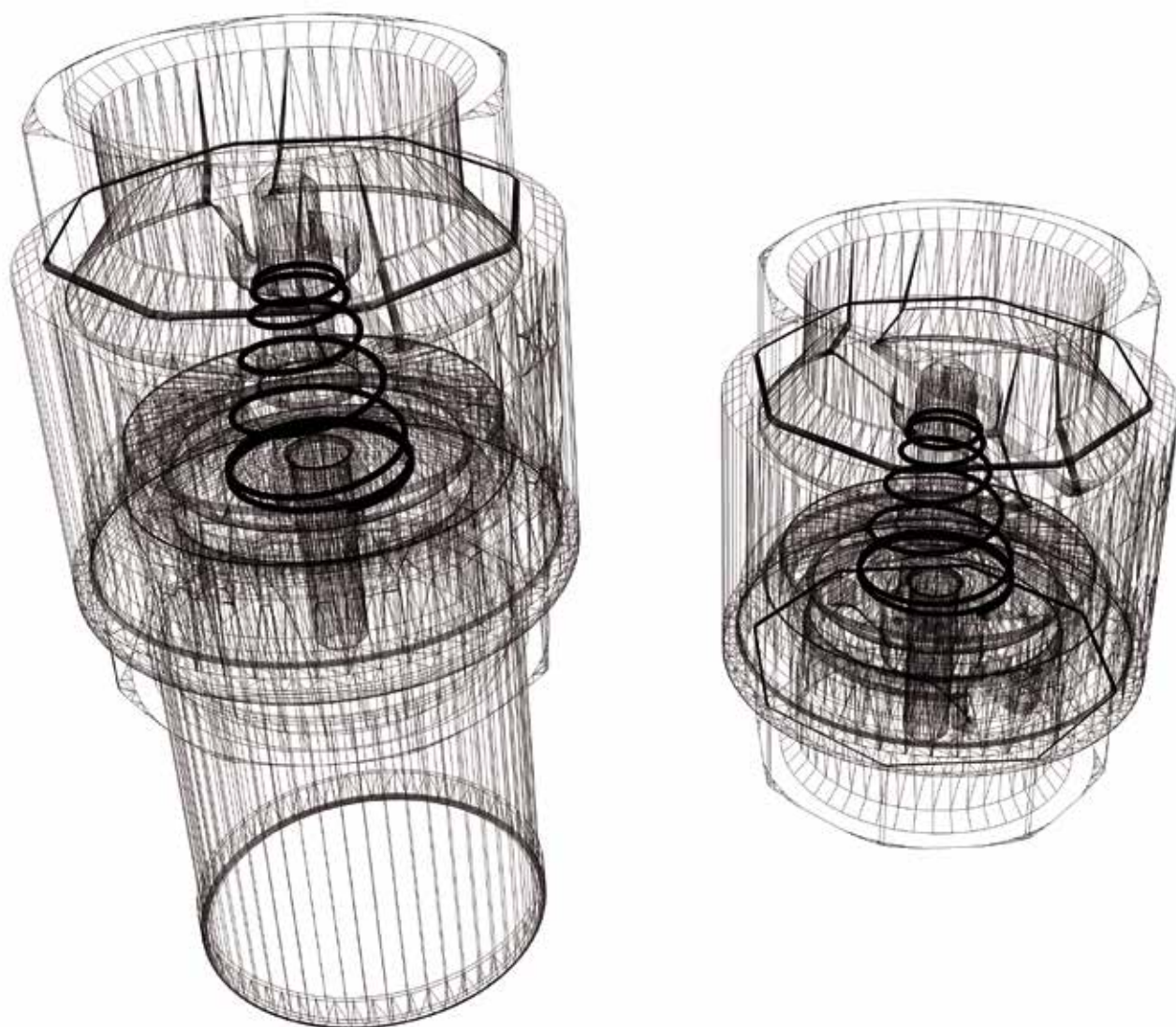




TECHNICAL CATALOGUE

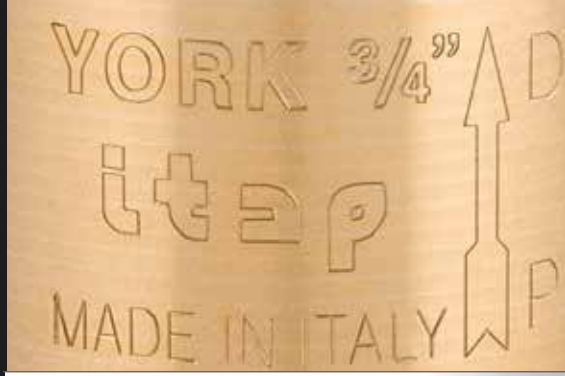
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# YORK® CHECK AND FOOT VALVES





