

TOPAZ ANSI 300

Ball valve in stainless steel, of solid and advanced design is backed by the twenty-year experience gained by ENOLGAS in production of ball valves.

In order to keep tolerances and material quality constant, investment casting of body and end adapter was preferred to forging, with careful subsequent toolings on CNC machines, which guarantee a high quality standard.

Leading design and accurate machining and finishing of the valves guarantee a perfect tightness and lifetime troubleless working operations.



INDUSTRIAL VALVES

TECHNICAL FEATURES

Full bore.

The machining of the body takes place on CNC high precision machines so as to guarantee the compliance with the design specifications.

Possibility of stops at 90° by operation without lever.

Blow-out proof stem with labyrinth sealing system adjustable by Belleville washers.

Equipped with wrapping seats ensuring long life cycles.

Perfect air bubble-free sealing.

Maintenance free.

All valves are tested at 25 bar pressure, for a period exceeding 48 hours.

Fire safe to BS 6755, API 6FA, API 607.

General prescriptions to BS 5351.

Connection with actuators to ISO 5211.

END CONNECTIONS

Flanges to UNI 2223-2229
DIN 2501 BL. 1
DIN 3202
ANSI B 16.5
ANSI B 16. 10.

WORKING PRESSURE

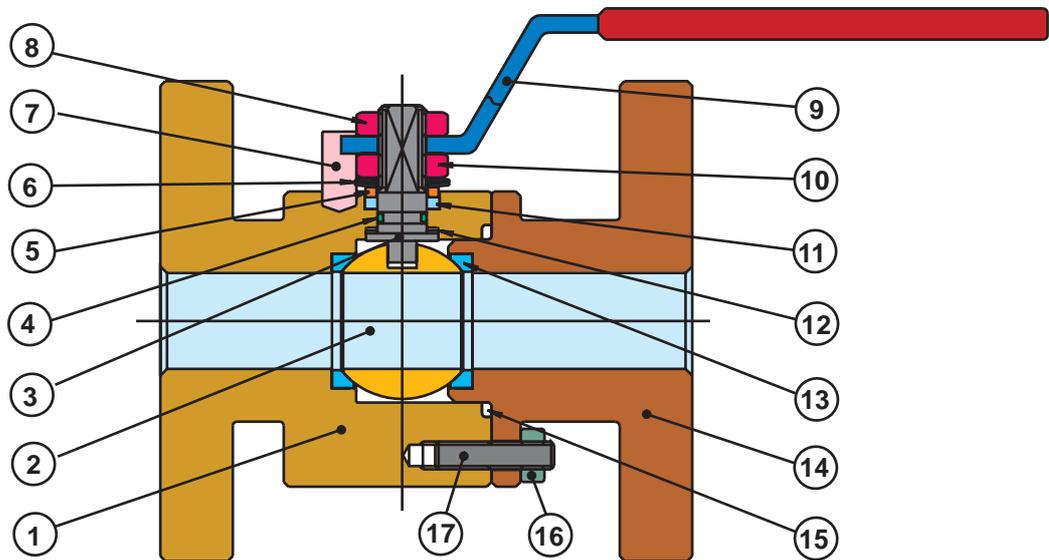
PN 64 and ANSI 300.

TEMPERATURE LIMITS

From -20°C to +180°C.

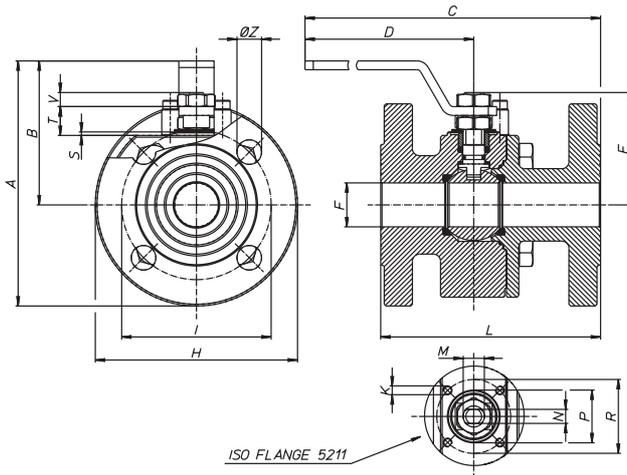
UTILISATION

TOPAZ is suitable for air, gas, water, oil and for industrial plants.



