



**2 PIECES BALL VALVES FLANGED ISO PN 16
WITH LIMIT SWITCH BOX**

Model/Ref: 762



*Partnership.
Without Limits.*

www.lauridsenindustri.dk

**2 PIECES BALL VALVES FLANGED ISO PN 16
WITH LIMIT SWITCH BOX**

Size : DN 15 to 300 mm
Ends : ISO PN16/40 R.F. Flanges
Min Temperature : - 20°C
Max Temperature : + 200°C
Max Pressure : 40 Bars up to DN50 (16 bars over)
Specifications : ISO 5211 mounting pad
PTFE filled with glass seat
Anti blow-out stem
Atex
Fire safe according to API607 up to DN150

Materials : Carbon steel or Stainless steel

2 PIECES BALL VALVES FLANGED ISO PN 16 WITH LIMIT SWITCH BOX

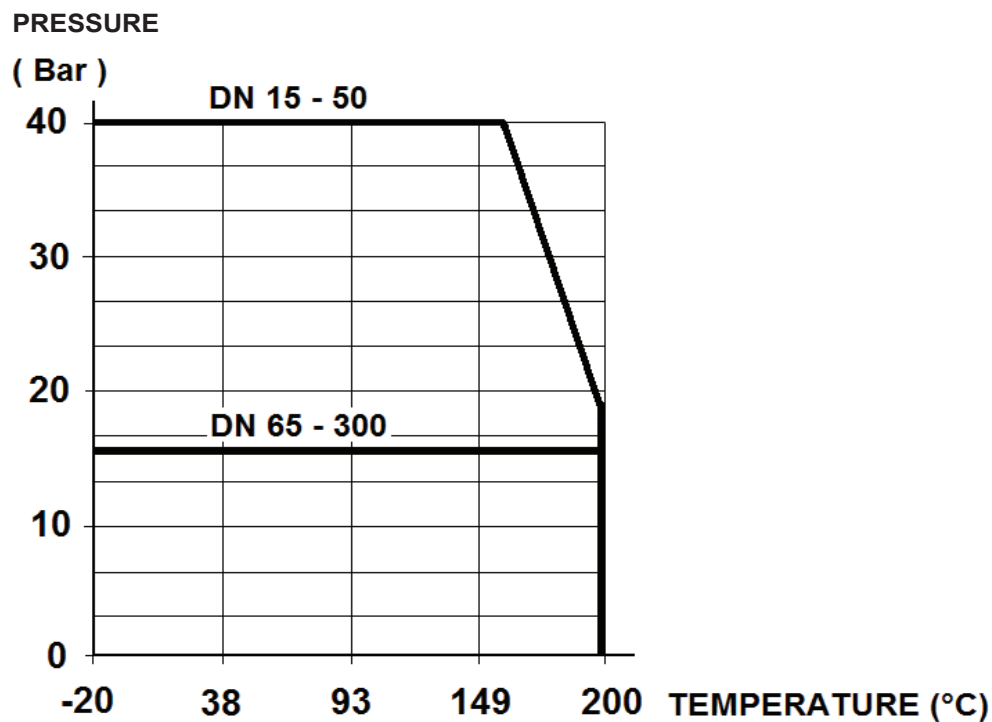
SPECIFICATIONS :

- Full bore
- Anti blow-out stem
- Double antistatic device
- PTFE filled with glass seat
- Locking device
- ISO 5211 mounting pad
- 2 pieces type (Split body)
- Hollowed ball from DN125 to DN300
- With exhaust hole in the ball (located in the top of the ball to avoid overpressure in it)
- Primer coating for carbon steel valves (Ref. 762)

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 : 40 bars up to DN50, 16 bars over (see graph under)

PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :



RANGE :

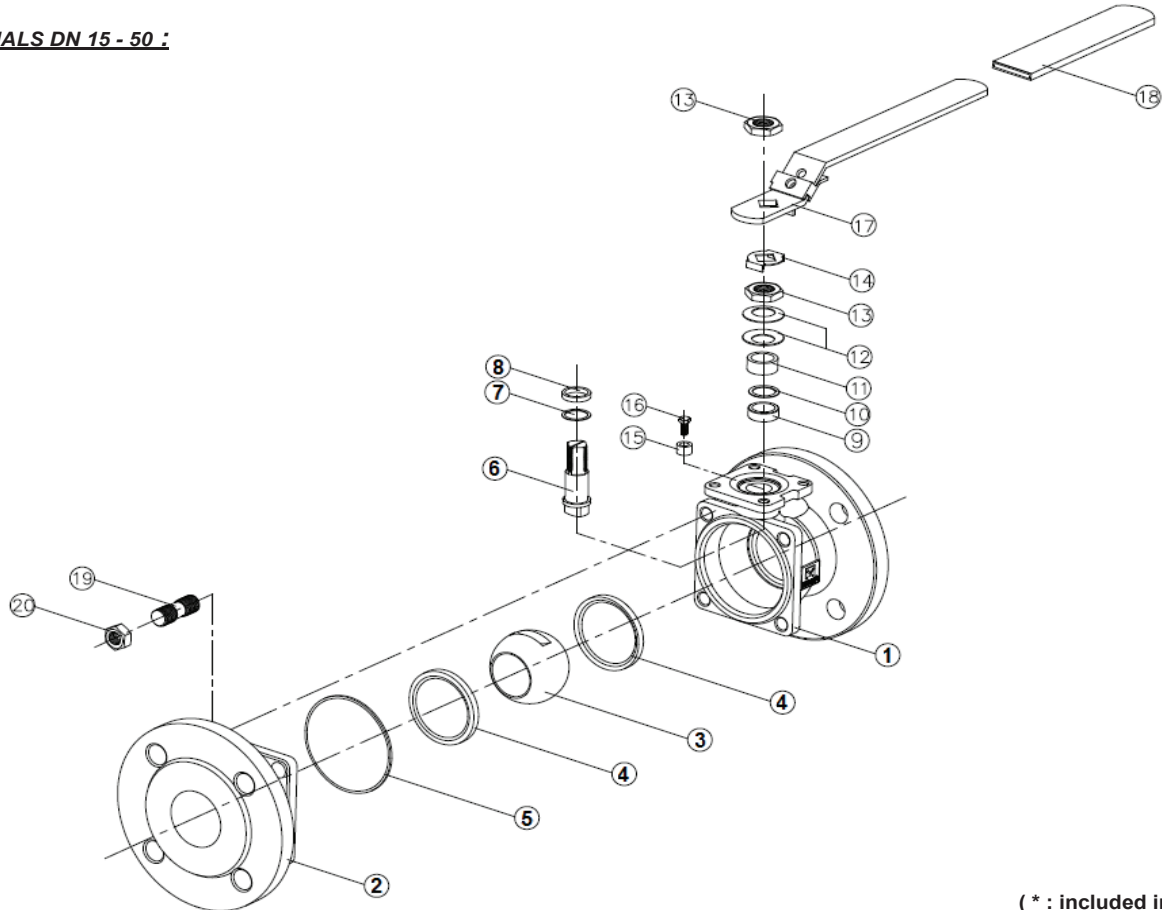
- Carbon steel body **Ref. 762** from DN 15 to DN 200 (with gearbox from DN250 to 300)
- Stainless steel body **Ref. 763** from DN 15 to DN 200 (with gearbox from DN250 to 300)
- Gearbox possible **Ref. 9830296-9830297** from DN 150 to DN 200