ITAP SpA, founded in Lumezzane (Brescia) in 1972, is currently one of the leading production companies in Italy of valves, fittings and distribution manifolds for plumbing and heating systems. Thanks to fully automated production processes, with 72 tooling machines and 51 assembly lines, we are able to produce 200,000 pieces per day. Our innate pursuit for innovation and observance of technical regulations is supported by the company certification ISO 9001: 2008. The company has always considered its focus on quality as the main tool to obtain significant business results: today ITAP SpA is proud to offer products bearing the approval of numerous international certifying bodies.





TEC

CHECK AND FOOT

A detailed wireframe illustration of a York check and foot valve. The valve has a cylindrical body with a hexagonal top and bottom flange. Inside the body, a coiled spring is visible, connected to a central valve mechanism. The entire illustration is rendered in a light gray wireframe style.

YORK®  
CHECK AND  
FOOT VALVES

**SUITABLE FOR DOMESTIC  
WATER SERVICES,  
HEATING AND AIR-  
CONDITIONING PLANTS,  
COMPRESSED AIR  
SYSTEMS.**

**THEY CAN BE INSTALLED  
IN ANY POSITION:  
VERTICAL,  
HORIZONTAL,  
OBLIQUE.**

# 103

## YORK® CHECK VALVE



| SIZE           | PRESSURE     | CODE    | PACKING |
|----------------|--------------|---------|---------|
| 3/8" (DN 10)   | 12bar/174psi | 1030038 | 10/200  |
| 1/2" (DN 15)   | 12bar/174psi | 1030012 | 10/200  |
| 3/4" (DN 20)   | 12bar/174psi | 1030034 | 8/128   |
| 1" (DN 25)     | 12bar/174psi | 1030100 | 8/88    |
| 1 1/4" (DN 32) | 10bar/145psi | 1030114 | 6/54    |
| 1 1/2" (DN 40) | 10bar/145psi | 1030112 | 4/36    |
| 2" (DN 50)     | 10bar/145psi | 1030200 | 2/28    |
| 2 1/2" (DN 65) | 8bar/116psi  | 1030212 | 1/16    |
| 3" (DN 80)     | 8bar/116psi  | 1030300 | 1/12    |
| 4" (DN 100)    | 8bar/116psi  | 1030400 | 1/7     |

### TECHNICAL SPECIFICATIONS

Body in brass.

Plate in polymer.

Washer in NBR.

Spring in stainless steel.

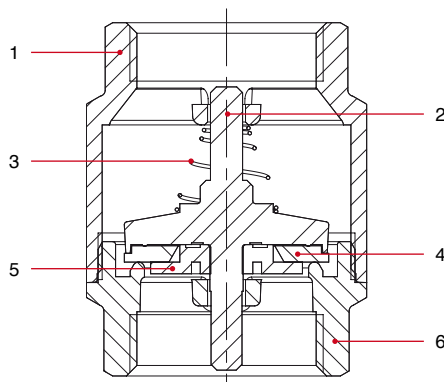
Minimum and maximum working temperatures: -20°C, 100°C.

Threads: ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).

### CERTIFICATIONS



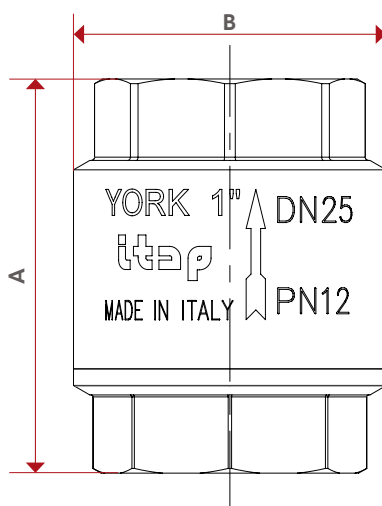
### MATERIALS



| POS. | DESCRIPTION | N. | MATERIAL                 |
|------|-------------|----|--------------------------|
| 1    | Body        | 1  | Brass CW617N             |
| 2    | Pin         | 1  | Polymer                  |
| 3    | Spring      | 1  | Stainless steel AISI 302 |
| 4    | Washer      | 1  | NBR                      |
| 5    | Plate       | 1  | Polymer                  |
| 6    | End adapter | 1  | Brass CW617N             |



