

TECHNICAL CATALOGUE

EUROPA® 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 63 tooling machines and 25 assembly lines, we are able to produce 150,000 pieces per day. Our innate pursuit for innovation and observance of technical regulations in force is supported by the company certification ISO 9001: 2008. The company has always considered its focus on quality as the main tool to obtaining significant business results: today ITAP SpA is proud to offer products bearing the approval of numerous international certifying bodies.



EUROPA® CHECK AND FOOT VALVES





EUROPA®
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.**

100

EUROPA® CHECK VALVE



| SIZE | PRESSURE | CODE | PACKING |
|---------------|----------------|---------|---------|
| 3/8" (DN 10) | 25bar/362.5psi | 1000038 | 10/130 |
| 1/2" (DN 15) | 25bar/362.5psi | 1000012 | 10/120 |
| 3/4" (DN 20) | 25bar/362.5psi | 1000034 | 8/88 |
| 1" (DN 25) | 25bar/362.5psi | 1000100 | 6/54 |
| 1"1/4 (DN 32) | 18bar/261psi | 1000114 | 4/36 |
| 1"1/2 (DN 40) | 18bar/261psi | 1000112 | 4/32 |
| 2" (DN 50) | 18bar/261psi | 1000200 | 2/20 |
| 2"1/2 (DN 65) | 12bar/174psi | 1000212 | 1/8 |
| 3" (DN 80) | 12bar/174psi | 1000300 | 1/6 |
| 4" (DN 100) | 12bar/174psi | 1000400 | 1/4 |

TECHNICAL SPECIFICATIONS

Body in brass.

Plate in stainless steel.

Washer in NBR.

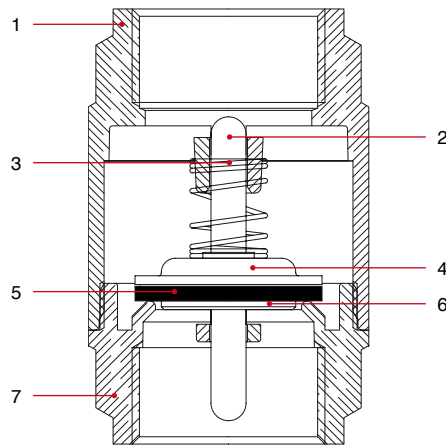
Spring in stainless steel.

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

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

Available also with NPT thread in the sizes from 1/2" to 4".

MATERIALS



| POS. | DESCRIPTION | N. | MATERIAL |
|------|-------------|----|--------------------------|
| 1 | Body | 1 | Brass CW617N |
| 2 | Pin | 1 | Brass CW614N |
| 3 | Spring | 1 | Stainless steel AISI 302 |
| 4 | Plate | 1 | Stainless steel AISI 304 |
| 5 | Washer | 1 | NBR |
| 6 | Plug | 1 | Brass CW614N |
| 7 | 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 | 55 | 58,5 | 65 | 74,5 | 83 | 93 | 101 | 122 | 141,5 | 158,5 |
| B | 34,5 | 34,5 | 41,5 | 48 | 60,5 | 71 | 87 | 120 | 140 | 172 |
| Kg/cm ² bar | 25 | 25 | 25 | 25 | 18 | 18 | 18 | 12 | 12 | 12 |
| LBS - psi | 362,5 | 362,5 | 362,5 | 362,5 | 261 | 261 | 261 | 174 | 174 | 174 |

MANUFACTURER INSTRUCTIONS

Installation

The EUROPA® check valves are uni-directional; in the sense that 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:

- The installer has to be sure that the two pipes are correctly allied;
- 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 gas get'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:

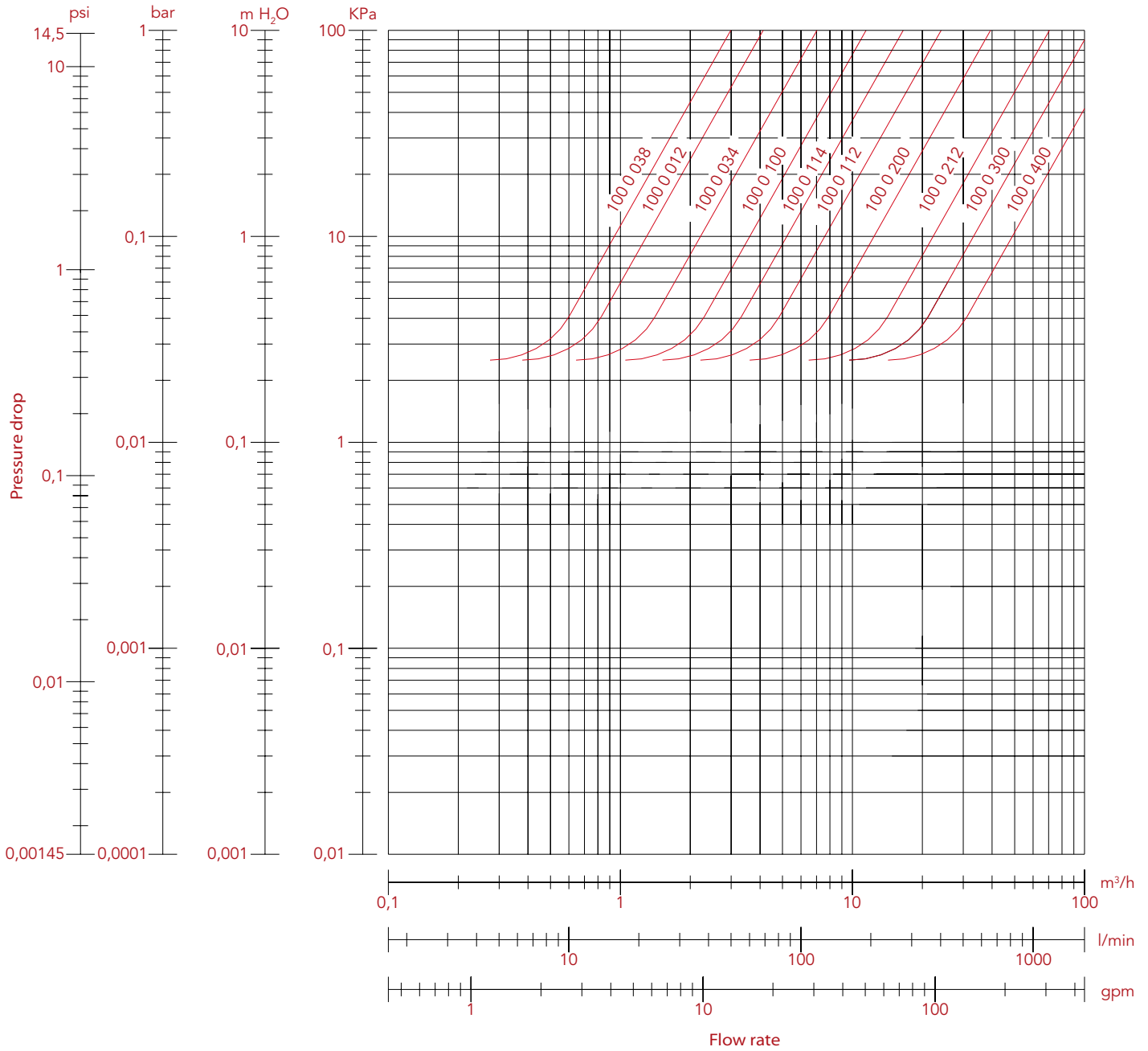
- Wear the protective clothing normally required to work with carried fluids;
- Take the pressure inside the line out;
- During the disassembling process, apply the key at the end of the valve, the one nearest the pipe