ENDS :

- R.F. Flanged ISO PN40 up to DN50, ISO PN16 over

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MATERIALS DN 15 - 50 :

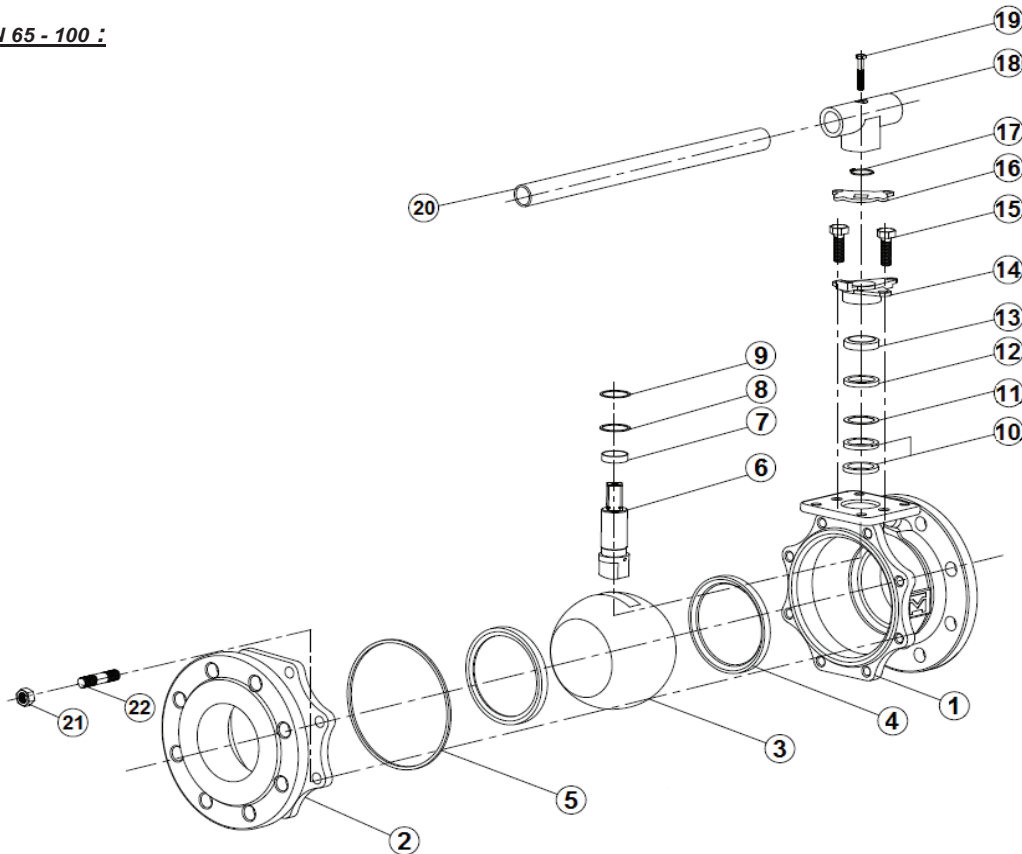


(* : included in gaskets kit)

Item	Designation	Materials 762	Materials 763
1	Body	ASTM A216 WCB	ASTM A351 CF8M
2	Ends	ASTM A216 WCB	ASTM A351 CF8M
3	Ball	ASTM A351 CF8M	
4*	Seat	PTFE filled with glass	
5*	Body seal	Graphite	
6	Stem	ASTM A276 316	
7*	Ring	PTFE filled with carbon	
8*	Ring	PTFE filled with carbon	
9*	Packing	Graphite	
10*	Packing	PTFE filled with carbon	
11	Packing gland	SS 304	
12	Elastic ring	SS 301	
13	Nut	SS 304	
14	Washer	SS 304	
15	Pin	SS 304	
16	Pin screw	SS 304	
17	Handle	SS 304	
18	Handle cover	PVC	
19	Stud	SS 304	
20	Nut	SS 304	

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MATERIALS DN 65 - 100 :

