

2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE LONG PATTERN (ASME B16.10 TABLE 2-7) PTFE SEAT

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

Ball valve with firesafe certificate ISO 10497 and API 607 to reduce risks in case of fire.

Fugitive emission according to EN 15848-1 :2006 B Class and TA LUFT for an excellent tightness on the stem and to prevent external leakage.

PTFE seat for a temperature up to +230°C.

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

Handling possible with locking device, lockable gearbox, oval handwheel or stem extension.

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



Certificate
3.1



JC
VALVES



PED/2014/68/UE
BUREAU VERITAS
Certification



NACE MR01-75

Size : DN15 to DN300 (NPS 1/2" to 12")

Connection : Flanges Class 300 PN50 RF

Min Temperature : -29°C

Max Temperature : +230°C

Max Pressure : 50 Bars

Specifications : PTFE seat

ISO 5211 mounting pad

Anti blow-out stem, full bore

Fire safe ISO 10497 : 2004, API 607 5th, BS

6755 Part 2 and API 6FA

Materials : Carbon steel ASTM A216 WCB

*the installation defects and wear defects are not covered by the guarantee

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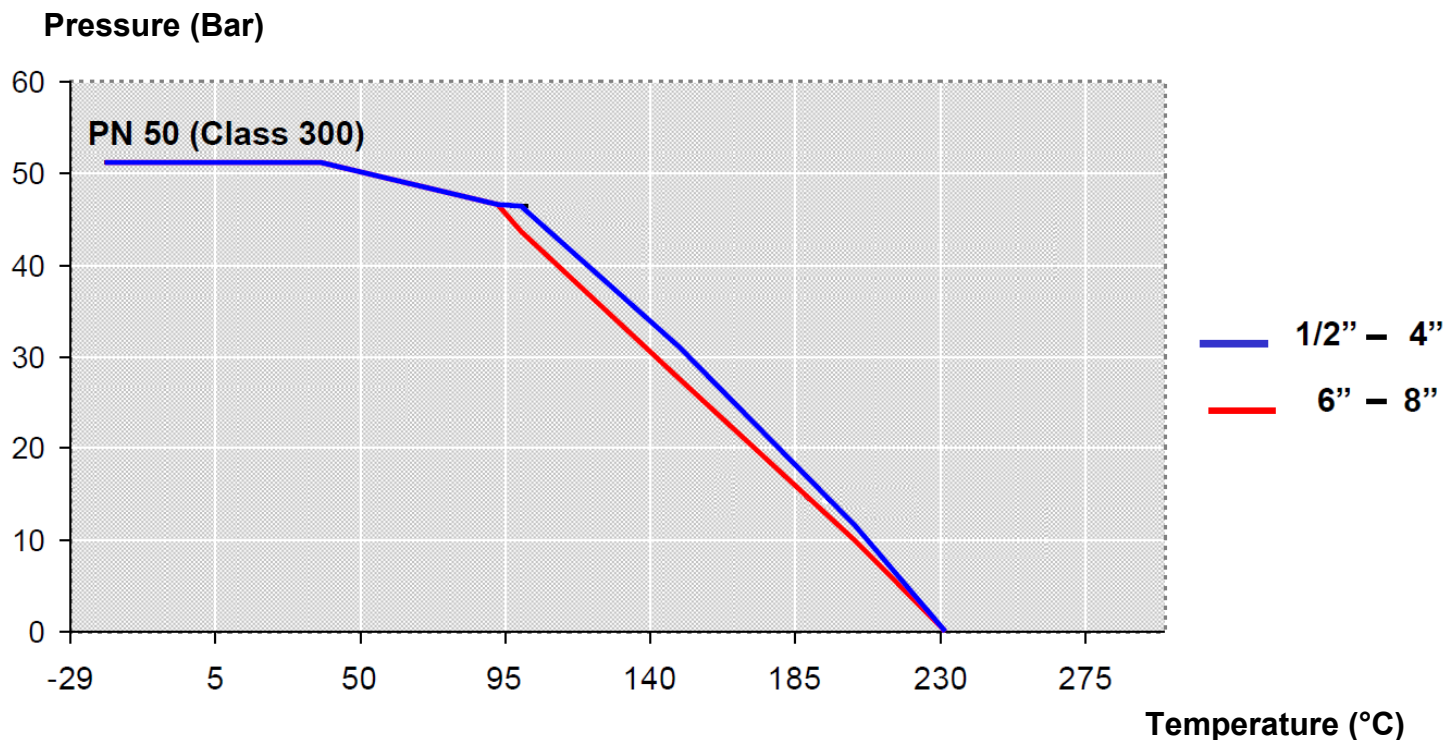
SPECIFICATIONS :

- Full bore
- Anti blow-out stem
- PTFE seat
- Locking device on request
- ISO 5211 mounting pad
- 2 pieces type (Split body)
- Class 300 PN50 Flanges R.F.
- Antistatic device
- Fire safe ISO 10497 : 2004, API 607 5th, BS 6755 Part.2 and API 6FA
- Fugitive emissions EN 15848-1 : 2006 and TA LUFT VDI 2440
- Graphite packing + FKM O ring on stem
- With exhaust hole in the ball (located in the top of the ball to avoid overpressure in it)
- Trunnion mounted hollow ball over from DN250 (10") to DN300 (12")
- Painting color RAL 5009, 15-50μ thickness

USE :

- Chemical industries, petrochemical industries, hydraulic installation, heating, water distribution, compressed air
- Min and max Temperature Ts : -29°C to + 230°C
- Max Pressure Ps : 50 bars (see graph)
- Vacuum 10^{-2} torr
- Compressed air (ambient temperature) : 50 bars maximum
- Steam : 12 bars maximum

PRESSURE / TEMPERATURE GRAPH (STEAM EXCLUDED) :



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FLOW COEFFICIENT Kvs (in m³ / h) :

NPS (")	1/2"	3/4"	1"	1"1/2	2"	3"	4"	6"	8"	10"	12"
DN	15	20	25	40	50	80	100	150	200	250	300
Kvs (m ³ / h)	20	40	75	170	270	1000	1650	4200	9000	15000	20800

TORQUE VALUE (in Nm without safety coefficient) at 50 bars :

