



Precision  
Agriculture



Ultimate control  
ultimate  
precision

# Valves

Control Valves, Manual Valves, Air Valves

2025 v1.0

/ Product Catalog





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# / Control Valves



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### Spare Parts

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|                |    |
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|                |    |
|----------------|----|
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|               |    |
|---------------|----|
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|---------------|----|

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# Product Portfolio

## AquaNet™

Mechanism: Rigid Plug  
Material: Reinforced Nylon  
Diameters: ¾" – 2"



## DPR-3000

Mechanism: Spring loaded piston  
Material: Reinforced nylon  
Diameters: 3" , 4"



## Series 75

Mechanism: Diaphragm  
Material: Reinforced Nylon, Polypropylene  
Diameters: ¾" – 8"R



## Series 80

Mechanism: Rigid Plug  
Material: Reinforced Nylon  
Diameters: ¾" – 4"R



## Series 90

Mechanism: Diaphragm  
Material: PVC  
Diameters: 3" - 6"



## Series 100

Mechanism: Diaphragm  
Material: Various Metals  
Diameters: ¾" – 32"



## Series 300

Mechanism: Rigid Plug  
Material: Various Metals  
Diameters: ¾" – 40"



# Typical Applications

## Manual Control On/Off



### MAN

The valve is controlled manually by a three port selector that allows the user to select the closed, opened or remote-controlled position of the valve. Opening and closing the valve is quick and effortless, even under high pressure conditions.

## Hydraulic Control On/Off



### HYD

A 3-way relay valve, activated by hydraulic or pneumatic pressure command, opens or closes the main valve. The standard valve is supplied in the "normally closed" position. The "normally open" position is optional. Hydraulic activation can be added to other control applications on request.

## Electric Control On/Off



### ELE

A 3-way solenoid valve, activated by an electric current or an electric pulse, opens or closes the main valve. The standard valve is supplied in the "normally closed" position. The "normally open" position is optional. Electric activation can be added to other control applications on request.

## Pressure Reducing



### PRV

The valve maintains a preset downstream pressure, regardless of upstream pressure or flow rate fluctuation. The main valve is controlled by either a 3-way pilot valve (allowing full opening when upstream pressure drops below the pressure set-point), or by a 2-way pilot valve (creating a minimal differential in open position).

## Pressure Sustaining (and Relief)



### PSV

The valve maintains upstream pressure, regardless of flow rate variations. The valve will be in the "closed" position if the upstream pressure drops below the set-point and will fully open when the upstream pressure exceeds the set-point.

### Quick Relief



#### QRV

The valve opens instantly when the pressure in the pipeline exceeds the safe level, thus relieving excessive pressure from the network. When the pressure returns to normal, the valve closes slowly, at an adjustable pace.

### Flow Control



#### FLV

The valve limits the flow rate in the network to a preset value regardless of upstream pressure variations. The valve fully opens when the flow rate drops below the set point.

### Level Control



#### LCV

The main valve is controlled by a float valve, located in the tank or reservoir and set at the required maximum water level. The valve maintains the maximum level continuously.

### Surge Anticipating



#### SAV

The valve protects the pumping system from water hammer, caused by sudden pump shut-off (in the case of power failure, for example). The valve is assembled on a T-junction of the main pipeline, and instantly opens when the pump stops, relieving the returning high pressure wave. The valve slowly closes once the pressure returns to the static level. The valve also functions as a pressure relief valve.

### Pump Control



#### PCV

The valve eliminates damaging surges caused by pump start-up and shut-off. The electrically activated valve gradually opens on pump start-up, and slowly closes before the pump is switched off. The valve will automatically close drip tight in case of power failure. Optional Additions: Flow Rate Limitation, Extended Closure, Two-Stage Operating, Pressure Reducing and Pressure Sustaining.

# DPR 3000

## DIRECT PRESSURE REGULATING VALVE

Netafim Direct Pressure Regulating Valves designed to protect thin-wall irrigation systems from unstable pressure, water hammers and fluctuations. It is suitable for open field and intensive greenhouse applications.



Quick  
reaction



Great  
modularity



Remote  
operation

## / Benefits & Features

- **Quick reaction**
  - Fast-acting pressure regulation minimizes downstream pressure fluctuations, protecting the system from water hammers and supporting intensive irrigation
- **Pressure Uniformity**
  - It ensures continuous non-peak, consistent pressure and maximum system uptime
- **Modular design**
  - Supports multiple spring options for precise pressure set points and a wide range of connection types including grooved and solvent-welded, in ISO and ATM standards.
  - The DPR 3000 is also available at various downstream pressures
- **Remote operation**
  - By hydraulic-relays operators or solenoids such as Aquative™

## / Specifications & Recommendations

- Diameters – 4" (Coming soon: 2", 3", 6")
- Connections Types – Grooved (VIC) 4"; Female Solvent Welded (SW) ASTM 3"/ ISO 90 mm
- Maximum Fluid Temperature – 60°C (140°F)
- PN Rating – 6.0 bar / 87 psi
- Body – Reinforced polyamide
- Springs – Stainless steel
- Flow Rates\* – Min. 20 m³/h (88.0 gpm); Max. 80 m³/h (352 gpm)
- Max. Inlet Pressure – 6.0 bar (87 psi)
- Spring Types – 0.70, 1.20, 1.70, 2.0 bar (10.0, 17.50, 25.0, 29.0 psi)

\* Higher flow rates will incur higher pressure losses, and probably less stability especially at low upstream pressures

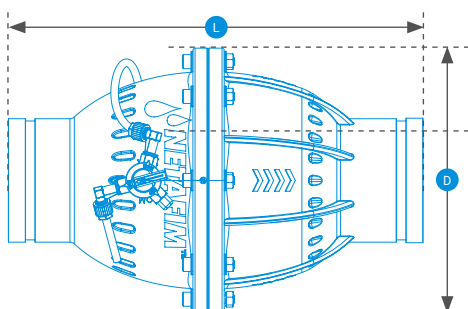
**Note:** The DPR 3000 should not be opened/disassembled in the field/grower warehouse. Only a specialized technician with the correct tools should be allowed to inspect the interior parts of the product.

## → Opening and Closing Pressures Required for Each Spring

| Spring                  | Opening Pressure    | Closing Pressure   |
|-------------------------|---------------------|--------------------|
| A - 0.70 bar / 10.0 psi | 1.2 bar / 17.50 psi | 1.1 bar / 16.0 psi |
| B - 1.2 bar / 17.50 psi | 1.2 bar / 17.50 psi | 1.1 bar / 16.0 psi |
| C - 1.7 bar / 24.50 psi | 1.8 bar / 26.0 psi  | 1.1 bar / 16.0 psi |
| D - 2 bar / 29.0 psi    | 1.8 bar / 26.0 psi  | 1.1 bar / 16.0 psi |

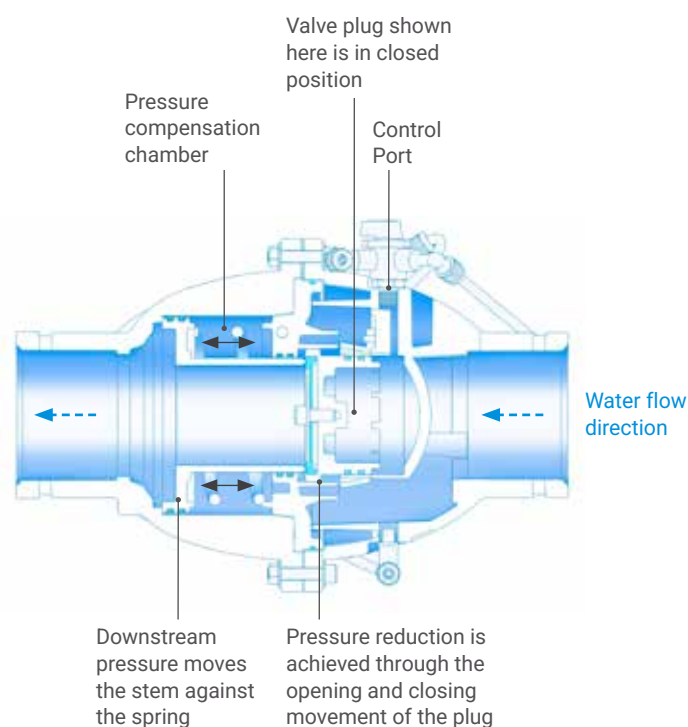
## → Technical Dimensions

DPR 3000 4" (Kv=120, Cv=140)

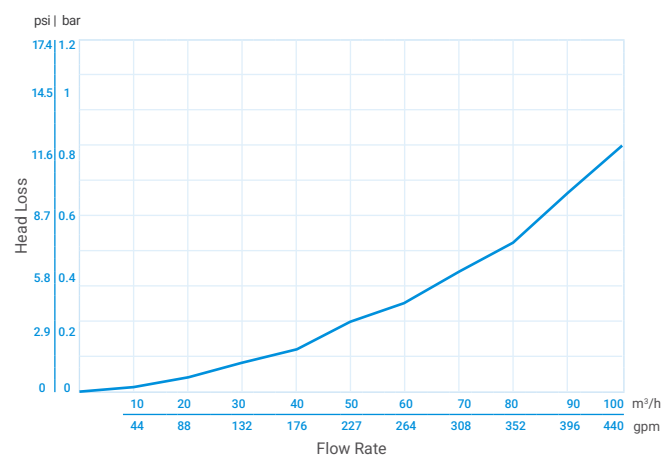


| Model       | Diameter<br>(mm / inch) | Length<br>(mm / inch) | Weight<br>(kg / lb.) |
|-------------|-------------------------|-----------------------|----------------------|
| DPR 3000 4" | 245 / 9.64              | 380 / 14.95           | 3.75 / 8.27          |

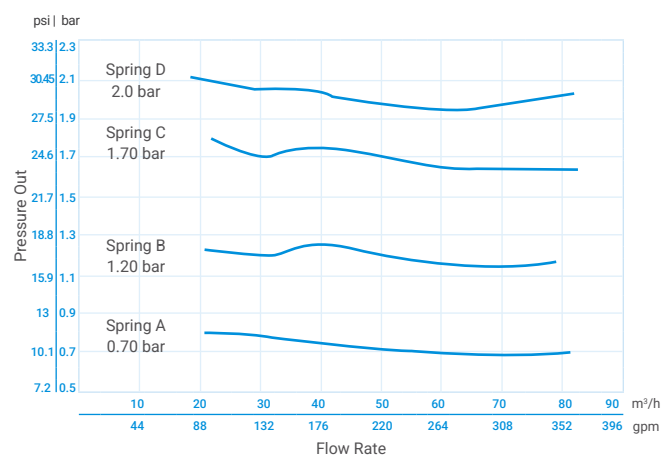
## → Cross Section



## → Head Loss vs. Flow Rate



## → Outlet Pressure vs. Flow Rate



All test were performed at inlet pressure of 3 bar/ 43.50 psi

## → Flow Rate & Pressure Regulation Spring Selection

| Product                                     | Min. Flow Rate |      | Max. Flow Rate |       | Max. Regulation Pressure |      | Body Material        |
|---------------------------------------------|----------------|------|----------------|-------|--------------------------|------|----------------------|
|                                             | m³/h           | gpm  | m³/h           | gpm   | bar                      | psi  |                      |
| 4" DPR 3000 Spring A (0.70 bar / 10.0 psi)  | 20.0           | 88.0 | 80.0           | 352.5 | 4.50                     | 65.0 | Reinforced Polyamide |
| 4" DPR 3000 Spring B (1.20 bar / 17.50 psi) | 20.0           | 88.0 | 80.0           | 352.5 | 6.00                     | 87.0 | Reinforced Polyamide |
| 4" DPR 3000 Spring C (1.70 bar / 25.0 psi)  | 20.0           | 88.0 | 80.0           | 352.5 | 6.00                     | 87.0 | Reinforced Polyamide |
| 4" DPR 3000 Spring D (2.0 bar / 29.0 psi)   | 20.0           | 88.0 | 80.0           | 352.5 | 6.00                     | 87.0 | Reinforced Polyamide |

## → Catalog Numbers

| Description                             | Flow Range          |                    | Nominal Output Pressure |       | Max. Regulation Pressure |      | Catalog Number |
|-----------------------------------------|---------------------|--------------------|-------------------------|-------|--------------------------|------|----------------|
|                                         | m³/h<br>(min - max) | gpm<br>(min - max) | bar                     | psi   | bar                      | psi  |                |
| Spring A (0.7 bar / 10.0 psi)           |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN A S P       | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000002   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC A S P | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000003   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC A P  | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000004   |
| DPRV PL 4" H VIC/ 3" ISO MAN A S P      | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000005   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC A S P | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000006   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC A P   | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000007   |
| Spring B (1.20 bar / 17.5 psi)          |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN B S P       | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000010   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC B S P | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000011   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC B P  | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000012   |
| DPRV PL 4" H VIC/ 3" ISO MAN B S P      | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000013   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC B S P | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000014   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC B P   | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000015   |
| Spring C (1.70 bar/ 25 psi)             |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN C S P       | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000030   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC C S P | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000031   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC C P  | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000032   |
| DPRV PL 4" H VIC/ 3" ISO MAN C S P      | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000033   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC C S P | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000034   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC C P   | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000035   |
| Spring D (2.0 bar/ 29.0 psi)            |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN D S P       | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000040   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC D S P | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000041   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC D P  | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000042   |
| DPRV PL 4" H VIC/ 3" ISO MAN D S P      | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000043   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC D S P | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000044   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC D P   | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000045   |

ELE = Electric control on/off  
 MAN = Manual control on/off  
 AQAC = Solenoid Aqautive 24 AC  
 A, B, C, D = Type of spring  
 S = 3 way manual valve  
 H = Horizontal  
 VIC = Victaulic connection  
 ASTM = Adhesion standard  
 ISO = Adhesion standard  
 P = Pressure gauge

# AquaNet™ Electric Valves

The professional electric/hydraulic valve line. Suitable for landscape and greenhouse applications.



1½" - 2"  
model



¾" - 1"  
model



Energy saving



Long distance  
operation



3 position knob,  
On/Off/Auto

## / Benefits & Features

- Great features
  - Patented hydraulic 3-way control
  - For all types of water
- All water types
  - Designed to operate with all types of water, including effluent (2mm command orifice)
- Outstanding
  - pressure and flow range
- Manual override
  - Close / Auto / Open
- Low energy consumption
  - for maximal wire distance
- Built-in
  - pressure regulator with adjustable knob 0.7 – 4.5bar (optional 1½" & 2" Electrical models only)
- Flow control handle
  - Standard on all models
- EPDM diaphragm
  - Resistant against chemicals used in agriculture

# / Specifications & Recommendations

## ¾" & 1" Globe Models

- Working Pressure – 0.2 - 10 bar
- Ambient Temp. Max. – 60°C (140°F)
- Fluid Temp Max. – 60°C (140°F)
- Plastic Parts – Reinforced Nylon
- Diaphragms – EPDM
- Leads – 2 x AWG 22 (8cm)

## 1½" & 2" Globe & Angle Models

- Working Pressure – 0.3 - 10 bar
- Ambient Temp. Max. – 60°C (140°F)
- Fluid Temp Max. – 60°C (140°F)
- Plastic Parts – Reinforced Nylon
- Diaphragms – EPDM
- Leads – 2 x AWG 22 (120cm)

\* Pressure Regulating Range: 0.7-4.5 bar (1½" & 2" only)

## → Packaging Data

| Model                  | Quantity P/Box (Units) | Box Dimensions (cm x cm x cm) | Box Weight (Kg, average) |
|------------------------|------------------------|-------------------------------|--------------------------|
| Aquanet Plus ¾", 1"    | 12                     | 47.0 x 26.0 x 12.0            | 4.45                     |
| Aquanet Plus 1½" G     | 1                      | 21.5 x 12.5 x 19              | 1.18                     |
| Aquanet Plus 1½" A     |                        |                               | 1.29                     |
| Aquanet Plus 2" G      |                        |                               | 1.16                     |
| Aquanet Plus 2" A      |                        |                               | 1.24                     |
| Pressure Regulator Kit |                        | 12.0 x 9.0 x 7.0              | 0.11                     |

## → Electrical Specifications

### 24v AC

|         |          |
|---------|----------|
| Voltage | 18-28VAC |
| Inrush  | 90ma     |
| Holding | 75ma     |

In AC models, 2-5 seconds delay from command to activation

**Note: Operating within the specified voltage range outlined above is crucial to ensure the proper functionality of the product**

| Cable Gauge (awg) | Diameter (mm) | Cross Section (mm²) | Max. Distance (m) |
|-------------------|---------------|---------------------|-------------------|
| 20                | 0.8           | 0.5                 | 1250              |
| 18                | 1.0           | 0.8                 | 2000              |
| 17                | 1.1           | 1.0                 | 2500              |
| 16                | 1.3           | 1.3                 | 3500              |
| 15                | 1.4           | 1.5                 | 5000              |

Max. distance between Aquanet Plus AC and controllers

### DC

|                  |           |
|------------------|-----------|
| Voltage          | 12-40 VDC |
| Min. Pulse Width | 80ms      |

Recommended working condition capacitor mode

| Voltage (VDC) | Capacitor (µf) | Min. Pulse (ms) |
|---------------|----------------|-----------------|
| 12-18         | 4700           | 80              |
| 18-28         | 3300           | 80              |
| 28-40         | 2200           | 80              |

| Cable Gauge (awg) | Diameter (mm) | Cross Section (mm²) | Max. Distance (m) |
|-------------------|---------------|---------------------|-------------------|
| 20                | 0.8           | 0.5                 | 150               |
| 17                | 1.1           | 1.0                 | 240               |
| 15                | 1.4           | 1.5                 | 380               |

## → Electrical Connections

¾" & 1" DC red + black common

¾" & 1" AC black/black

1 ½" & 2" DC red + black common

1 ½" & 2" AC black/black

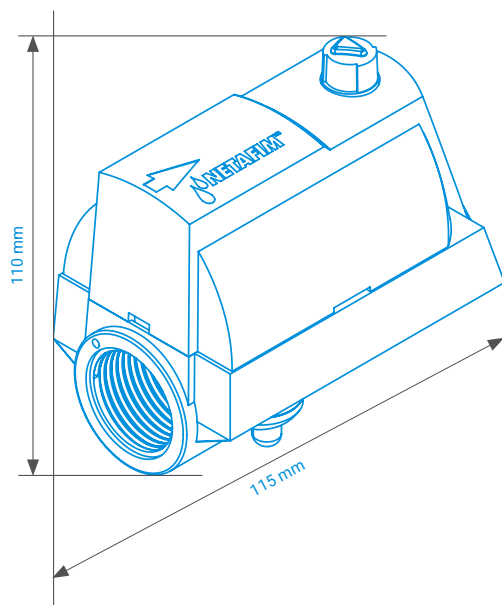
(Changing DC connection wire will change NC to no)

It is recommended to isolate wires connections from water to prevent corrosion.