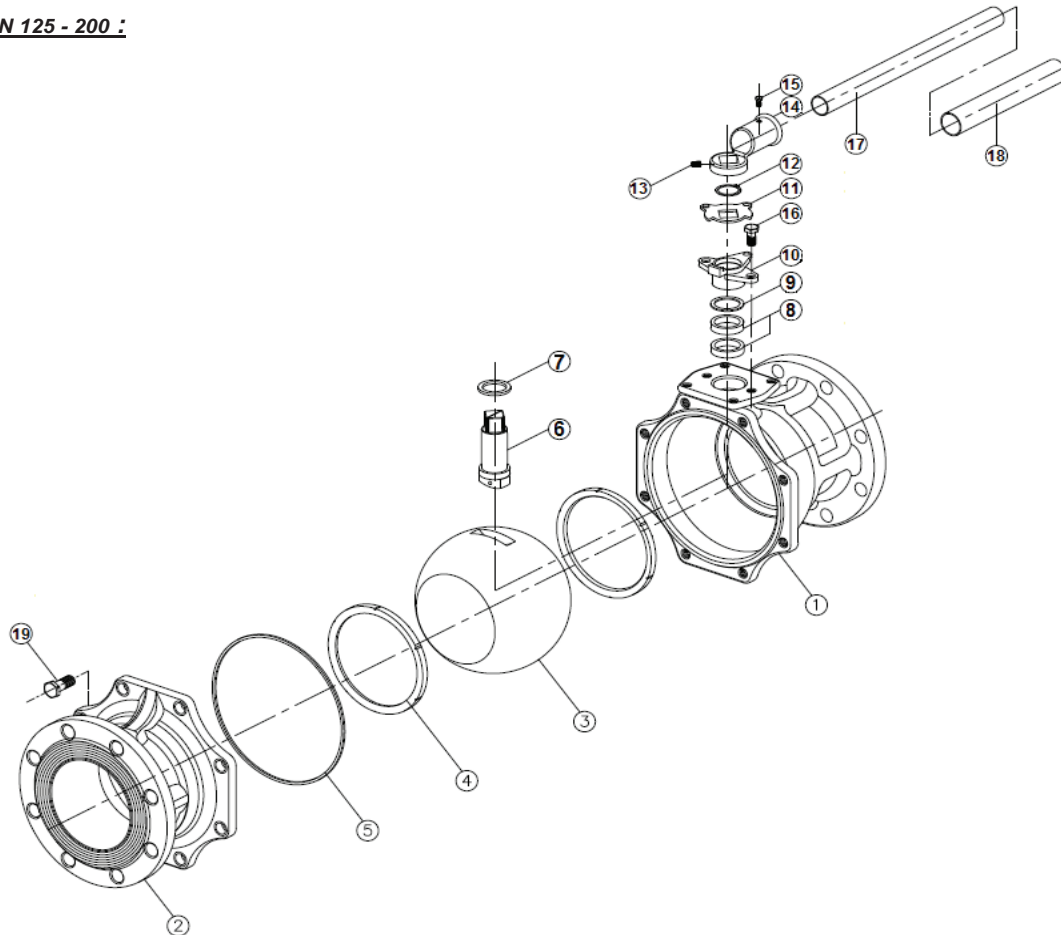


Item	Designation	Materials 762	Materials 763
1	Body	ASTM A216 WCB	ASTM A351 CF8M
2	Ends	ASTM A216 WCB	ASTM A351 CF8M
3	Ball	ASTM A351 CF8M	
4*	Seat	PTFE filled with glass	
5*	Body seal	Graphite	
6	Stem	ASTM A276 316	
7*	Ring	PTFE filled with carbon	
8*	Ring	PTFE filled with carbon	
9*	Ring	PTFE filled with carbon	
10*	Packing	Graphite	
11*	Packing	PTFE filled with carbon	
12	Ring	SS 304	
13	Ring	SS 304	
14	Packing gland	ASTM A351 CF8	
15	Packing gland screw	SS 304	
16	Pin	SS 304	
17	Circlips	SS 304	
18	Handle adaptor	ASTM A351 CF8	
19	Screw	SS 304	
20	Handle	Steel	
21	Nut	SS 304	
22	Stud	SS 304	

(* : included in gaskets kit)

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MATERIALS DN 125 - 200 :

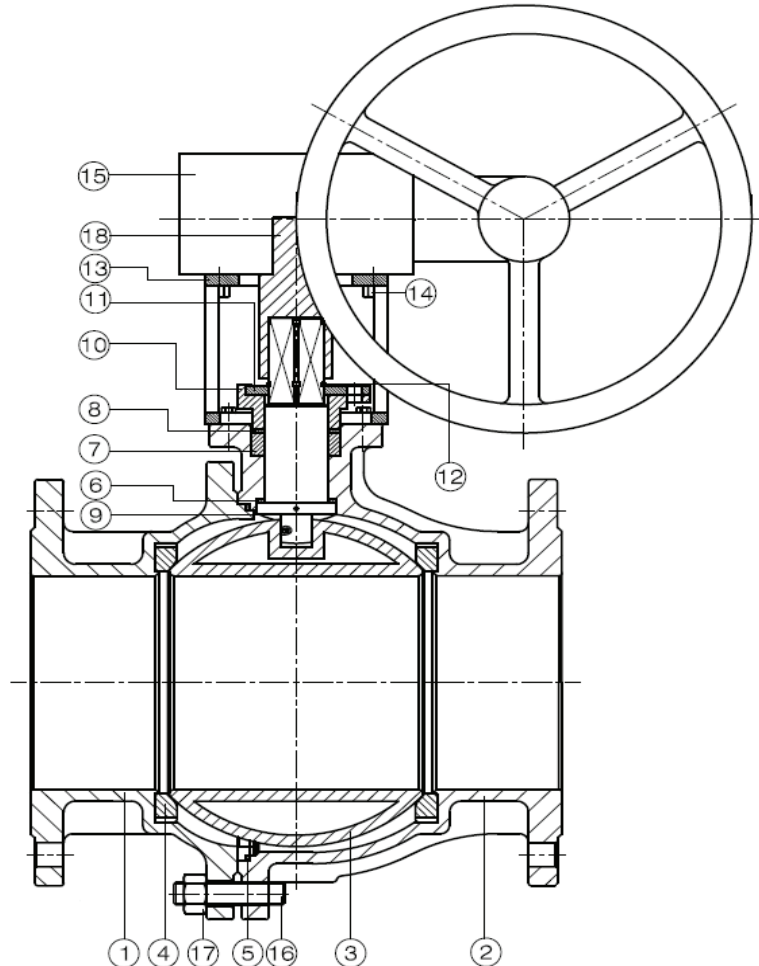


Item	Designation	Materials 762	Materials 763
1	Body	ASTM A216 WCB	ASTM A351 CF8M
2	Ends	ASTM A216 WCB	ASTM A351 CF8M
3	Ball	SS 316	
4*	Seat	PTFE filled with glass	
5*	Body seal	Graphite	
6	Stem	ASTM A276 316	
7*	Ring	PTFE filled with carbon	
8*	Packing	Graphite	
9*	Packing	PTFE filled with carbon	
10*	Packing gland	ASTM A351 CF8	
11	Pin	SS 304	
12	Circlips	SS 304	
13	Screw	SS 304	
14	Handle adaptor	SS 304	
15	Screw	SS 304	
16	Packing gland screw	SS 304	
17	Handle	Steel	
18	Handle cover	PVC	
19	Body screw	SS 304	

(* : included in gaskets kit)

2 PIECES BALL VALVES FLANGED ISO PN 16 WITH LIMIT SWITCH BOX

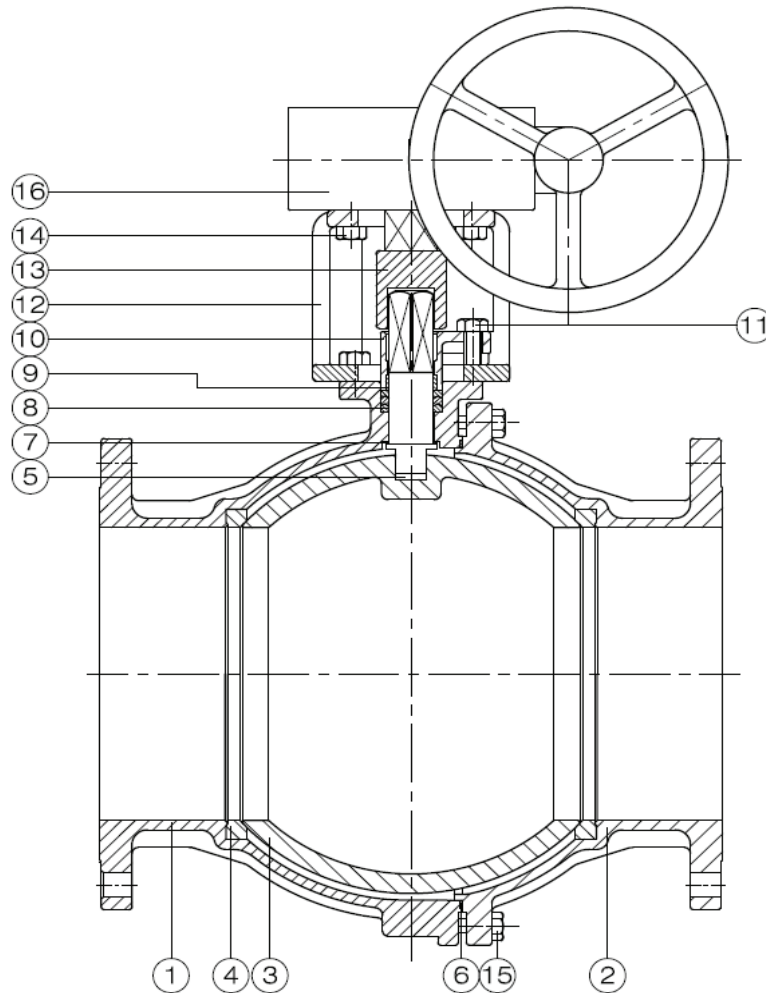
MATERIALS DN 250 :



