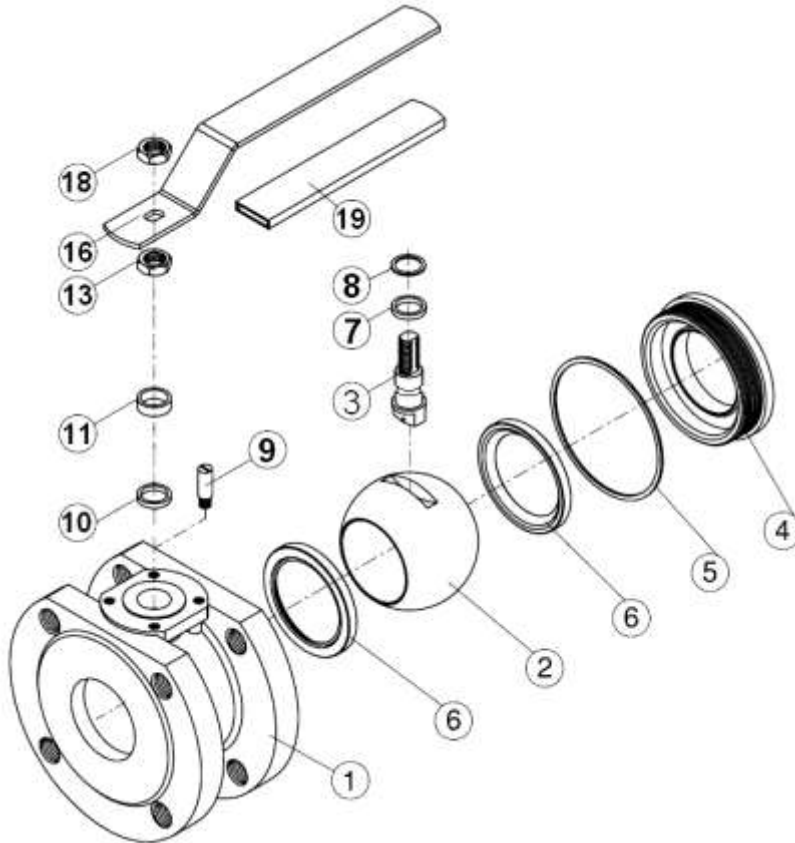
**ENDS :**

- Between flanges PN16 R.F.



**WAFER STAINLESS STEEL BALL VALVE PN 16**

**MATERIALS DN 15 - 20 :**

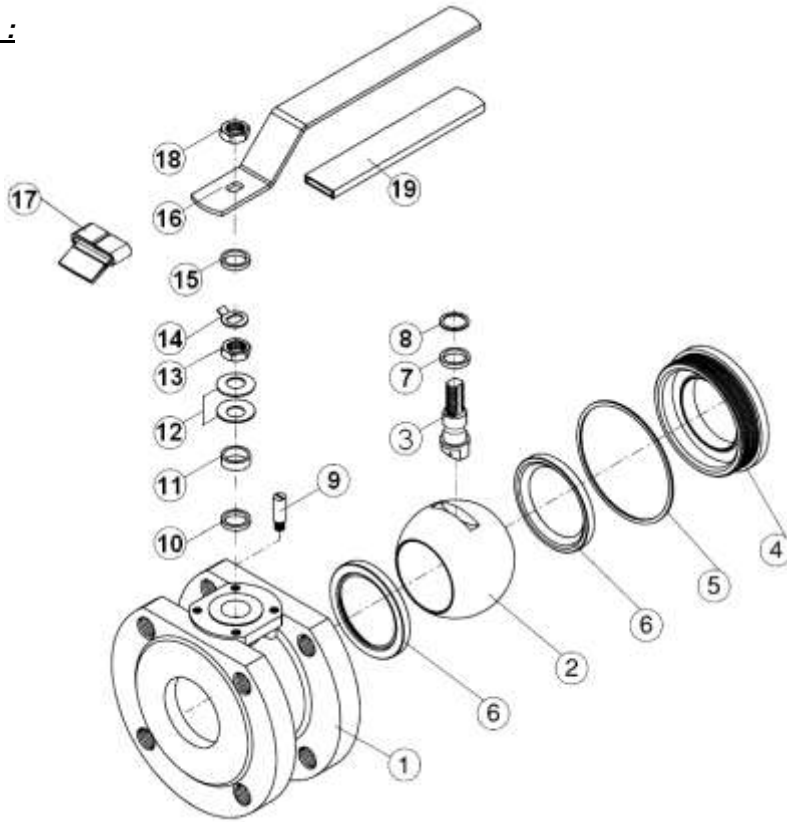


(\* : Included in gaskets kit )