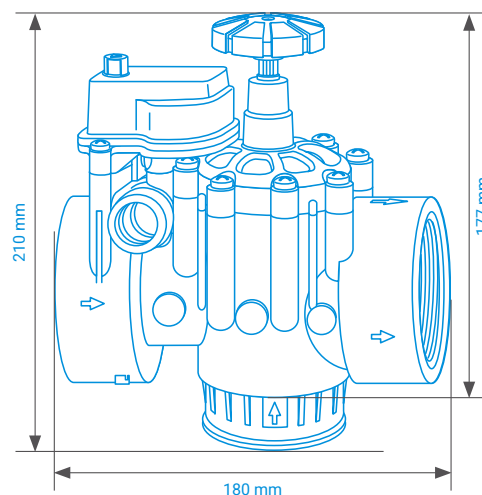
AquaNet™ is compatible with most DC latch controllers with two or three wire output. For specific models, please contact your Netafim representative.

## → Technical Dimensions

### ¾" & 1" Models



### 1½" & 2" Models



## → Catalog Numbers

| Diameter | Connection Type | Input | Shape    | Catalog Number without Regulator | Catalog Number with Regulator |
|----------|-----------------|-------|----------|----------------------------------|-------------------------------|
| ¾"       | BSP             | AC    | Straight | 34000-001000*                    |                               |
|          |                 | DC    | Straight | 34500-001000*                    |                               |
| 1"       |                 | AC    | Straight | 34000-001100*                    |                               |
|          |                 | DC    | Straight | 34500-001100*                    |                               |
| 1½"      |                 | AC    | Angle    | 34040-001000                     | 34020-001000                  |
|          |                 |       | Globe    | 34040-001100                     | 34020-001100                  |
|          |                 | DC    | Angle    | 34540-001000                     | 34520-001000                  |
|          |                 |       | Globe    | 34540-001100                     | 34520-001100                  |
| 2"       |                 | AC    | Angle    | 34040-001200                     | 34020-001200                  |
|          |                 |       | Globe    | 34040-001300                     | 34020-001300                  |
|          |                 | DC    | Angle    | 34540-001200                     | 34520-001200                  |
|          |                 |       | Globe    | 34540-001300                     | 34520-001300                  |

\* With flow control

## → Head Loss (m) Flow m³/h

|       |         | Flow |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |       |       |       |
|-------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| Model | Pattern | 1    | 2    | 3    | 4    | 6    | 8    | 10   | 12   | 14   | 16   | 18   | 20   | 22   | 24   | 26   | 28    | 30    | 32    | 34    |
| ¾"    | G       | 1.00 | 1.30 | 2.00 | 2.50 | 4.50 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -     | -     | -     | -     |
| 1"    | G       | 1.00 | 1.30 | 2.00 | 2.40 | 4.00 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -     | -     | -     | -     |
| 1½"   | G       | 0.52 | 0.64 | 0.77 | 0.92 | 1.28 | 1.70 | 2.21 | 2.79 | 3.46 | 4.22 | 5.06 | 6.00 | 7.00 | 8.17 | 9.41 | 10.75 | 12.20 | 13.77 | 15.46 |
|       | A       | 0.90 | 0.93 | 0.98 | 1.05 | 1.23 | 1.48 | 1.80 | 2.18 | 2.64 | 3.18 | 3.79 | 4.49 | 5.26 | 6.12 | 7.06 | 8.08  | 9.20  | 10.40 | 11.70 |
|       | A-G     | 0.00 | 0.10 | 0.40 | 0.70 | 1.30 | 1.92 | 2.57 | 3.25 | 3.98 | 4.76 | 5.61 | 6.53 | 7.54 | 8.64 | 9.84 | 11.16 | 12.60 | 14.17 | 15.90 |
|       | HYG     | 0.36 | 0.36 | 0.42 | 0.43 | 0.72 | 1.06 | 1.49 | 2.04 | 2.68 | 3.44 | 4.30 | 5.26 | 6.33 | 7.50 | 8.77 | 10.15 | 11.63 | 13.22 | 14.90 |
|       | HYA     | -    | -    | 0.00 | 0.00 | 0.30 | 0.57 | 0.87 | 1.21 | 1.60 | 2.04 | 2.52 | 3.05 | 3.63 | 4.26 | 4.94 | 5.67  | 6.45  | 7.28  | 8.18  |
| 2"    | G       | 0.63 | 0.74 | 0.86 | 1.00 | 1.33 | 1.71 | 2.16 | 2.69 | 3.28 | 3.96 | 4.72 | 5.56 | 6.50 | 7.54 | 8.67 | 9.91  | 11.26 | 12.72 | 14.30 |
|       | A       | 1.41 | 1.30 | 1.23 | 1.18 | 1.15 | 1.23 | 1.41 | 1.68 | 2.04 | 2.50 | 3.03 | 3.65 | 4.35 | 5.12 | 5.97 | 6.88  | 7.85  | 8.89  | 9.99  |
|       | A-G     | 1.40 | 1.69 | 1.97 | 2.25 | 2.80 | 3.35 | 3.92 | 4.50 | 5.12 | 5.77 | 6.48 | 7.24 | 8.00 | 8.99 | 9.98 | 11.09 | 12.30 | 13.60 | 15.06 |
|       | HYG     | -    | -    | -    | 0.00 | 0.38 | 0.83 | 1.34 | 1.93 | 2.60 | 3.34 | 4.16 | 5.07 | 6.06 | 7.15 | 8.33 | 9.60  | 10.97 | 12.45 | 14.02 |
|       | HYA     | -    | 0.02 | 0.06 | 0.12 | 0.27 | 0.47 | 0.73 | 1.04 | 1.40 | 1.81 | 2.28 | 2.80 | 3.36 | 3.98 | 4.65 | 5.37  | 6.14  | 6.96  | 7.84  |

\* G = Globe =, A = Angle, A-G = Angle valve globe flow, HYG = Hydraulic globe valve, HYA = Hydraulic angle valve

# 75 Series

## 3/4" - 4"R

### CONTROL VALVES

The strong and versatile reinforced nylon valves of the 75 Series exhibit exceptional hydraulic characteristics and provide optimal control of irrigation systems.



Long-lasting  
performance



High  
durability



Versatility

## / Benefits & Features

- **Long-lasting performance** High flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body
- **High durability** Long life and easy inline maintenance accomplished by structural simplicity and high-quality corrosion-free materials
- **Versatility** Gal plastic valves are available with full selection of control functions and various end connections

## / Specifications & Recommendations

- Maximum Pressure – 10 bar (145psi)
- Minimum Recommended Flow – 1m<sup>3</sup>/h (5gpm)
- Minimum Operating Pressure – 0.4 bar (6psi)\*
- Maximum Operating Temperature – 60°C (140°F)

\* Available with low pressure diaphragm

## → Hydraulic Performance

| Diameter           | inch        | ¾  | 1  | 1½ | 2  | 2½ | 3R  | 3   | 4R  |
|--------------------|-------------|----|----|----|----|----|-----|-----|-----|
|                    | mm          | 20 | 25 | 35 | 50 | 65 | 80  | 80  | 100 |
| Flow Rate Factor** | Kv (metric) | 12 | 16 | 60 | 83 | 85 | 90  | 120 | 120 |
|                    | Cv (US)     | 14 | 20 | 70 | 96 | 98 | 104 | 140 | 140 |

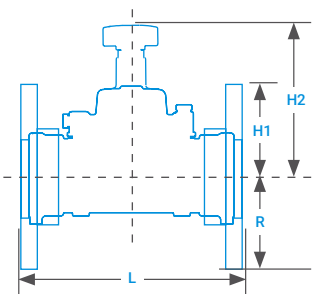
\*\* In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → Technical Dimensions

| Diameter               |          | inch      | ¾          | 1          | 1½       | 2          | 2½        | 3R        | 3          | 3*        | 4R*       |
|------------------------|----------|-----------|------------|------------|----------|------------|-----------|-----------|------------|-----------|-----------|
|                        |          | mm        | 20         | 25         | 40       | 50         | 65        | 80        | 80         | 80        | 100       |
| Height                 | h1       | mm / inch | 38 / 1½    | 38 / 1½    | 67 / 2⅝  | 67 / 2⅝    | 67 / 2⅝   | 67 / 2⅝   | 100 / 3⅛   | 100 / 3⅛  | 100 / 3⅛  |
|                        | H2       |           | 100 / 4    | 100 / 4    | 112 / 4⅜ | 112 / 4⅜   | 112 / 4⅜  | 112 / 4⅜  | 180 / 7⅛   | 180 / 7⅛  | 180 / 7⅛  |
|                        | r        |           | 18 / ⅞     | 22 / ⅞     | 30 / 1⅜  | 37 / 1½    | 47 / 1⅞   | 54 / 2⅛   | 60 / 2⅜    | 100 / 3⅛  | 110 / 4⅜  |
| Length                 | L        |           | 113 / 4½   | 124 / 4⅞   | 188 / 7⅜ | 199 / 7⅞   | 228 / 9   | 236 / 9¼  | 260 / 10¼  | 290 / 11⅞ | 290 / 11⅞ |
| Control chamber volume | cc / gal |           | 36 / 0.01  |            |          | 180 / 0.04 |           |           | 250 / 0.05 |           |           |
| Weight                 | kg / lbs |           | 0.2 / 0.44 | 0.2 / 0.44 | 0.9 / 2  | 0.9 / 2    | 1.2 / 2.6 | 1.4 / 3.1 | 1.8 / 4.4  | 3 / 6.8   | 4 / 8.8   |

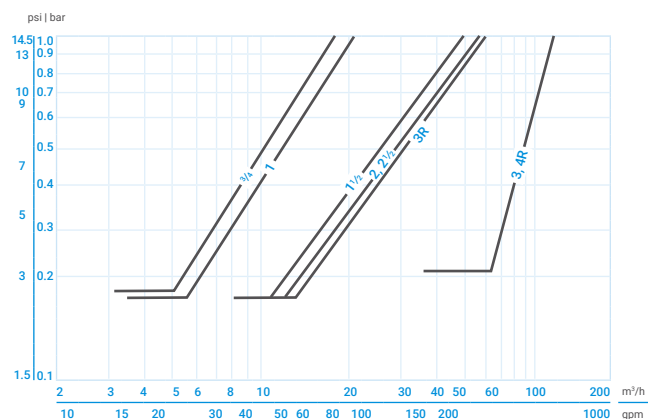
R: Reduced, 3R: 323", 4R: 434"

\* Dimensions for these diameters include flanges

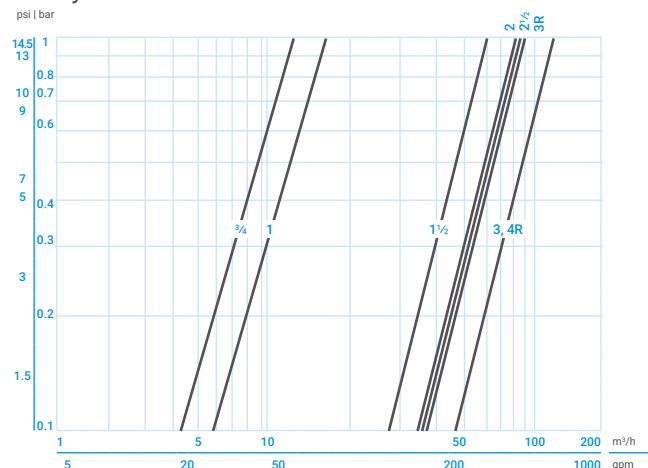


## → Head Loss

### 2-Way



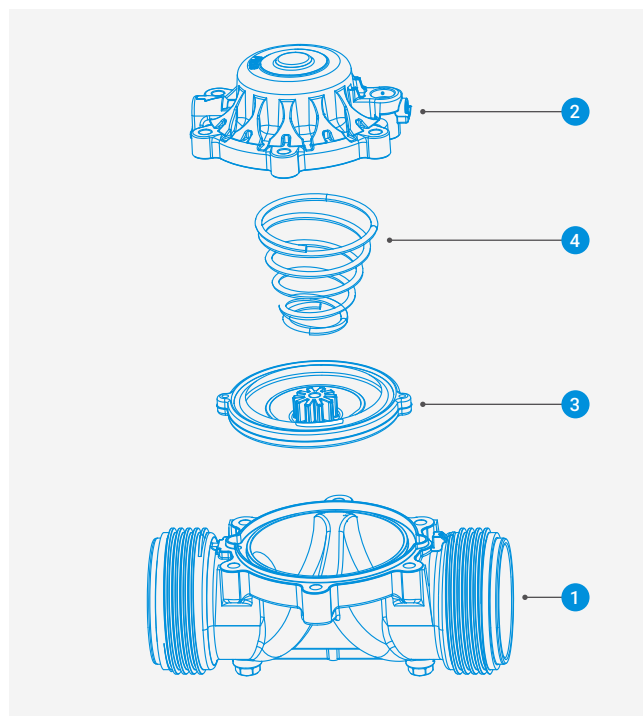
### 3-Way



## → Material Specification

| # | Part      | Material         | Optional*     |
|---|-----------|------------------|---------------|
| 1 | Body      | Reinforced Nylon | Polypropylene |
| 2 | Bonnet    | Reinforced Nylon | Polypropylene |
| 3 | Diaphragm | Natural Rubber   | ALD70         |
| 4 | Spring    | SST 302          | SST 316       |

\* Optional parts for special chemical resistance



# 75 Series 3"H - 8"R CONTROL VALVES

The strong and versatile reinforced nylon valves of the 75 Series exhibit exceptional hydraulic characteristics and provide optimal control of irrigation systems.