## OVERALL DIMENSIONS



|            | 3/8" | 1/2" | 3/4" | 1"   | 1 1/4" | 1 1/2" | 2"   | 2 1/2" | 3"  | 4"    |
|------------|------|------|------|------|--------|--------|------|--------|-----|-------|
| DN         | 10   | 15   | 20   | 25   | 32     | 40     | 50   | 65     | 80  | 100   |
| A          | 46,5 | 48   | 53   | 60,5 | 66,5   | 74     | 80,5 | 98     | 103 | 118,5 |
| B          | 35   | 35   | 42   | 48   | 59,5   | 70,5   | 86   | 103    | 126 | 154   |
| Kg/cm² bar | 12   | 12   | 12   | 12   | 10     | 10     | 10   | 8      | 8   | 8     |
| LBS - psi  | 174  | 174  | 174  | 174  | 145    | 145    | 145  | 116    | 116 | 116   |

## MANUFACTURER INSTRUCTIONS

### Installation

The YORK® check valves are uni-directional; that means they manage the flow in one direction only, which is indicated by the arrow on the body. The valves are composed by a spring, a little valve and a couple of parts made of brass (body and end-adapter) which 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-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:

- For a proper installation of the valve, near curves and circulation pumps, the valve must be mounted at a distance equal to 10 times the diameter of the pipe.
- The installer has 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 case the fluid transported has got some impurities (dust, too hard water, and so on) it's necessary to remove impurities by or filter them, otherwise they could damage the seal.

### Disassembly the installed valve

To remove the valve from the pipe line or anyhow before unscrewing the connections linked:

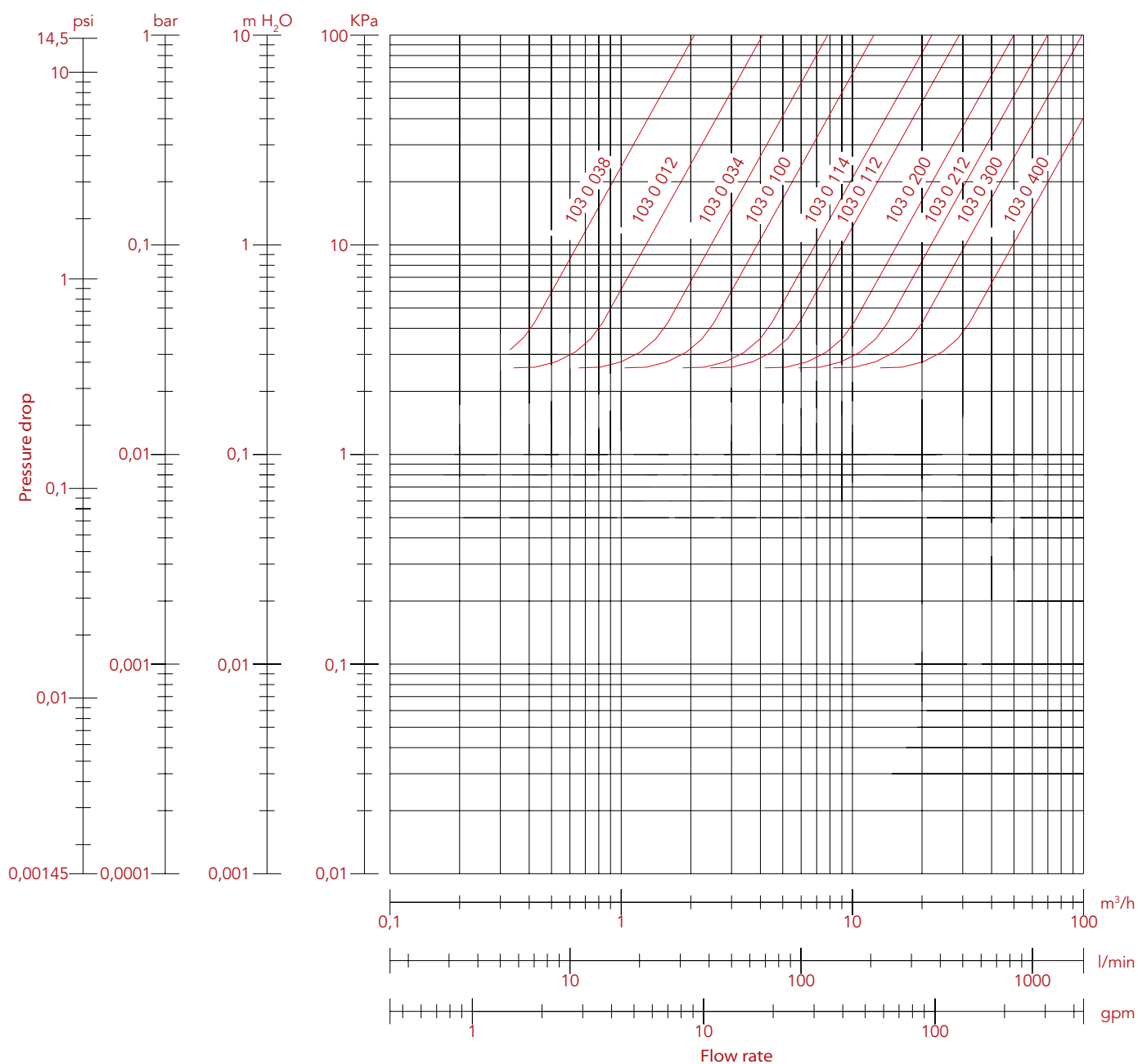
- Wear the protective clothing normally required to work with carried fluids;
- Depressurize the line;
- During the disassembling process, apply the key at the end of the valve, the one nearest the pipe

