



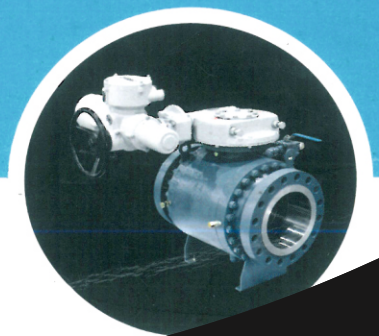
# Alka-Tech

**INDUSTRIAL VALVES & FITTINGS CO.**

**WE ARE THE BEST LEADING  
MANUFACTURER OF  
INDUSTRIAL VALVES**



## **BALL VALVES**



ALKA TECH is an ISO 9001:2015 approved reputed Manufacturer of Industrial Valves founded by Mr. John Mascarenhas with Joint Venture collaboration FUTURE VALVE TECHNOLOGIES a team having experience exclusively in the Design and Production of Valve technology for more than two decades.

We are driven by the ability to provide innovative & Sustainable solutions to your business needs.

- High Quality
- Cost Effective
- Finished product

- Delivery On time
- Advanced Technology
- Expert Engineers

We are focused on accomplishing complete consumer loyalty through Design, Development, Manufacturing, and supply of reliable quality Industrial Valves with the point of zero rate dismissal while remaining financially savvy and serious. This will be accomplished by collaboration and ceaseless improvement in all the regions of activity.

Alka Tech Industrial Valves & Fittings Co. established to supply high performance valves to critical applications. Our team over decades of experience in valve design, manufacturing, quality control and deliveries understands the customer challenges in sourcing quality valves in the scheduled time.

In order to meet such demand company operates on sophisticated ERP system which includes project planning and management. Company has latest software for design and automated test benches of latest technology.

Our supplier control process ensured experienced suppliers and sub-vendors meet quality requirements of raw materials and accuracy of machined parts.

Company manufacture and supply below types of valves in soft and metal seated;

- Process to Instrument and Piping Valves Double Block and Bleed (DBB)
- Ball valves Floating and Trunnion
- Butterfly valves Double and Triple offset
- Piston Valves
- GGC Valves

Company management and employees have expertise in international standards and customer specifications with the past experience on working with a multinational valves manufacturing company engaged in supply of valves to various reputed EPCs and users like: Shell Global, Saudi Aramco, PDO, ADNOC, KOC, QP, Petrobras, Petronas, EIL, MECON, ONGC, HPCL, IOCL, BPCL.

We are focussed on manufacturing of valves for sectors like:

Oil, Gas, Power, Water, Chemical, Fertilisers, Nuclear, Mining LNG, Marine and Hydrogen sectors.

## WHY US

### IN HOUSE RESEARCH & DEVELOPMENT

Our Engineering, Research and Development facilities uses latest technology and software.

Design validation tests done in house as per MESC/SPE/77/300 series and API 6D. Fugitive emission test done a per ISO 15848, API624 and API 641.

### ERP FOR MANUFACTURING PROCESSES

ERP is implemented across all functions for effective process control. Specific project management module is implemented to ensure best quality valves are delivered on time.

### IN HOUSE TESTING FACILITY

Production testing facility uses modern automated equipment and software.

### QUALITY, HEALTH & ENVIRONMENT MANAGEMENT SYSTEM

We at Alka Tech valve strives to create a culture where we take personal responsibility for the health, safety and environment. We have QHSE maintained through our advanced ERP.





## METAL SEATED

1.5" - 24" | Class 150 - Class 1500

DN 15 - DN 300 | PN 16 - PN 40

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

- 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

## WHY METAL SEATED BALL VALVES?

### METAL SEATED BALL VALVES ARE MAINLY USED FOR HEAVY DUTY APPLICATIONS SUCH AS:

- High temperatures: above 260 C the use of soft seats is not recommended
- Abrasive media: even small particles can damage soft seats.
- High Velocity in opening/closing cycles: this action can perfectly deform the soft ring and destroy the seat.



## HARDERING TREATMENTS

### JCT-70

Max. Temperature: 550 C  
Corrosion Resistance: Medium  
Abrasion Resistance: High

Is a Tungsten Carbide coating in a metallic matrix bonded. Mechanically to the base material by HVOF methods. This treatment gives a very good resistance to abrasion and impact and is suitable to work upon 550 C

### JCC-60

Max. Temperature: 800 C  
Corrosion Resistance: High  
Abrasion Resistance: High

Is a Chromium Carbide coating in a nickel-chrome base in a metallic matrix bonded mechanically to the base material by HVOF methods. This treatment gives a very good resistance to abrasion and is the best choice for severe corrosion applications. It is suitable to work up to 800 C.

### JHT-65

Max. Temperature: 500 C  
Corrosion Resistance: Medium  
Abrasion Resistance: Medium

This is an exclusive treatment developed by Alka Tech with two main advantages, first all the ball and seat surface is hardened and second there is no additional overlayer on the surface. This gives a very good tightness and a lower torque. The surface is hardened to 70 Rockwell C and it is valid to work upto 500 C

## RANGE OF METAL SEATED BALL VALVES

Alka Tech can produce the following metal seated ball valves:

Pressure Class	Floating	Monoblock	Trunnic
150	1/2" up to 8"	-	2" up to 24"
300	1/2" up to 4"	-	2" up to 24"
600	1/2" up to 2"	-	2" up to 24"
800	-	1/2" up to 2"	-
900	-	-	2" up to 12"
1500	-	1/2" up to 2"	2" up to 8"

## RANGE OF METAL SEATED BALL VALVES

Metal seated Ball valves are mainly used for heavy duty applications.

One of the main advantages of using Alka Tech Valves metal seated ball valves is the fact that we can transform a soft seated stock valves into a metal seated valve.

### THE STEPS TO BE DONE ARE:

- Re-maching of the body.
- Lapping of the ball and seats
- Hardening treatment to ball and seats.
- Final adjustment of the ball with its seats.
- Assembly and test.

## Materials

Item	Description	EN-DIN		ASME	
		3516 AIM 3540 AIM	3516 IIM 3540 IIM	3515 AIM 3530 AIM	3515 IIM 3530 IIM
		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
3	Ball	A182 F316 or A351Gr. CF8M (Treatments CT-70, CC-60 or HT-65)		A182 F316 or A351Gr. CF8M (Treatments CT-70, CC-60 or HT-65)	
4	Stem	See options		See options	
5	Seat ring	A182 F316 or A351Gr. CF8M (Treatments CT-70, CC-60 or HT-65)		A182 F316 or A351Gr. CF8M (Treatments CT-70, CC-60 or HT-65)	
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	A193Gr. B8M
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		Stainless	
28	Nut (DN 32 to DN 100)	A4-70		A193Gr. B7M Zinc dichromate	A193Gr. 8M
32	Seat disk spring	Inconel 718		Inconel 718	
33	Seat Ring	See options		See options	
39	Stem bushing	25% G.F. PTFE		25% G.F. PTFE	
41	Spacer (DN 40to 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**
**PN 16 / 40**
**Full Bore**
**3516 PN 16**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
65	65	170	76	145	4x18	185	169	348	F07	44	19,7	M22x1.5	16	16	160	550
80	80	180	82	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	22	220	1000
100	100	190	90	180	8x18	220	231	495	F10	56,5	29,2	M28x1.5	20	32	280	1650
125	125	325	120	210	8x18	250	262	698	F12	56	27,6	N35x2	25	52,5	775	3000
150	151	350	135	240	8x22	285	298	698	F12	68	38,5	M40x1.5	29	76	990	4200
200	203	400	200	295	12x22	340	352	868	F14	72	39	M45x2	32	111	1200	9000

**3540 PN 40**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
15	15	115	53	65	4x14	95	110	164	F05	11,2	5,7	M12x1.5	9	2,8	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	40	75
32	32	130	54	100	4x18	140	131	210	F05	32	13,7	M16x1.5	12	7	60	130
40	40	140	55	110	4x18	150	148	213	F07	41,5	19,2	M18x1.5	13	9	90	170
50	50	150	61	125	4x18	165	155	213	F07	41,5	19,2	M18x1.5	13	12	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	220	1000
100	100	190	91	190	8x22	235	231	495	F10	56,5	29,2	M28x1.5	20	35	280	1650
125	125	325	120	220	8x26	270	262	698	F12	56	27,6	M35x2	25	57	775	3000
150	151	350	135	250	8x26	300	298	698	F12	68	38,5	M40x1.5	29	83,5	990	4200

