

(-46°C)SCTDZXL/F14AZ LOW TEMPERATURE

LCC and LCB material

Floating Ball Valve, ASME CLASS 150 / CLASS 300



Features

Full bore.

Design Standards: ISO 17292:2004 / API 608:2012 /
BS 5351:1986*

*Although it is obsolete, it is adopted because most customers specify it

Flanges: ASME B16.5:1996, RF

Lengths/Face-to-face: ASME B16.10:2010

Leak test: EN 122661 Rate A / API 598, MESC SPE
77/200 (Only the % of valves required by the customer)

Top flange: ISO 5211:2001 and CAPI: 2002

Seats: Modified PTFE HYPATITE

Stem: Anti-static

Autoadjustable packing

NACE MR0175

Approvals

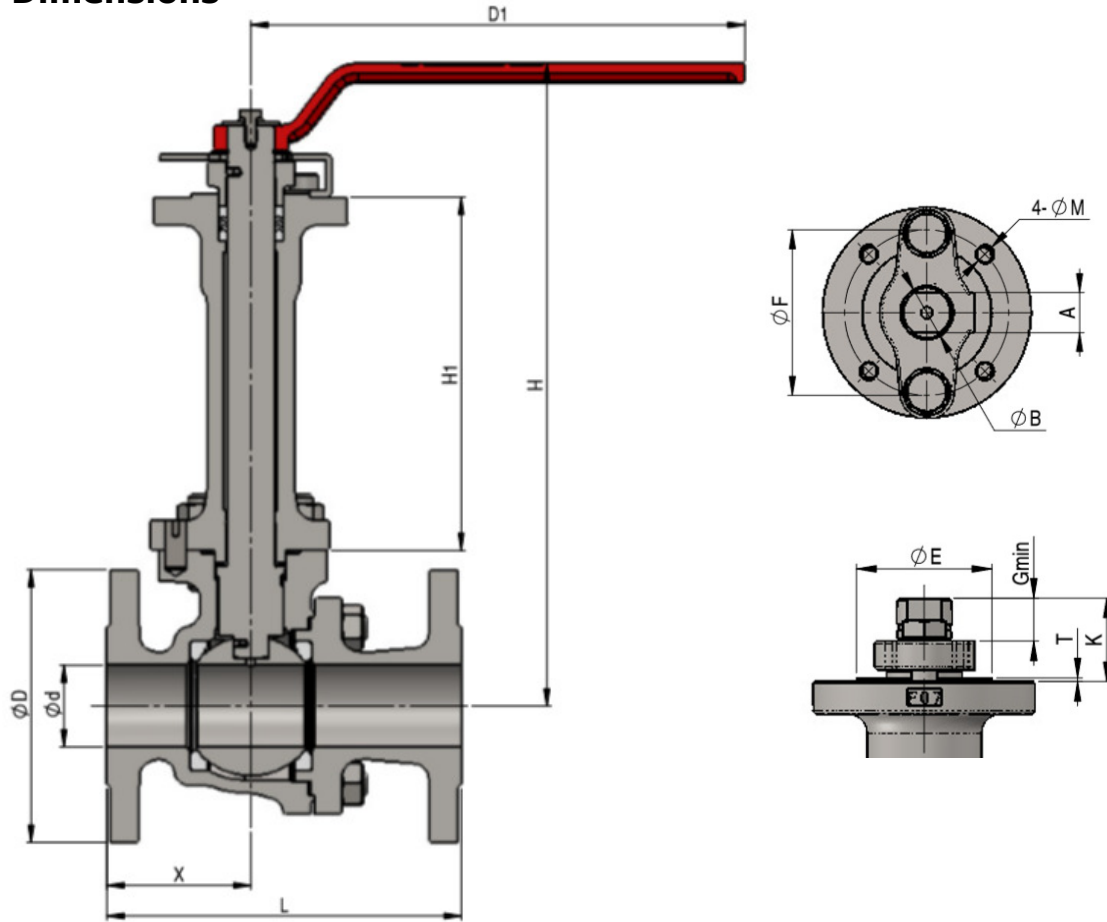
Fire test Certification: API 607 ed. 6th

