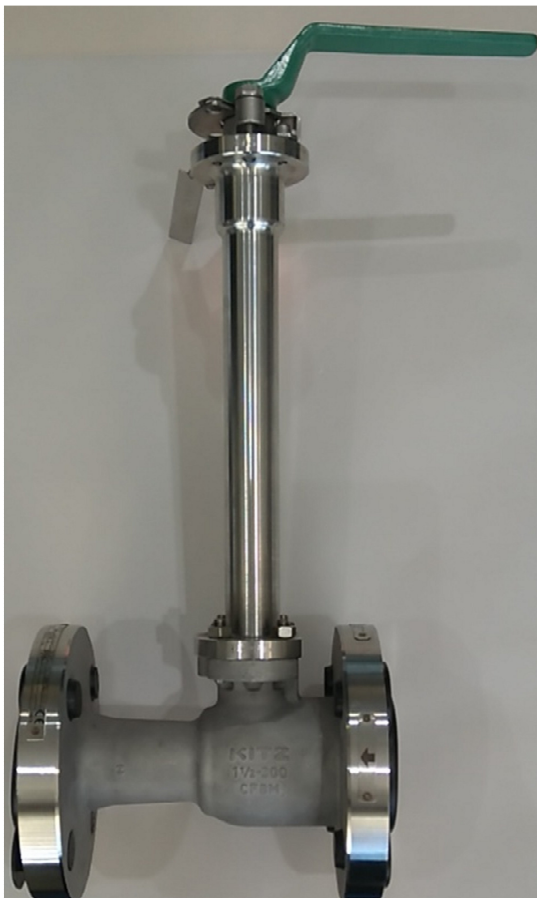


## **(-196°C)UTAZL / BF6KZ CRY TEMPERATURE**

### **CF8M material**

### **Floating Ball Valve, ASME CLASS 150 / CLASS 300**



#### **Features**

Reduced 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\*Although it is obsolete, it is adopted because most customers specify it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 12266-1 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**

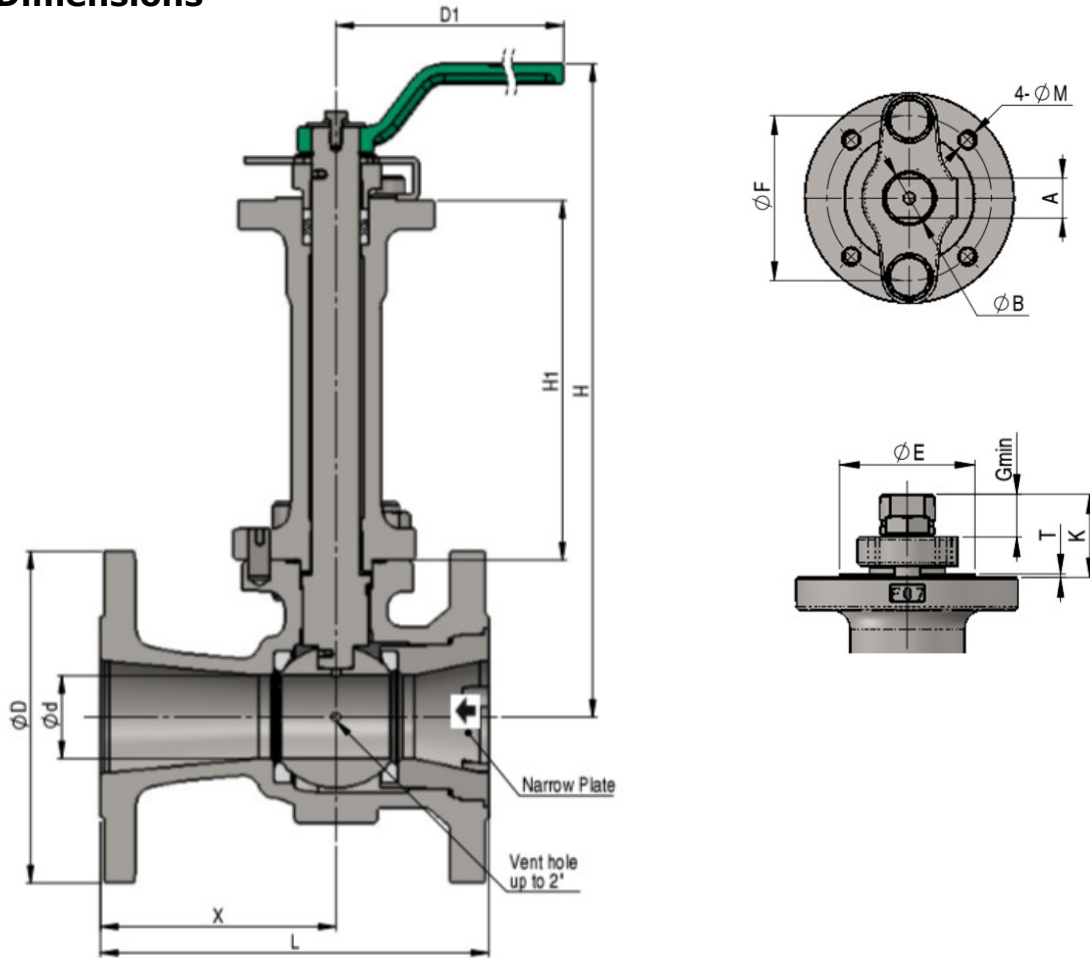
Fire test Certification: API 607 ed. 6<sup>th</sup>

