



# Válvulas Industriales





**Válvulas Industriales**

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**Válvulas Industriales**

## **THE POWER OF EXPERIENCE**

CVA has built up more than thirty years of professional and business specialisation in the industrial valve sector. It is an organisation fully oriented towards customer satisfaction, and the experience acquired in supplying more than 3,000 users with very different needs and levels of requirements makes CVA a highly efficient and competitive specialised partner.



**Válvulas Industriales**

COMERCIAL DE VÁLVULAS Y ACCESORIOS



## THE STRENGTH OF THE ENGINEERING

The CVA's engineering department investigates and tests the valves at limit conditions to optimise their performance and to ensure that they are reliable and last as long as possible under operational conditions, qualities certified by the principal institutions and approved by companies providing a good representation of the industrial sector.



## THE DYNAMIC OF THE SERVICE

CVA's technical/sales team, with a high level of technical qualifications, co-operates closely with customers, from advice and provision of specific solutions to the design of whole projects.



## CAPACITY FOR RESPONSE

CVA guarantees to supply any valve, anywhere, as quickly as possible. More than 2,000m<sup>2</sup> of warehouses and 8,000 items in permanent stock ensure speed of delivery, maintaining safety stocks for each customer. In addition, CVA's latest generation computer network provides traceability and instant information in the course of each delivery.





FLOATING



METAL



TRUNNION



WAFER



MONOBLOCK



THREADED VALVES 2/3 PCS

## THE POWER OF THE RANGE

CVA has an extensive range of industrial valves for multiple sectors and uses. The availability of all basic systems with many alternatives and options allows CVA to offer a specific valve for every need and working condition; from the smallest (1/8") up to largest diameters (48") and from the lowest pressure (20 mBar) to the highest (720 Bar), in various materials: iron, carbon steel, stainless steel, bronze, brass, steel alloys...

## MANUFACTURERS

CVA has achieved important agreements with renowned manufacturers of high quality.

For this reason, we can offer a wide range of ball valves of a higher quality and worldwide reputed.

CVA has committed to quality and service with the aim to meet our customers satisfaction, at the time that we have built up an international reputation.

CVA is certified ISO 9001:2008. All ball valves that we commercialize follow well known quality assurance standards that currently require main industries.



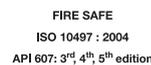
## CERTIFICATES

### QUALITY ASSURANCE SYSTEM

- ISO9001:2008 certified
- REPRO Certified

### MANUFACTURERS PRODUCTS APPROVALS

- API Q1 certified by the AMERICAN PETROLEUM INSTITUTE
- API 6D certified by the AMERICAN PETROLEUM INSTITUTE
- PED 97 / 23 / EC certified
- CE Marking (Module H, Category III) in accordance with PED 97 / 23 / EC
- Fire Safe ISO 10947 : 2004
- API 607 3rd., 4th. and 5th. Edition
- BS 6755 Part 2 certified by Lloyd's Register and SGS
- GOST "R" certified for Russian market
- SIL 3 (Safety integrity level)
- Atex
- EN 13774



## SECTORS OF APPLICATION



SECTORS OF APPLICATION	TYPE OF VALVES				
	Monobloc	2 pieces	3 pieces	Split Body	Trunnion
General Processes	●	●	●	●	●
Automotive	●	●	●	●	
Chemical	●	●	●	●	●
Food & Beverage		●			
Mining				●	
Nuclear					●
Onshore	●	●	●	●	●
Oil & Gas				●	●
Offshore				●	●
Petrochemical	●	●	●	●	●
Power generation				●	●
Pulp & Paper				●	●
Shipbuilding / Marine	●	●	●	●	
Waste incineration					●
HVAC- Climatization		●	●	●	
Refineries	●		●	●	●

● Specific Application    ● Optional Application

## GENERAL HIGHLIGHTS

- + Split, 3 pcs, monoblock or wafer design body
- + Full and reduced bore.
- + Flanged ACC, ANSI, EN-DIN or threaded BSP, NPT or welded ends Acc SW, BW or with nipples.
- + Castings on Cast Iron, Cast steel, Stainless steel, alloyed or brass.
- + Polished ball Ra 1 in soft seated valves (in metal seated valves is lapped); grinded stem Ra 1.6
- + Full traceability of shell components also ball and stem acc EN 10204 3.1 (upon request)
- + NACE MR01.75 wetting parts and bolting as Standard Fire safe as standard construction ISO10947 : 2004 and API 607 : 3rd, 4th, 5th edition.
- + Antistatic device integral with stem
- + Sizes from 1/8" to 24"
- + Rating from PN16 until ANSI2500 lbs
- + Floating or Trunnion mounted ball.
- + Soft or metal seats.
- + Fugitive emissions EN-ISO 15848-1
- + SIL 3 (safety integrity level 3)

Important Note: Some of these features may not be available in all types of valves showed in this catalog. Pls. contact our sales department.



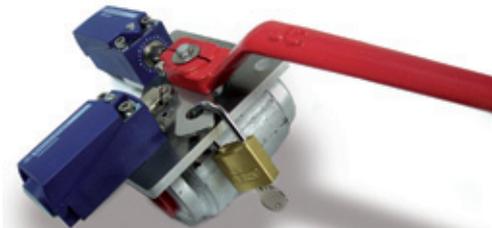
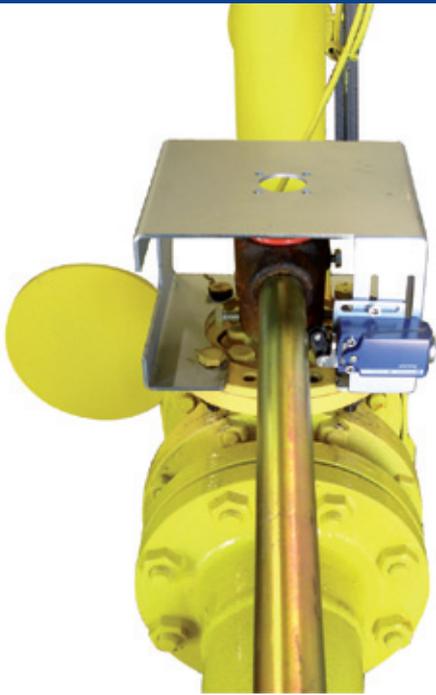
# SERVICES

## CAPACITY

The capacity of CVA is not just limited for the supply of all kinds of valves and accesories, but also it is capable to contribute a complement of services that, with total security, can be so useful in various existing requirements for new installations or as spares.

## SPECIFICATIONS

Accordingly to the specifications and instructions, Heating jackets can be adapted to most types of valves.



## ASSEMBLIES

Different kinds of special assemblies such as ellectric or pneumatic actuators (regulation and commisioning included), solenoid valves, regulation panels, limit switches, are jointly for the development of general drawings and operation diagrams.

## MODIFICATIONS

We modify the ends connections in relation to the requirement in a short-term delivery, (Flanged RTJ, NPT to SW, RF to BW, SW to RF, RF to FF, etc.)

## OPERATORS

Maneuvering accesories (Handwheels, gearboxes, chains, hydraulic, etc.)

## ELONGATIONS

Heat sinks, Stem elongations.



## COATINGS

Paint finishes and special coatings and supply of components in exotic materials and high pressure valves.

## REPAIR & ADVICE

We complement our support services for repair, modification and / or expansion of facilities with plant visits. External technical advice.



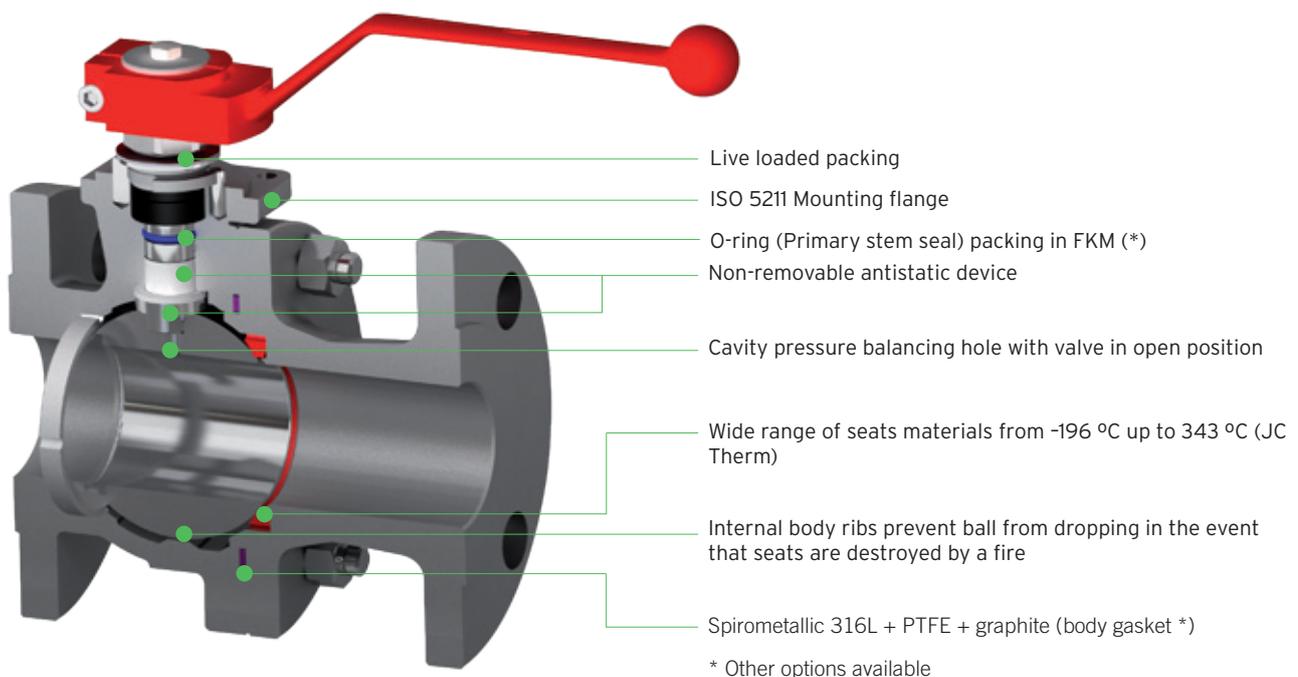


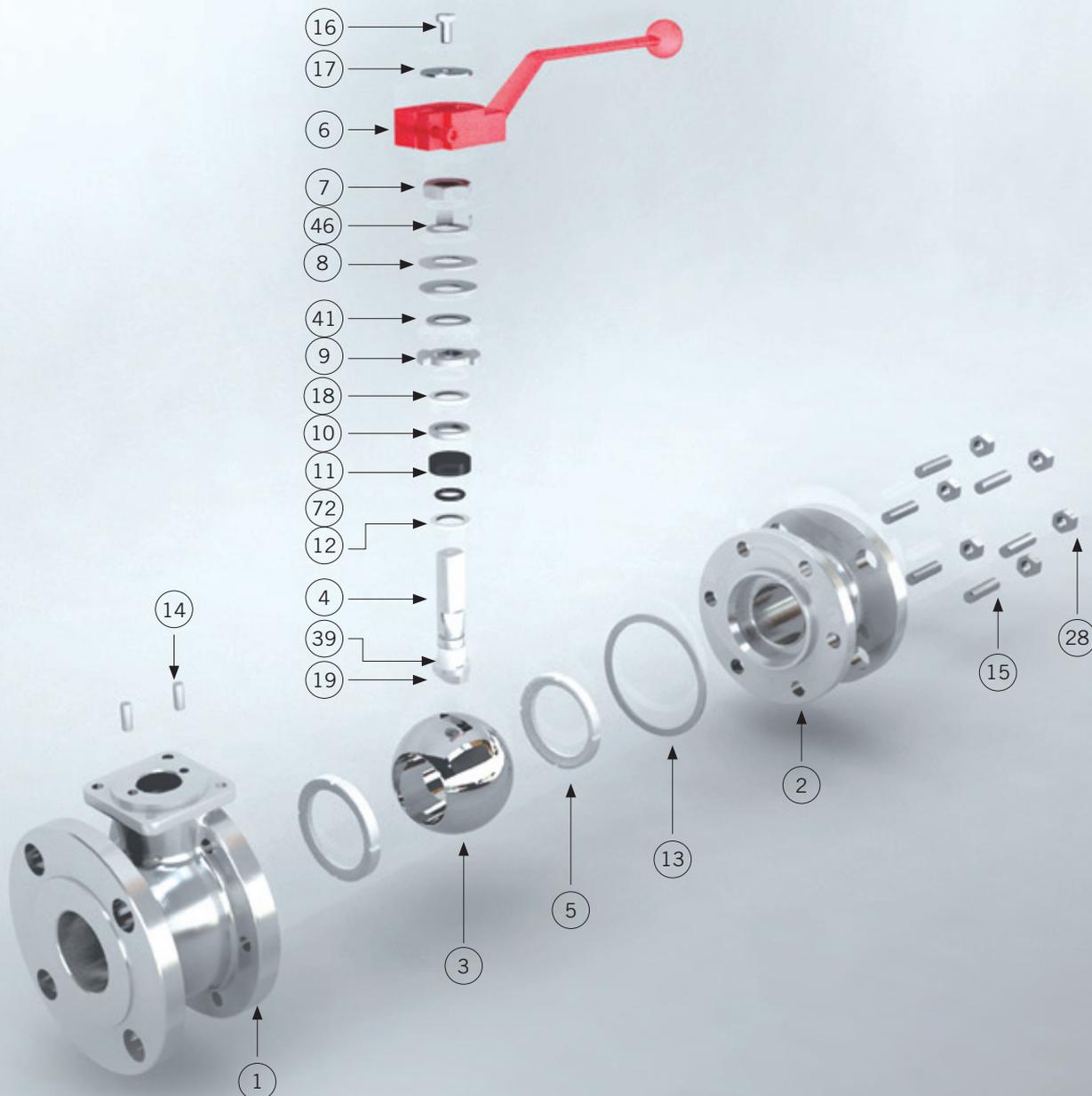
BALL VALVES | **FLOATING**  
2 WAY BALL VALVES

# FLOATING EN-DIN

DN 15 - DN 200 | PN 16 - PN 40

A floating ball valve is a valve with seats supported ball, that is pushed by upstream pressure towards the downstream seat to ensure sealing. The DN of the floating ball valves range is limited by the capability of the seats material to support the pressure, temperature and weight of the ball.





# Materials

EN-DIN

Item	Description	AIT	IIT
1	Body	1.0619	1.4408
2	Body connector	1.0619	1.4408
3	Ball	A 351 Gr. CF8M (DN 15 : 25 A 479 Tp.316)	
4	Stem	A 479 Tp.316	
5	Seat ring	PTFE	
6	Wrench	Nodular Iron	
7	Gland nut	Zinc plated carbon steel	AISI 303
8	Disk spring	Carbon St.	E.N.P. Carbon St.
9	Stop plate	Carbon St.	AISI 304
10	Gland	AISI 303	AISI 316
11	Gland packing	Graphite	
12	Stem thrust seal	25% G.F. PTFE	
13	Body connector seal	AISI 316L + PTFE + Graphite	
14	Stop pin	Carbon St.	Stainless St.
15	Bolt (DN 32 to DN 100 Stud)	DIN 933 A4-70 (DN 32 to DN 100 : A4-70)	
16	Bolt	DIN 933 A4-70	
17	Washer	Zinc plated carbon steel	AISI 304
18	Thrust washer	25% G.F. PTFE	
19	Antistatic device	Stainless St.	
28	Nut (DN 32 to DN 100)	DIN 934 A4-70	
39	Stem bushing (DN 25 to DN 200)	25% G.F. PTFE	
41	Spacer (DN 40 to 200)	Carbon St.	AISI 304
46	Washer	AISI 304	AISI 304
72	"O" Ring	FKM	
89	Identification plate	Stainless St.	

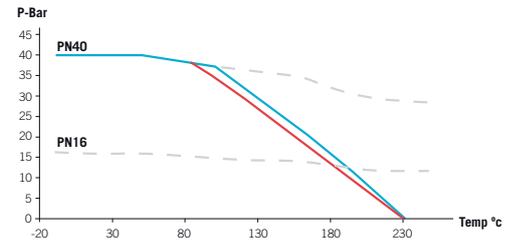
**EN-DIN 516 / 540 AIT/IIT**

**PN 16 / 40**

**Full Bore**



**Pressure - Temperature**



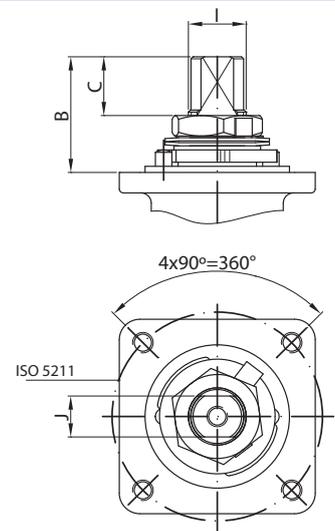
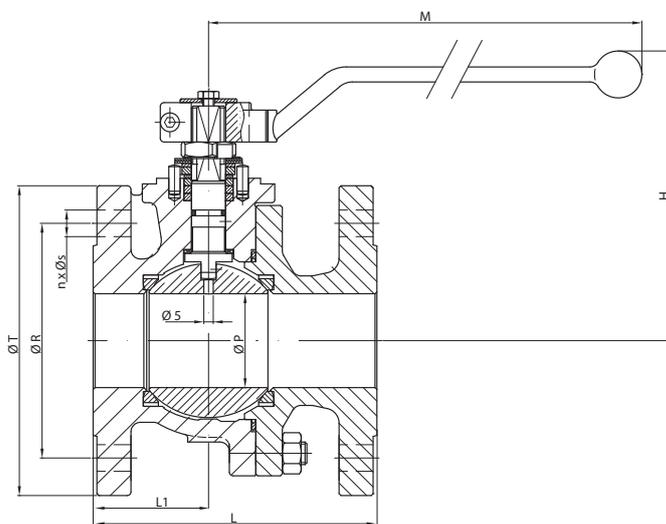
**PTFE SEATS**

DN 15 to 100 ——— (Blue line)  
 DN 125 to 200 ——— (Red line)

For 1.0619 only.  
 For other materials consult EN 1092-1

**PN 16.** From DN 65 to DN 200

**PN 40.** From DN 15 to DN 150



(\*) Dimensions of diameters of drills ISO 5211 refer to table from page 87.

**Fig. 516 (PN 16)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
65	65	170	76	145	4x18	185	169	348	F07	44	19,7	M22x1.5	16	16	55	550
80	80	180	82	160	8x18	200	207	445	F10	44,5	18,7	M25x1.5	18	22	85	1000
100	100	190	90	180	8x18	220	231	495	F10	56,5	29,2	M28x1.5	20	32	130	1650
125	125	325	120	210	8x18	250	262	698	F12	56	27,6	M35x2	25	52,5	180	3000
150	151	350	135	240	8x22	285	298	698	F12	68	38,5	M40x1.5	29	76	250	4200
200	203	400	200	295	12x22	340	352	868	F14	72	39	M45x2	32	111	580	9000

**Fig. 540 (PN 40)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15	15	115	53	65	4x14	95	110	164	F05	11,2	5,7	M12x1.5	9	2,8	10	20
20	20	120	52	75	4x14	105	117	164	F05	13,2	9,2	M12x1.5	9	2,8	10	20
25	25	125	49	85	4x14	115	129	164	F05	22,7	10,2	M12x1.5	9	5	16	75
32	32	130	54	100	4x18	140	131	210	F05	32	13,7	M16x1.5	12	7	25	130
40	40	140	55	110	4x18	150	148	213	F07	41,5	19,2	M18x1.5	13	9	30	170
50	50	150	61	125	4x18	165	155	213	F07	41,5	19,2	M18x1.5	13	12	55	270
65	65	170	76	145	8x18	185	169	348	F07	44	19,7	M22x1.5	16	17	80	550
80	80	180	75	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	23	130	1000
100	100	190	91	190	8x22	235	231	495	F10	56,5	29,2	M28x1.5	20	35	150	1650
125	125	325	120	220	8x26	270	262	698	F12	56	27,6	M35x1.5	25	57	240	3000
150	151	350	135	250	8x26	300	298	698	F12	68	38,5	M40x1.5	29	83,5	480	4200

(\*) Dimensions in mm, weight in kg and Torque in Nm.  
 (\*\*) Weights and dimensions can be changed without notice.

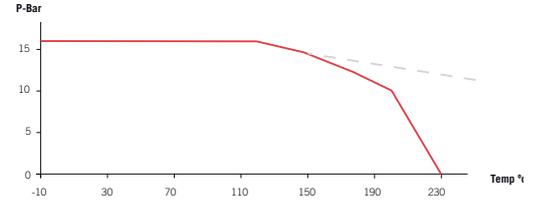
**EN-DIN 512 HIT**

**PN 16**

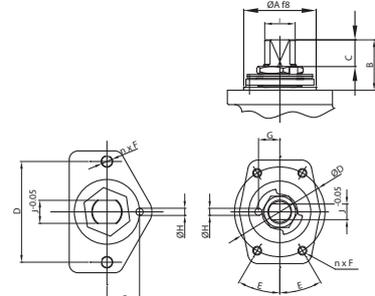
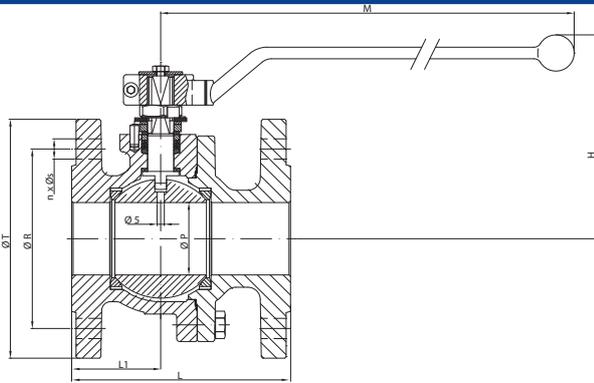
**Full Bore**



**Pressure - Temperature**



**PN 16. From DN 15 to DN 200**



**Fig. 512 (PN 16)**

DN	ØP	L	L1	ØR	N x ØS	ØT	H	M	WEIGHT	TORQUE	Kv
15	15	115	50	65	4x14	95	99	164	2,39	8	20
20	20	120	52	75	4x14	105	102	164	3,19	10	40
25	25	125	52	85	4x14	115	106	164	3,9	15	75
32	32	130	54	100	4x18	140	117	210	6,3	22	130
40	40	140	55	110	4x18	150	133	213	8	25	170
50	50	150	61	125	4x18	165	141	213	10,7	40	270
65	65	170	75	145	4x18	185	152	348	15,4	55	550
80	80	180	78,5	160	8x18	200	189	445	20,2	85	1000
100	100	190	90	180	8x18	220	220	495	25,8	130	1650
125	125	325	141	210	8x18	250	254	698	49,5	180	3000
150	150	350	160	240	8x22	285	281	698	74,1	250	4200
200	200	400	200	295	12x22	340	338	868	110,5	580	9000

**ACTUATOR CONNECTION**

DN	ØA	B	C	D	E	N x F	G	ØH	I	J
15	29	20	8,5	40	-	2xM6	13,3	5	M12x1.5	9
20	29	20	8,5	40	-	2xM6	13,3	5	M12x1.5	9
25	29	20	8,5	40	-	2xM6	13,3	5	M12x1.5	9
32	34	30	13	Ø50	30°	4xM6	15	5	M16x1.5	12
40	39	40,5	20	Ø56	30°	4xM10	18	6	M18x1.5	13
50	39	40,5	20	Ø56	30°	4xM10	18	6	M18x1.5	13
65	47	41	18,5	Ø65	30°	4xM10	22	6	M22x1.5	16
80	55	41,5	18,5	Ø74	30°	4xM10	24	8	M25x1.5	18
100	59	53,5	28,2	Ø82	30°	4xM10	26	8	M28x1.5	20
125	68	53	27,5	Ø100	40°	4xM12	30	8	M35x2	25
150	74	65	38,5	Ø104	40°	4xM12	33	8	M40x2	29
200	94	66	37	Ø130	40°	4xM16	42	10	M45x2	32

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

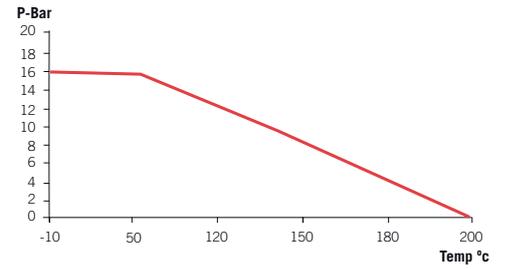
# EN-DIN 150 HIT

PN 16

Full Bore

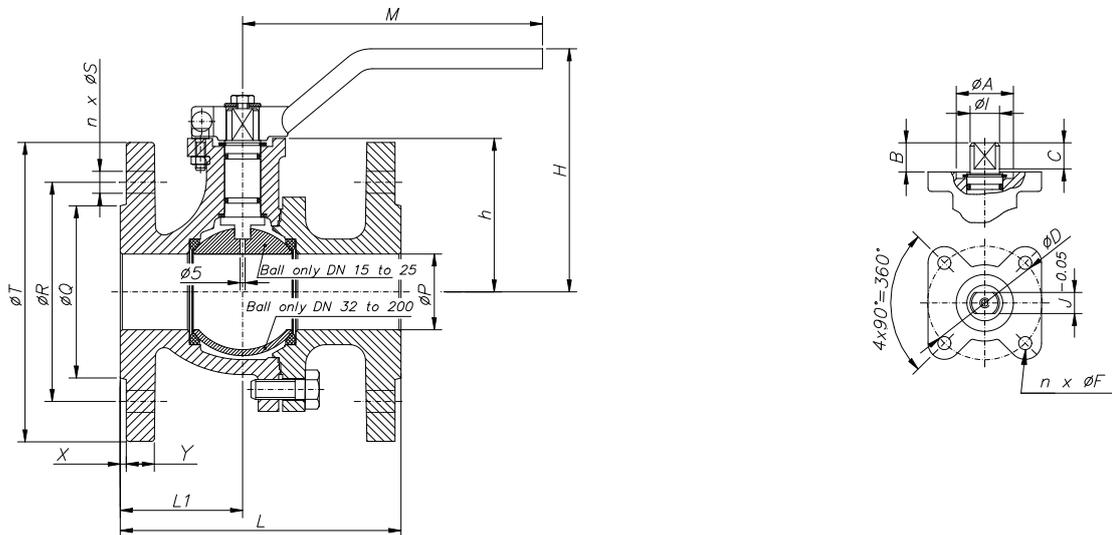


## Pressure - Temperature



\* Depending on FKM resistance to the fluid

## PN 16. From DN 65 to DN 200



**Fig. 150 (PN 16)**

DN	ISO 5211	ØA	B	C	ØD	n x ØF	ØI	J	WEIGHT	TORQUE	Kv
15 (1/2")	F04	19	7,5	5,5	42	4x5	10	7	2	6	37,4
20 (3/4")	F04	19	6	5	42	4x5	10	7	2,6	6	74,8
25 (1")	F04	21	6,2	5	42	4x5	10	7	3,5	11	105
32 (1 1/4")	F04	21	6,7	5,5	42	4x5	10	7	5,2	12	176
40 (1 1/2")	F04	30	15	16	42	4x5	16	12	6,5	26	223
50 (2")	F04	30	15	16	42	4x5	16	12	8,6	41	416
65 (2 1/2")	F07	35	18	19	70	4x8	18	13	11	41	660
80 (3")	F07	35	18	19	70	4x8	18	13	14	71	1200
100 (4")	F07	38	19	20	70	4x8	22	16	19,5	119	1980
125 (5")	F07	38	19,5	20	70	4x8	22	16	33	190	3600
150 (6")	F10	50	24,5	27	102	4x10	28	20	47,5	220	5040
200 (8")	F10	50	24,5	27	102	4x10	28	20	79,5	450	10890

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

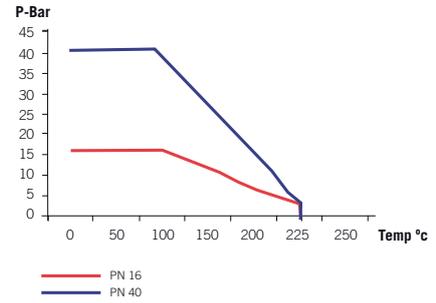
# EN-DIN 154 / 156 IIT

PN 16 / 40

Full Bore



## Pressure - Temperature



PN 16.

PN 40.

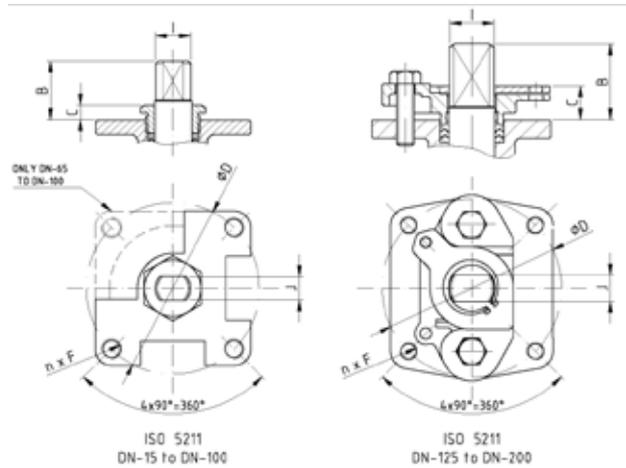
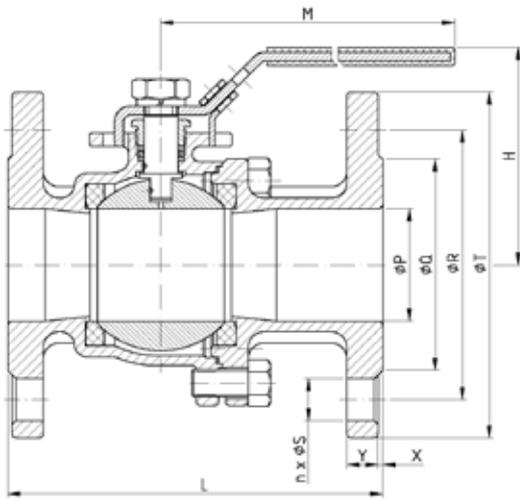


Fig. 154 (PN 40)

DN	φP	L	φQ	φR	n x φS	φT	X	Y	H	M	WEIGHT	TORQUE	Kv
15	15	115	45	65	4 x 14	95	2	14	72	123	2,38	7	22,3
20	20	120	58	75	4 x 14	105	2	16	76	123	3	7	42,8
25	25	125	68	85	4 x 14	115	2	16	92	182	3,7	11	80,5
32	32	130	78	100	4 x 18	140	2	16	95	152	5,6	17,6	102,8
40	40	140	88	110	4 x 18	150	3	15	125	246	9,24	38,5	222,8
50	50	150	102	125	4 x 18	165	3	17	132	246	9,42	55	411,3

Fig. 156 (PN 16)

DN	φP	L	φQ	φR	n x φS	φT	X	Y	H	M	WEIGHT	TORQUE	Kv
65	65	170	122	145	4 x 18	185	2	16	135	301	12,8	66	642,7
80	80	180	138	160	8 x 18	200	2	18	153	301	16,4	71,5	1114
100	98	190	158	180	8 x 18	220	2	18	194	285	23,7	77	1970
125	125	325	188	210	8 x 18	250	3	19	260	750	43,5	143	3856
150	150	350	212	240	8 x 22	285	3	19	280	750	54,8	176	4627
200	200	400	268	295	12 x 22	340	3	21	340	1000	93	495	8568

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

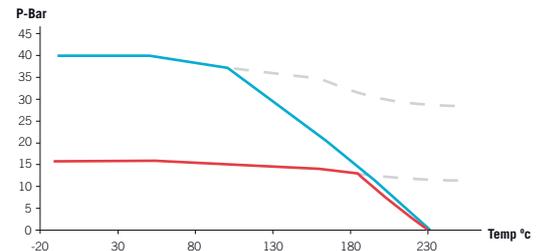
# EN-DIN 316 / 340 AIT/IIT Long Pattern

PN 16 / 40

Full Bore

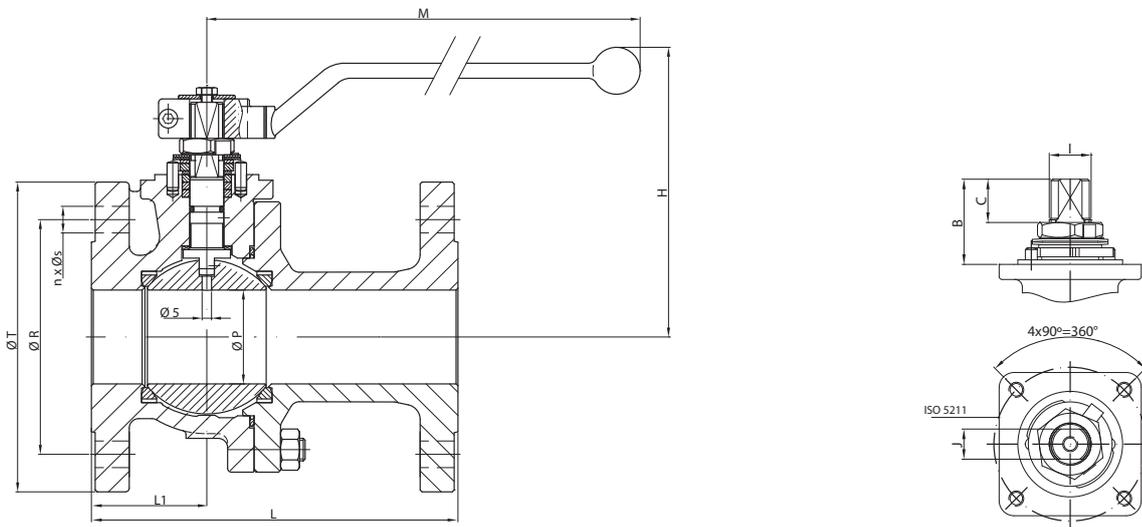


## Pressure - Temperature



**PTFE SEATS**  
**DN 15 to 50** (Blue line)  
**DN 125 to 100** (Red line)  
 For 1.0619 only.  
 For other materials consult EN 1092-1

### PN 16. From DN 65 to DN 200



**Fig. 316 (PN 16)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
65	65	290	76	145	4x18	185	169	348	F07	44	19,7	M22x1.5	16	18,3	55	550
80	80	310	82	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	24	85	1000
100	100	350	90	180	8x18	220	231	495	F10	56,5	29,2	M28x1.5	20	36	130	16500

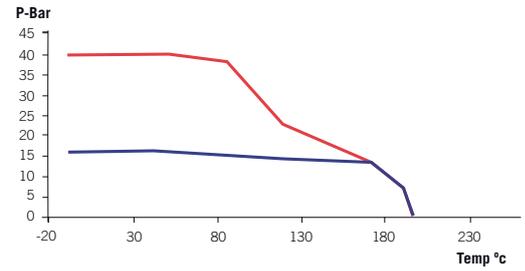
**Fig. 340 (PN 40)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15	15	130	53	65	4x14	95	110	164	F05	11,2	5,7	M12x1.5	9	3	10	20
25	25	160	49	85	4x14	115	129	164	F05	22,7	10,2	M12x1.5	9	5,2	16	75
32	32	180	54	100	4x18	140	131	210	F05	32	13,7	M16x1,5	12	7,6	25	130
40	40	200	55	110	4x18	150	148	213	F07	41,5	19,2	M18x1.5	13	9,6	30	170
50	50	230	61	125	4x18	165	155	213	F07	41,5	19,2	M18x1.5	13	12,9	55	270

(\*) Dimensions in mm, weight in kg and Torque in Nm.  
 (\*\*) Weights and dimensions can be changed without notice.



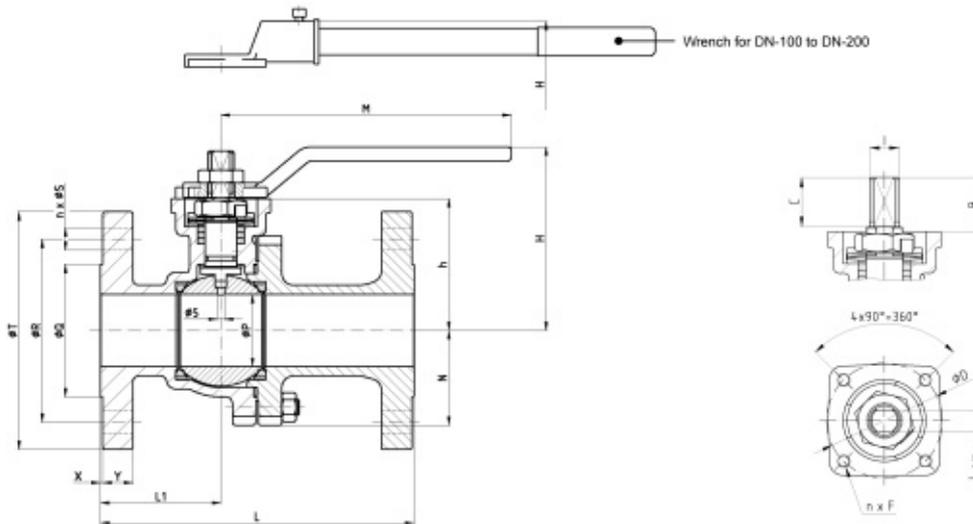
Pressure - Temperature



For 1.0619 only. For other materials consult EN 1092-1

PN 16.

PN 40.