Item	Designation	Materials 762	Materials 763
1	Body	ASTM A216 WCB	ASTM A351 CF8M
2	Ends	ASTM A216 WCB	ASTM A351 CF8M
3	Ball	SS 316	
4*	Seat	PTFE filled with glass	
5*	Body gasket	Graphite	
6*	Ring	PTFE filled with carbon	
7*	Packing	Graphite	
8*	Packing	PTFE filled with carbon	
9	Stem	ASTM A276-316	
10	Gland	ASTM A351 CF8	
11	Gland bolt	SS 304	
12	Circlips	SS 304	
13	Yoke	SS 304	
14	Screw	SS 304	
15	Worm gear	ASTM A48-No.35	
16	Stud	SS 304	
17	Nut	SS 304	
18	Stem caput	SS 1045	

2 PIECES BALL VALVES FLANGED ISO PN 16 WITH LIMIT SWITCH BOX

MATERIALS DN 300 :

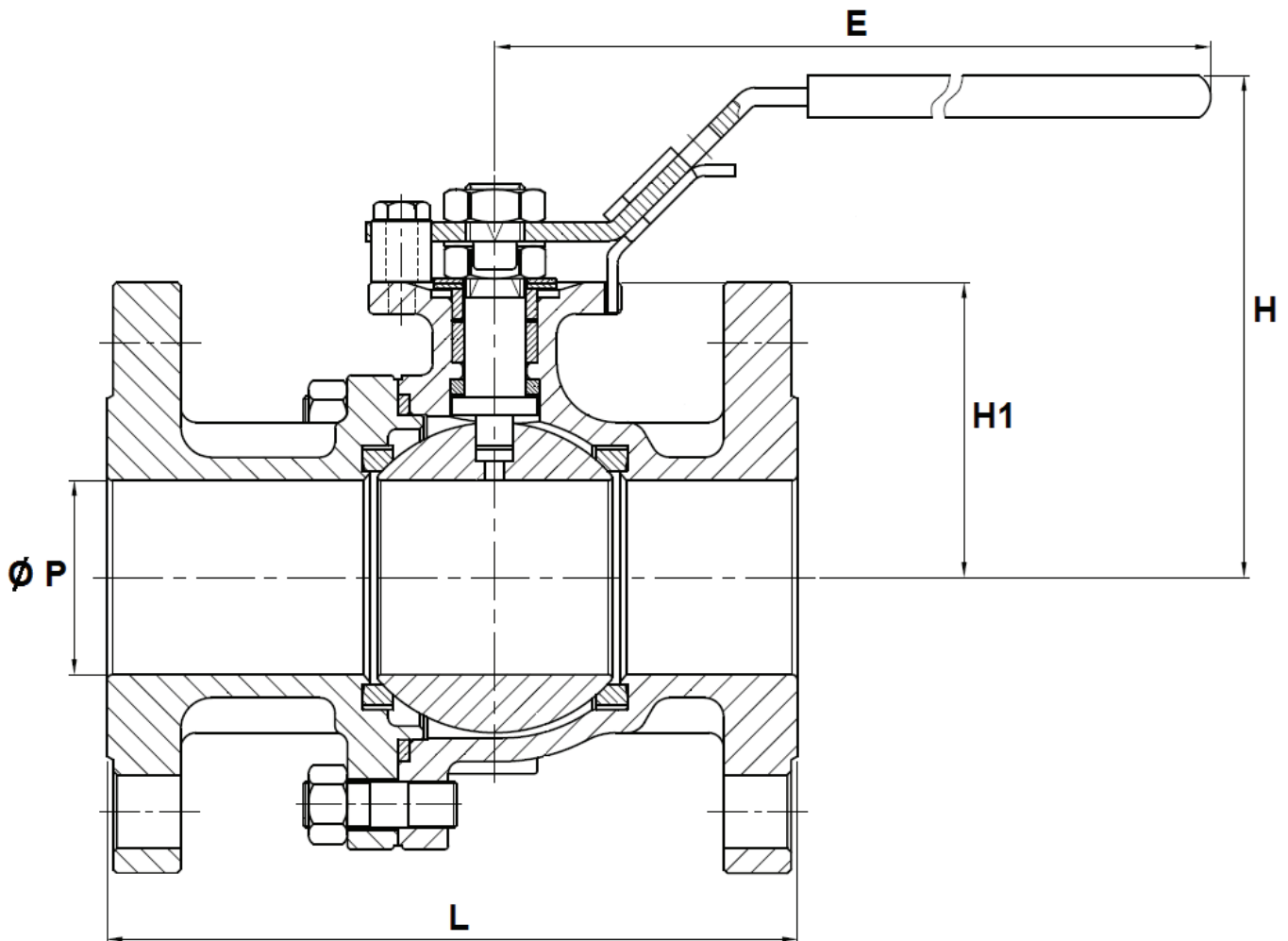


Item	Designation	Materials 762	Materials 763
1	Body	ASTM A216 WCB	ASTM A351 CF8M
2	Ends	ASTM A216 WCB	ASTM A351 CF8M
3	Ball	ASTM A351 CF8	ASTM A351 CF8M
4*	Seat	PTFE filled with glass	
5	Stem	SS 304	SS 316
6*	Body gasket	PTFE filled with glass	
7*	Ring	CTFE	
8*	Packing	PTFE filled with glass	
9*	Packing	PTFE	
10	Gland	ASTM A351 CF8	
11	Gland screw	Carbon steel	SS 304
12	Yoke	Cast iron FC20	
13	Stem caput	Carbon steel	
14	Yoke bolt	Carbon steel	SS 304
15	Body screw	Carbon steel	SS 304
16	Worm gear	Cast iron FC20	

