

F14A

Floating Ball Valve, ASME CLASS 150 / CLASS 300



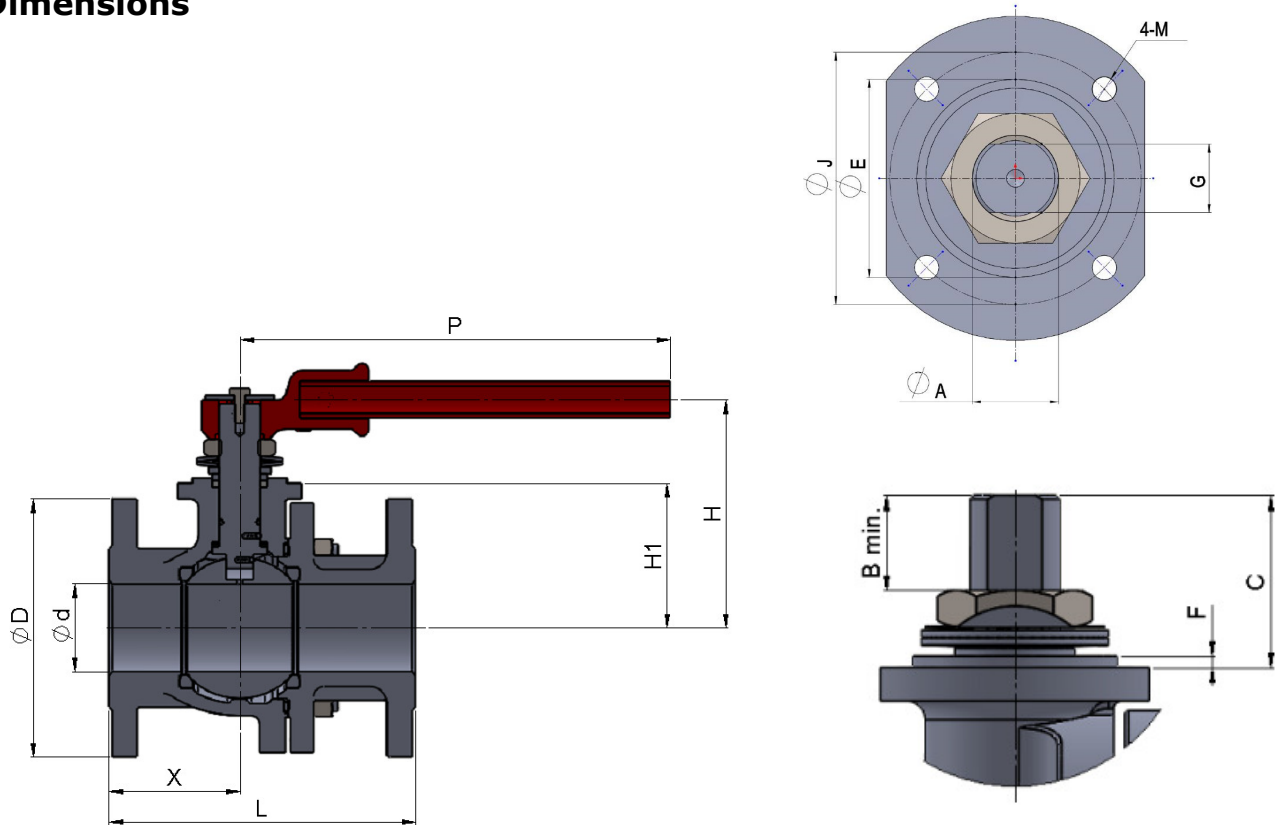
Features

- Full bore. Split body
- **Design Standards:** ISO 17292 / ASME B16.34 / API 608
- **Flanges:** ASME B16.5, RF
- **Lengths/Face-to-face:** ASME B16.10
- **Leak test:** EN 12266-1 Rate A / API 598
- **Top flange:** ISO 5211
- **Seats:** Modified PTFE TFM™ 1600 ball seats provide enhanced sealing performance and longer life
- **Stem:** Anti-static and proof Blow-out
- Autoadjustable packing
- NACE MR0175
- Locking device in open and close position

Approvals

- Fire test Certification: API 607 ed. 7th / ISO 10497 ed. 3rd
- PED 2014/68/UE approval for CE marked products.
- Fugitive Emission Certification: ISO 15848-1 (2015)
- CRN approval
- Marine Division certificate
- ATEX approval
- SIL IEC 61508 – 2010 Certification
- EAC TR CU