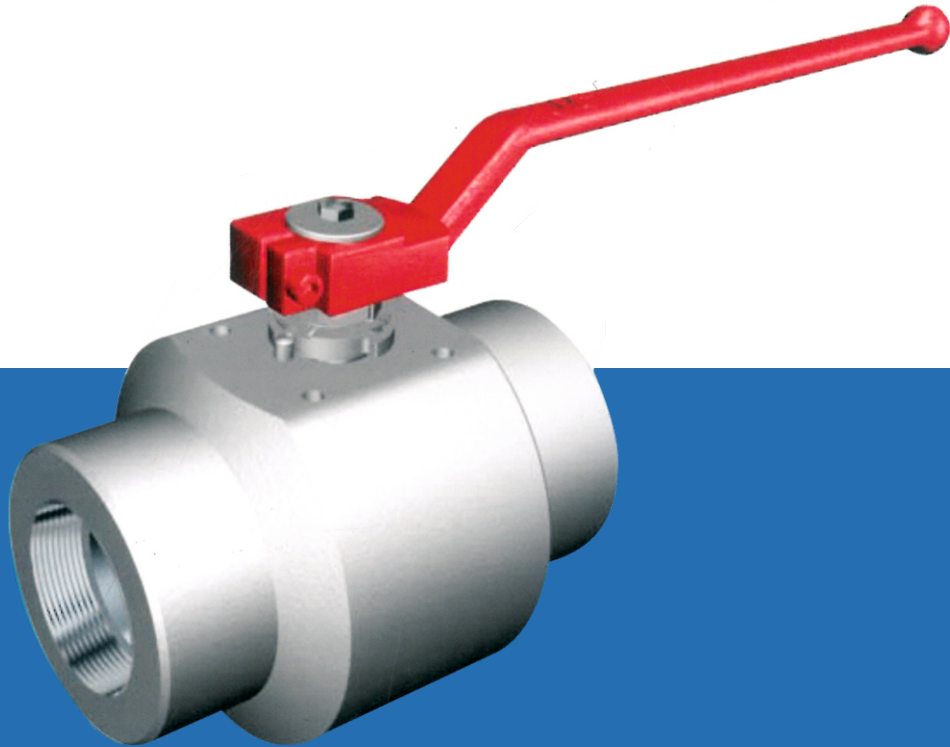
**ASME 3515 / 3530**
**Class 150 / 300**
**Full Bore**
**3515 Class 150**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
15 (1/2")	15	108	47	60,3	4x15,9	90	110	164	F05	11,2	5,7	M12x1.5	9	2	22	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	39	75
40 (1.5")	40	165	65	98,4	4x15,9	125	148	213	F07	41,5	19,2	M18x1.5	13	8	59	170
50 (2")	50	178	61	120,7	4x19	150	155	213	F07	41,5	19,2	M18x1.5	13	11	100	270
65 (2.5")	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	260	1000
100 (4")	100	229	90	190,5	8x19	230	231	495	F10	56,5	29,2	M28x1.5	20	38	440	1650
150 (6")	151	394	174	241,3	8x22,2	280	298	698	F12	68	38,5	M40x1.5	29	88	800	4200
200 (8")	203	457	200	298,5	8x22,2	345	352	868	F14	68	39	M45x2	32	155	1100	9000

**3530 Class 300**

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
15 (1/2")	15	140	60	66,7	4x15,9	95	110	164	F05	11,2	5,7	M12x1.5	9	3	22	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 (1.5")	40	190	80	114,3	4x22,2	155	148	213	F07	41,5	19,2	M18x1.5	13	11	80	170
50 (2")	50	216	83	127	8x19	165	155	213	F07	41,5	19,2	M18x1.5	13	14	150	270
80 (3")	80	283	118	168,3	8x22,2	210	207	445	F07	44,5	19,7	M25x1.5	18	32	250	550
100 (4")	100	305	133	200	8x22,2	255	231	495	F10	56,5	29,2	M28x1.5	20	52	500	1000

(\*) Dimensions in mm and weight in kg.  
 (\*\*) Weights and dimensions can be changed without notice.  
 (1) Limited to 16 bar.



## METAL SEATED

# UDV

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

This Ultimate Drain Valve (UDA) 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	Metallic seat	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.
54	Seat gasket	Graphite	
72	O'ring	A Flas	

Other materials under request

## UDV CLASS 800 & 1500 AIM & IIM TYPE

Class 800 / 1500

Reduced Bore

### UDV Class 800

DN	ØP	L	L1	R	N	h	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
1/2"	15	90	45	NPT	37,5	32	102	164	F04	18,4	7,8	M12x1.5	9	3,5	30	11
3/4"	15	110	55	NPT	37,5	32	102	164	F04	18,4	7,8	M12x1.5	9	4,5	30	11
1"	20	120	60	NPT	42,5	35,5	106	164	F05	20	8,5	M12x1.5	9	5	37	14
1.5"	28	150	75	NPT	60	50	111	210	F05	31,5	15,5	M16x1.5	12	6	102	30
2"	36	180	90	NPT	67,5	60	128	213	F07	38,5	19	M18x1.5	13	10	173	72

### UDV Class 1500

DN	ØP	L	L1	R	N	h	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
1/2"	15	90	45	NPT	37,5	32	102	164	F04	18,4	7,8	M12x1.5	9	3,5	30	11
3/4"	15	110	55	NPT	37,5	32	102	164	F04	18,4	7,8	M12x1.5	9	4,5	30	11
1"	20	120	60	NPT	42,5	35,5	106	164	F05	20	8,5	M12x1.5	9	5	37	14
1.5"	28	150	75	NPT	60	50	111	210	F05	31,5	15,5	M16x1.5	12	6	102	30
2"	36	180	90	NPT	67,5	60	128	213	F07	38,5	19	M18x1.5	13	10	173	72

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

# METAL SEATED CAST TRUNNION

2" - 24" | Class 150 - Class 600

## Materials

METAL TO METAL TRUNNION

Item	Description	AIM	IIM
1	Body	A 216 Gr. WCB (C 025%)	A 351 Gr. CF8M
2	Body connector	A 216 Gr. WCB (C 025%)	A 351 Gr. CF8M
3	Ball	A182 F316 or A351Gr. CF8M (Treatments CT-70 CC-60 or HT-65)	
4	Stem	17-4 PH or Nitronic 50	
5	Seat ring	Tp.316 + HT70	
7	Gland nut	Zinc plated carbon st.	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 + HT-65	AISI-316 + HT-65
10.1	Gland	AISI-303	AISI-316
11	Gland packing	Graphite	
12	Stem thrust seal	AISI 316 + HT-65	
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	50% S.S. PTFE	
19	Antistatic device	Stainless St.	
21/21a	Ball trunnion	A 351 Gr. CF8M	
22/22a	Trunnion bearing	AISI-316 + PTFE	
26	Bolt	DIN 912 8.8 Zinc Plated	DIN 912 A2
28	Nut	A 194 Gr.2HM Zinc dichromate	A 194 Gr. 8m**
32	Spring	Inconel - 750	
33	O' Ring	FKM -- Note 1 --	
35	Spring carrier	A 351 Gr. CF8M	
39	Stem bushing	25% G.F. PTFE	
39.1	Stem bushing	AISI-316 + PTFE -- Note 2 & Note 3 --	
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 1 & 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 & Note 3 --	
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 Spectrum.

