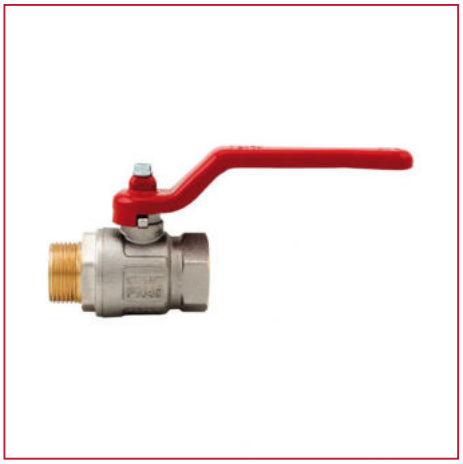
FULL FLOW BALL VALVES: IDEAL

091 Ideal ball valve, full flow

Suitable for domestic water services, heating and air-conditioning plants, compressed air systems.
IDEAL



SIZE	PRESSURE	CODE	PACKING
1/4" (DN 8)	50bar/725psi	0910014/N	12/192
3/8" (DN 10)	50bar/725psi	0910038/N	12/192
1/2" (DN 15)	50bar/725psi	0910012/N	12/120
3/4" (DN 20)	40bar/580psi	0910034/N	8/64
1" (DN 25)	40bar/580psi	0910100/N	8/40
1"1/4 (DN 32)	30bar/435psi	0910114/N	4/32
1"1/2 (DN 40)	30bar/435psi	0910112/N	2/24
2" (DN 50)	25bar/362.5psi	0910200/N	2/12

CERTIFICATIONS

TECHNICAL SPECIFICATIONS

Female/female or male/female threads.
Lever handle in steel (aluminium in the sizes 2”1/2, 3” and 4”) or T handle in aluminium or flat lever handle in lined steel.
Body in nickel-plated brass.
Minimum and maximum working temperatures: -20°C, 150°C in absence of steam.
Threads: ISO 228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).
Mention “N” in the code only to order the black handle.

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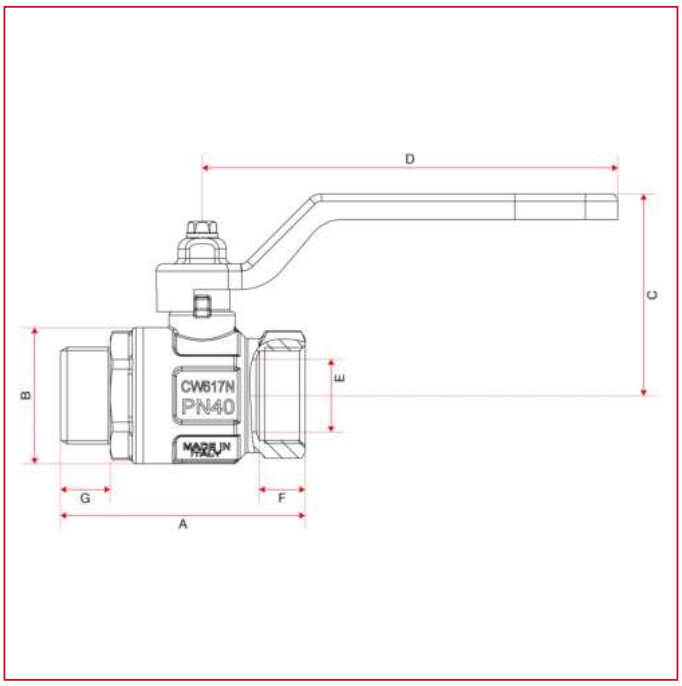
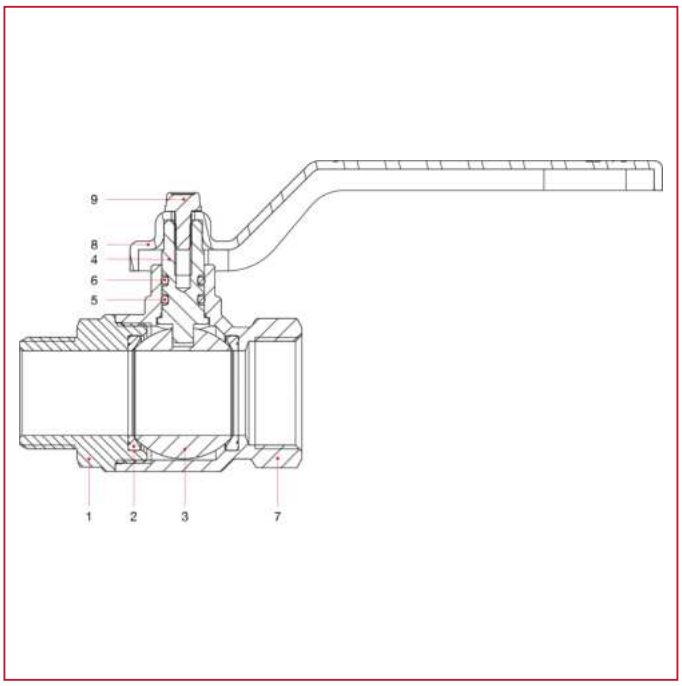
OVERALL DIMENSIONS