### 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. In case of losses of tightening, take note that these can be caused by a deposit of foreign bodies (dirty, calcareous) on the rubber seal. In order to solve this inconvenient, it's necessary to unmount the valve and remove the foreign body with compressed air tools.

# FLOW RATE AND PRESSURE DROP CHART

## WITH WATER



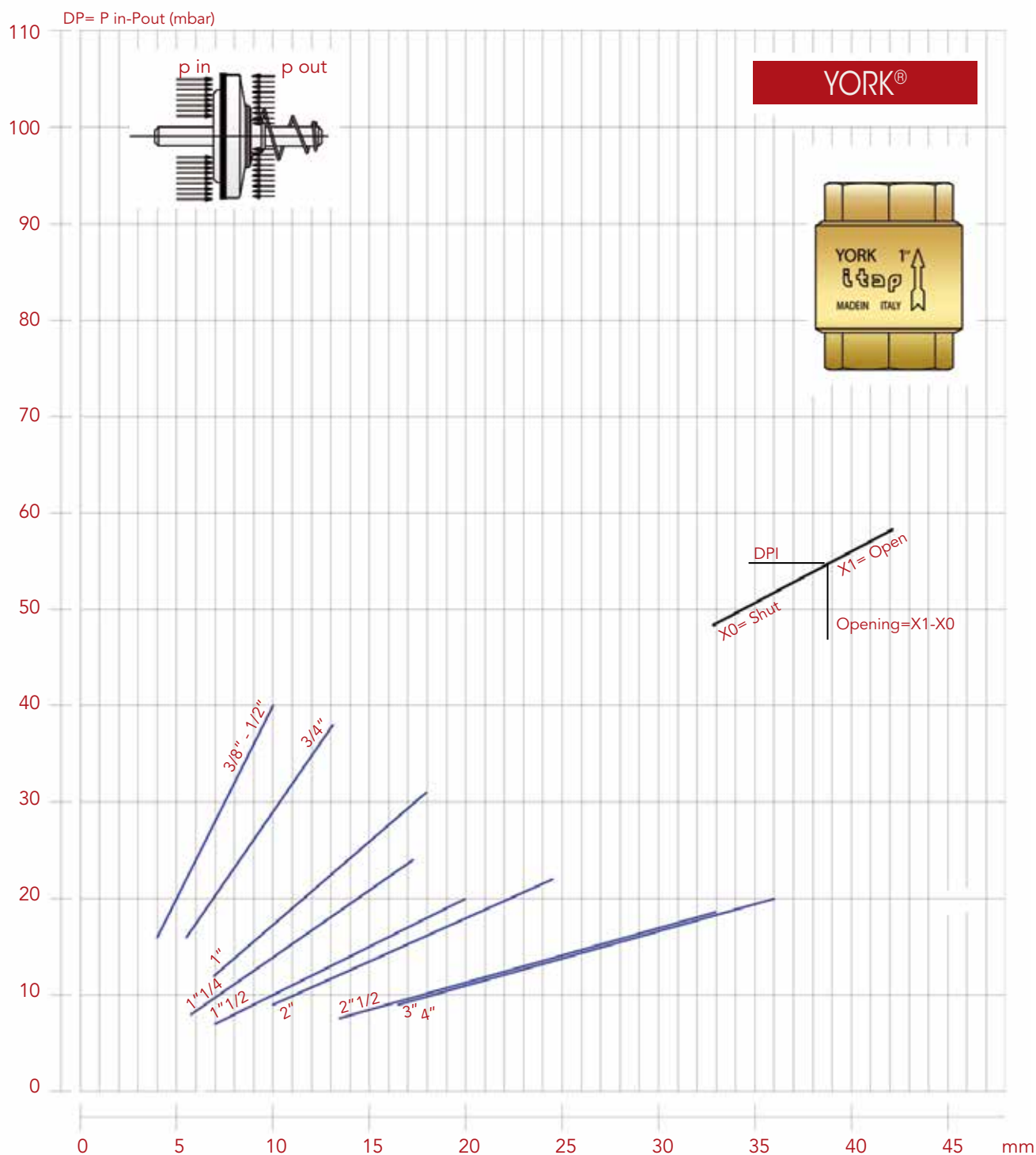
| SIZE | 3/8" | 1/2" | 3/4" | 1"    | 1 1/4" | 1 1/2" | 2"    | 2 1/2" | 3"    | 4"     |
|------|------|------|------|-------|--------|--------|-------|--------|-------|--------|
| Kv   | 2,11 | 4,22 | 7,92 | 11,67 | 22,42  | 29,39  | 51,40 | 69,90  | 98,49 | 157,91 |