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

Note 3: Over 350C Steel Inconel + HT-625



## CAST TRUNNION METAL 2515 / 2530 / 2560

Class 150 / 300 / 600

Full Bore

### 2515 Class 150

DN	ØP	L	L1	ØR	n x ØS	ØT	H	N	ISO 5211	B	C	I	J	K	WEIGHT 3516	TORQUE
50 (2")	50	178	78.5	120.7	4x19	150	84	80	F07	42	17	M22x1.5	16	-	13	80
80 (3")	80	203	87	152.4	4x19	190	126	-	F10	55	27	M28x1.5	20	-	22	220
100 (4")	100	229	101	190.5	8x19	230	152	120	F12	56	27	M35x2	25	-	39	340
150 (6")	151	394	197	241.3	8x22.2	280	212	168	F14	70	36	M45x2	32	-	98	720
200 (8")	203	457	230	298.5	8x22.2	345	233	208	F14	70	37	M45x2	32	-	124	1300
250 (10")	254	533	267	362	12x25.4	405	256	243	F14	70	37	M45x2	32	-	175	1883
300 (12")	305	610	305	431.8	12x25.4	485	297	287.5	F14	106	58	50	14	53.5	295	2620
350 (14")	337	686	343	476.3	12x28.5	535	333	323	F323	103	49	60	18	64.2	580	2446
400 (16")	388	762	381	539.8	16x28.5	595	412	358	F25	159	103	90	25	95.3	750	3160

### 2530 Class 300

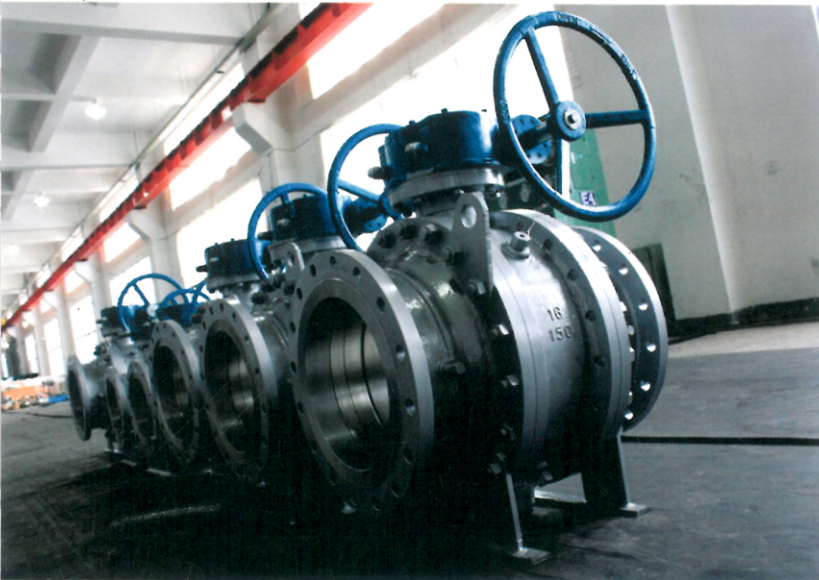
DN	ØP	L	L1	ØR	n x ØS	ØT	H	N	ISO 5211	B	C	I	J	K	WEIGHT 3516	TORQUE
50 (2")	50	216	84	127	8x19	165	84	-	F07	42	17	M22x1.5	16	-	16	190
80 (3")	80	283	115	168.3	8x22.2	210	126	-	F10	55	27	M28x1.5	20	-	33	360
100 (4")	100	305	133	200	8x22.2	255	152	-	F12	56	27	M35x2	25	-	43	640
150 (6")	151	403	202	269.9	12x22.2	320	212	173	F14	70	36	M45x2	32	-	113	1290
200 (8")	203	502	252	330.2	12x25.4	380	233	210	F14	70	37	M45x2	32	-	157	2162
250 (10")	254	568	284	387.4	16x28.5	445	256	253	F14	70	37	M45x2	32	-	263	4100
300 (12")	305	648	315	450.8	16x31.8	520	297	300	F16	103	49	60	18	64.2	480	5670
350 (14")	337	762	381	514.4	20x31.8	585	333	331	F16	103	49	60	18	64.2	655	6030
400 (16")	388	838	419	571.5	20x34.9	650	412	365	F25	159	103	90	25	95.3	890	7200

### 2560 Class 600

DN	ØP	L	L1	ØR	n x ØS	ØT	H	N	ISO 5211	B	C	I	J	K	WEIGHT 3516	TORQUE
50 (2")	50	292	96	127	8x19	165	84	-	F07	42	17	M22x1.5	16	-	20	270
80 (3")	80	356	140	168.3	8x22.2	210	126	113	F10	55	27	M28x1.5	20	-	41	560
100 (4")	100	432	160	215.9	8x25.2	275	152	-	F12	56	27	M35x2	25	-	77	1240
150 (6")	151	559	246	292.1	12x28.2	355	212	188	F14	97	49	45	14	48.5	192	2500
200 (8")	203	660	315	349.2	12x31.8	420	237	235	F14	113	64	50	14	53.5	329	6060
250 (10")	254	787	340	431.8	16x34.9	510	275	273	F16	103	49	60	18	64.2	460	8300
300 (12")	305	838	404	489	20x34.9	560	345	335	F16	127	73	65	18	69.2	570	9400

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





# 2-PIECE CAST TRUNNION MOUNTED CAST TRUNNION

2" - 16" | Class 150 - Class 600

## Materials CAST TRUNNION

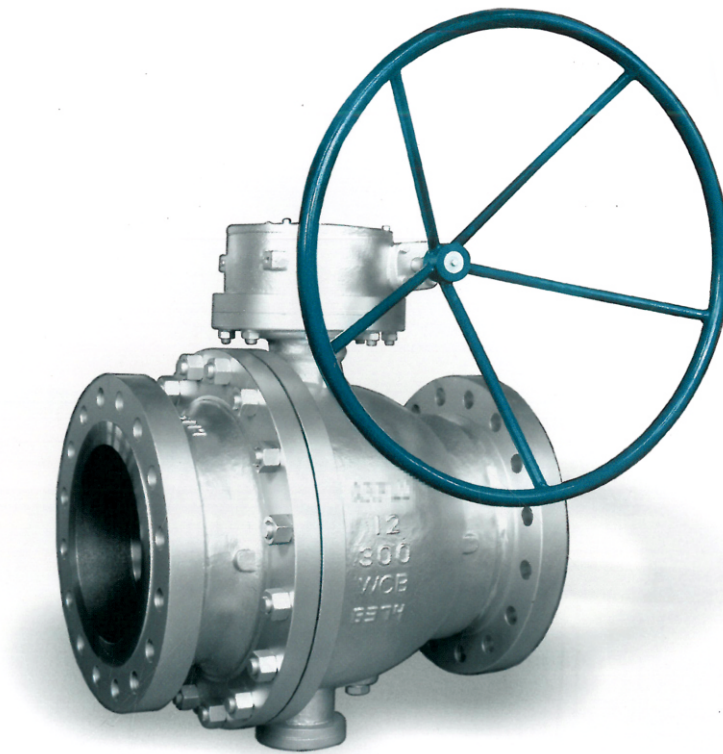
Item	Description	AIT	IIT
1	Body	A 216 Gr. WCB (C 025%)	A 351 Gr. CF8M
2	Body connector	A 216 Gr. WCB (C 025%)	A 351 Gr. CF8M
3	Ball		A 351 Gr. CF8M
4	Stem		A 479 Tp. 316
5	Seat ring		RPTFE, PTFE, DEVLON
7	Gland nut	Zinc plated carbon st.	AISI 303
8	Disk spring / Spring	Carbon St.	E.N.P. Carbon St.
9	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 Spectrum.

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



## CAST BALLVALVES 2515 / 2530 / 2560

Class 150 / 300 / 600

Full Bore

### 2515 Class 150

DN	ØP	L	L1	ØR	n x ØS	ØT	H	N	ISO 5211	B	C	I	J	K	WEIGHT 3516	TORQUE	Kv
50 (2")	50	178	78.5	120.7	4x19	150	84	80	F07	42	17	M22x1.5	16	-	13	80	366
80 (3")	80	203	87	152.4	4x19	190	126	-	F10	55	27	M28x1.5	20	-	22	220	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	720	3.297
200 (8")	203	457	230	298.5	8x22.2	345	233	208	F14	70	37	M45x2	32	-	124	1300	5.861
250 (10")	254	533	267	362	12x25.4	405	256	243	F14	70	37	M45x2	32	-	175	1883	9.454
300 (12")	305	610	305	431.8	12x25.4	485	297	287.5	F16	103	49	50	14	53.5	295	2620	13.631
350 (14")	337	686	343	476.3	12x28.5	535	333	323	F16	103	49	60	18	64.2	580	2446	16.641
400 (16")	388	762	381	539.8	16x28.5	595	412	358	F25	159	103	90	25	95.3	750	3160	23.554