NPS (")	DN	BTO*	RTO	ETO	BTC	RTC	ETC*	MAST Stem A479 F316	MAST Stem A182 F51
1/2"	15	12	6	7	9	6	10	26	57
3/4"	20	16	8	10	12	8	13	26	57
1"	25	20	10	12	15	10	16	26	57
1"1/2	40	37	19	22	28	19	30	85	185
2"	50	55	28	33	41	28	44	85	185
3"	80	128	64	77	96	64	102	246	539
4"	100	238	119	143	179	119	190	305	668
6"	150	492	246	295	369	246	394	974	2131
8"	200	1100	550	660	825	550	880	1387	3034
10"	250	1480	740	888	1110	740	1184	1387	3034
12"	300	1900	950	1140	1425	950	1520	4343	9501

RANGE :

- Carbon steel body ball valve with handle flanged Class 300 PN50 **Ref. 530AIT** from DN 15 to DN 150 (NPS 1/2" to 6")
- Carbon steel body ball valve with free stem Class 300 PN50 **Ref. 1530AIT** from DN200 to 300 (NPS 8" to 12")

CONNECTION :

- Class 300 PN50 R.F. Flanges

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ACCESSORIES :



- Reinforced locking device

DN (mm)	15	20	25	40	50	80	100	150	200
NPS (")	1/2"	3/4"	1"	1"1/2	2"	3"	4"	6"	8"
Ref.	9830120		9830121	9830123		9830125	9830126	9830128	9830129

- Stainless steel handle

DN (mm)	15	20	25	40	50	80	100	150
NPS (")	1/2"	3/4"	1"	1"1/2	2"	3"	4"	6"
Ref.	9830513			9830515		9830517	9830518	9830520

- Stainless steel oval handwheel

DN (mm)	15	20	25	40	50
NPS (")	1/2"	3/4"	1"	1"1/2	2"
Ref.	9830575	9830578		9830577	

- Lockable gearbox

DN (mm)	150	200	250	300
NPS (")	6"	8"	10"	12"
Ref.	9830592	9830595	9830596	9830597

- Single stainless steel stem extension 100 mm (can't be used with oval handwheel)

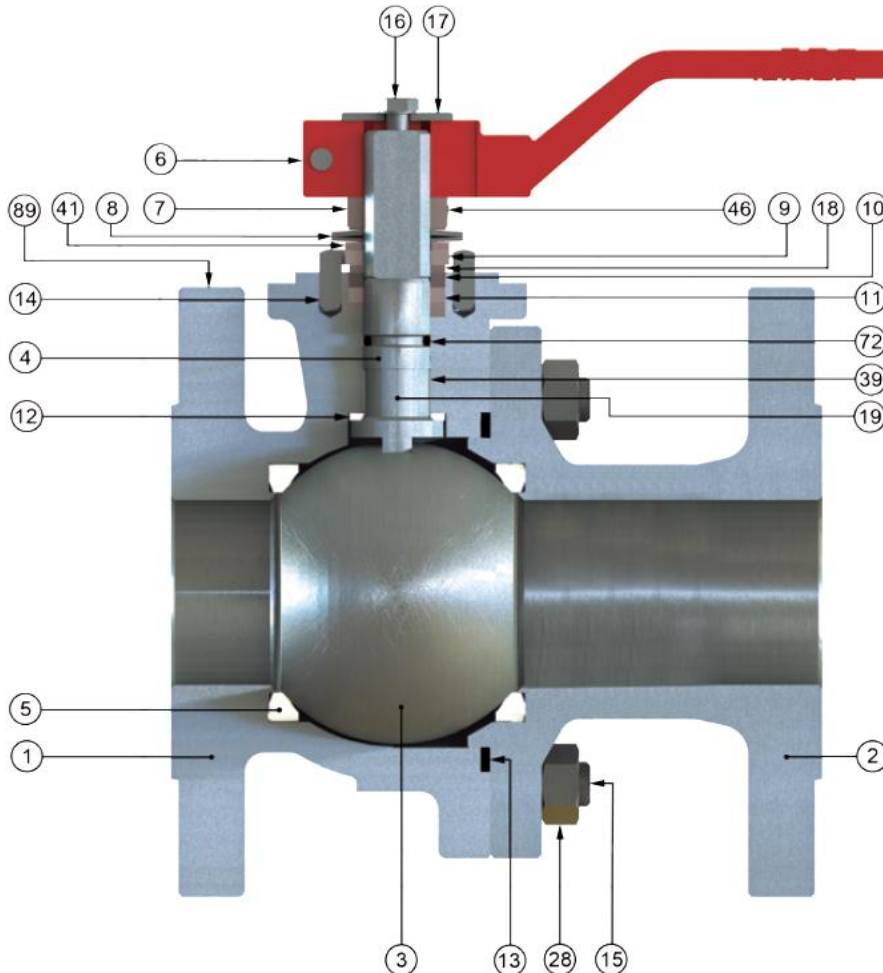
DN (mm)	15	20	25	40	50	80	100	150
NPS (")	1/2"	3/4"	1"	1"1/2	2"	3"	4"	6"
Ref. JC	9810615			9810617		9810619	9810620	9810622

- Stainless steel stem extension 100 mm with ISO plate

DN (mm)	15	20	25	40	50	80	100	150	200
NPS (")	1/2"	3/4"	1"	1"1/2	2"	3"	4"	6"	8"
Ref. SF	JCRISO015020		JCRISO025	JCRISO040050		JCRISO080	JCRISO100	JCVSSBI150	JCVSSBI200

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VALVE MATERIALS DN15-150 (NPS 1/2" to 6") :



Repairability :



*Gaskets kit (Item 5, 11, 12, 13, 18, 46 and 72)	
DN15	9804600
DN20	9804601
DN25	9804602
DN32	9804603
DN40	9804604
DN50	9804605
DN65	9804606
DN80	9804607
DN100	9804708
DN150	9804710

(* : Included in gaskets kit)

Item	Designation	Materials
1	Body	ASTM A216 WCB
2	Ends	
3	Ball DN15-25	ASTM A479 Tp.316
	Ball DN 32-200	Inox ASTM A 351 CF8M
4	Stem	ASTM A479 Tp.316 or Duplex ASTM A182 F51
5*	Seat	PTFE
6	Handle	Carbon Steel A216 WCB
7	Packing nut	Carbon Steel
8	Elastic ring	Carbon Steel
9	Stop washer	Carbon Steel
10	Packing gland	AISI 303
11*	Packing	Graphite
12*	Gasket	PTFE filled with 25% glass