PED 97/23/EC approval for CE marked products

Marine Division certificate

ATEX 94/9/EC approval

## Dimensions

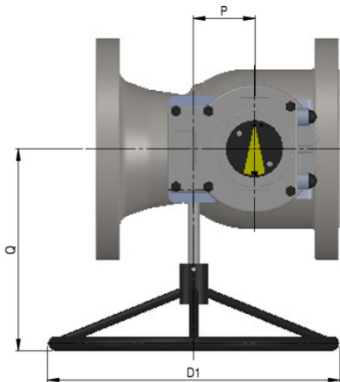


Class 150																
Size	General Dimensions [mm]														Kv	
inch.	$\varnothing d$	$\varnothing D$	L	X	D1	H	H1	A	B	E	F	G	K	T	ISO 5211	[m <sup>3</sup> /h] [bar]
1/2"	12,5	89	108	54	130	307	214	7	10	25	36	8,5	18	1	F03-S	6,9
3/4"	19	99	117	61	130	309	214	7	10	25	36	8,5	18	1	F03-S	10,3
1"	25	108	127	73,5	130	331,7	221,5	9	12	25	36	9	22	1	F03	20,76
1 1/2"	38	127	165	107	160	405	277,5	14	18	35	50	14	30	1,5	F05	83,0
2"	51	152	178	108	230	421	285,5	17	22	55	70	17	34	1,5	F07	121,9
3"	76	190	203	115	700	549,6	346,5	22	28	70	102	22	45	2	F10	256,0
4"	102	229	229	128	700	565,6	346,5	22	28	70	102	22	45	2	F10	417,8
6"*	152	279	267	151	-	675	407	27	36	85	125	27	52	2	F12	827,8
8"*	203	343	292	161	-	779	421	36	48	100	140	36	63	2	F14	1388,3
10"*	254	406	330	166	-	912	469	46	60	130	165	46	79	2	F16	2249,0

(\*) Manual Gear

Class 300																
Size	General Dimensions [mm]														Kv	
inch.	$\varnothing d$	$\varnothing D$	L	X	D1	H	H1	A	B	E	F	G	K	T	ISO 5211	[m <sup>3</sup> /h] [bar]
1/2"	12,5	95	140	80	130	307	214	7	10	25	36	8,5	18	1	F03-S	6,9
3/4"	19	117	152	87,5	130	309	214	7	10	25	36	8,5	18	1	F03-S	10,3
1"	25	124	165	103	130	331,7	221,5	9	12	25	36	9	22	1	F03	20,76
1 1/2"	38	156	190	120	160	405	277,5	14	18	35	50	14	30	1,5	F05	83,0
2"	51	165	216	126	400	421	285,5	17	22	55	70	17	34	1,5	F07	121,9
3"	76	210	283	174	700	549,6	346,5	22	28	70	102	22	45	2	F10	256,0
4"*	102	254	305	189,5	-	566	347	22	28	70	102	22	45	2	F10	417,8
6"*	152	318	403	241	-	675	407	27	36	85	125	27	52	2	F12	827,8
8"*	203	381	419	273,5	-	779	421	36	48	100	140	36	63	2	F14	1388,3
10"*	254	444	457	285	-	912	469	46	60	130	165	46	79	2	F16	2249,0

