

## (-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\*Although it is obsolete, it is adopted because most customers specify it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

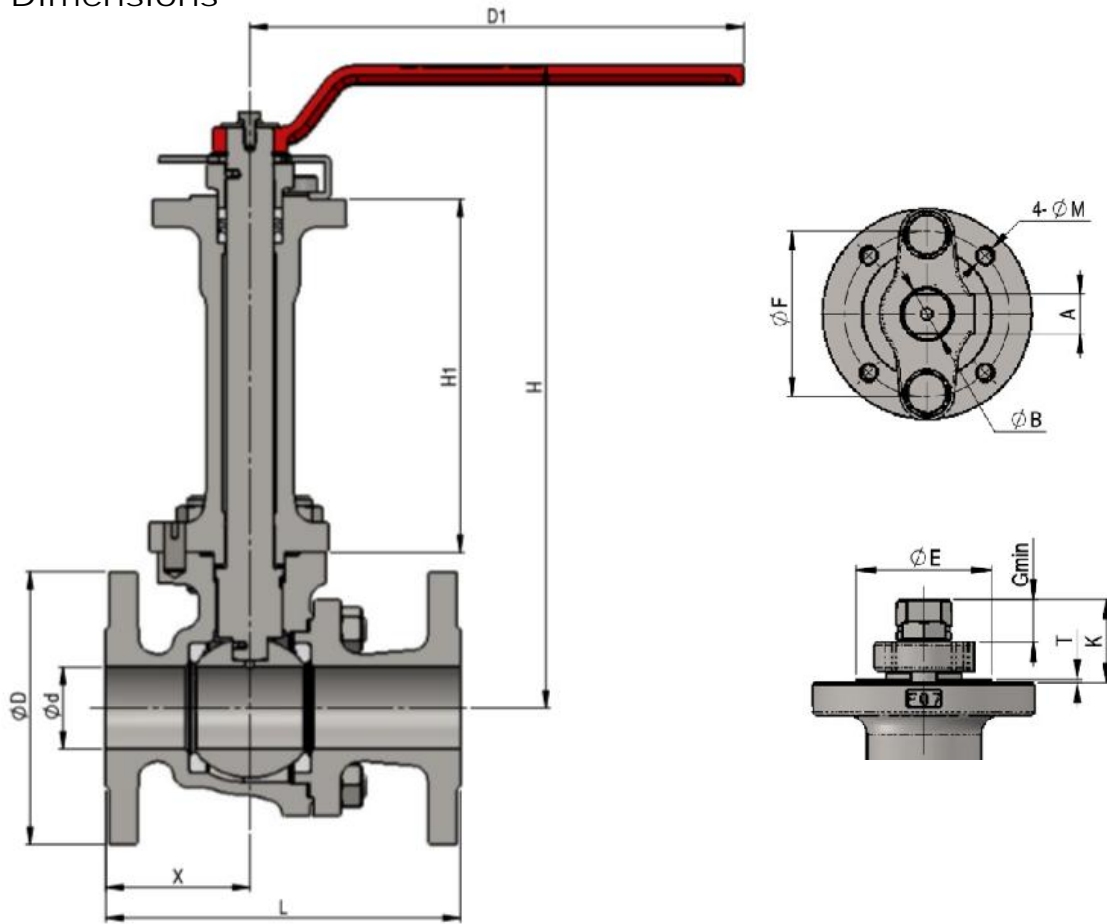
Fire test Certification: API 607 ed. 6<sup>th</sup>

PED 2014-68-UE approval for CE marked products

Marine Division certificate

ATEX 2014-68-UE approval

### Dimensions

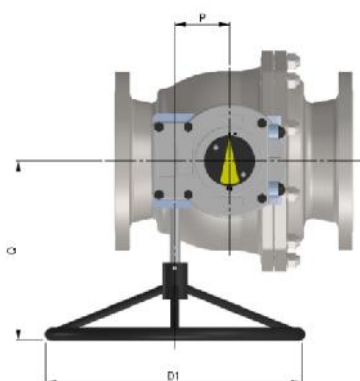


Class 150																	
Size	General Dimensions [mm]															Kv	Weight
inch.	Ød	ØD	L	X	D1	H	H1	A	B	E	F	G	K	T	ISO 5211	[m³/h] [bar]	[Kg]
½"	14	89	108	44,5	130	228	120	9	12	25	36	9	22	1	F03	13	3,3
¾"	19	98	117	47,5	130	231	120	9	12	25	36	9	22	1	F03	28,5	3,5
1"	24	108	127	49	160	268	143	14	18	35	50	14	30	1,5	F05	51	5,9
1½"	38	127	165	67	230	300	165	17	22	55	70	17	34	1,5	F07	156,5	11,5
2"	50	152	178	73	230	309	165	17	22	55	70	17	34	1,5	F07	299,3	14,4
3"	76	190	203	94	400	383	194	22	28	70	102	22	45	2	F10	882,3	31
4"	100	229	229	110	-	474	207	27	36	85	125	27	52	2	F12	1652,1	65
6"*	151	279	394	175	-	594	236	36	48	100	140	36	63	2	F14	3734,2	130
8"*	202	343	457	220	-	682	268	46	60	130	165	46	79	2	F16	7429,5	241
10"*	253	406	533	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	L	X	D1	H	H1	A	B	E	F	G	K	T	ISO 5211	[m³/h] [bar]	[Kg]
½"	14	95	140	58	130	228	120	9	12	25	36	9	22	1	F03	13	3,7
¾"	19	117	152	65	130	231	120	9	12	25	36	9	22	1	F03	28,5	5,2
1"	24	124	165	69	160	268	143	14	18	35	50	14	30	1,5	F05	51	8,6
1½"	38	156	190	80	230	300	165	17	22	55	70	17	34	1,5	F07	156,5	16,9
2"	50	165	216	89	400	313	165	17	22	55	70	17	34	1,5	F07	299,3	21
3"	76	210	283	135	700	413	194	22	28	70	102	22	45	2	F10	882,3	44
4"*	100	254	305	143	-	474	207	27	36	85	125	27	52	2	F12	1652,1	85
6"*	151	318	403	190	-	600	236	36	48	100	140	36	63	2	F14	3734,2	168
8"*	202	381	502	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.

