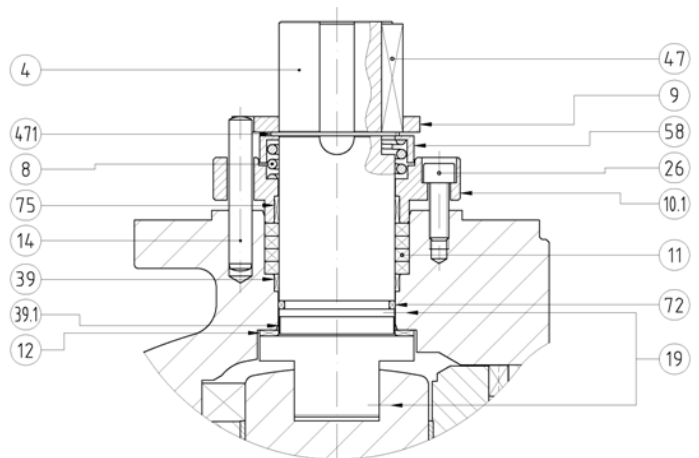
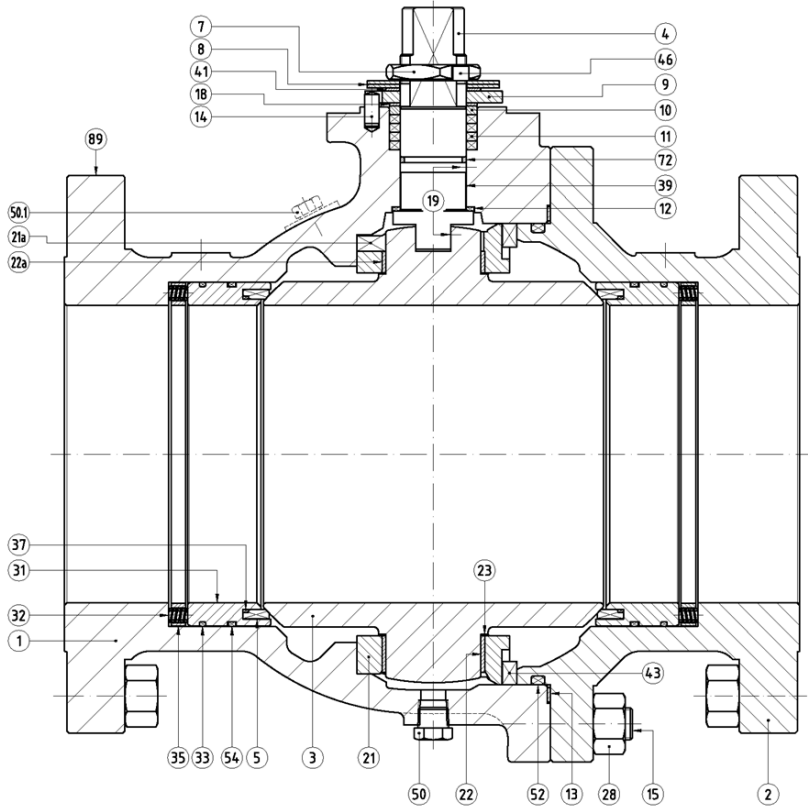


API 6D & Fire safe



DN-300 (12") to DN-400 (16") Class-150 & 300  
 DN-150 (6") to DN-300 (12") Class-600



Item	Description	Material	
		A.I.T.	I.I.T.
1	Body	A 216 Gr. WCB (C ≤ 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	
7	Gland nut	Zinc Plated Carbon Steel	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	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	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.