TEC

# DIAGRAM MINIMUM PRESSURE TO GET THE VALVES OPENING



YORK®

# 108

## YORK® FOOT VALVE



| SIZE           | PRESSURE     | CODE    | PACKING |
|----------------|--------------|---------|---------|
| 3/8" (DN 10)   | 12bar/174psi | 1080038 | 10/220  |
| 1/2" (DN 15)   | 12bar/174psi | 1080012 | 10/220  |
| 3/4" (DN 20)   | 12bar/174psi | 1080034 | 8/144   |
| 1" (DN 25)     | 12bar/174psi | 1080100 | 8/120   |
| 1 1/4" (DN 32) | 10bar/145psi | 1080114 | 6/60    |
| 1 1/2" (DN 40) | 10bar/145psi | 1080112 | 4/48    |
| 2" (DN 50)     | 10bar/145psi | 1080200 | 2/26    |
| 2 1/2" (DN 65) | 6bar/87psi   | 1080212 | 1/25    |
| 3" (DN 80)     | 6bar/87psi   | 1080300 | 1/17    |
| 4" (DN 100)    | 6bar/87psi   | 1080400 | 1/10    |

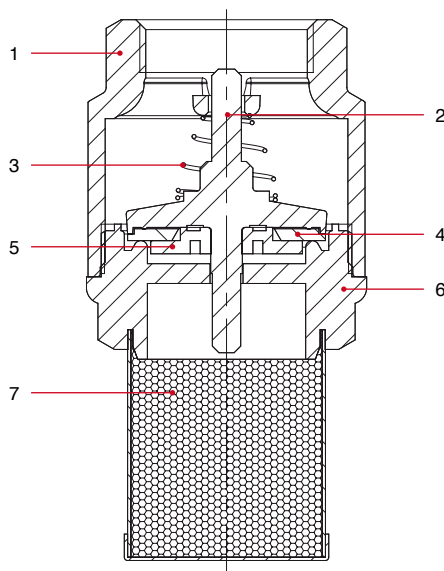
### TECHNICAL SPECIFICATIONS

Body in brass.  
 Plate in polymer.  
 Washer in NBR.  
 Spring in stainless steel.  
 Strainer in polymer and stainless steel.  
 Filtration degree: 3/8" through 2": 1200µm; 2 1/2" through 4": 2000µm.  
 Minimum and maximum working temperatures: -20°C, 100°C.  
 Threads: ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).