Series 256 (PN 16)

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	N	H	M	Weight
65	65	170	72	122	145	4 x 18	185	2	16	104	78	140	350	13,3
80	78	180	73	138	160	8 x 18	200	2	18	118,5	87	190	450	19,1
100	100	190	83	158	180	8 x 18	220	2	18	144	108	192,5	466	25,6
125	125	325	120	188	210	8 x 18	250	2	20	184	134	240	775	47,6
150	151	350	135	212	240	8 x 22	285	2	20	203	152	259	775	63,5
200	203	400	200	268	295	12 x 22	340	2	21	250	202	319	845	115,3

Series 254 (PN 40)

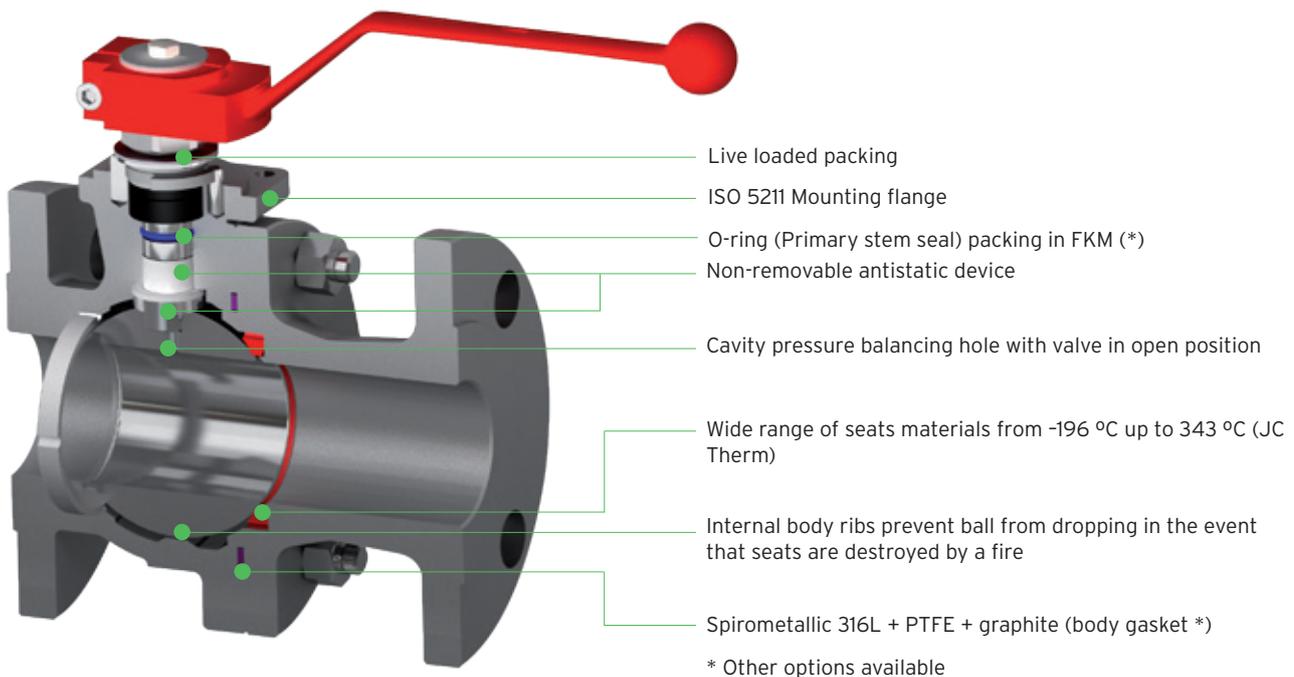
DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	N	H	M	Weight
15	15	115	53	45	65	4 x 14	95	2	14	41	31	68	170	2,4
20	20	120	52	58	75	4 x 14	105	2	16	43	33	70	170	3,2
25	25	125	52	68	85	4 x 14	115	2	16	58,5	39	86	170	4,1
32	32	130	54	78	100	4 x 18	140	2	16	63,5	43	89,5	170	5,8
40	40	140	55	88	110	4 x 18	150	2	16	86,5	48	122,5	215	8,1
50	50	150	61	102	125	4 x 18	165	2	18	91,5	63	127,5	215	10,6
65	65	170	72	122	145	8 x 18	185	2	20	104	78	140	350	14,8
80	78	180	73	138	160	8 x 18	200	2	22	118,5	87	190	450	20,6
100	100	190	83	158	190	8 x 22	235	2	22	144	108	192,5	466	29,2
125	125	325	120	188	220	8 x 26	270	2	24	184	134	240	775	53,6
150	151	350	135	212	250	8 x 26	300	2	26	203	152	259	775	74,7

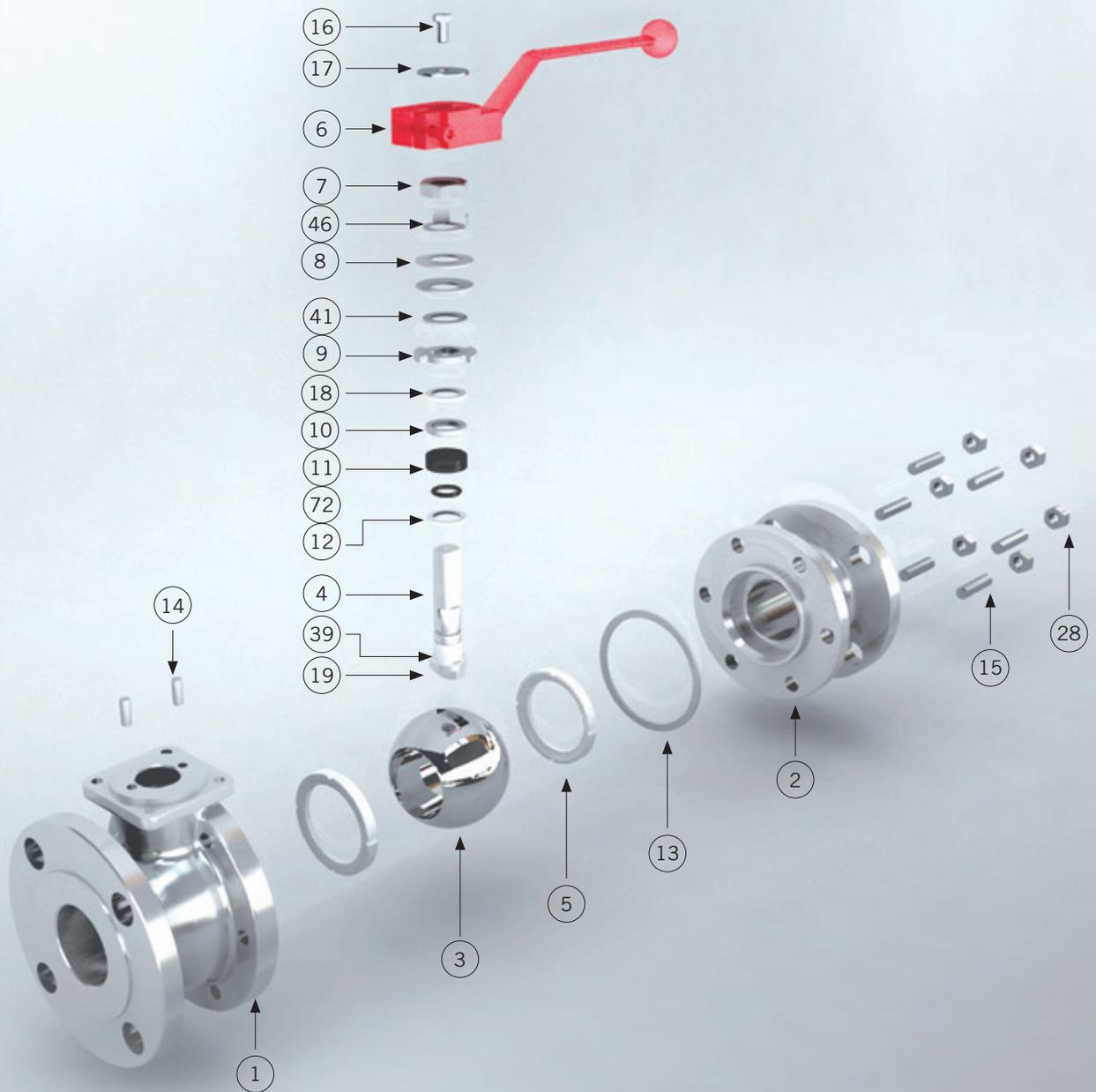
(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

# FLOATING ASME

1/2" - 12" | Class 150 - Class 600

A floating ball valve is a valve with seats supported ball, that is pushed by upstream pressure towards the downstream seat to ensure sealing. The DN of the floating ball valves range is limited by the capability of the seats material to support the pressure, temperature and weight of the ball.





# Materials

ASME

Item	Description	AIT	LIT	IIT
1	Body	A 216 Gr. WCB (C ≤ 0,25%)	A 352 Gr. LCC	A 351 Gr. CF8M
2	Body connector	A 216 Gr. WCB (C ≤ 0,25%)	A 352 Gr. LCC	A 351 Gr. CF8M
3	Ball		A 351 Gr. CF8M (DN 15 : 25 A 479 Tp.316)	
4	Stem		A 479 Tp.316	
5	Seat ring		PTFE, PEEK, NYLON, DEVLON	
6	Wrench		Nodular Iron	
7	Gland nut	Zinc plated carbon steel	AISI 303	AISI 303
8	Disk spring	Carbon St.	E.N.P. Carbon St.	E.N.P. Carbon St.
9	Stop plate	Carbon St.	AISI 304	AISI 304
10	Gland	AISI 303	AISI 316	AISI 316
11	Gland packing		Graphite	
12	Stem thrust seal		25% G.F. PTFE	
13	Body connector seal		AISI 316L + PTFE + Graphite	
14	Stop pin	Carbon St.	Stainless St.	Stainless St.
15	Stud	A 193 Gr. B7M Zinc dichromate	A 193 Gr. L7M	A 193 Gr. B8M
16	Bolt	DIN 933 5.6 Zinc plated	DIN 933 A2	DIN 933 A2
17	Washer	Zinc plated carbon steel	AISI 304	AISI 304
18	Thrust washer		25% G.F. PTFE	
19	Antistatic device		Stainless St.	
28	Nut	A 194 Gr. 2HM Zinc dichromate	A 194 Gr. 7M	A 194 Gr. 8M
39	Stem bushing (DN 25 to 200)		25% G.F. PTFE	
41	Spacer (DN 40 to 200)	Carbon St.	AISI 304	AISI 304
46	Washer	AISI-304	AISI 304	AISI 304
72	"O" Ring		FKM	
89	Identification plate		Stainless St.	

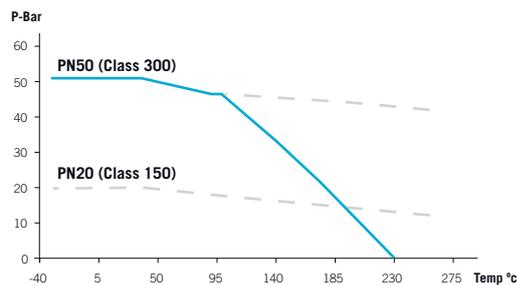
# ASME 515 / 530 AIT/IIT

Class 150 / 300

Full Bore



## Pressure - Temperature

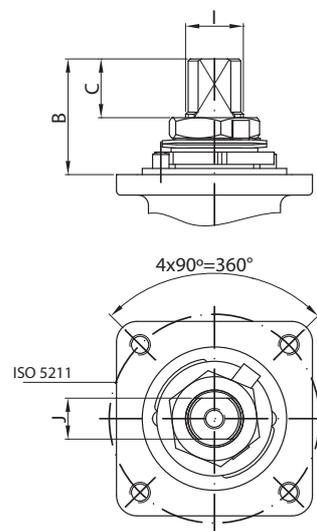
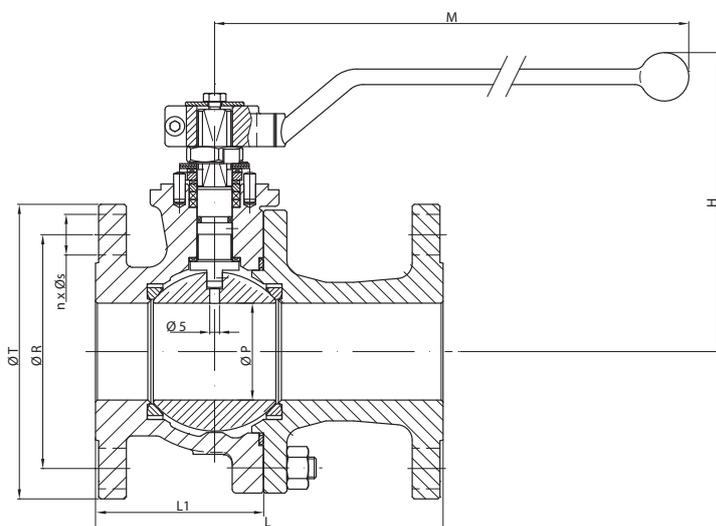


### PTFE SEATS

8" to 12" — For A216 Gr. WCB only. For other materials consult ASME B16.34

Class 150. From 1/2" to 8"

Class 300. From 1/2" to 6"



**Fig. 515 (Class 150)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15 (1/2")	15	108	47	60,3	4x15,9	90	110	164	F05	11,2	5,7	M12x1,5	9	2	8	20
20 (3/4")	20	117	50	69,9	4x15,9	100	117	164	F05	13,2	9,2	M12x1,5	9	3	10	40
25 (1")	25	127	52	79,4	4x15,9	110	129	164	F05	22,7	10,2	M12x1,5	9	3,5	15	75
40 (1 1/2")	40	165	65	98,4	4x15,9	125	148	213	F07	41,5	19,2	M18x1,5	13	8	25	170
50 (2")	50	178	61	120,7	4x19	150	155	213	F07	41,5	19,2	M18x1,5	13	11	40	270
65 (2 1/2")	65	190	75	139,7	4x19	180	169	348	F07	44	19,7	M22x1,5	16	16	60	550
80 (3")	80	203	79	152,4	4x19	190	207	445	F10	44,5	19,7	M25x1,5	18	23	90	1000
100 (4")	100	229	90	190,5	8x19	230	231	495	F10	56,5	29,2	M28x1,5	20	38	150	1650
150 (6")	151	394	174	241,3	8x22,2	280	298	698	F12	68	38,5	M40x1,5	29	88	250	4200
200 (8")	203	457	200	298,5	8x22,2	345	352	868	F14	72	39	M45x2	32	155	700	9000

**Fig. 530 (Class 300)**

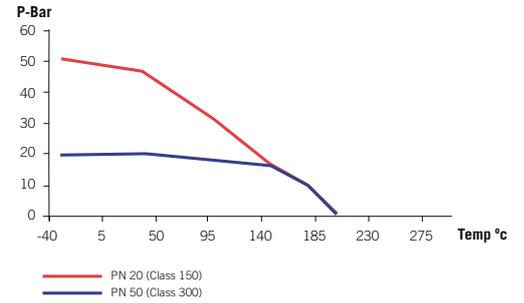
DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15 (1/2")	15	140	60	66,7	4x15,9	95	110	164	F05	11,2	5,7	M12x1,5	9	3	12	20
20 (3/4")	20	152	65	82,6	4x19	115	117	164	F05	13,2	9,2	M12x1,5	9	4	16	40
25 (1")	25	165	70	88,9	4x19	125	129	164	F05	22,7	10,2	M12x1,5	9	5	20	75
40 (1 1/2")	40	190	80	114,3	4x22,2	155	148	213	F07	41,5	19,2	M18x1,5	13	11	35	170
50 (2")	50	216	83	127	8x19	165	155	213	F07	41,5	19,2	M18x1,5	13	14	55	270
80 (3")	80	283	118	168,3	8x22,2	210	207	445	F10	44,5	19,7	M25x1,5	18	32	150	1000
100 (4")	100	305	133	200	8x22,2	255	231	495	F10	56,5	29,2	M28x1,5	20	52	230	1650
150 (6")	151	403	160	269,9	12x22,2	320	298	698	F12	68	38,5	M40x1,5	29	94	342	4200

(\*) Dimensions in mm, weight in kg and Torque in Nm.  
 (\*\*\*) Weights and dimensions can be changed without notice.

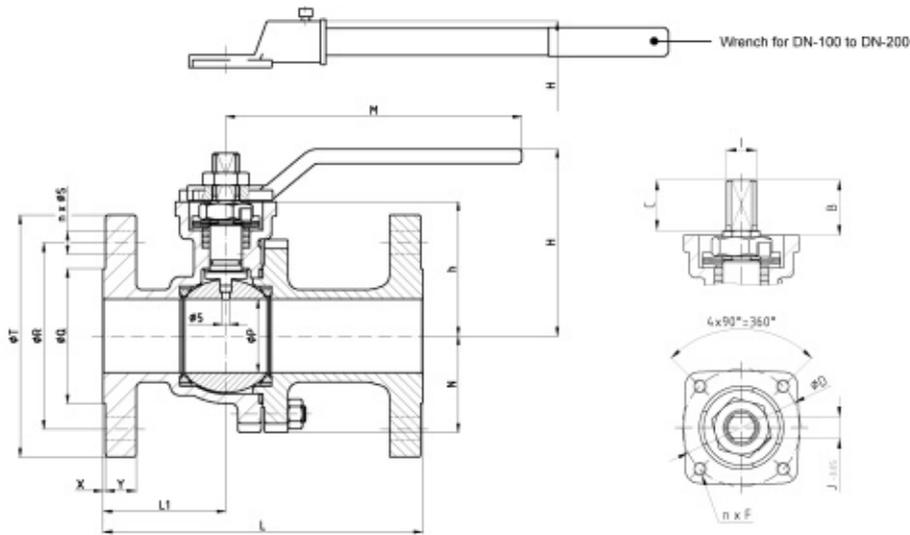
**ASME 315 / 330 / 415 / 430 AIT/IIT** | **Class 150 / 300** | **Full Bore**



**Pressure - Temperature**



**Class 150. From 1/2" to 8"** | **Class 300. From 1/2" to 8"**



**Fig. 315 / 415 (Class 150)**

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	N	H	M	Weight
15 (1/2")	15	108	47	35	60,45	4 x 15,74	88,9	1,6	9,6	41	31	68	170	1,7
20 (3/4")	20	117	50	43	69,8	4 x 15,74	98,5	1,6	9,6	43	33	70	170	2,2
25 (1")	25	127	52	51	79,24	4 x 15,74	108	1,6	9,6	58,5	39	86	170	2,9
40 (1 1/2")	40	165	65	73	98,55	4 x 15,74	127	1,6	12,7	86,5	48	122,5	215	6
50 (2")	50	178	61	92	120,65	4 x 19	152	1,6	14,2	91,5	63	127,5	215	8,5
65 (2 1/2")	65	190	75	105	139,7	4 x 19	178	1,6	16	104	78	140	350	13,3
80 (3")	78	203	78,5	127	152,4	4 x 19	191	1,6	17,4	118,5	87	190	450	18,5
100 (4")	100	229	90	157	190,5	8 x 19	229	1,6	22,3	144	108	192,5	466	29,3
150 (6")	151	394	174	216	241,3	8 x 22,2	279,5	1,6	23,9	203	152	259	775	64,5
200 (8")	203	457	209	270	298,45	8 x 22,2	343	1,6	26,9	250	202	319	845	123,2

**Fig. 330 / 430 (Class 300)**

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	N	H	M	Weight
15 (1/2")	15	140	60	35	66,55	4 x 15,74	95	1,6	12,7	41	31	68	170	2,4
20 (3/4")	20	152	65	43	82,55	4 x 19	117,5	1,6	14,2	43	33	70	170	3,5
25 (1")	25	165	70	51	88,9	4 x 19	124	1,6	16	58,5	39	86	170	4,6
40 (1 1/2")	40	190	80	73	114,3	4 x 22,2	155,5	1,6	19	86,5	48	122,5	215	9,2
50 (2")	50	216	83	92	127	8 x 19	165	1,6	20,8	91,5	63	127,5	215	11,5
80 (3")	78	283	118	127	168,1	8 x 22,2	210	1,6	26,9	118,5	87	190	450	25
100 (4")	100	305	133	157	200,15	8 x 22,2	254	1,6	30,2	144	108	192,5	466	39,5
150 (6")	151	403	160	216	169,75	12 x 22,2	318	1,6	35	203	152	259	775	88,1
200 (8")	203	502	239	270	330,2	12 x 25,43	381	1,6	39,6	250	202	319	845	160,5

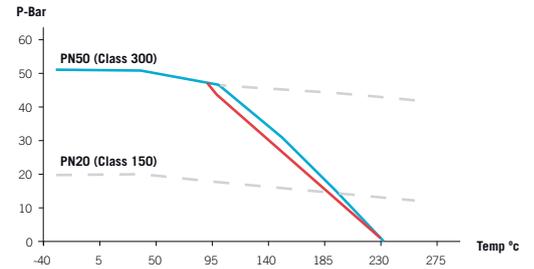
(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

# ASME 715 / 730 AIT/IIT

Class 150 / 300

Reduced Bore

## Pressure - Temperature



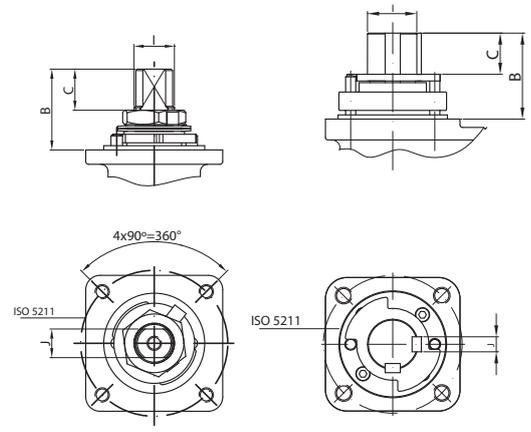
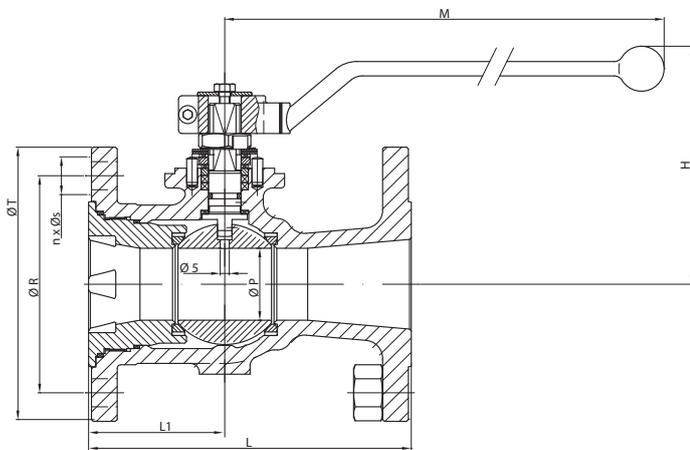
**PTFE SEATS**

1/2" to 4" ————  
6" to 8" ————

For A216 Gr. WCB only.  
For other materials consult ASME B16.34

Class 150. From 1/2" to 12"

Class 300. From 1/2" to 8"



ONLY FOR SIZE DN - 300 (12")

**Fig. 715 (Class 150)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15 (1/2")	9,5	108	54	60,3	4x15,9	90	81	164	F05	22	8,3	M10x1,5	7	1,6	6	7
20 (3/4")	15	117	60	69,9	4x15,9	100	98	164	F05	22,7	9	M12x1,5	9	2,1	9	10
25 (1")	20	127	65	79,4	4x15,9	110	101	164	F05	22,7	9	M12x1,5	9	2,7	10	26
40 (1 1/2")	32	165	72	98,4	4x15,9	125	117	210	F05	34,5	14,7	M16x1,5	12	5,1	21	107
50 (2")	40	178	75,1	120,7	4x19	150	134	213	F07	41,5	19,2	M18x1,5	13	7,9	25	140
80 (3")	58	203	88	152,4	4x19	190	149	348	F07	44	19,7	M22x1,5	16	14,3	40	300
100 (4")	80	229	104,1	190,5	8x19	230	189	445	F10	44,5	19,7	M25x1,5	18	25,9	90	600
150 (6")	111	267	125	241,3	8x22,2	280	227	495	F12	56,5	29,2	M28x1,5	20	43,8	180	1000
200 (8")	144	292	135	298,5	8x22,2	345	264	698	F12	68	38,5	M40x1,5	29	77	250	2000
250 (10")	187	330	164	362	12x25,4	405	307	698	F12	72	39	M45x2	32	114	600	4100
(1) 300 (12")	228	356	178	431,8	12x25,4	485	-	-	F14	106	58	Ø50	14	230	960	6900

**Fig. 730 (Class 300)**

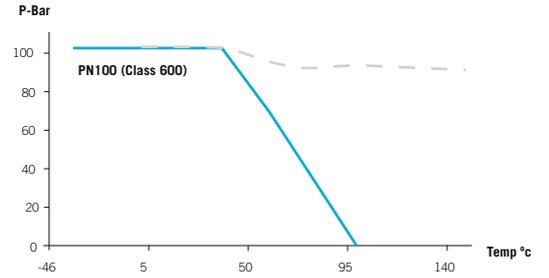
DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15 (1/2")	9,5	140	54	66,7	4x15,9	95	81	164	F05	22	8,3	M10x1,5	7	1,6	10	7
20 (3/4")	15	152	60	82,6	4x19	115	98	164	F05	22,7	9	M12x1,5	9	2,1	12	10
25 (1")	20	165	65	88,9	4x19	125	101	164	F05	22,7	9	M12x1,5	9	4,1	16	26
40 (1 1/2")	32	190	72	114,3	4x22,2	155	117	210	F05	34,5	14,2	M16x1,5	12	8,2	30	107
50 (2")	40	216	75,1	127	8x19	165	134	213	F07	41,5	19,2	M18x1,5	13	10,9	35	140
80 (3")	58	283	88	168,3	8x22,2	210	149	348	F07	41,5	19,2	M18x1,5	13	21,4	60	300
100 (4")	80	305	104,1	200	8x22,2	255	189	445	F10	44,5	19,7	M25x1,5	18	28,9	150	600
150 (6")	111	403	125	269,9	12x22,2	320	227	495	F12	56,5	29,2	M28x1,5	20	70	280	1000
200 (8")	144	419	135	330,2	12x25,4	380	264	698	F12	68	38,5	M40x1,5	29	110,5	420	2000

(\*) Dimensions in mm, weight in kg and Torque in Nm. (\*\*) Weights and dimensions can be changed without notice. (1) Body and Body connector joint is not threaded, is with screws.

**ASME 560 AIT/IIT** **Class 600** **Full Bore**

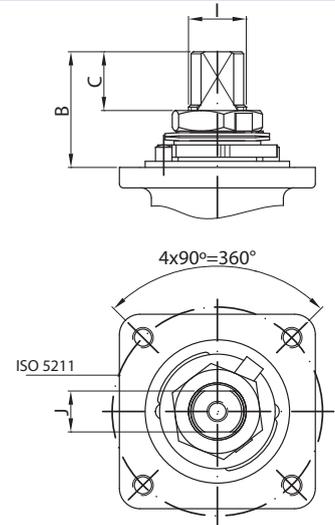
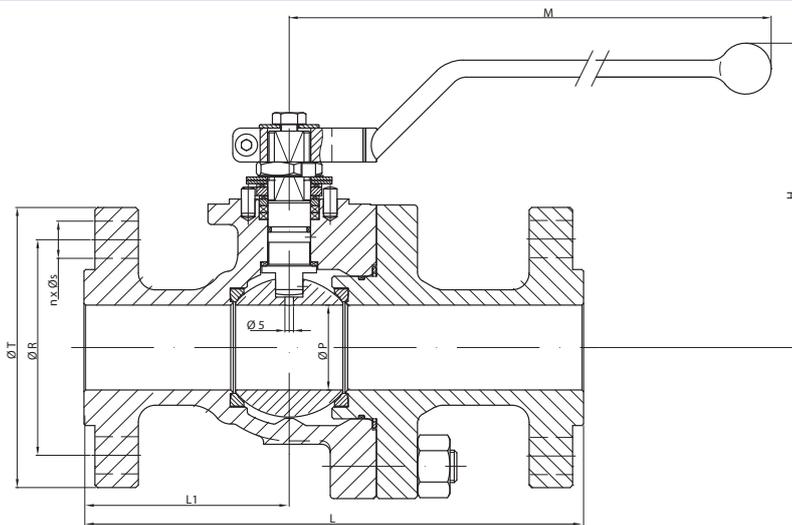


**Pressure - Temperature**



**NYLON SEATS**  
**2" to 4"**  
 For A216 Gr. WCB only.  
 For other materials consult ASME B16.34

**Class 600. From 2" to 4"**



**Fig. 560 (Class 600)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
50 (2")	50	292	120	127	8x19	165	180	445	F10	45	20,2	M25x1.5	18	29	135	270
80 (3")	80	356	151	168,3	8x22,2	210	228	698	F12	55,5	27	M35x2	25	42	325	1000
100 (4")	100	432	172	215,9	8x25.4	275	245	698	F12	55	26,5	M35x2	25	78	450	1650

(\*) Dimensions in mm, weight in kg and Torque in Nm.  
 (\*\*) Weights and dimensions can be changed without notice.  
 Other sizes available under request from BAR Stock.

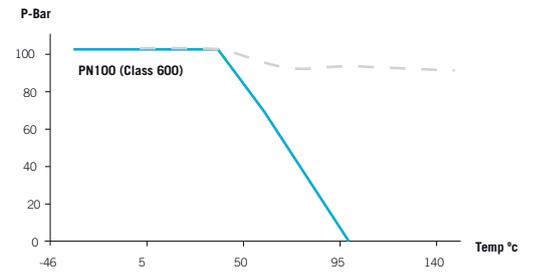
# ASME 660 AIT/IIT

Class 600

Reduced Bore



## Pressure - Temperature



NYLON SEATS

2" to 4"

For A216 Gr. WCB only.  
For other materials consult ASME B16.34

## Class 600. From 2" to 4"

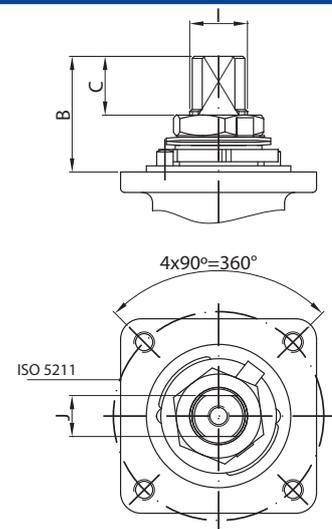
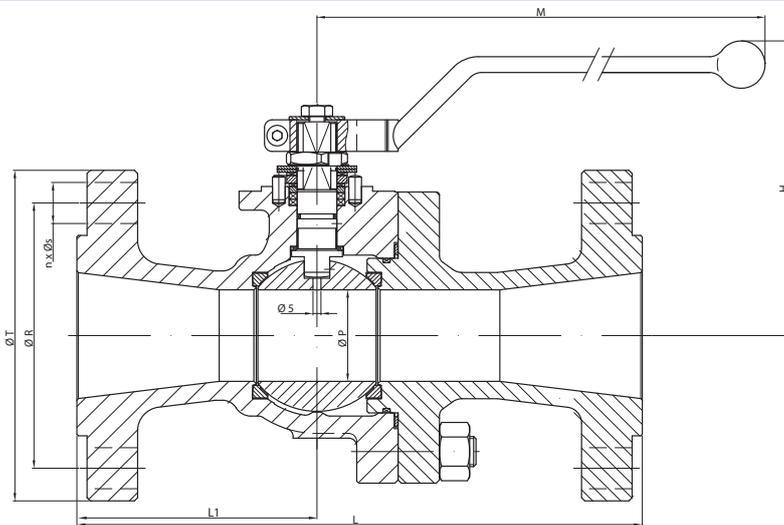
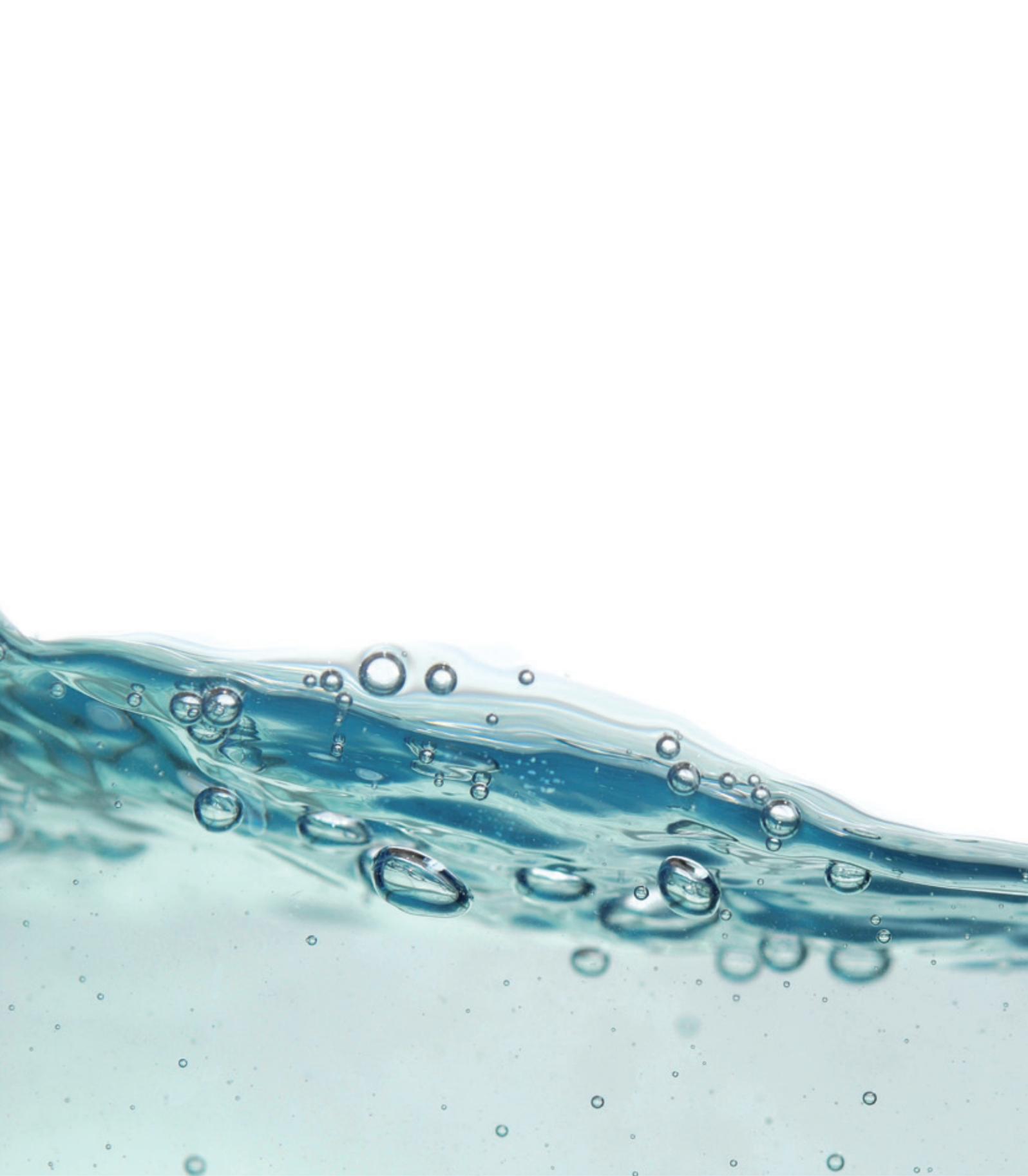


Fig. 660 (Class 600)

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
50 (2")	40	292	120	127	8x19	165	137	348	F07	43	18,7	M22x1.5	16	17	95	140
80 (3")	58	356	151	168.3	8x22,2	210	228	698	F10	44	19,2	M25x2	18	30	185	300
100 (4")	80	432	190	215.9	8x25.4	275	228	698	F10	55,5	27	M35x2	25	64	325	600

(\*) Dimensions in mm, weight in kg and Torque in Nm.  
(\*\*) Weights and dimensions can be changed without notice.  
Other sizes available under request from BAR Stock.



BALL VALVES | **FLOATING**  
3 WAY BALL VALVES

# FLOATING 3 WAYS BALL VALVES

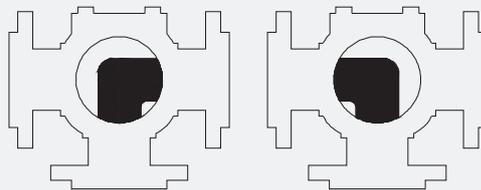
1" - 8" | Class 150  
DN 25 - DN 200 | PN 16

The JC Three way ball valves, have been designed to divert the flow at 90° in several options between two pipes. Three way ball valves are available with either "L" and double "L" (X) port, or T-port design. The full port design is easily automated and is available with various seat materials.