### 2530 Class 300

DN	ØP	L	L1	ØR	n x ØS	ØT	H	N	ISO 5211	B	C	I	J	K	WEIGHT 3516	TORQUE	Kv
50 (2")	50	216	84	127	8x19	165	84	-	F07	42	17	M22x1.5	16	-	16	49	366
80 (3")	80	283	115	168.3	8x22.2	210	126	-	F10	55	27	M28x1.5	20	-	33	107	938
100 (4")	100	305	133	200	8x22.2	255	152	-	F12	56	27	M35x2	25	-	43	210	1.465
150 (6")	151	403	202	269.9	12x22.2	320	212	173	F14	70	36	M45x2	32	-	113	522	3.297
200 (8")	203	502	252	330.2	12x25.4	380	233	210	F14	70	37	M45x2	32	-	157	1.060	5.861
250 (10")	254	568	284	387.4	16x28.5	445	257	253	F14	70	37	M45x2	32	-	263	1.559	9.454
300 (12")	305	648	315	450.8	16x31.8	520	310	300	F16	103	49	60	18	64.2	480	3.125	13.631
350 (14")	337	762	381	514.4	20x34.9	585	333	331	F16	103	49	60	18	64.2	655	3.642	16.641
400 (16")	388	838	419	571.5	20x34.9	650	412	365	F25	159	103	90	25	95.3	890	4.732	23.554

### 2560 Class 600

DN	ØP	L	L1	ØR	n x ØS	ØT	H	N	ISO 5211	B	C	I	J	K	WEIGHT 3516	TORQUE	Kv
50 (2")	50	292	96	127	8x19.1	165	84	-	F07	42	17	M22x1.5	16	-	20	85	366
80 (3")	80	356	140	168.3	8x22.2	210	126	113	F10	55	27	M28x1.5	20	-	41	196	938
100 (4")	100	432	160	215.9	8x25.2	275	152	-	F12	56	27	M35x2	25	-	77	392	1.465
150 (6")	151	559	246	292.1	12x28.5	355	212	188	F14	97	49	45	14	48.5	192	1.007	3.297
200 (8")	203	660	315	349.2	12x31.8	420	237	235	F14	113	64	50	14	53.5	329	2.057	5.861
250 (10")	254	787	340	431.8	16x34.9	510	275	273	F14	103	49	60	18	64.2	460	3.013	9.454
300 (12")	305	838	404	489	20x34.9	560	345	335	F16	127	73	65	18	69.2	570	6.097	13.631

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

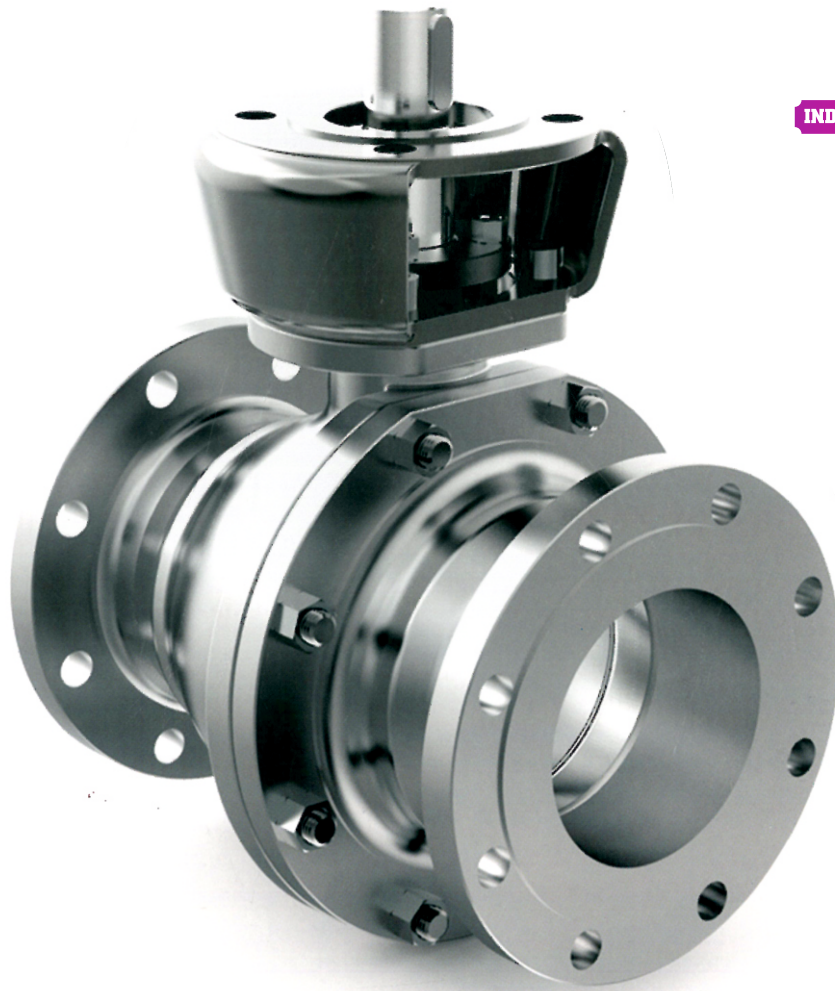


# FLOATING ASME

1/2" - 12" | Class 150 - Class 1500

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 025%)	A 352 Gr. LCC	A 351 Gr. CF8M
2	Body connector	A 216 Gr. WCB (C 025%)	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 st.	AISI 303	AISI 303
8	Disk spring	Carbon St.	A 666 Tp.301	A 666 Tp.301
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. 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

**Class 150 / 300**

**Full Bore**

### 515 Class 150

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	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 (1.5")	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 (2.5")	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

### 530 Class 300

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	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 (1.5")	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

