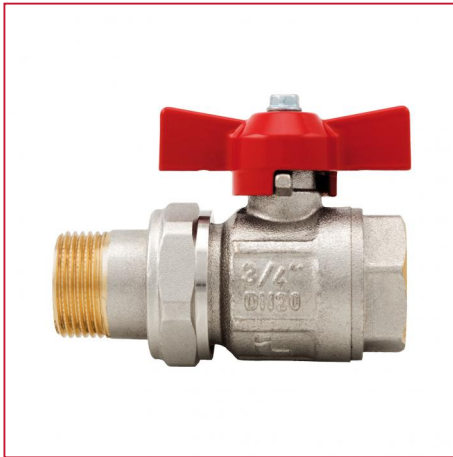




# FULL FLOW BALL VALVES: IDEAL

## 098 Ideal ball valve, full flow for manifolds

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



| SIZE           | PRESSURE       | CODE    | PACKING |
|----------------|----------------|---------|---------|
| 1/2" (DN 15)   | 50bar/725psi   | 0980012 | 8/88    |
| 3/4" (DN 20)   | 40bar/580psi   | 0980034 | 6/60    |
| 1" (DN 25)     | 40bar/580psi   | 0980100 | 6/48    |
| 1 1/4" (DN 32) | 30bar/435psi   | 0980114 | 4/32    |
| 1 1/2" (DN 40) | 30bar/435psi   | 0980112 | 2/16    |
| 2" (DN 50)     | 25bar/362.5psi | 0980200 | 2/14    |

### CERTIFICATIONS



### TECHNICAL SPECIFICATIONS

Male/female threads.

T handle in aluminium.

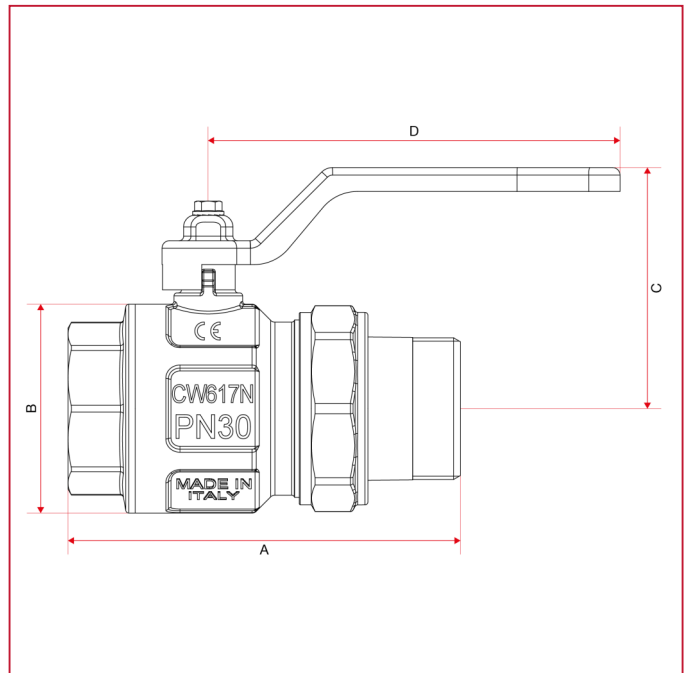
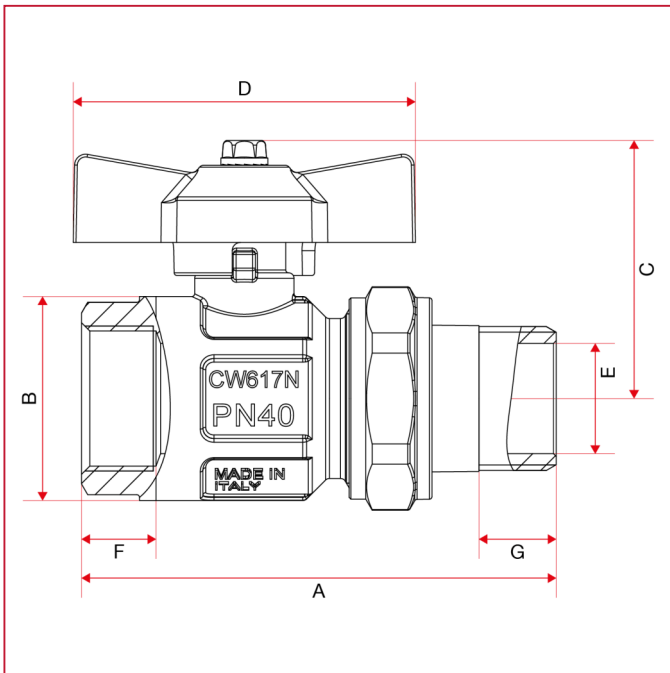
Body in nickel-plated brass.

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).

1 1/2 and 2" size with flat seat and lever handle in steel.