Item	Description	TOPAZ stainless steel		TOPAZ carbon steel	
1	Body	From bar	AISI 316 D 1.4401	A 105	
2	Ball	Forged	AISI 316 D 1.4401	AISI 304	D 1.4301
3	Stem	From bar	AISI 316 D 1.4401	AISI 304	D 1.4301
4	O-ring	Green or black	Fluoroelastomer	Fluoroelastomer	
5	Packing washer	From bar	AISI 316 D 1.4401	AISI 304	D 1.4301
6	Spring washers	Drawn	AISI 301 D 1.4310	50CrV4	
7	Operation stop pin	From bar	AISI 304 D 1.4301	Carbon steel 8.8	
8	Locking nut	Forged	AISI 304 D 1.4301	A 105 Nickel-plated	
9	Lever handle	P.V.C. insulated red color	A 105 Nickel-plated	A 105 Nickel-plated	
10	Stem retaining nut	Forged	AISI 304 D 1.4301	A 105 Nickel-plated	
11	Upper stem packing	From bar	Virgin P.T.F.E.*	Virgin P.T.F.E.*	
12	Thrust washer	From bar	Virgin P.T.F.E.*	Virgin P.T.F.E.*	
13	Ball seats	From bar	Virgin P.T.F.E.	Virgin P.T.F.E.	
14	Body flange	From bar	AISI 316 D 1.4401	A 105	
15	Static gasket	From bar	Virgin P.T.F.E.*	Virgin P.T.F.E.*	
16	Locking nut	Forged	AISI 304 D 1.4301	A 105 Nickel-plated	
17	Stud bolt	From bar	A 193 B8	A 193 B7	

* Graphite, for fire safe.



- 15% GLASS-FILLED PTFE with temperature limits -20°C + 195°C
- PTFE+CARBOGRAPHITE with temperature limits -20°C + 210°C
- Degreased version
- Antistatic device from DN15 to DN32
- On request the valve is available with ATEX certificate
- Body in LF2
- For further special requests please consult our technical/commercial service

AVAILABLE ACCESSORIES

Extended stem for insulated pipes.

Size	A mm	B mm	C mm	D mm	E mm	F mm	H mm	K mm	I mm	L mm	M mm	N mm	P mm	R mm	S mm	T mm	V mm	Z mm	N° holes	ISO FLANGE	weight gr.
1/2"	113,5	66	232,1	140	48	15	89	M5	66,7	140	M10	6	-	36	-	5	9	16	4	F03	3600
3/4"	127,8	69	241,1	140	51	20	117,5	M5	82,5	151	M10	6	25	36	2	8	9	14	4	F03	5605
1"	144	82	292,1	180	62,5	25	124	M5	88,9	165	M12	8	30	42	2	11,5	11,5	19	4	F04	6245
1 1/4"	153,5	87	303,4	180	67	32	133	M5	98,4	178	M12	8	30	42	2	10	11	19	4	F04	8560
1 1/2"	186	108	358,5	230	87,5	40	156	M6	114,3	189	M16	10	35	50	2,5	14,5	15,5	22	4	F05	13185
2"	197,5	115	381	230	94,5	49,5	165	M6	127	216	M16	10	35	50	2,5	14,5	15,5	19	4	F05	16555
2 1/2"	234,5	139	485,4	320	119,5	65	191	M8	149,2	241	M22	14	55	70	3	18,7	20,8	22	8	F07	27825
3"	255	150	523,5	320	130	78	210	M8	168,3	283	M22	14	55	70	3	18,7	20,8	22	8	F07	36150
4"	290	163	559	370	148,5	96	254	M8	200	305	M27	16	-	102	-	1,5	26	22	8	F10	60055

Breaking Torque in Nm

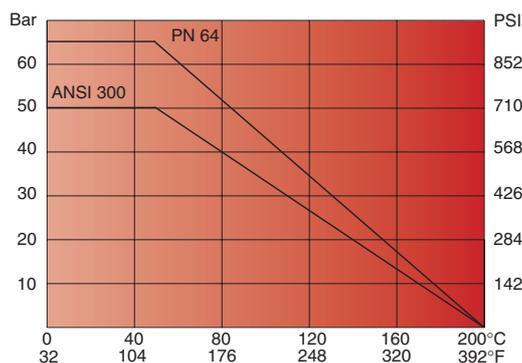
DN size	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
0	4	7	15	21	26	36	51	81	130
16	5	8	17	23	28	39	54	86	150
40	6	10	22	28	32	45	62	120	200

Nm

Values in Nm can change depending on the material used for seats, on temperature and on the fluid used.
For a safe working of the various sorts of servocontrol, it is necessary to consider a

safety factor = 1,5 in each condition. While the valve is working, with frequent on/off cycles, the operating torque can become extremely low in comparison with the beginning one.

PRESSURE/TEMPERATURE DIAGRAM



LOSS OF HEAD DIAGRAM