## ASME 715 / 730

**Class 150 / 300**

**Full Bore**

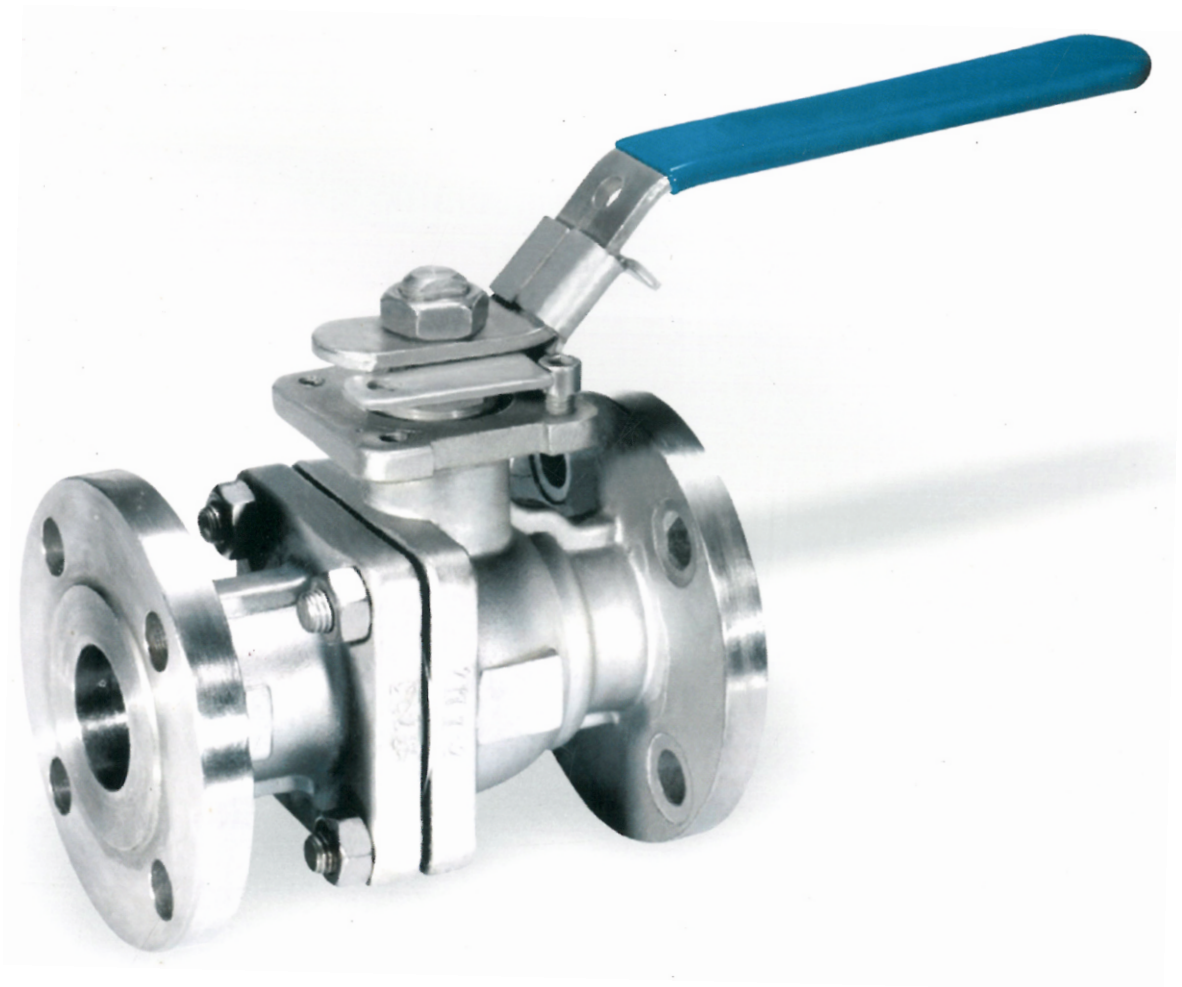
### 715 Class 150

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	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	11	26
40 (1.5")	32	165	72	98,4	4x15,9	125	117	210	F05	34,5	14,7	M16x1.5	12	5,1	17	107
50 (2")	40	178	75,1	120,7	4x19	150	134	213	F07	41,5	19,2	M18x1.5	13	7,9	26	140
80 (3")	58	203	88	152,4	4x19	190	149	348	F07	44	19,7	M22x1.5	16	14,3	58	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	210	1000
200 (8")	144	292	135	298,5	8x22,2	345	264	698	F12	68	38,5	M40x1.5	29	77	320	2000
250 (10")	187	330	164	361	12x25,4	405	307	698	F12	72	39	M45x2	32	114	650	4100
300 (12")	228	356	178	431,8	12x25,4	485	-	-	F14	106	58	Ø50	14	230	980	6900

### 730 Class 300

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	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 (1.5")	32	190	72	114,3	4x22,2	155	117	210	F05	34,5	14,2	M16x1.5	12	8,2	26	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	90	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	570	2000

(\*) Dimensions in mm and 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

Class 600

Full Bore

### 560 Class 600

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
15 (1/2")	15	165	70	35	4x15,8	95,3	111	163,5	F05	11,2	5	12	9	5,5	20	22
20 (3/4")	20	190	86	43	4x19	117,3	117	163,5	F05	23,7	10,5	12	9	8	25	43
25 (1")	25	216	94	50,3	4x19	124	119	210	F05	33,5	13	16	12	10	65	81
40 (1.5")	40	241	104	73	4x22,2	155,4	137	347,5	F07	43	17,6	22	16	19	80	224
50 (2")	50	292	120	127	8x19	165	180	445	F10	45	20,2	M25x1.5	18	29	110	270
80 (3")	80	356	151	168,3	8x22,2	210	228	698	F12	55,5	27	M35x2	25	42	270	1000
100 (4")	100	432	172	215,9	8x25,4	275	245	698	F12	55	26,5	M35x2	25	78	484	1650

## ASME 600

Class 600

Full Bore

### 660 Class 600

DN	ØP	L	L1	ØR	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
50 (2")	40	292	120	127	8x19	165	137	348	F07	43	18,7	M22x1.5	16	17	80	140
80 (3")	58	356	151	168,3	8x22,2	210	228	698	F10	44	19,2	M25x2	18	30	130	300
100 (4")	80	432	190	215,9	8x25,4	275	228	698	F10	55,5	27	M35x2	25	64	300	600

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



## 3 PIECE FORGED BALL VALVES

### ASME

From 1/4" - 2" | Class 800 - Class 1500

Forging is a manufacturing process where metal is shaped by plastic deformation under great pressure into high strength parts. The Alka Tech Valves 3 Piece forged ball valves are designed with excellent mechanical properties, yield strength, ductility, toughness, reliability (used for critical applications).



## Materials | 800 | 1500

Item	Description	Carbon Steel	Stainless Steel	Carbon Steel	Stainless Steel
1	Body	ASTM A105	ASTM A182 Gr. F316	ASTM A105 / A350 LF2	ASTM A182 Gr. F316
2	Body connector	ASTM A105	ASTM A182 Gr. F316	ASTM A105 / A350 LF2	ASTM A182 Gr. F316
3	Ball	A 479 T.p 316	A 479 T.p 316	A 479 T.p 316	A 479 T.p 316
4	Stem	A 479 T.p 316	A 479 T.p 316	A 479 TP410	17-4-PH
5	Seat ring	TFM-1600+CG	TFM-1600+CG	DEVLON "V" (*)	DEVLON "V" (*)
6	Wrench	Z.P. Carbon Steel	Z.P. Carbon Steel	Z.P. Carbon Steel	Z.P. Carbon Steel
7	Gland nut	Z.P. Carbon Steel	AISI 316	Z.P. Carbon St.	AISI 316
8	Disk spring	Carbon Steel	AISI 301	Carbon Steel	AISI 301
10	Gland	AISI 316	AISI 316	AISI 316	AISI 316
11	Gland packing	Graphite	Graphite	Graphite	Graphite
12	Stem thrust seal	PTFE + 25% Graphite	PTFE + 25% Graphite	PTFE + 25% Graphite	PTFE + 25% Graphite
13	Body connector seal	Graphite	Graphite	Graphite	Graphite
13	Body connector seal	PTFE	PTFE	PTFE	PTFE
14	Stop pin	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
15	Stud	ASTM A 193 B7M	ASTM A 193 B8M	ASTM A 193 B7M	ASTM A 193 B8M
19	Antistatic device	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
28	Nut	ASTM A 194 2HM	ASTM A 194 Gr8M	ASTM A 194 2HM	ASTM A 194 Gr8M
72	O' Ring	FKM	FKM	FKM	FKM
89	Identification plate	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel

Other materials under request.  
(\*) Seat materials under request: DELRIN - PCTFE - NYLON 6.6

## ASME 800

Class 800

Full Bore

### 800 Class 800

DN	A	B	C	ØD	E	ISO 5211	G	H	I	N x J	Øk	TORQUE
1/4"	68	59	43	9,5	170	36 F03	8,7	10,7	7	4xM5	10	6
3/8"	68	59	43	9,5	170	36 F03	8,7	10,7	7	4xM5	10	6
1/2"	72	59	45	15	170	36 F03	8,7	10,7	7	4xM5	10	11
3/4"	94	72	59	20	215	42 F04	15,7	17,7	9,5	4xM5	12	20
1"	106	72	62	25	215	42 F04	15,7	17,17	9,5	4xM5	12	36
1.5"	125,5	109	89	40	245	50 F05	25,2	27,2	9,5	4xM6	16	64
2"	128	114	89	50	300	50 F05	16,5	18	12	4xM6	18	98

## ASME 81500

Class 800

Full Bore

### 81500 Class 1500

DN	A	B	C	ØD	E	ISO 5211	G	H	I	N x J	Øk	TORQUE
1/4"	84	59	42	9,5	170	36 F03	9,7	10,4	7	4xM5	10	14
3/8"	84	59	42	9,5	170	36 F03	9,7	10,4	7	4xM5	10	14
1/2"	104	66	49	15	170	36 F03	9,7	10,4	9	4xM5	12	20
3/4"	127	86	66	20	245	50 F05	15,6	17,7	9,5	4xM6	16	29
1"	134	91	70	25	245	50 F05	15,4	17	9,5	4xM6	16	43
1.5"	200	111	101,5	40	350	70 F07	16	17,6	16	4xM8	22	131
2"	222	142	117,7	49	375	70 F07	19	20,4	18	4xM8	25	203

(\*) Dimensions in mm and Torque in Nm.



# MONOBLOCK VALVES

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

## Materials MONOBLOCK

Item	Description	L.I.CG.	I.I.CG.
1	Body	A 350 Gr. LF Class 1	A 479 Tp. 316L
2	Body connector	A 350 Gr. LF Class 1	A 479 Tp. 316L
3	Ball		A 351 Gr. CF8M / A182 F316
4	Stem		AISI 410 / A 479 Tp. 316
5	Seat ring		Carbon graphite filled PTFE
6	Wrench (DN-1.5" & 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-1.5" & 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-1.5" & 2")		DIN 933 A2
17	Washer (DN-1.5" & 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.