	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
DN	8	10	15	20	25	32	40	50
A	54	54	58,5	66,5	78,5	91,5	105,5	122
B	23,5	24	30,5	37	45,5	57	70	84
C	37	37	41	55	59	75	81	96
D	80	80	80	113	113	138	138	157,8
E	8	10	15	20	25	32	39	50
F	10	10	12	12,5	15	17	18,5	22
G	10,5	10,5	11,5	13,5	14,5	17	19	21
Kg/cm2 bar	50	50	50	40	40	30	30	25
LBS - psi	725	725	725	580	580	435	435	362,5

FULL FLOW BALL VALVES: IDEAL

MATERIALS



POS.	DESCRIPTION	N.	MATERIAL
1	Male end adapter	1	Nickel-plated brass CW617N
2	Seat	2	P.T.F.E.
3	Ball	1	Chrome-plated brass CW617N
4	Stem	1	Brass CW614N
5	O-ring	1	NBR
6	O-ring	1	Viton®
7	Body	1	Nickel-plated brass CW617N
8	Lever handle	1	Varnished steel P04
9	Screw	1	Zinc-plated steel C4C

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INSTALLATION

The itap S.p.A.'s valves are bi-directional, that means they manage the flow in both the directions.
The valves are composed by a ball, two seal in PTFE material, one stem, two sailing rings (O-Rings), one handle and a couple of parts made of brass (body and end adopter) that contain them and that are assembled by means of threat and a sealed material to obtain their aim.
In order to avoid that the sealed material gets broken and then the valve looses the connection between the body and the end-adapter, it's necessary to avoid to submit the two parts under the influence of a torque.
For the installation normal hydraulic practices must be used, and especially:
- ones have to be sure that the two pipes are correctly aligned;
- during the assembling process the installer has to apply its assembling tools at the end that is nearest to the pipe;
- the application of the sealing materials by the fitter (PTFE or hempen cloth) must be limited at the threat zone. An excess should interferes in the ball-gasket's closure zone, compromising the tightness.
- in the case that the fluid transported presents some impurities (dust, water too hard, etc.) ones have to remove these impurities by the means of a filter. Otherwise they could damage the seals.