Long-lasting  
performance



High  
durability



Versatility

## / Benefits & Features

- |                            |                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| → Long-lasting performance | High flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body |
| → High durability          | Long life and easy inline maintenance accomplished by structural simplicity and high-quality corrosion-free materials                                    |
| → Versatility              | Gal plastic valves are available with full selection of control functions and various end connections                                                    |

## / Specifications & Recommendations

- Maximum Pressure – 12 bar (175psi)
- Minimum Recommended Flow – 1m<sup>3</sup>/h (5gpm)
- Minimum Operating Pressure – 0.4 bar (6psi)\*
- Maximum Operating Temperature – 60°C (140°F)

\* Available with low pressure diaphragm

## → Hydraulic Performance

| Diameter           | inch        | 3H  | 4   | 6R  | 6   | 8R  |
|--------------------|-------------|-----|-----|-----|-----|-----|
|                    | mm          | 80  | 100 | 150 | 150 | 200 |
| Flow Rate Factor** | Kv (metric) | 250 | 350 | 350 | 580 | 580 |
|                    | Cv (US)     | 290 | 405 | 405 | 670 | 670 |

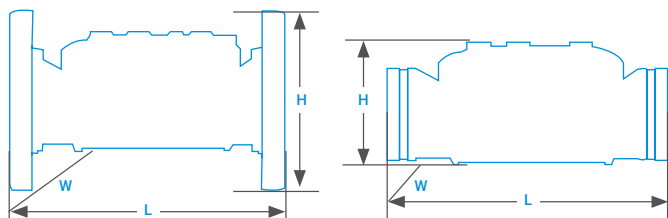
\*\* In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → Technical Dimensions

| Diameter               |   | inch      | 3"H                                  | 3"H                                 | 4                                    | 4                                    | 6R                                   | 6*                                   | 8R                                   |
|------------------------|---|-----------|--------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|                        |   | mm        | 80                                   | 80                                  | 100                                  | 100                                  | 150                                  | 150                                  | 200                                  |
| Connection Type        |   |           | Thread                               | Flange                              | Groove                               | Flange                               |                                      |                                      |                                      |
| Height                 | H | mm / inch | 162 / 6 <sup>3</sup> / <sub>8</sub>  | 190 / 7 <sup>1</sup> / <sub>2</sub> | 160 / 7                              | 230 / 9                              | 285 / 11 <sup>1</sup> / <sub>5</sub> | 285 / 11 <sup>1</sup> / <sub>5</sub> | 307 / 12                             |
|                        | W |           | 236 / 9 <sup>2</sup> / <sub>7</sub>  | 236 / 9 <sup>2</sup> / <sub>7</sub> | 236 / 9 <sup>2</sup> / <sub>7</sub>  | 236 / 9 <sup>2</sup> / <sub>7</sub>  | 285 / 11 <sup>1</sup> / <sub>5</sub> | 285 / 11 <sup>1</sup> / <sub>5</sub> | 307 / 12                             |
| Length                 | L |           | 452 / 17 <sup>3</sup> / <sub>4</sub> | 485 / 19                            | 350 / 13 <sup>3</sup> / <sub>4</sub> | 373 / 14 <sup>1</sup> / <sub>2</sub> | 420 / 16 <sup>1</sup> / <sub>2</sub> | 420 / 16 <sup>1</sup> / <sub>2</sub> | 500 / 19 <sup>2</sup> / <sub>3</sub> |
| Control chamber volume |   | cc / gal  | 500 / 0.13                           |                                     |                                      |                                      |                                      | 1000 / 0.26                          |                                      |
| Weight                 |   | kg / lbs  | 4.7 / 10.4                           | 6 / 13.2                            | 3.9 / 8.6                            | 6 / 13.2                             | 7.5 / 16.5                           | 10.6 / 23.4                          | 13.8 / 30.4                          |

6R: 646" 8R: 868", H: High Flow, 3H: 343"

\* Dimensions for these diameters include flanges

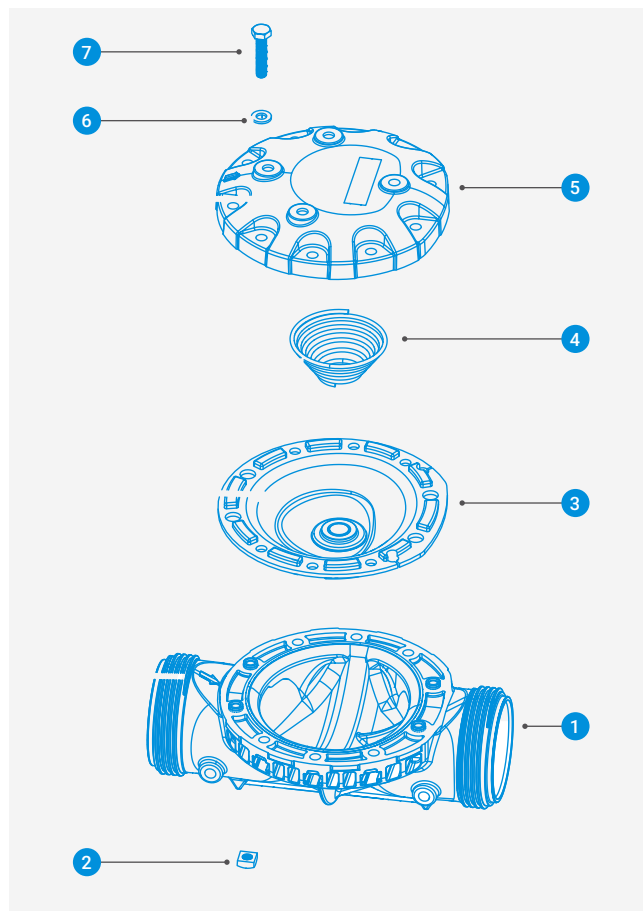
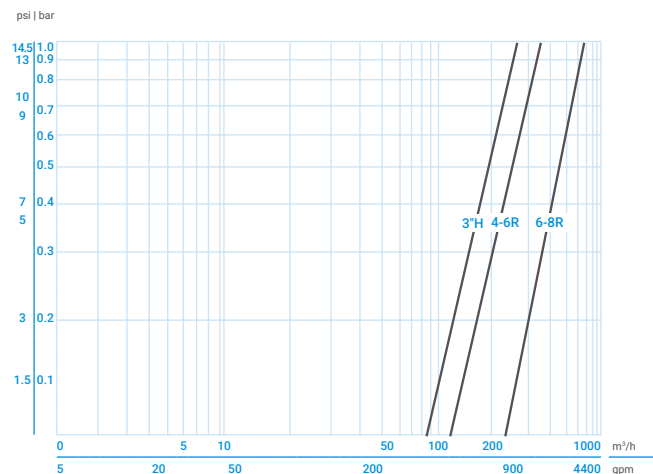


## → Material Specification

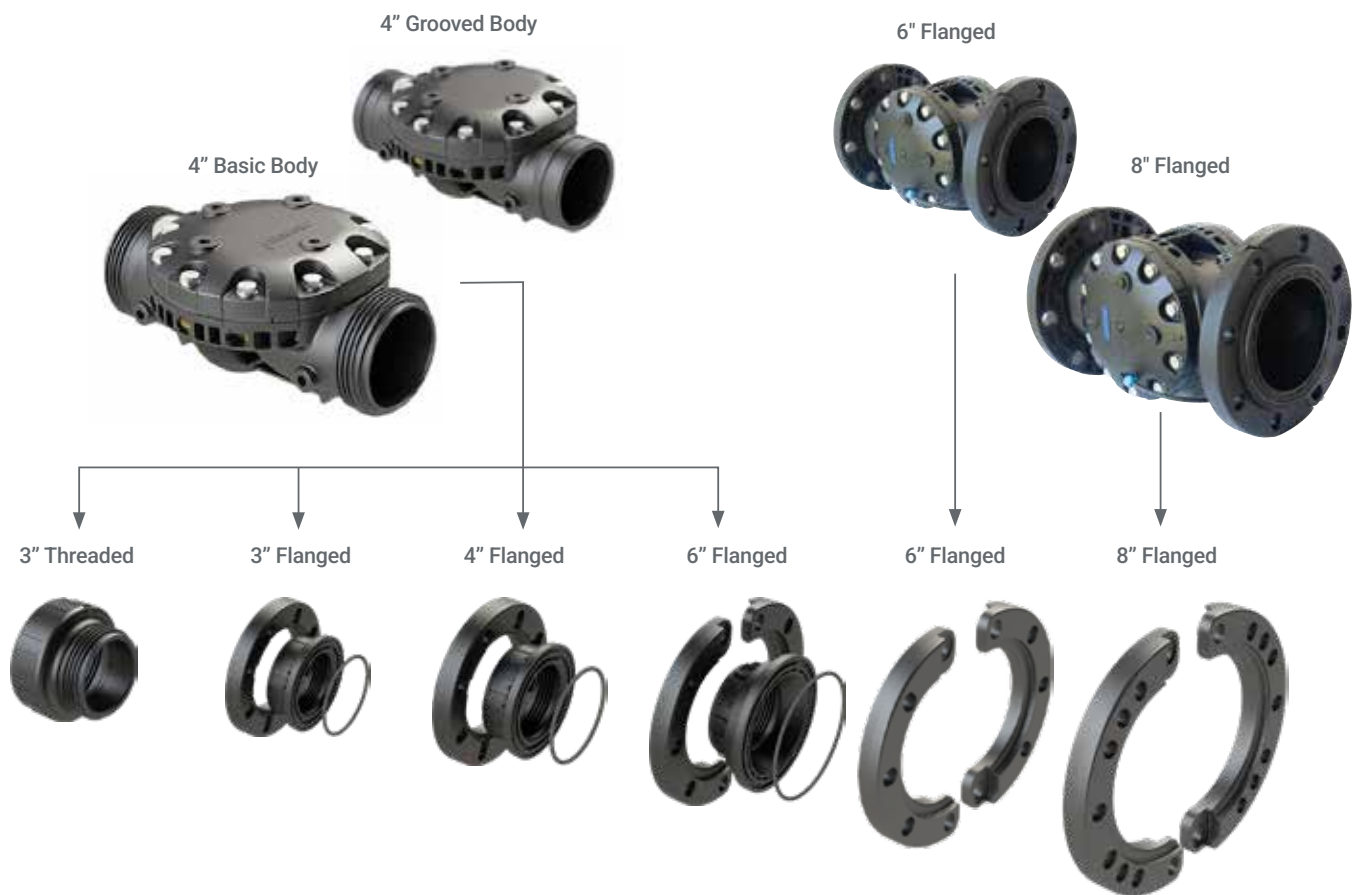
| # | Part      | Material | Optional*        |
|---|-----------|----------|------------------|
| 1 | Body      | GPR      | Polypropylene PP |
| 2 | Nut       | Brass    | SST 316          |
| 3 | Diaphragm | NR       | ALD, EPDM        |
| 4 | Spring    | SST 302  | SST 316, Inconel |
| 5 | Bonnet    | GRP      | Polypropylene    |
| 6 | Washer    | SST 304  | SST 316          |
| 7 | Bolt      | SST 304  | SST 316          |

\* Optional parts for special chemical resistance

## → Head Loss



## → Connection Types



Note: Available in an array of sizes from 3"H to 8"R

# 80 Series

## REINFORCED NYLON CONTROL VALVES

Globe and angle plastic valves of the 80 Series, equipped with a fully supported diaphragm, guarantee rapid and precise control of irrigation systems.



Optimal  
protection



Efficient  
installation



Flexible

## / Benefits & Features

- **Optimal protection**  
Tight closing & quick opening is achieved by a rigid plug mechanism that is suitable for high pressure applications and responds rapidly to water pressure fluctuations
- **Efficient installation**  
The valves are available in both globe and angle shapes and therefore eliminate the use of elbow joints and extending pipelines
- **Flexible**  
Available with full range of control functions, various end connections, and a selection of 2-way and 3-way bonnets with integral accessories

## / Specifications & Recommendations

- Maximum Pressure – 10 bar (145psi)
- Minimum Recommended Flow – 1m<sup>3</sup>/h (5gpm)
- Minimum Operating Pressure – 0.5 bar (7psi)\*
- Maximum Operating Temperature – 60°C (140°F)

## → Hydraulic Performance

| Shape              |             | Straight |    | Angle |    |     |     |
|--------------------|-------------|----------|----|-------|----|-----|-----|
| Diameter           | inch        | 1½       | 2  | 1½    | 2  | 3   | 4R* |
|                    | mm          | 40       | 50 | 40    | 50 | 80  | 100 |
| Flow Rate Factor** | Kv (metric) | 35       | 45 | 45    | 60 | 180 |     |
|                    | Cv (US)     | 40       | 52 | 55    | 70 | 208 |     |

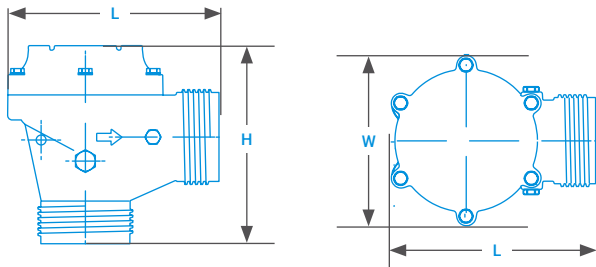
\* R: Reduced, 4R: 434"

\*\* In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → Technical Dimensions

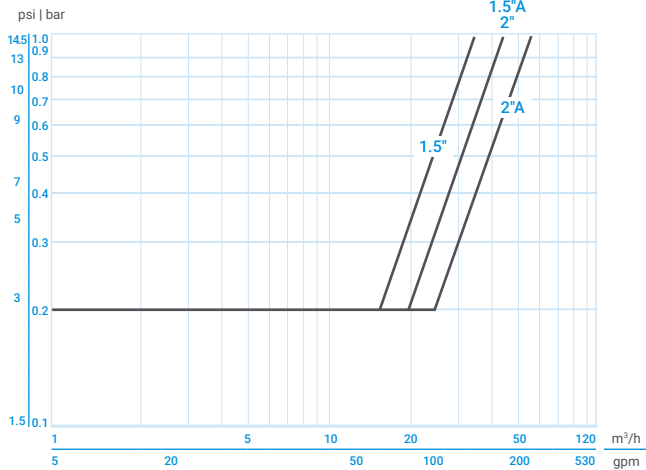
| Shape                  |   |           | Straight   |            | Angle      |            |            |            |
|------------------------|---|-----------|------------|------------|------------|------------|------------|------------|
| Diameter               |   | inch      | 1½         | 2          | 1½         | 2          | 3          | 4"R*       |
|                        |   | mm        | 40         | 50         | 40         | 50         | 80         | 100        |
| Height                 | H | mm / inch | 159 / 6.23 | 166 / 6.54 | 171 / 6.73 | 171 / 6.73 | 175 / 6.9  | 175 / 6.9  |
| Width                  | W | mm / inch | 163 / 6.42 | 127 / 5.00 | 163 / 6.42 | 163 / 6.42 | 195 / 7.67 | 195 / 7.67 |
| Length                 | L | mm / inch | 165 / 6.49 | 165 / 6.49 | 88 / 3.46  | 88 / 3.46  | 354 / 14   | 390 / 15.3 |
| Control chamber volume |   | cc / gal  | 100 / 0.02 | 100 / 0.02 | 100 / 0.02 | 100 / 0.02 | 400 / 0.10 | 400 / 0.10 |
| Weight                 |   | kg / lbs  | 0.9 / 2    | 0.9 / 2    | 0.8 / 1.8  | 0.8 / 1.8  | 3.8 / 8.3  | 4.2 / 9.2  |

\* Dimensions for these diameters include flanges

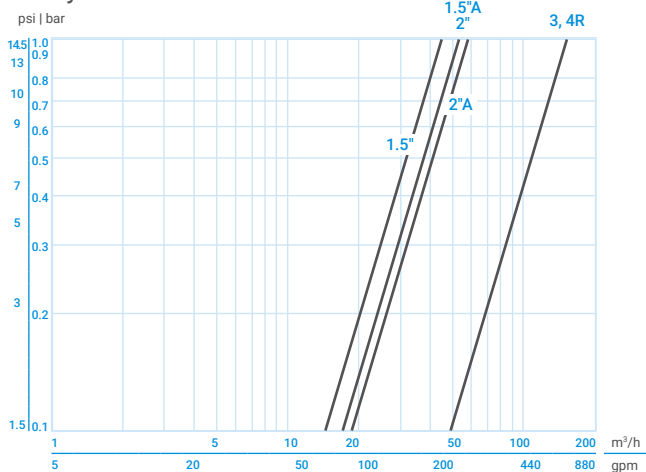


## → Head Loss

### 2-Way Valves



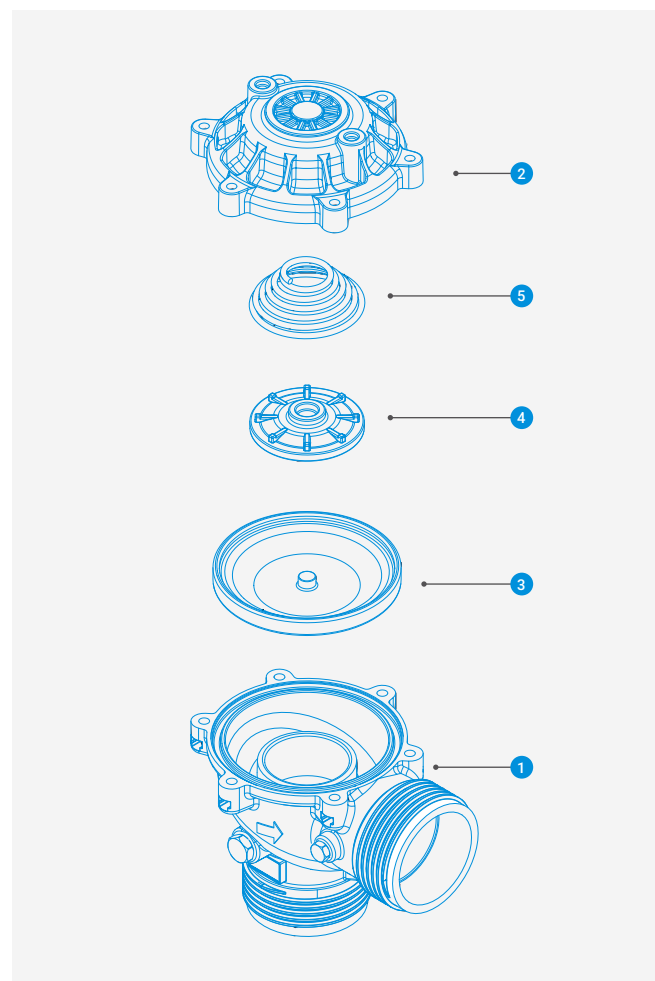
### 3-Way Valves



## → Material Specifications

| # | Part        | Material             |
|---|-------------|----------------------|
| 1 | Body        | Reinforced nylon     |
| 2 | Bonnet      | Reinforced nylon     |
| 3 | Diaphragm*  | Natural rubber, EPDM |
| 4 | Spring seat | Nitrile rubber       |
| 5 | Spring      | SST 302              |

Optional parts for special chemical resistance



# 80 Series $\frac{3}{4}$ " - 1"

## REINFORCED NYLON CONTROL VALVES

2-Way electric valve specially designed for landscape and greenhouses.