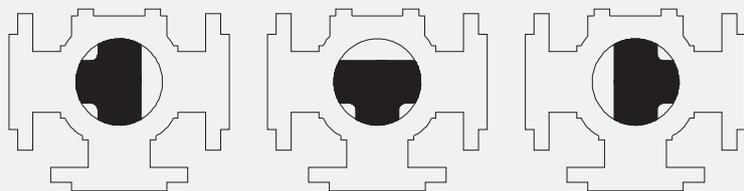


## PORT COMBINATIONS

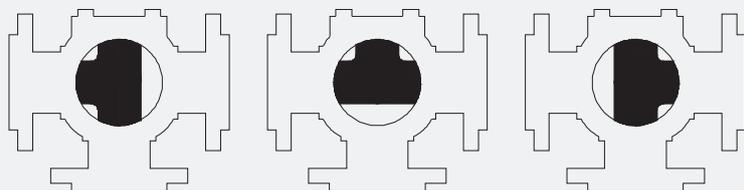
### 3 WAY L PORT

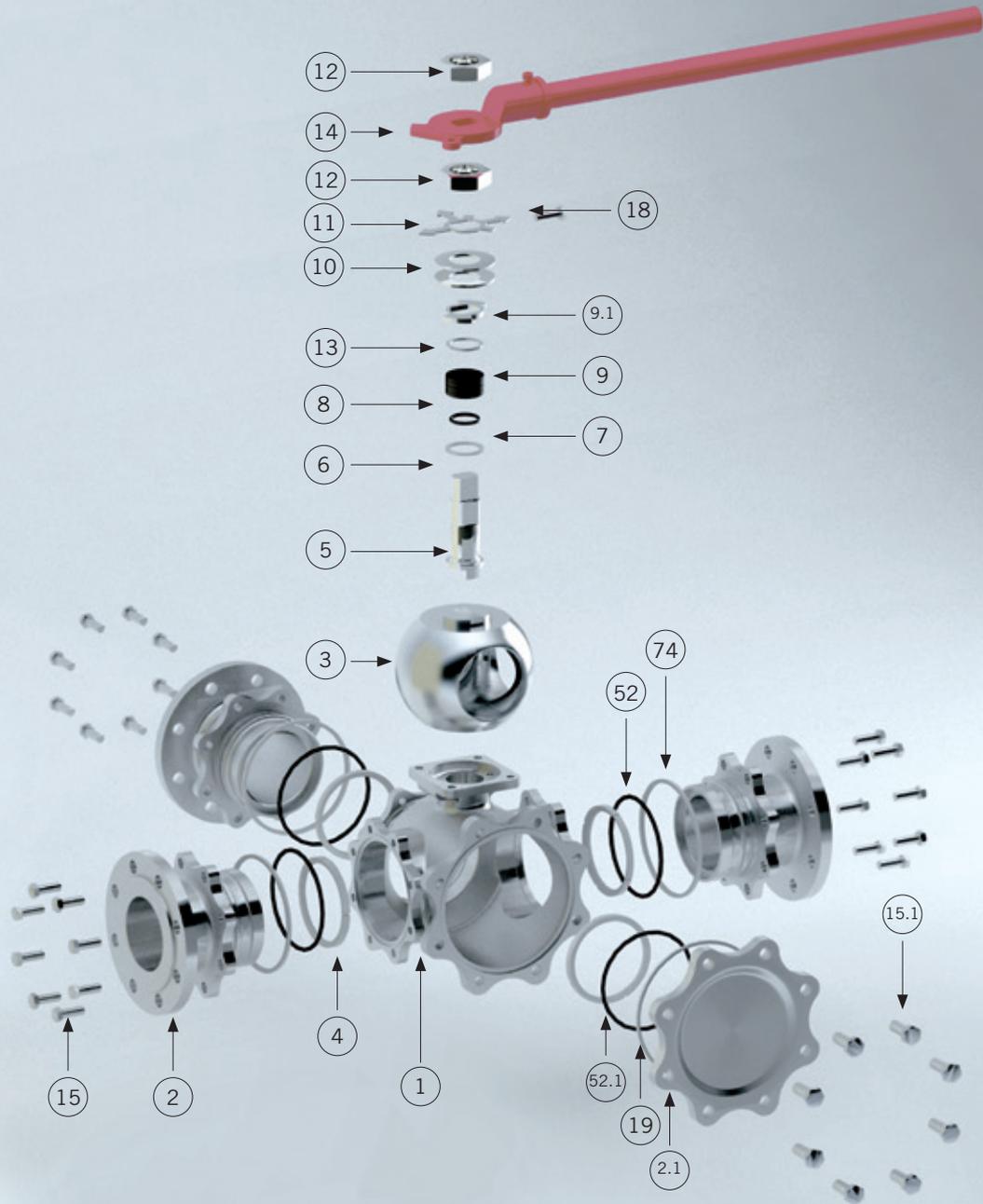


### 3 WAY T PORT



### 3 WAY INVERTED PORT





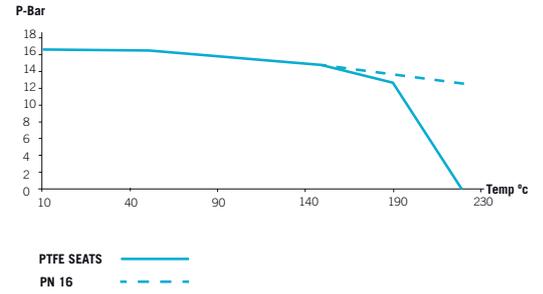
Materials		EN-DIN		ASME	
		916 AIT	916 IIT	915 AIT	915 IIT
Item	Description	Material		Material	
1	Body	1.0619	1.4408	A216 Gr. WCB (C≤0,25%)	A351 Gr. CF8M
2	Body connector	1.0619	1.4408	A216 Gr. WCB (C≤0,25%)	A351 Gr. CF8M
2.1	Side Cover	1.0619	1.4408	A216 Gr. WCB (C≤0,25%)	A351 Gr. CF8M
3	Ball	A 351 Gr. CF8M		A 351 Gr. CF8M	
4	Seat ring	PTFE		PTFE	
5	Stem	A 479 Type 316		A 479 Type 316	
6	Stem thrust seal	25%GF PTFE		25%GF PTFE	
7	O'ring	FKM		FKM	
8	Stem packing	Graphite		Graphite	
9	Gland	AISI 303	AISI 316	AISI 303	AISI 316
9.1	Stop plate	F114	AISI 304	F114	AISI 304
10	Disk spring	E.N.P Carbon steel		E.N.P Carbon steel	
11	Look. Wash. Pointer	Rilsan coated Carbon St.		Rilsan coated Carbon St.	
12	Gland nut	Zinc plated carbon steel	AISI 303	Zinc plated carbon steel	AISI 303
13	Antifriction washer	25%GF. PTFE		25%GF. PTFE	
14	Wrench	Nodular iron		Nodular iron	
15	Bolt	DIN 933 A4 - 70		DIN 933 A4 - 70	
15.1	Bolt	DIN 933 A4 - 70		DIN 933 A4 - 70	
18	Stop bolt	A4-70		A4-70	
19	Body cover seal	PTFE		PTFE	
52	O'ring	FKM		FKM	
52.1	O'ring	FKM		FKM	
74	Body connector seal	PTFE		PTFE	
89	Identification plate	Stainless St.		Stainless St.	

# EN DIN 916 AIT/IIT

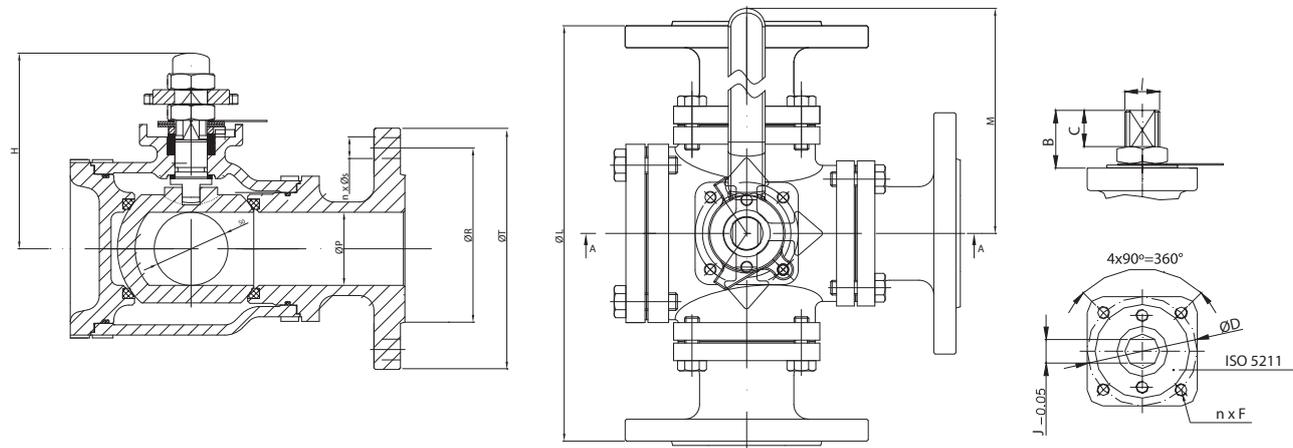
PN 16

Full Bore

## Pressure - Temperature



### PN 16. From DN 25 to DN 200

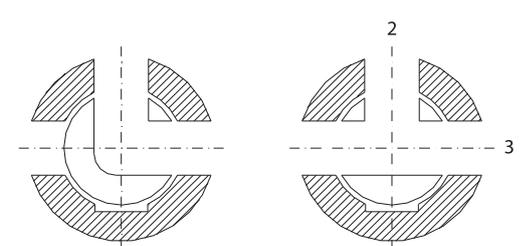


**Fig. 916 (PN 16)**

DN	øP	øL	A	A1	øR	n x øS	øT	H	M	ISO 5211	B	C	I	J	WEIGHT
25	25	212	106	70	85	4x14	115	96	170	F05	22	12,2	M12x1,5	8	8
40	40	262	131	80	110	4x18	150	121	200	F07	33	19,2	M18x1,5	12	17
50	50	290	145	90	125	4x18	165	134	350	F07	34	20,2	M22x1,5	15	25
65	65	325	162,5	107	145	8x18	185	180	350	F10	34	19,2	M22x1,5	15	34
80	80	370	185	117	160	8x18	200	189	465	F10	45	27,7	M28x1,5	19	51
100	100	430	215	148	180	8x18	220	230	475	F12	56	32,2	M36x1,5	24	77
150	150	500	250	194	240	8x22	285	280	855	F14	69	41	M48x3	32	138
200	200	600	300	270	295	12x22	340	325	855	F14	69	34	M48x3	32	

VALVE SIZE	TORQUE	
	AT MAXIMUM DIFFERENTIAL PRESSURE	
	L	T
25 (1")	32	32
40 (1 1/2")	71	71
50 (2")	130	130
65 (2 1/2")	195	195
80 (3")	260	260
100 (4")	494	494
150 (6")	689	689
200 (8")	850	850

VALVE SIZE	Kv		
	PORT L	PORT T	
		PORT 2	PORT 3
25 (1")	20,4	28,9	51
40 (1 1/2")	51,85	51,85	149,6
50 (2")	42,5	80,75	249,9
65 (2 1/2")	136,85	136,85	478,55
80 (3")	206,55	291,55	732,7
100 (4")	323	323	1217,2
150 (6")	726,75	726,75	3087,2
200 (8")	920	920	4810

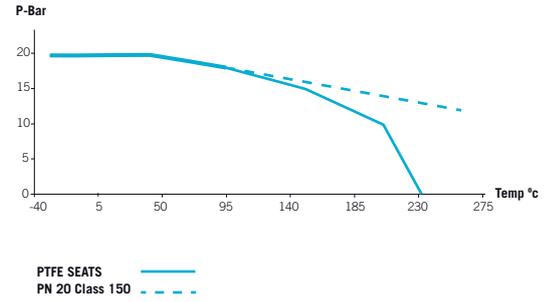


(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.  
 Torque Values in Nm.  
 Kv Values in m3/h.

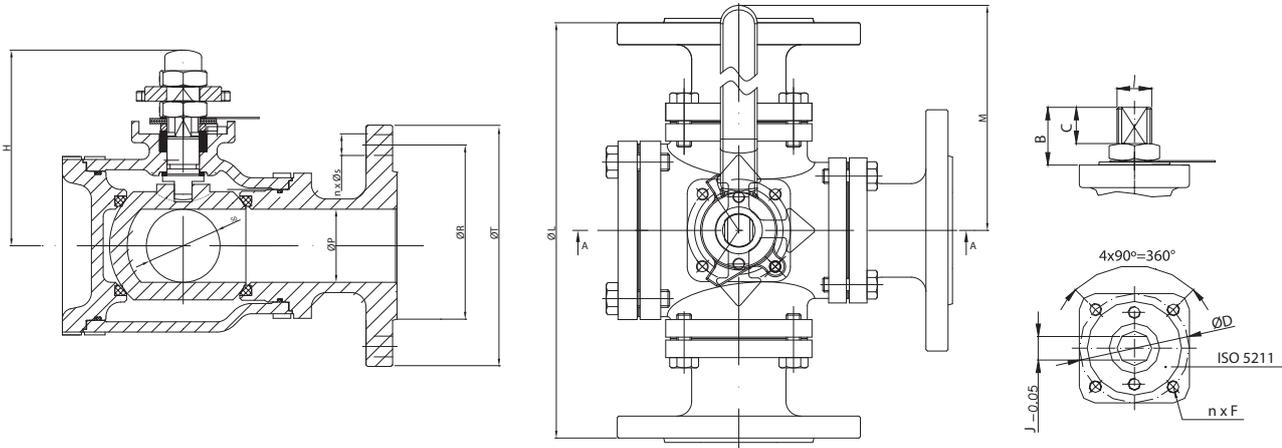
**ASME 915 AIT/IIT** **Class 150** **Full Bore**



**Pressure - Temperature**



**Class 150. From 1" to 8"**

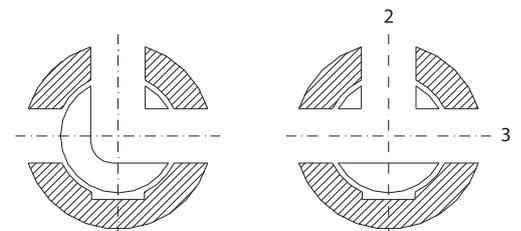


**Fig. 915 (Class 150)**

DN	øP	øL	A	A1	øR	n x øS	øT	H	M	ISO 5211	B	C	I	J	WEIGHT
1"	25	212	106	70	79,4	4x15,9	110	96	170	F05	22	12,2	M12x1,5	8	8
1 1/2"	40	262	131	80	98,4	4x15,9	125	121	200	F07	33	19,2	M18x1,5	12	17
2"	50	290	145	90	120,7	4x19	150	134	350	F07	34	20,2	M22x1,5	15	25
2 1/2"	65	325	162,5	107	139,7	4x19	180	180	350	F10	34	19,2	M22x1,5	15	34
3"	80	370	185	117	152,4	4x19	190	189	465	F10	45	27,7	M28x1,5	19	51
4"	100	430	215	148	190,5	8x19	230	230	475	F12	56	32,2	M36x1,5	24	77
6"	150	500	250	194	241,3	8x22,2	280	280	855	F14	69	41	M48x3	32	138
8"	200	600	300	270	298,5	8x22,2	345	325	855	F14	69	34	M48x3	32	

VALVE SIZE	TORQUE	
	AT MAXIMUM DIFFERENTIAL PRESSURE	
	L	T
25 (1")	32	32
40 (1 1/2")	71	71
50 (2")	130	130
65 (2 1/2")	195	195
80 (3")	260	260
100 (4")	494	494
150 (6")	689	689
200 (8")	850	850

VALVE SIZE	Kv		
	PORT L	PORT T	
		PORT 2	PORT 3
25 (1")	20,4	28,9	51
40 (1 1/2")	51,85	51,85	149,6
50 (2")	42,5	80,75	249,9
65 (2 1/2")	136,85	136,85	478,55
80 (3")	206,55	291,55	732,7
100 (4")	323	323	1217,2
150 (6")	726,75	726,75	3087,2
200 (8")	920	920	4810



(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.  
Torque Values in Nm.  
Kv Values in m3/h.



BALL VALVES

# SEMI-TRUNNION 2 WAY BALL VALVES

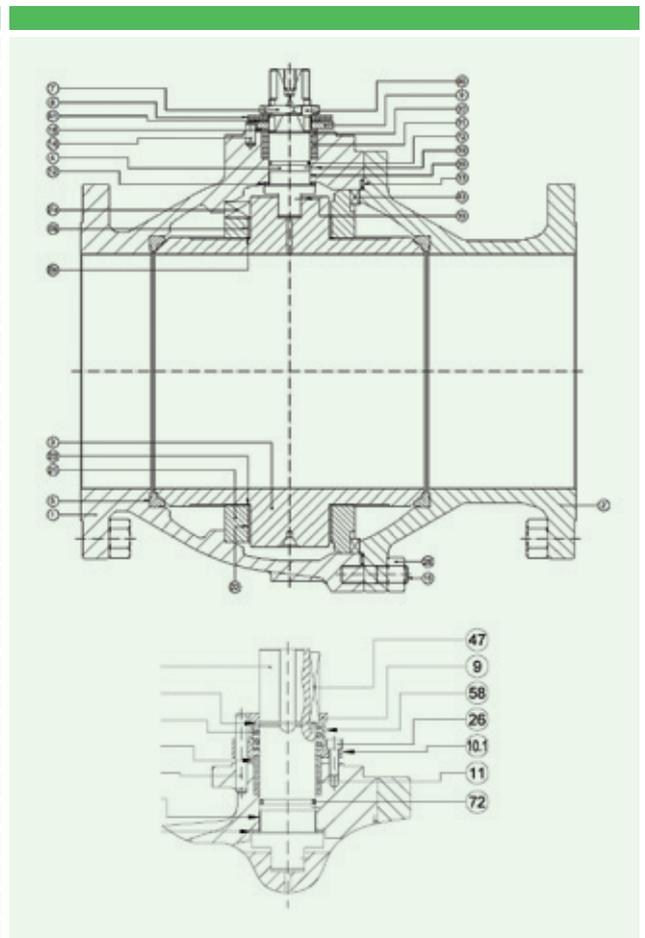
# SEMI-TRUNNION BALL VALVES

8" - 12" | Class 150 - Class 300  
 DN 200 - DN 300 | PN 16 - PN 40

A Semi - trunnion ball valve has additional mechanical anchoring of the ball at the top and the bottom mounted in a split body, suitable for dimensions up to DN300 and 300 lbs/PN40. The JC semi - trunnion mounted ball valves has an intermediate design between floating ball and Trunnion and are suitable to install in general applications also is often presented in the hydrocarbon industry and in the gas storage and transportation field.

## Materials CAST TRUNNION

Item	Description	AIM	IIM
1	Body	A 216 Gr. WCB (C ≤ 0,25%)	A 351 Gr. CF8M
2	Body connector	A 216 Gr. WCB (C ≤ 0,25%)	A 351 Gr. CF8M
3	Ball	A 351 Gr. CF8M	
4	Stem	A 479 Tp.316	
5	Seat ring	PTFE	PTFE
7	Gland nut	Zinc plated carbon steel	AISI 303
8	Disk spring	Carbon St.	E.N.P. Carbon St.
9	Stop plate	Carbon St.	AISI 304
10	Gland	AISI 303	AISI 316
10.1	Gland	AISI 303	AISI 316
11	Gland packing	Graphite	
12	Stem thrust seal	25% G.F. PTFE	
13	Body connector seal	AISI 316L + Graphite	
14	Stop pin	Carbon St.	Stainless St.
15	Stud	A 193 Gr. B7M Zinc dichromate	A 193 Gr. B8M
18	Thrust washer	25% G.F. PTFE	
19	Antistatic device	Stainless St.	
21 /21a	Ball Trunnion	AISI 316	
22 /22a	Trunnion Bearing	PTFE + 50% SS	
23	Bearing	PTFE	
26	Bolt	DIN 912 8.8 Zinc plated	DIN 912 A2
28	Nut	A 194 Gr. 2HM Zinc dichromate	A 194 Gr. 8M
39	Stem Bushing	25% G.F. PTFE *	
41	Spacer	Carbon St.	Stainless St.
43	Key	AISI 316	
46	Locking washer	AISI 304	
47	Key	AISI 316	
58	Spring Protection	Carbon St.	Stainless St.
72	O Ring	FKM	
89	Identification plate	Stainless St.	
471	Retainer	Steel	Stainless St.

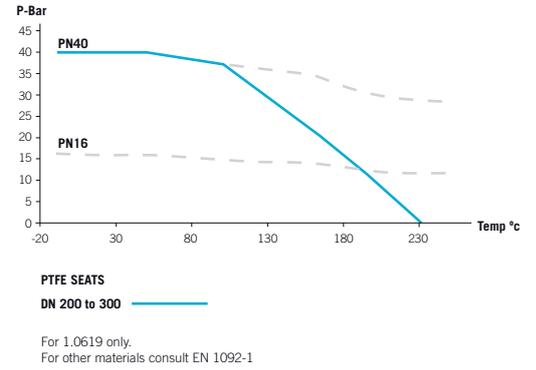


(\*) AISI 316 + PTFE only in DN300 (12").

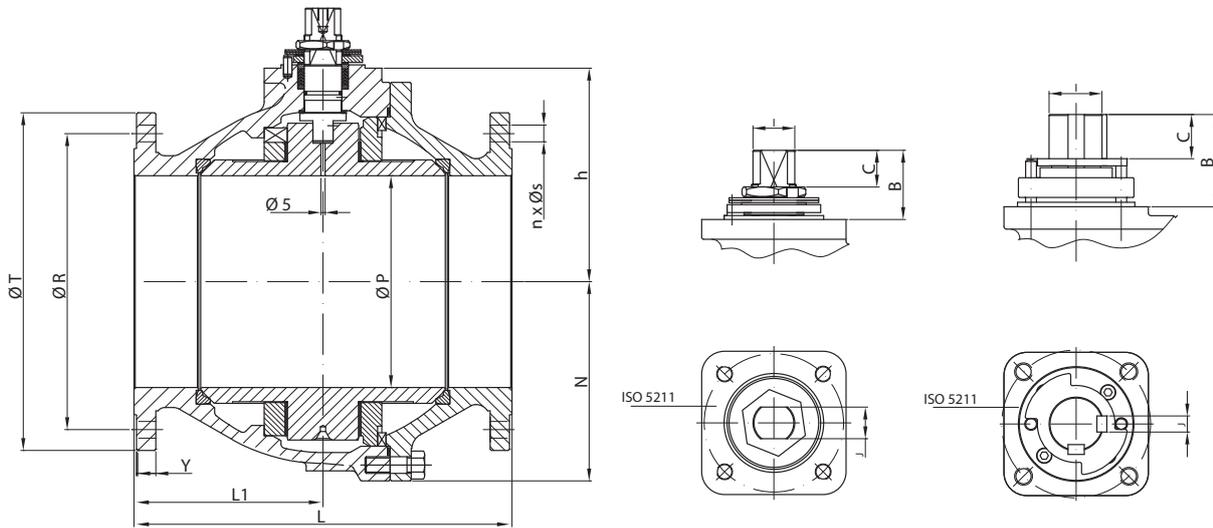
**EN DIN 1516 / 1540 AIT/IIT** **PN 16 / PN 40** **Full Bore**



**Pressure - Temperature**



**PN 16. From DN 250 to DN 300** **PN 40. From DN 200 to DN 300**



**Fig. 1516 (PN 16)**

DN	øP	L	L1	øR	n x øS	Y	øT	h	N	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
250	254	450	225	355	12x26	26	405	256	239	F14	72	39	M45x2	32	223	1120	15000
300	305	500	245	410	12x26	26	460	297	288	F14	106	58	50	14	323	1800	20800

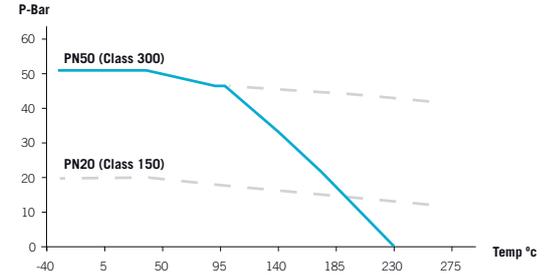
**Fig. 1540 (PN 40)**

DN	øP	L	L1	øR	n x øS	Y	øT	h	N	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
200	203	400	200	320	12x30	34	375	233	208	F14	72	39	M45x2	32	162	1000	9000
250	254	450	199	385	12x33	38	450	256	253	F14	72	39	M45x2	32	264	1400	15000
300	305	500	240	450	16x33	42	515	310	300	F14	106	58	50	14	440	2300	20800

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.



Pressure - Temperature



PTFE SEATS  
8" to 12"

For A216 Gr. WCB only.  
For other materials consult ASME B16.34

Class 150. From 10" to 12"

Class 300. From 8" to 12"

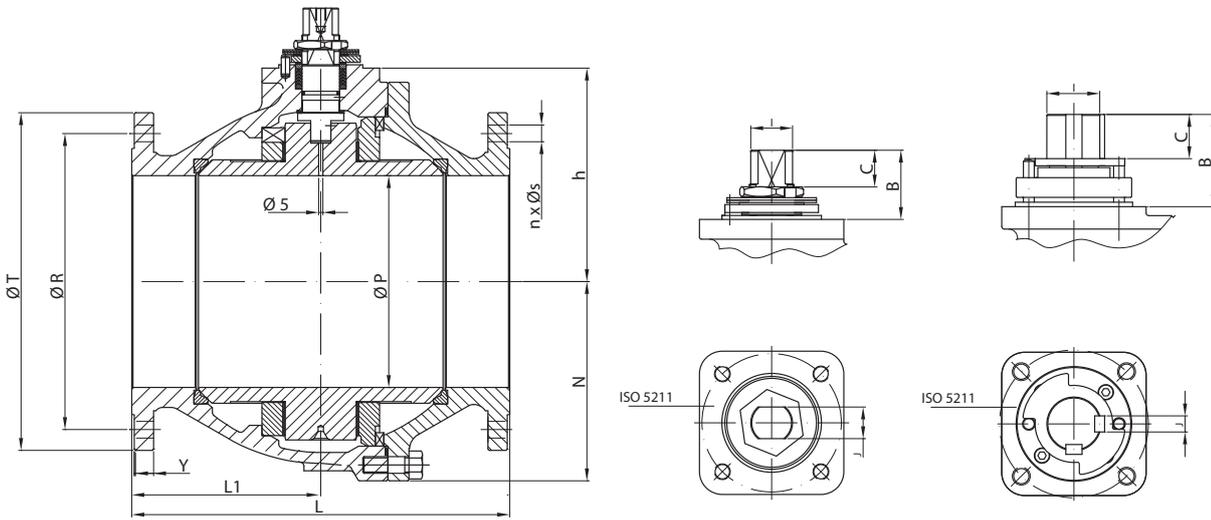


Fig. 1515 (Class 150)

DN	øP	L	L1	øR	n x øS	Y	øT	h	N	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
250 (10")	254	533	225	362	12x25,4	28,7	405	256	239	F14	72	39	M45x2	32	237	1280	15000
300 (12")	305	610	245	431,8	12x25,4	30,2	485	297	287,5	F14	106	58	50	14	357	2000	20800

Fig. 1530 (Class 300)

DN	øP	L	L1	øR	n x øS	Y	øT	h	N	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
200 (8")	203	502	239	330,2	12x25,4	39,6	380	233	208	F14	72	39	M45x2	32	189	1280	9000
250 (10")	254	568	225	387,4	16x28,5	46,2	445	256	252,5	F14	72	39	M45x2	32	301	1480	15000
300 (12")	305	648	315	450,8	16x31,8	49,2	520	310	300	F14	106	58	50	14	520	2550	20800

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.



BALL VALVES

**METAL SEATED**  
**2 WAY BALL VALVES**

# METAL SEATED

1/2" - 24" | Class 150 - Class 1500  
 DN 15 - DN 300 | PN 16 - PN 40

CVA offers also a large range of metal seated ball valves for different services (slurries, pulp and liquors, high temperature, abrasive or sticking fluids, control).

## What is HT-65?

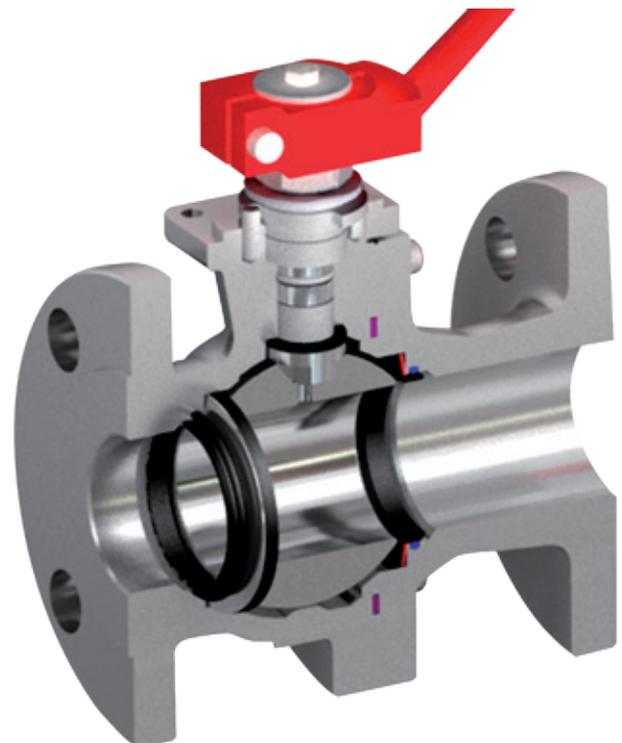
HT-65 is a thermal-chemical diffusion process where ferrous parts are heat treated at 565 °C (1050 °F) through an appropriate formulation to assure the interface of the materials being processed. The intrinsic properties of HT-65 are its low coefficient of friction as well as the degree of lubricity in both the dry state as well as under lubrication. This highly lubricious process prevents stainless steel from galling and, once HT-65 is applied, the surface becomes Rockwell 70 in hardness on the "C" scale.

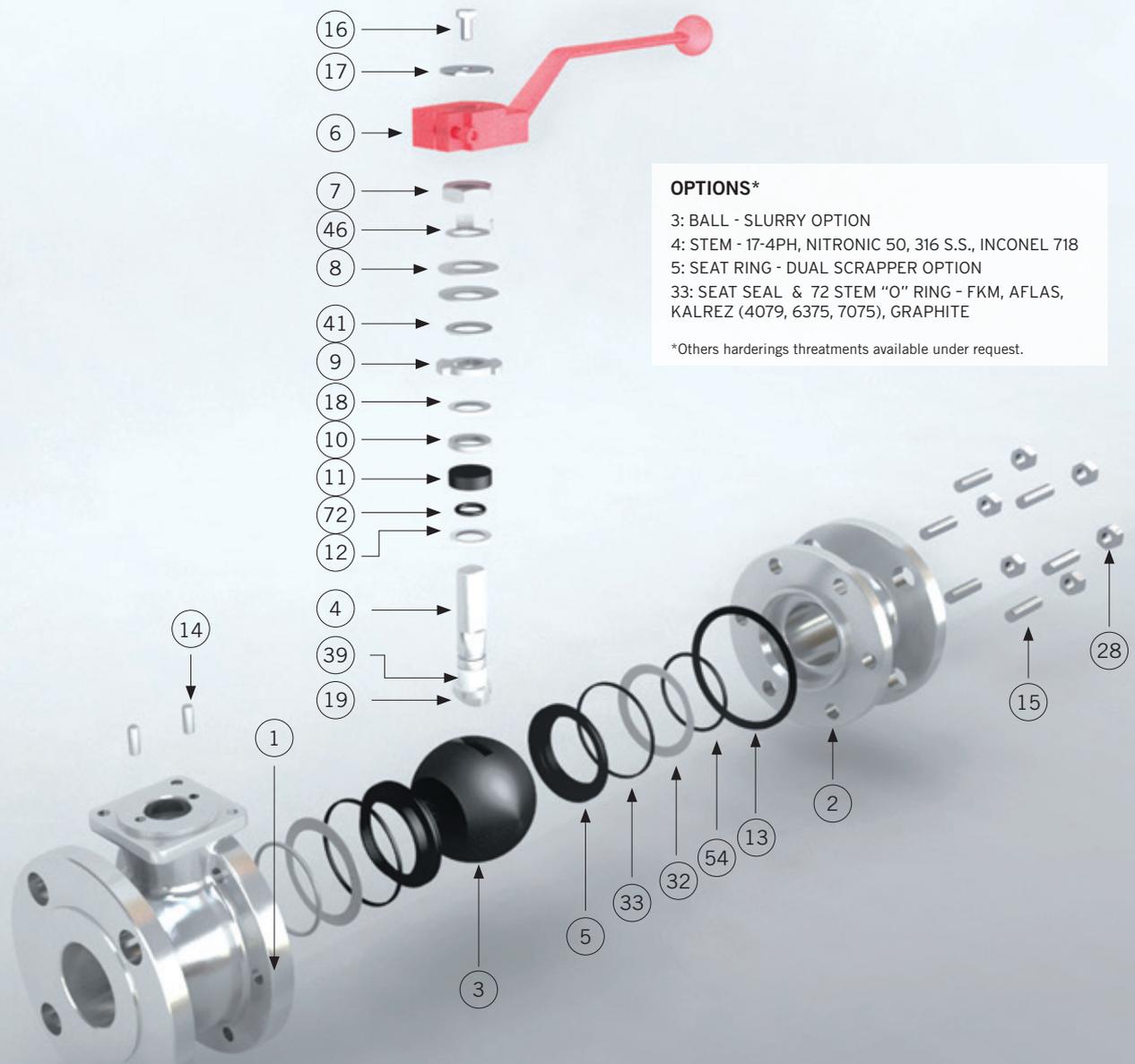
The HT-65 layer is highly resistant to wear, seizure & corrosion. Typically HT-65 penetrates the ferrous matrix to a depth of 0,2 to 0,25 mm (0,0079 to 0,01") to form the diffusion zone. Austenitic steels develop an extremely hard & complex compound zone distinctive from all ferrous metals, typically 17 to 22 microns (0,0007 to 0,0009") thick and a diffusion zone approximately 76 microns (0,003") deep.

HT-65 components have excellent sliding and running properties, a very low friction coefficient that minimizes the incidence of abrasion due to wear and galling.

With HT-65, JC can assure a bubble tight sealing up to temperatures of 327 °C and Class V up to 500 °C.

- » **Bubble tight sealing up to 327 °C and Class V up to 500 °C**
- » **Low coefficient of friction**
- » **Excellent sliding and running properties**
- » **Hardens the complete surface of ball and seats**
- » **Other hardening procedure under request (CC60, CT70, HT2200)**





**OPTIONS\***

3: BALL - SLURRY OPTION  
 4: STEM - 17-4PH, NITRONIC 50, 316 S.S., INCONEL 718  
 5: SEAT RING - DUAL SCRAPPER OPTION  
 33: SEAT SEAL & 72 STEM "O" RING - FKM, AFLAS, KALREZ (4079, 6375, 7075), GRAPHITE

\*Others hardenings threathments available under request.