Dimensions



Class 150																			
Size	General Dimensions [mm]															Kv	Weight		
inch.	Ød	ØD	L		X	P	H	H1	A	B	C	E	F	G	J	M	ISO 5211	[m³/h] [bar]	[Kg]
			Short	Long															
1/2"	14	90	108		45,5	150	90	23,5	10	9,5	18	25	1,5	6	36	M5	F03	19	2
3/4"	19	100	117		52	150	95	29	10	8	16,5	25	1,5	6	36	M5	F03	40,5	2,5
1"	25	110	127		54,5	150	106	30,5	12	10	20,5	35	2	8	50	M6	F05	79,5	3,5
1.1/2"	38	125	165		80,5	200	126	61	14	13,5	29	35	2	9	50	M6	F05	208,5	7
2"	51	150	178		76	250	133	84	24	24	46	55	3	19	70	M8	F07	433	12,3
3"	76	190	203		90	250	153	104	24	24	46	55	3	19	70	M8	F07	1062	23
4"	102	230	229		114,5	500	201	130	36	38,5	66	70	3	22	102	M10	F10	2158	40
6"	152	280	267	394	134	750	240	169	36	38,5	66	70	3	22	102	M10	F10	5662	76
8"*	203	343	-	457	228	-	342	231	50**	42**	64,5**	100	3	30*	140	M16	F14	9201	180
10"*	254	406	-	533	266	-	378	286	65	171,5	174,5	130	3	18	165	M20	F16	15269	255
12"*	305	485	-	610	305	-	440	315	65	171,5	174,5	130	3	18	165	M20	F16	22971	360

(*) Manual Gear

(**) Bare stem

Class 300																			
Size	General Dimensions [mm]															Kv	Weight		
inch.	Ød	ØD	L		X	P	H	H1	A	B	C	E	F	G	J	M	ISO 5211	[m³/h] [bar]	[Kg]
			Short	Long															
1/2"	14	95	140		49,5	150	90	23,5	10	9,5	18	25	1,5	6	36	M5	F03	16,5	2,8
3/4"	19	115	152		62	150	95	29	10	8	16,5	25	1,5	6	36	M5	F03	35,5	3,5
1"	25	125	165		66	150	106	30,5	12	10	20,5	35	2	8	50	M6	F05	70	5,2
1.1/2"	38	155	190		96	200	126	61	14	13,5	29	35	2	9	50	M6	F05	194,5	10,5
2"	51	165	216		106	350	133	84	24	24	46	55	3	19	70	M8	F07	392,5	15,5
3"	76	210	283		127	350	153	104	24	24	46	55	3	19	70	M8	F07	900	31
4"	102	255	305		152,5	500	201	130	36	38,5	66	70	3	22	102	M10	F10	1871	55
6"	152	320	403		201,5	1000	240	169	36	38,5	66	70	3	22	102	M10	F10	4608	115
8"*	203	381	-	502	251	-	342	231	50**	42**	64,5**	100	3	30*	140	M16	F14	8779	239
10"*	254	445	-	568	284	-	378	286	65	171,5	174,5	130	3	18	165	M20	F16	14791	297
12"*	305	521	-	648	324	-	440	315	65	171,5	174,5	130	3	18	165	M20	F16	22287	450

(*) Manual Gear

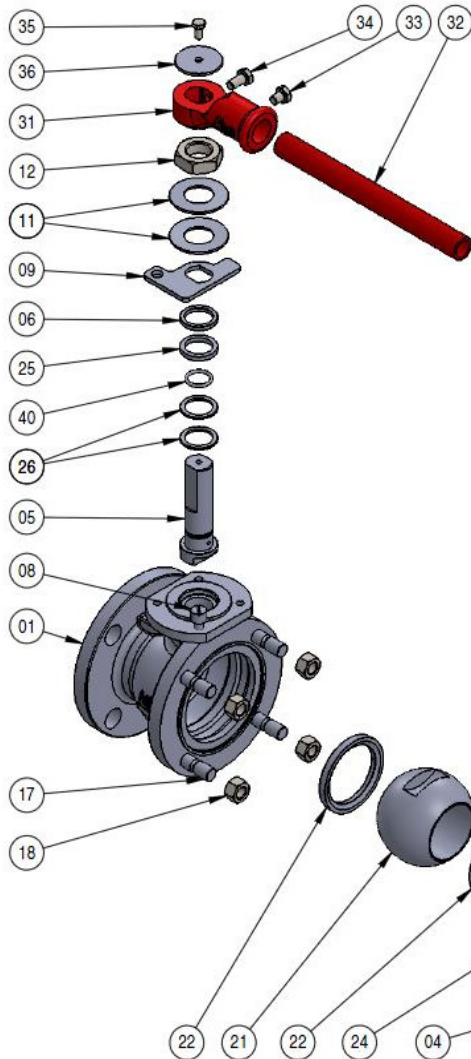
(**) Bare stem

Operation Torque (BTO)