DISASSEMBLY

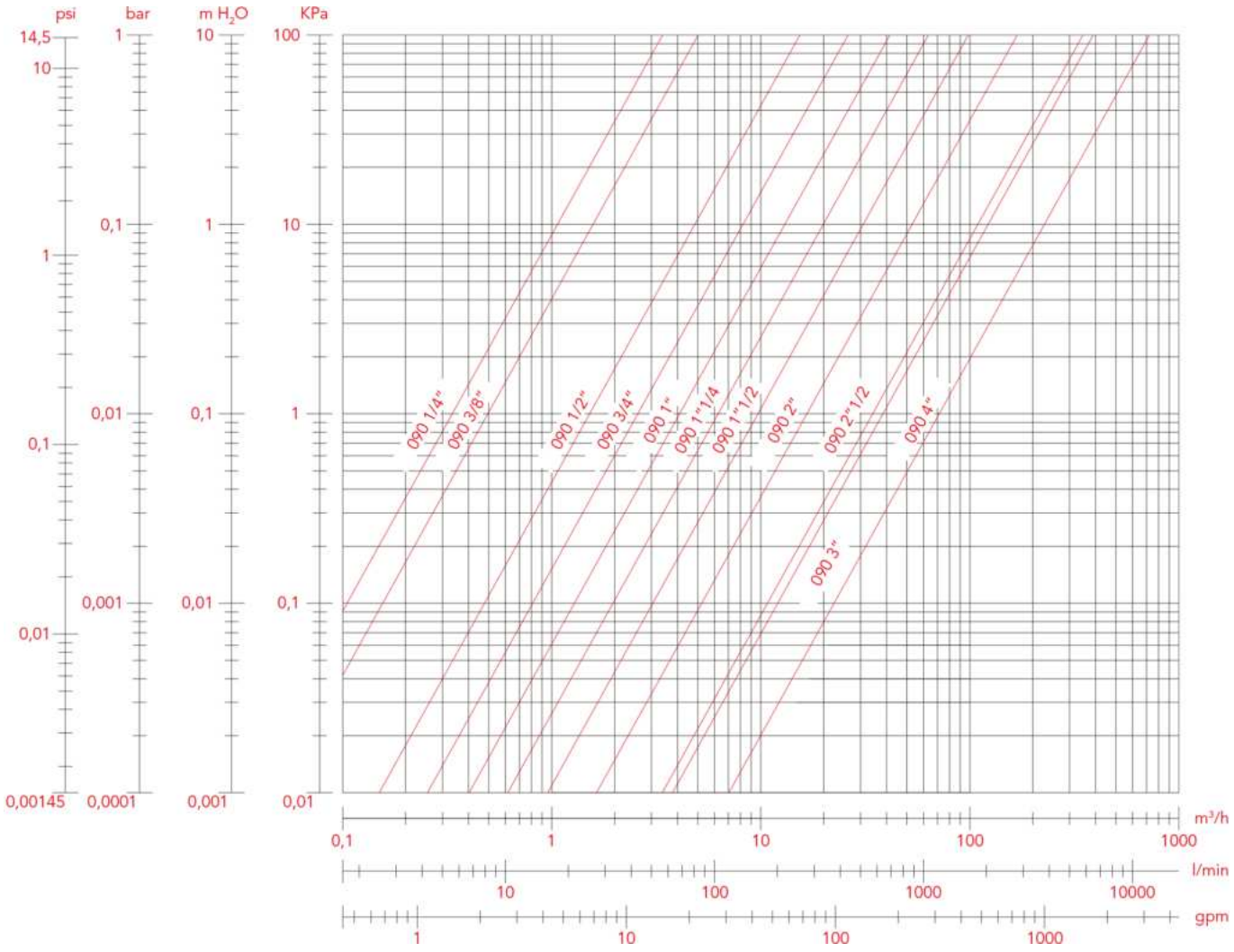
To remove the valve from the pipe line or anyhow before to unscrew the junctions linked to it:
- wear the clothing protective normally required to work with the fluid transported within the line;
- depressurizze the line and operate in this way:
  - positioning the valve in opened position and than empty the line;
  - handle the valve to put down the residue pressure contained inside the space between the ball and the body before of remove it from the line;
  - during the disassembly apply the screw tool at the end of the valve nearest the pipe;

MAINTENANCE

Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.