Item	Description	EN-DIN		ASME	
		3516 AIM 3540 AIM	3516 IIM 3540 IIM	3515 AIM 3530 AIM	3515 IIM 3530 IIM
1	Body	1.0619	1.4408	A216 Gr.WCB (C≤0,25%)	A351 Gr. CF8M
2	Body connector	1.0619	1.4408	A216 Gr.WCB (C≤0,25%)	A351 Gr. CF8M
3	Ball	316 S.S. + HT-65 Lapped		316 S.S. + HT-65 Lapped	
4	Stem	See options		See options	
5	Seat ring	316 S.S. + HT-65 Lapped		316 S.S. + HT-65 Lapped	
6	Wrench	Nodular Iron		Nodular Iron	
7	Gland nut	Zinc plated carbon steel	AISI 303	Zinc plated carbon steel	AISI 303
8	Disk spring	Carbon steel	ENP Carbon Steel	Carbon steel	ENP Carbon Steel
9	Stop plate	Carbon steel	AISI 304	Carbon steel	AISI 304
10	Gland	AISI 303	AISI 316	AISI 303	AISI 316
11	Gland packing	Graphite		Graphite	
12	Stem thrust seal	316 S.S. + HT-65		316 S.S. + HT-65	
13	Body connector seal	AISI 316L +Graphite		AISI 316L + Graphite	
14	Stop pin	Carbon St.	Stainless St.	Carbon St.	Stainless St.
15	Stud (DN 32 to DN 100)	A4-70		A193Gr. B7M Zinc dichromate	A193 Gr. B8M
15.1	Bolt	A4-70		-	-
16	Bolt	DIN 933 A4-70		DIN 933 A4-70	
17	Washer	Zinc plated carbon steel	AISI 304	Zinc plated carbon steel	AISI 304
18	Thrust washer	316 S.S. + HT65		316 S.S. + HT65	
19	Antistatic device	Stainless St.		Stainless St.	
28	Nut (DN 32 to DN 100)	A4-70		A194 Gr. 2HM Zinc dichromate	A194 Gr. 8M
32	Seat disk spring	Inconel X-750		Inconel X-750	
33	Seat Ring	See options		See options	
39	Stem bushing	25% G.F. PTFE		25% G.F. PTFE	
41	Spacer (DN 40 to DN200)	Carbon steel	AISI 304	Carbon steel	AISI 304
46	Locking washer	AISI 304		AISI 304	
54	Seat Seal	Graphite		Graphite	
72	Stem "O" Ring	See options		See options	

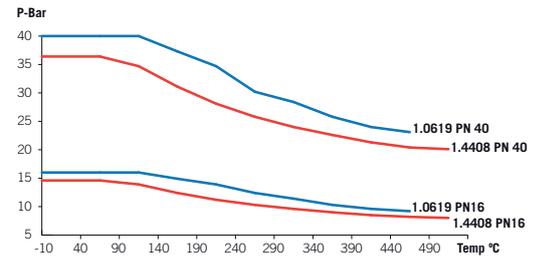
**EN DIN 3516 / 3540 AIT/IIT**

**PN 16 / PN 40**

**Full Bore**



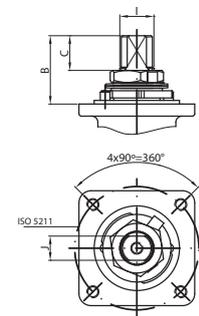
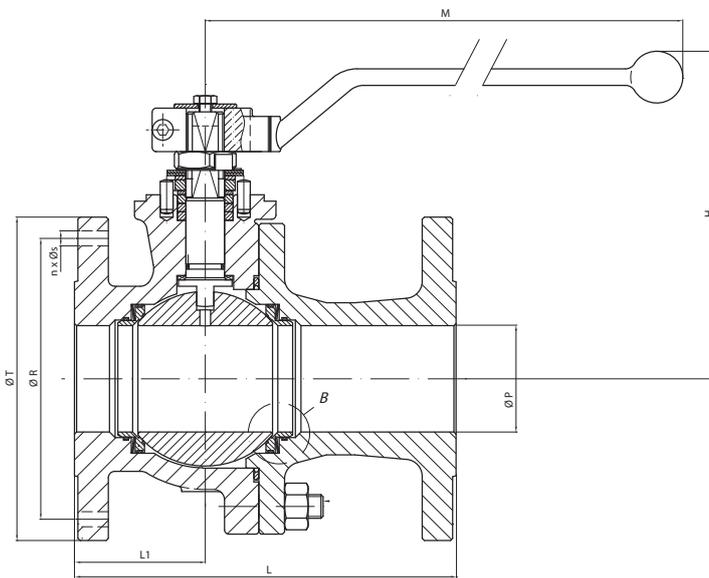
**Pressure - Temperature**



For other materials consult EN 1092-1

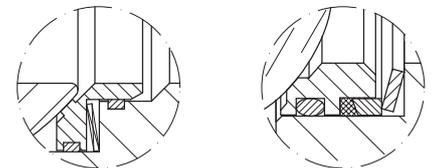
**PN 16.** From DN 65 to DN 200

**PN 40.** From DN 15 to DN 150



**DETAIL B**

ONLY DN-1/2" & 3/4"



**Fig. 3516 (PN 16)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	WEIGHT 3316	TORQUE	Kv
65	65	170	76	145	4x18	185	169	348	F07	44	19,7	M22x1.5	16	16	18,3	121	550
80	80	180	82	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	22	25	161	1000
100	100	190	90	180	8x18	220	231	495	F10	56,5	29,2	M28x1.5	20	32	36	247	1650
125	125	325	120	210	8x18	250	262	698	F12	56	27,6	M35x2	25	52,5	--	360	3000
150	151	350	135	240	8x22	285	298	698	F12	68	38,5	M40x1.5	29	76	--	675	4200
200	203	400	200	295	12x22	340	352	868	F14	72	39	M45x2	32	111	--	1130	9000

**Fig. 3540 (PN 40)**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3540	WEIGHT 3340	TORQUE	Kv
15	15	115	53	65	4x14	95	110	164	F05	11,2	5,7	M12x1.5	9	2,8	3	26	20
20	20	120	52	75	4x14	105	117	164	F05	13,2	9,2	M12x1.5	9	3,6	--	35	40
25	25	125	49	85	4x14	115	129	164	F05	22,7	10,2	M12x1.5	9	5	5,2	40	75
32	32	130	54	100	4x18	140	131	210	F05	32	13,7	M16x1.5	12	7	7,6	52	130
40	40	140	55	110	4x18	150	148	213	F07	41,5	19,2	M18x1.5	13	9	9,6	60	170
50	50	150	61	125	4x18	165	155	213	F07	41,5	19,2	M18x1.5	13	12	12,9	120	270
65	65	170	76	145	8x18	185	169	348	F07	44	19,7	M22x1.5	16	17	--	160	550
80	80	180	75	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	23	--	254	1000
100	100	190	91	190	8x22	235	231	495	F10	56,5	29,2	M28x1.5	20	35	--	1650	
125	125	325	120	220	8x26	270	262	698	F12	56	27,6	M35x2	25	57	--	3000	
150	151	350	135	250	8x26	300	298	698	F12	68	38,5	M40x1.5	29	83,5	--	4200	

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

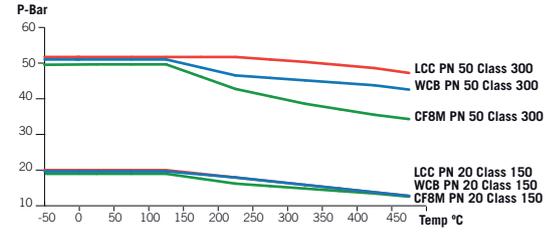
**ASME 3515 / 3530 AIT/IIT**

**Class 150 / 300**

**Full Bore**



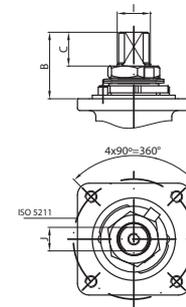
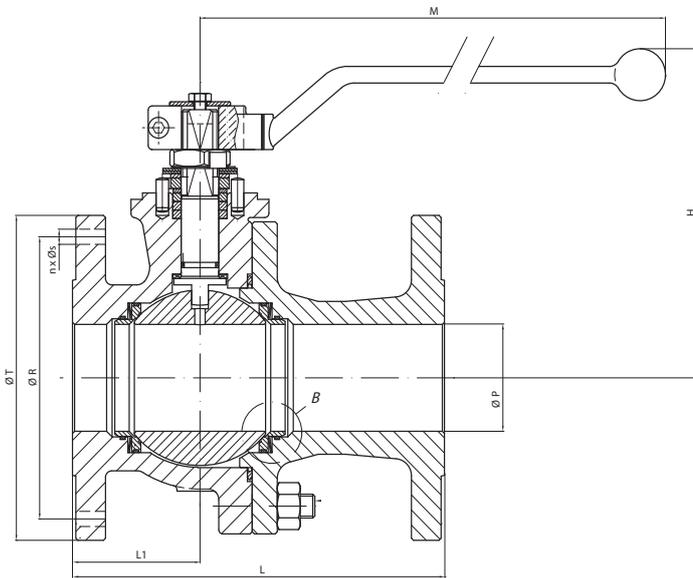
**Pressure - Temperature**



For other materials consult ASME B16.34

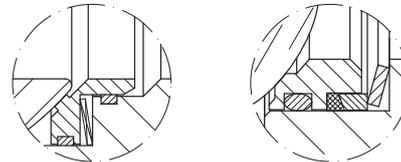
**Class 150. From 1/2" to 8"**

**Class 300. From 1/2" to 6"**



**DETAIL B**

ONLY DN-1/2" & 3/4"



**Fig. 3515 (Class 150)**

DN	øP	L	L1	øR	n x øS	øT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15 (1/2")	15	108	47	60,3	4x15,9	90	110	164	F05	11,2	5,7	M12x1.5	9	2	26	20
20 (3/4")	20	117	50	69,9	4x15,9	100	117	164	F05	13,2	9,2	M12x1.5	9	3	32	40
25 (1")	25	127	52	79,4	4x15,9	110	129	164	F05	22,7	10,2	M12x1.5	9	3,5	38	75
40 (1 1/2")	40	165	65	98,4	4x15,9	125	148	213	F07	41,5	19,2	M18x1.5	13	8	55	170
50 (2")	50	178	61	120,7	4x19	150	155	213	F07	41,5	19,2	M18x1.5	13	11	92	270
65 (2 1/2")	65	190	75	139,7	4x19	180	169	348	F07	44	19,7	M22x1.5	16	16	140	550
80 (3")	80	203	79	152,4	4x19	190	207	445	F10	44,5	19,7	M25x1.5	18	23	170	1000
100 (4")	100	229	90	190,5	8x19	230	231	495	F10	56,5	29,2	M28x1.5	20	38	273	1650
150 (6")	151	394	174	241,3	8x22,2	280	298	698	F12	68	38,5	M40x1.5	29	88	778	4200
200 (8")	203	457	200	298,5	8x22,2	345	352	868	F14	72	39	M45x2	32	155	1313	9000

**Fig. 3530 (Class 300)**

DN	øP	L	L1	øR	n x øS	øT	H	M	ISO 5211	B	C	I	J	WEIGHT	TORQUE	Kv
15 (1/2")	15	140	60	66,7	4x15,9	95	110	164	F05	11,2	5,7	M12x1.5	9	3	32	20
20 (3/4")	20	152	65	82,6	4x19	115	117	164	F05	13,2	9,2	M12x1.5	9	4	40	40
25 (1")	25	165	70	88,9	4x19	125	129	164	F05	22,7	10,2	M12x1.5	9	5	45	75
40 (1 1/2")	40	190	80	114,3	4x22,2	155	148	213	F07	41,5	19,2	M18x1.5	13	11	70	170
50 (2")	50	216	83	127	8x19	165	155	213	F07	41,5	19,2	M18x1.5	13	14	135	270
80 (3")	80	283	118	168,3	8x22,2	210	207	445	F07	44,5	19,7	M25x1.5	18	32	286	550
100 (4")	100	305	133	200	8x22,2	255	231	495	F10	56,5	29,2	M28x1.5	20	52		1000
150 (6")	151	403	160	269,9	12x22,2	320	298	698	F10	68	38,5	M40x1.5	29	94		1650

(\*) Dimensions in mm and weight in kg.

(\*\*) Weights and dimensions can be changed without notice.

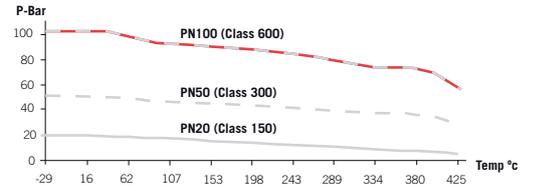
# CAST BALL VALVES 2515 / 2530 / 2560 AIT/IIT

Class 150 / 300 / 600

Full Bore



## Pressure - Temperature



### METAL SEATS

2" to 16"

For A216 Gr. WCB only.  
For other materials consult ASME B16.34

Class 150. From 2" to 16"

Class 300. From 2" to 16"

Class 600. From 2" to 12"

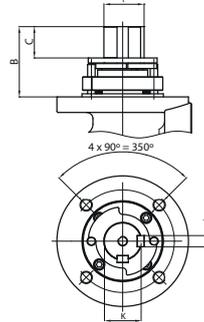
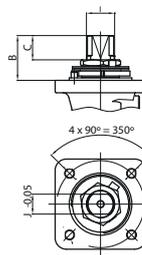
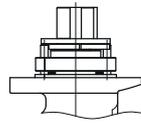
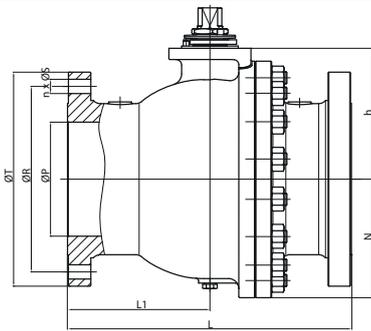


Fig. 2515 (Class 150)

DN	øP	L	L1	øR	n x øS	øT	h	N	ISO 5211	B	C	I	J	K	WEIGHT	TORQUE	Kv
50 (2")	50	178	78.5	120.7	4x19	150	84	80	F07	42	17	M22x1,5	16	-	13	70	366
80 (3")	80	203	87	152.4	4x19	190	126	-	F10	55	27	M28x1,5	20	-	22	130	938
100 (4")	100	229	101	190.5	8x19	230	152	120	F12	56	27	M35x2	25	-	39	340	1.465
150 (6")	151	394	197	241.3	8x22.2	280	212	168	F14	70	36	M45x2	32	-	98	500	3.297
200 (8")	203	457	230	298.5	8x22.2	345	233	208	F14	70	37	M45x2	32	-	124	800	5.861
250 (10")	254	533	267	362	12x25.4	405	256	243	F14	70	37	M45x2	32	-	175	1.010	9.454
300 (12")	305	610	305	431.8	12x25.4	485	297	287.5	F14	106	58	50	14	53.5	295	1.800	13.631
350 (14")	337	686	343	476.3	12x28.5	535	333	323	F16	103	49	60	18	64.2	580	2.600	16.641
400 (16")	388	762	381	539.8	16x28.5	595	412	358	F25	159	103	90	25	95.3	750	3.500	23.554

Fig. 2530 (Class 300)

DN	øP	L	L1	øR	n x øS	øT	h	N	ISO 5211	B	C	I	J	K	WEIGHT	TORQUE	Kv
50 (2")	50	216	84	127	8x19	165	84	-	F07	42	17	M22x1,5	16	-	16	80	366
80 (3")	80	283	115	168.3	8x22.2	210	126	-	F10	55	27	M28x1,5	20	-	33	140	938
100 (4")	100	305	133	200	8x22.2	255	152	-	F12	56	27	M35x2	25	-	43	380	1.465
150 (6")	151	403	202	269.9	12x22.2	320	212	173	F14	70	36	M45x2	32	-	113	700	3.297
200 (8")	203	502	252	330.2	12x25.4	380	233	210	F14	70	37	M45x2	32	-	157	900	5.861
250 (10")	254	568	284	387.4	16x28.5	445	257	253	F14	70	37	M45x2	32	-	263	1.300	9.454
300 (12")	305	648	315	450.8	16x31.8	520	310	300	F16	103	49	60	18	64.2	480	2.500	13.631
350 (14")	337	762	381	514.4	20x34.9	585	333	331	F16	103	49	60	18	64.2	655	3.750	16.641
400 (16")	388	838	419	571.5	20x34.9	650	412	365	F25	159	103	90	25	95.3	890	5.000	23.554

Fig. 2560 (Class 600)

DN	øP	L	L1	øR	n x øS	øT	h	N	ISO 5211	B	C	I	J	K	WEIGHT	TORQUE	Kv
50 (2")	50	292	96	127	8x19.1	165	84	-	F07	42	17	M22x1,5	16	-	20	90	366
80 (3")	80	356	140	168.3	8x22.2	210	126	113	F10	55	27	M28x1,5	20	-	41	170	938
100 (4")	100	432	160	215.9	8x25.2	275	152	-	F12	56	27	M35x2	25	-	77	400	1.465
150 (6")	151	559	246	292.1	12x28.5	355	212	188	F14	97	49	45	14	48.5	192	900	3.297
200 (8")	203	660	315	349.2	12x31.8	420	237	235	F14	113	64	50	14	53.5	329	1.400	5.861
250 (10")	254	787	340	431.8	16x34.9	510	275	273	F16	103	49	60	18	64.2	460	3.050	9.454
300 (12")	305	838	404	489	20x34.9	560	345	335	F16	127	73	65	18	69.2	570	3.800	13.631

(\*) Dimensions in mm and weight in kg.

(\*\*) Weights and dimensions can be changed without notice.

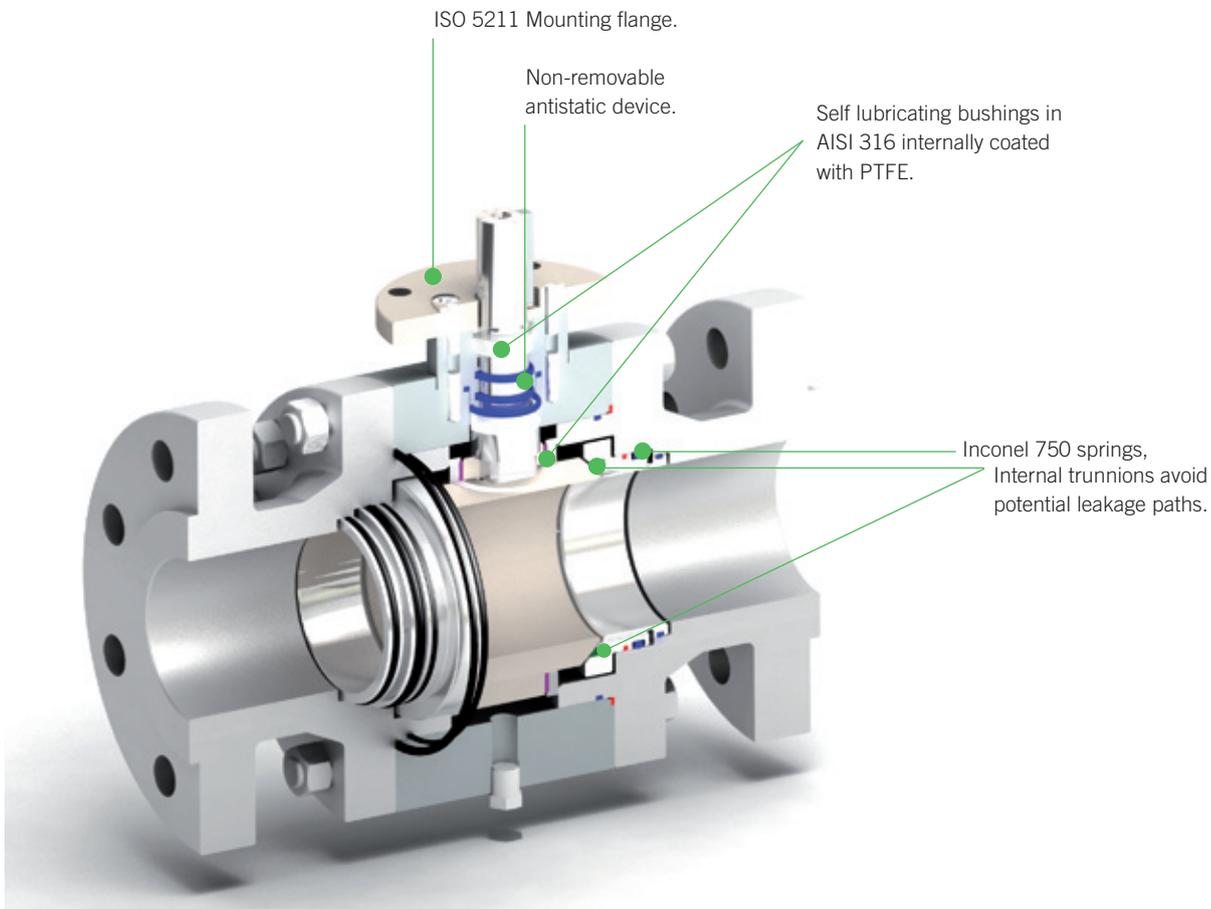


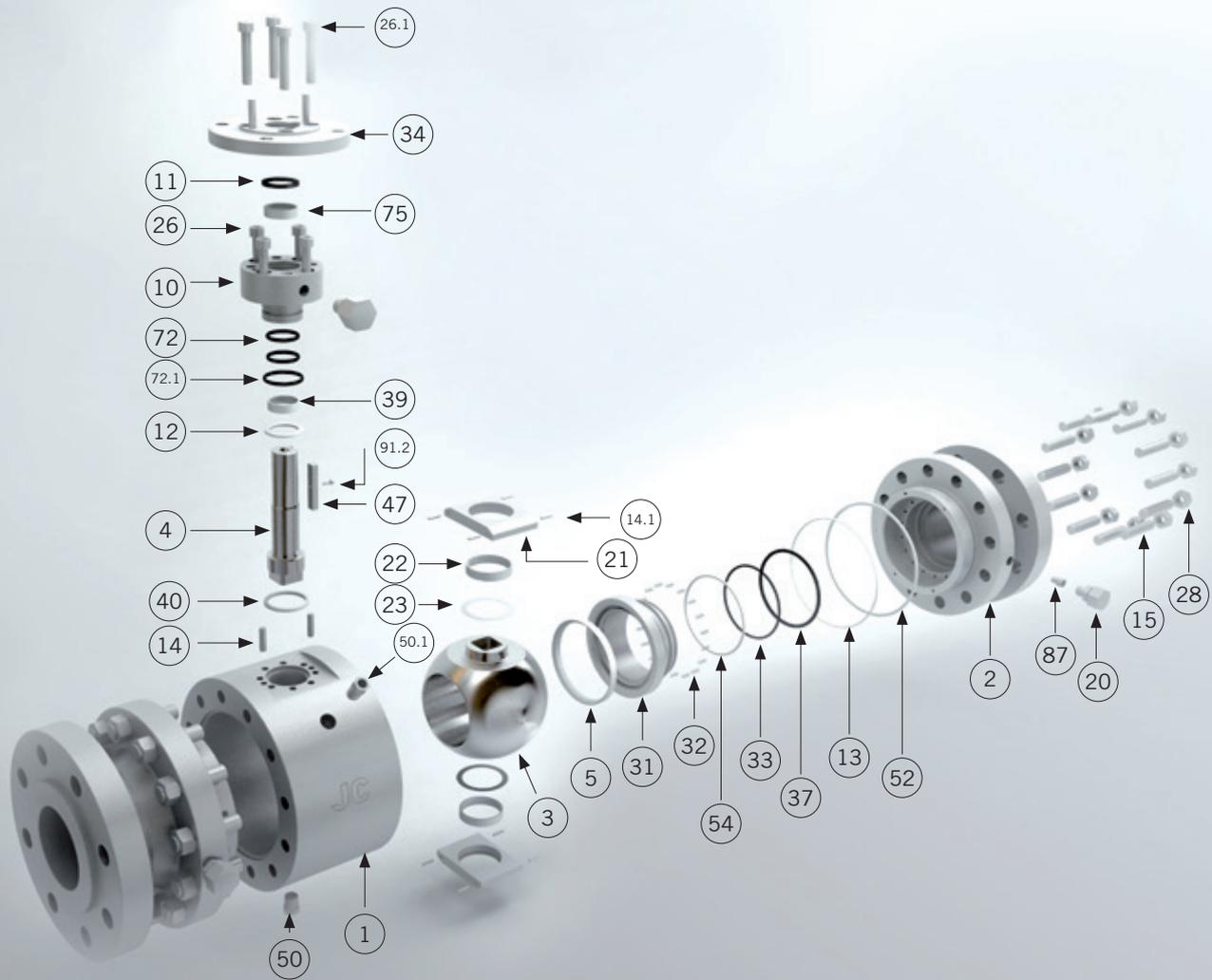
BALL VALVES | **TRUNNION**  
2 WAY BALL VALVES

# 3 PIECE FORGED TRUNNION MOUNTED

2" - 42" | Class 150 - Class 2500

A trunnion ball valve has additional mechanical anchoring of the ball at the top and the bottom, suitable for larger and higher pressure valves. The JC trunnion mounted ball valves are suitable to stand the harsh service conditions often presented in the hydrocarbon industry and in the gas storage and transportation field. In general, they are recommended for tight shut-off in high pressure and double block and bleed applications.





# Materials

## SERIES 6000 & 7000

Item	Description	AIT	LIT	IIT
1	Body	A 105N	A 350 Gr. LF2 Class. 1	A182 F316
2	Body Connector	A 105N	A 350 Gr. LF2 Class. 1	A182 F316
3	Ball		A182 F316 or A351Gr. CF8M	
4	Stem		A 479 Tp.316	
5	Seat Ring		RPTFE, PEEK, DEVLON	
10	Gland	A 105N	A 350 Gr. LF2 Class-1	A 479 Tp.316
11	Gland Packing		Graphite	
12	Stem Thrust Seal		25% G.F. + PTFE	
13	Body Connector Seal		Graphite	
14 / 14.1	Pin	Carbon St.	Carbon Steel	Stainless Steel
15	Stud	A 193 Gr. B7M Zinc dichromate	A 320 Gr. L7M	A 193 Gr. B8M
19	Antistatic Device		Stainless St.	
20	Sealant Injector	Carbon Steel	Carbon Steel	Stainless Steel
21	Ball Trunnion		A 479 Tp.316	
22	Trunnion Bearing		AISI 316 with inside in PTFE	
23	Bearing		PTFE	
26 / 26.1	Bolt	A 193 Gr. B7M Zinc dichromate	A 320 Gr. L7M	A 193 Gr. B8M
28	Nut	A 194 Gr. 2HM Zinc dichromate	A 194 Gr. 7M	A 194 Gr. 8M
31	Seat Carrier		A 479 Tp.316 / A182 F316	
32	Spring		Inconel - 750	
33	"O" Ring		FKM	
34	Mounting Flange	A 105N	A 350 Gr. LF2 Class-1	A 479 Tp.316
37	"O" Ring		FKM	
39	Stem Bushing		AISI 316 with inside in PTFE	
40	Gasket		Graphite	
47	Key	Carbon Steel	Carbon Steel	Stainless St.
50	Drain Plug	A 105	A 350 Gr. LF2 Class-1	AISI 316
50.1	Relieve Plug	A 105	A 350 Gr. LF2 Class-1	AISI 316
52	"O" Ring		FKM	
54	Seat Carrier Seal		Graphite	
72 / 72.1	"O" Ring		FKM	
75	Stem Bushing		AISI 316 with inside in PTFE	
87	Check Valve		Stainless St.	
89	Identification plate		Stainless St.	
91.2	Bolt		DIN 912 A2	

# FORGED BALL VALVES 6015 / 6030 / 6060 / 6090 / 6050 / 6042

Full Bore

Class 150.  
From 2" to 24"

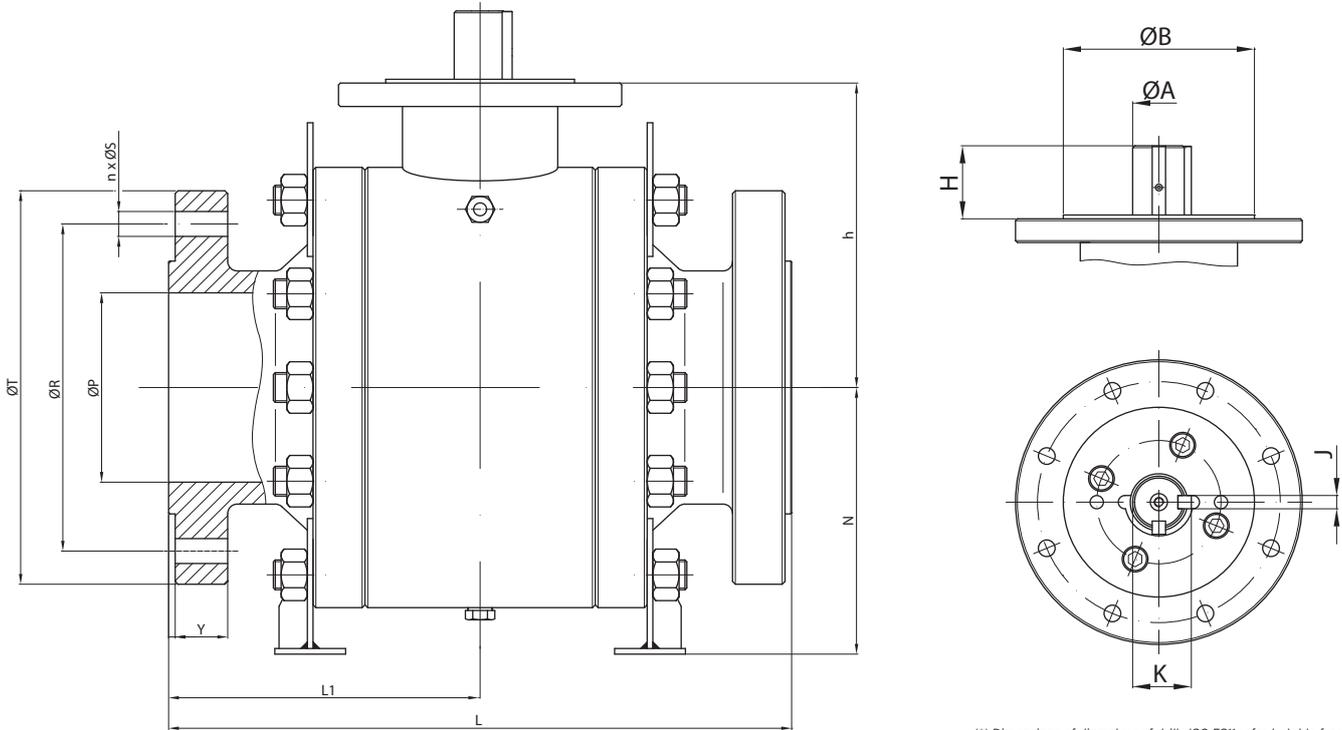
Class 300.  
From 2" to 24"

Class 600.  
From 2" to 24"

Class 900.  
From 2" to 24"

Class 1500.  
From 2" to 12"

Class 2500.  
From 2" to 8"



(\*) Dimensions of diameters of drills ISO 5211 refer to table from page 87.

## Pressure - Temperature

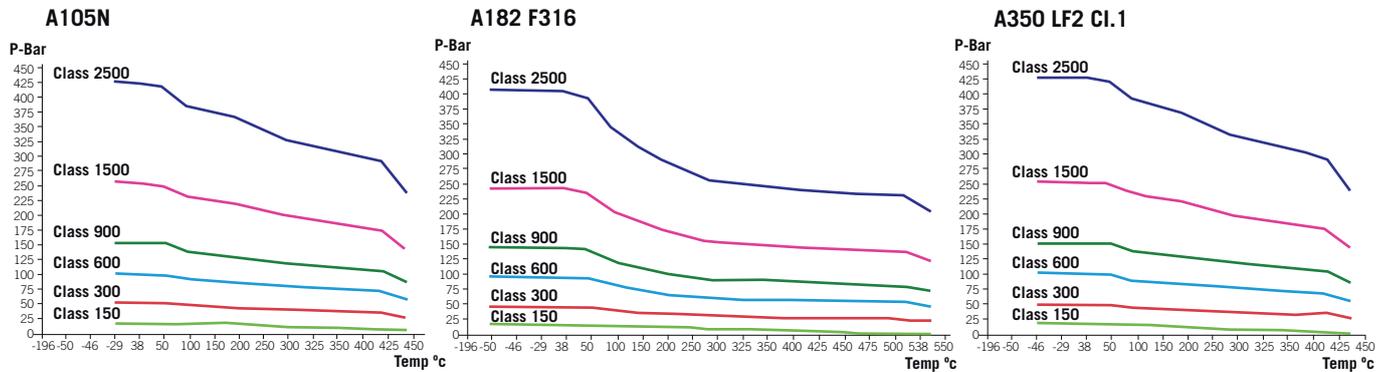


Fig. 6015 (Class 150)

DN	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
2"	49	178	89	120.7	4 x 19	150	14	125	100	F10	36,5	20	8	22,5	52	27	366
3"	76	203	101,5	152.4	4 x 19	190	18	156,5	133,5	F12	37,5	26	10	30	59	52	938
4"	102	229	114,5	190.5	8 x 19	230	22	175	167	F12	54	30	10	34	110	98	1.465
6"	152	394	197	241.3	8 x 22	280	24	269	277	F16	71	39,9	14	48,9	171	225	3.297
8"	203	457	228,5	298.5	8 x 22,2	345	27	325	325	F25	77	49,9	14	58,4	334	450	5.861
10"	254	533	266,5	362	12 x 25,4	405	29	362	319	F25	84,5	59,9	16	67	458	668	9.454
12"	305	610	305	431.8	12 x 25,4	485	30	423	399	F25	104	69,9	18	78	736	1.317	13.631
14"	337	686	343	476.3	12 x 28,5	535	33	455	439	F30	119	79,9	22	87,9	1.019	1.547	16.641
16"	387	762	381	539.8	16 x 28,5	595	35	490	472	F30	134	84,9	22	94,9	1.778	2.000	23.554
18"	438	864	432	577.9	16 x 31,8	635	38	542	596	F30	147,5	99,9	28	111,9	1.860	3.027	29.672
20"	488	914	457	635	20 x 31,8	700	41	577	610	F30	147,5	99,9	28	111,9	2.439	3.803	36.633
24"	589	1.067	533,5	749.3	20 x 34,9	815	46	599	692	F40	152	120	32	134	4.302	9.100	52.751

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

**Fig. 6030 (Class 300)**

DN	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
2"	49	216	108	127	8 x 19	165	21	125	95	F10	36,5	20	8	22,5	60	49	366
3"	76	283	141,5	168,3	8 x 22,2	210	27	156,5	133,5	F12	37,5	26	10	30	72	107	938
4"	102	305	152,5	200	8 x 22,2	255	30	175	167	F12	54	30	10	34	120	210	1.465
6"	152	403	201,5	269,9	12 x 22,2	320	35	269	277	F16	71	39,9	14	48,9	195	522	3.297
8"	203	502	251	330,2	12 x 25,4	380	40	325	325	F25	77	49,9	14	58,4	352	1.060	5.861
10"	254	568	284	387,4	16 x 28,5	445	46	362	319	F25	84,5	59,9	16	67	534	1.559	9.454
12"	305	648	324	450,8	16 x 31,8	520	49	423	399	F25	104	69,9	18	78	847	3.125	13.631
14"	337	762	381	514,4	20 x 31,8	585	52	455	439	F30	119	79,9	22	87,9	1.221	3.642	16.641
16"	387	838	419	571,5	20 x 34,9	650	56	490	472	F30	134	84,9	22	94,9	1.831	4.732	23.554
18"	438	914	457	628,6	24 x 34,9	710	59	542	596	F30	147,5	99,9	28	111,9	2.057	7.000	29.672
20"	488	991	495,5	685,8	24 x 34,9	775	62	577	610	F30	147,5	99,9	28	111,9	2.721	8.959	36.633
24"	589	1.143	571,5	812,8	24 x 41,3	915	68	599	673	F40	152	120	32	134	5.525	23.400	52.751

**Fig. 6060 (Class 600)**

DN	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
2"	49	292	146	127	8 x 19	165	25	125	100	F10	36,5	20	8	22,5	63	85	366
3"	76	356	178	168,3	8 x 22,2	210	32	156,5	138,5	F12	37,5	26	10	30	78	196	938
4"	102	432	216	213,9	8 x 25,4	275	38	175	164	F12	54	30	10	34	132	392	1.465
6"	152	559	279,5	292,1	12x 28,5	355	48	268,5	277,5	F16	71	44,9	14	51,4	262	1.007	3.297
8"	203	660	330	349,2	12 x 31,8	420	56	325	296	F25	77	54,9	14	61,4	490	2.057	5.861
10"	254	787	393,5	431,8	16 x 34,9	510	64	362	365	F25	84,5	59,9	16	67	728	3.013	9.454
12"	305	838	419	489	20 x 34,9	560	67	423	418	F25	104	69,9	18	78	1.218	6.079	13.631
14"	337	889	444,5	527	20 x 38,1	605	70	455	450	F30	119	79,9	22	87,9	1.374	7.062	16.641
16"	387	991	495,5	603,2	20 x 41,3	685	76	490	504	F30	134	84,9	22	94,9	2.474	9.196	23.554
18"	438	1.092	546	654	20 x 44,5	745	83	542	567,5	F30	147,5	99,9	28	111,9	2.595	13.485	29.672
20"	488	1.194	597	723,9	24 x 44,5	815	89	577	581	F35	147,5	99,9	28	111,9	3.183	17.381	36.633
24"	589	1.397	698,5	838,2	24 x 50,8	940	102	599	694	F40	157,5	119,8	32	133,6	6.250	40.100	52.751

**Fig. 6090 (Class 900)**

DN	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
2"	51	368	184	165,1	8 x 25,4	215	38,1	120	101	F10	35	23	8	27	52	199	366
3"	77	381	190,5	190,5	8 x 25,4	240	38,1	153	124	F14	37	33	10	38	80	545	938
4"	102	457	228,5	235	8 x 31,8	290	44,5	170	151	F16	37	33	10	38	170	786	1.465
6"	152	610	305	317,5	12 x 31,8	380	55,6	214	380	F25	59	46	14	53	390	1.330	3.297
8"	203	737	368,5	393,7	12 x 38,1	470	63,5	258	428	F25	75	58	18	67	640	2.536	5.861
10"	254	838	419	469,9	16 x 38,1	545	69,9	303	489	F25	113	68	20	78	1.070	4.950	9.454
12"	305	965	482,5	533,4	20 x 38,1	610	79,4	348	525	F25	111	68	20	78	1.610	7.850	13.631
14"	324	1.029	514,5	558,8	20 x 41,3	640	85,8	381	545	F25	110	88	24	100	1.760	10.868	16.641
16"	375	1.130	565	616	20 x 44,5	705	88,9	418	580	F25	110	88	24	100	2.240	18.112	23.554
18"	425	1.219	609,5	685,8	20 x 50,8	785	101,6	464	630	F35	130	120	32	136	3.000	28.738	29.672
20"	473	1.321	660,5	749,3	20 x 54	855	108	507	672	F35	130	120	32	136	4.360	43.470	36.633
24"	571	1.549	774,5	901,7	20 x 66,7	1.040	139,7	596	760	F35	127	148	32	164	7.050	55.555	52.751

**Fig. 6050 (Class 1500)**

DN	øP	L <sup>(1)</sup>	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
2"	51	371	185,5	165,1	8 x 25,4	215	38,1	129	107	F12	31	23	8	27	55	369	366
3"	77	473	236,5	203,2	8 x 31,8	265	47,7	156	137	F14	36	33	10	38	105	942	938
4"	102	549	274,5	241,3	8 x 34,9	310	54	193	168	F16	39,5	38	10	43	205	1.425	1.465
6"	146	711	355,5	317,5	12 x 38,1	395	82,6	242	395	F25	69,5	46	14	53	525	2.795	3.297
8"	194	841	420,5	393,7	12 x 44,5	485	92,1	292	445	F25	112,5	68	20	78	890	4.468	5.861
10"	241	1.000	500	482,6	12 x 50,8	585	108	336	505	F25	110,5	78	20	88	1.560	7.486	9.454
12"	289	1.146	573	571,5	16 x 54	675	123,9	399	565	F25	110	88	24	100	2.355	10.626	13.631

**Fig. 6042 (Class 2500)**

DN	øP	L <sup>(1)</sup>	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
2"	44,5	454	227	171,4	8 x 28,6	235	50,9	150	125	F16	39	33	10	38	110	786	366
3"	64	584	292	228,6	8 x 34,9	305	66,7	182	151	F16	39	38	10	43	215	1.932	938
4"	89	683	341,5	273,0	8 x 41,3	355	76,2	214	187	F25	66	46	14	53	385	2.042	1465
6"	133	927	463,5	368,3	8 x 54	485	108	282	430	F25	78,5	58	18	67	840	4.368	3297
8"	181	1.038	519	438,2	12 x 54	550	127	356	495	F25	105,5	78	20	88	1.435	8.211	5861

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.  
 (1) With RTS Flanges.