Item	Designation	Materials
13*	Body spiral seat	AISI 316L + PTFE + Graphite
14	Pin	Carbon Steel
15	Screw (stud DN32-100)	A193 Gr. B7M zinc dichr .
16	Handle screw	DIN 933 A2-70
17	Washer	Zinc plated carbon steel
18*	Thrust washer	PTFE filled with 25% glass
19	Antistatic device	Stainless steel
28	Nut (DN32-100)	A 194 Gr. 2HM zinc dichr .
39	Stem bushing (DN25-200)	PTFE filled with 25% glass
41	Spacer (DN40-200)	Carbon Steel
46*	Washer	AISI 304
72*	O ring	FKM
89	ID plate	Stainless steel

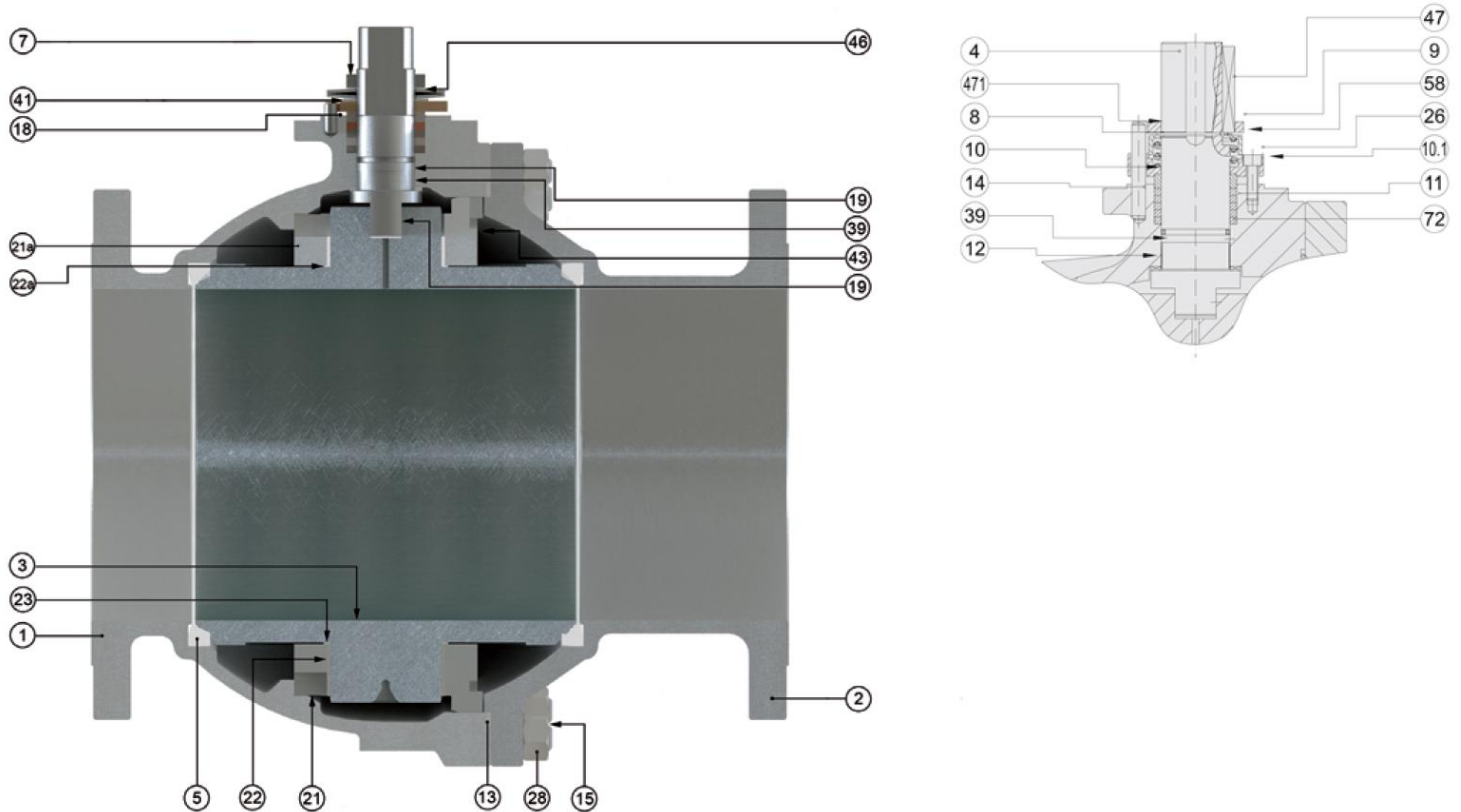
Sferaco 90 rue du Ruisseau 38297 St Quentin Fallavier Tel: + 33 (0) 474.94.15.90 Fax: + 33 (0) 474.95.62.08 Internet: www.sferaco.com E-mail : info@sferaco.fr

Date : 12/25

Rev.05

**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
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VALVE MATERIALS DN 200-300 (NPS 8" to 12") :



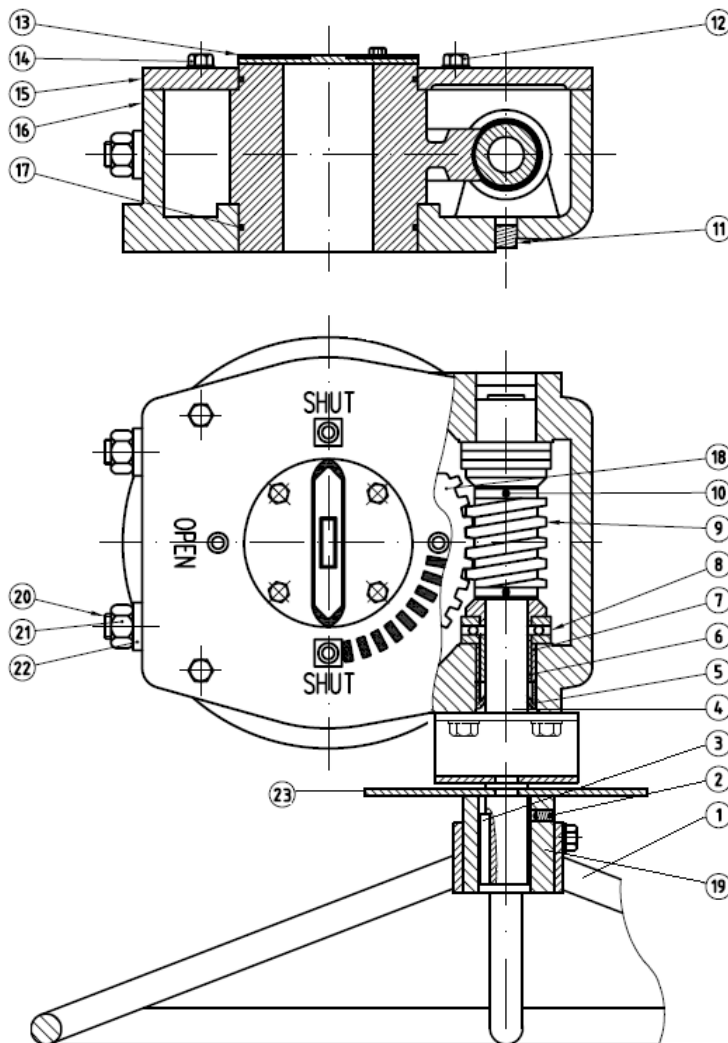
(* : Included in gaskets kit)