### CERTIFICATIONS



### MATERIALS

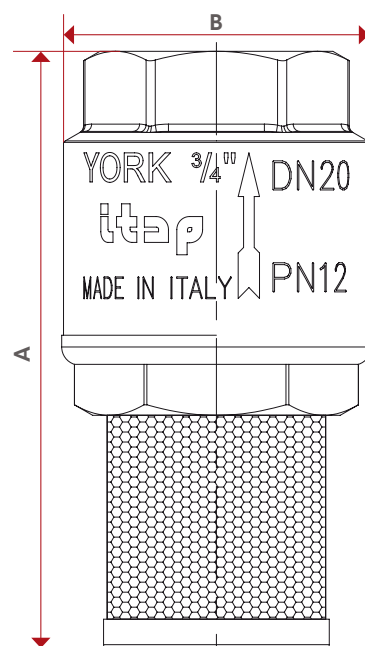


| POS. | DESCRIPTION | N. | MATERIAL                 |
|------|-------------|----|--------------------------|
| 1    | Body        | 1  | Brass CW617N             |
| 2    | Pin         | 1  | Polymer                  |
| 3    | Spring      | 1  | Stainless steel AISI 302 |
| 4    | Washer      | 1  | NBR                      |
| 5    | Plate       | 1  | Polymer                  |
| 6    | End adapter | 1  | Polymer                  |
| 7    | Strainer    | 1  | Stainless steel AISI 304 |



## OVERALL DIMENSIONS

|            |                                                   |                  |
|------------|---------------------------------------------------|------------------|
|            | 3/8" - 1/2" - 3/4" - 1" -<br>1 1/4" - 1 1/2" - 2" | 2 1/2" - 3" - 4" |
| Filtration | μ 1200                                            | μ 2000           |



|            | 3/8" | 1/2" | 3/4" | 1"   | 1 1/4" | 1 1/2" | 2"    | 2 1/2" | 3"    | 4"    |
|------------|------|------|------|------|--------|--------|-------|--------|-------|-------|
| DN         | 10   | 15   | 20   | 25   | 32     | 40     | 50    | 65     | 80    | 100   |
| A          | 69,5 | 70   | 82   | 91,5 | 108    | 119    | 136,5 | 164,5  | 184,5 | 214,5 |
| B          | 35   | 35   | 42   | 48   | 59,5   | 70,5   | 86    | 103    | 126   | 154   |
| Kg/cm² bar | 12   | 12   | 12   | 12   | 10     | 10     | 10    | 6      | 6     | 6     |
| LBS - psi  | 174  | 174  | 174  | 174  | 145    | 145    | 145   | 87     | 87    | 87    |

## MANUFACTURER INSTRUCTIONS

### Installation

The YORK® check valves are uni-directional; that means they manage the flow in one direction only, which is indicated by the arrow on the body. The valves are composed by a spring, a little valve and a couple of parts made of brass (body and end-adapter) which 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-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:

- For a proper installation of the valve, near curves and circulation pumps, the valve must be mounted at a distance equal to 10 times the diameter of the pipe.
- The installer has 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 case the fluid transported has got some impurities (dust, too hard water, and so on) it's necessary to remove impurities by or filter them, otherwise they could damage the seal.