Item	Designation	Materials 771
1	Body	ASTM A351 CF8M
2	Ball	ASTM A351 CF8M
3	Stem	AISI 304
4	Insert	ASTM A351 CF8M
5*	Body seal	PTFE
6*	Seat	PTFE filled with 15% glass fiber
7*	Thrust washer	PTFE
8*	O ring	FKM
9	Stop pin	AISI 304
10*	Packing	PTFE
11	Gland	AISI 304
13	Gland nut	
16	Handle	
18	Handle nut	
19	Handle cover	Plastic

**WAFER STAINLESS STEEL BALL VALVE PN 16**

MATERIALS DN 25 - 50 :

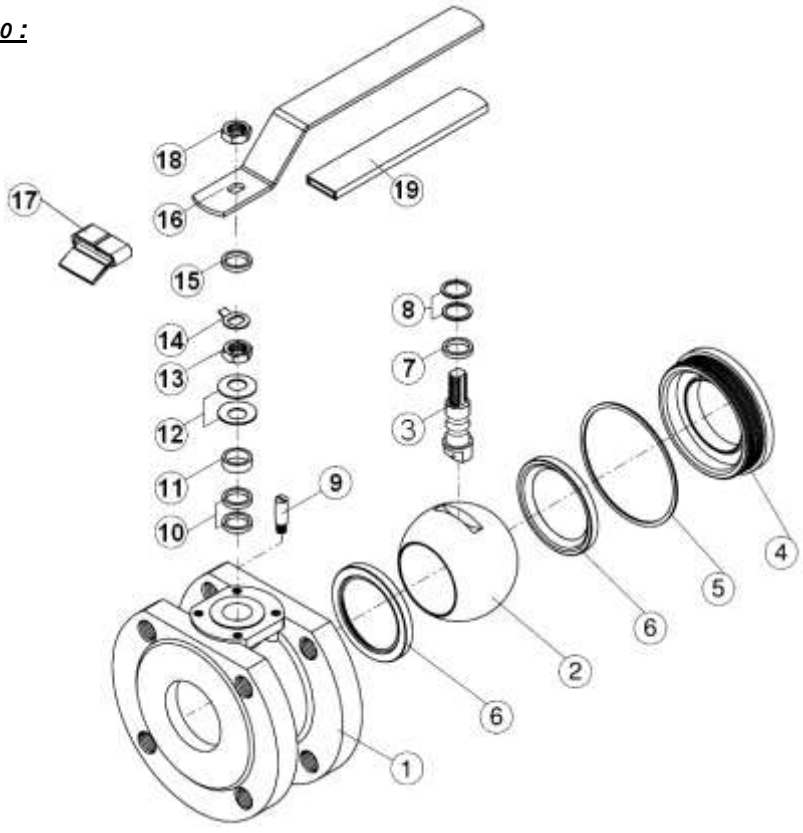


Item	Designation	Materials 771
1	Body	ASTM A351 CF8M
2	Ball	ASTM A351 CF8M
3	Stem	AISI 304
4	Insert	ASTM A351 CF8M
5*	Body seal	PTFE
6*	Seat	PTFE filled with 15% glass fiber
7*	Thrust washer	PTFE
8*	O ring	FKM
9	Stop pin	AISI 304
10*	Packing	PTFE
11	Gland	AISI 304
12	Elastic ring	AISI 301
13	Gland nut	AISI 304
14	Tab washer	
15	Washer	
16	Handle	
17	Locking device	
18	Handle nut	Plastic
19	Handle cover	

(\* : Included in gaskets kit )