## ASME 400

Class 800

Full Bore

### 400 Class 800

DN	ØP	L	L2	R1	R2	R3	H	M	B	C	I	J	WEIGHT	TORQUE20 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	11	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	14	25
1"	25	95	240	1"NPT	1"SW	1"BW	98	158	19,7	11,1	M12x1.5	9	3,1	15	19	30
1.5"	40	130	260	1.5"NPT	1.5"SW	1.5"BW	128	213	38,5	19,2	M18x1.5	13	10	25	78	50
2"	6	140	260	2"NPT	2"SW	2"BW	141	348	41	19,2	M22x1.5	16	14,6	40	129	70

## ASME 411N

Class 800

Full Bore

### 411N Class 800

DN	ØP	L	R	H	M	B	C	I	J	WEIGHT	TORQUE20 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" x 1/2"	15	110	NPT	101	164	18,7	7,8	M12x1.5	9	4,5	7	10	16
1" x 3/4"	20	120	NPT	105	164	20	8,6	M12x1.5	9	5	9	14	25
1/2" x 1"	28	150	NPT	111	210	31,5	15,5	M16x1.5	12	6	19	34	71
2" x 11.5"	36	180	NPT	128	213	38,5	19,2	M18x1.5	13	10	43	79	164

## ASME 41500

Class 1500

Reduced & Full Bore

### 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
1.5" 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
1.5"	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 1.5"	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 and weight in kg .  
(\*\*) Weights and dimensions can be changed without notice.



# SEMI-TRUNNION BALL VALVES

8" - 12" | Class 150 - Class 300

DN 200 - DN 300 | PN 16 - PN 40

## Materials

### CAST TRUNNION

Item	Description	AIT	IIT
1	Body	A 216 Gr. WCB © 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		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		PTFE + 50% SS
23	Bearing		PTFE
28	Bolt	DIN 912 8.8 Zinc plated	DIN 912 A2
39	Nut	A 194 Gr. 2HM Zinc dichromate	A 194 Gr. 8M
41	Stem Bushing		25% G.F. PTFE
43	Spacer	Carbon St.	Stainless St.
46	Key		AISI 316
47	Locking washer		AISI 304
58	Spring Protection		AISI 316
72	O' Ring	Carbon St.	FKM Stainless St.
89	Identification plate		Stainless St.
471	Retainer	Steel	Stainless St.

## ASME 1515 / 1530

Class 150 / 300

Full Bore

### 1515 Class 150

DN	ØP	L	L1	ØR	n x ØS	Y	ØT	H	N	ISO 5211	B	C	I	J	WEIGHT 3516	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

### 1530 Class 300

DN	ØP	L	L1	ØR	n x ØS	Y	ØT	H	N	ISO 5211	B	C	I	J	WEIGHT 3516	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.

## EN-DIN 1516 / 1540

PN 16 / PN 40

Full Bore

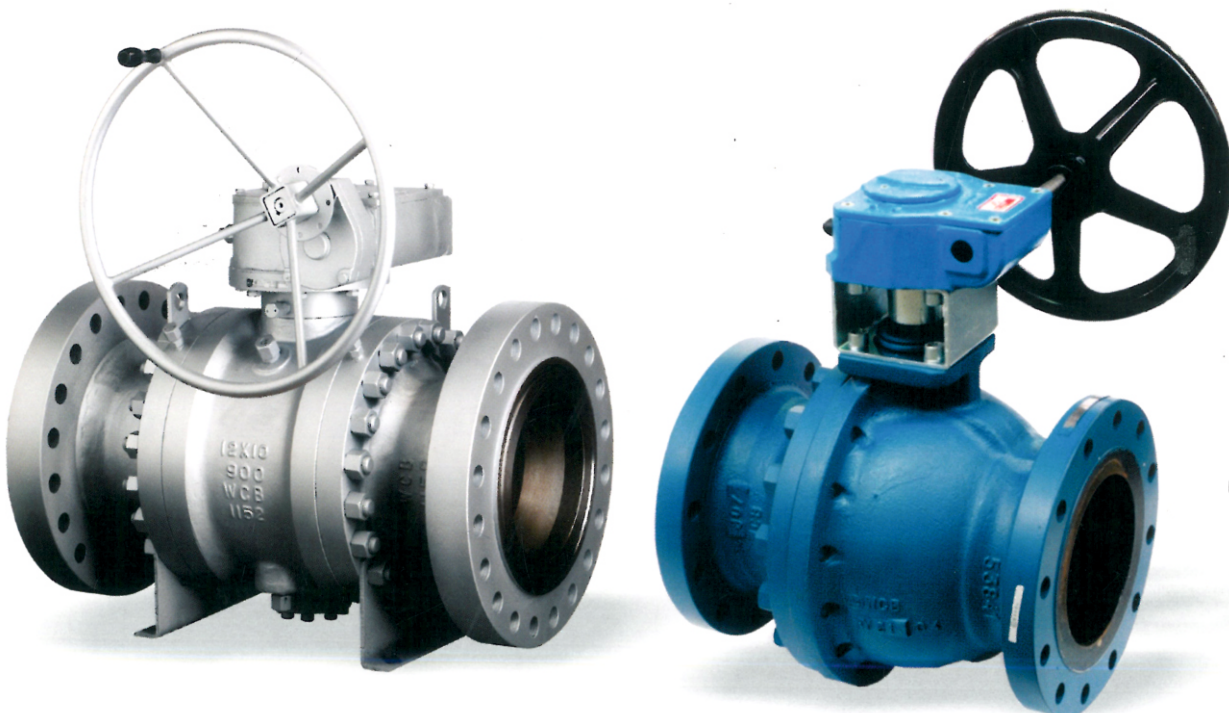
### 1516 PN 16

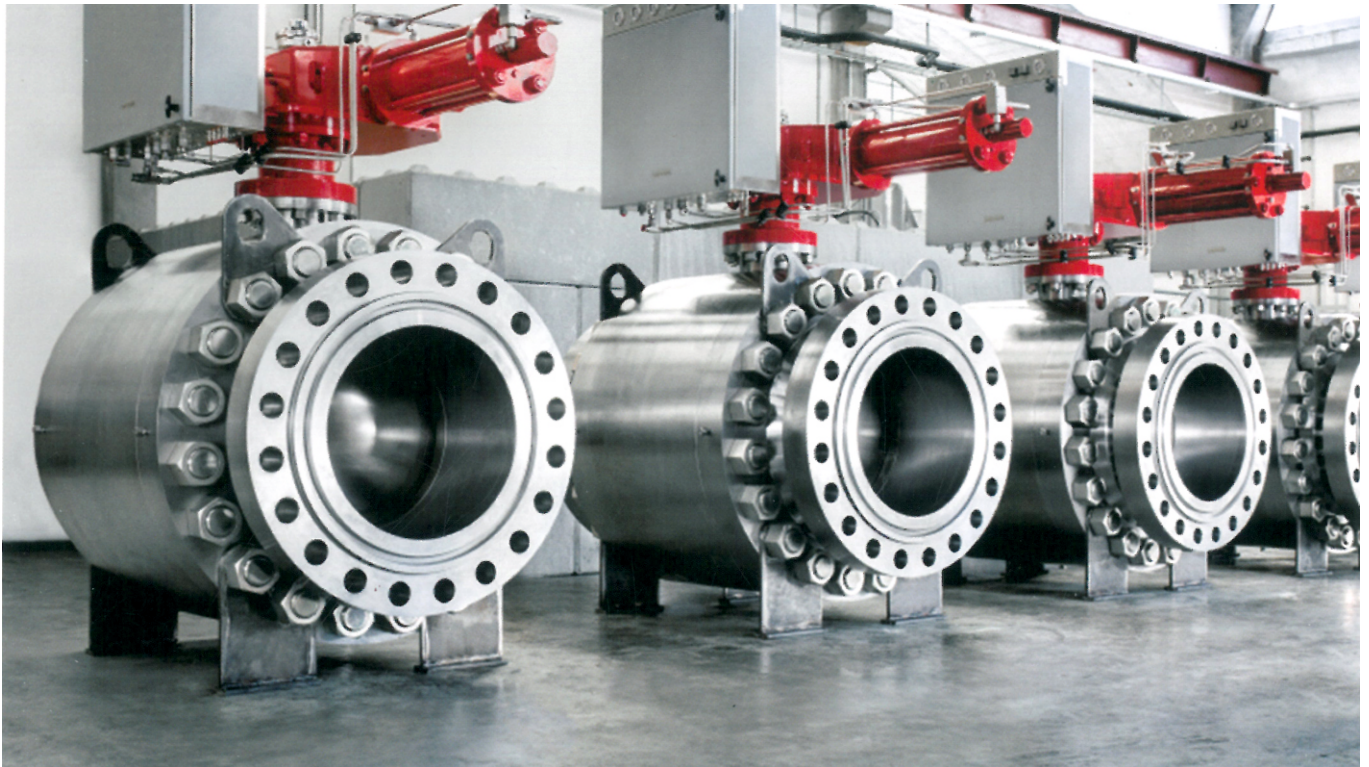
DN	ØP	L	L1	ØR	n x ØS	Y	ØT	H	N	ISO 5211	B	C	I	J	WEIGHT 3516	TORQUE	Kv
250	254	450	225	254	12x26	26	405	256	239	F14	72	39	M45x2	32	223	1120	15000
300	305	500	245	305	12x26	26	460	297	288	F14	106	58	50	14	323	1800	20800