**2 PIECES BALL VALVES FLANGED ISO PN 16
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SIZE DN 15 - 50 (in mm) :

DN 15 - 50

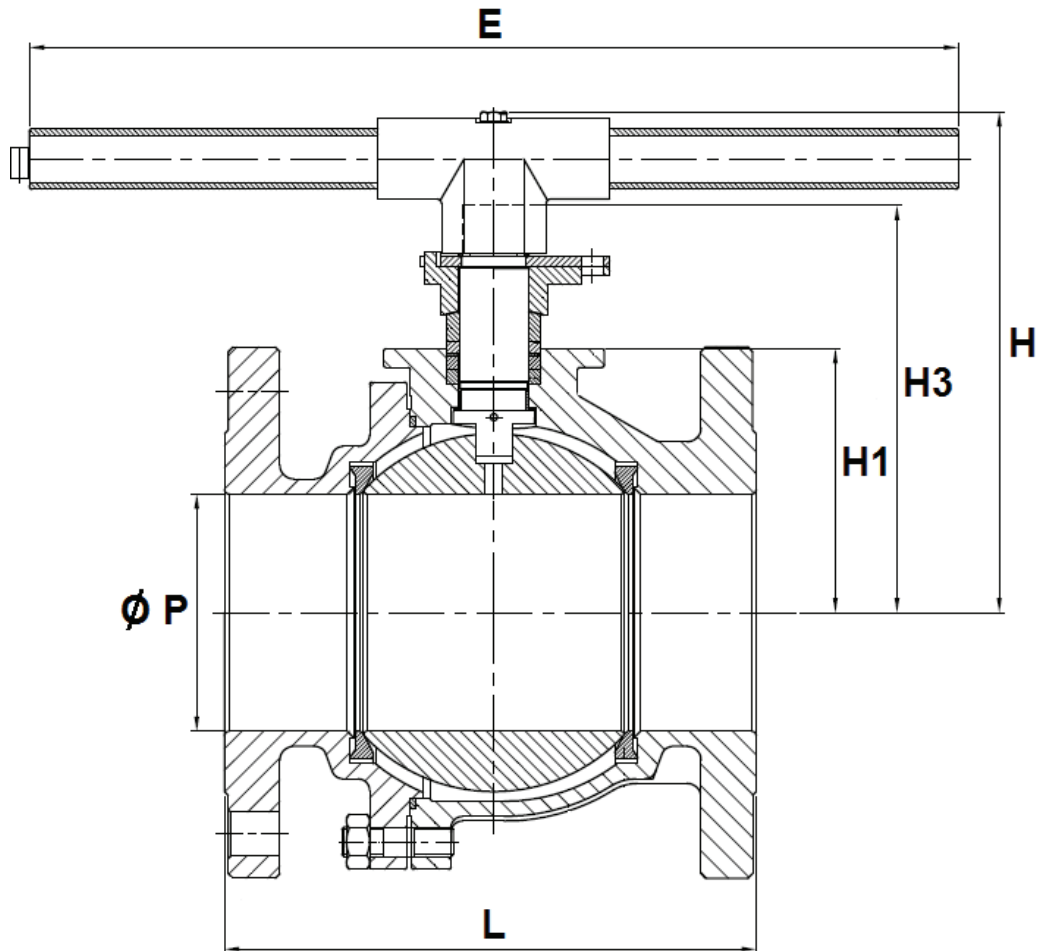


Ref.	DN	15	20	25	32	40	50
762 / 763	Ø P	15	20	24	30	38	50
	L	115	120	125	130	140	150
	E	158	158	196	196	245	261
	H	75.6	78.1	92	96	109.1	115.6
	H1	39	42.5	52	56	66	73
	Weight (Kg)	2.3	3	4	5.5	7	9.3

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SIZE DN 65 - 100 (in mm) :

DN 65 - 100

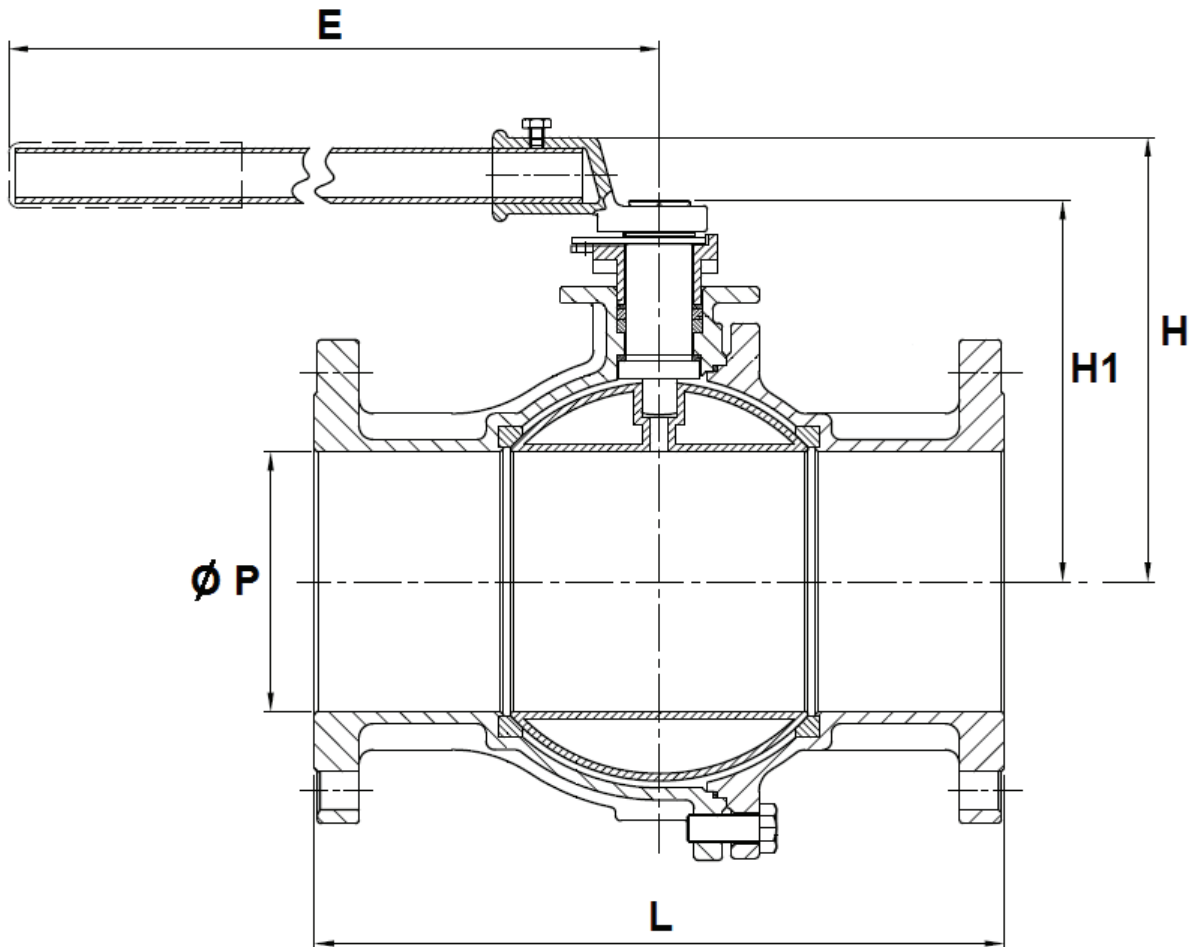


Ref.	DN	65	80	100
762 / 763	Ø P	64	76	98
	L	170	180	190
	E	400	400	400
	H	188	194	215
	H1	86.5	91.5	113.5
	H3	152	158	179
	Weight (Kg)	14.4	17.5	23.3

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SIZE DN 125 - 200 (in mm) :