# FORGED BALL VALVES 7015 / 7030 / 7060 / 7090 / 7050 / 7042

Reduced Bore

Class 150.  
From 3" to 30"

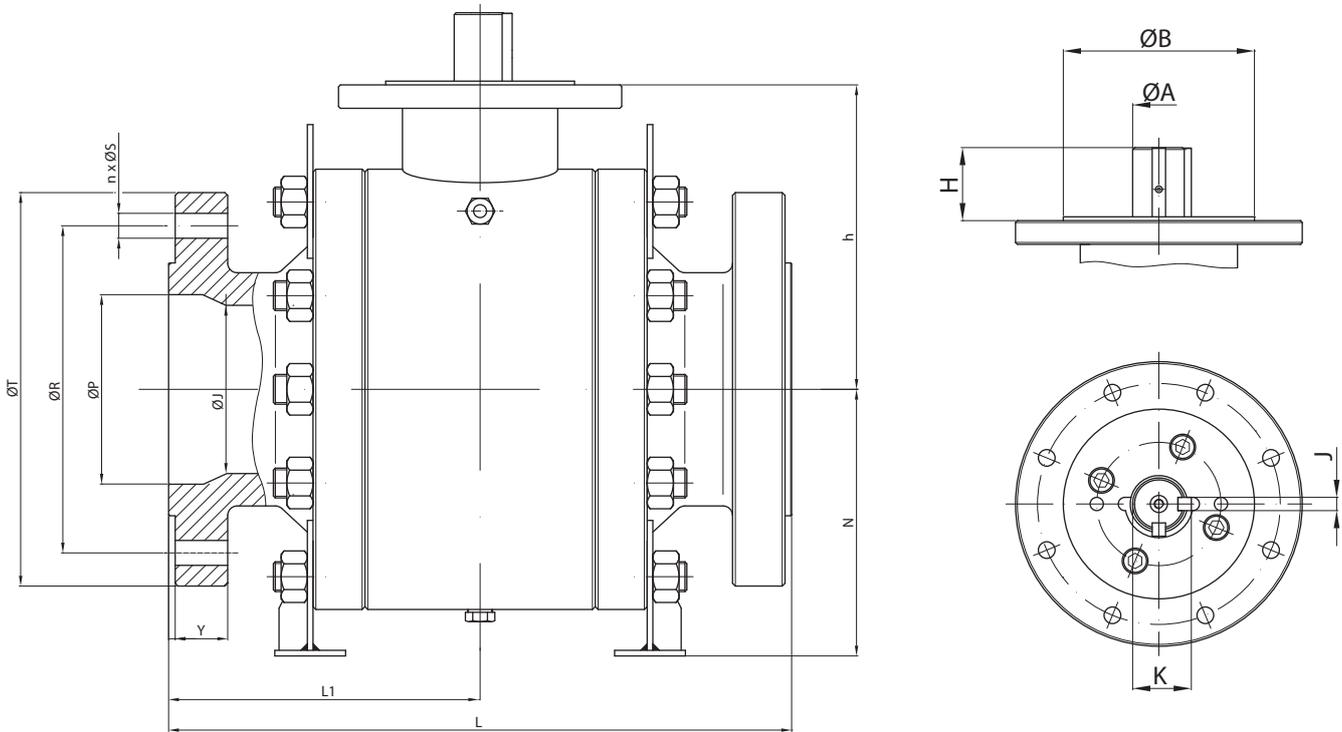
Class 300.  
From 3" to 30"

Class 600.  
From 3" to 30"

Class 900.  
From 3" to 30"

Class 1500.  
From 3" to 14"

Class 2500.  
From 3" to 10"



## Pressure - Temperature

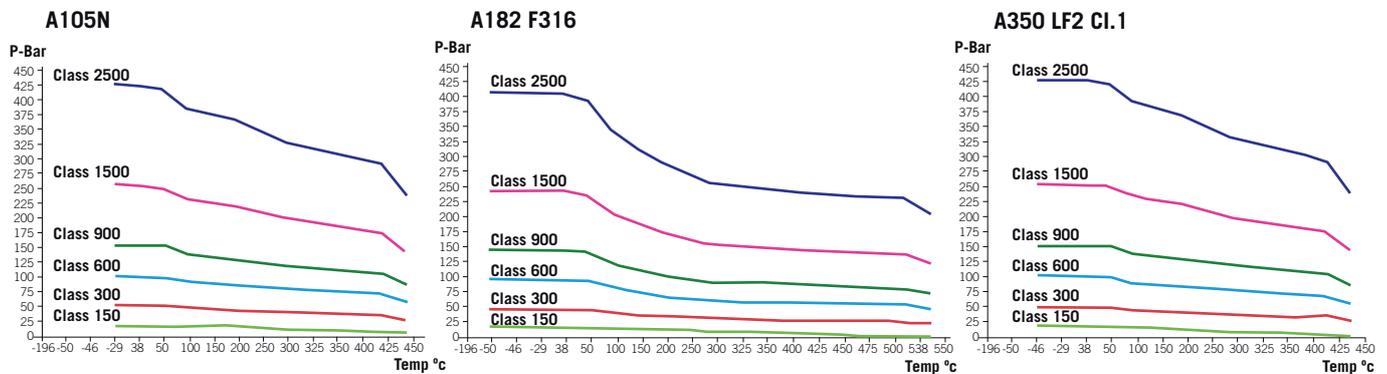


Fig. 7015 (Class 150)

DN	ØJ	ØP	L	L1	ØR	n x ØS	ØT	Y	h	N	ISO 5211	H	ØA	J	K	WEIGHT	TORQUE	Kv
3" x 2"	76	49	203	101,5	152.4	4 x 19	190	18	125	100	F10	36,5	20	8	22,5	66	27	190
4" x 3"	102	76	229	114,5	190.5	8 x 19	230	22	156,5	133,5	F12	37,5	26	10	30	75	52	567
6" x 4"	152	102	394	197	241.3	8 x 22	280	24	175	167	F12	54	30	10	34	115	98	815
8" x 6"	203	152	457	228,5	298.5	8 x 22.2	345	27	269	277	F16	71	39,9	14	48,9	205	225	2.021
10" x 8"	254	203	533	266,5	362	12 x 25.4	405	29	325	325	F25	77	49,9	14	58,4	375	450	4.205
12" x 10"	305	254	610	305	431.8	12 x 25.4	485	30	362	319	F25	84,5	59,9	16	67	565	668	7.348
14" x 12"	337	305	686	343	476.3	12 x 28.5	535	33	423	399	F25	104	69,9	18	78	825	1.317	10.120
16" x 14"	387	337	762	381	538.8	16 x 28.5	595	35	455	439	F30	119	79,9	22	87,9	1.250	1.547	12.000
18" x 16"	438	387	864	432	577.9	16 x 31.8	635	38	490	472	F30	134	84,9	22	94,9	1.820	2.000	17.269
20" x 18"	488	438	914	457	635	20 x 31.8	700	41	542	596	F30	147,5	99,9	28	111,9	2.450	3.027	18.647
24" x 20"	589	488	1.067	533,5	749.3	20 x 34.9	815	46	577	610	F30	147,5	99,9	28	111,9	2.790	3.803	27.010
30" x 24"	735	589	1.295	647,5	857	28 x 35	985	73	599	692	F40	152	120	32	134	5.530	9.100	32.150

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

**Fig. 7030 (Class 300)**

DN	øJ	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
3" x 2"	76	49	283	141,5	168,3	8 x 22,2	210	27	125	95	F10	36,5	20	8	22,5	65	49	190
4" x 3"	102	76	305	152,5	200	8 x 22,2	255	30	156,5	133,5	F12	37,5	26	10	30	85	107	567
6" x 4"	152	102	403	201,5	269,9	12 x 22,2	320	35	175	167	F12	54	30	10	34	135	210	815
8" x 6"	203	152	502	251	330,2	12 x 25,4	380	40	269	277	F16	71	39,9	14	48,9	225	522	2.021
10" x 8"	254	203	568	284	387,4	16 x 28,5	445	46	325	325	F25	77	49,9	14	58,4	385	1.060	4.205
12" x 10"	305	254	648	324	450,8	16 x 31,8	520	49	362	319	F25	84,5	59,9	16	67	650	1.559	7.348
14" x 12"	337	305	762	381	514,4	20 x 31,8	585	52	423	399	F25	104	69,9	18	78	995	3.125	10.120
16" x 14"	387	337	838	419	571,5	20 x 34,9	650	56	455	439	F30	119	79,9	22	87,9	1.460	3.642	12.000
18" x 16"	438	387	914	457	628,6	24 x 34,9	710	59	490	472	F30	134	84,9	22	94,9	1.925	4.732	17.269
20" x 18"	488	438	991	495,5	685,8	24 x 34,9	775	62	542	596	F30	147,5	99,9	28	111,9	2.450	7.000	18.647
24" x 20"	589	488	1.143	571,5	812,8	24 x 41,3	915	68	577	610	F30	147,5	99,9	28	111,9	3.250	8.959	27.010
30" x 24"	735	589	1.397	698,5	857	28 x 48	1.092	90	599	673	F40	152	120	32	134	5.900	23.400	32.150

**Fig. 7060 (Class 600)**

DN	øJ	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
3" x 2"	76	49	356	178	168,3	8 x 22,2	210	32	125	100	F10	36,5	20	8	22,5	72	85	190
4" x 3"	102	76	432	216	215,9	8 x 25,4	275	38	156,5	138,5	F12	37,5	26	10	30	93	196	567
6" x 4"	152	102	559	279,5	292,1	12 x 28,5	355	48	175	164	F12	54	30	10	34	169	392	815
8" x 6"	203	152	660	330	349,2	12 x 31,8	420	56	268,5	277,5	F16	71	44,9	14	51,4	301	1.007	2.021
10" x 8"	254	203	787	393,5	431,8	16 x 34,9	510	64	325	296	F25	77	54,9	14	61,4	555	2.057	4.205
12" x 10"	305	254	838	419	489	20 x 34,9	560	67	362	365	F25	84,5	59,9	16	67	829	3.013	7.348
14" x 12"	337	305	889	444,5	527	20 x 38,1	605	70	423	418	F25	104	69,9	18	78	1.426	6.079	10.120
16" x 14"	387	337	991	495,5	603,2	20 x 41,3	685	76	455	450	F30	119	79,9	22	87,9	1.751	7.062	12.000
18" x 16"	438	387	1.092	546	654	20 x 44,5	745	83	490	504	F30	134	84,9	22	94,9	2.625	9.196	17.269
20" x 18"	488	438	1.194	597	723,9	24 x 44,5	815	89	542	567,5	F30	147,5	99,9	28	111,9	3.111	13.485	18.647
24" x 20"	589	488	1.397	698,5	838,2	24 x 50,8	940	102	577	581	F35	147,5	99,9	28	111,9	4.250	17.381	27.010
30" x 24"	735	589	1.651	825,5	857	28 x 54	1.130	108	599	694	F40	157,5	119,8	32	133,6	7.125	40.100	32.150

**Fig. 7090 (Class 900)**

DN	øJ	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
3" x 2"	77	51	381	190,5	190,5	8 x 25,4	240	38,1	120	101	F10	35	23	8	27	62	199	190
4" x 3"	102	77	457	228,5	235	8 x 31,8	290	44,5	153	124	F14	37	33	10	38	105	545	567
6" x 4"	152	102	610	305	317,5	12 x 31,8	380	55,6	170	151	F16	37	33	10	38	201	786	815
8" x 6"	203	152	737	368,5	393,7	12 x 38,1	470	63,5	214	380	F25	59	46	14	53	436	1.330	2.021
10" x 8"	254	203	838	419	469,9	16 x 38,1	545	69,9	258	428	F25	75	58	18	67	735	2.536	4.205
12" x 10"	305	254	965	482,5	533,4	20 x 38,1	610	79,4	303	489	F25	113	68	20	78	1.200	4.950	7.348
14" x 12"	324	305	1.029	514,5	558,8	20 x 41,3	640	85,8	348	525	F25	111	68	20	78	1.795	7.850	10.120
16" x 14"	375	324	1.130	565	616	20 x 44,5	705	88,9	381	545	F25	110	88	24	100	2.105	10.868	12.000
18" x 16"	425	375	1.219	609,5	685,8	20 x 50,8	785	101,6	418	580	F25	110	88	24	100	2.720	18.112	17.269
20" x 18"	473	425	1.321	660,5	749,3	20 x 54	855	108	464	630	F35	130	120	32	136	4.050	28.738	18.647
24" x 20"	571	473	1.549	774,5	901,7	20 x 66,7	1.040	139,7	507	672	F35	130	120	32	136	4.650	43.470	27.010
30" x 24"	712	571	1.803	901,5	857,0	20 x 72	1.232	142,0	596	760	F35	127	148	32	164	7.950	55.555	32.150

**Fig. 7050 (Class 1500)**

DN	øJ	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
3" x 2"	77	51	473	236,5	203,2	8 x 31,8	265	47,7	129	107	F12	31	23	8	27	80	369	190
4" x 3"	102	77	549	274,5	241,3	8 x 34,9	310	54	156	137	F14	36	33	10	38	156	942	567
6" x 4"	146	102	711	355,5	317,5	12 x 38,1	395	82,6	193	168	F16	39,5	38	10	43	325	1.425	815
8" x 6"	194	146	841	420,5	393,7	12 x 44,5	485	92,1	242	395	F25	69,5	46	14	53	603	2.795	2.021
10" x 8"	241	194	1.000	500	482,6	12 x 50,8	585	108	292	445	F25	112,5	68	20	78	950	4.468	4.205
12" x 10"	289	241	1.146	573	571,5	16 x 54	675	123,9	336	505	F25	110,5	78	20	88	1.825	7.486	7.348
14" x 12"	318	289	1.276	638	635	16 x 60	750	133,4	399	565	F25	110	88	24	100	2.750	10.626	10.120

**Fig. 7042 (Class 2500)**

DN	øJ	øP	L	L1	øR	n x øS	øT	Y	h	N	ISO 5211	H	øA	J	K	WEIGHT	TORQUE	Kv
3" x 2"	64	44,5	584	292	228,6	8 x 34,9	305	66,7	150	125	F16	39	33	10	38	140	786	190
4" x 3"	89	64	683	341,5	273,0	8 x 41,3	355	76,2	182	151	F16	39	38	10	43	250	1.932	567
6" x 4"	133	89	927	463,5	368,3	8 x 54	485	108	214	187	F25	66	46	14	53	520	2.042	815
8" x 6"	181	133	1.038	519	438,2	12 x 54	550	127	282	430	F25	78,5	58	18	67	1.000	4.368	2.021
10" x 8"	226	181	1.292	646	539,8	12 x 66	675	165	356	495	F25	105,5	78	20	88	1.850	8.211	4.205

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

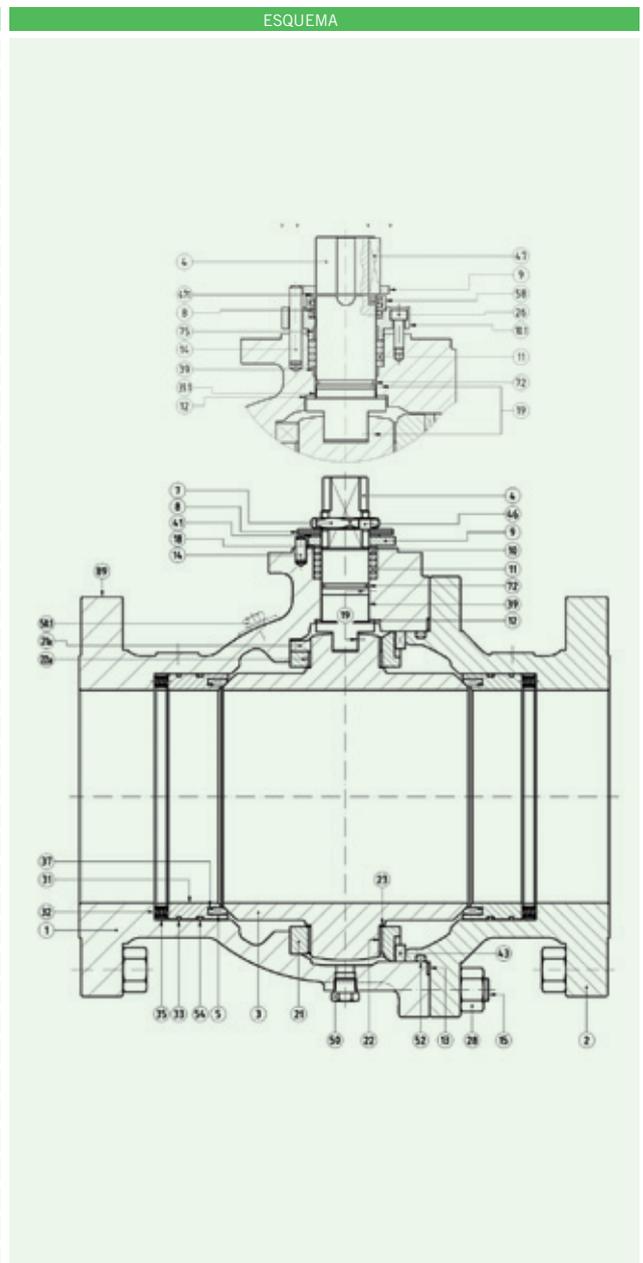
# CAST TRUNNION

## 2-PIECE CAST TRUNNION MOUNTED

2" - 16" | Class 150 - Class 600

### Materials CAST TRUNNION

Item	Description	AIT	IIT
1	Body	A 216 Gr. WCB (C ≤ 0.25%)	A 351 Gr. CF8M
2	Body connector	A 216 Gr. WCB (C ≤ 0.25%)	A 351 Gr. CF8M
3	Ball	A 351 Gr. CF8M	
4	Stem	A 479 Tp.316	
5	Seat ring	PTFE	
7	Gland nut	Zinc Plated Carbon Steel	AISI-303
8	Disk spring / Spring	Carbon St. *	E.N.P. Carbon St. *
9	Stop plate	Carbon St.	AISI-304
10	Gland ring	AISI-303	AISI-316
10.1	Gland	AISI-303	AISI-316
11	Gland packing	Graphite	
12	Stem thrust seal	25% G.F. PTFE	
13	Body connector seal	AISI-316L + Graphite	
14	Stop pin	Carbon St.	Stainless St.
15	Stud	A 193 Gr. B7M Zinc dichromate	A 193 Gr. B8M **
18	Thrust washer	25% G.F. PTFE	
19	Antistatic device	Stainless St.	
21 / 21a	Ball trunnion	A 351 Gr. CF8M	
22 / 22a	Trunnion bearing	AISI-316 + PTFE	
23	Bearing	PTFE	
26	Bolt	DIN 912 8.8 Zinc Plated	DIN 912 A2
28	Nut	A 194 Gr. 2HM Zinc dichromate	A 194 Gr. 8M **
31	Seat Carrier	A 351 Gr. CF8M	
32	Spring	Inconel - 750	
33	O' Ring	FKM -- Note 1 --	
35	Spring carrier	A 351 Gr. CF8M	
37	O' Ring	FKM -- Note 1 --	
39	Stem bushing	25% G.F. PTFE	
39.1	Stem bushing	AISI-316 + PTFE -- Note 2 --	
41	Spacer	Carbon St.	Stainless St.
43	Key	AISI-316	
46	Locking washer	AISI-304	
47	Key	Carbon St.	
50	Drain plug	A 105	AISI-316
50.1	Vent plug	A 105	AISI-316
52	O' Ring	FKM -- Note 2 --	
54	Seat carrier seal	Graphite	
58	Spring protection	Carbon St.	Stainless St.
72	O' Ring	FKM -- Note 1 --	
75	Stem bushing	AISI-316 + PTFE -- Note 2 --	
89	Identification plate	Stainless St.	
471	Retainer	Carbon St.	Stainless St.



(\*) On request Inconel X-750.

(\*\*) On request B7M / 2HM Zinc Plated & Bichromated.

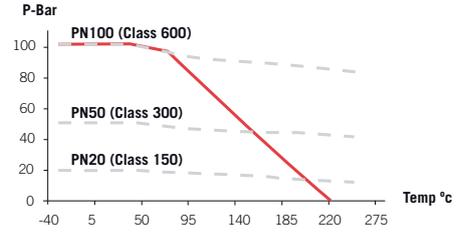
Note 1: Depending on design conditions AFLAS, KALREZ or KALREZ Spectrum.

Note 2: Only DN-350 & 400 and all Fig.2560.

**CAST BALL VALVES 2515 / 2530 / 2560**      **Class 150 / 300 / 600**      **Full Bore**



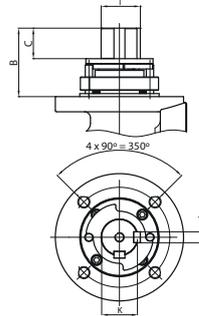
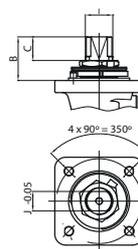
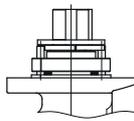
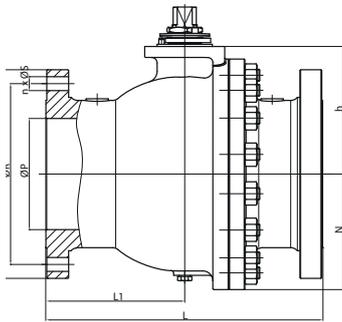
**Pressure - Temperature**



**METAL SEATS**  
2" to 16"

For A216 Gr. WCB only.  
For other materials consult ASME B16.34

**Class 150. From 2" to 16"**      **Class 300. From 2" to 16"**      **Class 600. From 2" to 12"**



**Fig. 2515 (Class 150)**

DN	øP	L	L1	øR	n x øS	øT	h	N	ISO 5211	B	C	I	J	K	WEIGHT	TORQUE	Kv
50 (2")	50	178	78.5	120.7	4x19	150	84	80	F07	42	17	M22x1,5	16	-	13	70	366
80 (3")	80	203	87	152.4	4x19	190	126	-	F10	55	27	M28x1,5	20	-	22	130	938
100 (4")	100	229	101	190.5	8x19	230	152	120	F12	56	27	M35x2	25	-	39	340	1.465
150 (6")	151	394	197	241.3	8x22.2	280	212	168	F14	70	36	M45x2	32	-	98	500	3.297
200 (8")	203	457	230	298.5	8x22.2	345	233	208	F14	70	37	M45x2	32	-	124	800	5.861
250 (10")	254	533	267	362	12x25.4	405	256	243	F14	70	37	M45x2	32	-	175	1.010	9.454
300 (12")	305	610	305	431.8	12x25.4	485	297	287.5	F14	106	58	50	14	53.5	295	1.800	13.631
350 (14")	337	686	343	476.3	12x28.5	535	333	323	F16	103	49	60	18	64.2	580	2.600	16.641
400 (16")	388	762	381	539.8	16x28.5	595	412	358	F25	159	103	90	25	95.3	750	3.500	23.554

**Fig. 2530 (Class 300)**

DN	øP	L	L1	øR	n x øS	øT	h	N	ISO 5211	B	C	I	J	K	WEIGHT	TORQUE	Kv
50 (2")	50	216	84	127	8x19	165	84	-	F07	42	17	M22x1,5	16	-	16	80	366
80 (3")	80	283	115	168.3	8x22.2	210	126	-	F10	55	27	M28x1,5	20	-	33	140	938
100 (4")	100	305	133	200	8x22.2	255	152	-	F12	56	27	M35x2	25	-	43	380	1.465
150 (6")	151	403	202	269.9	12x22.2	320	212	173	F14	70	36	M45x2	32	-	113	700	3.297
200 (8")	203	502	252	330.2	12x25.4	380	233	210	F14	70	37	M45x2	32	-	157	900	5.861
250 (10")	254	568	284	387.4	16x28.5	445	257	253	F14	70	37	M45x2	32	-	263	1.300	9.454
300 (12")	305	648	315	450.8	16x31.8	520	310	300	F16	103	49	60	18	64.2	480	2.500	13.631
350 (14")	337	762	381	514.4	20x34.9	585	333	331	F16	103	49	60	18	64.2	655	3.750	16.641
400 (16")	388	838	419	571.5	20x34.9	650	412	365	F25	159	103	90	25	95.3	890	5.000	23.554

**Fig. 2560 (Class 600)**

DN	øP	L	L1	øR	n x øS	øT	h	N	ISO 5211	B	C	I	J	K	WEIGHT	TORQUE	Kv
50 (2")	50	292	96	127	8x19.1	165	84	-	F07	42	17	M22x1,5	16	-	20	90	366
80 (3")	80	356	140	168.3	8x22.2	210	126	113	F10	55	27	M28x1,5	20	-	41	170	938
100 (4")	100	432	160	215.9	8x25.2	275	152	-	F12	56	27	M35x2	25	-	77	400	1.465
150 (6")	151	559	246	292.1	12x28.5	355	212	188	F14	97	49	45	14	48.5	192	900	3.297
200 (8")	203	660	315	349.2	12x31.8	420	237	235	F14	113	64	50	14	53.5	329	1.400	5.861
250 (10")	254	787	340	431.8	16x34.9	510	275	273	F16	103	49	60	18	64.2	460	3.050	9.454
300 (12")	305	838	404	489	20x34.9	560	345	335	F16	127	73	65	18	69.2	570	3.800	13.631

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

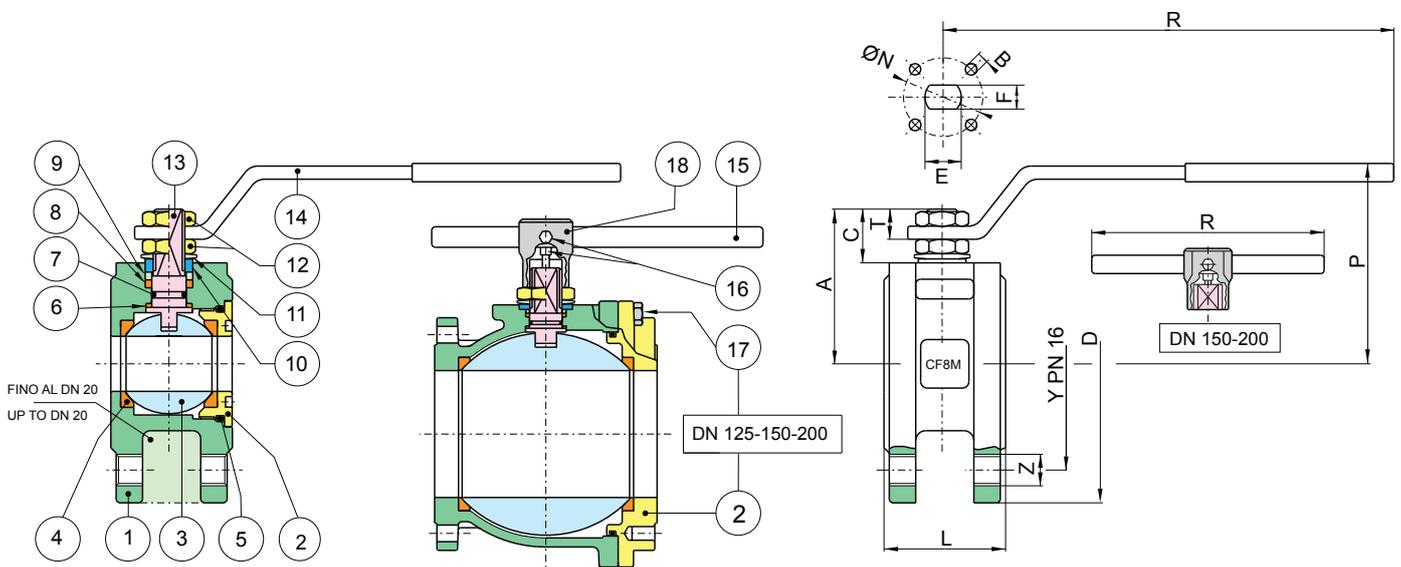




**WAFER**  
BALL VALVES | **2/3 WAY BALL VALVES**

# WAFER 2/3 WAY BALL VALVES

1/2" - 8" | Class 150 - Class 600  
PN16 - PN64



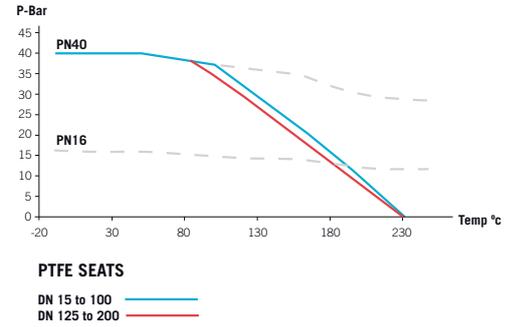
## Materials FORGED/CAST

Item	Description	Material A105	Material CF8	Material CF8M
1	Body *	ASTM A105	A351 - CF8 / A182-F304	A351 - CF8M / A182-F316
2	End connection	ASTM A105	A351 - CF8 / A182-F304	A351 - CF8M / A182-F316
3	Ball	A351 - CF8 / A182-F304	A351 - CF8 / A182-F304	A351 - CF8M / A182-F316
4	Ball seat	PTFE	PTFE	PTFE
5	Ring	FKM (VITON®)	FKM (VITON®)	FKM (VITON®)
6	Thrust Washer	PTFE	PTFE	PTFE
7	O'Ring	FKM (VITON®)	FKM (VITON®)	FKM (VITON®)
8	Stem seat	PTFE	PTFE	PTFE
9	Packing gland	CARBON STEEL	CARBON STEEL	CARBON STEEL
10	End stop	INOX AISI 430 (DN 15- DN 50) CARBON STEEL (DN65 - DN200)	INOX AISI 430 (DN 15- DN 50)	INOX AISI 430 (DN 15- DN 50)
11	Spring Washer	CARBON STEEL	CARBON STEEL	CARBON STEEL
12	Nut	CARBON STEEL	CARBON STEEL	CARBON STEEL
13	Stem	A182 - F304	A182 - F304	A182 - F316
14	Handle	CARBON STEEL	CARBON STEEL	CARBON STEEL
15	Handle DN 150-200	CARBON STEEL	CARBON STEEL	CARBON STEEL
16	Screw	CARBON STEEL	CARBON STEEL	CARBON STEEL
17	Screw	CARBON STEEL (DN 125- DN 150) CARBON STEEL (DN 200)	CARBON STEEL(DN 125 - DN 150)	CARBON STEEL(DN 125 - DN 150)
18	Body handle DN 150-200	EN-GJL 250	EN-GJL 250	EN-GJL 250

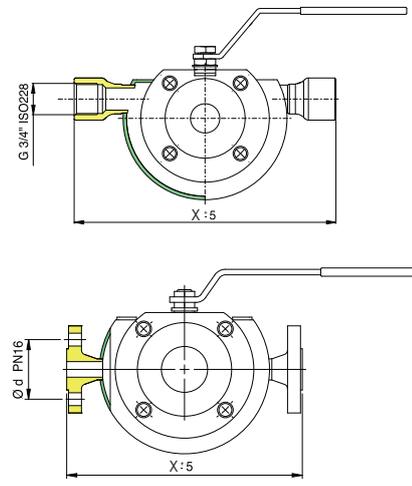
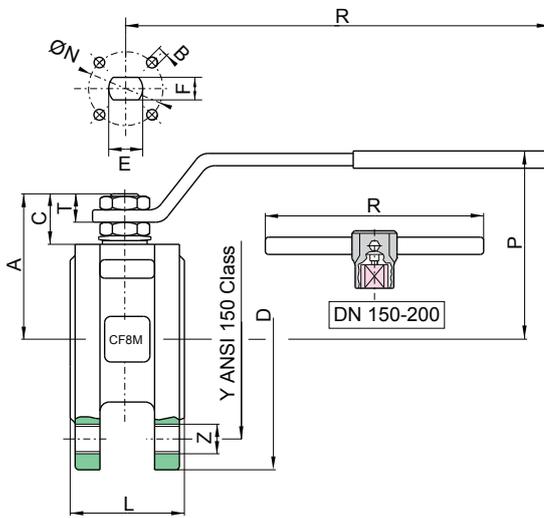
**EN DIN 721000 / 720000 CF8M & CF8** **PN 16 / PN 40** **Full Bore**



**Pressure - Temperature**



**PN 16. From DN65 to DN200** **PN 40. From DN15 to DN50**



(w/heating jacket as option)

**Fig. 721000 / 720000 (PN 16)**

DN	D	Y	Z	I	L	R	P	A	C	T	E	F	N	B	KV	PN	Kg
1/2"(DN 15)	90	65	4xM12	19	35	131,5	64,5	47	15,5	9	10	7	32	4xM5	16,3	16	1,3
3/4"(DN 20)	100	75	4xM12	20	40	131,5	69	51,5	15,5	9	10	7	32	4xM5	29,5	16	1,9
1"(DN 25)	110	85	4xM12	24	46	174,5	80,5	61	19,5	11,5	12	8	42	4xM5	43	16	2,7
1 1/4"(DN 32)	130	100	4xM16	28	54	174,5	84,5	64,5	16,5	11,5	12	8	42	4xM5	89	16	4,2
1 1/2"(DN 40)	140	110	4xM16	31,75	63,5	250,5	102,5	78	24,5	13	16	10	50	4xM6	230	16	5,9
2"(DN 50)	150	125	4xM16	41	82	250,5	111	87	25	13,5	16	10	50	4xM6	265	16	8,7
2 1/2"(DN65)	175	145	4xM16	51,5	103	321,5	128	104,5	28	18	20	14	70	4xM8	540	16	15,5
3"(DN80)	190	160	8xM16	61	122	321,5	138,5	115	28,5	18	20	14	70	4xM8	873	16	20,5
4"(DN100)	220	180	8xM16	76	152	381,5	156,5	137	34,5	22	24	18	102	4xM10	1390	16	34,2
5"(DN125)	250	210	8xM16	98	196	381,5	178,5	159	34	22	24	18	102	4xM10	1707	16	52,5
6"(DN150)	300	240	8xM20	116	232	700	237	201,5	51,5	30	42	30	125	4xM12	2024	16	92
8"(DN200)	340*	295	12xM20	158,5	317	700	280	245	51,5	30	42	30	125	4xM12	2720	16	94

(\*)Dimensions in mm.  
 (\*\*) Weights and dimensions can be changed without notice.

# EN DIN 722000 A105

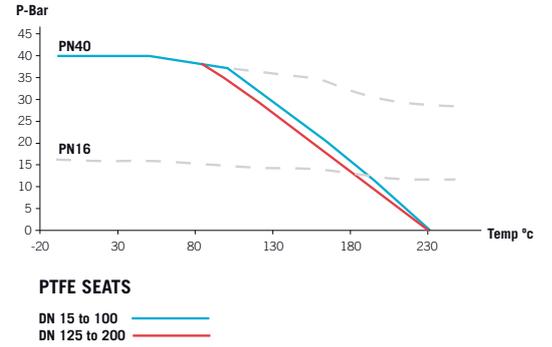
PN 16 / PN 40

Full Bore



JACKETED DETAIL

## Pressure - Temperature



PN 16. From DN65 to DN200

PN40. From DN15 to DN50

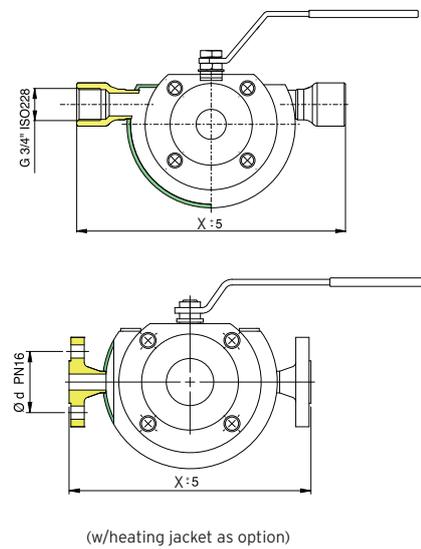
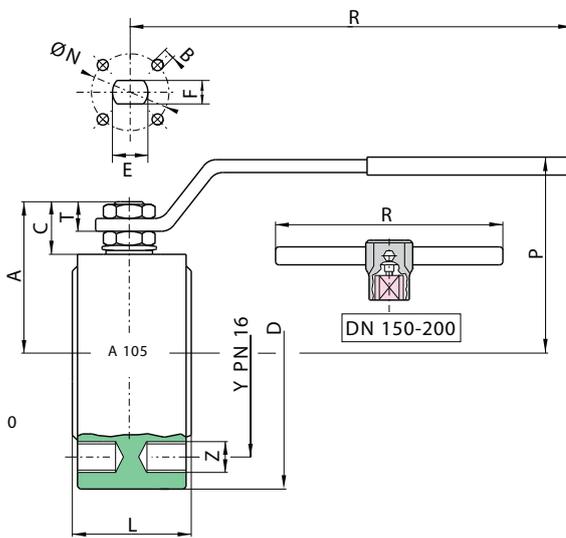


Fig. 722000 (PN 16)

DN	D	Y	Z	I	L	R	P	A	C	T	E	F	N	B	KV	PN	Kg
1/2"(DN 15)	90	65	4xM12	19	35	131,5	64,5	47	15,5	9	10	7	32	4xM5	16,3	16	1,3
3/4"(DN 20)	100	75	4xM12	20	40	131,5	69	51,5	15,5	9	10	7	32	4xM5	29,5	16	1,9
1"(DN 25)	110	85	4xM12	24	46	174,5	80,5	61	19,5	11,5	12	8	42	4xM5	43	16	2,7
1 1/4"(DN 32)	130	100	4xM16	28	54	174,5	84,5	64,5	16,5	11,5	12	8	42	4xM5	89	16	4,2
1 1/2"(DN 40)	140	110	4xM16	31,75	63,5	250,5	102,5	78	24,5	13	16	10	50	4xM6	230	16	5,9
2"(DN 50)	150	125	4xM16	41	82	250,5	111	87	25	13,5	16	10	50	4xM6	265	16	8,7
2 1/2"(DN65)	175	145	4xM16	51,5	103	321,5	128	104,5	28	18	20	14	70	4xM8	540	16	15,5
3"(DN80)	190	160	8xM16	61	122	321,5	138,5	115	28	18	20	14	70	4xM8	873	16	20,5
4"(DN100)	220	180	8xM16	76	152	381,5	156,5	137	34,5	22	24	18	102	4xM10	1390	16	34,2
5"(DN125)	250	210	8xM16	98	196	381,5	178,5	159	34	22	24	18	102	4xM10	1707	16	52,5
6"(DN150)	300	240	8xM20	116	232	700	237	201,5	51,5	30	42	30	125	4xM12	2024	16	92
8"(DN200)	340*	295	12xM20	158,5	400	700	280	288	68	28	42	30	125	4xM12	2720	16	94

(\*)Dimensions in mm.  
(\*\*) Weights and dimensions can be changed without notice.