Long-lasting performance



High durability



Versatility

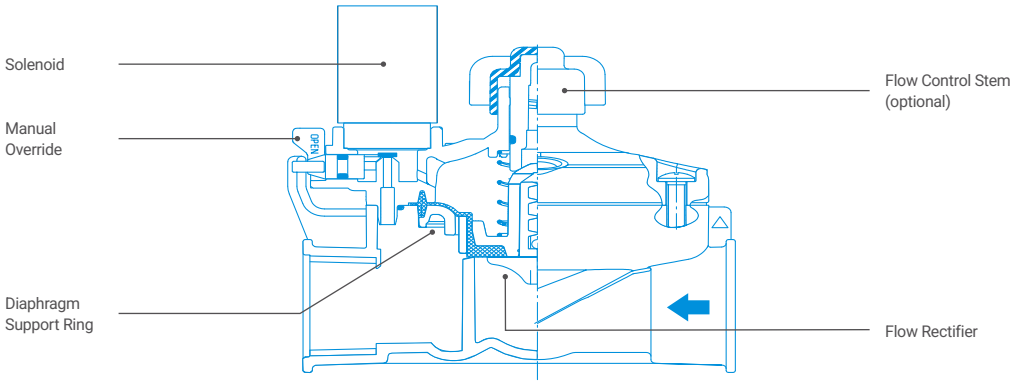
## / Benefits & Features

- **Cost effective** Simple reliable and economical
- **High durability** Corrosion-free materials
- **Versatility** Operation at wide range of flow rates from near zero to maximal flow
- **Global pattern valve** Activated by a fully-supported diaphragm
- **Opening** Internal bleed manual override
- **Optional** Removable flow control stem handle

## / Specifications & Recommendations

- Maximum Pressure – 10 bar (145psi)
- Minimum Operating Pressure – 0.5 bar (7psi)
- Maximum Operating Temperature – 60°C (140°F)
- Standard – 24 VAC 50/60 Hz.  $\pm 10\%$
- Optional – Other voltage rating or latching DC operators

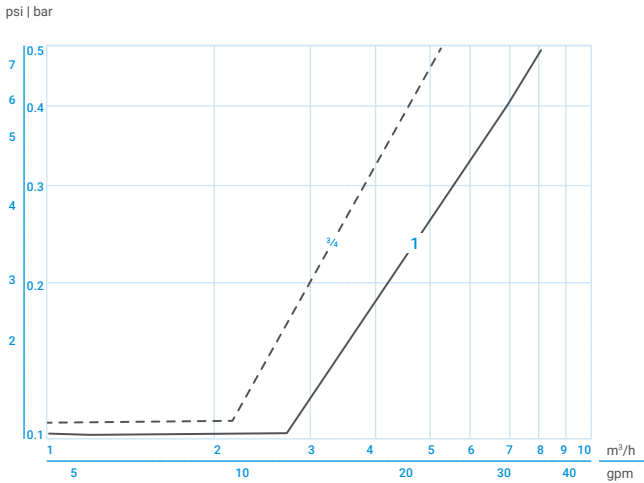
→ Components



→ Technical Dimensions

| Diameter |   | inch      | $\frac{3}{4}$ | 1          |
|----------|---|-----------|---------------|------------|
|          |   | mm        | 40            | 25         |
| Height   | H | mm / inch | 109 / 4.3     | 112 / 4.4  |
| Width    | W | mm / inch | 75 / 3        | 75 / 3     |
| Length   | L | mm / inch | 98 / 3.9      | 103 / 4.1  |
| Weight   |   | kg / lbs  | 0.28 / 0.62   | 0.29 / 0.6 |

→ Head Loss



# 80 QR Series

## REINFORCED NYLON CONTROL VALVES

The 80 QR Series is a pilot-operated, universal quick-relief valve, that is designed for the pressure-surge protection of pumps, filtration systems and pipelines.



Long-lasting  
performance



High  
durability



Versatility

## / Benefits & Features

- |                                            |                                                                              |
|--------------------------------------------|------------------------------------------------------------------------------|
| → Fast opening and slow, regulated closure | Prevents shuttering and secondary surges                                     |
| → Extremely accurate                       | Will open and close at the same pressure setting                             |
| → Up to 10 bar                             | Wide operation pressure range, from as low as 0.5 bar and up to 10 bar       |
| → High Flow/ Low Pressure                  | Designed for high flow rates while maintaining extremely low pressure losses |

## / Specifications & Recommendations

- Maximum Pressure – 10 bar (145psi)
- Maximum Operating Temperature – 60°C (140°F)

→ Hydraulic Performance

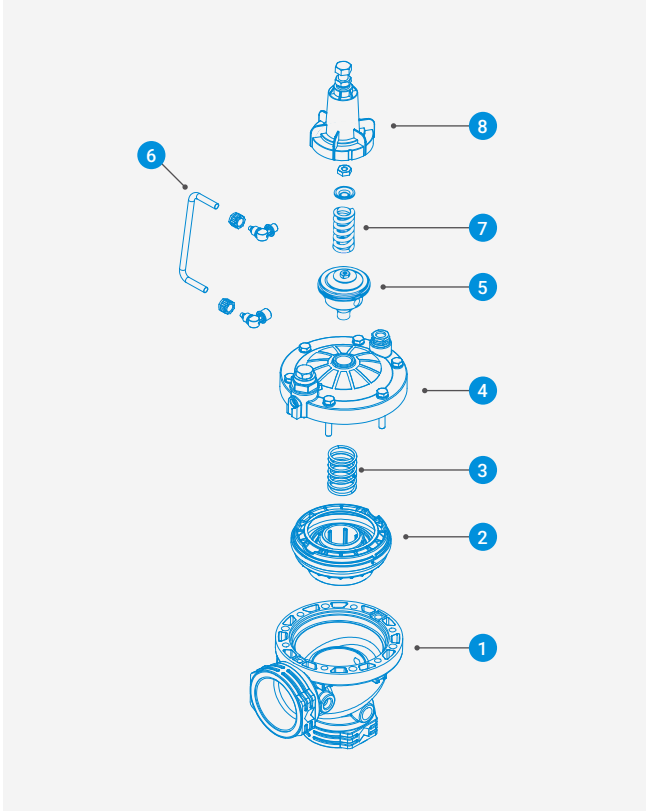
Based on Flow Rate (m³/h)

| Diameter / bar | Set Point (bar) |     |     |     |     |     |     |     |     |     |
|----------------|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                | 1               | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
| 1½"            | 37              | 52  | 64  | 74  | 82  | 90  | 97  | 104 | 110 | 130 |
| 2"             | 46              | 66  | 80  | 93  | 104 | 114 | 123 | 131 | 139 | 150 |
| 3"             | 120             | 170 | 208 | 240 | 268 | 294 | 317 | 339 | 360 | 385 |

→ Material Specifications

| # | Part               | Material*     |
|---|--------------------|---------------|
| 1 | Body               | GRP           |
| 2 | Diaphragm assembly | GRP, NR, EPDM |
| 3 | Main spring        | SST           |
| 4 | Bonnet             | GRP           |
| 5 | Pilot-valve base   | GRP, SST, NR  |
| 6 | Control tube       | PP            |
| 7 | Adj. spring        | SST           |
| 8 | Pilot-valve bonnet | GRP           |

\* Optional parts for special chemical resistance



# 80 W Series

## DUAL OUTLET CONTROL VALVES

Netafim presents the 80 W Series - high- quality dual valves, designed for agriculture applications. A great combination of affordability, ease of use, and a durable construction.



Long-lasting  
performance



High  
durability



Versatility

## / Benefits & Features

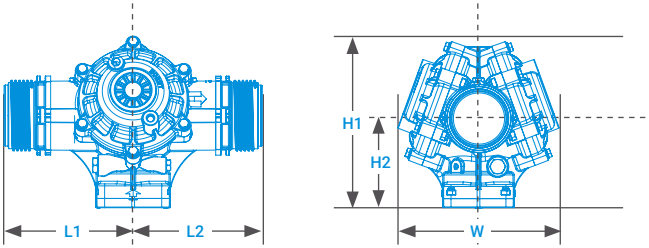
- |                                 |                                                                                          |
|---------------------------------|------------------------------------------------------------------------------------------|
| → Clever design                 | Specially created for irrigation when one inlet and two independent outlets are required |
| → Wide operation pressure range | As low as 0.5 bar up to 10 bar                                                           |
| → Low pressure losses           | Even in high flow rates                                                                  |
| → Versatility                   | Allows for a wide range of control applications                                          |

## / Specifications & Recommendations

- Maximum Pressure – 10 bar (145psi)
- Minimum Recommended Flow – 1m<sup>3</sup>/h (5gpm)
- Minimum Operating Pressure – 0.5 bar (7psi)\*
- Maximum Operating Temperature – 60°C (140°F)

→ Technical Dimensions

| Dimensions | Metric / US |              |
|------------|-------------|--------------|
| H1         | mm / inch   | 259 / 103/16 |
| H2         |             | 139 / 51/2   |
| L1         | mm / inch   | 194 / 765/16 |
| H2         |             | 202 / 791/2  |
| W          | mm / inch   | 250 / 97/8   |
| Weight     | kg / lbs    | 4.4 / 9.7    |



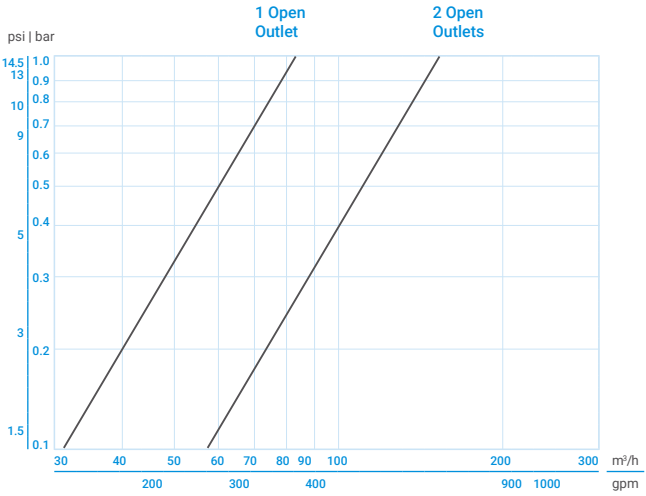
→ Hydraulic Performance

|                |    |            |     |
|----------------|----|------------|-----|
| 1 Open Outlet  | Kv | m³/h@ 1bar | 105 |
|                | Cv | gpm @ 1psi | 121 |
| 2 Open Outlets | Kv | m³/h@ 1bar | 210 |
|                | Cv | gpm @ 1psi | 242 |

→ End Connections

|                                                 |                             |
|-------------------------------------------------|-----------------------------|
| Inlet: 3" / 80mm BSP/NPT Female-threaded Metric |                             |
| Outlets:                                        | BSP/NPT Female-threaded     |
|                                                 | 3" and 4" Universal flanged |
|                                                 | 3" Grooved (Optional)       |

→ Head Loss



# 90 Series

## PVC CONTROL VALVES

Exclusive valves series (3" – 6") suitable for underground and above-ground installation in open fields and greenhouses.



Long-lasting performance



Very high efficiency



High corrosion & UV resistance

## / Benefits & Features

- **Long-lasting performance**  
Excellent regulation capabilities achieved by a flexible diaphragm mechanism that is designed to allow maximal to near zero flow while operating at very low head losses
- **Very high efficiency**  
Available with full selection of control functions and various end connections  
  
The optional underground installation reduces both costs and friction losses by eliminating the use of elbow joints
- **High corrosion & UV resistance**  
Resistance to corrosive fluids is accomplished by using high-quality corrosion-free materials, both externally and internally  
  
Optional materials available for protection against highly concentrated chemicals

## / Specifications & Recommendations

- **Maximum Pressure** – for 3" & 4" valves: 8 bar (115psi), for 6" valves: 10 bar (145psi)
- **Minimum Recommended Flow** – 1m<sup>3</sup>/h (5gpm)
- **Minimum Operating Pressure** – 0.6 bar (9psi)
- **Maximum Operating Temperature** – 40°C (104°F)

NOTE: This model is available with low pressure diaphragm

## → Hydraulic Performance

| Valve Size        | inch | 3     | 4       | 6       |
|-------------------|------|-------|---------|---------|
|                   | mm   | 80-90 | 100-110 | 150-160 |
| Flow rate factor* | Kv   | 155   | 215     | 480     |
|                   | Cv   | 180   | 250     | 560     |

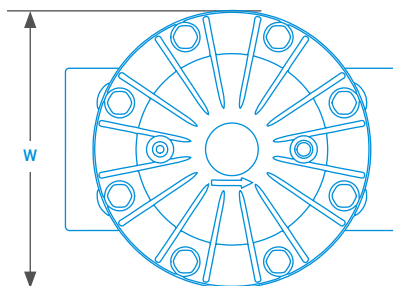
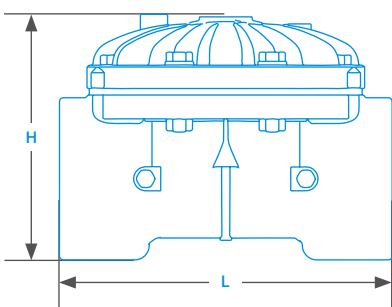
\* In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → Technical Dimensions

| Diameter *             |          | inch      | 3           | 4           | 6            |
|------------------------|----------|-----------|-------------|-------------|--------------|
|                        |          | mm        | 80-90       | 100-110     | 150-160      |
| Height                 | H        | mm / inch | 208 / 8.06  | 208 / 8.06  | 382 / 15     |
| Width                  | W        | mm / inch | 229 / 9.16  | 229 / 9.16  | 260 / 10.40  |
| Length                 | L        | mm / inch | 258 / 10.18 | 278 / 10.93 | 360 / 14.18  |
| Control chamber volume | cc / gal |           | 681 / 0.18  | 681 / 0.18  | 2,575 / 0.68 |
| Weight                 | kg / lbs |           | 4 / 8.8     | 4.2 / 9.2   | 11.8 / 26    |

\* PVC SW valves are 10mm larger than the pipe to allow solvent welding

**Note:** The selection of the valve's diameter depends on the diameter of the pipes in the field



## → Material Specifications

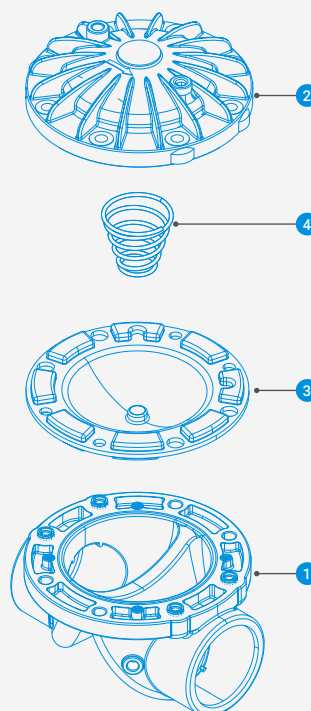
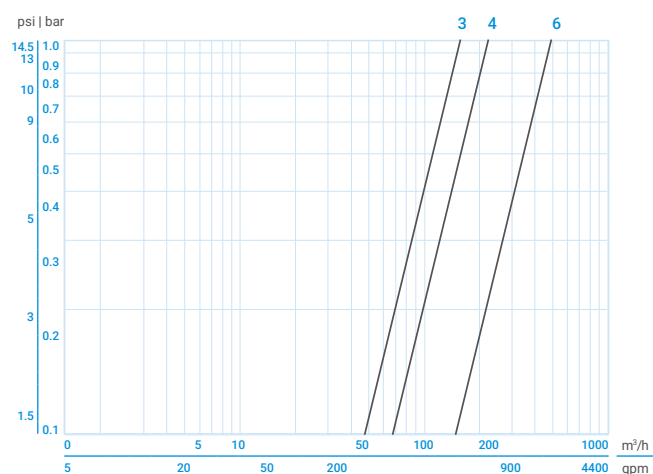
| # | Part        | Material                   | *Optional |
|---|-------------|----------------------------|-----------|
| 1 | Body        | uPVC                       | -         |
| 2 | Bonnet      | Glass reinforced Polyamide | PPS       |
| 3 | Diaphragm** | Natural rubber             | ALD, EPDM |
| 4 | Spring      | SST 302                    | SST 316   |

\* Optional parts for special chemical resistance

\*\* Wide selection of pressure ranges

## → Head Loss

### 3-Way Valves



# 100 Series

## METAL CONTROL VALVES

The powerful and reliable metal valves of the 100 Series display remarkable hydraulic performance and provide impeccable control of irrigation systems.