### OVERALL DIMENSIONS





## FULL FLOW BALL VALVES: IDEAL

|            | 1/2" | 3/4" | 1"   | 1"1/4 | 1"1/2 | 2"    |
|------------|------|------|------|-------|-------|-------|
| DN         | 15   | 20   | 25   | 32    | 40    | 50    |
| A          | 74   | 86   | 99   | 115   | 131,5 | 150,5 |
| B          | 30,5 | 37   | 45,5 | 57    | 70    | 84    |
| C          | 41   | 47   | 50,8 | 63,5  | 81    | 96    |
| D          | 47   | 62   | 62   | 70    | 138   | 157,8 |
| E          | 15   | 20   | 25   | 32    | 39    | 50    |
| F          | 12,5 | 13,5 | 15   | 16,5  | 17,5  | 20,5  |
| G          | 12   | 14   | 16   | 17    | 16    | 17    |
| Kg/cm2 bar | 50   | 40   | 40   | 30    | 30    | 25    |
| LBS - psi  | 725  | 580  | 580  | 435   | 435   | 362,5 |



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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 adapter) that contain them and that are assembled by means of thread and a sealed material to obtain their aim.

In order to avoid that the sealed material gets broken and then the valve loses the connection between the body and the end-adaptor, 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 thread zone. An excess should interfere 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;
- depressurize the line and operate in this way:
  - positioning the valve in opened position and then 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

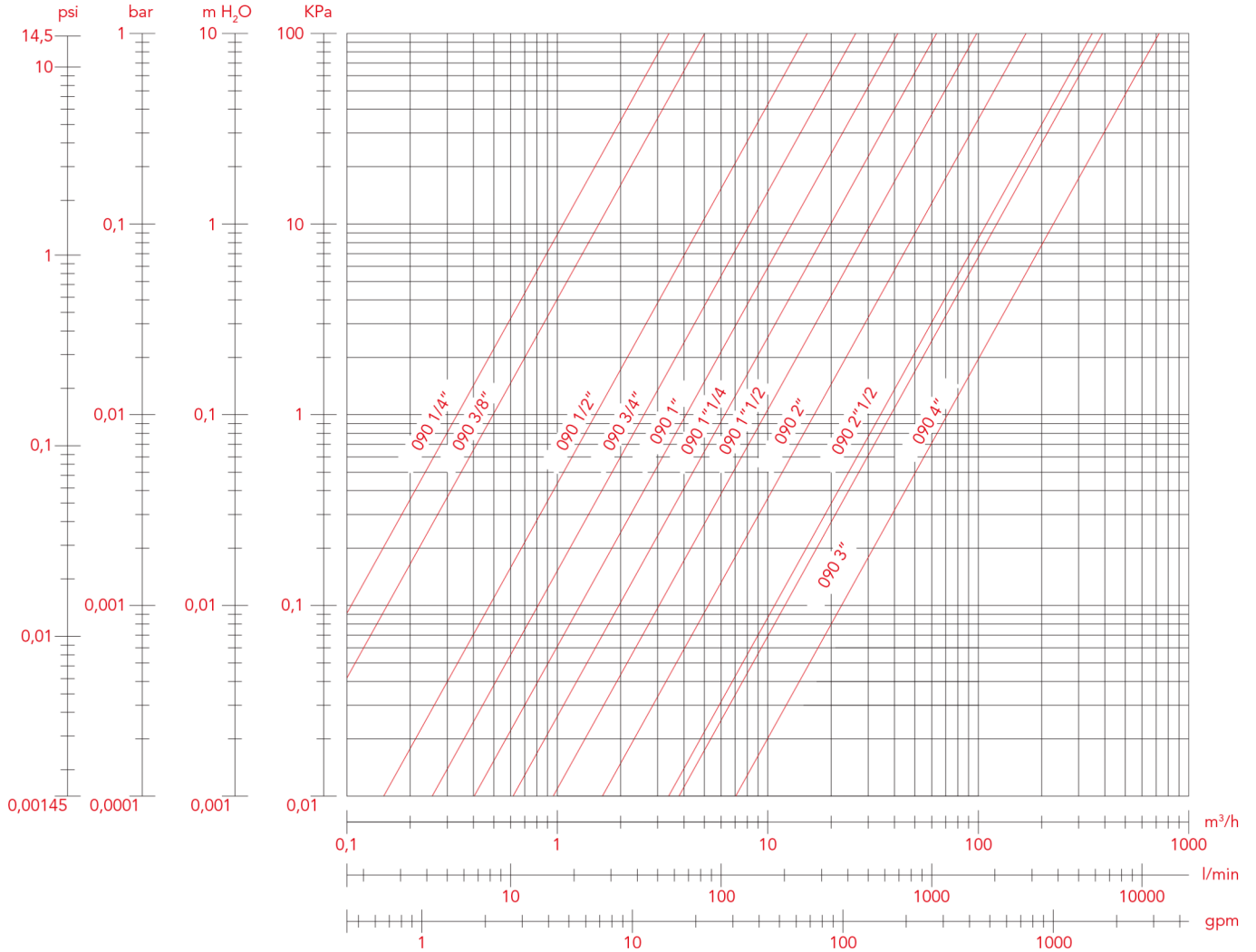
Verify the valve periodically, according to its application's field and its works' field and its work's conditions, in order to be sure that the valve works correctly.



# FULL FLOW BALL VALVES: IDEAL

## LOSS DIAGRAM (With water)

|    | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"  |
|----|-------|-------|-------|--------|--------|-----|
| KV | 15,65 | 26,26 | 41,44 | 63,69  | 101    | 169 |





# FULL FLOW BALL VALVES: IDEAL

## PRESSURE-TEMPERATURE DIAGRAM

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