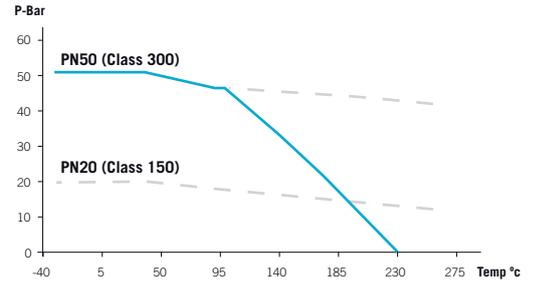
**ASME 720006/720009 CF8M & A105** **Class 150** **Full Bore**



720006 CF8M

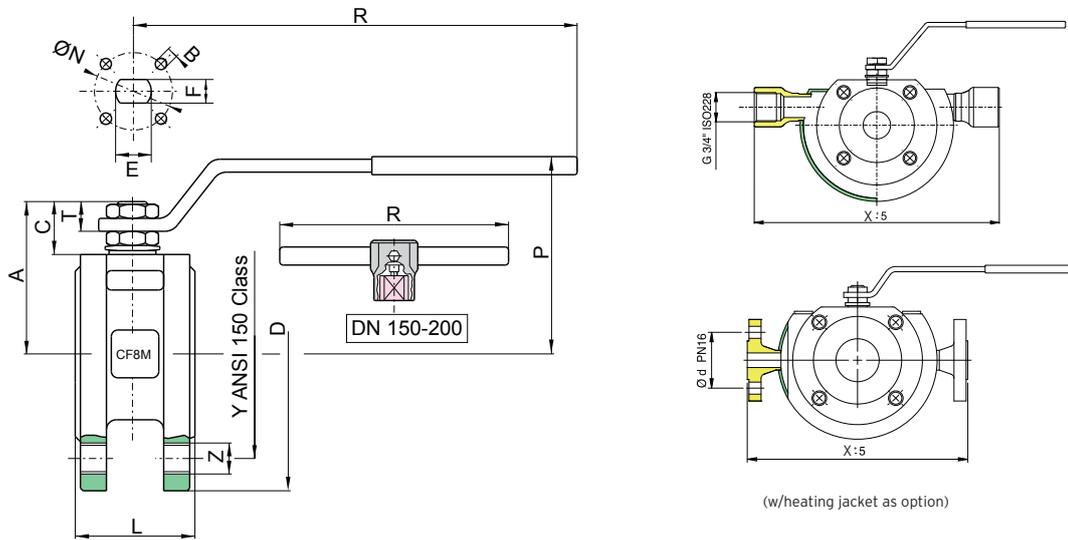
720009 A105

**Pressure - Temperature**



**PTFE SEATS**

**Class 150. From 1/2" to 8"**



**Fig. 720006 / 720009 (Class 150)**

DN	D	Y	Z	I	L	R	P	A	C	T	E	F	N	B	KV	PN	Kg720006	Kg720009
1/2"(DN 15)	90	61	4xM12	19	35	131,5	64	47	15,5	9	10	7	32	4xM5	16,3	20	1,3	1,3
3/4"(DN 20)	100	70	4xM12	20	40	131,5	69	51,5	15,5	9	10	7	32	4xM5	29,5	20	1,8	1,8
1"(DN 25)	110	80	4xM12	24	46	174,5	80	61	19,5	11,5	12	8	42	4xM5	43	20	2,7	2,7
1 1/4"(DN 32)	130	89	4xM16	28	54	174,5	84	64,5	16,5	11,5	12	8	42	4xM5	89	20	4,3	4,3
1 1/2"(DN 40)	150	99	4xM16	31,75	63,5	250,5	102	78	24,5	13	16	10	50	4xM6	230	20	3,3	5,1
2"(DN 50)	165	121	4xM16	41	82	250,5	111	87	25	13,5	16	10	50	4xM6	265	20	5,5	8,8
2 1/2"(DN65)	185	140	4xM16	51,5	103	321,5	128	104,5	28	18	20	14	70	4xM8	540	20	9,6	15,6
3"(DN80)	200	153	8xM16	61	122	321,5	138	115	28,5	18	20	14	70	4xM8	873	20	12,8	20,8
4"(DN100)	220	191	8xM16	76	152	381,5	156	137	34,5	22	24	18	102	4xM10	1390	20	21,1	34,2
5"(DN125)	250	216	8xM16	98	196	381,5	178	159	34	22	24	18	102	4xM10	1707	20	37,5	52,5
6"(DN150)	285	242	8xM20	116	232	700	237	201,5	51,5	30	42	30	125	4xM12	2024	20	46,1	92
8"(DN200)	340*	299	12xM20	158,5	317	700	280	245	51,5	30	42	30	125	4xM12	2720	20	94	94

(\*)Dimensions in mm.  
(\*\*) Weights and dimensions can be changed without notice.

# ASME 720212 / 720232 CF8M & A105

Class 300

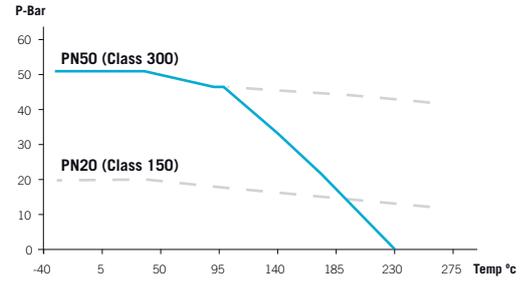
Full Bore



720212 CF8M

720232 A105

## Pressure - Temperature



### PTFE SEATS

8" to 12"

For A216 Gr. WCB only.  
For other materials consult ASME B16.34

## Class 300. From 1/2" to 8"

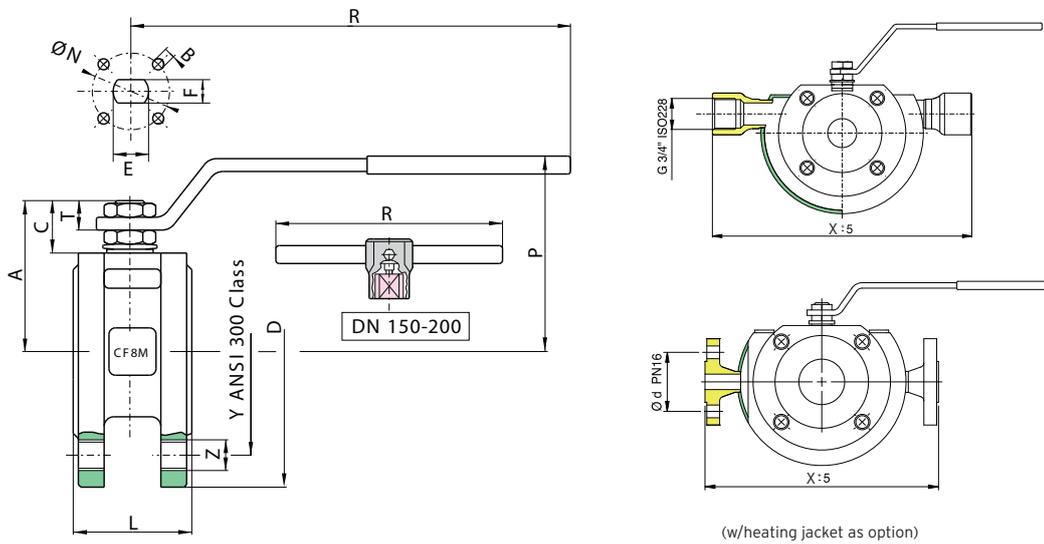


Fig. 720212 / 720232 (Class 300)

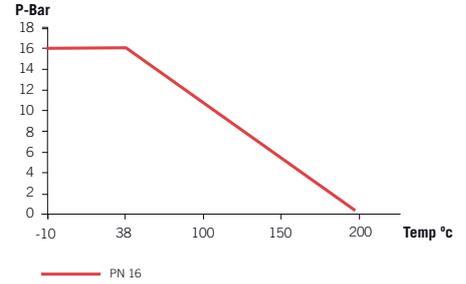
DN	D	Y	Z	I	L	R	P	A	C	T	E	F	N	B	KV	PN	Kg720212	Kg720232
1/2"(DN 15)	95	66,5	4xM14	19	35	131,5	64,5	47	11,5	9	10	7	32	4xM5	16,3	50	1,4	1,4
3/4"(DN 20)	120	82,5	4xM18	20	40	131,5	69	51,5	9,5	9	10	7	32	4xM5	29,5	50	2,5	2,5
1"(DN 25)	120	89	4xM18	24	46	174,5	80,5	61	13	11,5	12	8	42	4xM5	43	50	3,1	3,1
1 1/4"(DN 32)	130	98,5	4xM18	28	54	174,5	84,5	64,5	16,5	11,5	12	8	42	4xM5	89	50	4,2	4,2
1 1/2"(DN 40)	150	114,5	4xM20	31,75	63,5	250,5	102,5	78	20,5	13	16	10	50	4xM6	230	50	6,7	6,7
2"(DN 50)	165	127	8xM18	41	82	250,5	112,5	87	16	13,5	16	10	50	4xM6	265	50	7,3	10,4
2 1/2"(DN 65)	190	149	8xM20	51,5	103	321,5	129	104,5	18,5	18	20	14	70	4xM8	540	50	12	17,7
3"(DN 80)	210	168,5	8xM20	61	122	321,5	138,5	115	21	18	20	14	70	4xM8	873	50	17,2	24,6
4"(DN 100)	254	200	8xM20	76	152	381,5	157,5	137	23,5	22	24	18	102	4xM10	1390	50	30,4	45,3
6"(DN 150)	320	270	12xM20	116	232	700	237	201,5	51,5	22	24	30	125	4xM12	2024	50	72	101
8"(DN 200)	380*	330	12xM24	158	317	700	280	245	51,5	30	42	30	125	4xM12	2720	50	122	122

(\*)Dimensions in mm.  
(\*\*) Weights and dimensions can be changed without notice.

EN DIN 176 CF8M PN 16 Full Bore



Pressure - Temperature



PN 16. From DN15 to DN100

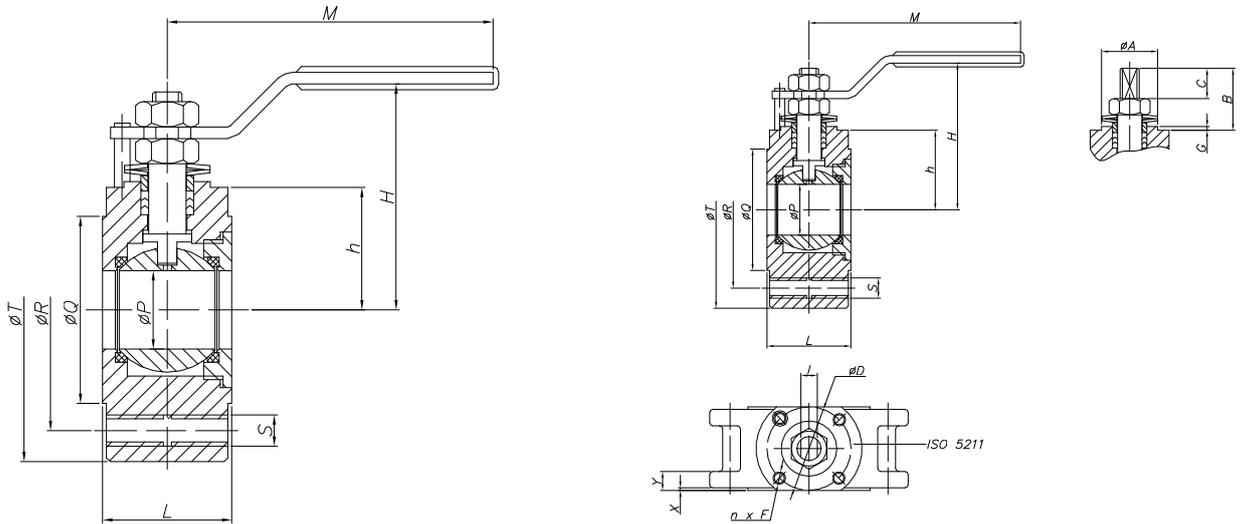
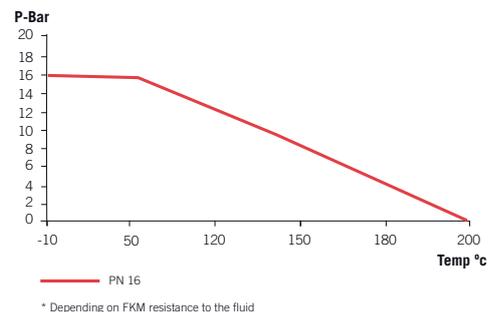
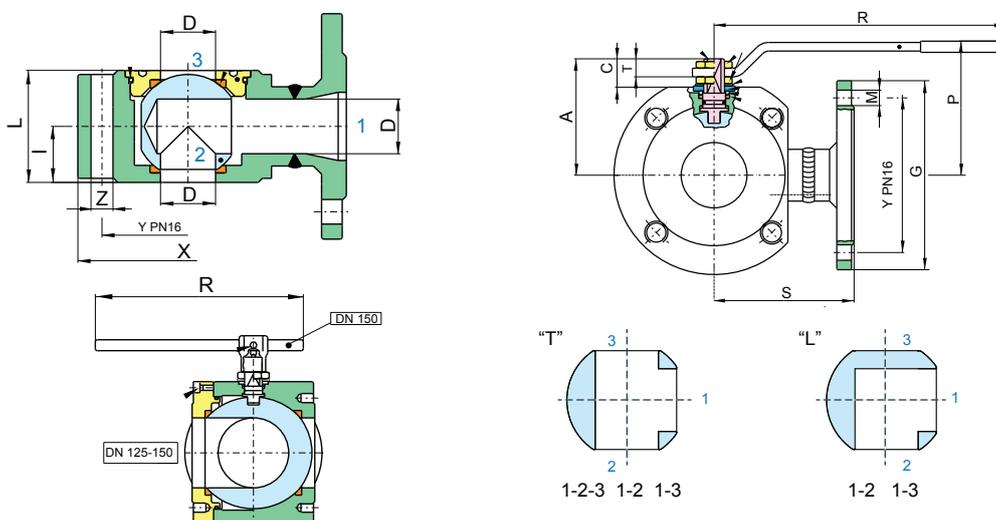


Fig. 176 (PN 16)

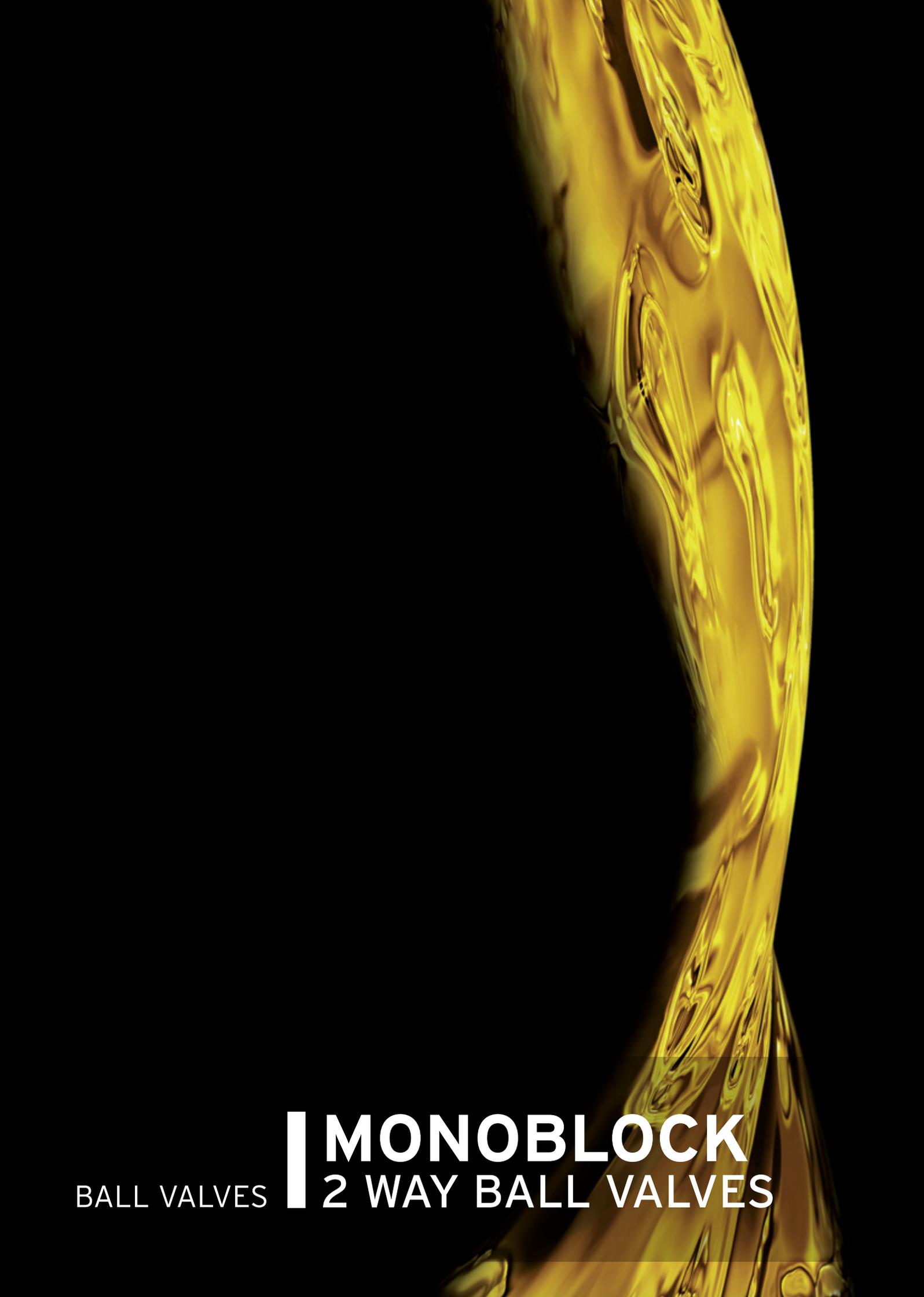
DN	øP	L	øQ	øR	øS	øT	X	Y	h	H	M	Weight
15	16	35	45	65	M12	90	2	14	32	57	116	0,95
20	20	38	58	75	M12	100	2	16	35	64	116	1,5
25	25	44	65	85	M12	110	2	16	40	68	165	1,93
32	32	54	78	100	M16	130	2	16	49	85	165	3,2
40	38	62	88	110	M16	150	3	16	52	89	193	4,8
50	50	80	102	125	M16	150	3	18	62	98	193	5,52
65	64	101	122	145	M16	178	3	18	80	129	235	9,28
80	76	118	138	160	M16	190	3	20	88	138	235	12,6
100	96	150	158	180	M16	220	3	20	105	164	329	19

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.


**Pressure - Temperature**

**PN 16. From 1/2" to 6"**

**Fig. 776007 / 776000 (PN 16)**

DN	X	Y	Z	I	L	R	P	A	C	T	G	M	D	S	E	F	N	B	PN	Kg
(DN 15)	89	65	4xM12	20	40	131,5	64,5	47	15,5	9	95	4x/E14	10	76	10	7	32	4xM5	16	2,23
(DN 20)	99	75	4xM12	20	40	131,5	67	49,5	13,5	9	105	4x/E14	15	82	10	7	32	4xM5	16	2,86
(DN 25)	109	85	4xM12	23	46	174,5	79	59	18	12,5	115	4x/E14	20	86	12	8	42	4xM5	16	3,89
(DN 32)	130	100	4xM16	29	58	174,5	84	64	15,5	11,5	140	4x/E18	25	100	12	8	42	4xM5	16	6,21
(DN 40)	140	110	4xM16	35,5	71	250,5	102,5	78	24,5	13	150	4x/E18	32	105	16	10	50	4xM6	16	8,50
(DN 50)	160	125	4xM16	41	82	250,5	109	85	25	13,5	165	4x/E18	40	115	16	10	50	4xM6	16	12,27
(DN 65)	180	145	4xM16	53	106	321,5	128	104,5	28	18	185	4x/E18	50,2	125	20	14	70	4xM8	16	19,10
(DN 80)	200	160	8xM16	61	122	321,5	136,5	113	28	18	200	8x/E18	64	150	20	14	70	4xM8	16	24,34
(DN 100)	220	180	8xM16	76	152	381,5	155,5	136	34,5	22	220	8x/E18	76	159	24	18	102	4xM10	16	38,45
(DN 125)	250	210	8xM16	98	196	381,5	178,5	159	34,5	22	250	8x/E18	100	190	24	18	102	4xM10	16	63
(DN150)	306	240	8xM20	116	242	700	252	201	59	29	285	8x/E22	125	210	42	30	125	4xM12	16	108

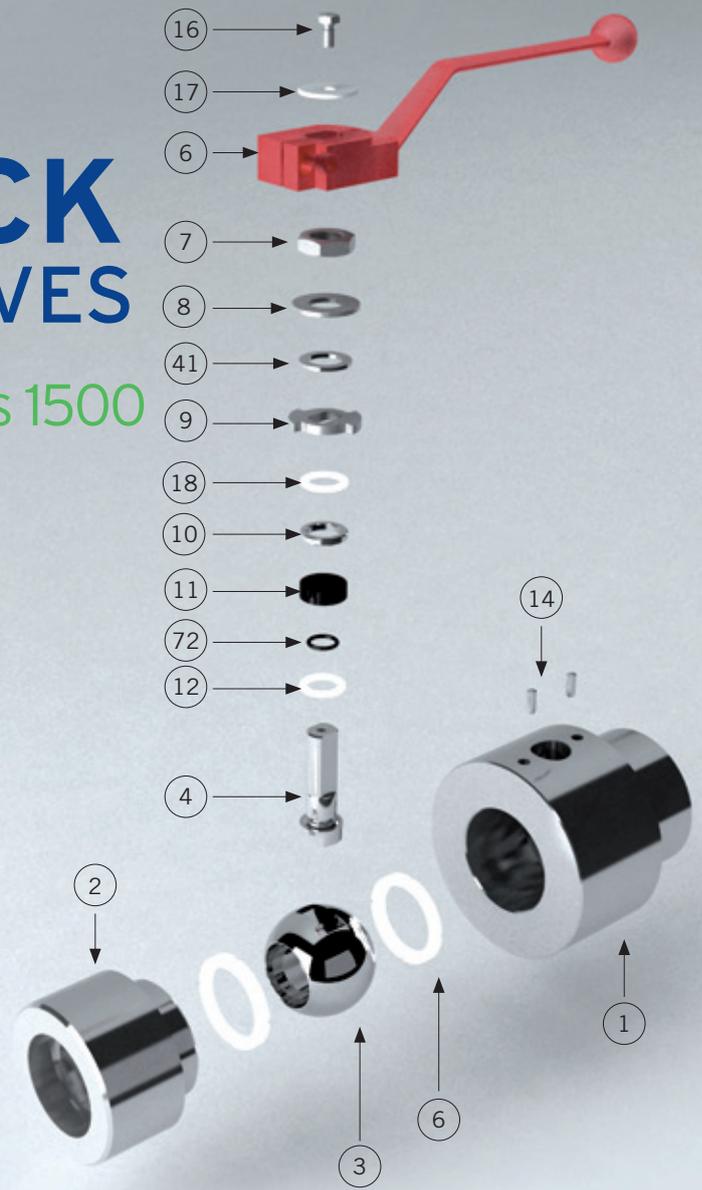
(\*) Dimensions in mm.



BALL VALVES | **MONOBLOCK**  
2 WAY BALL VALVES

# MONOBLOCK 2 WAY BALL VALVES

3/8" - 2" | Class 800 - Class 1500

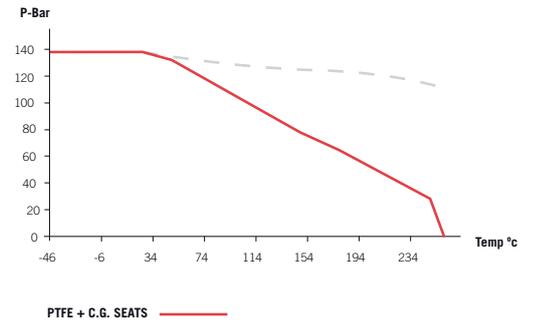


## Materials

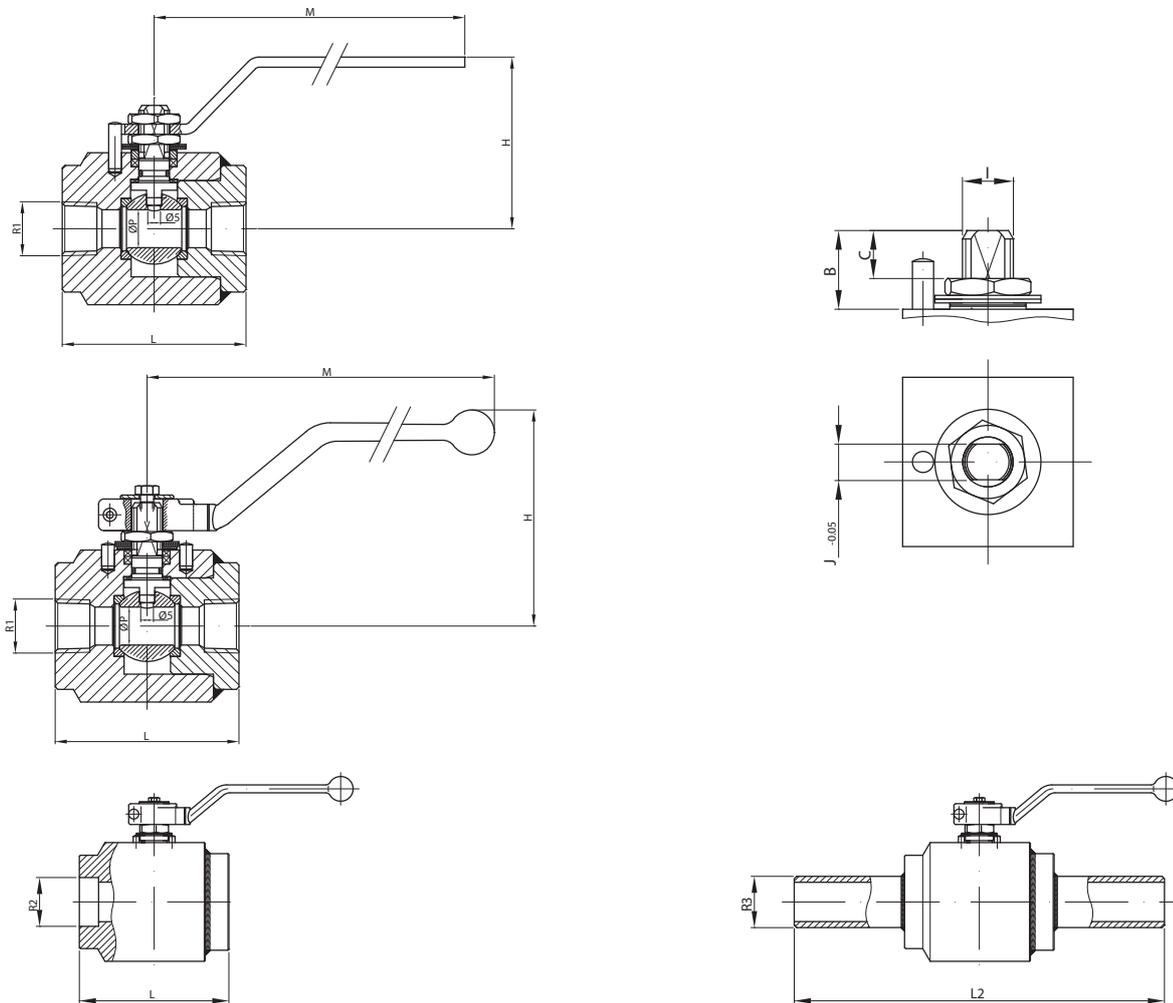
### MONOBLOCK

Item	Description	L.I.CG.	L.I.CG.
1	Body	A 350 Gr. LF2 Class 1	A 479 Tp.316L
2	Body connector	A 350 Gr. LF2 Class 1	A 479 Tp.316L
3	Ball		A 351 Gr. CF8M
4	Stem		AISI 410
5	Seat ring		Carbon graphite filled PTFE
6	Wrench (DN-1 1/2" & 2")		Nodular iron
6.1	Wrench (DN-3/8" ~ 1")		AISI-316
7	Gland nut		AISI 303
8	Disk spring		E.N.P. Carbon Steel
9	Stop plate (DN-1 1/2" & 2")		AISI 304
10	Gland		AISI 316
11	Gland packing		Graphite
12	Stem thrust seal		25% G.F. PTFE
14	Stop pin		Stainless St.
16	Bolt (DN-1 1/2" & 2")		DIN 933 A2
17	Washer (DN-1 1/2" & 2")		AISI 304
18	Thrust washer		25% G.F. PTFE
19	Antistatic device		Stainless St.
41	Spacer (DN-40 & 50)		AISI 304
72	"O" Ring		FKM
89	Identification plate		Stainless St.

**Pressure - Temperature**



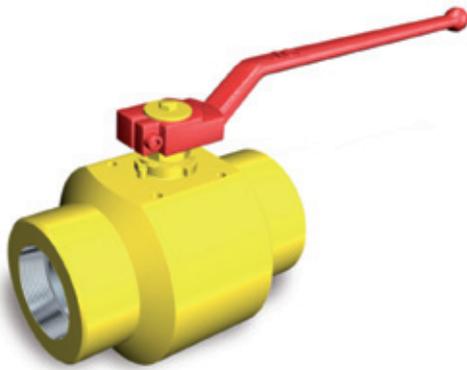
**Class 800. From 3/8" to 2"**



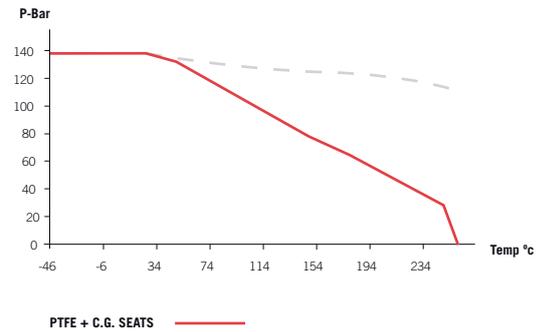
**Fig. 400 (Class 800)**

DN	øP	L	L2	R1	R2	R3	H	M	B	C	I	J	WEIGHT	TORQUE 20 bar	TORQUE 55 bar	TORQUE 138 bar
3/8"	9,5	70	240	3/8" NPT	3/8" SW	3/8" BW	86	158	16	8,1	M10x1.5	7	1	6	9	16
1/2"	15	72	240	1/2" NPT	1/2" SW	1/2" BW	91	158	18,7	10,6	M12x1.5	9	1,6	8	12	20
3/4"	20	90	240	3/4" NPT	3/4" SW	3/4" BW	94	158	19,2	11,1	M12x1.5	9	2,4	10	16	25
1"	25	95	240	1" NPT	1" SW	1" BW	98	158	19,7	11,1	M12x1.5	9	3,1	15	20	30
1 1/2"	40	130	260	1 1/2" NPT	1 1/2" SW	1 1/2" BW	128	213	38,5	19,2	M18x1.5	13	10	25	35	50
2"	50	140	260	2" NPT	2" SW	2" BW	141	348	41	19,2	M22x1.5	16	14,6	40	55	70

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.



Pressure - Temperature



Class 800. From 1/2" to 2"

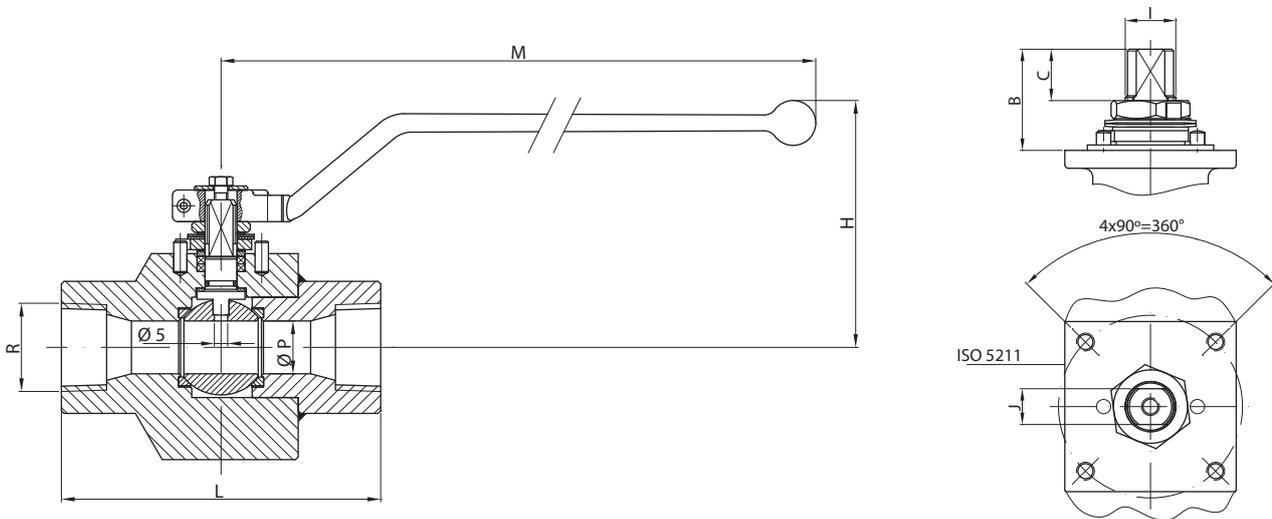


Fig. 411N (Class 800)

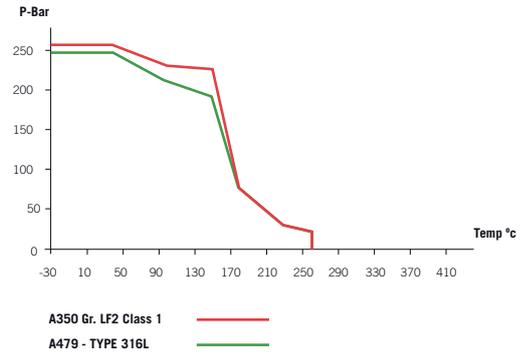
DN	øP	L	R	H	M	B	C	I	J	WEIGHT	TORQUE 20 bar	TORQUE 55 bar	TORQUE 138 bar
1/2"	15	90	NPT	101	164	18,7	7,8	M12x1.5	9	3,5	7	10	16
3/4"	15	110	NPT	101	164	18,7	7,8	M12x1.5	9	4,5	7	10	16
1"	20	120	NPT	105	164	20	8,6	M12x1.5	9	5	9	14	25
1 1/2"	28	150	NPT	111	210	31,5	15,5	M16x1.5	12	6	19	34	71
2"	36	180	NPT	128	213	38,5	19,2	M18x1.5	13	10	43	79	164

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.