Long-lasting  
performance



Versatility



High  
durability

## / Benefits & Features

- **Long-lasting performance** High flow capacity and very low head losses achieved by a flexible diaphragm that provides a wide water passage throughout the valve's hydrodynamic body
- **Versatility** The valves are available in globe and angle shapes, with an extensive selection of materials, a full range of control functions, and various end connections
- **High durability** Long life and easy inline maintenance accomplished by structural simplicity and the use of high-quality materials that can withstand the harshest conditions

## / Specifications & Recommendations

- Maximum Pressure – 16 bar (230psi) and 25 bar (365psi)
- Minimum Recommended flow – 1m<sup>3</sup>/h (5gpm)
- Minimum Operating Pressure – 0.4 bar (6psi)\*

\* Available with low pressure diaphragm

## → Hydraulic Performance

| Shape              |      | Straight |    |    |     |     |     |     |     |     |     |     |      |      |      |      |    | Angle |     |     |     |     |  |
|--------------------|------|----------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|----|-------|-----|-----|-----|-----|--|
| Diameter           | inch | ¾        | 1  | 1½ | 2   | 2½  | 3R* | 3   | 4   | 6   | 8R* | 8   | 10   | 12   | 14   | 16   | 1½ | 2     | 3R* | 3   | 4   | 6   |  |
|                    | mm   | 20       | 25 | 40 | 50  | 65  | 80  | 80  | 100 | 150 | 200 | 200 | 250  | 300  | 350  | 400  | 40 | 50    | 80  | 80  | 100 | 150 |  |
| Flow rate factor** | Kv   | 17       | 17 | 65 | 95  | 95  | 95  | 170 | 220 | 600 | 670 | 800 | 1250 | 1900 | 1900 | 2600 | 60 | 90    | 90  | 150 | 200 | 570 |  |
|                    | Cv   | 20       | 20 | 75 | 110 | 110 | 110 | 200 | 255 | 695 | 775 | 925 | 1445 | 2195 | 2195 | 3005 | 70 | 105   | 105 | 175 | 230 | 660 |  |

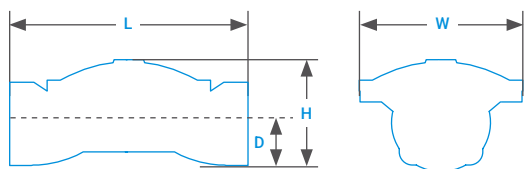
\* R: Reduced, 3R: 323", 8R: 868" \*\*.

Note: In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)<sup>2</sup>

## → Technical Dimensions

### Straight Flow, Threaded Connection

| Diameter |   | inch      | ¾          | 1          | 1½         | 2          | 2½         | 3R         | 3           |
|----------|---|-----------|------------|------------|------------|------------|------------|------------|-------------|
|          |   | mm        | 20         | 25         | 40         | 50         | 65         | 80         | 80          |
| Height   | H | mm / inch | 43 / 1.69  | 52 / 2.05  | 93 / 3.66  | 115 / 4.53 | 118 / 4.65 | 126 / 4.96 | 135 / 5.31  |
| Width    | W | mm / inch | 68 / 2.68  | 68 / 2.68  |            | 112 / 4.41 | 112 / 4.41 |            | 200 / 7.87  |
| Length   | L | mm / inch | 115 / 4.53 | 120 / 4.72 | 170 / 6.69 | 188 / 7.4  | 219 / 8.62 | 225 / 8.86 | 316 / 12.44 |
|          | D | mm / inch | 20 / 0.79  | 24 / 0.94  | 33 / 1.3   | 42 / 1.65  | 46 / 1.81  | 54 / 2.13  | 53 / 2.09   |
| Weight   |   | kg / lbs  | 1 / 2.2    |            | 2.2 / 4.9  | 3.2 / 7    | 3.6 / 7.9  | 4.5 / 9.9  | 11 / 24     |

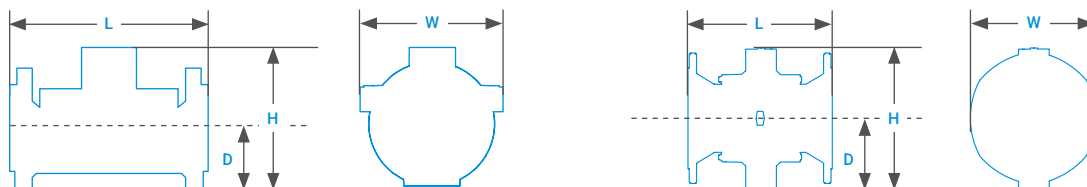


### Straight Flow, Flanged Connection - Standard models 16 bar (250psi)

| Diameter |            | inch    | 1½          | 2          | 2½          | 3R         | 3           | 4           | 6           | 8R          | 8           | 10          | 12          | 14          |
|----------|------------|---------|-------------|------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          |            | mm      | 40          | 50         | 65          | 80         | 80          | 100         | 150         | 200         | 200         | 250         | 300         | 350         |
| Height   | H          | mm/inch | 153 / 6.02  | 166 / 6.54 | 185 / 7.28  | 202 / 7.95 | 200 / 7.87  | 230 / 9.06  | 314 / 12.36 | 350 / 13.78 | 400 / 15.75 | 445 / 17.52 | 495 / 19.49 | 495 / 19.49 |
| Width    | W          | mm/inch | 76.5 / 3.01 | 166 / 6.54 | 185 / 7.28  | 200 / 7.87 | 200 / 7.87  | 230 / 9.06  | 300 / 11.8  | 365 / 14.4  | 365 / 14.4  | 440 / 17.3  | 490 / 19.3  | 530 / 20.9  |
| Length   | L          | mm/inch | 186 / 7.32  | 200 / 7.87 | 214 / 8.43  | 200 / 7.87 | 285 / 11.22 | 305 / 12.01 | 390 / 15.35 | 385 / 15.16 | 460 / 18.11 | 535 / 21.06 | 580 / 22.83 | 580 / 22.83 |
|          | D          | mm/inch | 76.5 / 3.01 | 85 / 3.35  | 92.5 / 3.64 | 105 / 4.13 | 105 / 4.13  | 110 / 4.33  | 145 / 5.71  | 170 / 6.69  | 170 / 6.69  | 205 / 8.07  | 240 / 9.45  | 270 / 10.6  |
| Weight   | Cast Iron  |         | 5.8 / 13    | 7.2 / 15.8 | 10.3 / 22.7 | 11 / 24.3  | 17 / 37.5   | 22 / 48.5   | 46 / 101    | 50 / 110    | 80 / 176    | 117 / 258   | 156 / 344   | 182 / 401   |
|          | Duct. Iron | kg/lbs  | 6.2 / 14    | 7.7 / 17   | 10.3 / 22.7 | 11.8 / 26  | 18.2 / 40.1 | 24 / 53     | 49 / 108    | 54 / 119    | 86 / 190    | 125 / 276   | 167 / 368   | 172 / 379   |
|          | Bronze     |         | 6.5 / 14.3  | 8 / 17.6   |             |            | 19 / 42     | 24 / 53     | 51 / 112    |             | 89 / 196    | 131 / 289   | 147 / 324   | 180 / 397   |

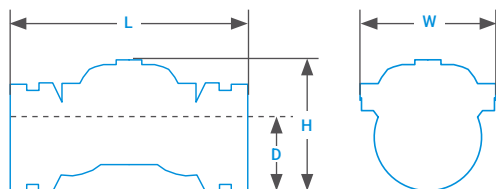
### Straight Flow, Flanged Connection - High Pressure models 25 bar (360psi)

| Diameter |   | inch     | 2          | 14.5 / 322 <sup>TH</sup> | 2½          | 3          | 4           | 6           | 8           | 10          | 16          | 18          | 20          | 24          |
|----------|---|----------|------------|--------------------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|          |   | mm       | 50         | 50                       | 65          | 80         | 100         | 150         | 200         | 250         | 400         | 450         | 500         | 600         |
| Height   | H | mm/inch  | 169 / 6.65 | 120 / 6.65               | 185 / 7.28  | 237 / 9.33 | 263 / 10.35 | 378 / 14.88 | 481 / 18.94 | 546 / 21.5  | 830 / 32.68 | 830 / 32.68 | 970 / 38.19 | 970 / 38.19 |
| Width    | W | mm/inch  | 175 / 6.9  | 175 / 6.9                | 185 / 7.28  | 200 / 7.87 | 260 / 10.24 | 320 / 12.6  | 400 / 15.75 | 495 / 19.49 | 830 / 32.68 | 830 / 32.68 | 980 / 38.58 | 980 / 38.58 |
| Length   | L | mm/inch  | 228 / 8.98 | 250 / 8.98               | 233 / 9.18  | 310 / 12.2 | 356 / 14.02 | 436 / 17.17 | 530 / 20.87 | 636 / 25.04 | 709 / 27.91 | 715 / 28.15 | 900 / 35.43 | 900 / 35.43 |
|          | D | mm/inch  | 85 / 3.35  | 42 / 1.65                | 92.5 / 3.64 | 105 / 4.13 | 120 / 4.72  | 150 / 5.91  | 180 / 7.09  | 215 / 8.46  | 310 / 12.2  | 340 / 13.39 | 490 / 19.29 | 490 / 19.29 |
| Weight   |   | kg / lbs | 10 / 22    | 6 / 13                   | 14.5 / 32   | 30 / 66.1  | 38 / 83.8   | 75 / 165.3  | 123 / 271   | 190 / 419   | 433 / 955   | 460 / 1014  | 674 / 1486  | 696 / 1534  |



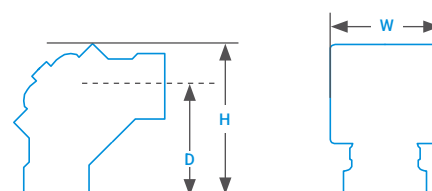
## Straight Flow, Grooved Connection

| Diameter |   | inch      | 1½         | 2          | 3R         | 3           | 4           | 6           |
|----------|---|-----------|------------|------------|------------|-------------|-------------|-------------|
|          |   | mm        | 40         | 50         | 80         | 80          | 100         | 150         |
| Height   | H | mm / inch | 81 / 3.19  | 100 / 3.94 | 120 / 4.72 | 124 / 4.88  | 133 / 5.24  | 250 / 9.84  |
| Width    | W | mm / inch | 93 / 3.66  | 112 / 4.41 | 112 / 4.41 | 200 / 7.87  | 194 / 7.64  | 300 / 11.81 |
| Length   | L | mm / inch | 177 / 6.97 | 190 / 7.48 | 201 / 7.91 | 286 / 11.26 | 317 / 12.48 | 392 / 15.43 |
|          | D | mm / inch | 26 / 1.02  | 33 / 1.3   | 47 / 1.85  | 47 / 1.85   | 60 / 2.36   | 82 / 3.23   |
| Weight   |   | kg / lbs  | 1.8 / 4    | 2.6 / 5.7  | 3 / 6.6    | 11 / 24.3   | 12 / 26.4   | 31 / 68.3   |



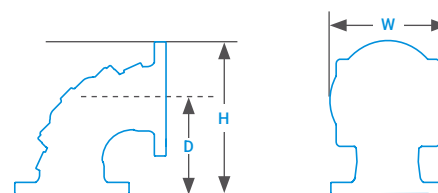
## Angle Flow, Threaded Connection

| Diameter |   | inch      | 1½         | 2          | 3R         | 3           |
|----------|---|-----------|------------|------------|------------|-------------|
|          |   | mm        | 40         | 50         | 80         | 80          |
| Height   | H | mm / inch | 110 / 4.33 | 136 / 5.35 | 165 / 6.5  | 239 / 9.41  |
| Width    | W | mm / inch | 93 / 3.66  | 112 / 4.41 | 112 / 4.41 | 200 / 7.87  |
|          | D | mm / inch | 75 / 2.95  | 90 / 3.54  | 114 / 4.49 | 145 / 5.71  |
| Weight   |   | kg / lbs  | 1.7 / 3.7  | 2.4 / 5.3  | 3.6 / 7.9  | 10.8 / 23.8 |



## Angle Flow, Flanged Connection

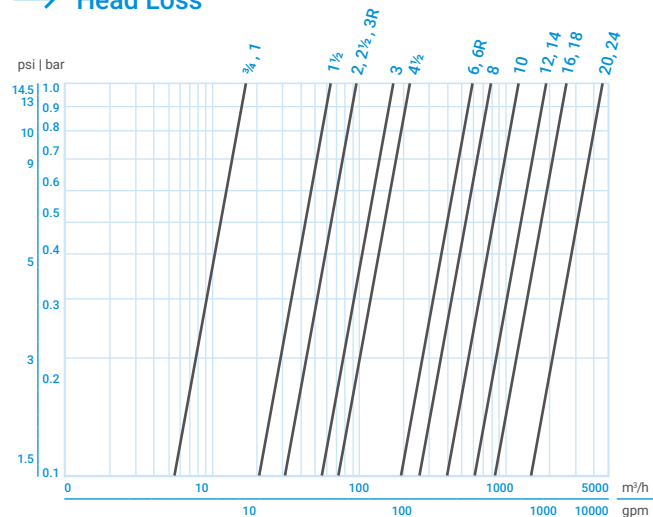
| Diameter |   | inch      | 3          | 4          | 6          |
|----------|---|-----------|------------|------------|------------|
|          |   | mm        | 80         | 100        | 150        |
| Height   | H | mm / inch | 278 / 10.9 | 300 / 11.8 | 380 / 15   |
| Width    | W | mm / inch | 200 / 7.87 | 230 / 9.06 | 300 / 11.8 |
|          | D | mm / inch | 174 / 6.85 | 185 / 7.28 | 230 / 9.06 |
| Weight   |   | kg / lbs  | 18 / 39.7  | 21 / 46.3  | 45 / 99.2  |



## Angle Flow, Grooved Connection

| Diameter |   | inch      | 3           | 4           |
|----------|---|-----------|-------------|-------------|
|          |   | mm        | 80          | 100         |
| Height   | H | mm / inch | 240 / 9.45  | 250 / 9.84  |
| Width    | W | mm / inch | 200 / 7.87  | 200 / 7.87  |
|          | D | mm / inch | 170 / 6.69  | 185 / 7.28  |
| Weight   |   | kg / lbs  | 10.5 / 23.1 | 11.5 / 25.4 |

→ Head Loss

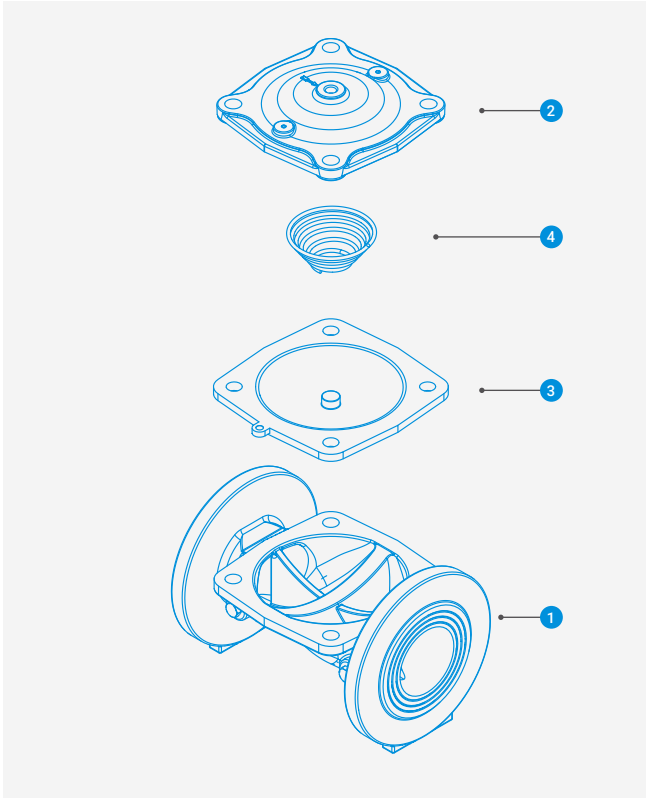


→ Material Specifications

| # | Part         | Material       | *Optional                             |
|---|--------------|----------------|---------------------------------------|
| 1 | Body         | Cast iron      | Ductile iron, bronze, stainless steel |
| 2 | Bonnet       | Cast iron      | Ductile iron, bronze, stainless steel |
| 3 | Dia-phragm** | Natural rubber | NBR, EPDM, neoprene                   |
| 4 | Spring       | SST 302        | SST 316                               |

\* Optional parts for special resistance

\*\* Wide selection of pressure ranges



# 300 Series

## METAL CONTROL VALVES

State-of-the-art automatic control valves are designed to withstand the most demanding requirements of water system control.