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**MATERIALS DN 65 - 100 :**

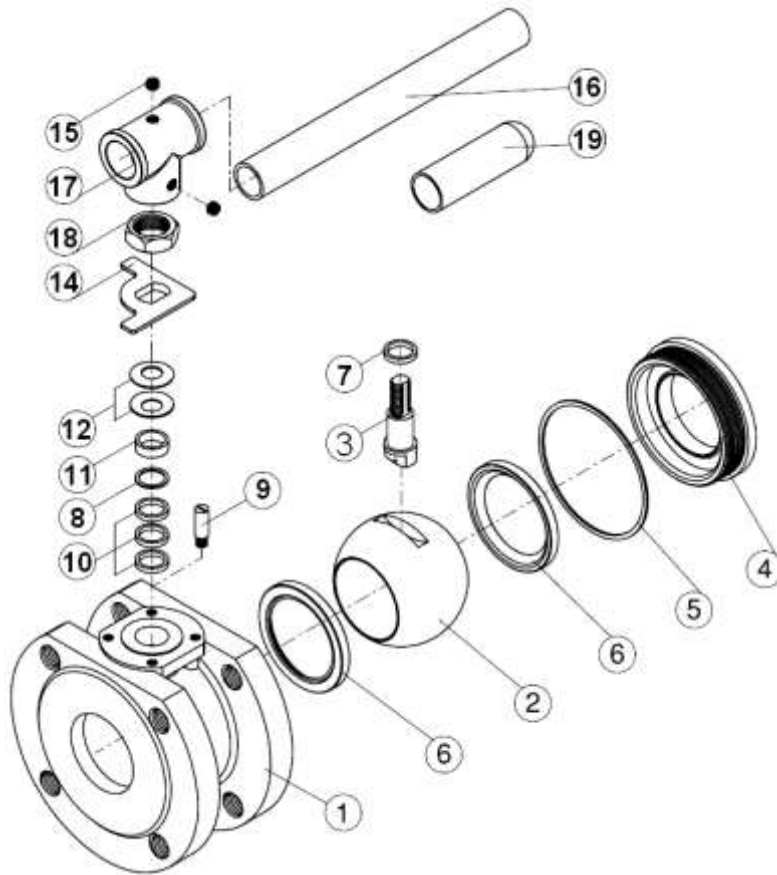


Item	Designation	Materials 771
1	Body	ASTM A351 CF8M
2	Ball	ASTM A351 CF8M
3	Stem	AISI 304
4	Insert	ASTM A351 CF8M
5*	Body seal	PTFE
6*	Seat	PTFE filled with 15% glass fiber
7*	Thrust washer	PTFE
8*	O ring	FKM
9	Stop pin	AISI 304
10*	Packing	PTFE
11	Gland	AISI 304
12	Elastic ring	AISI 301
13	Packing	AISI 304
14	Tab washer	
15	Washer	
16	Handle	
17	Locking device	
18	Handle nut	Plastic
19	Handle cover	

(\* : Included in gaskets kit )

**WAFER STAINLESS STEEL BALL VALVE PN 16**

MATERIALS DN 125 - 150 :