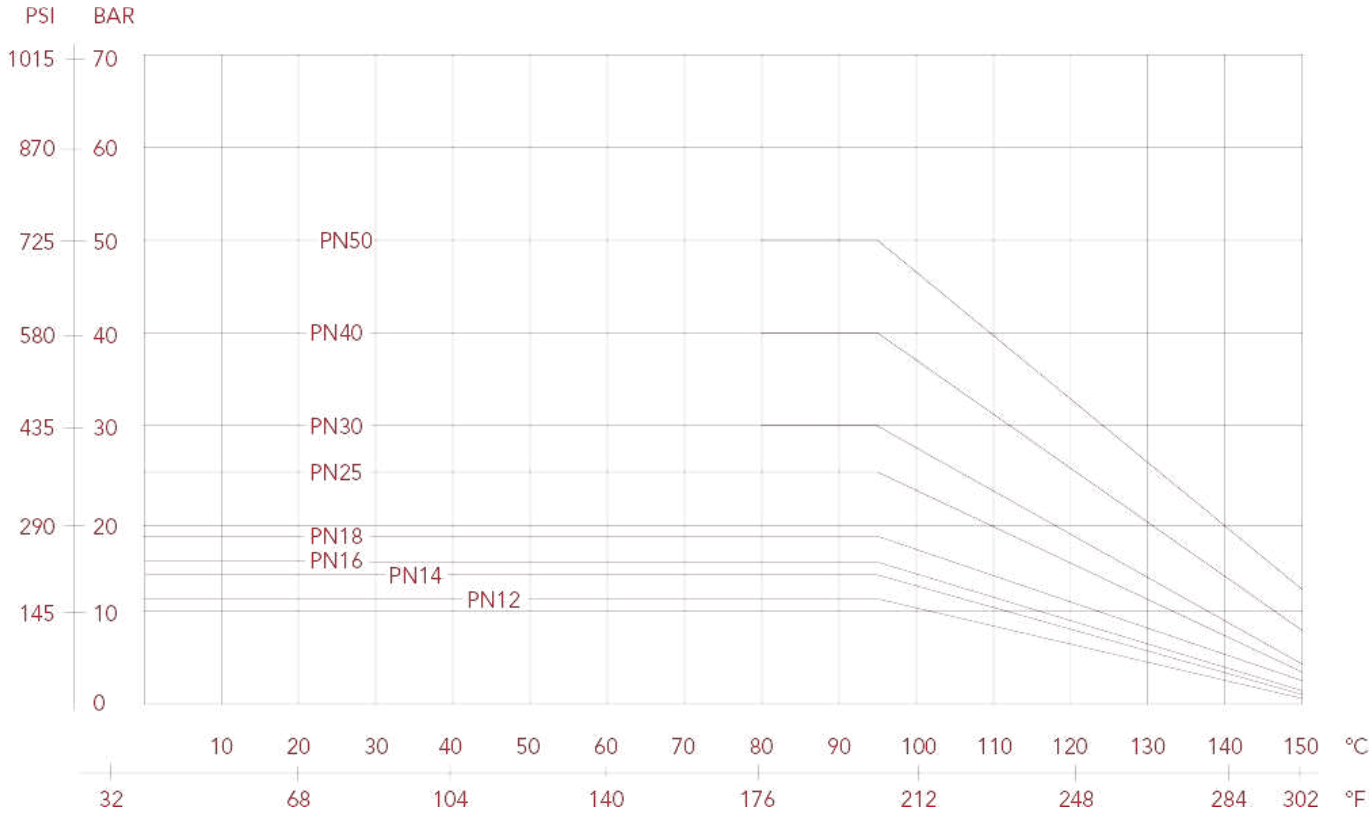
LOSS DIAGRAM (With water)

	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
KV	3,45	5,00	15,65	26,26	41,44	63,69	101	169



PRESSURE-TEMPERATURE DIAGRAM

The values shown by the dropping lines state the maximum limit of employment of the valves.
The shown values are approximate.



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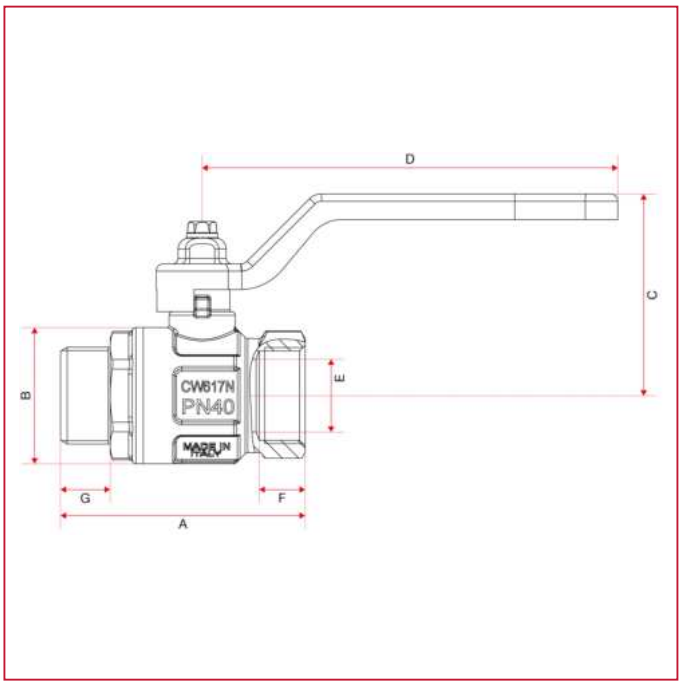
OVERALL DIMENSIONS



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