

# TENAX•WP

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

Triple sealing blow out-proof stem.

Two spring washers on top of the stem packing.  
Quarter turn stop working also without lever.

Full bore.

The TENAX•WP ball valves is supplied with an ISO plate for the direct assembly of an actuator.

According to ISO 5211 standard

## END CONNECTIONS

Female screwed to ISO 7/1  
Rp = DIN 2999.

Male screwed to ISO 228/1  
= DIN 259.

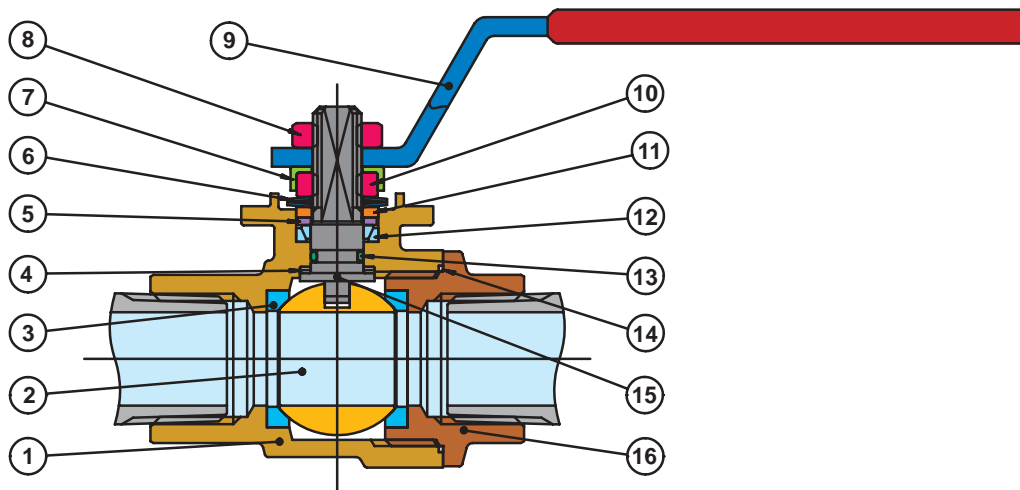
Special threads (BSPT, NPT, etc.) available on request.

## WORKING PRESSURE

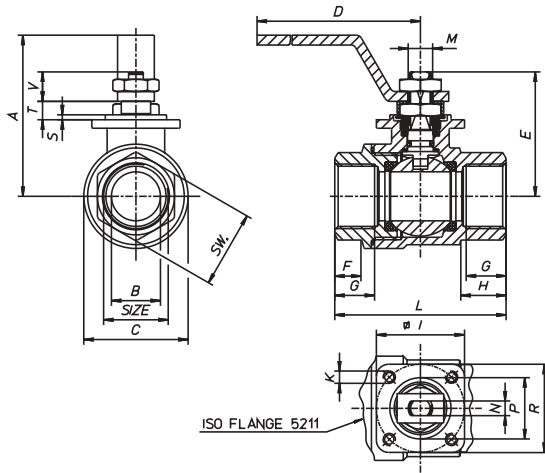
PN 160 (3/8") to PN 40 (2")

## TEMPERATURE LIMITS

From -20°C to +150°C.



Item	Description	Material
1	Body	AISI 316 D 1.4408
2	Ball	Forged AISI 316 D 1.4401
3	Ball seats	From bar Virgin P.T.F.E.
4	Thrust washer	From bar Virgin P.T.F.E.
5	Packing washer	From bar AISI 304 D 1.4301
6	Spring washers	Drawn AISI 301 D 1.4310
7	Fixing-nut plate	Blanked AISI 304 D 1.4301
8	Locking nut	Forged AISI 304 D 1.4301
9	Lever handle	P.V.C. insulated red color AISI 304 D 1.4301
10	Stem retaining nut	Forged AISI 304 D 1.4301
11	Operation-stop	Blanked AISI 304 D 1.4301
12	Stem packing	From bar Virgin P.T.F.E.
13	O-ring	green or black Fluoroelastomer
14	Static gasket	From bar Virgin P.T.F.E.
15	Stem	From bar AISI 316 D 1.4401
16	End adapter	Investment casting AISI 316 D 1.4408



- 15% GLASS-FILLED PTFE. Temperature limits -20°C + 175°C
- PTFE+CARBOGRAPHITE: use up to 180°C
- Stems with antistatic device from 3/4" to 2"
- Degreased version
- On request the valve is available with ATEX certificate (from 3/4" to 2")
- Polished Version
- For further special request 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	G mm	H mm	I mm	K mm	L mm	M mm	N mm	P mm	R mm	S mm	T mm	V mm	SW. EXA.	SW. OCT.	ISO FLANGE	weight gr.
3/8"	52	10	29	110	37	8,5	11,4	13,5	36	M5	55	M8	4	25	36	2	6	9,5	21,5	-	F03	245
1/2"	55	15	34	110	42	10	15	18	36	M5	65	M8	4	25	36	2	6	9,5	26,5	-	F03	325
3/4"	66	20	42,5	140	52	11,5	16,3	18	36	M5	70	M10	6	25	36	2	7,5	12	31,5	-	F03	510
1"	70	25	50,5	140	56	14	19,1	27,5	36	M5	85	M10	6	25	36	2	7,5	12	40,5	-	F03	765
1 1/4"	85	32	63	180	68	15,5	21,4	28,5	42	M5	95	M12	8	30	42	3	9,5	13,5	-	49,5	F04	1270
1 1/2"	91	40	75,5	180	74	18,5	21,4	23	42	M5	105	M12	8	30	42	3	9,5	13,5	-	54,5	F04	1810
2"	105	50	91	230	87	22,5	25,7	35	50	M6	125	M16	10	35	50	3	11,3	17,8	-	69,5	F05	3160

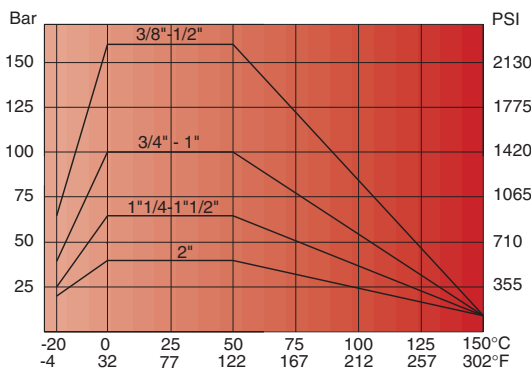
### Breaking Torque in Nm

DN size	10	15	20	25	32	40	50	
	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	
PN - bar	0	1,6	3,2	3,6	4,6	11,5	19	27,5
	16	1,8	4,3	4,9	5,9	15	24	38
	40	2,5	5,1	6	6,9	16,7	28,6	42
	64	3,2	5,6	6,8	8	18,4	32	
	100	3,8	6,5	8,5	10			
	160	5	8					
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