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

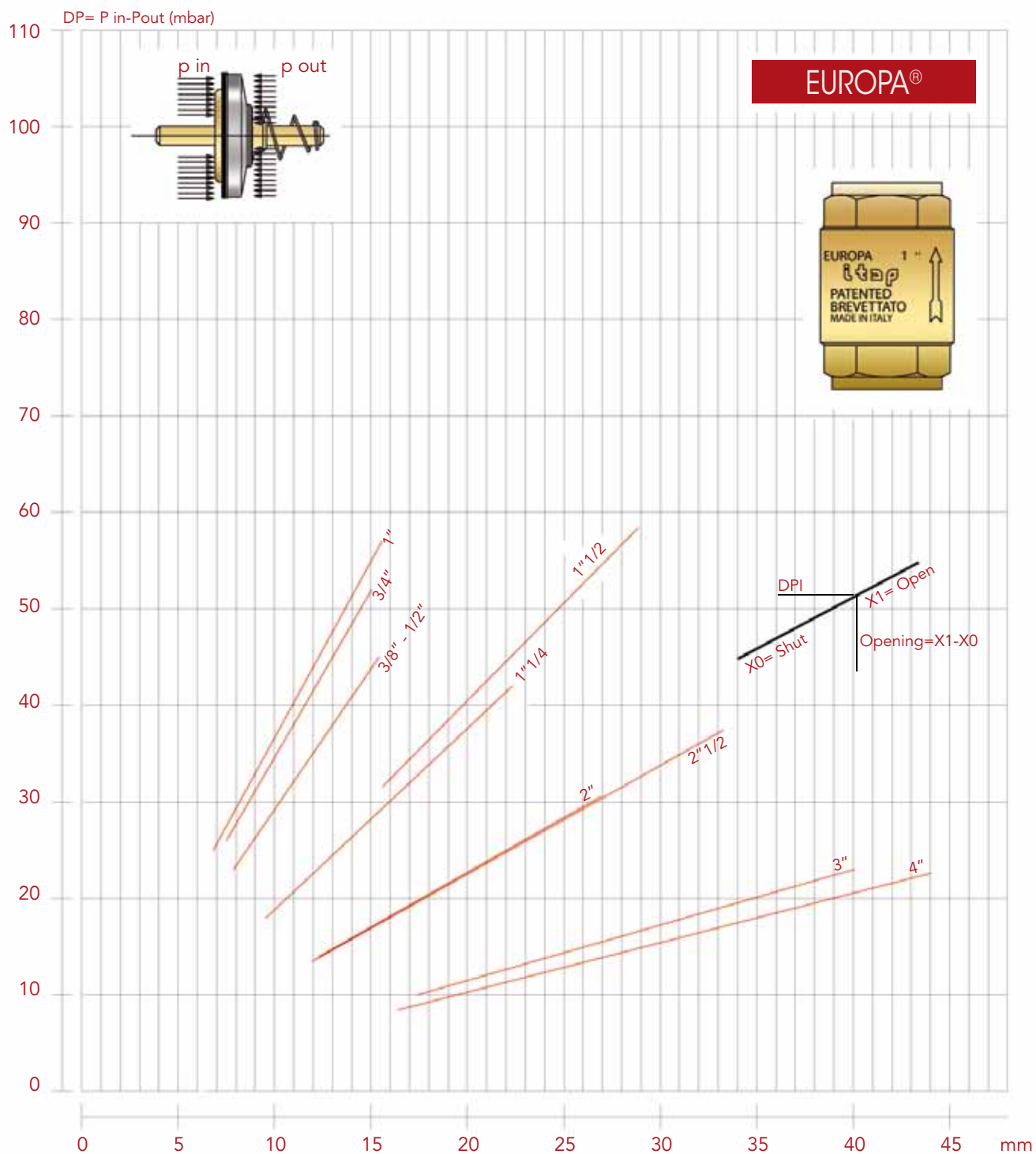


| SIZE | 3/8" | 1/2" | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" |
|------|------|------|------|-------|--------|--------|-------|--------|--------|--------|
| Kv | 2,99 | 4,12 | 7,03 | 11,45 | 16,54 | 24,12 | 39,32 | 70,64 | 105,60 | 155,30 |

Dates given by laboratory CETIM accredited by RNE



DIAGRAM MINIMUM PRESSURE TO GET THE VALVES OPENING



105

EUROPA®
FOOT VALVE



| SIZE | PRESSURE | CODE | PACKING |
|----------------|----------------|---------|---------|
| 3/8" (DN 10) | 25bar/362.5psi | 1050038 | 8/120 |
| 1/2" (DN 15) | 25bar/362.5psi | 1050012 | 8/120 |
| 3/4" (DN 20) | 25bar/362.5psi | 1050034 | 6/90 |
| 1" (DN 25) | 25bar/362.5psi | 1050100 | 4/60 |
| 1 1/4" (DN 32) | 18bar/261psi | 1050114 | 4/32 |
| 1 1/2" (DN 40) | 18bar/261psi | 1050112 | 2/26 |
| 2" (DN 50) | 18bar/261psi | 1050200 | 2/14 |
| 2 1/2" (DN 65) | 12bar/174psi | 1050212 | 1/6 |
| 3" (DN 80) | 12bar/174psi | 1050300 | 1/5 |
| 4" (DN 100) | 12bar/174psi | 1050400 | 1/3 |

TECHNICAL SPECIFICATIONS

Body in brass.