### 1540 PN 40

DN	ØP	L	L1	ØR	n x ØS	Y	ØT	H	N	ISO 5211	B	C	I	J	WEIGHT 3516	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	1300	20800

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





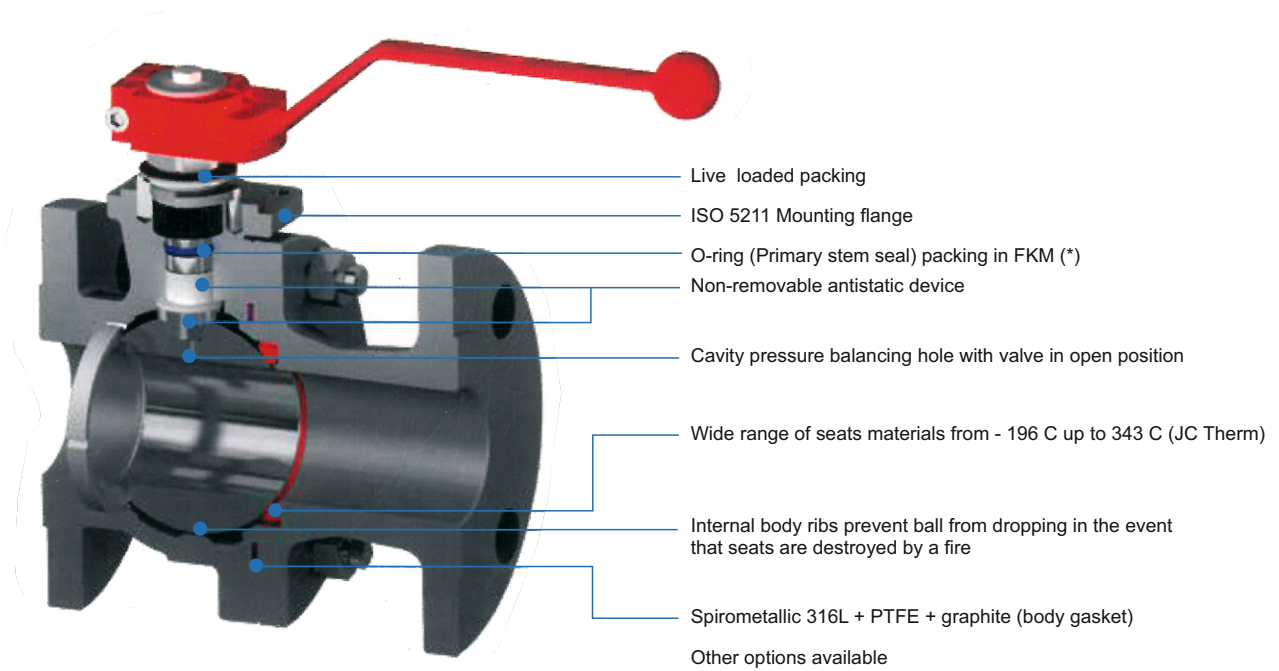


# FLOATING

## 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 (Dn15 : 25 A 479 Tp.316	
4	Stem	A 479 Tp. 316 St.	
5	Seat ring	PTFE	
6	Wrench	Nodular Iron	
7	Gland nut	Zinc plated carbon steel	AISI 303
8	Disk spring	Carbon St.	A 666 Tp.301
9	Stop plate (DN-1.5" & 2")	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)	8.8 Zinc Plated & Bichromated	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 934.8 Zinc plated carbon steel	DIN 934 A4-70
39	Stem bushing (DN 25 to DN 200)	25% G.F. PTFE	
41	Spacer (DN 40 & 200)	Carbon St.	AISI 304
46	Washer	AISI 304	AISI 304
72	"O" Ring	FKM	
89	Identification plate	Stainless St.	

## EN-DIN 516 / 540

Class 16 / 40

Full Bore

### 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	62	550
80	80	180	82	160	8x18	200	207	445	F10	44,5	18,7	M25x1.5	18	22	89	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	194	3000
150	151	350	135	240	8x22	285	298	698	F12	68	38,5	M40x1.5	29	76	287	4200
200	203	400	200	295	12x22	340	352	868	F14	72	39	M45x2	32	111	683	9000

### 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	12	20
25	25	125	49	85	4x14	115	129	164	F05	22,7	10,2	M12x1.5	9	5	17	75
32	32	130	54	100	4x18	140	131	210	F05	32	13,7	M16x1.5	12	7	22	130
40	40	140	55	110	4x18	150	148	213	F07	41,5	19,2	M18x1.5	13	9	27	170
50	50	150	61	125	4x18	165	155	213	F07	41,5	19,2	M18x1.5	13	12	38	270
65	65	170	76	145	8x18	185	169	348	F07	44	19,7	M22x1.5	16	17	59	550
80	80	180	75	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	23	123	1000
100	100	190	91	190	8x22	235	231	495	F10	56,5	29,2	M28x1.5	20	35	179	1650
125	125	325	120	220	8x26	270	262	698	F12	56	27,6	M35x1.5	25	57	265	3000
150	151	350	135	250	8x26	300	298	698	F12	68	38,5	M40x1.5	29	83,5	451	4200

## EN-DIN 316 / 340

Class 16 / 40

Full Bore

### 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	63	550
80	80	310	82	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	24	97	1000
100	100	350	90	180	8x18	220	231	495	F10	56,5	29,2	M28x1.5	20	36	130	1650
125	125	400	120	188	8x18	250	262	698	F12	56	27,6	M35x2	25	58	188	3000
150	150	480	135	212	8x22	285	298	698	F12	68	38,5	M40x1.5	29	81	250	4200

### 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
20	20	150	52	75	4x14	105	129	164	F05	13,2	9,2	M12x1.5	9	3,8	14	20
25	25	160	49	85	4x14	115	129	164	F05	22,7	10,2	M12x1.5	9	5,2	17	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	41	270
65	65	290	76	145	8x18	185	169	348	F07	44	19,7	M22x1.5	16	18,5	70	550
80	80	310	75	160	8x18	200	207	445	F10	44,5	19,7	M25x1.5	18	25	116	1000
100	100	350	91	190	8x22	235	231	495	F10	56,5	29,2	M28x1.5	20	39	169	1650
125	125	400	120	220	8x26	262	262	698	F12	56	27,6	M35x1.5	25	63	248	3000
150	150	480	135	250	8x26	300	298	698	F12	68	38,5	M40x1.5	29	87	492	4200

(\*) Dimensions in mm and weight in kg and Torque in Nm.  
(\*\*) Weights and dimensions can be changed without notice.  
(1) Under request, please consult the minimum manufacturing quantities.

## EN-DIN 512

Class 16

Full Bore

### 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	698	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



# FLOATING 3 WAY BALL VALVES

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

The Alka Tech 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 "L" (X) port, or T-port design. The full port design is easily automated and is available with various seat materials.





## 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	A351 Gr. CF8M		A351 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	25% GF PTFE		25% GF PTFE	
14	Wrench	Nadular Iron		Nadular 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	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.	