Item	Designation	Materials
1	Body	ASTM A216 WCB
2	Ends	
3	Ball	ASTM A 351 CF8M
4	Stem	ASTM A479 Tp.316 or Duplex ASTM A182 F51
5*	Seat	PTFE
7	Packing gland	Ductile iron
8	Elastic washer	Carbon steel
9	Pin	
10	Gland	
10.1	Ring	AISI 303
11*	Packing	PTFE
12*	Gasket	PTFE filled with 25% glass
13*	Body seat	AISI 316L +PTFE+ Graphite
14	Stop pin	Carbon steel
15	Stud	A193 Gr. B7M

Item	Designation	Materials
18*	Bushing	PTFE filled with 25% glass
19	Antistatic device	Stainless steel
21/21a	Ball trunnion	AISI 316
22/22a	Trunnion bearing	PTFE + 50% Stainless steel
23	Bearing	PTFE
26	Bolt	DIN 912 8.8 zinc plated
28	Nut (only for DN250)	A 194 Gr. 2HM
39	Stem bushing	PTFE + 50% Stainless steel
41	Spacer	Carbon steel
43-47	Key	AISI 316
46*	Locking washer	AISI 304
58	Spring protection	Carbon steel
72*	O ring	FKM
89	ID plate	Stainless steel
471	Retainer	DIN 933 A2-70

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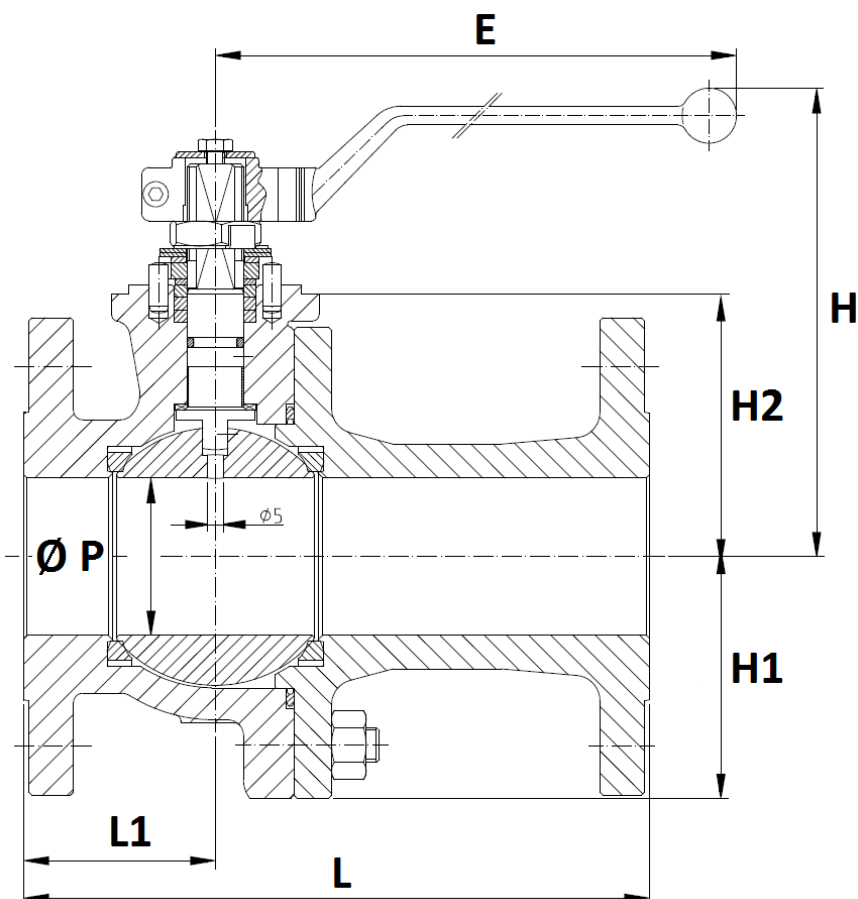
LOCKABLE GEARBOX MATERIALS :



Item	Designation	Materials
1	Handwheel	Carbon steel
2	Screw	
3	Stem key	
4	Input shaft	AISI 1045
5	Oil seal	Rubber
6	Bearing	Cu Base Alloy
7	Oil bearing	
8	Thrust bearing	Carbon steel
9	Worm	AISI 1045
10	Pin	Carbon steel
11	Plug	
12	Screw	Cast iron
13	Indicator plate	
14	Screw	Carbon steel
15	Cover	
16	Housing	Rubber
17	O ring	
18	Worm gear	Ductile iron
19	Nut	Carbon steel
20	Stop screw	
21	Nut	
22	Washer	
23	Locking device	