### Disassembly the installed valve

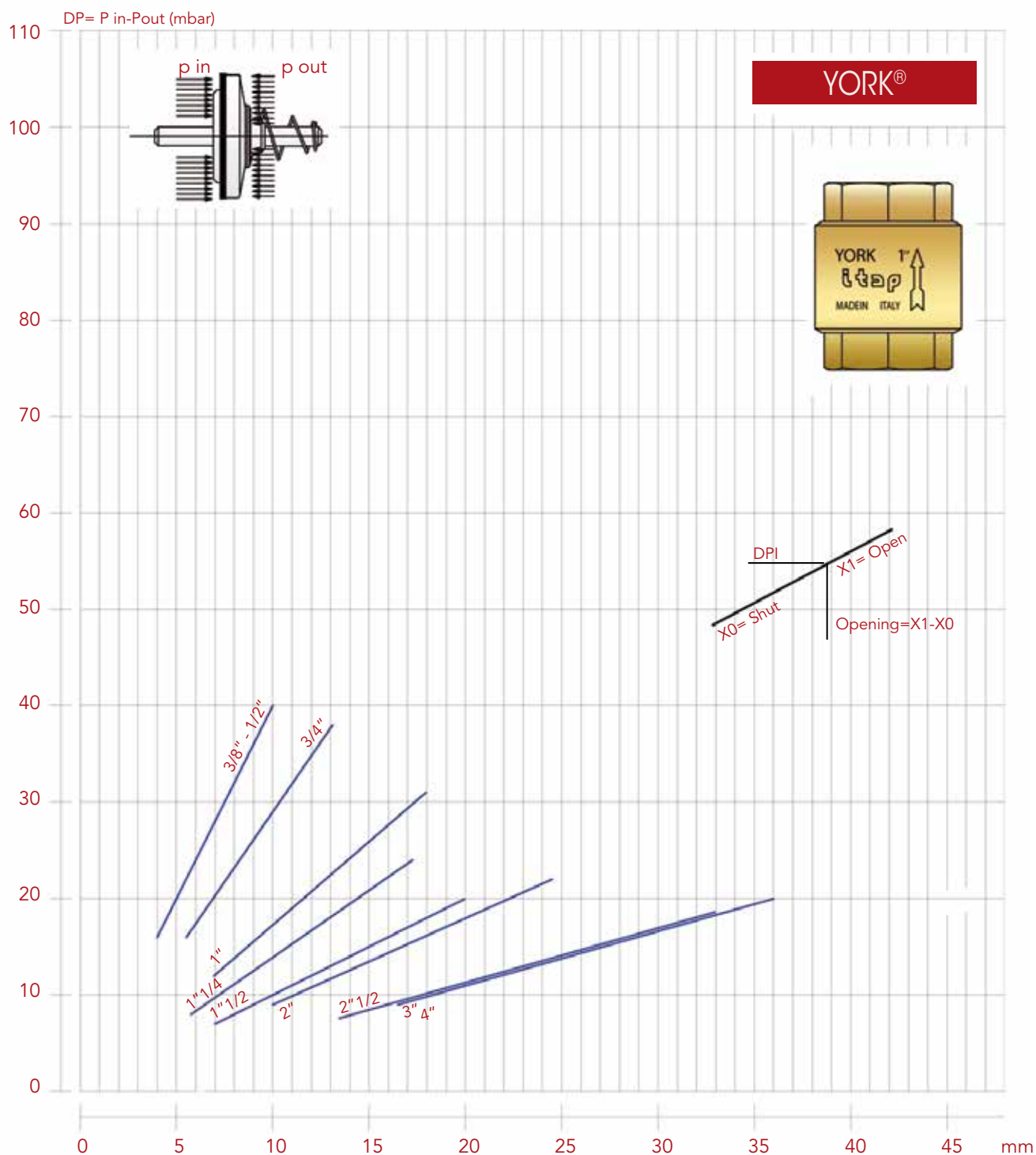
To remove the valve from the pipe line or anyhow before unscrewing the connections linked:

- Wear the protective clothing normally required to work with carried fluids;
- Depressurize the line;
- During the disassembling process, apply the key at the end of the valve, the one 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. In case of losses of tightening, take note that these can be caused by a deposit of foreign bodies (dirty, calcareous) on the rubber seal. In order to solve this inconvenient, it's necessary to unmount the valve and remove the foreign body with compressed air tools.

# DIAGRAM MINIMUM PRESSURE TO GET THE VALVES OPENING





TEC

102

STRAINER FOR  
EUROPA®, YORK®,  
ROMA®, BLOCK®  
CHECK VALVES



| SIZE          | CODE    | PACKING |
|---------------|---------|---------|
| 3/8" (DN 10)  | 1020038 | 30/1200 |
| 1/2" (DN 15)  | 1020012 | 30/900  |
| 3/4" (DN 20)  | 1020034 | 20/480  |
| 1" (DN 25)    | 1020100 | 20/280  |
| 1"1/4 (DN 32) | 1020114 | 10/180  |
| 1"1/2 (DN 40) | 1020112 | 10/140  |
| 2" (DN 50)    | 1020200 | 4/76    |
| 2"1/2 (DN 65) | 1020212 | 1/62    |
| 3" (DN 80)    | 1020300 | 1/36    |
| 4" (DN 100)   | 1020400 | 1/20    |

#### TECHNICAL SPECIFICATIONS

Filtration degree:

- 3/8" through 2": 1200µm;
- 2"1/2 through 4": 2000µm.

Strainer in stainless steel.

Threaded end in polymer.