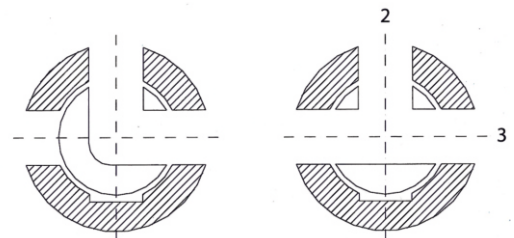
**ASME 915** **Class 150** **Full Bore**

**915 Class 150**

DN	ØP	ØL	A	A1	n x ØS	ØT	H	M	ISO 5211	B	C	I	J	WEIGHT
1"	25	212	106	70	4x15,9	110	96	170	F05	22	12,2	M12x1.5	8	8
1.5"	40	262	131	80	4x15,9	125	121	200	F07	33	19,2	M18x1.5	12	17
2"	50	290	145	90	4x19	150	134	350	F07	34	20,2	M22x1.5	15	25
2.5"	65	325	162,5	107	4x19	180	180	350	F10	34	19,2	M22x1.5	15	34
3"	80	370	185	117	4x19	190	189	465	F10	45	27,7	M28x1.5	19	51
4"	100	430	215	148	8x19	230	230	475	F12	56	32,2	M36x1.5	24	77
6"	150	500	250	194	8x22,2	280	280	855	F14	69	41	M48x3	32	138
8"	200	600	300	270	8x22,2	345	325	855	F14	69	34	M48x3	32	

TORQUE		
VALVE SIZE	AT MAXIMUM DIFFERENTIAL PRESSURE	
	L	T
25 (1")	32	26
40 (1.5")	65	55
50 (2")	88	72
65 (2.5")	140	132
80 (3")	220	205
100 (4")	440	440
150 (6")	680	680
200 (8")	1100	1100

Kv			
VALVE SIZE	PORT L	PORT T	
		PORT 2	PORT 3
25 (1")	20,4	28,9	51
40 (1.5")	51,85	51,85	149,6
50 (2")	42,5	80,75	249,9
65 (2.5")	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 Valves in Nm.  
Kv Values in m<sup>3</sup>/h.

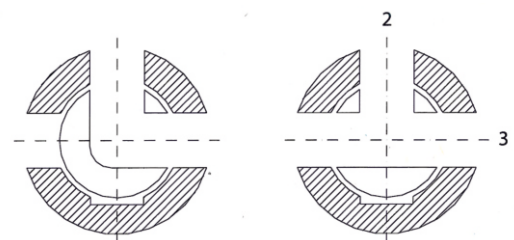
**ASME 915** **PN 16** **Full Bore**

**916 Class 16**

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

TORQUE		
VALVE SIZE	AT MAXIMUM DIFFERENTIAL PRESSURE	
	L	T
25 (1")	35	30
40 (1.5")	59	59
50 (2")	88	72
65 (2.5")	140	140
80 (3")	220	220
100 (4")	360	360
150 (6")	680	680
200 (8")	850	850

Kv			
VALVE SIZE	PORT L	PORT T	
		PORT 2	PORT 3
25 (1")	20,4	28,9	51
40 (1.5")	51,85	51,85	149,6
50 (2")	42,5	80,75	249,9
65 (2.5")	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 Valves in Nm.  
Kv Values in m<sup>3</sup>/h.

# SPECIAL CONSTRUCTIONS

Alka Tech can be delivered in special constructions as following:

## ASME 915

When viscous materials are handled, Alka Tech steam jacketed ball valves are recommended to prevent valve to be blocked in closed position.

The maximum steam jacket pressure is 10 (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, TFE.

**Applications:** Styrene, Butadiene, Monomers, Pharmaceutical, 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 Alka Tech

## CRYOGENIC SERVICE

Alka Tech 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 Alka Tech offers valves designed with special seats, bonnets and materials for low temperature or cryogenic service.

## FULLY AUTOMATED BALL VALVES

Alka Tech can be delivered with pneumatic, electric, hydraulic or gas-over-oil actuators as per requirements.

## SPECIAL TAILOR MADE VALVES MADE FROM OR FORGINGS

Alka Tech made valves are indicated for specific demands, special circumstance, extra-ordinary applications, hard to obtain products and short delivery times. Valves are produced from bar stock materials or forgings with really shorts time, eith exotic materials Nickel alloys (Hastelloy, Incoloy, Inconel, Monel, Alloy 20, etc.)Titanium, Duplex and Super Duplex and corrosion resistant alloys.

## FULLY WELDED VALVES

The Alka Tech fully welded ball valve gives it maximum strength at minimum weight as well as maximum resistance both to pipeline pressures and stresses. The compact spherical design also eliminates body flanges, thus reducing overall size leak paths.

Alka Tech welded body ball valves are used mainly in gas transmission and distribution pipeline (Mid-stream), typical for underground and buried installation.

## IN HOUSE TESTING FACILITIES INCLUDE

FACTORY  
ACCEPTANCE  
TEST (FAT)

HYDROSTATIC  
SHELL & SEAT  
TESTING

LOW & HIGH  
PRESSURE GAS  
TESTING

CRYOGENIC  
TESTING

LOW  
TEMPERATURE  
TESTING

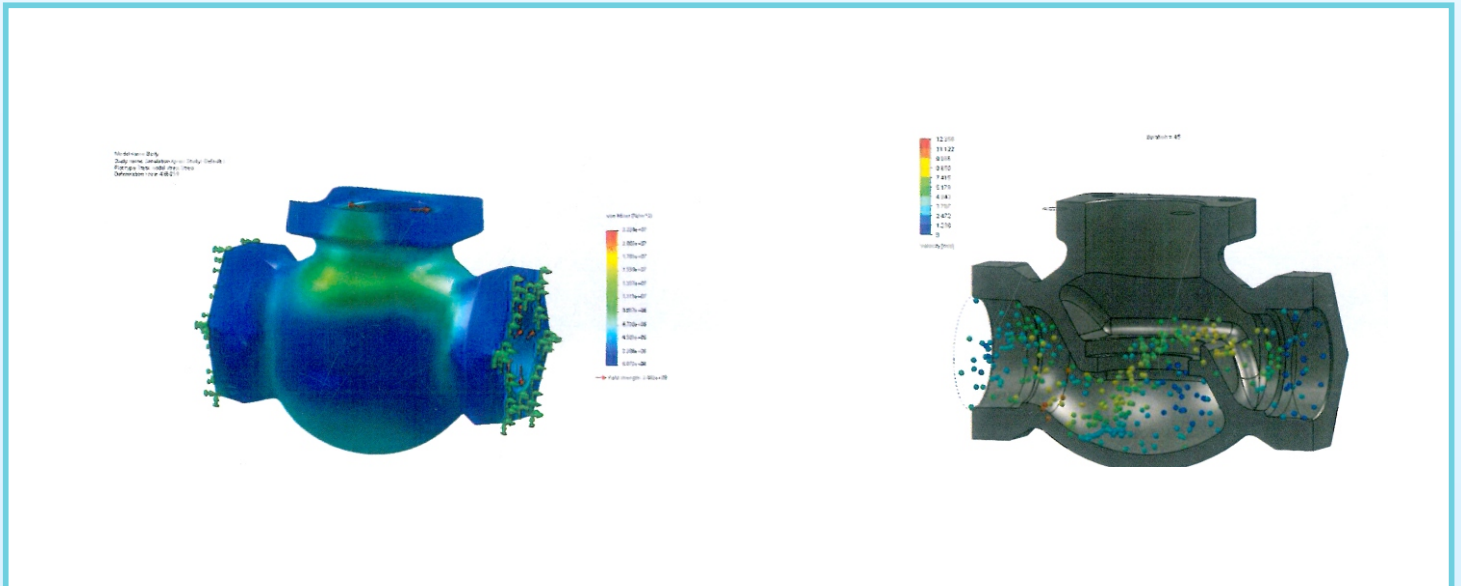
HIGH  
TEMPERATURE  
TESTING

FUGITIVE  
EMISSION  
TESTING (FET)

ENDURANCE  
CYCLIC TESTING

FIRE SAFE  
TESTING

*Alka Tech Industrial Valve & Fittings Co. has an advanced manufacturing setup with automated valve test equipment. In-House Research and Development has an advanced setup for new design validation tests (DVT).*



*Our research and development team continuously upgrade our valves to meet latest standards and customer requirements hence the data given here in is subject to change.*

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