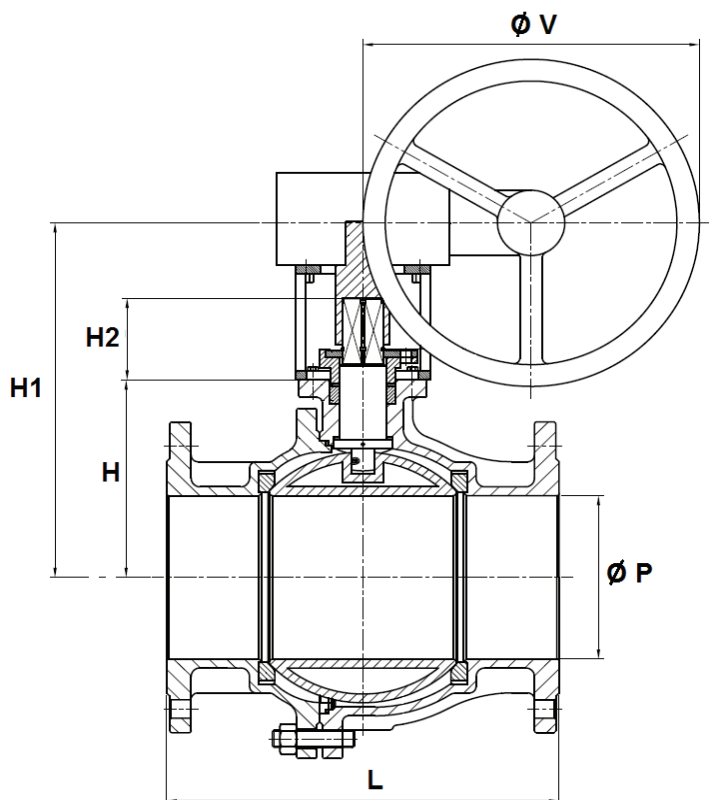
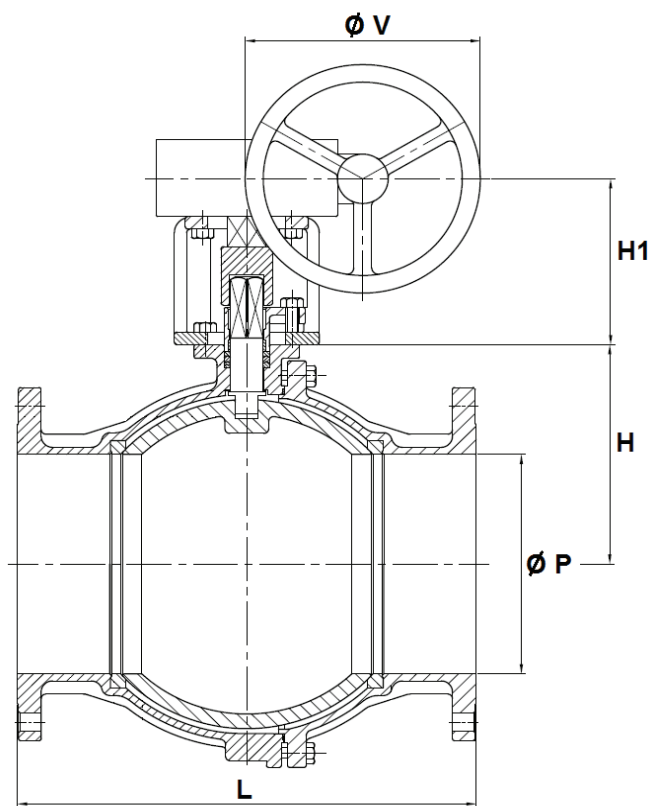
DN 125 - 200



Ref.	DN	125	150	200
762 / 763	Ø P	125	150	200
	L	325	350	400
	E	743	743	925
	H	239.6	256.5	323.5
	H1	199	220	286.5
	Weight (in Kg)	36.7	52	78

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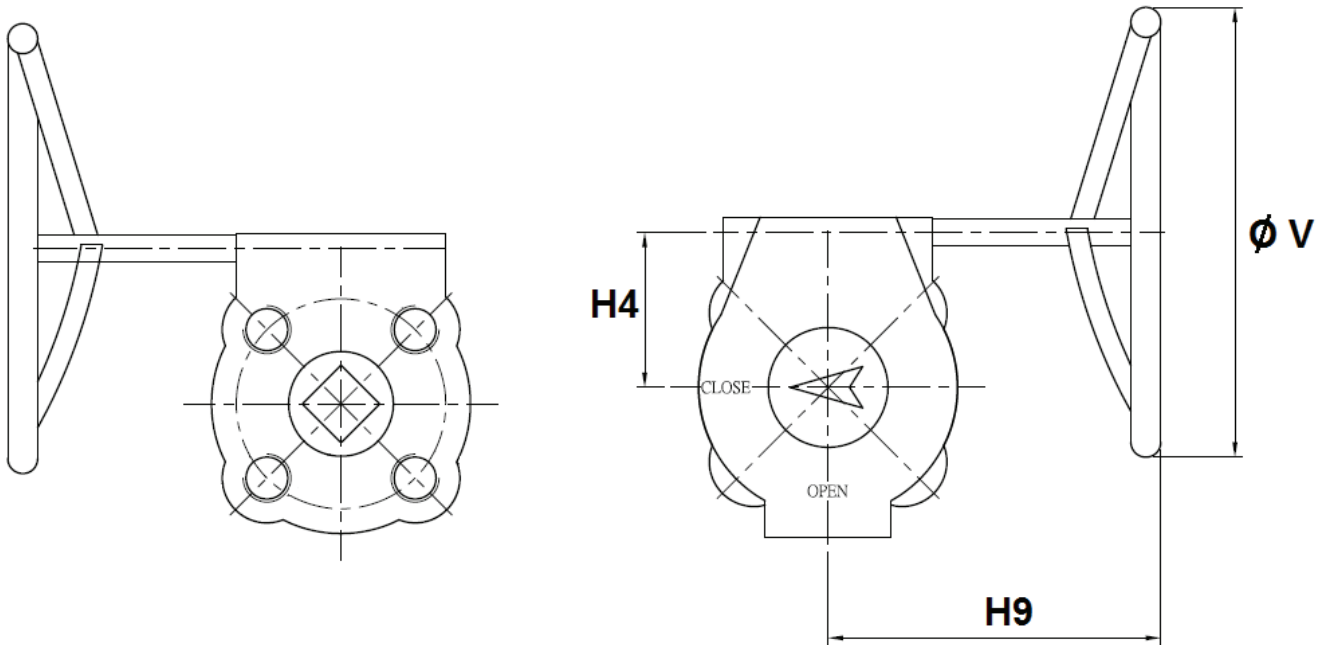
SIZE DN 250 - 300 (in mm) :

DN 250

DN 300


Ref.	DN	250	300
762 / 763	Ø P	250	300
	L	450	500
	Ø V	300	400
	H	260	293
	H1	393	193
	H2	85.5	-
	Weight (in Kg)	157	176.5