Valve Size	Maximum differential pressure [barg] / Operation torque [Nm]										MAST (Nm)
	5	10	15	20	25	30	35	40	45	51	
1/2"	2,5	2,5	2,5	2,7	2,7	2,7	2,7	3	3	3	11,1
3/4"	5	5,1	5,5	5,5	5,5	5,7	5,9	5,9	6,2	6,2	11,1
1"	9	9,5	9,7	10,1	10,1	10,1	10,1	10,3	10,3	10,5	23,1
1 1/2"	14	14	14,5	14,5	14,5	14,5	15	15	15,5	17,5	32,2
2"	37	37,5	38	38	39,5	39,5	40,5	42,5	44,5	48	230
3"	50	51	58	60	63	65	70	75	85	95	230
4"	110	115	118	120	145	160	170	180	190	195	566
6"	240	245	250	260	265	285	350	370	405	410	566
8"	400	420	475	500	550	585	620	660	705	750	1652
10"	1200	1300	1350	1400	1440	1490	1525	1540	1565	1600	3894
12"	1825	1910	1950	2000	2010	2025	2040	2070	2085	2100	3894

Note: Safety factor not included

Material List



Pos.	Description	Carbon Steel	Stainless Steel
01	Body	ASTM A216 Gr.WCC	ASTM A351 Gr.CF8M / ASTM A351 Gr.CF3M
04	Cap	ASTM A216 Gr.WCC	ASTM A351 Gr.CF8M / ASTM A351 Gr.CF3M
05	Antistatic stem*	ASTM A182 Gr.F316 / ASTM A479 Type 316	ASTM A182 Gr.F316 / ASTM A479 Type 316
06	Gland ring	ASTM A479 Type 316	ASTM A479 Type 316
08	Stop pin	Stainless Steel	Stainless Steel
09	Stopper plate	Stainless Steel	Stainless Steel
11	Disk spring	Stainless Steel	Stainless Steel
12	Gland nut	Stainless Steel (1/2" - 2") Carbon Steel (3" - 6")	Stainless Steel
17	Stud Bolt (size 2" & up)	ASTM A193 Gr.B7M	ASTM A193 Gr.B8M
18	Nut (size 2" & up)	ASTM A194 Gr.2HM	ASTM A194 Gr.8M
21	Ball	ASTM A479 Type 316 EN 10213 1.4408 ASTM A351 Gr.CF8M ASTM A182 Gr.F316	ASTM A479 Type 316 EN 10213 1.4408 ASTM A351 Gr.CF8M ASTM A182 Gr.F316
22	Seat *	H-PTFE (TFM 1600)	H-PTFE (TFM 1600)
24	Gasket	Graphite + 316L	Graphite + 316L
25	Gland packing	Graphite	Graphite
26	Thrust washer	PTFE + 25% Graphite (size 1/2", 3/4" & 1") PTFE (size 1 1/2" & up)	PTFE + 25% Graphite (size 1/2", 3/4" & 1") PTFE (size 1 1/2" & up)
31	Handle head (size 2" & up)	Ductile Iron	Ductile Iron
32	Handle bar (size 2" & up)	Carbon Steel	Carbon Steel
33	Handle bolt (size 2" & up)	Stainless Steel	Stainless Steel
34	Handle bolt (size 1 1/2" & up)	Stainless Steel	Stainless Steel
35	Bolt (size 1 1/2" & up)	Stainless Steel (1 1/2" - 2") Carbon Steel (3" - 6")	Stainless Steel
36	Washer (size 1 1/2" & up)	Stainless Steel (1 1/2" - 2") Carbon Steel (3" - 6")	Stainless Steel
40	O-ring *	FKM	FKM

* Various stem, seats and O-rings materials are available as optional.

Note: Components arrangement may vary depending on the size.

P-T Rating

Class 150				
Pressure-Temperature Ratings [bar]				
Temperature	1/2" ~ 8"		10" ~ 12"	
	WCC	CF8M - CF3M*	WCC	CF8M
-29°C ~ 38°C	19,8	19	19,8	19
200°C	13,8	13,7	8,3	8,3

Class 300										
Pressure-Temperature Ratings [bar]										
Temperature	1/2" ~ 1 1/2"		2"		3" ~ 4"		6" ~ 8"		10" ~ 12"	
	WCC	CF8M	WCC	CF8M/CF3M*	WCC	CF8M/CF3M*	WCC	CF8M/CF3M*	WCC	CF8M
-29°C ~ 38°C	51,7	49,6	51,7	49,6	51,7	49,6	51,7	49,6	25	
200°C	37,5		26,2		18,7		14		8,3	

*CF3M → This material is available in the following sizes 2", 3" 4" and 6"