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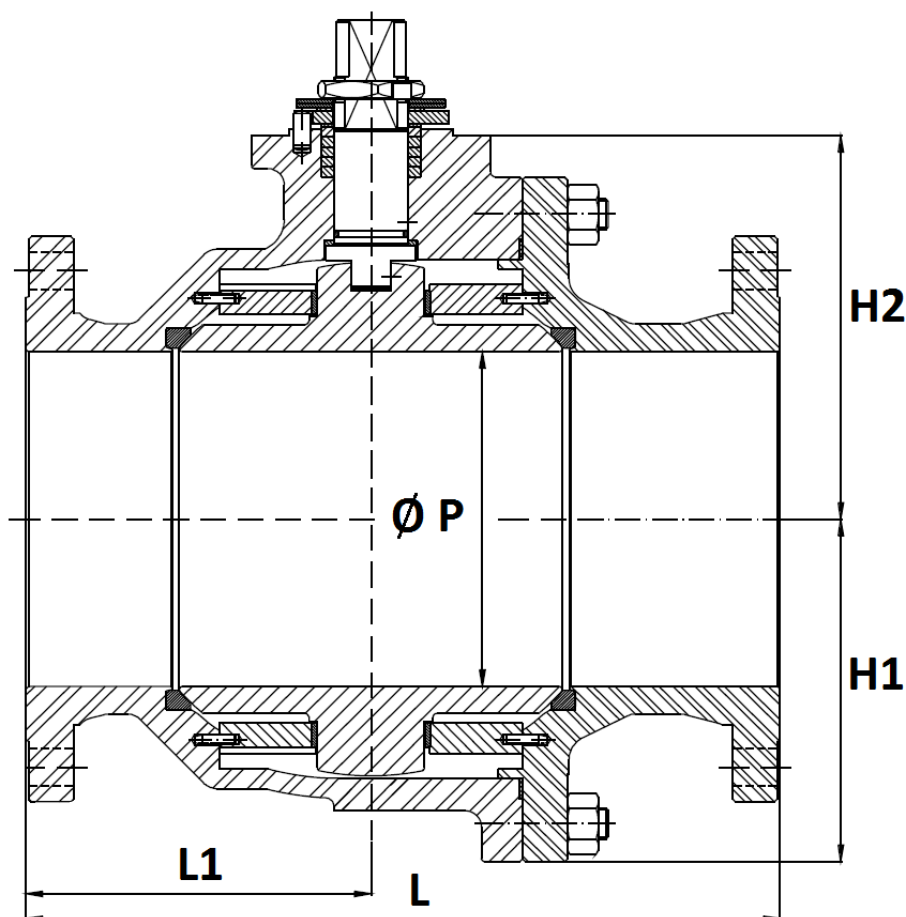
VALVE SIZE DN15-150 (NPS 1/2" to 6") (in mm) :



NPS (")	1/2"	3/4"	1"	1"1/2	2"	3"	4"	6"
DN	15	20	25	40	50	80	100	150
Ø P	15	20	25	40	50	80	100	151
L	140	152	165	190	216	282	305	403
L1	60	65	70	80	83	118	133	160
E	164	164	164	213	213	445	495	698
H	111	118	130	148	155	207	232	299
H1	-	-	-	-	-	-	-	168
H2	46	53	58	76	83.5	111	133	183
Weight (Kg)	3	4	5	11	14	32	52	94
Ref.	530AIT015	530AIT020	530AIT025	530AIT040	530AIT050	530AIT080	530AIT100	530AIT150

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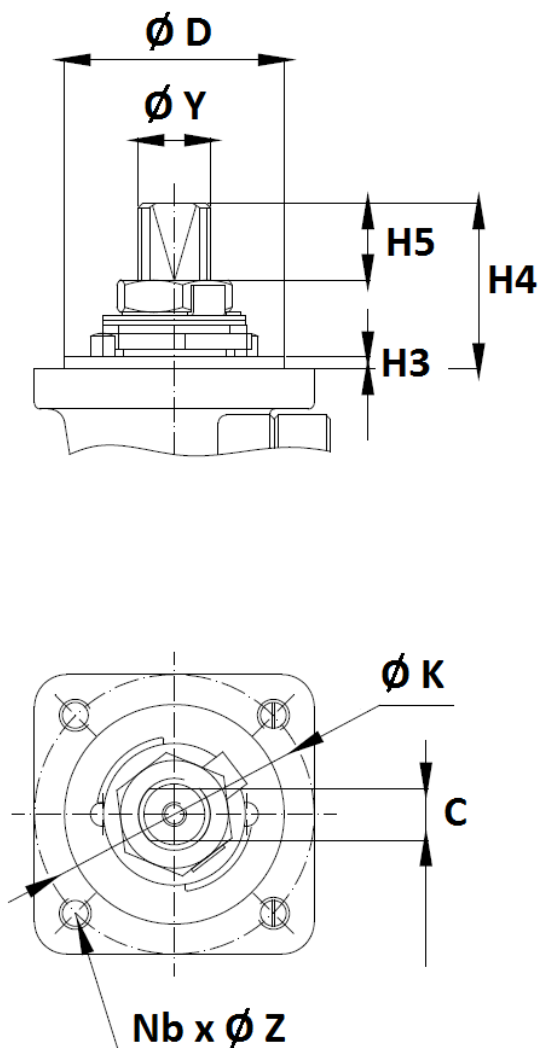
VALVE SIZE DN 200-300 (NPS 8" to 12") (in mm) :



NPS (")	8"	10"	12"
DN	200	250	300
Ø P	203	254	305
L	502	568	648
L1	239	225	315
H1	208	253	300
H2	233	256	310
Weight (in Kg)	189	301	520
Ref.	530AIT200	530AIT250	530AIT300

**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
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ISO MOUNTING PAD AND STEM SIZE DN15-150, NPS 1/2" to 6" (in mm) :

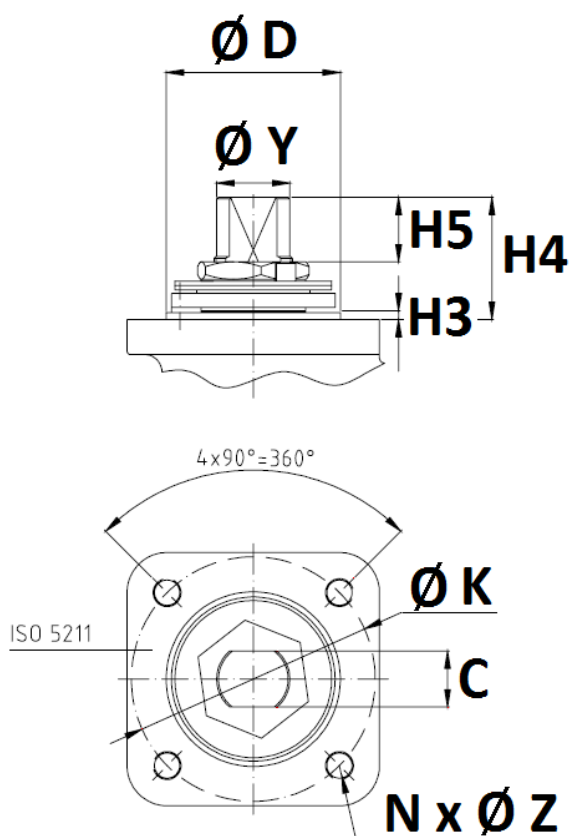


NPS (")	1/2"	3/4"	1"	1"1/2	2"	3"	4"	6"
DN	15	20	25	40	50	80	100	150
H3	1.5			3				
H4	11.2	14.7	22.7	41.5	41.5	44.5	56.5	68
H5	5	8.5	9.5	18.3	18.3	18.6	27.8	37.1
C	9	9	9	13	13	18	20	29
Ø Y	M12x1.5			M18x1.5		M25x1.5	M28x1.5	M40x2
Ø D	35			55		70		85
Ø K	50			70		102		125
ISO	F05			F07		F10		F12
N x Ø Z	4 x M6			4 x M8		4 x M10		4 x M12