PED 97/23/EC approval for CE marked products

Marine Division certificate

ATEX 94/9/EC approval

Dimensions

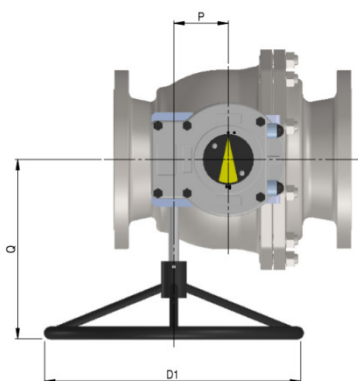


Class 150																
Size	General Dimensions [mm]													Kv	Weight	
inch.	Ød	ØD	X	D1	H	H1	A	B	E	F	G	K	T	ISO 5211	[m ³ /h] [bar]	[Kg]
½"	14	89	44,5	130	228	120	9	12	25	36	9	22	1	F03	13	3,3
¾"	19	98	47,5	130	231	120	9	12	25	36	9	22	1	F03	28,5	3,5
1"	24	108	49	160	268	143	14	18	35	50	14	30	1,5	F05	51	5,9
1½"	38	127	67	230	300	165	17	22	55	70	17	34	1,5	F07	156,5	11,5
2"	50	152	73	230	309	165	17	22	55	70	17	34	1,5	F07	299,3	14,4
3"	76	190	94	400	383	194	22	28	70	102	22	45	2	F10	882,3	31
4"*	100	229	110	-	474	207	27	36	85	125	27	52	2	F12	1652,1	65
6"*	151	279	175	-	594	236	36	48	100	140	36	63	2	F14	3734,2	130
8"*	202	343	220	-	682	268	46	60	130	165	46	79	2	F16	7429,5	241
10"*	253	406	266,5	-	764	268	46	60	130	165	46	79	2	F16	12402,3	319

(*) Manual Gear

Class 300																
Size	General Dimensions [mm]													Kv	Weight	
inch.	Ød	ØD	X	D1	H	H1	A	B	E	F	G	K	T	ISO 5211	[m ³ /h] [bar]	[Kg]
½"	14	95	58	130	228	120	9	12	25	36	9	22	1	F03	13	3,7
¾"	19	117	65	130	231	120	9	12	25	36	9	22	1	F03	28,5	5,2
1"	24	124	69	160	268	143	14	18	35	50	14	30	1,5	F05	51	8,6
1½"	38	156	80	230	300	165	17	22	55	70	17	34	1,5	F07	156,5	16,9
2"	50	165	89	400	313	165	17	22	55	70	17	34	1,5	F07	299,3	21
3"	76	210	135	700	413	194	22	28	70	102	22	45	2	F10	882,3	44
4"*	100	254	143	-	474	207	27	36	85	125	27	52	2	F12	1652,1	85
6"*	151	318	190	-	600	236	36	48	100	140	36	63	2	F14	3734,2	168
8"*	202	381	251	-	726	268	46	60	130	165	46	79	2	F16	7429,5	285

(*) Manual Gear



Gear Dimensions [mm] UTAZL								
Size	Class 150				Class 300			
Inch.	Gear Type	D1	P	Q	Gear Type	D1	P	Q
4"	-	-	-	-	AB 550	300	71	283
6"	AB 880	400	86	306	AB 1250	500	104,5	347
8"	AB 1250	500	104,5	347	AB 2000 LB	500	53	329
10"	AB 2000 LB	600	53	349	-	-	-	-

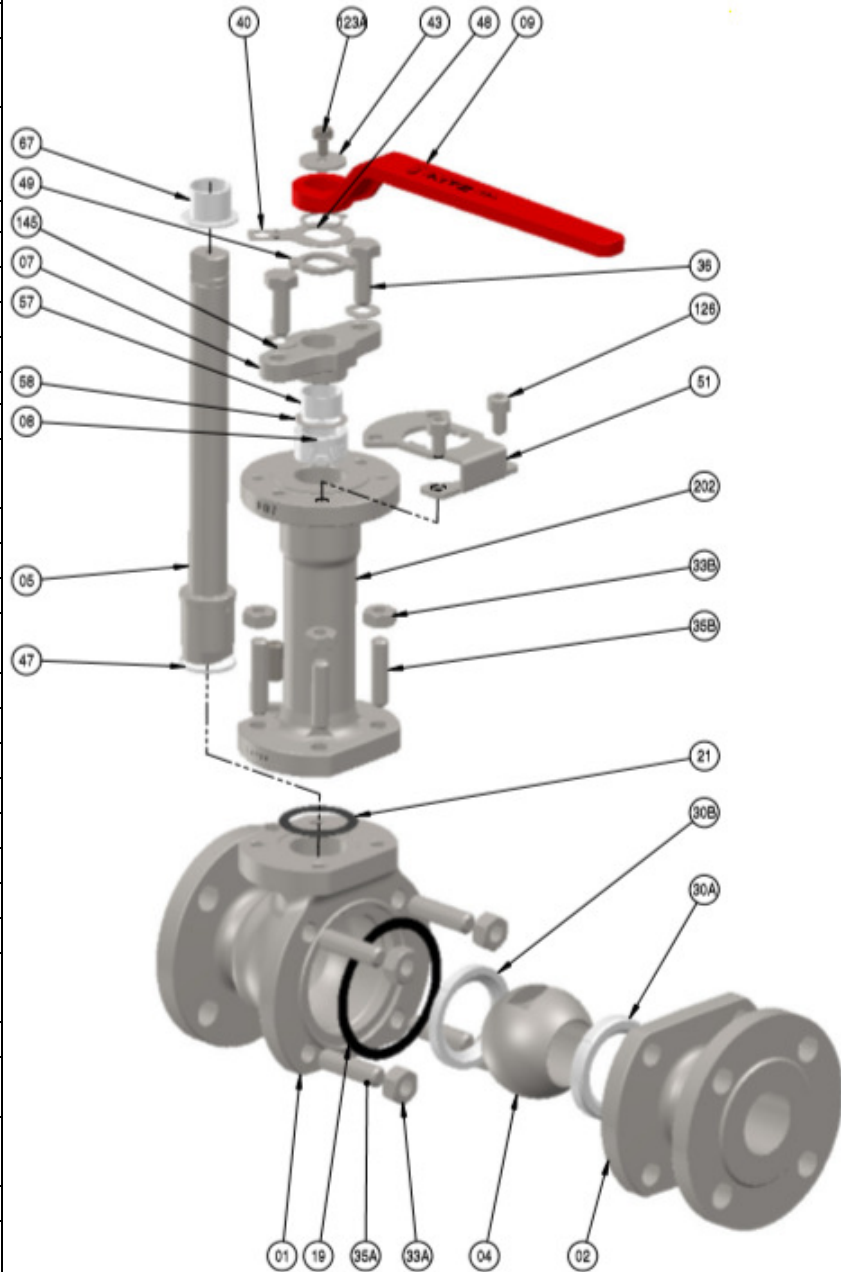
Note: Other Gear model as optional.