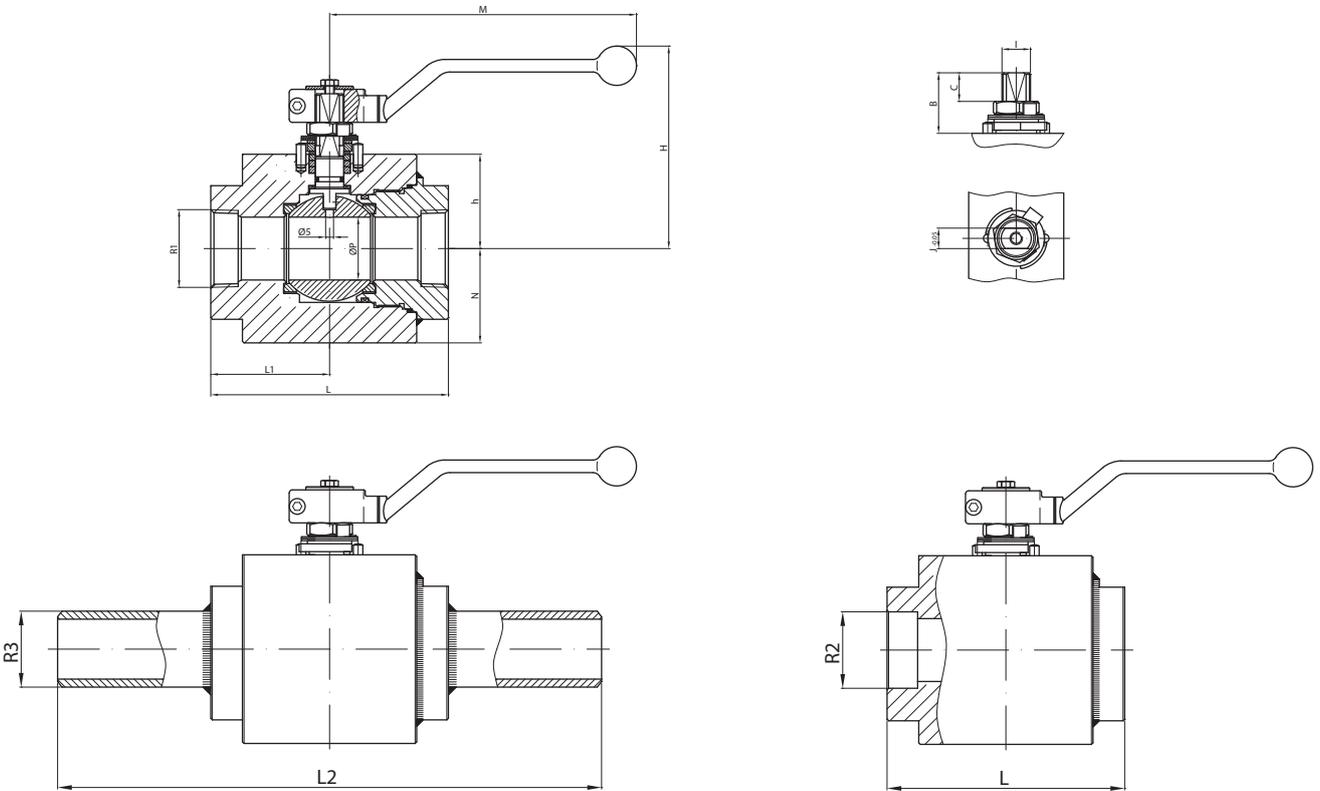
**ASME 41500 LICG & IICG** **Class 1500** **Reduced Bore**



**Pressure - Temperature**



**Class 1500. From 3/8" to 2"**



**Fig. 41500 (Class 1500)**

DN	ØP	L	L1	L2	R1	R2	R3	h	N	H	M	B	C	I	J
3/8"	9,5	80	35	240	3/8" NPT	3/8" SW	3/8" BW	25	25	80,5	164	16	6	M10x1,5	7
1/2" x 3/8"	9,5	90	35	250	1/2" NPT	1/2" SW	1/2" BW	25	25	80,5	164	16	6	M10x1,5	7
1/2"	15	90	35	250	1/2" NPT	1/2" SW	1/2" BW	29	25	99	164	19,5	8	M12x1,5	9
3/4" x 1/2"	15	110	50	270	3/4" NPT	3/4" SW	3/4" BW	29	25	99	164	19,5	8	M12x1,5	9
3/4"	20	110	50	270	3/4" NPT	3/4" SW	3/4" BW	32	34	102	164	19,5	8	M12x1,5	9
1" x 3/4"	20	119	49	279	1" NPT	1" SW	1" BW	32	34	102	164	19,5	8	M12x1,5	9
1"	25	119	49	279	1" NPT	1" SW	1" BW	36	37,5	107	164	19,5	7,5	M12x1,5	9
1 1/2" x 1 1/4"	32	150	75	310	1 1/2" NPT	1 1/2" SW	1 1/2" BW	36	37,5	116	210	30,5	14	M16x1,5	12
1 1/2"	40	150	75	310	1 1/2" NPT	1 1/2" SW	1 1/2" BW	60	60	128	213	38,5	19	M18x1,5	13
2 x 1 1/2"	40	161	66	321	2" NPT	2" SW	2" BW	60	60	128	213	38,5	19	M18x1,5	13
2"	50	161	66	321	2" NPT	2" SW	2" BW	73	73	141	348	40,5	19	M22x1,5	16

(\*) Dimensions in mm, weight in kg and Torque in Nm.  
(\*\*) Weights and dimensions can be changed without notice.

# METAL SEATED UDV

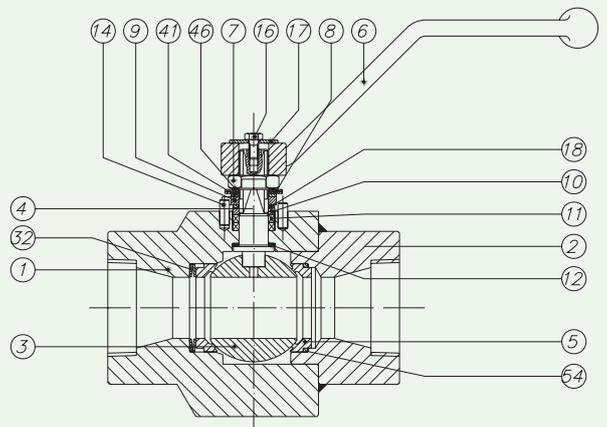
1/2" - 2" | Class 800 - Class 1500

The Ultimate Drain Valve (UDV) it is a high temperature special design. The valve has got a monobloc welded body and it is reduced bore. This valve is designed to support high temperatures at high pressures.



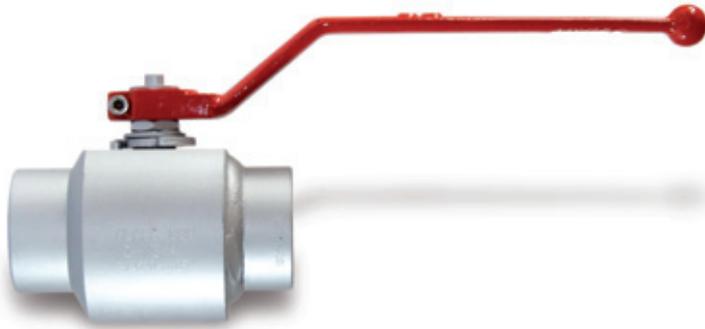
## Materials METAL SEATED UDV

Item	Description	C.S. BODY	S.S. BODY
1	Body	A 105	A 479 Type 316
2	Body connector	A 105	A 479 Type 316
3	Ball	AISI 316 + HT-65 (*)	
4	Stem	17-4 PH + HT-65 (*)	
5	Seat ring	AISI 316 + HT-65	
6	Wrench	GGG-40	
7	Gland nut	Zinc plated carbon st.	AISI 303
8	Disk spring	Carbon St.	E.N.P. Carbon St.
9	Stop plate	Carbon St.	AISI 304
10	Gland	AISI 316 + HT-65	
11	Gland packing	Graphite	
12	Stem thrust seal	AISI 316 + HT-65	
14	Stop pin	Carbon St.	Stainless St.
16	Bolt	DIN 933 5.6 Zinc plated	DIN 933 A2
17	Washer	Carbon St.	Stainless St.
18	Thrust washer	AISI 316 + HT-65	
32	Disk spring	Inconel 718	
41	Spacer	Carbon St.	Stainless St.
46	Washer	AISI 304	
54	Seat gasket	Graphite	

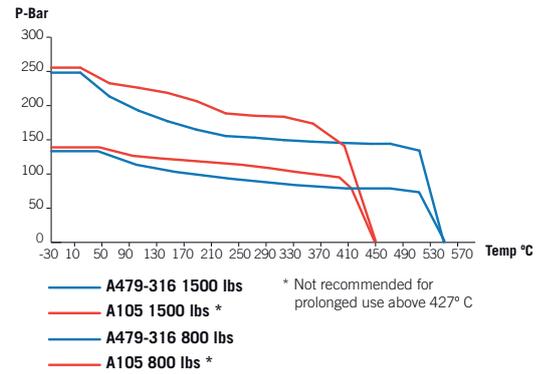


(\*) Other materials under request.

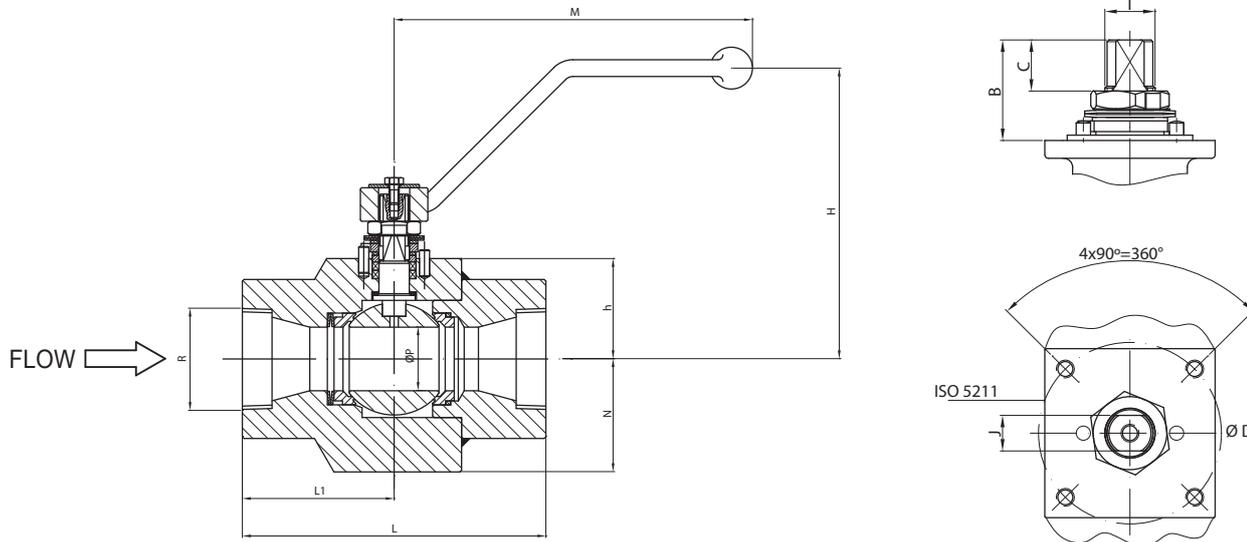
**UDV CLASS 800 & 1500 AIM & IIM TYPE** **Class 800 / 1500** **Reduced Bore**



**Pressure - Temperature**



**Class 800. From 1/2" to 2"**



**Fig. UDV (Class 800)**

DN	ØP	L	L1	R	N	h	H	M	ISO 5211	B	C	ØD	n x F	I	J	WEIGHT	TORQUE	Kv
1/2"	15	90	45	NPT	37,5	32	102	164	F04	18,4	7,8	42	4 x M5	M12 x1,5	9	3,5	30	11
3/4"	15	110	55	NPT	37,5	32	102	164	F04	18,4	7,8	42	4 x M5	M12 x1,5	9	4,5	30	11
1"	20	120	60	NPT	42,5	35,5	106	164	F05	20	8,5	50	4 x M6	M12 x1,5	9	5	37	14
1 1/2"	28	150	75	NPT	60	50	111	210	F05	31,5	15,5	50	4 x M6	M16 x1,5	12	6	102	30
2"	36	180	90	NPT	67,5	60	128	213	F07	38,5	19	70	4 x M8	M18 x1,5	13	10	173	72

**Fig. UDV (Class 1500)**

DN	ØP	L	L1	R	N	h	H	M	ISO 5211	B	C	ØD	n x F	I	J	WEIGHT	TORQUE	Kv
1/2"	15	90	45	NPT	37,5	32	102	164	F04	18,4	7,8	42	4 x M5	M12x1,5	9	3,5	39	11
3/4"	15	110	55	NPT	37,5	32	102	164	F04	18,4	7,8	42	4 x M5	M12x1,5	9	4,5	39	11
1"	20	120	60	NPT	42,5	35,5	106	164	F05	20	8,5	50	4 x M6	M12x1,5	9	5	54	14
1 1/2"	28	150	75	NPT	60	50	111	210	F05	31,5	15,5	50	4 x M6	M16x1,5	12	6	161	30
2"	36	180	90	NPT	67,5	60	128	213	F07	38,5	19	70	4 x M8	M18x1,5	13	10	287	72

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

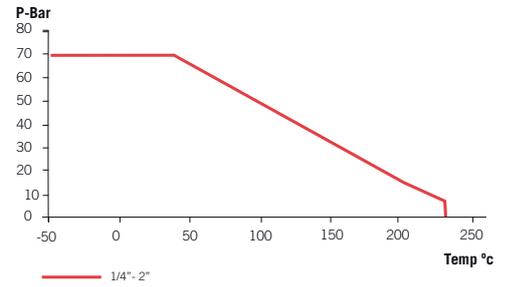
# 160 PRI CF8M

1000 WOG (69) bar

Reduced Bore

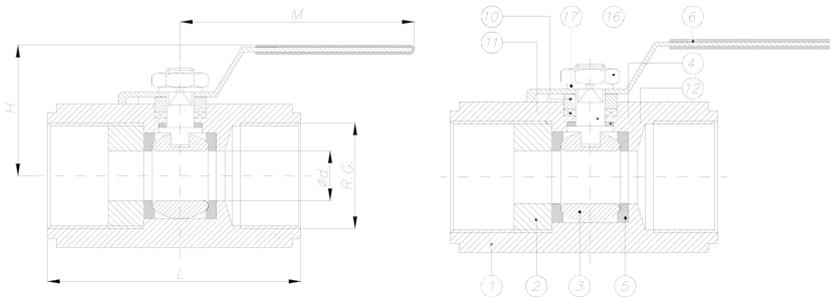


## Pressure - Temperature



## 1000 psi WOG From 1/4" to 2" BSP

## Materials

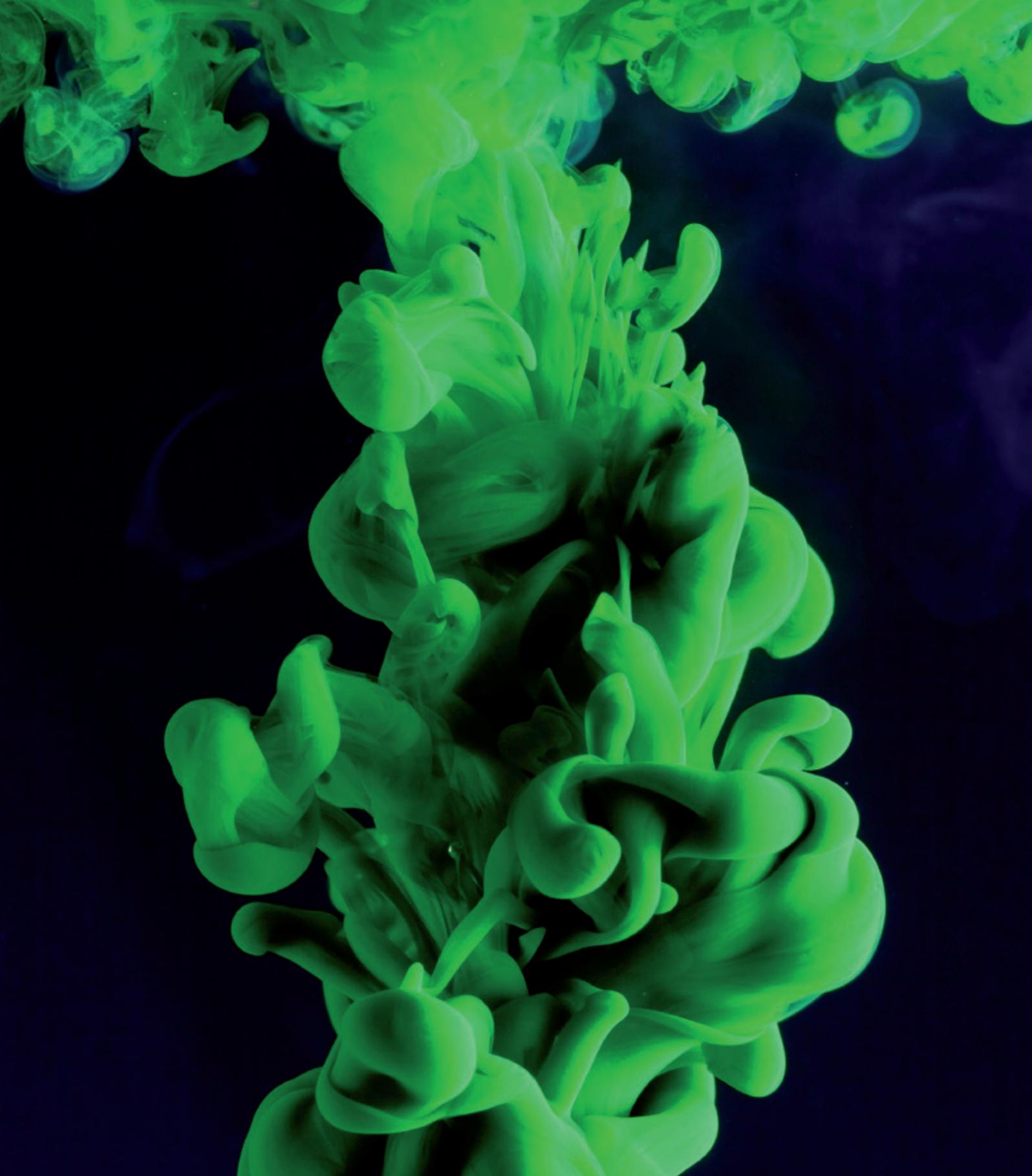


Item	Description	Material
1	Body	ASTM A351 CF8M
2	Insert	AISI 316
3	Ball	ASTM A351 CF8M
4	Stem	AISI 316
5	Seat ring	PTFE + 15% G.F.
6	Wrench	AISI 304
10	Gland	AISI 304
11	Gland packing	PTFE + 15% G.F.
12	Stem thrust seal	PTFE
16	Wrench Nut	AISI 304
17	Thrust Washer	AISI 304

**Fig. 160**

DN	R.G.	Ød	L	M	H	WEIGHT
1/4" (DN 10)	1/4"	5	38,3	61	28,8	0,07
3/4" (DN 12)	3/8 "	7,2	43,5	86	33,5	0,12
1/2" (DN 15)	1/2"	9	55,9	110	63,3	0,20
3/4" (DN 20)	3/4"	12,5	58,3	110	62	0,29
1" (DN 25)	1"	15	69,8	121	6,7	0,43
1 1/4" (DN 32)	1 1/4"	20	77,1	146	82,6	0,71
1 1/2" (DN 40)	1 1/2"	25	82,7	146	82,6	0,84
2" (DN 50)	2"	32	96,9	152	87,4	1,35

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.



BALL VALVES | **2 PCS / 3 PCS**  
**2/3 WAY BALL VALVES**

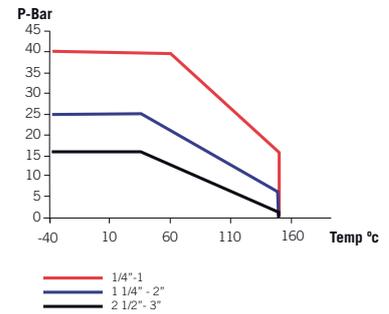
**2000 Brass**

**PN 16 / 40**

**Full Bore**

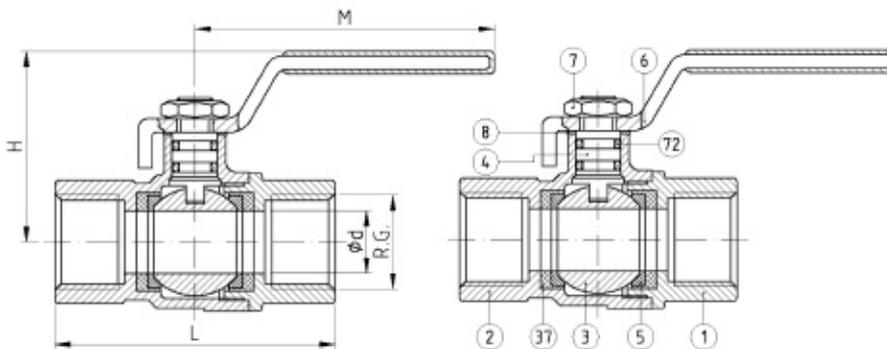


**Pressure - Temperature**



**PN 40 / 16. From 1/4" to 3" BSP or NPT**

**Materials**



Item	Description	Material
1	Body	BRASS 58
2	Body connector	BRASS 58
3	Ball	Cr-Ni PLATED BRASS 58
4	Stem	PLATED BRASS 58
5	Seat ring	PTFE
6	Wrench	Fe 50 DACROMET
7	Gland Nut	NICKEL PLATED BRASS 58
8	Seal Ring	PTFE
37	Seal Cover	NBR

**Fig. 2000**

DN	R.G.	Ød	L	M	H	WEIGHT
1/4" (DN 10)	1/4"	9,8	51,5	85	43	0,12
3/8" (DN 12)	3/8"	9,8	51,5	85	43	0,13
1/2" (DN 15)	1/2"	14	62	95	46,3	0,2
3/4" (DN 20)	3/4"	19	70	95	50	0,36
1" (DN 25)	1"	24	84	110	58	0,53
1 1/4" (DN 32)	1 1/4"	31	98	110	70	0,87
1 1/2" (DN 40)	1 1/2"	38	106	140	78	1,1
2" (DN 50)	2"	49	126	160	94	1,8
2 1/2" (DN 65)	2 1/2"	64	149	210	122	4
3" (DN 80)	3"	74	173,4	210	130	5,5

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

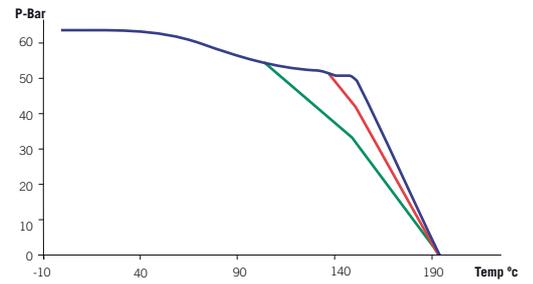
# 2001 CF8M

1000 WOG (69 bar)

Full Bore



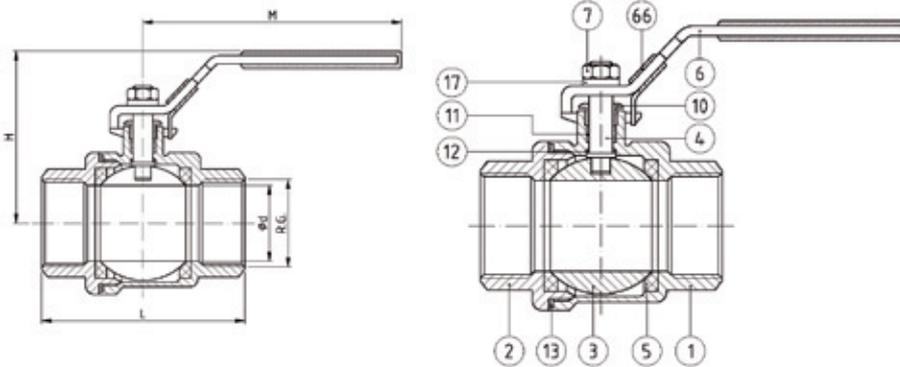
## Pressure - Temperature



**PTFE SEATS**  
 1/4" to 1" ——— (Blue line)  
 1 1/4" to 1 1/2" ——— (Red line)  
 2" to 3" ——— (Green line)

1000 psi WOG. From 1/4" to 3" BSP

## Materials



Item	Description	Material
1	Body	ASTM A351 CF8M
2	Body connector	ASTM A351 CF8M
3	Ball	ASTM A351 CF8M
4	Stem	AISI 316
5	Seat ring	PTFE
6	Wrench	AISI 304
7	Wrench Nut	AISI 304
10	Gland	AISI 304
11	Gland packing	PTFE
12	Stem thrust seal	PTFE
13	Body connector seal	PTFE
17	Washer	AISI 304
66	Locking device	AISI 304

**Fig. 2001**

DN	R.G.	Ød	L	M	H	WEIGHT
(DN 10)	1/4"	11,2	50	100	50	0,23
(DN 12)	3/8"	12,5	50	100	50	0,22
(DN 15)	1/2"	15	58	100	52	0,26
(DN 20)	3/4"	20	65	115	57	0,47
(DN 25)	1"	25	80	150	75	0,65
(DN 32)	1 1/4"	32	92	150	80	1,15
(DN 40)	1 1/2"	40	105	180	95	1,65
(DN 50)	2"	50	125	180	102	2,75
(DN 65)	2 1/2"	65	155	245	120	4,9
(DN 80)	3"	80	187	245	130	7,7

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.

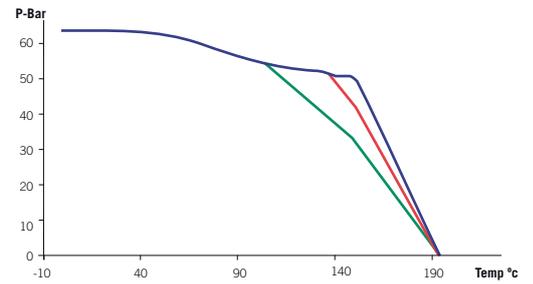
# 705000 A105-WCB

1000 WOG (PN 64)

Full Bore



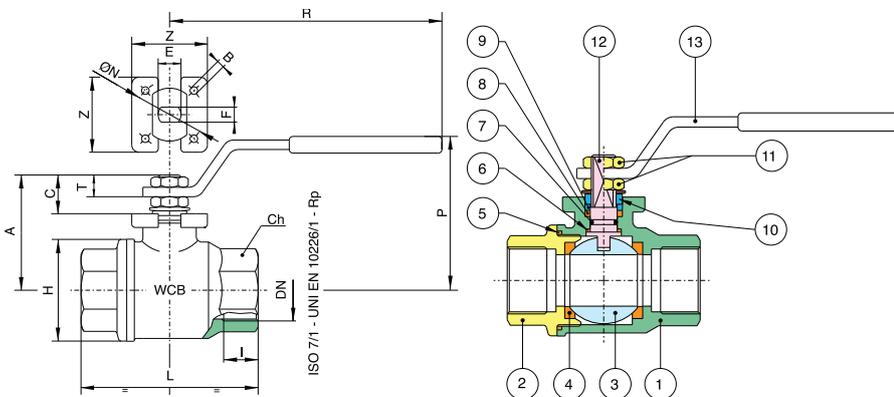
## Pressure - Temperature



PTFE SEATS  
 1/4" to 1" ——— (Blue line)  
 1 1/4" to 1 1/2" ——— (Red line)

PN 64. From 1/4" to 2" BSP or NPT

## Materials

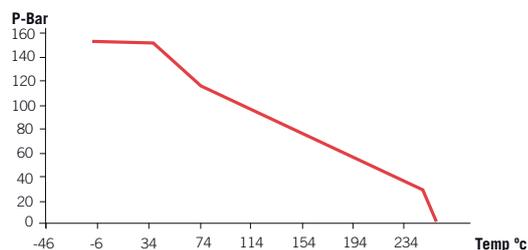
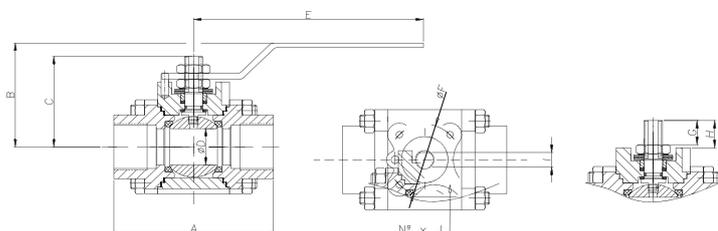
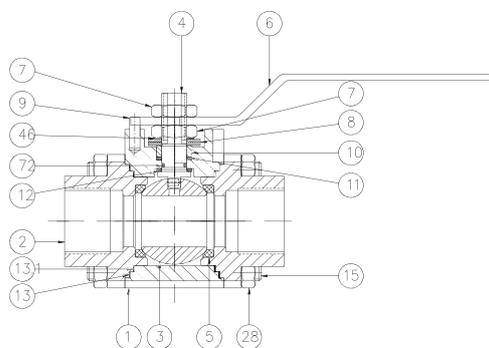


Item	Description	Material
1	Body	ASTM 105 - WCB
2	End connection	ASTM 105 - WCB
3	Ball	A351 - CF8
4	Ball seat	PTFE
5	Seat	PTFE
6	Thrust Washer	PTFE
7	O'Ring	FKM (VITON®)
8	Stem seat	PTFE
9	Packing gland	CARBON STEEL
10	End stop	AISI 430
11	Nut	CARBON STEEL
12	Stem	A182 - F304
13	Handle	CARBON STEEL

Fig. 705000

DN	I	L	H	CH	R	P	A	C	T	KV	PN	Kg
(DN 8)	11	66	36	Es.27	109	51	37,5	13,5	9	5,4	64	0,26
(DN 10)	11,4	66	36	Es.27	109	51	37,5	13,5	9	664	0,24	
(DN 15)	15	66	36	Es.27	109	51	37,5	13,5	9	16,3	64	0,32
(DN 20)	16,3	76	43	Es.32	131,5	66,5	49,5	15	10	29,5	64	0,54
(DN 25)	19,1	90	51	Ott.41	174,5	78,5	59,5	19,5	12,5	43	64	0,99
(DN 32)	20,9	98	64	Ott. 50	174,5	82,5	63	19,5	12,5	89	64	1,34
(DN 40)	21,4	110	77	Ott. 55	250,5	99	78	24	16,5	230	64	2,14
(DN 50)	25,7	133	98	Ott.70	250,5	108	87	24	16,5	265	64	3,36

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.


**Pressure - Temperature**

**Class 900. From 1/4" to 2"**
**Materials**


Item	Description	Carbon Steel	Stainless Steel
1	Body	A 216 WCB(C ≤ 0,25%)	A 351 CF8M
2	End Connector	A 216 WCB(C ≤ 0,25%)	A 351 CF8M
3	Ball	A 351 CF8M (DN 1/4" - 3/8": A 479 Tp. 316)	
4	Stem	A 479 TP316	
5	Seat ring	PTFE+CG	
6	Wrench	Z.P. Carbon Steel	
7	Gland nut	Z.P. Carbon St.	AISI 316
8	Disk Spring	Carbon Steel	E.N.P. Carbon St.
10	Gland	AISI 316	
11	Gland packing	Graphite	
12	Stem thrust seal	25%Graphite	
13	Body connector seal	Graphite	
13.1	Body connector seal	PTFE	
14	Stop pin	Stainless Steel	
15	Stud	ASTM A 193 B7M	ASTM A 193 B8M
19	Antistatic device	Stainless Steel	
28	Nut	ASTM A 194 2HM	ASTM A 194 Gr8M
46	Locking washer	Stainless Steel	
72	O'ring	FKM (Vitón)	
89	Identification plate	Stainless Steel	

(\*) Other materials under request.

**Fig. TRP900**

DN	A	B	C	ØD	E	ØF	G	H	I	N° x J	ØK
1/4"	68	59	43	9,5	170	36	8,7	10,7	7	4xM5	10
3/8"	68	59	43	9,5	170	36	8,7	10,7	7	4xM5	10
1/2"	72	59	45	15	170	36	8,7	10,7	7	4xM5	10
3/4"	94	72	59	20	215	42	15,7	17,7	9,5	4xM5	12
1"	106	72	62	25	215	42	15,7	17,7	9,5	4xM5	12
1 1/2"	125,5	109	89	40	245	50	25,2	27,2	9,5	4xM6	16
2"	128	114	89	50	300	50	16,5	18	12	4xM6	18

 (\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.

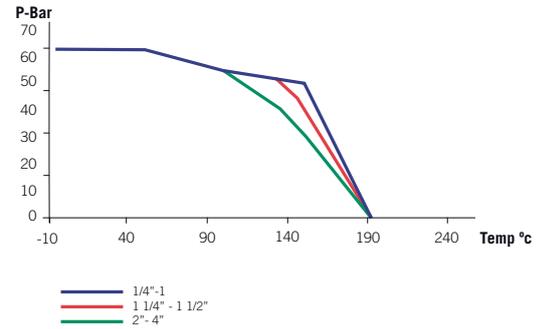
140 / 141 / 142 / 143 CF8M

1000 WOG (69 bar)

Full Bore

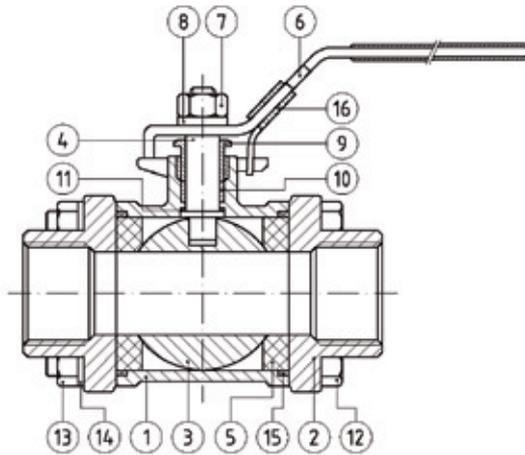


Pressure - Temperature



140 / 141 / 142 / 143. From 1/4" to 4" BSP/NPT/SW/BW

Materials



Item	Description	Material
1	Body	ASTM A351 CF8M (**)
2	Body connector	ASTM A351 CF8M (**)
3	Ball	ASTM A351 CF8M
4	Stem	AISI 316
5	Seat ring	PTFE
6	Wrench	AISI 304
7	Wrench Nut	AISI 304
8	Wrench Washer	AISI 304
9	Gland	AISI 304
10	Gland packing	PTFE
11	Stem thrust seal	PTFE
12	Bolt	AISI 304
13	Nut	AISI 304
14	Washer	AISI 304
15	Seat Gasket	PTFE
16	Lock Device	AISI 304

\*\*Wcb body under request.

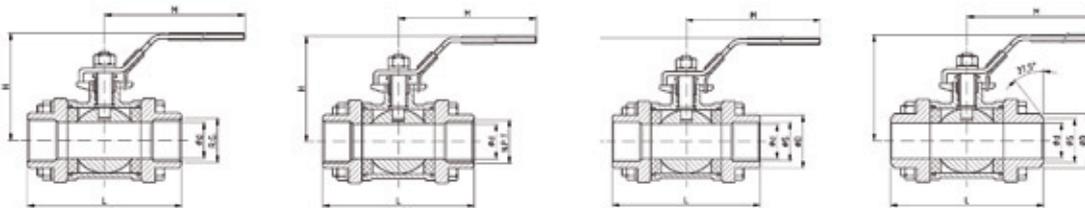


Fig. 140 / 141 / 142 / 143

DN	R.G.	NPT	Ø D SW	Ø D BW	Ø d	L	M	H	Weight in Kg	Torque In Nm at At diff. Press. 69 bar	Kv Values in m³/h
(DN 10)	1/4"	1/4"	19	17,6	11,6	59	105	50	0,31	5,6	5,2
(DN 12)	3/8"	3/8"	22,5	22,5	12,7	59	105	50	0,35	5,6	6,0
(DN 15)	1/2"	1/2"	27	22,5	15	68,5	105	55	0,41	9	8,7
(DN 20)	3/4"	3/4"	33	30,7	20	84	125	60	0,7	11,3	21,6
(DN 25)	1"	1"	40	34,5	25	89	158	72	1,2	14,7	30,3
(DN 32)	1 1/4"	1 1/4"	48,8	43,5	32	112	158	78	2,1	9,2	39,8
(DN 40)	1 1/2"	1 1/2"	55	49,5	38	121	195	91	2,5	24,9	69,3
(DN 50)	2"	2"	67,2	61,5	53	146	195	105	3,7	45,2	95,2
(DN 65)	2 1/2"	2 1/2"	86,4	76	65	165	245	127	7,4	73,2	268,4
(DN 80)	3"	3"	103	92	80	183	245	137	12,8	128,8	311,7
(DN 100)	4"	4"	130,7	115	100	232	320	172	23	165,4	710

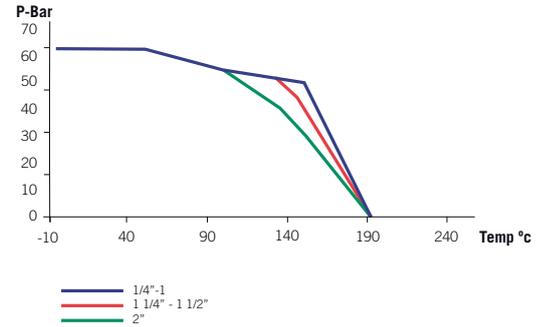
(\*) Dimensions in mm and weight in kg.

(\*\*) Weights and dimensions can be changed without notice.