**2 PIECES BALL VALVES FLANGED ISO PN 16
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GEARBOX SIZE (in mm) :

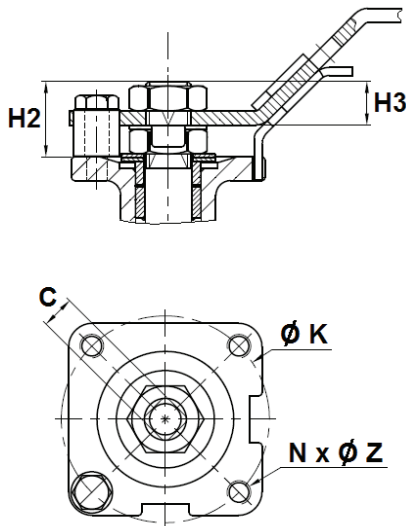


DN	150	200
H4	63	78
H9	238	226
Ø V	300	300
Weight (Kg)	12.5	15
Ref.	9830296	9830297

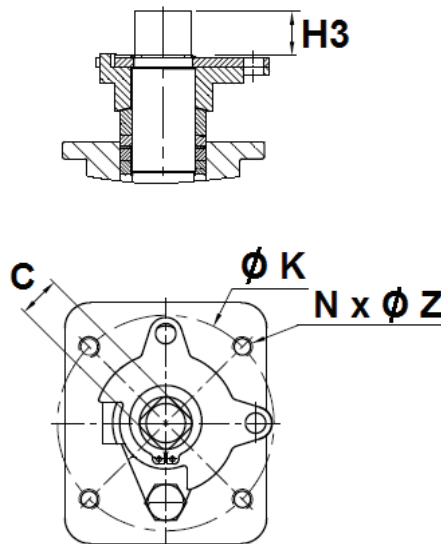
**2 PIECES BALL VALVES FLANGED ISO PN 16
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ISO MOUNTING PAD AND STEM SIZE (in mm) :

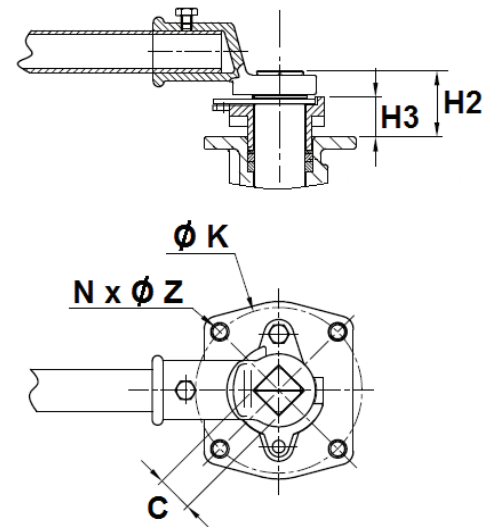
DN 15 – 50



DN 65 – 100



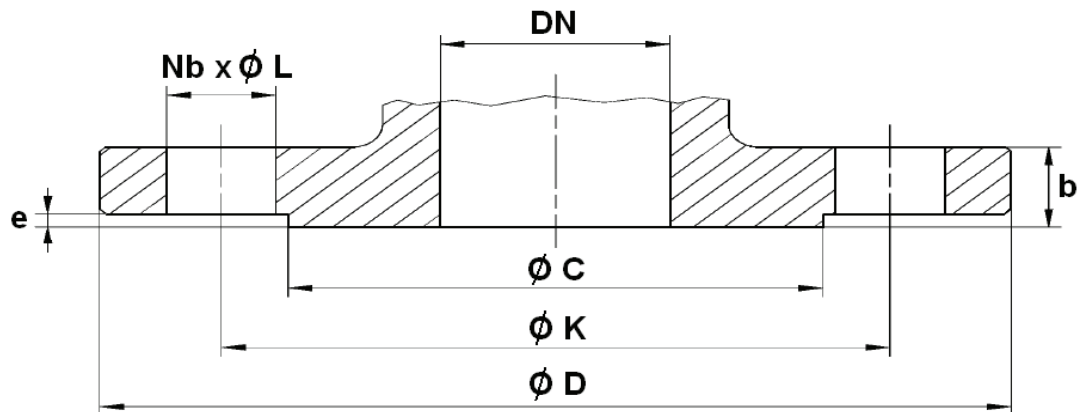
DN 125 - 200



Ref.	DN	15	20	25	32	40	50	65	80	100	125	150	200
762 – 763	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	-	-	-	52	50	85.5
H3	8.5	8.5	12	12	14	14	27	27	27	32	31	30	

**2 PIECES BALL VALVES FLANGED ISO PN 16
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FLANGES SIZE (in mm) :



Ref.	DN	15	20	25	32	40	50	65
762 - 763	Ø C	45	58	68	78	88	102	122
	Ø D	95	105	115	140	150	165	185
	Ø K	65	75	85	100	110	125	145
	Nb x Ø L	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	4 x 18	4 x 18
	b	16	18	18	18	18	20	18
	e	2	2	2	2	3	3	3

Ref.	DN	80	100	125	150	200	250	300
762 - 763	Ø C	138	158	188	212	268	320	378
	Ø D	200	220	250	285	340	405	460
	Ø K	160	180	210	240	295	355	410
	Nb x Ø L	8 x 18	8 x 18	8 x 18	8 x 22	12 x 22	12 x 26	12 x 26
	b	20	20	22	22	24	26	28
	e	3	3	3	3	3	3	4

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FLOW COEFFICIENT Kvs (M3 / h) :

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kvs (m3/h)	31	58	86	139	229	415	698	983	1686	2824	3953	7225	7731	17994

TORQUE VALUES (in Nm without safety coefficient) :

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Torque (Nm)	8	10	12	20	30	40	60	90	130	160	250	500	750	1300

GEARBOX SPECIFICATIONS :

DN	150	200
Ref.	9830296	9830297
Ratio factor	30 :1	50 :1
Output torque (Nm)	700	1200

STANDARDS :

- Fabrication according to ISO 9001 : 2008
- DIRECTIVE 97/23/CE : CE N° 0035
Risk Category III Module H
- Construction according to EN 12516-1
- Tests according to API 598, table 6
- ISO PN16 R.F. flanges according to EN 1092-1 PN16
- ISO 5211 mounting pad
- Length according to EN 558 series 27 (DIN 3202 F4/F5)
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 & 22 (optional marking)
- Fire safe according to API 607 5° edition up to DN100, 4° edition from DN125 to DN150

**2 PIECES BALL VALVES FLANGED ISO PN 16
WITH LIMIT SWITCH BOX****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

2 PIECES BALL VALVES FLANGED ISO PN 16 WITH LIMIT SWITCH BOX

The SP series limit switch box provides a compact design and the most economical solution for both visual and remote electrical indication of rotary valve/actuator position. Integral NAMUR mounting legs provide additional cost saving by eliminating the need for a separate mounting bracket. The switch options available make the SP series suitable for use in IP65 weather proof applications and also intrinsically safe applications.