Plate in stainless steel.

Washer in NBR.

Spring in stainless steel.

Strainer in polymer and stainless steel.

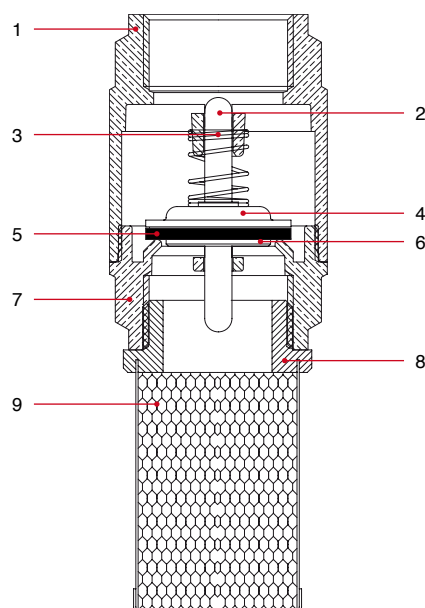
Filtration degree: 3/8" through 2": 1200µm; from 2 1/2" to 4": 2000µm.

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

Threads: 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".

MATERIALS



| POS. | DESCRIPTION | N. | MATERIAL |
|------|-------------|----|--------------------------|
| 1 | Body | 1 | Brass CW617N |
| 2 | Pin | 1 | Brass CW614N |
| 3 | Spring | 1 | Stainless steel AISI 302 |
| 4 | Plate | 1 | Stainless steel AISI 304 |
| 5 | Washer | 1 | NBR |
| 6 | Plug | 1 | Brass CW614N |
| 7 | End adapter | 1 | Brass CW617N |
| 8 | End adapter | 1 | Polymer |
| 9 | Strainer | 1 | Stainless steel AISI 304 |



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 | 90 | 97,5 | 114,5 | 133,5 | 147 | 165 | 187 | 230 | 264,5 | 297 |
| B | 34,5 | 34,5 | 41,5 | 48 | 60,5 | 71 | 87 | 120 | 140 | 172 |
| Kg/cm ² bar | 25 | 25 | 25 | 25 | 18 | 18 | 18 | 12 | 12 | 12 |
| LBS - psi | 362,5 | 362,5 | 362,5 | 362,5 | 261 | 261 | 261 | 174 | 174 | 174 |

MANUFACTURER INSTRUCTIONS

Installation

The EUROPA® check valves are uni-directional; in the sense that 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:

- The installer has to be sure that the two pipes are correctly allied;
- 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 gas get'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