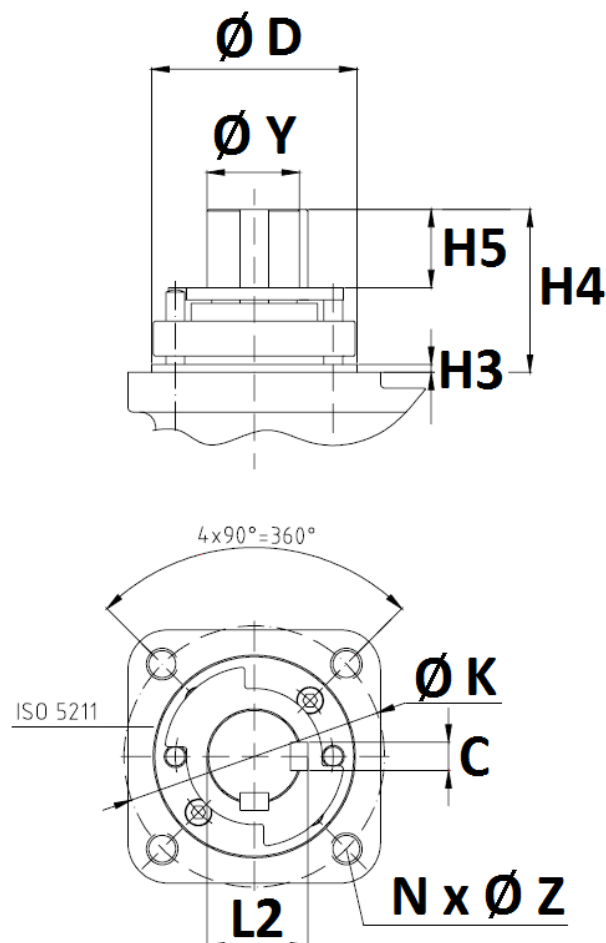
**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
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ISO MOUNTING PAD AND STEM SIZE DN200-300 NPS 8" to 12" (in mm) :

DN200-250 (8"-10")



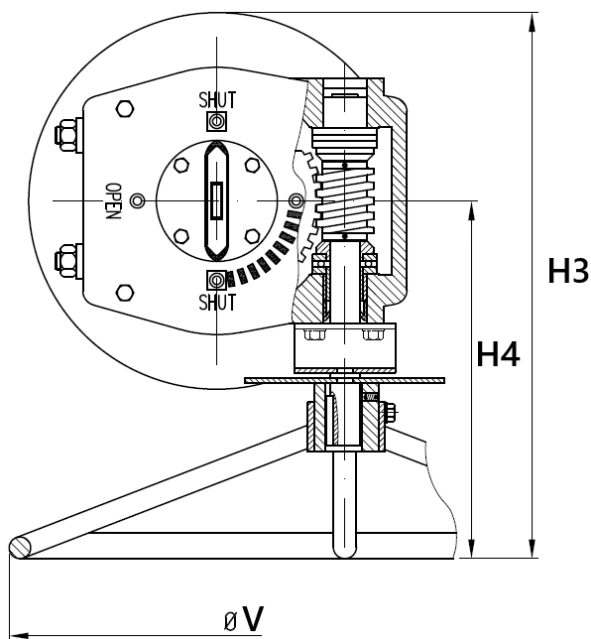
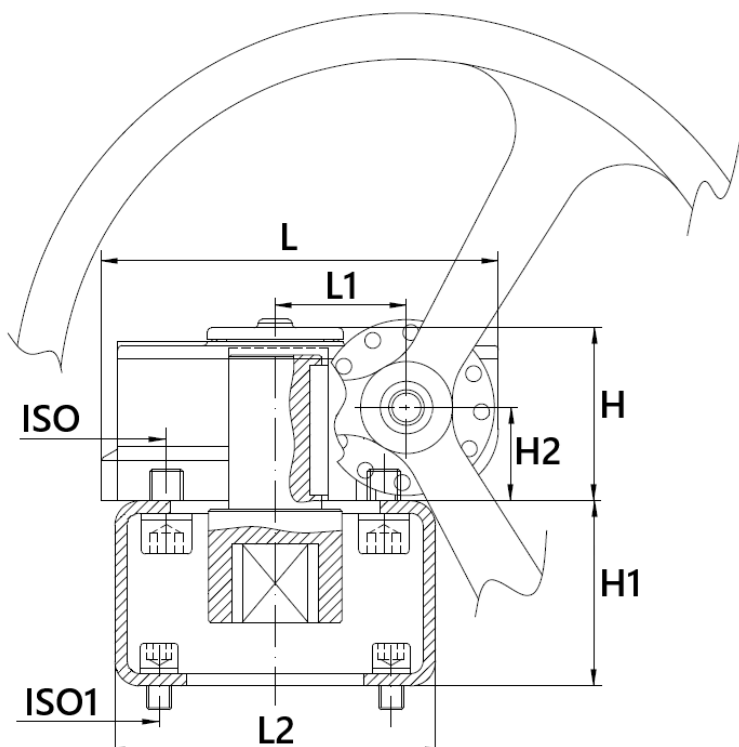
DN300 (12")



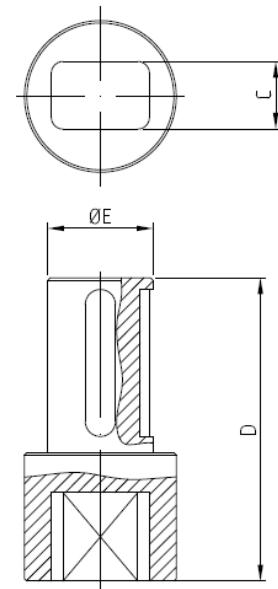
NPS (")	8"	10"	12"
DN	200	250	300
H3	4	4	5
H4	72	72	103
H5	36.5	36.5	49.4
L2	-	-	64.2
C	32	32	18
Ø Y	M45x2	M45x2	Ø60
Ø D	100	100	130
Ø K	140	140	165
ISO	F14	F14	F16
N x Ø Z	4 x M16	4 x M16	4 x M20