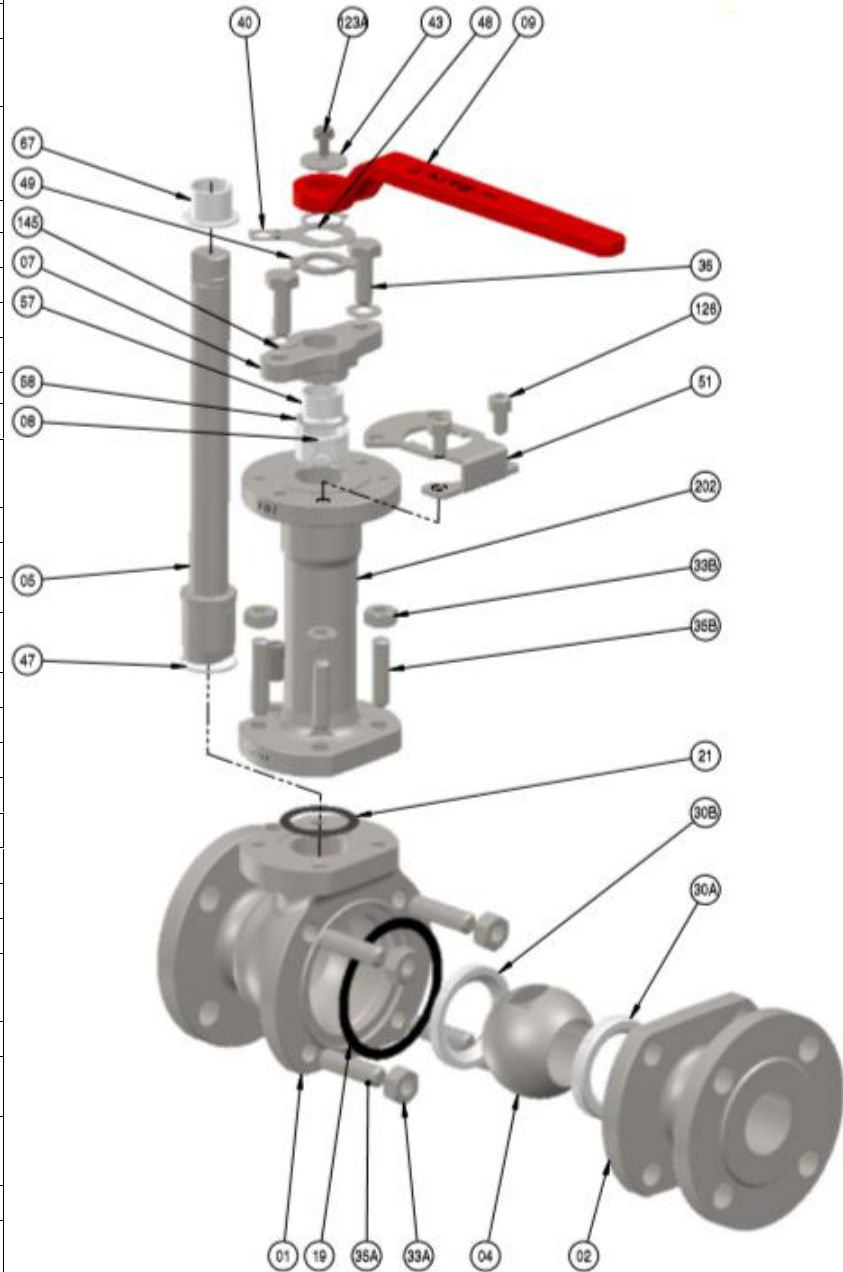
## Operation Torque (BTO)

Maximum differential pressure [barg] / Operation torque [Nm] *				MAST [Nm]
Valve Size	Class 150	Class 300		
15	½"	5,2	6,3	35,7
20	¾"	7,8	8,9	35,7
25	1"	13,0	19,3	128
40	1½"	28,4	38,8	232
50	2"	32,6	54,0	232
80	3"	84,5	205,0	493
100	4"	163,9	384,9	965
150	6"	494,0	-	2288
200	8"	843,3	-	4645
250	10"	1952,7	-	4645

\*All torque values include a 30% safety factor. Values are for clean, static water at ambient temperature

## 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 & pin	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