Thread: ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).

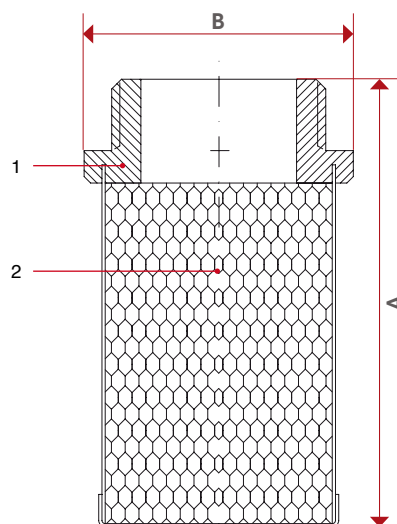
**Available also with NPT thread in the sizes 2"1/2, 3" e 4".**

#### CERTIFICATIONS



#### MATERIALS

#### OVERALL DIMENSIONS



|   | 3/8" | 1/2" | 3/4" | 1"   | 1"1/4 | 1"1/2 | 2" | 2"1/2 | 3"  | 4"    |
|---|------|------|------|------|-------|-------|----|-------|-----|-------|
| A | 42   | 47   | 57,5 | 69   | 75    | 83    | 98 | 123   | 138 | 152,5 |
| B | 25,5 | 29,5 | 36   | 43,5 | 50,5  | 56,5  | 69 | 86    | 102 | 129   |

| POS. | DESCRIPTION | N. | MATERIAL                 |
|------|-------------|----|--------------------------|
| 1    | End adapter | 1  | Polymer                  |
| 2    | Strainer    | 1  | Stainless steel AISI 304 |

YORK®

# 107

STRAINER FOR  
EUROPA®, YORK®,  
ROMA®, BLOCK®  
CHECK VALVES



| SIZE           | CODE    | PACKING |
|----------------|---------|---------|
| 3/8" (DN 10)   | 1070038 | 50/1500 |
| 1/2" (DN 15)   | 1070012 | 40/1200 |
| 3/4" (DN 20)   | 1070034 | 35/840  |
| 1" (DN 25)     | 1070100 | 30/420  |
| 1 1/4" (DN 32) | 1070114 | 20/280  |
| 1 1/2" (DN 40) | 1070112 | 15/195  |
| 2" (DN 50)     | 1070200 | 8/112   |

## TECHNICAL SPECIFICATIONS

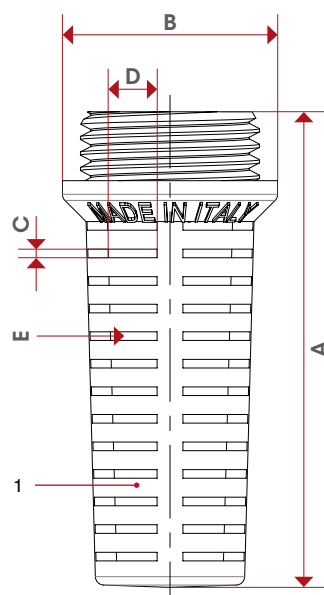
Strainer in polymer.  
Thread: ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).

## CERTIFICATIONS



## MATERIALS

## OVERALL DIMENSIONS



|                | 3/8"  | 1/2"  | 3/4"  | 1"    | 1 1/4" | 1 1/2" | 2"    |
|----------------|-------|-------|-------|-------|--------|--------|-------|
| A              | 55,5  | 55    | 55,3  | 59    | 69,5   | 74     | 87,3  |
| B              | 23    | 25    | 32    | 39    | 47     | 54     | 66    |
| C              | 1     | 1     | 1     | 1     | 1      | 1      | 1     |
| D              | 5,58  | 8,15  | 11,37 | 14,74 | 20,78  | 23,94  | 30,99 |
| E (n°)         | 52    | 52    | 52    | 52    | 56     | 64     | 76    |
| Filtration (μ) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000  | 1.000  | 1.000 |

| POS. | DESCRIPTION | N. | MATERIAL |
|------|-------------|----|----------|
| 1    | Strainer    | 1  | Polymer  |





# NOTES



ITAP S.p.A.  
Via Ruca 19  
25065 Lumezzane  
Brescia (ITALIA)  
Tel 030 89270  
Fax 030 8921990  
[www.itap.it](http://www.itap.it) - [info@itap.it](mailto:info@itap.it)