(WEATHER PROOF)

IP65 and Nema4 and 4X weather proof enclosure.

(COMPACT DESIGN)

SP switchboxes have been engineered in order to reduce overall dimensions. Total height from actuator pinion is 76 mm with a standard SP unit. It is ideal for use on all size actuators including very small units.

(VISUAL INDICATOR)

SP switchboxes mounts as standard a flat visual position indicator in order to see real valve position; on request we can also supply the SP limit switch box complete of 3D position indicator in order to see the real valve position both looking from top and from side.

(INTEGRAL MOUNTING BRACKET)

SP housing incorporates integral mounting legs and drive shaft that conform to NAMUR VDI/VDE3845 international dimension standards. Using a single adjustable sliding bracket it is possible to fit SP switchboxes onto any VDI/VDE3845 actuator. Both 30x80 and 30x130 top pattern and 20mm, 30mm, 40mm and 50 mm pinion height can be matched with a single bracket. This maximizes interchangeability plus reduces cost by eliminating need for bracket and coupler.

(CORROSION RESISTANT)

SP switchboxes are made of high tech reinforced polymers. UV resistant and VO polycarbonate cover and VO reinforced PPE body provide a very high mechanical resistance. The resin construction makes this unit ideal for use in hostile environments. The housing also incorporates captive cover screws.

(HIGH THICKNESS CABLE ENTRY)

SP switch box is provided with a M20x1.5 [1/2" npt/f or PG13.5 as option] cable entry. SP cable entry has a 15 mm [1/2"] thickness thread. This feature prevent housing damage due to very heavy cables or cable glands. No back nut are required to fit cable glands.

(HIGH RESOLUTION SPLINED CAMS)

Easy-set cams are splined and independently adjustable. This design offers tool free calibration and positive vibration resistant engagement.

(SWITCH OPTIONS)

Mechanical switches are available for general purpose applications. Gold plated mechanical switches or proximity PNP are available for low current applications. Inductive proximity NAMUR switch option provides an effective choice for intrinsically safe applications ATEX certificate (consult SIP bulletin).



FLAT INDICATOR



3D INDICATOR

(MATERIALS)

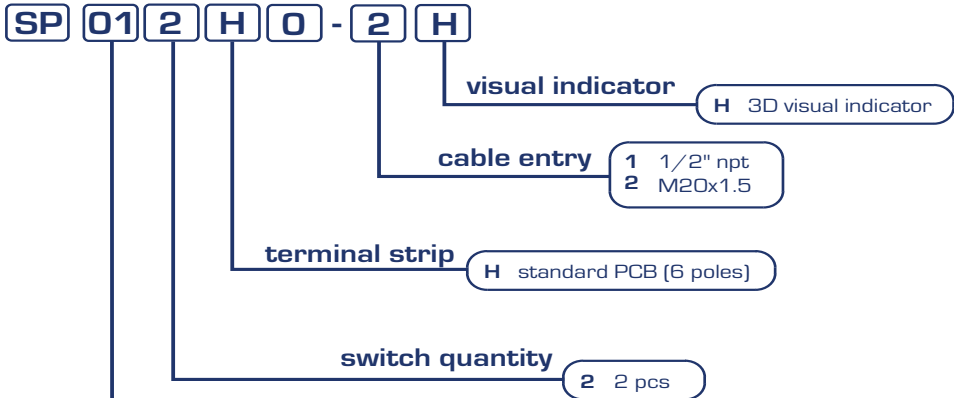
Body : VO reinforced Polyphenil Ether
Cover : UV resistant and VO polycarbonate
Shaft : reinforced techno polymer
Fasteners : stainless steel

(RATINGS)

Temperature range: standard -15°C + 80°C
Temp. range may vary due to switch range
Electrical: according to switch option
Consult "BO2003-E-SWITCH_DATA" bulletin for switch rating

2 PIECES BALL VALVES FLANGED ISO PN 16 WITH LIMIT SWITCH BOX

[STANDARD OPTIONS AVAILABLE - Nomenclature]



NOTES

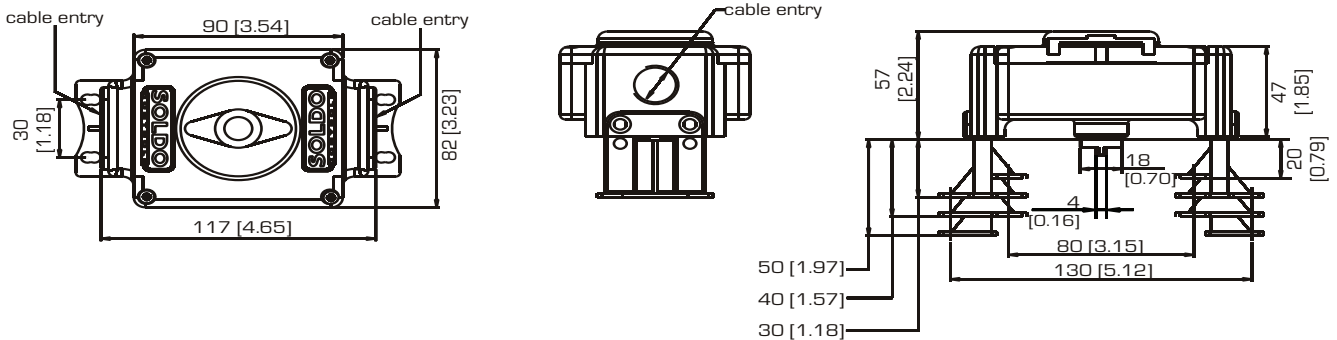
Terminal strip options depend on switch type.

* Namur EEx ia proximity switches available on SIP series limit switch box ATEX certificate (consult SIP bulletin)

** Resistive loads when not specified.

	switch type *	rating **	max q.ty installed
01	electromech SPDT silver plated contacts	max 5A@250VAC - 3A@24VDC min 50mA@250VAC - 50mA@24VDC	2
03	electromech SPDT gold plated contacts	max 3A@250VAC - 1A@24VDC min 5mA@250VAC - 1mA@24VDC	2
73	proximity PNP NO P+F NBB2 V3 E2	3 wire amplified, 10-30VDC, 100mA	2
75	proximity NO / NC programmable IFM IS5026	2 wire amplified, 5-36VDC, 200mA	2
83	proximity NO P+F NBB3 V3 Z4	2 wire amplified, 5-60VDC, 100mA	2
N1	magnetic proximity SPDT silver plated	max 250 VAC, 28 VDC, resistive load 5A, inductive load 4A	2
N2	magnetic proximity SPDT gold plated	max 250 VAC, 30 VDC, resistive load 1A, inductive load 0.5A	2
N3	magnetic proximity SPDT gold / bifurcated	max 250 VAC, 30 VDC, resistive load 1A, inductive load 0.5A	2
ASI	AS-i board interface	see AS-i LITE bulletin	

[DIMENSION WITH FLAT INDICATOR mm - inch]



[DIMENSION WITH 3D INDICATOR mm - inch]