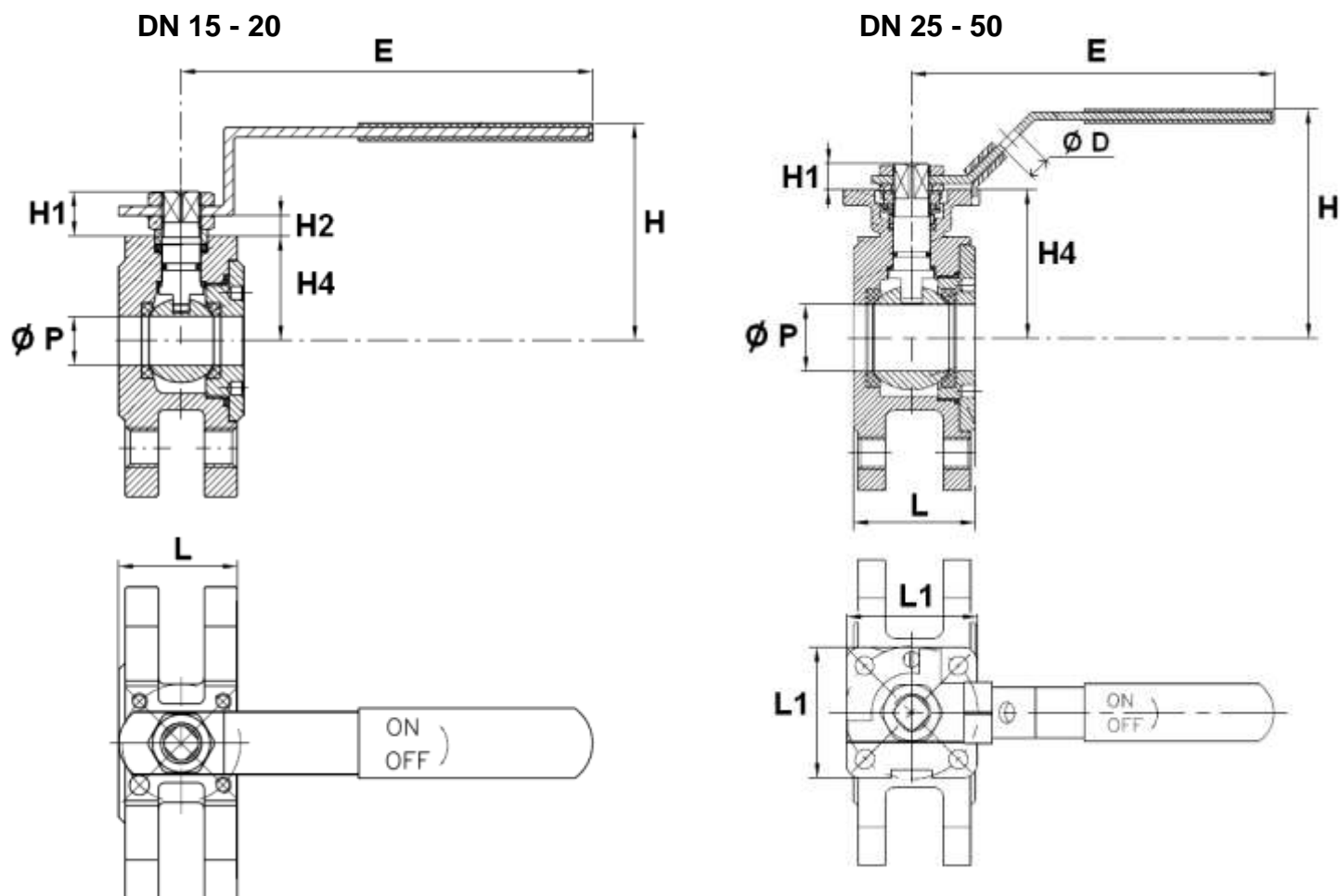


Item	Designation	Materials 771
1	Body	ASTM A351 CF8M
2	Ball	ASTM A351 CF8M
3	Stem	AISI 316
4	Insert	ASTM A351 CF8M
5*	Body seal	PTFE
6*	Seat	PTFE filled with 15% glass fiber
7*	Thrust washer	PTFE
8*	Packing	PTFE
9	Stop pin	AISI 304
10*	Stem packing	PTFE
11	Gland	AISI 304
12	Elastic ring	AISI 301
14	Stop plate	AISI 304
15	Handle screw	AISI 304
16	Handle	Steel
17	Handle adapter	ASTM A351 CF8
18	Packing nut	AISI 304
19	Handle cover	Plastic

(\* : Included in gaskets kit )