Long-lasting  
performance



Versatility



High  
durability

## / Benefits & Features

- |                            |                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------|
| → Long-lasting performance | Available with an extended range of unique control functions that cater to both special and standard needs |
| → Versatility              | The valves are available in globe and angle shapes with the widest range of accessories in the market      |
| → Outstanding design       | A unique rigid mechanism that provides ultimate hydraulic control in any given condition                   |

## / Specifications & Recommendations

- Maximum Pressure – 16 bar (230psi) and 25 bar (365psi)
- Minimum Recommended flow – 1m<sup>3</sup>/h (5gpm)
- Minimum Operating Pressure – 0.5 bar (7psi)

## → Hydraulic Performance

| Shape            |      | Globe Type |    |    |     |     |     |     |      |      |      |      |      |      |      |      |      | Angle Type |    |     |     |     |     |      |  |
|------------------|------|------------|----|----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------------|----|-----|-----|-----|-----|------|--|
| Diameter         | inch | 1½         | 2  | 2½ | 3   | 4   | 6   | 8   | 10   | 12   | 14   | 16   | 18   | 20   | 24   | 28   | 32   | 1½         | 2  | 3   | 4   | 6   | 8   | 10   |  |
|                  | mm   | 40         | 50 | 65 | 80  | 100 | 150 | 200 | 250  | 300  | 350  | 400  | 450  | 500  | 600  | 700  | 800  | 40         | 50 | 80  | 100 | 150 | 200 | 250  |  |
| Flow rate factor | Kv   | 43         | 43 | 43 | 115 | 167 | 407 | 676 | 1160 | 1600 | 1600 | 3000 | 3150 | 3300 | 6500 | 6500 | 6500 | 60         | 60 | 140 | 190 | 460 | 770 | 1310 |  |
|                  | Cv   | 50         | 50 | 50 | 133 | 195 | 475 | 790 | 1360 | 1900 | 1900 | 3500 | 3700 | 3860 | 7600 | 7600 | 7600 | 70         | 70 | 164 | 222 | 537 | 900 | 1533 |  |

## → Technical Dimensions

for Globe Flanged Type

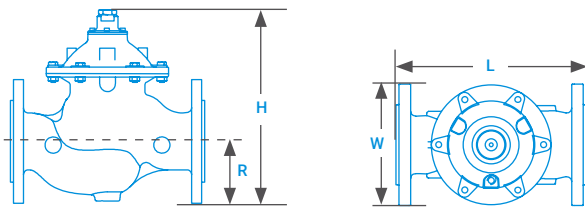
| Diameter               |         | 1½                                 | 2                                   | 2½                                 | 3                                   | 4                                  | 6                                   | 8                                   | 10                                   | 12                                  | 14                                   | 16                                  | 18                                  | 20                                    | 24                                    | 28                                    | 32                                    |
|------------------------|---------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
|                        |         | 40                                 | 50                                  | 65                                 | 80                                  | 100                                | 150                                 | 200                                 | 250                                  | 300                                 | 350                                  | 400                                 | 450                                 | 500                                   | 600                                   | 700                                   | 800                                   |
| L                      | mm/inch | 230/9 <sup>1</sup> / <sub>16</sub> | 230/9 <sup>1</sup> / <sub>16</sub>  | 290/11 <sup>3</sup> / <sub>8</sub> | 310/12 <sup>3</sup> / <sub>16</sub> | 350/13 <sup>3</sup> / <sub>4</sub> | 480/18 <sup>7</sup> / <sub>8</sub>  | 600/23 <sup>5</sup> / <sub>8</sub>  | 730/28 <sup>3</sup> / <sub>4</sub>   | 850/33 <sup>7</sup> / <sub>16</sub> | 980/38 <sup>9</sup> / <sub>16</sub>  | 1100/43 <sup>5</sup> / <sub>8</sub> | 1200/47 <sup>1</sup> / <sub>4</sub> | 1250/49 <sup>3</sup> / <sub>16</sub>  | 1450/57 <sup>1</sup> / <sub>8</sub>   | 1650/64 <sup>15</sup> / <sub>16</sub> | 1850/72 <sup>7</sup> / <sub>8</sub>   |
| H                      | mm/inch | 185/7 <sup>5</sup> / <sub>16</sub> | 185/7 <sup>5</sup> / <sub>16</sub>  | 185/7 <sup>5</sup> / <sub>16</sub> | 230/9 <sup>1</sup> / <sub>16</sub>  | 240/9 <sup>7</sup> / <sub>16</sub> | 330/13                              | 390/15 <sup>3</sup> / <sub>8</sub>  | 520/20 <sup>1</sup> / <sub>2</sub>   | 635/25                              | 635/25                               | 855/33 <sup>5</sup> / <sub>8</sub>  | 855/33 <sup>5</sup> / <sub>8</sub>  | 855/33 <sup>5</sup> / <sub>8</sub>    | 1574/61 <sup>15</sup> / <sub>16</sub> | 1675/65 <sup>5</sup> / <sub>16</sub>  | 1675/65 <sup>5</sup> / <sub>16</sub>  |
| W                      | mm/inch | 153/6                              | 170/6 <sup>11</sup> / <sub>16</sub> | 185/7 <sup>3</sup> / <sub>16</sub> | 200/7 <sup>7</sup> / <sub>8</sub>   | 235/9 <sup>1</sup> / <sub>4</sub>  | 330/13                              | 415/16 <sup>5</sup> / <sub>16</sub> | 525/20 <sup>11</sup> / <sub>16</sub> | 610/24                              | 610/24                               | 850/33 <sup>7</sup> / <sub>16</sub> | 850/33 <sup>7</sup> / <sub>16</sub> | 850/33 <sup>7</sup> / <sub>16</sub>   | 1100/43 <sup>9</sup> / <sub>16</sub>  | 1100/43 <sup>9</sup> / <sub>16</sub>  | 1090/42 <sup>15</sup> / <sub>16</sub> |
| R                      |         | 82.5/3 <sup>1</sup> / <sub>4</sub> | 82.5/3 <sup>1</sup> / <sub>4</sub>  | 92.5/3 <sup>5</sup> / <sub>8</sub> | 100/3 <sup>15</sup> / <sub>16</sub> | 110/4 <sup>5</sup> / <sub>16</sub> | 142.5/5 <sup>5</sup> / <sub>8</sub> | 172.5/6 <sup>3</sup> / <sub>4</sub> | 205/8 <sup>1</sup> / <sub>16</sub>   | 230/9                               | 272/10 <sup>11</sup> / <sub>16</sub> | 290/11 <sup>7</sup> / <sub>16</sub> | 310/12 <sup>3</sup> / <sub>16</sub> | 357.5/14 <sup>1</sup> / <sub>16</sub> | 490/19 <sup>5</sup> / <sub>16</sub>   | 498/19 <sup>5</sup> / <sub>8</sub>    | 603/23 <sup>3</sup> / <sub>4</sub>    |
| Weight (kg/lbs)        |         | 12/26                              | 12/26                               | 13/29                              | 22/49                               | 37/82                              | 80/176                              | 157/346                             | 245/540                              | 405/893                             | 510/1124                             | 822/1812                            | 945/2083                            | 980/2160                              | 1950/4299                             | 2070/4560                             | 2600/5730                             |
| Control chamber volume |         | 0.1/0.02                           | 0.1/0.02                            | 0.1/0.02                           | 0.3/0.08                            | 0.7/0.2                            | 1.5/0.4                             | 4.3/1.1                             | 9.7/2.6                              | 18.6/4.9                            | 18.6/4.9                             | 50/13.2                             | 50/13.2                             | 50/13.2                               | 84/22.2                               | 84/22.2                               | 84/22.2                               |

for Angle Type

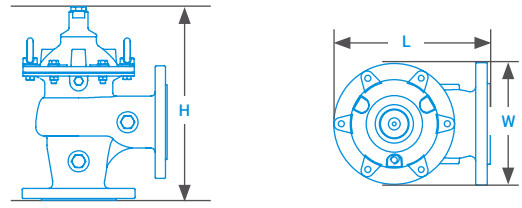
| Diameter        | inch    | 2"           | 3"           | 4"           | 6"           | 8"           | 10"         |
|-----------------|---------|--------------|--------------|--------------|--------------|--------------|-------------|
|                 | mm      | 50           | 80           | 100          | 150          | 200          | 250         |
| L               | mm/inch | 208 / 83/16  | 250 / 913/16 | 295 / 111/16 | 405 / 16     | 505 / 197/8  | 585 / 23    |
| H               | mm/inch | 240 / 97/16  | 415 / 165/16 | 445 / 171/2  | 570 / 227/16 | 635 / 25     | 832 / 323/4 |
| W               | mm/inch | 170 / 611/16 | 200 / 77/8   | 235 / 91/4   | 330 / 13     | 415 / 165/16 | 495 / 191/2 |
| Weight (kg/lbs) |         | 12 / 26      | 20 / 44      | 37 / 81      | 76 / 167     | 150 / 330    | 234 / 550   |

Note: Minimum quantities may apply for S-300 angle valves

### Globe Flanged Type

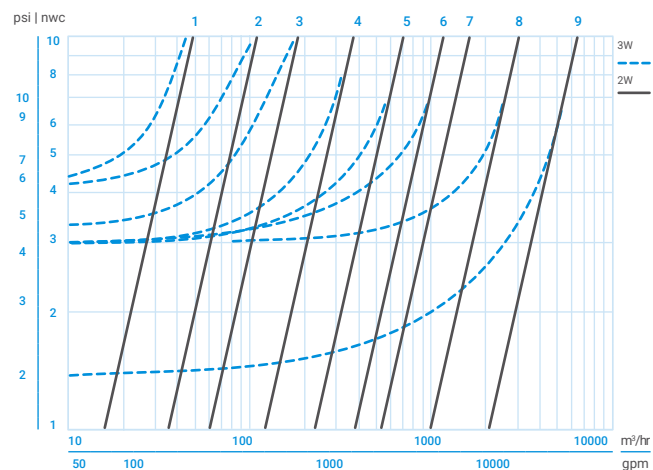


### Angle Type



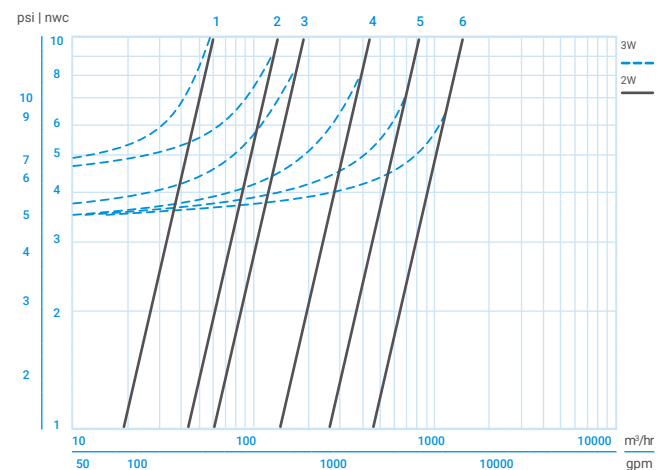
## → Head Loss

### Globe Flanged Type



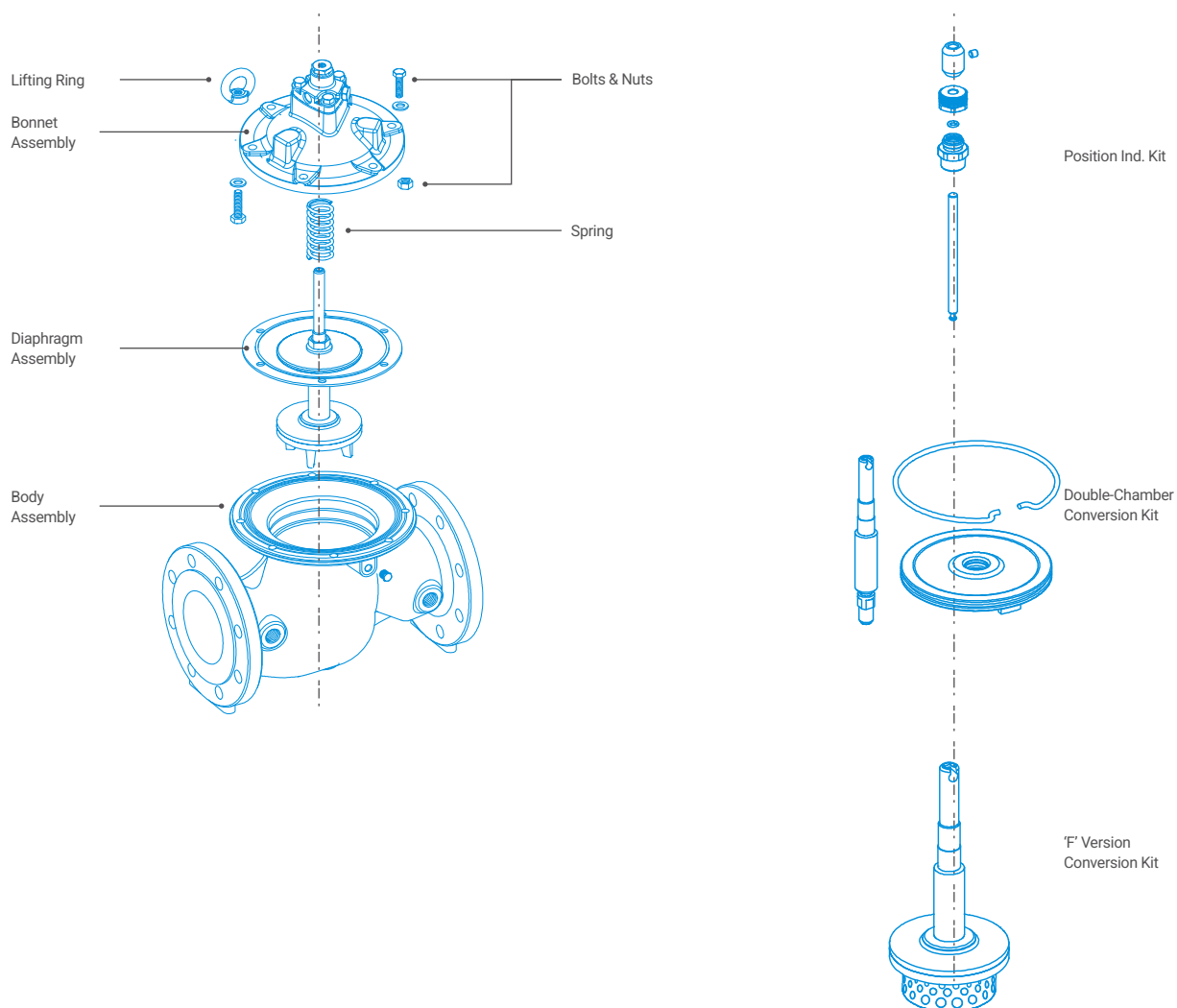
1= 1½", 2", 2½" / 40, 50, 65mm  
2= 3" / 80mm  
3= 4" / 100mm  
4= 6" / 150mm  
5= 8" / 200mm  
6= 10" / 250mm  
7= 14", 12" / 300, 350mm  
8= 16" / 400mm  
9= 32", 28", 24" / 600, 700, 800mm

### Angle Type



1= 1½", 2" / 40, 50mm  
2= 3" / 80mm  
3= 4" / 100mm  
4= 6" / 150mm  
5= 8" / 200mm  
6= 10" / 250mm