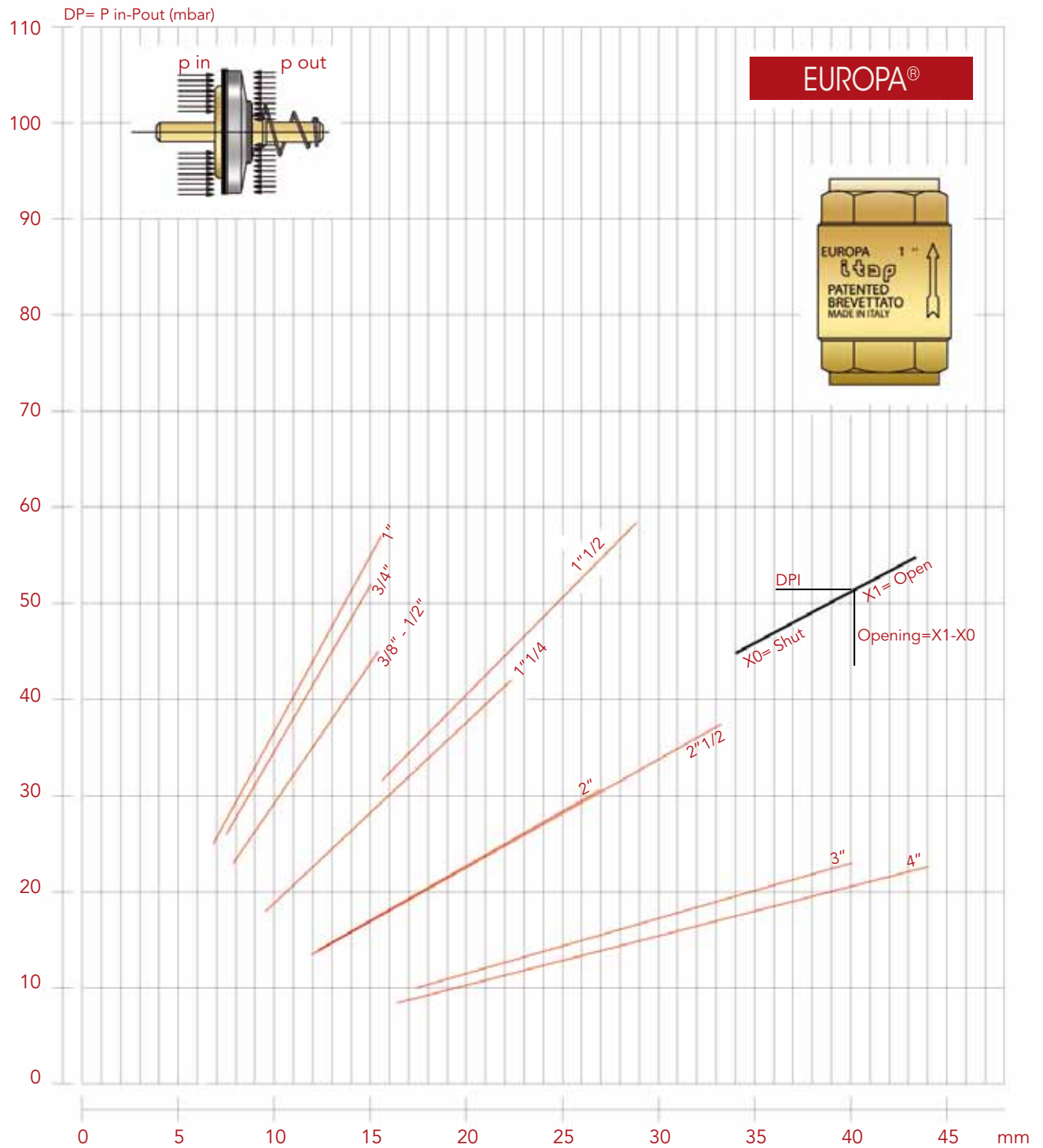
To remove the valve from the pipe line or anyhow before unscrewing the connections linked:

- Wear the protective clothing normally required to work with carried fluids;
- Take the pressure inside the line out;
- 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



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.

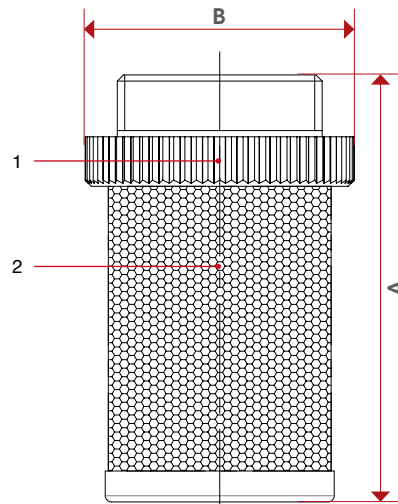
Threaded end in polymer.

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".

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 |

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

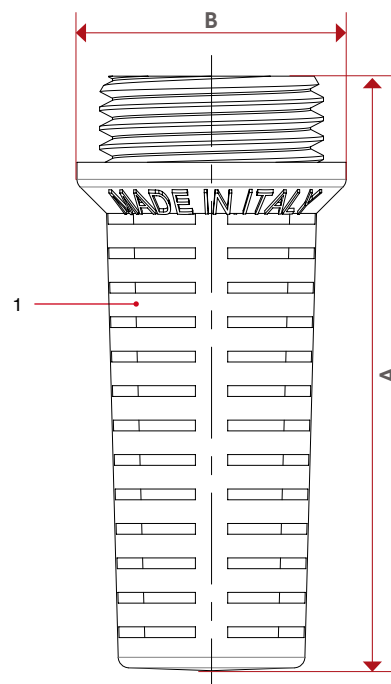
Strainer in polymer.

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

Filtration degree: 1000µm

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 |

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





NOTES

Lined area for notes with horizontal dashed lines.



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