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SIZE ( in mm ) :**

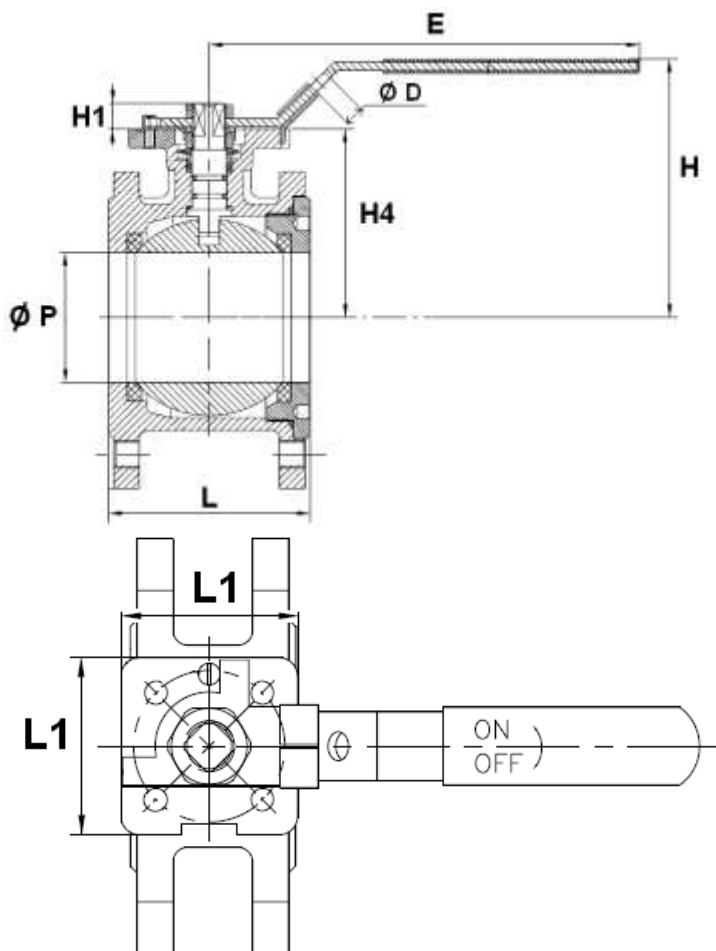


DN	15	20	25	32	40	50
Ø P	15	20	25	32	38	50
L	35	39	44	52	64	83
L1	-	-	49	49	65	65
E	125.2	125.2	136.2	136.2	204.5	204.5
H	75	80	95	101.5	122.5	121.5
H1	13.5	13.5	12	10	13.5	14
H2	6	6	-	-	-	-
H4	32	35.5	65	71.5	85	83.5
Ø D	-	-	8	8	8	8
Weight (in Kg)	1.1	1.41	1.82	3	4.3	5.9
Ref.	771015	771020	771025	771032	771040	771050

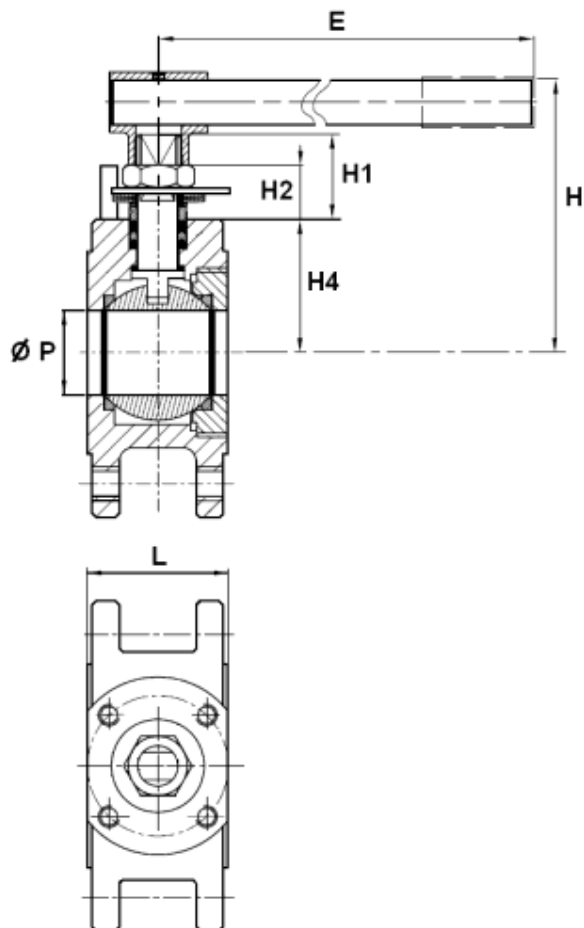
**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SIZE ( in mm ) :**