Operation Torque (BTO)

Valve Size		Maximum differential pressure [barg] / Operation torque [Nm]			
		Class 150		Class 300	
		*Without Safety Factor (SF)[Nm]	With 30% SF [Nm]	*Without SF [Nm]	With 30% SF [Nm]
15	1/2"	5,4	7	6	7,8
20	3/4"	9,6	12,5	10,5	13,6
25	1"	22,8	39,2	27	35,1
40	1 1/2"	41,1	29,6	54,8	71,2
50	2"	56,7	73,7	87,7	114
80	3"	128	166,4	233	302,9
100	4"	298	387,4	555	721,5
150	6"	947	1231,1	1562	2030,6
200	8"	1632	2121,6	2672	3473,6
250	10"	3104	4035,2	-	-

Material List

CCC	DESCRIPTION	CARBON STEEL
1	Body	ASTM A352 Gr.LCC
2	Cap	ASTM A352 Gr.LCC
3	Stem	ASTM A182 Gr.F316 ASTM A479 Type 316
4	Ball	ASTM A479 Type 316 ASTM A351 Gr.CF8M ASTM A182 Gr.F316
7	Gland	ASTM A351 Gr.CF8M
8	Gland Packing	Flexible Graphite
9	Handle	Carbon Steel
14	Pin	Stainless Steel
19	Gasket	Flexible Graphite
21	Gasket (SPW)	304ss + Graphite
30A	Seat (Insert side)	H-PTFE
30B	Seat (Body side)	PCTFE (Up to 2") H-PTFE (3-10")
33A	Nut	ASTM A194 Gr.7M
35A	Stud bolt	ASTM A320 Gr.L7M
33B	Nut extension	ASTM A194 Gr.7M
35B	Stud bolt extension	ASTM A320 Gr.L7M
36	Gland bolt	Stainless Steel
40	Key lock plate	Stainless Steel
43	Handlelock plate	Stainless Steel
47	Stem bearing	PTFE + Glass Filled
48	Snap bearing	Stainless Steel
49	Stopper	Stainless Steel
51	Stopper plate	Stainless Steel
57	Gland bush	PTFE + Glass Filled
58	Gland washer	ASTM A240 Type 304 ASTM A276 Type 304
67	Stem bearing	PTFE + Glass Filled
123A	Handle lock plate bolt	Stainless Steel
124	Spring & Spin	ASTM A313 Type 316 ASTM A276 Type 316
126	Stopper plate bolt	Stainless Steel
145	Coned disc springs	Stainless Steel
202	Bonnet extension	ASTM A352 Gr.LCC ASTM A350 Gr.LF2



* Various stem and seats materials are available as optional.

Note: Components arrangement may vary depending on the size.

P-T Rating

Pressure-Temperature Ratings [bar]									
Class 150		Class 300							
Temperature	Size	1/2" ~ 10"		1/2" ~ 3/4"	1" ~ 2"	3" ~ 4"	6"	8"	
		LCC	LCB	LCC/LCB				LCC/LCB	
-196°C ~ 38°C		19,8	18,4	51,7 (LCC) / 48 (LCB)				40	
150°C		15,8		40,3	37,3	28,5	22,6	19,2	