## → Components



## → Material Specifications

| # | Part                                       | Material                                             | *Optional                                                                         |
|---|--------------------------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1 | Body & cover                               | Ductile iron GGG50 (ASTM A-536)                      | Cast steel A-216 WCB<br>Cast SST CF8M (316)<br>Ni aluminum bronze<br>Others       |
| 2 | Main valve internals                       | SST, bronze and coated steel                         | SST 316, hastelloy, duplex                                                        |
| 3 | Spring                                     | SST 302                                              | SST 316, inconel                                                                  |
| 4 | Diaphragm                                  | Nylon fabric reinforced EPDM (WRAS and NSF approved) | NBR, viton                                                                        |
| 5 | Seals                                      | EPDM                                                 | NBR, viton                                                                        |
| 6 | Coating                                    | Fusion bonded epoxy (FBE) RAL 5010                   | UV protected FBE RAL 5010<br>FBE RAL 3002 (fire red)<br>UV protected FBE RAL 3002 |
| 7 | Control trim: fittings and control devices | Brass                                                | SST 316, duplex                                                                   |
| 8 | Control trim: tubes                        | Reinforced, heavy-duty polypropylene                 | Copper, SST 316, duplex                                                           |

\* Optional parts for special resistance

# Pilots, Solenoids & Hydraulic Relays

## → Plastic Pilots

Pressure Rating: 10 bar / 145psi

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |        |                                                                                    |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------|
|  |  |  |  | 29-50M | 3-Way multi-purpose<br>(Pressure reducing and sustaining)                          |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   | 29-100 | 3-Way pressure reducing                                                            |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   | 29-200 | 3-Way multi-purpose<br>(Pressure reducing and sustaining)                          |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   | 29-310 | 3-Way differential multi-purpose<br>(Flow control, differential pressure reducing) |

## → Metal Pilots

Pressure Rating: 25 bar / 360psi

|                                                                                    |                                                                                    |                                                                                    |                                                                                    |            |                                                                                      |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------------|
|  |  |  |  | 31-310     | 3-Way multi-purpose<br>(pressure reducing and sustaining)                            |
|                                                                                    |                                                                                    |                                                                                    |                                                                                    | 31-100     | 3-Way multi-purpose (pressure reducing and sustaining)                               |
|                                                                                    |                                                                                    |                                                                                    |                                                                                    | 76-200     | 3-Way differential multi-purpose<br>(flow control, differential pressure sustaining) |
|                                                                                    |                                                                                    |                                                                                    |                                                                                    | 68-410/510 | 2-Way ( 68-410 reducing/ 68-510 sustaining)                                          |

## → Solenoids

Pressure Rating: from 10 bar/145psi to 25 bar/360psi

Operating Voltage: AC: 24V, DC: 12V-24V, DC latch: 7.5V-30V

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                |                         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|-------------------------|
|  |  |  |  |  | D2             | 2-Way NC Solenoid       |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | D3             | 3-Way NC solenoid       |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | Aquative AC/DC | 3-Way NC or NO Solenoid |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | B2             | 2-Way NC or NO Solenoid |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     | B3             | 3-Way NC or NO Solenoid |

## → Relays

Pressure Rating: from 10 bar/145psi to 25 bar/360psi

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |        |                                           |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|-------------------------------------------|
|  |  |  |  | 25-300 | 3-Way / 2 positions NO w. $\frac{3}{8}$ " |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     | Galit  | 3-Way / 2 positions NC or NO              |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     | 66-210 | 3-Way / 2 positions NC or NO              |
|                                                                                     |                                                                                     |                                                                                     |                                                                                     | 28-800 | 2-Way / 2 positions                       |

# Description Guide

Please follow the ordering guide below and contact a Netafim representative

## 1 Series

|      |                     |
|------|---------------------|
| S75  | 75 Plastic          |
| S75T | 75PI + throttle     |
| S80  | 80 Plastic          |
| S80T | 80PI + throttle     |
| S80V | 80 "T" one chamber  |
| S80W | 80 "T" dual chamber |
| S90  | 90 PVC              |
| S100 | 100 Metal           |
| S300 | 300 Metal           |
| S500 | 500 Metal           |

## 2 Material

|    |                  |
|----|------------------|
| PL | Reinforced nylon |
| PP | Polypropylene    |
| PV | PVC              |
| CI | Cast iron        |
| DI | Ductile iron     |
| BR | Bronze           |
| ST | Stainless steel  |

## 3 Nominal Diameter

|     |                          |
|-----|--------------------------|
| ¾"  | ¾" (20mm)                |
| 1"  | 1" (25mm)                |
| 1½" | 1½" (40mm)               |
| 2"  | 2" (50mm)                |
| 2½" | 2½" (65mm)               |
| 3"R | 323" (80 x 50 x 80mm)    |
| 3"  | 3" (80mm)                |
| 3"H | 343" (80 x 100 x 80mm)   |
| 4"R | 434" (100 x 80 x 100mm)  |
| 4"  | 4" (100mm)               |
| 90  | 90mm (PVC)               |
| 110 | 110mm (PVC)              |
| 160 | 160mm (PVC)              |
| 6"R | 6" (150 x 100 x 150mm)   |
| 6"  | 6" (150mm)               |
| 8"R | 868" (200 x 150 x 200mm) |
| 8"  | 8" (200mm)               |
| 10" | 10" (250mm)              |
| 12" | 12" (300mm)              |
| 14" | 14" (350mm)              |
| 16" | 16" (400mm)              |
| 18" | 18" (450mm)              |
| 20" | 20" (500mm)              |
| 24" | 24" (600mm)              |
| 28" | 28" (700mm)              |
| 32" | 32" (800mm)              |

## Example

**S100<sup>1</sup> CI<sup>2</sup> 6"<sup>3</sup> A<sup>4</sup> DN16<sup>5</sup> PRS<sup>6</sup> MP<sup>7</sup> GR<sup>8</sup> AQAC<sup>9</sup> 3WNC<sup>10</sup> 2P<sup>11</sup>**

## 4 Configuration

|   |            |
|---|------------|
| H | Horizontal |
| A | Angle      |

## 5 Connection

|      |                    |
|------|--------------------|
| NPT  | NPT                |
| BSP  | BSP                |
| UNF  | Universal flange*  |
| DN10 | ISO PN10**         |
| DN16 | ISO PN16**         |
| AN12 | ANSI 125**         |
| AN15 | ANSI 150**         |
| BSTD | BSTD**             |
| BSTE | BSTE**             |
| ABNT | ABNT**             |
| VIC  | Grooved            |
| GLUE | PVC solvent welded |

\* Plastic only \*\* Metal only

## 6 Main Function

|     |                                         |
|-----|-----------------------------------------|
| BAS | Basic                                   |
| MAN | Manual control on/off                   |
| HYD | Hydraulic control on/off                |
| ELE | Electric control on/off                 |
| PRV | Pressure reducing                       |
| PSV | Pressure sustaining (& relief)          |
| PRS | Pressure reducing & sustaining          |
| FLV | Flow control                            |
| QRV | Quick relief                            |
| LCV | Level control                           |
| SAV | Surge anticipating                      |
| TOV | Pressure reducing, two-stage opening    |
| TSV | Pressure reducing, two sets of pressure |
| PCV | Pump control valve                      |

\* for PRS: 1st value for the PR and 2nd value for the PS

## 7 Pilot

|    |               |
|----|---------------|
| PP | Plastic pilot |
| MP | Metal pilot*  |

\* for metal valve only

## 8 Pilot Spring

|   |               |
|---|---------------|
| Y | Yellow spring |
| G | Green spring  |
| R | Red spring    |

## 9 Solenoid Type

|      |                                  |
|------|----------------------------------|
| AQAC | Solenoid aquative 24AC           |
| AQDC | Solenoid aquative 12-40VDC latch |
| D24A | Dorot solenoid 24VAC             |
| D24D | Dorot solenoid 24VDC             |
| D12D | Dorot solenoid 12VDC             |
| D12L | Dorot solenoid 12VDC latch       |
| 24AC | Other solenoid 24VAC             |
| 24DC | Other solenoid 24VDC             |
| 12DC | Other solenoid 12VDC             |
| 12DL | Other solenoid 12VDC latch       |

## 10 Valve's Mode

|      |           |
|------|-----------|
| 3WNC | 3-Way N.C |
| 2WNC | 2-Way N.C |
| 3WNO | 3-Way N.O |
| 2WNO | 2-Way N.O |
| 2W   | 2-Way*    |
| 3W   | 3-Way*    |

\* Manual and hydraulic control only

## 11 Accessories

|      |                                 |
|------|---------------------------------|
| C/2C | Check point (1 unit, 2 unit)    |
| P/2P | Pressure gauge (1 unit, 2 unit) |
| H    | Hydraulic relay                 |
| F    | Float                           |
| O    | Orifice                         |
| T    | Shuttle T                       |
| N    | Non-return feature              |
| S    | 3-Way manual valve              |
| LP   | Low-pressure diaphragm          |
| HP   | High-pressure diaphragm         |
| MIN  | Mining                          |
| SV   | Shreader                        |

# Flow Rate Suitability

→ Flexible Seal  
Series 75 3W

| Recommended Flow rate |         | Diameter |                   | Pattern  | Flow Rate in 1 bar Head-loss (m³/h) Kv | Flow Rate in 1m Head-loss (m³/h) | Flow Rate in 2m Head-loss (m³/h) | Flow Rate in 3m Head-loss (m³/h) | Flow Rate in 1psi Head-loss (gpm) Cv | Flow Rate in 1.5psi Head-loss (gpm) | Flow Rate in 3psi Head-loss (gpm) | Flow Rate in 4.5psi Head-loss (gpm) |
|-----------------------|---------|----------|-------------------|----------|----------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|
| m³/h*                 | gpm     | inch     | mm                |          |                                        |                                  |                                  |                                  |                                      |                                     |                                   |                                     |
| 7-14                  | 30-61   | 1½"      | 40mm              | Straight | 60                                     | 19                               | 27                               | 33                               | 69                                   | 85                                  | 120                               | 147                                 |
| 15-22                 | 62-97   | 2"       | 50mm              |          | 83                                     | 26                               | 37                               | 45                               | 96                                   | 118                                 | 166                               | 204                                 |
| 15-22                 | 62-97   | 3"R      | 80 x 50 x 80mm    |          | 90                                     | 28                               | 40                               | 49                               | 104                                  | 127                                 | 180                               | 221                                 |
| 23-55                 | 63-240  | 3"       | 80mm              |          | 120                                    | 38                               | 54                               | 66                               | 139                                  | 170                                 | 240                               | 294                                 |
| 23-55                 | 63-240  | 4"R      | 100 x 80 x 100mm  |          | 120                                    | 38                               | 54                               | 66                               | 139                                  | 170                                 | 240                               | 294                                 |
| 56-90                 | 241-395 | 3"H      | 80 x 100 x 80mm   |          | 250                                    | 79                               | 112                              | 137                              | 289                                  | 354                                 | 501                               | 613                                 |
| 56-90                 | 241-395 | 4"       | 100mm             |          | 350                                    | 111                              | 157                              | 192                              | 405                                  | 496                                 | 701                               | 858                                 |
| 56-90                 | 241-395 | 6"R      | 150 x 100 x 150mm |          | 350                                    | 111                              | 157                              | 192                              | 405                                  | 496                                 | 701                               | 858                                 |
| 91-200                | 396-880 | 6"       | 150mm             |          | 580                                    | 183                              | 259                              | 318                              | 671                                  | 821                                 | 1161                              | 1422                                |
| 91-200                | 396-880 | 8"R      | 200 x 150 x 200mm |          | 580                                    | 183                              | 259                              | 318                              | 671                                  | 821                                 | 1161                              | 1422                                |

Note: Maximal flow rate based on 3 m/s

→ Rigid Seal  
Series 80 3W

| Recommended Flow rate |        | Diameter |                  | Pattern  | Flow Rate in 1 bar Head-loss (m³/h) Kv | Flow Rate in 1m Head-loss (m³/h) | Flow Rate in 2m Head-loss (m³/h) | Flow Rate in 3m Head-loss (m³/h) | Flow Rate in 1psi Head-loss (gpm) Cv | Flow Rate in 1.5psi Head-loss (gpm) | Flow Rate in 3psi Head-loss (gpm) | Flow Rate in 4.5psi Head-loss (gpm) |
|-----------------------|--------|----------|------------------|----------|----------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|
| m³/h*                 | gpm    | inch     | mm               |          |                                        |                                  |                                  |                                  |                                      |                                     |                                   |                                     |
| 7-14                  | 30-61  | 1½"      | 40mm             | Straight | 35                                     | 11                               | 16                               | 19                               | 40                                   | 50                                  | 70                                | 86                                  |
| 15-22                 | 62-97  | 2"       | 50mm             |          | 45                                     | 14                               | 20                               | 25                               | 52                                   | 64                                  | 90                                | 110                                 |
| 7-14                  | 30-61  | 1½"      | 40mm             | Angle    | 45                                     | 45                               | 14                               | 20                               | 25                                   | 52                                  | 64                                | 90                                  |
| 15-22                 | 62-97  | 2"       | 50mm             |          | 60                                     | 19                               | 27                               | 33                               | 69                                   | 85                                  | 120                               | 147                                 |
| 23-55                 | 63-240 | 3"       | 80mm             |          | 180                                    | 57                               | 80                               | 99                               | 208                                  | 255                                 | 360                               | 441                                 |
| 23-55                 | 63-240 | 4"R      | 100 x 80 x 100mm |          | 180                                    | 57                               | 80                               | 99                               | 208                                  | 255                                 | 360                               | 441                                 |

Note: Maximal flow rate based on 3 m/s

→ Flexible Seal  
Series 90 3W

| Recommended Flow rate |         | Diameter |       | Pattern  | Flow Rate in 1 bar Head-loss (m³/h) Kv | Flow Rate in 1m Head-loss (m³/h) | Flow Rate in 2m Head-loss (m³/h) | Flow Rate in 3m Head-loss (m³/h) | Flow Rate in 1psi Head-loss (gpm) Cv | Flow Rate in 1.5psi Head-loss (gpm) | Flow Rate in 3psi Head-loss (gpm) | Flow Rate in 4.5psi Head-loss (gpm) |
|-----------------------|---------|----------|-------|----------|----------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|
| m³/h*                 | gpm     | inch     | mm    |          |                                        |                                  |                                  |                                  |                                      |                                     |                                   |                                     |
| 23-55                 | 63-240  | 3"       | 80mm  | Straight | 152                                    | 48                               | 68                               | 83                               | 176                                  | 215                                 | 304                               | 373                                 |
| 56-90                 | 241-395 | 4"       | 100mm |          | 215                                    | 68                               | 96                               | 118                              | 249                                  | 304                                 | 431                               | 527                                 |
| 91-200                | 396-880 | 6"       | 150mm |          | 480                                    | 152                              | 215                              | 263                              | 555                                  | 680                                 | 961                               | 1177                                |

Note: Maximal flow rate based on 3 m/s

## → Flexible Seal Series 100 3W

| Recommended Flow rate |           | Diameter |                | Pattern          | Flow Rate in 1 bar Head-loss (m³/h) Kv | Flow Rate in 1m Head-loss (m³/h) | Flow Rate in 2m Head-loss (m³/h) | Flow Rate in 3m Head-loss (m³/h) | Flow Rate in 1psi Head-loss (gpm) Cv | Flow Rate in 1.5psi Head-loss (gpm) | Flow Rate in 3psi Head-loss (gpm) | Flow Rate in 4.5psi Head-loss (gpm) |
|-----------------------|-----------|----------|----------------|------------------|----------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------------|-------------------------------------|-----------------------------------|-------------------------------------|
| m³/h*                 | gpm       | inch     | mm             |                  |                                        |                                  |                                  |                                  |                                      |                                     |                                   |                                     |
| 7-14                  | 30-61     | 1½"      | 40mm           | Straight / Angle | 64                                     | 20                               | 29                               | 35                               | 74                                   | 91                                  | 128                               | 157                                 |
| 15-22                 | 62-97     | 2"       | 50mm           |                  | 95                                     | 30                               | 42                               | 52                               | 110                                  | 135                                 | 190                               | 233                                 |
| 15-22                 | 62-97     | 2½"      | 65mm           |                  | 95                                     | 30                               | 42                               | 52                               | 110                                  | 135                                 | 190                               | 233                                 |
| 15-22                 | 62-97     | 3"R      | 80 x 50 x 80mm |                  | 95                                     | 30                               | 42                               | 52                               | 110                                  | 135                                 | 190                               | 233                                 |
| 23-55                 | 63-240    | 3"       | 80mm           |                  | 170                                    | 54                               | 76                               | 93                               | 197                                  | 241                                 | 340                               | 417                                 |
| 56-90                 | 241-395   | 4"       | 100mm          |                  | 220                                    | 70                               | 98                               | 120                              | 254                                  | 311                                 | 441                               | 540                                 |
| 91-200                | 396-880   | 6"       | 150mm          |                  | 600                                    | 190                              | 268                              | 329                              | 694                                  | 850                                 | 1201                              | 1471                                |
| 91-200                | 396-880   | 8"R      | 150mm          |                  | 670                                    | 212                              | 300                              | 367                              | 775                                  | 949                                 | 1342                              | 1643                                |
| 201-340               | 881-1500  | 8"       | 200mm          |                  | 800                                    | 253                              | 358                              | 438                              | 925                                  | 1133                                | 1602                              | 1962                                |
| 341-532               | 1501-2345 | 10"      | 250mm          |                  | 1250                                   | 395                              | 559                              | 685                              | 1445                                 | 1770                                | 2503                              | 3065                                |
| 533-765               | 2346-3370 | 12"      | 300mm          |                  | 1900                                   | 601                              | 850                              | 1041                             | 2197                                 | 2690                                | 3805                              | 4660                                |