(\*) Manual Gear



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

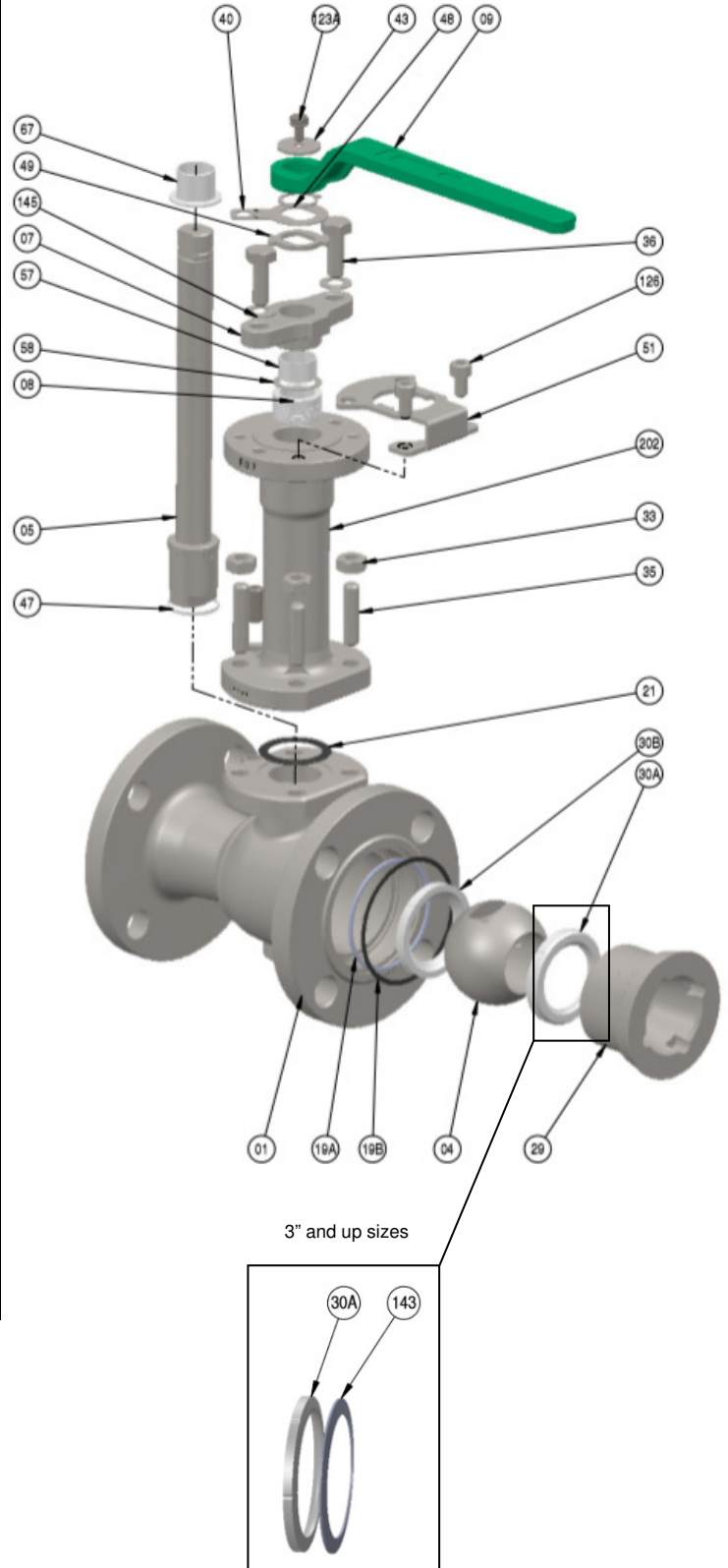
Note: Other Gear model as optional.

## 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	6,5	8,5	11
20	3/4"	7	9,1	10	13
25	1"	10	13	8,7	11,3
40	1 1/2"	30	39	45	58,5
50	2"	80,5	104,6	89,7	116,6
80	3"	155	201,5	219	284,7
100	4"	207	269,1	298	387,4
150	6"	381	495,3	659	856,7
200	8"	955	1241,5	1536	1996,8
250	10"	2011	2614,3	3195	4153,5

## Material List

CCC	DESCRIPTION	CARBON STEEL
1	Body	ASTM A351 Gr.CF8M
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
19A	Gasket	PTFE
19B	Gasket	Flexible Graphite
21	Gasket (SPW)	316Lss + Graphite
29	Insert	ASTM A351 Gr.CF8M ASTM A182 Gr.F316 ASTM A276 Type 316
30A	Seat (Insert side)	H-PTFE
30B	Seat (Body side)	PCTFE (Up to 2") H-PTFE (3-10")
33	Nut extension	ASTM A194 Gr.8M
35	Stud bolt extension	ASTM A320 Gr.B8M
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
143	Seat Spring ( From 3" to 10")	INCONEL X750
145	Coned disc springs	Stainless Steel
202	Bonnet extension	ASTM A351 Gr.CF8M ASTM A182 Gr.F316 ASTM A276 Type 316



\* 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]						
Temperature	Class 150		Class 300			
	Size 1/2" ~ 2"	3" ~ 10"	1/2" ~ 2"	3"	4" ~ 6"	8" ~ 10"
-196°C ~ 38°C	19		49,6			40
130°C (Up to 2") 150°C (3" to 10")	15,4	14,8	20	37,3	28,5	22,6