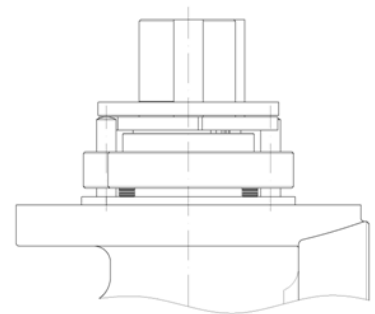
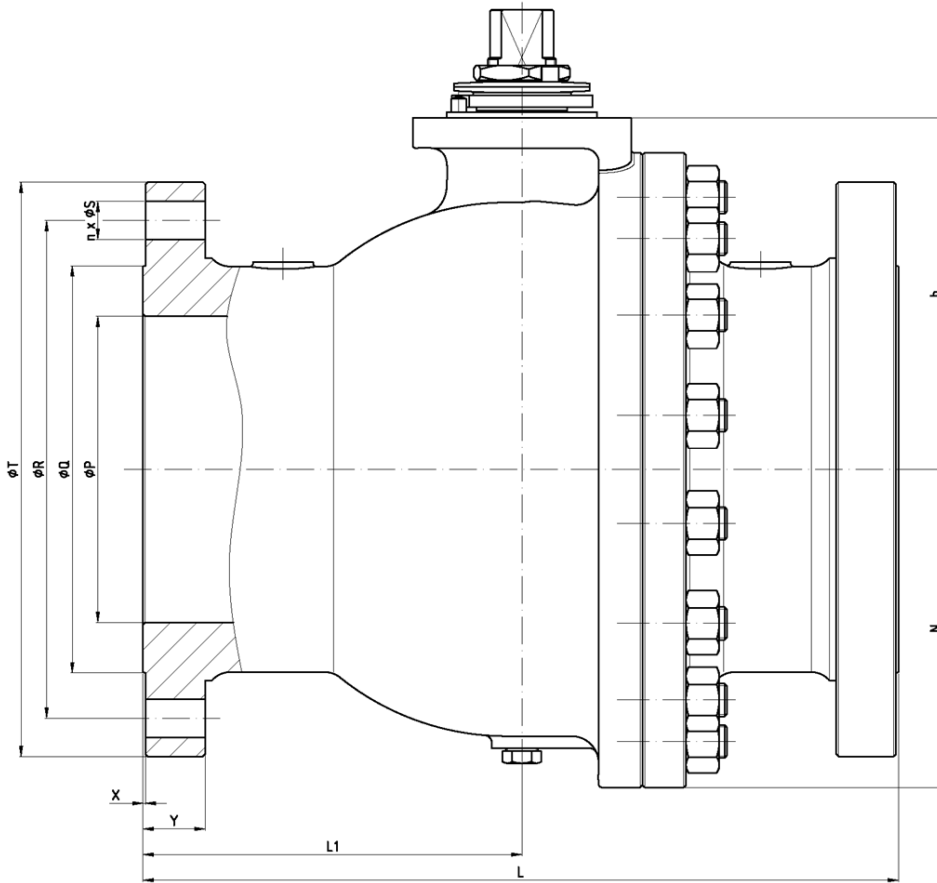
\* On request Inconel X-750

\*\* On request B7M / 2HM Zinc Plated & Bichromated

Note 1.- Depending on design conditions AFLAS, KALREZ or KALREZ Spectrum.

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

DN-300 (12") to DN-400 (16") Class-150 & 300  
 DN-150 (6") to DN-300 (12") Class-600



**Fig. BTR1150 (Class 150)**

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	N	Weight (Kg)
50 (2")	50	178	78.5	92	120.7	4x19	150	1.6	15.7	84	80	13
80 (3")	80	203	87	127	152.4	4x19	190	1.6	19	126	---	22
100 (4")	100	229	101	157	190.5	8x19	230	1.6	23.9	152	120	39
150 (6")	151	394	197	216	241.3	8x22.2	280	1.6	25.4	212	168	98
200 (8")	203	457	230	270	298.5	8x22.2	345	1.6	28.4	233	208	124
250 (10")	254	533	267	324	362	12x25.4	405	1.6	30.2	256	243	175
300 (12")	305	610	305	381	431.8	12x25.4	485	1.6	31.8	297	287.5	295
350 (14")	337	686	343	413	476.3	12x28.5	535	1.6	35	333	323	580
400 (16")	388	762	381	470	539.8	16x28.5	595	1.6	36.6	412	358	750

(\*) Dimensions in mm.

**Fig. BTR1300 (Class 300)**

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	N	Weight (Kg)
50 (2")	50	216	84	92	127	8x19	165	1.6	22.4	84	---	16
80 (3")	80	283	115	127	168,3	8x22.2	210	1.6	28.4	126	---	33
100 (4")	100	305	133	157	200	8x22.2	255	1.6	31.8	152	---	43
150 (6")	151	403	202	216	269.9	12x22.2	320	1.6	36.6	212	173	113
200 (8")	203	502	252	270	330.2	12x25.4	380	1.6	41.1	233	210	157
250 (10")	254	568	284	324	387.4	16x28.5	445	1.6	47.8	257	253	263
300 (12")	305	648	315	381	450,8	16x31.8	520	1.6	50.8	310	300	480
350 (14")	337	762	381	413	514.4	20x34,9	585	1.6	53.8	333	331	655
400 (16")	388	838	419	470	571.5	20x34,9	650	1.6	57.2	412	365	890

(\*) Dimensions in mm.

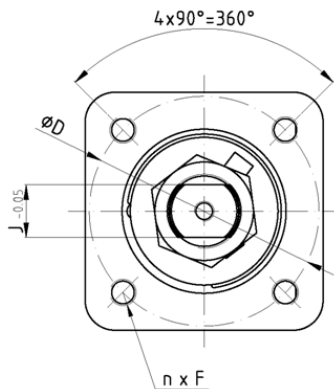
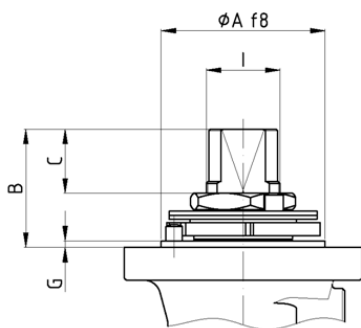
**Fig. BTR1600 (Class 600)**