**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
LONG PATTERN (ASME B16.10 TABLE 2-7) PTFE SEAT**

LOCKABLE GEARBOX SIZE DN150-200 (in mm) :



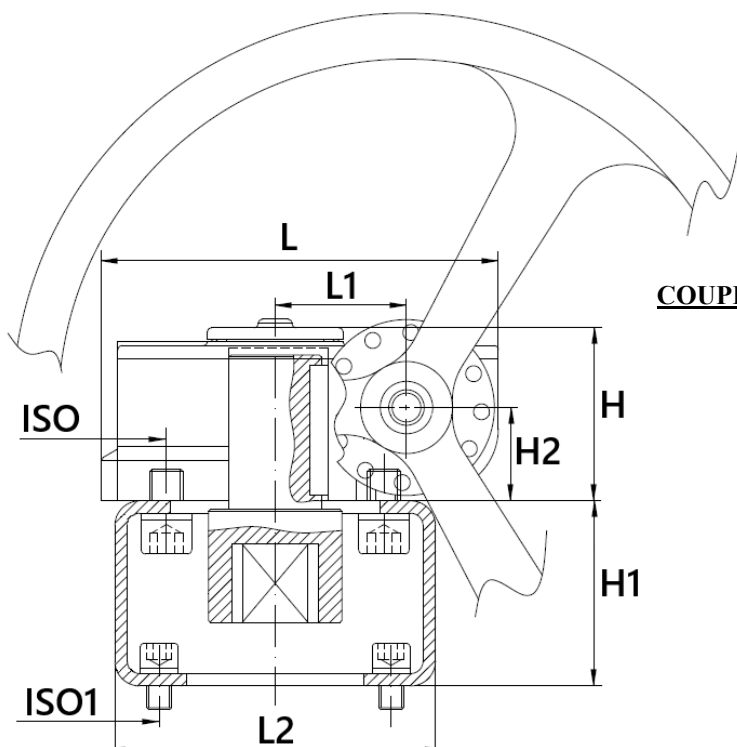
COUPLING :



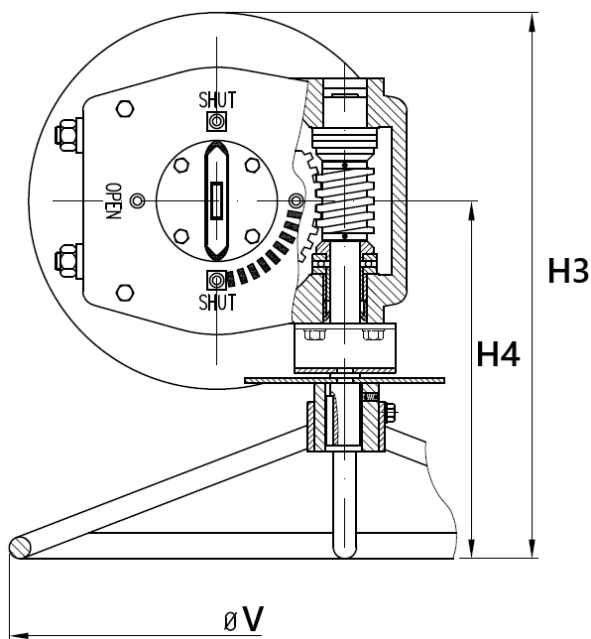
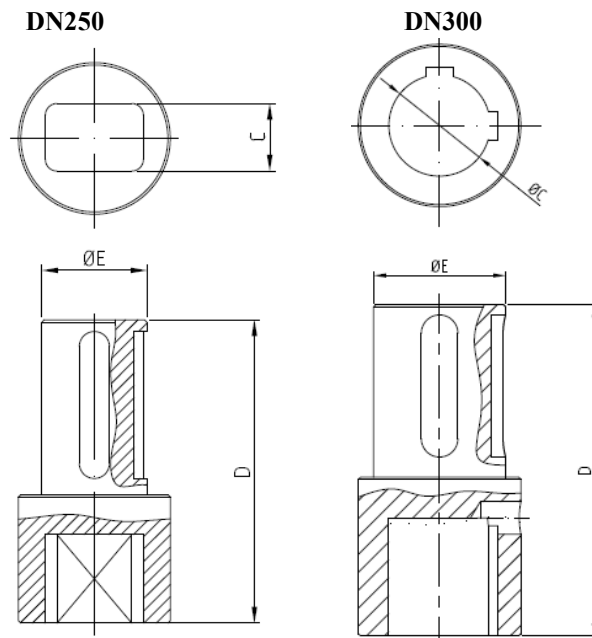
PN	Class 300 PN50	
NPS (")	6"	8"
DN (mm)	150	200
H	102	105
H1	90	
H2	56	50
H3	365	480
H4	255	345
L	217	242
L1	77.5	90
L2	156	
Ø V	465	600
ISO	F14	
ISO1	F12	F14
C	29	32
D	130	127
Ø E	45	65
Weight (in Kg)	22.4	28.5
Torque (Nm)	1200	
Ref.	9830592	9830595

**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
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LOCKABLE GEARBOX SIZE DN250-300 (in mm) :



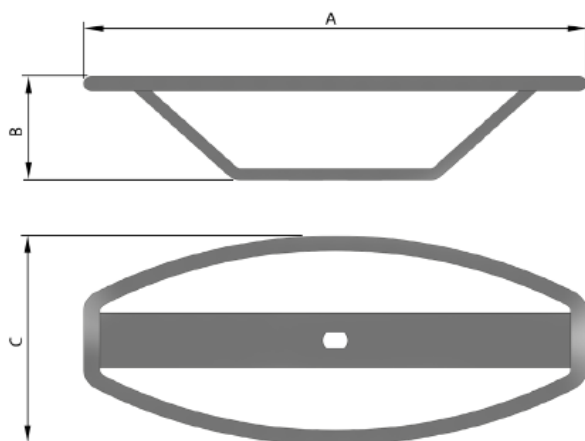
COUPLING :