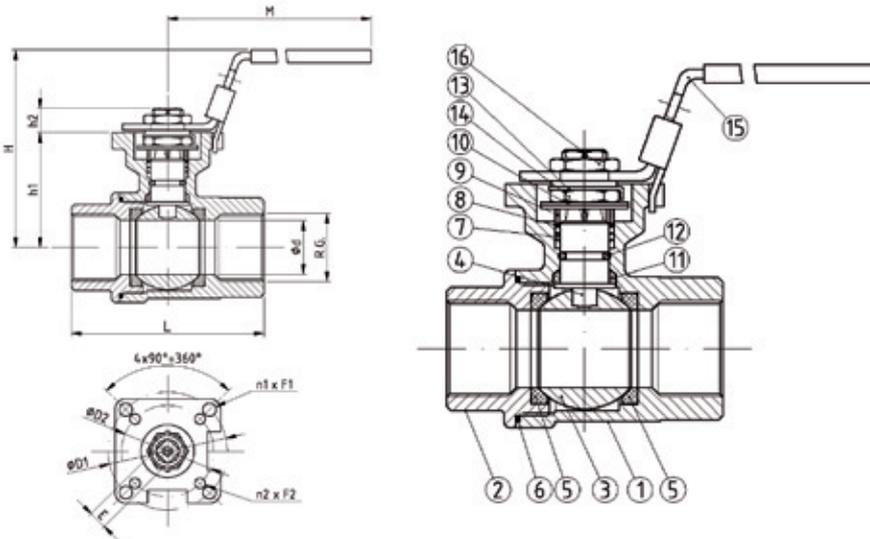
**2001 IMF ISO Mounting PAD CF8M** **1000 WOG (69 BAR)** **Full Bore**



**Pressure - Temperature**



**1000 WOG. From 1/4" to 2" BSP or NPT** **Materials**



Item	Description	Material
1	Body	ASTM A351 CF8M
2	Body connector	ASTM A351 CF8M
3	Ball	ASTM A351 CF8M
4	Stem	AISI 316
5	Seat ring	PTFE
6	Wrench	AISI 304
7	Wrench Nut	AISI 304
8	Wrench Washer	AISI 304
9	Gland	AISI 304
10	Gland packing	PTFE
11	Stem thrust seal	PTFE
12	Bolt	AISI 304
13	Nut	AISI 304
14	Washer	AISI 304
15	Seat Gasket	PTFE
16	Lock Device	AISI 304

**Fig. 2001 IMF**

DN	R.G.	Ød	L	M	H	h1	h2	E	n1 x F1	ØD1	n2 x F2	ØD2	WEIGHT
(DN 10)	1/4"	11,5	65,3	112	73	37	8,5	9	4 x 7	50	4 x 6	36	0,46
(DN 12)	3/8"	12,5	65,3	112	73	37	8,5	9	4 x 7	50	4 x 6	36	0,46
(DN 15)	1/2"	15	65,3	112	73	37	8,5	9	4 x 7	50	4 x 6	36	0,44
(DN 20)	3/4"	20	77,3	112	81,8	45	8,5	9	4 x 7	50	4 x 6	36	0,81
(DN 25)	1"	25	88,7	136	90,5	53,5	11,4	9	4 x 7	50	4 x 6	36	0,91
(DN 32)	1 1/4"	32	102,4	185	98	59	11,4	9	4 x 7	50	4 x 6	36	1,56
(DN 40)	1 1/2"	38	109	197,9	115	74,8	14	14	4 x 9	70	4 x 7	50	2,3
(DN 50)	2"	50	125,3	197,9	124	83,5	13,7	14	4 x 9	70	4 x 7	50	3,2

(\* Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

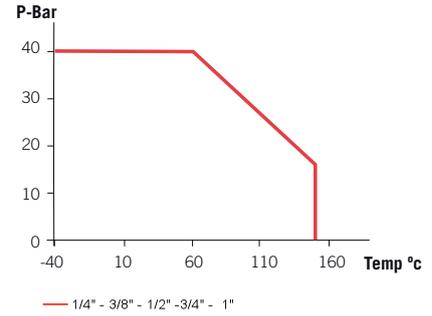
# 2500 ISO Mounting pad Brass

PN40

Full Bore

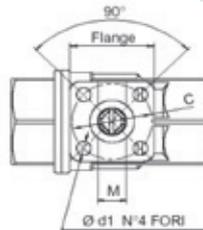
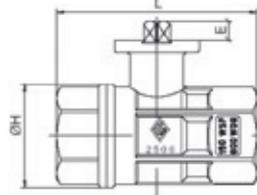
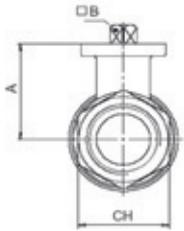
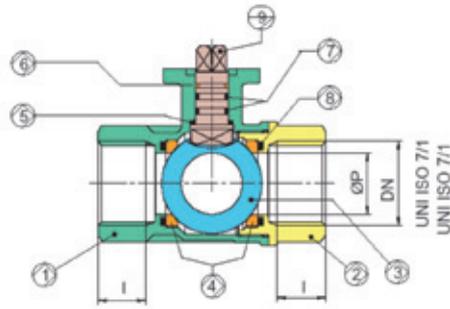


## Pressure - Temperature



PN40. From 1/4" to 4" BSP or NPT

## Materials



Item	Description	Material
1	Body	CW617N UNI EN 12165
2	End connection	CW617N UNI EN 12165
3	Ball	CW617N UNI EN 12165
4	Ball seat	PTFE (TEFLON ®)
5	Antifriction seat	PTFE (TEFLON ®)
6	Stem seat	PTFE (TEFLON ®)
7	O'Ring	FKM (VITON)
8	O'Ring	FKM (VITON)
9	Stem	CW614N UNI EN 12164

Fig. 2500 (PN40)

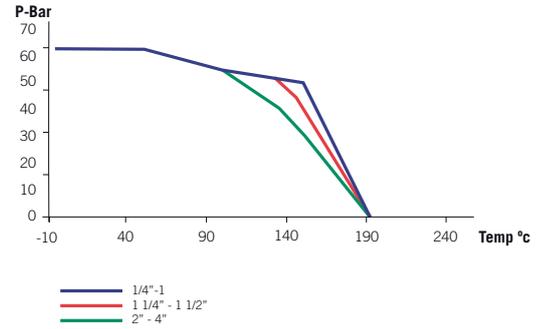
DN	Flange	A	B	C	d1	E	H	I	L	M	P	CH	PN	Kg
(DN 8)	38	33	9	36	6	9	33,5	11	67	13	14,2	27	40	0,35
(DN 10)	38	33	9	36	6	9	33,5	11,4	67	13	14,2	27	40	0,35
(DN 15)	38	33	9	36	6	9	33,5	11,4	67	13	14,2	27	40	0,35
(DN 20)	38	35	9	36	6	9	40	16,3	76	13	19	32	40	0,4
(DN 25)	38	45,5	9	36	6	9	49	19,1	90	13	24,2	41	40	0,71
(DN 32)	38	49	9	36	6	9	58,5	21,4	102	13	30	50	40	1,05
(DN 40)	50	64	11	50	7	11	71,5	21,4	114	21	38	55	40	1,70
(DN 50)	50	73,25	11	50	7	11	91,5	25,7	138	21	50,2	70	40	2,66
(DN65)	70	87	14	70	9	15	113	30,2	157	25	65	90	40	3,99
(DN80)	70	98	14	70	9	15	135	33,3	188	25	76	105	40	6,10
(DN100)	70	119,5	17	70	9	18	166	39,3	225	30	95	130	40	10,25

(\*) Dimensions in mm and weight in kg.

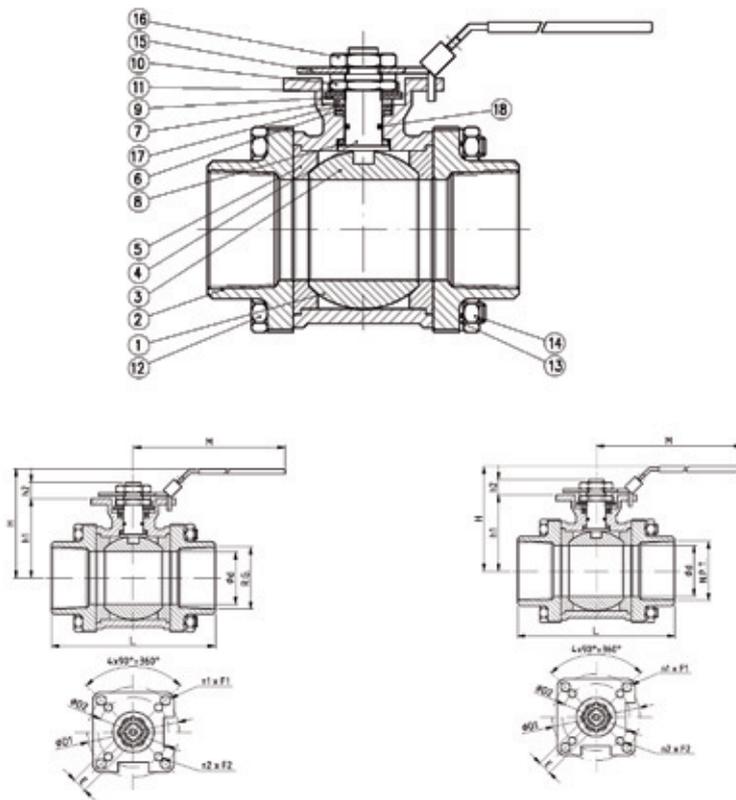
**140/141 IMF ISO Mounting PAD CF8M** **1000 WOG (69 BAR)** **Full Bore**



**Pressure - Temperature**



**1000 WOG, From 1/4" TO 4" BSP or NPT** **Materials**



Item	Description	Material
1	Body	ASTM A351 CF8M (**)
2	Body connector	ASTM A351 CF8M (**)
3	Ball	ASTM A351 CF8M
4	Stem	AISI 316
5	Seat ring	PTFE
6	Stem packing	PTFE + 15% G.F.
7	Gland	AISI 304
8	Thrust washer	PTFE
9	Belleville	AISI 304
10	Handle nut	AISI 304
11	Stop plate	AISI 304
12	Bolt	AISI 304
13	Bolt Washer	AISI 304
14	Bolt nut	AISI 304
15	Handle	AISI 304
16	Handel nut	AISI 304
17	Thrust washer	PTFE
18	O-Ring	FKM

\*\*Wcb body under request.

**Fig. 140 IMF / 141 IMF**

DN	R.G. & NPT	Ød	L	M	H	h1	h2	E	n1x F1	ØD1	n2x F2	ØD2	WEIGHT	Torque	Kv Values
(DN 10)	1/4"	11,5	63,5	112	73	37	8,5	9	4 x 6	36	4 x 7	50	0,59	4,9	5,2
(DN 12)	3/8"	12,5	63,5	112	73	37	8,5	9	4 x 6	36	4 x 7	50	0,58	4,9	6,0
(DN 15)	1/2"	15	63,5	112	73	37	8,5	9	4 x 6	36	4 x 7	50	0,57	4,9	8,7
(DN 20)	3/4"	20	72,5	112	80,8	45	8,5	9	4 x 6	36	4 x 7	50	0,71	6,5	21,6
(DN 25)	1"	25	81	136	90,5	53,5	11,4	9	4 x 6	36	4 x 7	50	1,03	13,7	30,3
(DN 32)	1 1/4"	32	94,5	185	98,7	59	11,4	9	4 x 6	36	4 x 7	50	1,56	21,6	39,8
(DN 40)	1 1/2"	38	108	197,9	115,3	74,8	14	14	4 x 7	50	4 x 9	70	2,5	29,5	69,3
(DN 50)	2"	50	121,5	197,9	124	83,5	13,7	14	4 x 7	50	4 x 9	70	3,44	47	95,2
(DN 65)	2 1/2"	65	157,5	264	155	108,8	18	17	4 x 9	70	4 x 11	102	6,4	58,3	268,4
(DN 80)	3"	80	190	264	208,5	118,3	18	17	4 x 9	70	4 x 11	102	11,2	86,8	311,7
(DN 100)	4"	100	225	325	216,7	153,8	18	17	4 x 9	70	4 x 11	102	22	122,6	710,0

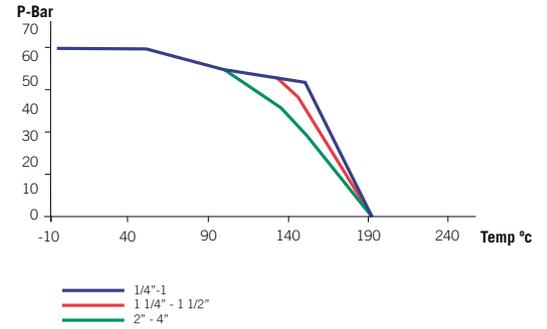
(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.  
 Torque In Nm At differential Pressure 69 bar.  
 Kv Values in m³/h

# 142 / 143 IMF ISO Mounting PAD CF8M

1000 WOG (69 BAR) Full Bore

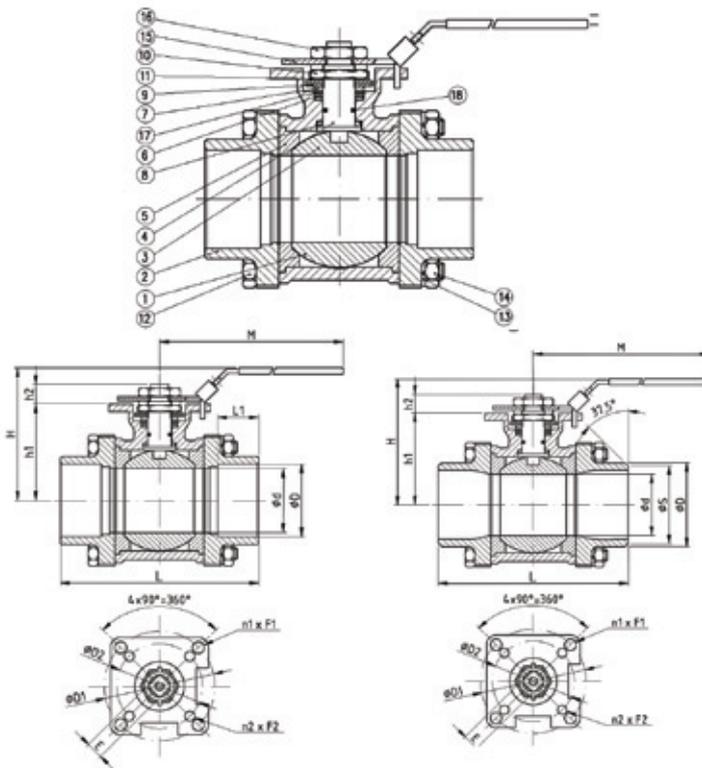


## Pressure - Temperature



1000 WOG. From 1/4" TO 4" SW or BW

## Materials



Item	Description	Material
1	Body	ASTM A351 CF8M (**)
2	Body connector	ASTM A351 CF8M (**)
3	Ball	ASTM A351 CF8M
4	Stem	AISI 316
5	Seat ring	PTFE
6	Wrench	AISI 304
7	Wrench Nut	AISI 304
8	Wrench Washer	AISI 304
9	Gland	AISI 304
10	Gland packing	PTFE
11	Stem thrust seal	PTFE
12	Bolt	AISI 304
13	Nut	AISI 304
14	Washer	AISI 304
15	Seat Gasket	PTFE
16	Lock Device	AISI 304

\*\*Wcb body under request.

Fig. 142 IMF / 143 IMF

DN	ød	ø D Ø S	BW Ø D	L1	L	M	H	h1	h2	E	n 1 x F1	øD1	n2x F2	øD2	Weight	Torque	Kv Values
1/4" (DN 10)	11,5	14,2	14,5	10	63,5	112	73	37	8,5	9	4 x 6	36	4 x 7	50	0,59	4,9	5,2
3/8" (DN 12)	12,5	17,5	17,1	10	63,5	112	73	37	8,5	9	4 x 6	36	4 x 7	50	0,58	4,9	6,0
1/2" (DN 15)	15	21,8	21,3	10	63,5	112	73	37	8,5	9	4 x 6	36	4 x 7	50	0,57	4,9	8,7
3/4" (DN 20)	20	27,4	26,7	13	72,5	112	80,8	45	8,5	9	4 x 6	36	4 x 7	50	0,71	6,5	21,6
1" (DN 25)	25	34,1	33,4	13	81	136	90,5	53,5	11,4	9	4 x 6	36	4 x 7	50	1,03	13,7	30,3
1 1/4" (DN 32)	32	42,7	42,2	13	94,5	185	98,7	59	11,4	9	4 x 6	36	4 x 7	50	1,56	21,6	39,8
1 1/2" (DN 40)	38	49	48,3	13	108	197,9	115,3	74,8	14	14	4 x 7	50	4 x 9	70	2,5	29,5	69,3
2" (DN 50)	50	61	60,3	16	121,5	197,9	124	83,5	13,7	14	4 x 7	50	4 x 9	70	3,44	47	95,2
2 1/2" (DN 65)	65	77	73	16	157,5	264	155	108,8	18	17	4 x 9	70	4 x 11	102	6,4	58,3	268,4
3" (DN 80)	80	90,2	88,9	16	190	264	208,5	118,3	18	17	4 x 9	70	4 x 11	102	11,2	86,8	311,7
4" (DN 100)	100	115,3	114,3	22	225	325	216,7	153,8	18	17	4 x 9	70	4 x 11	102	22	122,6	710,0

(\*) Dimensions in mm and weight in kg  
Torque In Nm At differential Pressure 69 bar.  
Kv Values in m<sup>3</sup> /h

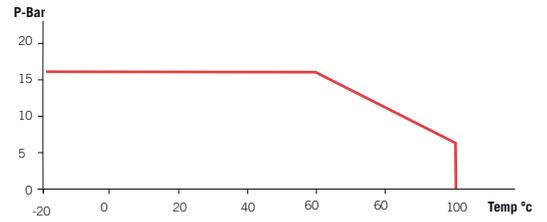
(\*\*) Weights and dimensions can be changed without notice.

**2000 3 ways L port brass 2 seats**

**PN 16**

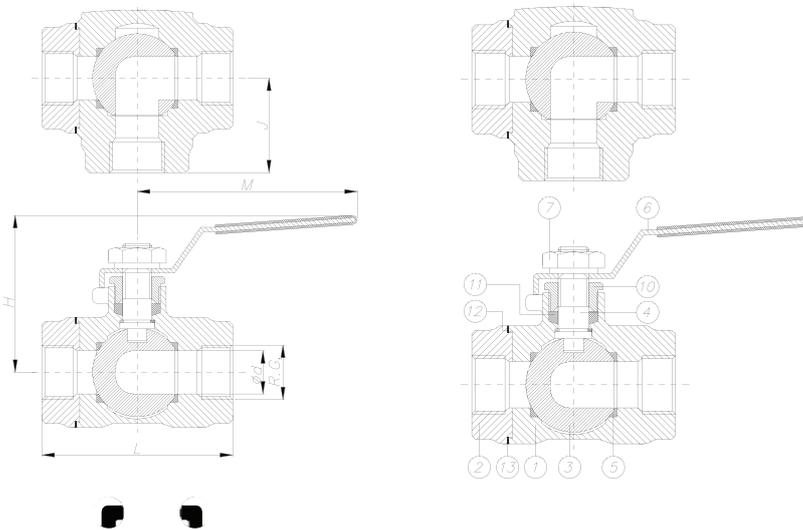
**Full Bore**

**Pressure - Temperature**



PN16. From 1/4" to 2" BSP or NPT

**Materials**



Item	Description	Material
1	Body	NICKEL PLATED BRASS 58
2	Body connector	NICKEL PLATED BRASS 58
3	Ball	Cr-Ni PLATED BRASS 58
4	Stem	PLATED BRASS 58
5	Seat ring	PTFE
6	Wrench	ALUMINIUM
7	Wrench Nut	NICKEL PLATED BRASS 58
10	Gland	NICKEL PLATED BRASS 58
11	Gland packing	PTFE
12	Stem thrust seal	PTFE
13	Body connector seal	PTFE

**Fig. 2000 3 WAYS "L" PORT**

DN	R.G.	Ød	L	J	M	H	WEIGHT
DN 10	1/4"	10	44	23	95	40,5	0,155
DN 12	"	10	49	26	95	40,5	0,19
DN 15	1/2"	14	62	33	95	43	0,3
DN 20	3/4"	19	70	38	115	53	0,48
DN 25	1"	24	84	45	115	57	0,84
DN 32	1 1/4"	30	98	55	155	72,5	1,29
DN 40	1 1/2"	38	106	60	155	78,5	1,92
DN 50	2"	47	126	70	175	94	2,98
DN 65	2 1/2"	62	152	90	215	111,5	6,9

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

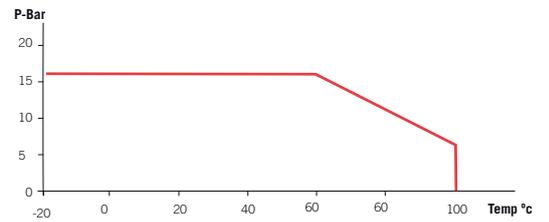
# 2000 3 ways T port brass 2 seats

PN 16

Full Bore

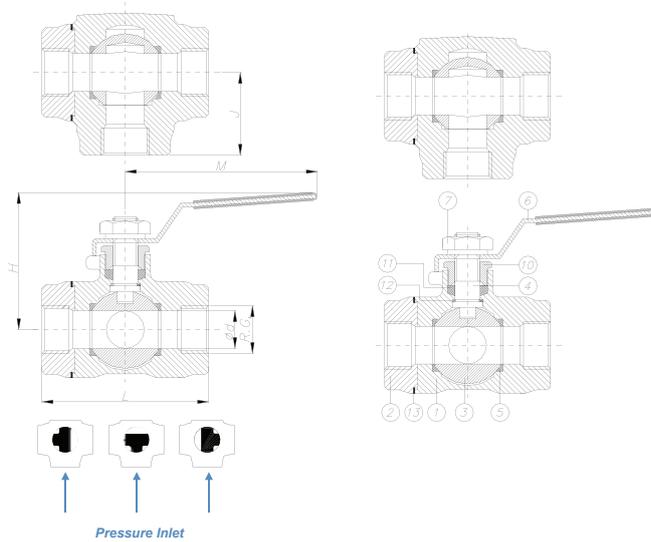


## Pressure - Temperature



PN 16. From 1/4" to 2" BSP or NPT

## Materials



Item	Description	Material
1	Body	NICKEL PLATED BRASS 58
2	Body connector	NICKEL PLATED BRASS 58
3	Ball	Cr-Ni PLATED BRASS 58
4	Stem	PLATED BRASS 58
5	Seat ring	PTFE
6	Wrench	ALUMINIUM
7	Wrench Nut	NICKEL PLATED BRASS 58
10	Gland	NICKEL PLATED BRASS 58
11	Gland packing	PTFE
12	Stem thrust seal	PTFE
13	Body connector seal	PTFE

Fig. 2000 3 WAYS "T" PORT

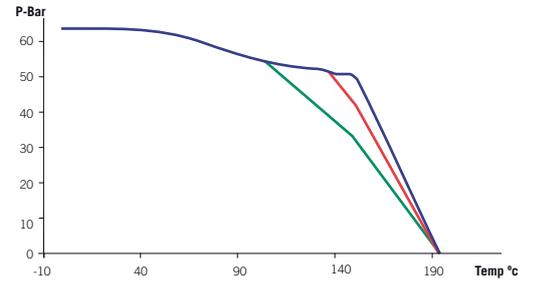
DN	R.G.	Ød	L	J	M	H	WEIGHT
(DN 10)	1/4"	10	44	23	95	40,5	0,155
(DN 12)	"	10	49	26	95	40,5	0,19
(DN 15)	1/2"	14	62	33	95	43	0,3
(DN 20)	3/4"	19	70	38	115	53	0,48
(DN 25)	1"	24	84	45	115	57	0,84
(DN 32)	1 1/4"	30	98	55	155	72,5	1,29
(DN 40)	1 1/2"	38	106	60	155	78,5	1,92
(DN 50)	2"	47	126	70	175	94	2,98
(DN 65)	2 1/2"	62	152	90	215	111,5	6,9

(\*) Dimensions in mm and weight in kg.  
(\*\*) Weights and dimensions can be changed without notice.

**2000 3 WAYS 772000T/775000L CF8M 4 seats** | **1000 WOG (69 bar)** | **Full Bore**

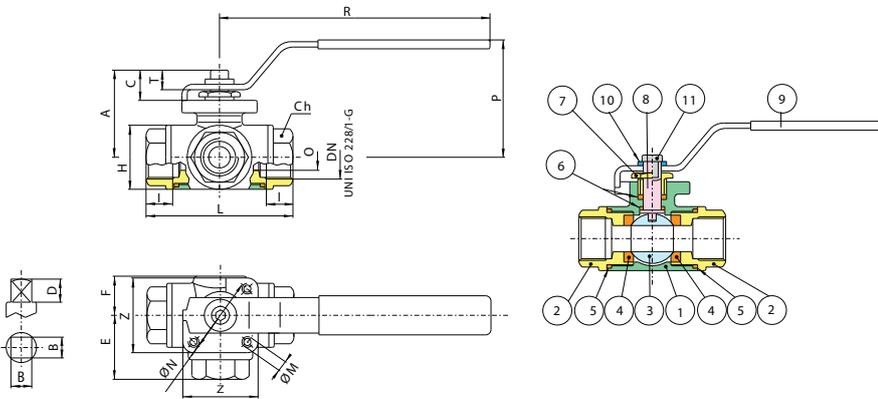


**Pressure - Temperature**



**PTFE SEATS**  
 1/4" to 1" ————  
 1 1/4" to 1 1/2" ————  
 2" to 3" ————

**PN64. From 1/4" to 2" BSP or NPT** | **Materials**

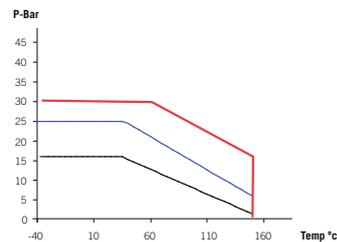


Item	Description	Material
1	Body	A351 - CF8M
2	End connection	A351 - CF8M
3	Ball	A182 - F316
4	Ball seat	PTFE
5	Seat	PTFE
6	Thrust Washer	PTFE
7	Stem retaining nut	A182 - F304
8	Stem	A182 - F316
9	Handle	A182 - F304
10	Washer	A182 - F304
11	Screw	A182 - F304

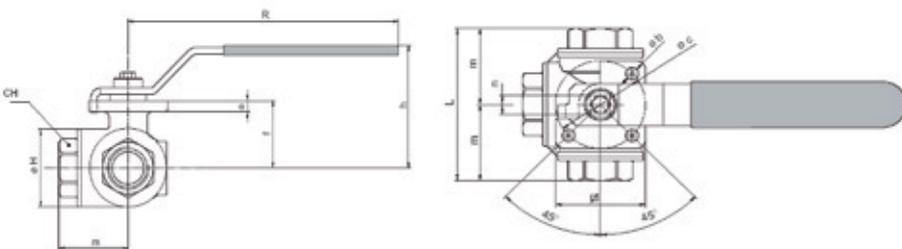
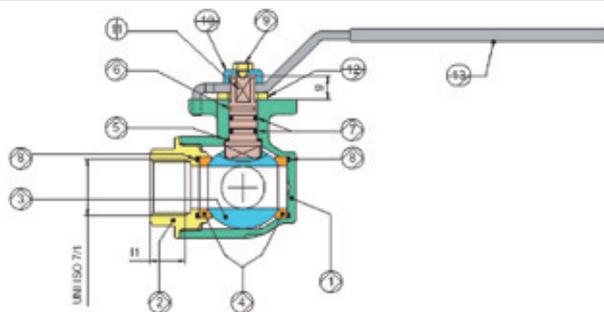
**Fig. 2000 3 WAYS T OR L PORT CF8M 4 SEATS**

DN	O	A	C	T	H	L	R	CH	I	E	F	P	ÆM	N	Z	ÆEB	D	KV	PN	Kg
(DN 8)	8	50	18	12,5	37	79	158	ES.28	16	39	22	66	M5	42 F04	42	9	5	2,8	64	0,81
(DN 10)	8	50	18	12,5	37	79	158	ES.28	16	39	22	66	M5	42 F04	42	9	5	3	64	0,77
(DN 15)	10	50	18	12,5	37	79	158	ES.28	18	39	22	66	M5	42 F04	42	9	5	3,6	64	0,72
(DN 20)	15	63	21,5	16	45	86	158	ES.35	18	43	28	75	M6	50 F05	50	11	7	6	64	1,11
(DN 25)	20	70	27	19,5	52	108	186	ES.41	21	54	31	78	M6	50 F05	50	11	11,5	11	64	1,71
(DN 32)	25	84	32,5	24	67	124	213	ES.52	21	62	34	93	M6	50 F05	50	11	16	16	64	2,77
(DN 40)	32	87	32,5	24	75	134	237	ES.58	24	67	40	96	M8	70 F07	70	11	16	25,5	64	3,82
(DN 50)	40	96	33	25,5	96	164	237	ES.73	27	81	50	95	M8	70 F07	70	14	16	37,5	64	6,73

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.


**Pressure - Temperature**


**PTFE SEATS**  
 1/4" to 1" ————  
 1 1/4" to 2" ————

**PN 30 / 16. From 1/4" to 2" BSP or NPT**
**Materials**


Item	Description	Material
1	Body	Brass CW617N UNI EN 12165
2	End connection	Brass CW617N UNI EN 12165
3	Ball	Brass CW617N UNI EN 12165
4	Ball seat	PTFE (TEFLON®)
5	Antiattrition seat	PTFE (TEFLON®)
6	Stem seat	PTFE (TEFLON®)
7	O'Ring	FKM (VITON®)
8	O'Ring	FKM (VITON®)
9	Screw	ACCIAIO
10	Bushing	CW614N UNI EN 12164
11	Stem	CW614N UNI EN 12164
12	Washer	NYLON
13	Handle	ACCIAIO UNI 7070

**Fig. 3500 / 3600 ISO L or T Port**

DN	H	I1	L	m	CH	R	h	ÆEb	ÆEc	e	f	g	ÆE	n	KV	PN	Kg
(DN 8)	34	11	67	33,5	22	120	62,5	6	36 (F03)	5	30,5	9	38	9	2,8	30	0,55
(DN 10)	34	11,4	67	33,5	22	120	62,5	6	36 (F03)	5	30,5	9	38	9	3	30	0,52
(DN 15)	39	15	77	38,5	27	120	63,5	6	36 (F03)	5	32,7	9	38	9	3,9	30	0,65
(DN 20)	48	16,3	87	43,5	32	170	75	7	50 (F05)	7	41,5	11	50	11	7,9	30	1,10
(DN 25)	60	19,1	105	52,5	41	170	79,5	7	50 (F05)	7	47	11	50	11	13	16	1,83
(DN 32)	72	21,4	122,5	61,25	50	170	93	7	50 (F05)	7	59,5	11	50	11	20,7	10	2,75
(DN 40)	86	21,4	138,5	69,25	55	230	113,5	9	70 (F07)	8	73,85	15	70	14	38,7	10	4,57
(DN 50)	111	25,7	166	83	70	230	123,5	9	70 (F07)	8	85	15	70	14	54	10	8,37

(\*) Dimensions in mm, weight in kg and Torque in Nm.  
 (\*\*) Weights and dimensions can be changed without notice.



BALL VALVES

**SPECIAL CONSTRUCTION**  
& other Distributed Valve

**PS4: 3 PIECES BALL VALVE**



- Butt weld ends, Socket weld ends, BSP & NPT Thread; Orbital Welding, Tri-clamp ends, compression fitting ends.

**PS4 Ball Valves:  
Features and benefits**

- Rotating flanges facilitate installation in the piping systems.
- Kit Box packing facilitate stock and maintenance

**PY4 LOW TEMPERATURE**



- Cryogenic Ball valve used at -196°C (liquid nitrogen, carbon dioxide, ...)

TEMPERATURE  
**-196°C**

**PS4-DR DRAINING BALL VALVE**



- Flush mounted ball valve on pipe From 3" to 8"

FROM  
**3" to 8"**

## PS4\_FCSZ TANK BOTTOM DRAINING



- Flush design tank bottom ball valve, for vacuum

VACUUM

## PS4LBWT PIGGING



- Ball valves for insertion and picking-up of pigs from the pipe
- Piggable lines

PIGGING

## PS4 PE SAMPLING



- Sampling ball valve
- Sampling ball

SAMPLING

## PZ4 V30 / PZ4 V60 FLOW CONTROL



- 3-piece V-ball valve
- Flow rate adjustment

FLOW  
CONTROL

## PN4 SANITARY TYPE



- FDA Approved, Clean utilities ball valve True bore, orbital welding

SANITARY  
TYPE

VALPRES

## WAFER BALL VALVE with Steam Jacket

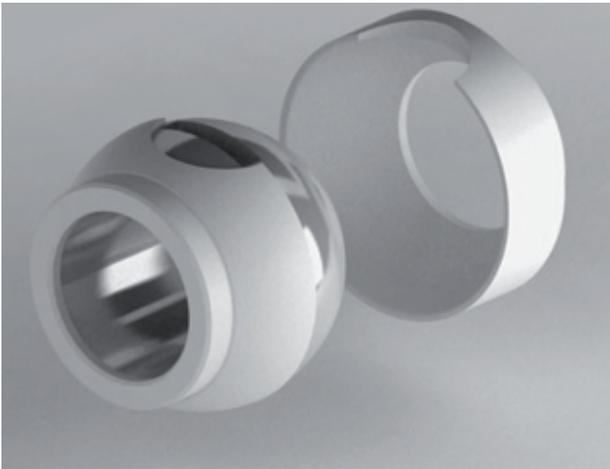


## STEAM JACKET



- When viscous materials are handled, JC steam jacketed ball valves are recommended to prevent valve to be blocked in closed position.
- The maximum steam jacket pressure is 10 Bar (1.0 Mpa) and maximum temperature is 260°.

## CAVITY FILLER



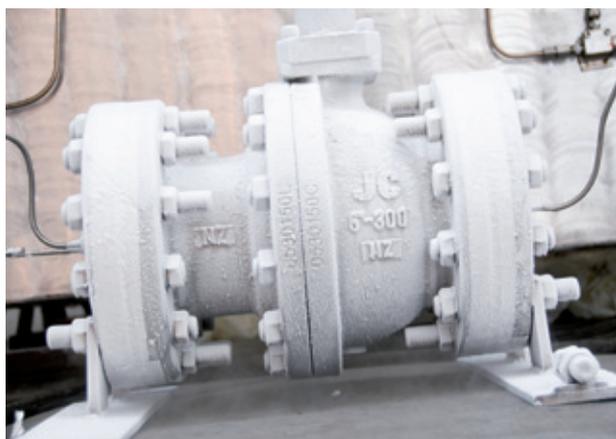
- Some of the roughest process controls problems involve fluids than can polymerize in place.
- That means they can polymerize inside body cavities and could block the valve. Cavity-filler seats are available in PTFE, Stansit, TFM.
- Applications: Styrene, Butadiene, Monomers, Pharmaceuticals, Food process, ...

## DOUBLE PACKING



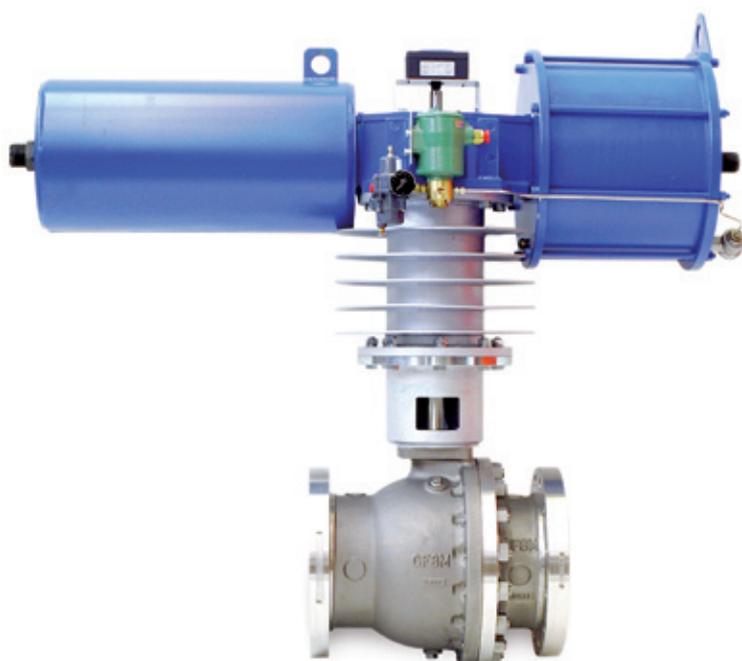
- Today's concern for the containment of fugitive emissions has brought forth in the industry a wide range of stem sealing concepts and designs aimed to eliminating stem leakage. For these applications where it is imperative that fluid containment has to be assured, double packing can be adapted to any JC ball valve.

## LOW TEMPERATURE OR CRYOGENIC SERVICE



- JC ball valves have been widely used in low temperature and cryogenic applications, including some gas treatment processes (LNG, Methane, LPG...), requiring valves able to be operated and to assure helium leakage rates within specified limits at low temperatures. In these cases JC offers valves designed with special seats, bonnets and materials for low temperature or cryogenic service.

## FULLY AUTOMATED BALL VALVES



- JC Valves can be delivered with pneumatic, electric, hydraulic or gas-over-oil actuators as per customer requirements.
- Today's concern for the containment of fugitive emissions has brought forth in the industry a wide range of stem sealing concepts and designs aimed to eliminating stem leakage. For these applications where it is imperative that fluid containment has to be assured, double packing can be adapted to any JC ball valve.



## DIMENSIONS OF DRILLS ACCORDING TO ISO 5211

FLANGE TYPE	DIAMETER OF BOLTS CIRCLE	NUMBER SCREWS	DIAMETER OF DRILLS
F03	36	4	M5
F04	42	4	M5
F05	50	4	M6
F07	70	4	M8
F10	102	4	M10
F12	125	4	M12
F14	140	4	M16
F16	165	4	M20
F25	254	8	M16
F30	298	8	M20
F35	356	8	M30
F40	406	8	M36
F48	483	12	M36

## MORE PRODUCTS



GATE, GLOBE & CHECK VALVES - STRAINERS

## ACCESSORIES



PNEUMATIC ACTUATOR - ELECTRIC ACTUATOR - HYDRAULIC ACTUATOR  
GAS OVER OIL ACTUATOR - WORM GEAR - LOCKING DEVICES - STEM EXTENSIONS







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