**DN 65 - 100**



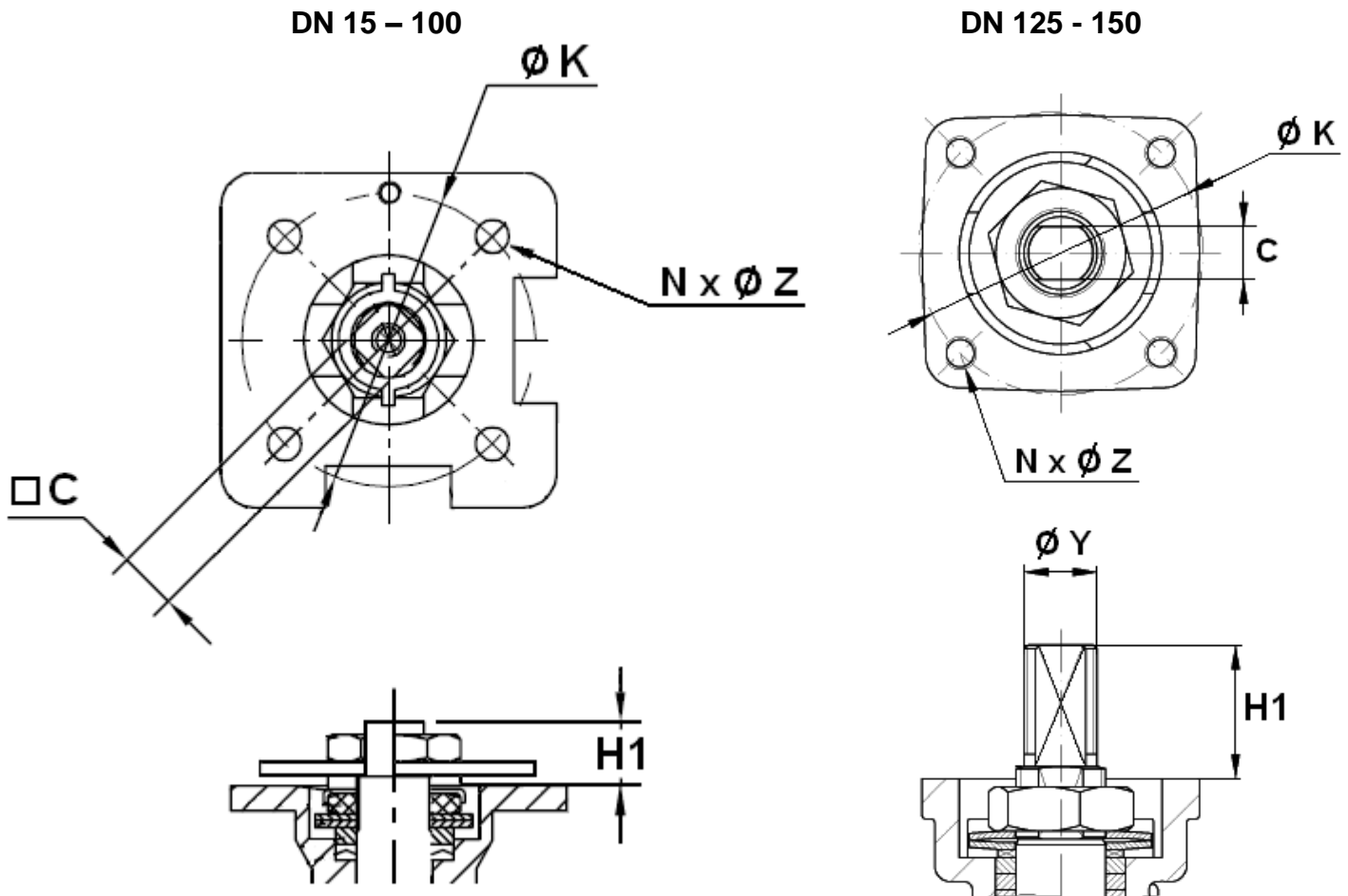
**DN 125 - 150**



DN	65	80	100	125	150
Ø P	65	76	94	118	135
L	105	121	152	179	202
L1	94	94	94	-	-
E	250	250	320	400	600
H	142	161	174	205	220
H1	18	18	20.5	50	50
H2	-	-	-	31	31
H4	101	120	130	117	130
Ø D	10	10	10	-	-
Weight (in Kg)	9	12.5	19.4	30	41
Ref.	771065	771080	771100	771125	771150