PN	Class 300 PN50	
NPS (")	10"	12"
DN (mm)	250	300
H	105	107
H1	90	140
H2	50	53
H3	480	457
H4	345	280
L	242	308
L1	90	126
L2	156	200
Ø V	600	
ISO	F14	F16
ISO1		
C	32	Ø 60
D	127	175
Ø E	65	80
Weight (in Kg)	28.5	48.9
Torque (Nm)	2000	3300
Ref.	9830596	9830597

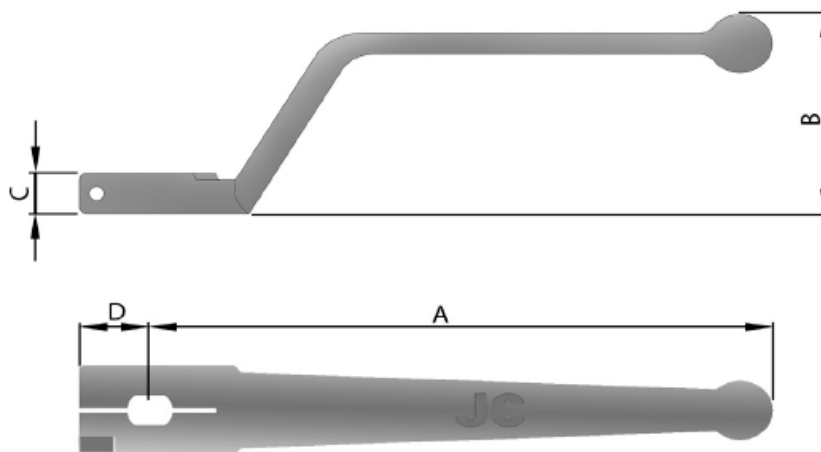
**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
LONG PATTERN (ASME B16.10 TABLE 2-7) PTFE SEAT**

OVAL HANDWHEEL SIZE DN15-50 NPS 1/2" to 2" (in mm) :



NPS (")	1/2"	3/4"	1"	1"1/2	2"
DN	15	20	25	40	50
A	160	160	160	216	216
B	54	54	54	57	57
C	75	75	75	100	100
Weight (Kg)	0.25	0.25	0.25	0.55	0.55
Ref.	9830575	9830578		9830577	

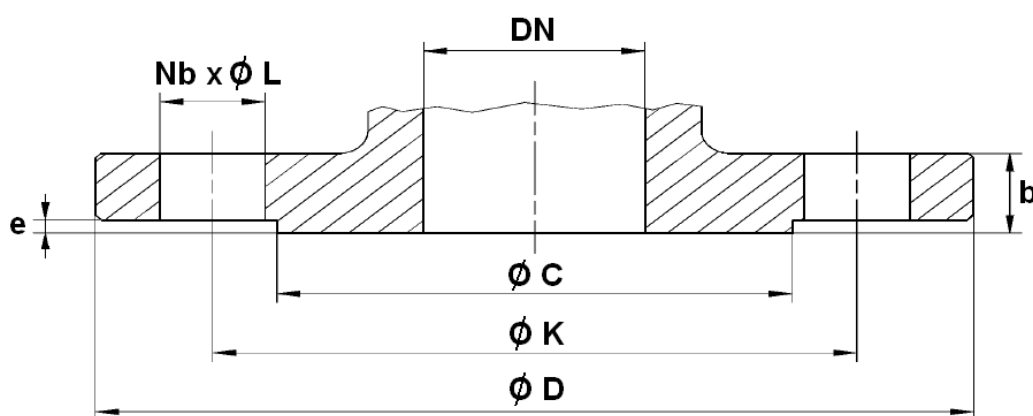
STAINLESS STEEL HANDLE SIZE DN15-200 NPS 1/2" to 8" (in mm) :



NPS (")	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"	5"	6"	8"
DN	15	20	25	32	40	50	65	80	100	125	150	200
A	163.5			300	212.5		347.5	445	495	697.5		867.5
B	58.5			45	48.5		46.5	70	70	77.5	84.5	84.5
C	12			16	21		20		29	30	40	
D	18.5			22	25.5			33		47		55
Weight (Kg)	0.2			0.3	0.53		0.63	1.52	1.85	2.95	3.4	4.6
Ref.	9830513			9830514	9830515		9830516	9830517	9830518	9830519	9830520	

**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
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FLANGES SIZE (in mm) :



NPS (")	1/2"	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12"
DN (mm)	15	20	25	40	50	80	100	150	200	250	300
Ø C	34.9	42.9	50.8	73	92.1	127	157.2	215.9	269.9	323.8	381
Ø D	95	115	125	155	165	210	255	320	380	445	520
Ø K	66.7	82.6	88.9	114.3	127	168.3	200	269.9	330.2	387.4	450.8
Nb x Ø L	4 x 15.9	4 x 19.1		4 x 22.2	8 x 19.1	8 x 22.2		12 x 22.2	12 x 25.4	16x28.6	16x31.8
b	14.3	15.9	17.5	20.7	22.3	28.6	31.8	36.6	41.2	47.7	50.9
e	1.6										

**2 PIECES CARBON STEEL BALL VALVE FLANGED CLASS 300 PN50 JC RANGE
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STANDARDS :

- Manufacturer certified ISO 9001:2015 and ISO 14001 : 2015
- DIRECTIVE 2014/68/EU : For liquids and gas of Group 1
 - DN15-25 : Article 4, §3 (SEP), no CE marking
 - DN40-100 : Risk Category II, CE 0056 marking
 - DN150 : Risk Category III, CE 0056 marking
- Certificate 3.1 on request
- Valve designing according to EN 1983 – ISO 17292, API 6D and ASME B16.34
- Body design according to ASME VIII Div.1
- Materials according to NACE MR 01-75
- Pressure Tests according to API 598
- Marking according to EN 19
- Fire safe according to ISO 10497 : 2004, API 607 5th, BS6755 Part 2, and API 6FA 1994
- Fugitive Emissions according to EN 15848-1 : 2006 B Class and TA LUFT VDI 2440
- SIL2 according to IEC/EN 61508, SIL 3 possible according to the type of installation
- Flanges R.F. type B1 Class 300 according to ASME B16.5
- Shell finishing quality MSS SP 55
- ISO 5211 mounting pad
- Length according to ASME B16.10 Table 2 Column 7 (EN 558 series 4 up to DN150)
- ATEX Group II Category 2 G/2Dc Zone 1 & 21 Zone 2 & 22 (optional marking) according to directive 2014/34/EU
- Russian certificate TRCU 10, TRCU 12 and TRCU 32 (EAC marking and declaration **on request**)

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.