DN	ØP	L	L1	ØQ	ØR	n x ØS	ØT	X	Y	h	N	Weight (Kg)
50 (2")	50	292	96	92	127	8x19.1	165	6.4	31.8	84	---	20
80 (3")	80	356	140	127	168,3	8x22.2	210	6.4	38.1	126	113	41
100 (4")	100	432	160	157	215.9	8x25.2	275	6.4	44.5	152	---	77
150 (6")	151	559	246	216	292.1	12x28.5	355	6.4	54.15	212	188	192
200 (8")	203	660	315	270	349,2	12x31.8	420	6.4	62	237	235	329
250 (10")	254	787	340	324	431.8	16x34,9	510	6.4	69.8	275	273	460
300 (12")	305	838	404	381	489	20x34,9	560	6.4	73	345	335	570

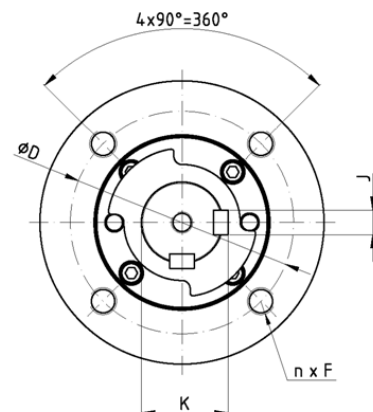
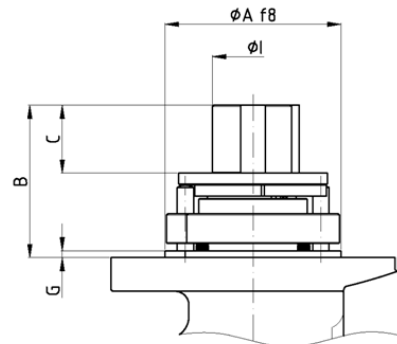
(\*) Dimensions in mm.

Actuator connection										
DN	ISO 5211	ØA	B	C	ØD	n x F	G	I	J	K
50 (2") Class-150 ~ 600	F07	55	42	17	70	4 x M8	3	M22x1.5	16	---
80 (3") Class-150 ~ 600	F10	70	55	27	102	4 x M10	3	M28x1.5	20	---
100 (4") Class-150 ~ 600	F12	85	56	27	125	4 x M12	3	M35x2	25	---
150 (6") Class-150 & 300	F14	100	70	36	140	4 x M16	4	M45x2	32	---
150 (6") Class-600	F14	100	97	49	140	4 x M16	4	45	14	48.5
200 (8") Class-150 & 300	F14	100	70	37	140	4 x M16	4	M45x2	32	---
200 (8") Class-600	F14	100	113	64	140	4 x M16	4	50	14	53.5
250 (10") Class-150 & 300	F14	100	70	37	140	4 x M16	4	M45x2	32	---
250 (10") Class-600	F16	130	103	49	165	4 x M20	5	60	18	64.2
300 (12") Class-150	F14	100	106	58	140	4 x M16	4	50	14	53.5
300 (12") Class-300	F16	130	103	49	165	4 x M20	5	60	18	64.2
300 (12") Class-600	F16	130	127	73	165	4 x M20	5	65	18	69.2
350 (14") Class-150 & 300	F16	130	103	49	165	4 x M20	5	60	18	64.2
400 (16") Class-150 & 300	F25	200	159	103	254	8 x M16	5	90	25	95.3

(\*) Dimensions in mm.



DN-50 (2") to DN-250 (10") Class-150 & 300  
 DN-50 (2") to DN-100 (4") Class-600



DN-300 (12") to DN-400 (16") Class-150 & 300  
 DN-150 (6") to DN-300 (12") Class-600

DESIGN STANDARDS				
Valves design	API 6D	ASME B16.34	EN ISO 17292	EN 1983
Body design	ASME VIII Div.1			
Shell Thickness	ASME B16.34			
Flanges	ASME B16.5 Raised Face			
Face to Face Dimensions	ASME B16.10	API 6D		
Actuator mounting flange	ISO 5211			
Wetted parts and bolting	NACE MR. 01.75			
Shell finishing quality	MSS SP- 55			
Marking	API 6D	EN ISO 17292	EN 19	CE-PED
TESTS AND CERTIFICATES				
Quality Assurance	ISO 9001	API Q1	CE-PED	
Fire safe certification	BS 6755 Part2/ISO 10497		API 607 6th Ed.	
Pressure testing	API 598	EN 12266		
Others	ISO 14001			

VALVE SIZE (mm)	Torque Values in Nm		
	AT DIFFERENTIAL PRESSURE		
	Class 150 20 bar	Class 300 55 bar	Class 600 102 bar
DN-50 (2")	70	80	90
DN-80 (3")	130	140	170
DN-100 (4")	340	380	400
DN-150 (6")	500	700	900
DN-200 (8")	800	900	1.400
DN-250 (10")	1.010	1.300	3.050
DN-300	1.800	2.500	3.800
DN-350	2.600	3.750	---
DN-400	3.500	5.000	---

### Pressure-Temperature

For A 216 Gr. WCB. For other materials consult ASME B16.34