**WAFER STAINLESS STEEL BALL VALVE PN 16**

**ISO MOUNTING PAD AND STEM SIZE ( in mm ) :**

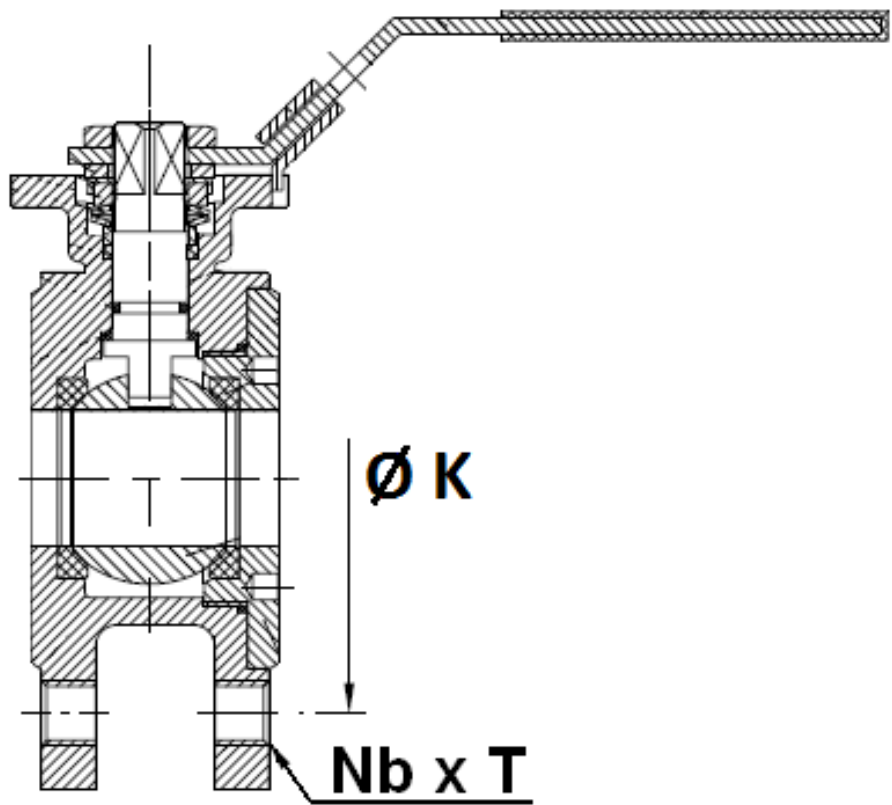


DN	15	20	25	32	40	50	65	80	100	125	150
C	9	9	11	11	14	14	17	17	17	17	17
$\varnothing Y$	-	-	-	-	-	-	-	-	-	28	28
H1	13.5	13.5	12	10	13.5	14	18	18	20.5	50	50
$\varnothing K$	36	36	42	42	50	50	70	70	102	102	125
ISO	F03	F03	F04	F04	F05	F05	F07	F07	F10	F10	F12
$N \times \varnothing Z$	4 x 5	4 x 5	4 x 6.4	4 x 6.4	4 x 7	4 x 7	4 x 9	4 x 9	4 x 11	4 x M10	4 x M12



**WAFER STAINLESS STEEL BALL VALVE PN 16**

**SIZE THREADED FLANGES HOLES ( FOR PN16 FLANGES in mm ) :**



DN	15	20	25	32	40	50	65	80	100	125	150
Ø K	65	75	85	100	110	125	145	160	180	210	240
Nb x Ø L	4 x M12	4 x M12	4 x M12	4 x M16	4 x M16	4 x M16	4 x M16	8 x M16	8 x M16	8 x M16	8 x M20



**WAFER STAINLESS STEEL BALL VALVE PN 16**

**STANDARDS :**

- Manufacturer certified ISO 9001 : 2015
- DIRECTIVE 2014/68/EU : CE N° 0035  
Risk Category II Module D1
- Certificate 3.1 on request
- Construction according to EN 12516
- Designing according to ASME B16.34
- Pressure tests according to EN 12266-1, Rate A
- ISO 5211 mounting pad
- PN16 R.F. flanges according to EN 1092-1 PN16
- Length according to EN 558 series 100 up to DN100

**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.