### Notes:

- Maximal flow rate based on 3 m/s
- Head loss calculation according to maximum required flow

## → Head Loss Calculations

$$\Delta P = \left( \frac{Q}{Kv} \right)^2$$

Q=m³/h  
Kv - taken from the technical publications  
Result given in Bar

$$\Delta P = \left( \frac{Q}{Cv} \right)^2$$

Q=gpm  
Cv - taken from the technical publications  
Result given in PSI

# Catalog Numbers of Main Products

(Additional diameters, connection types and functions are available upon request)

## 75 Series

| Diam. | Conn. Type | Functions    |              |                   |                                 |                                 |                     |                                |
|-------|------------|--------------|--------------|-------------------|---------------------------------|---------------------------------|---------------------|--------------------------------|
|       |            | Electric AC  | Electric DC  | Pressure Reducing | Electric AC & Pressure Reducing | Electric DC & Pressure Reducing | Pressure Sustaining | Pressure Reducing & Sustaining |
| 2"    | Thr. BSP   | 71640-002115 | 71640-001582 | 71600-008795      | 71640-001581                    | 71640-003411                    | 71600-002292        | 71600-010610                   |
| 3"R   | Thr. BSP   | 71640-004430 | 71640-004181 | 71600-009150      | 71640-016505                    | 71640-007175                    | 71600-011000        | 71600-050654                   |
| 3"    | Thr. BSP   | 71640-002265 | 71640-005139 | 71600-003546      | 71640-002152                    | 71640-002160                    | 71640-002161        | 71600-010975                   |
|       | Uni. FLN.  | 71640-002154 | 71640-002153 | 71600-003541      | 71640-002166                    | 71640-002167                    | 71600-035966        | 71600-003438                   |
| 3" h  | Thr. BSP   | 71600-003356 | 71600-003353 | 71600-003358      | 71600-003361                    | 71600-003360                    |                     |                                |
|       | Thr. NPT   | 71600-003355 | 71600-003354 | 71600-003357      | 71600-003362                    | 71600-003359                    |                     |                                |
| 4"R   | Uni. FLN.  | 71640-005593 | 71640-005524 | 71600-004241      | 71640-016520                    | 71640-005592                    | 71600-035870        | 71600-051095                   |
| 4"    | Uni. FLN.  | 71640-002342 | 71640-005522 | 71600-051101      | 71640-007182                    | 71640-007183                    | 71600-051093        | 71600-051102                   |
| 6"R   | Uni. FLN.  | 71640-007086 | 71640-007085 | 71600-052606      | 71640-007094                    | 71640-005835                    | 71600-052600        | 71600-003712                   |
| 6"    | Uni. FLN.  | 71640-000008 | 71640-000007 | 71600-000025      | 71640-000003                    | 71640-000004                    | 71600-000026        |                                |
| 8"r   | Uni. FLN.  | 71640-000010 | 71640-000009 | 71600-000018      | 71640-000006                    | 71640-000005                    | 71600-000027        |                                |

\*\* Electric valves are in 3-Way mode. Standard valve are without throttling handles (unless specified)

## 80 Series

| Diam. | Shape    | Connection Type   | Functions    |              |                   |                                 |                                 |              |
|-------|----------|-------------------|--------------|--------------|-------------------|---------------------------------|---------------------------------|--------------|
|       |          |                   | Electric AC  | Electric DC  | Pressure Reducing | Electric AC & Pressure Reducing | Electric DC & Pressure Reducing | Quick Relief |
| 3/4"  | Straight | Threaded BSP      | 71640-007320 | 71640-007330 |                   |                                 |                                 |              |
| 1"    | Straight | Threaded BSP      | 71640-007390 | 71640-007370 |                   |                                 |                                 |              |
| 1½"   | Straight | Threaded BSP      | 71640-001150 | 71640-001131 | 71600-050153      | 71640-001151                    | 71640-001152                    | 71600-050154 |
|       | Angle    |                   | 71640-001132 | 71640-007610 | 71600-050151      | 71640-001133                    | 71640-001134                    | 71600-000374 |
| 2"    | Straight | Threaded BSP      | 71640-003455 | 71640-014420 | 71600-008812      | 71640-014427                    | 71640-007681                    | 71600-050701 |
|       | Angle    |                   | 71640-003456 | 71640-014400 | 71600-050343      | 71640-003404                    | 71640-014390                    | 71600-000365 |
| 3"    | Angle    | Threaded BSP      | 71640-004990 | 71640-018221 | 71600-009475      | 71640-004810                    | 71640-002145                    | 71600-013442 |
|       |          | Universal flanged | 71640-004992 | 71640-017034 | 71600-051015      | 71640-005176                    | 71640-004991                    | 71600-013443 |
| 4"R   | Angle    | Universal flanged | 71640-018241 | 71640-018242 | 71600-051110      | 71640-005195                    | 71640-005196                    | 71600-051120 |

### Notes:

- Electric valves of diameters below 2" are 2-Way
- Available also in 3-Way

## 90 Series

| Diam. | Functions    |              |              |                   |                                 |                                 |                     |
|-------|--------------|--------------|--------------|-------------------|---------------------------------|---------------------------------|---------------------|
|       | Manual       | Electric AC  | Electric DC  | Pressure Reducing | Electric AC & Pressure Reducing | Electric DC & Pressure Reducing | Pressure Sustaining |
| 3"    | 71600-005400 | 71640-005060 | 71640-005065 | 71600-035990      | 71640-016530                    | 71640-016530                    | 71600-011250        |
| 4"    | 71610-018415 | 71640-005520 | 71640-005526 | 71600-006053      | 71640-016540                    | 71640-005521                    | 71600-035880        |
| 6"    | 71600-006150 | 71640-005961 | 71640-005950 | 71600-006193      | 71640-016550                    | 71640-005771                    | 71600-035890        |
| 90    | 71600-005500 | 71640-005055 | 71640-018108 | 71600-005745      | 71640-018102                    | 71640-005074                    | 71600-012485        |
| 110   | 71600-006000 | 71640-011070 | 71640-005516 | 71600-005790      | 71640-018103                    | 71640-018101                    | 71600-006052        |
| 160   | 71600-005870 | 71640-005910 | 71640-011080 | 71600-012475      | 71640-005094                    | 71640-005915                    | 71600-012479        |

\* Data is referring to valves with solvent welded end-connections

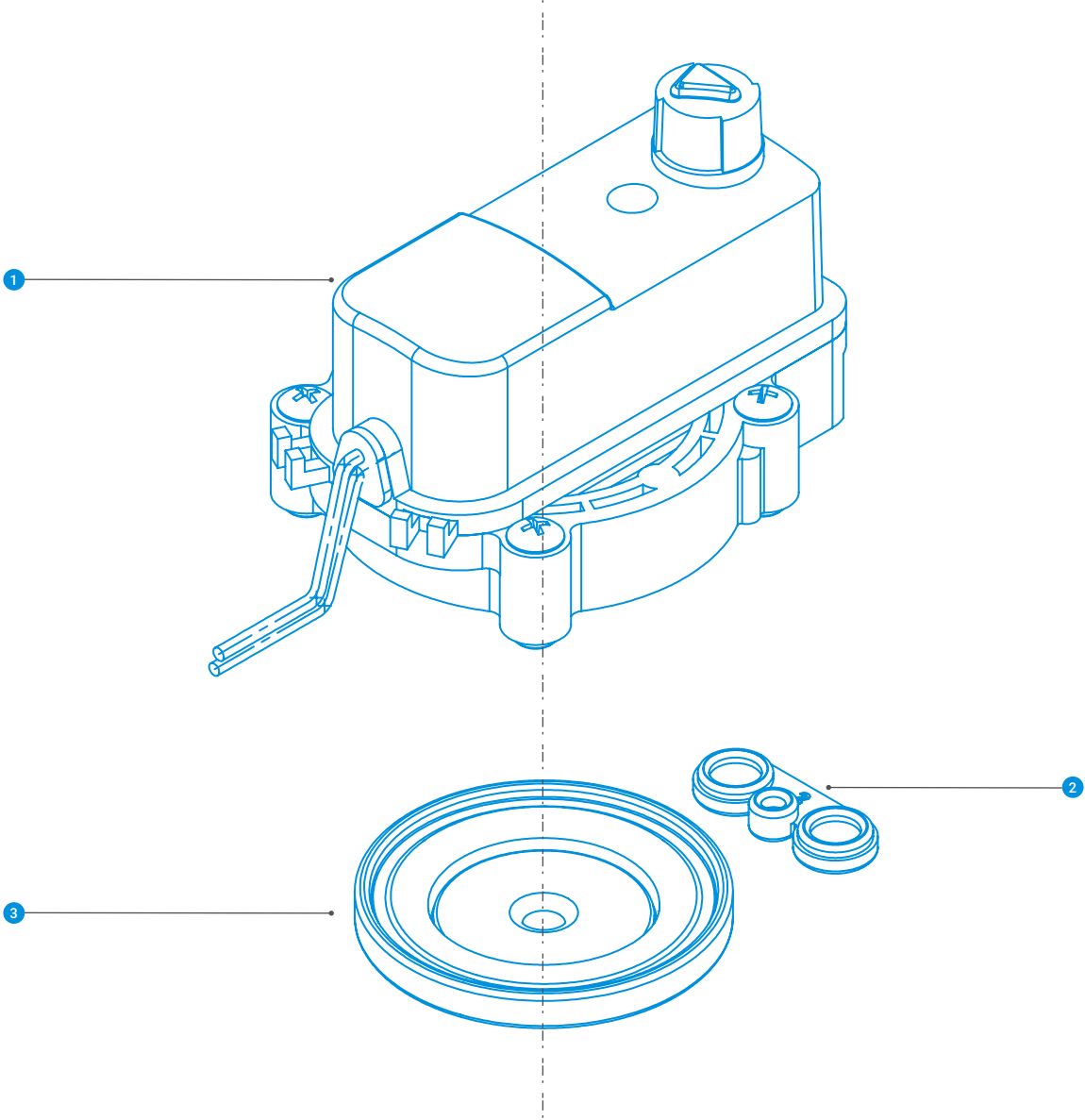
100 Series

| Diam. | Connection Type | Functions         |                                 |                                 |                     |                                |              |
|-------|-----------------|-------------------|---------------------------------|---------------------------------|---------------------|--------------------------------|--------------|
|       |                 | Pressure Reducing | Electric AC & Pressure Reducing | Electric DC & Pressure Reducing | Pressure Sustaining | Pressure Reducing & Sustaining | Quick Relief |
| 3"    | Flange ISO      | 71600-052310      | 71640-005009                    | 71640-005025                    | 71600-050265        | 71600-050270                   | 71600-050354 |
|       | Flange BSTD     | 71600-009125      | 71640-005020                    | 71640-016990                    | 71600-011300        | 71600-009453                   | 71600-014145 |
| 4"    | Flange ISO      | 71600-050369      | 71640-005455                    | 71640-006220                    | 71600-050310        | 71600-050300                   | 71600-014256 |
|       | Flange BSTD     | 71600-009590      | 71640-005210                    | 71640-005225                    | 71600-011540        | 71600-050302                   | 71600-050301 |
| 6"    | Flange ISO      | 71600-051511      | 71640-016671                    | 71640-016672                    | 71600-004421        | 71600-051510                   | 71600-050372 |
|       | Flange BSTD     | 71600-004420      | 71640-005868                    | 71640-016662                    | 71600-051521        | 71600-011755                   | 71600-004301 |
| 8"    | Flange ISO      | 71600-009893      | 71640-017115                    | 71640-006126                    | 71600-051600        | 71600-004699                   |              |
|       | Flange BSTD     | 71600-051603      | 71640-006120                    | 71640-006127                    | 71600-011800        | 71600-011810                   |              |

# / Spare Parts

# AquaNet™

3/4" - 1"

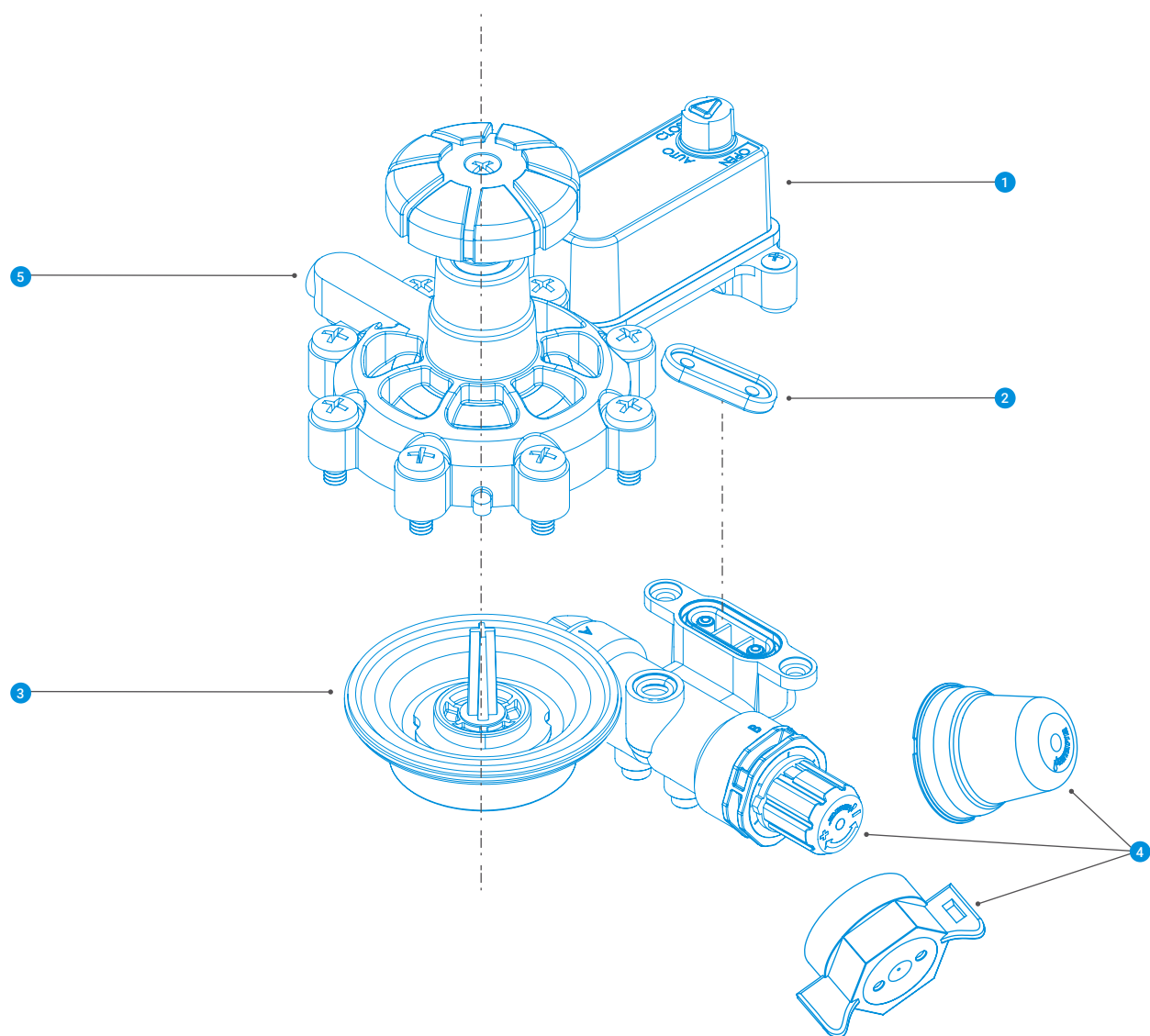


→ **Parts List & Catalog Numbers**

| Part List # | Description                                | Catalog Number |
|-------------|--------------------------------------------|----------------|
| 1           | AQUANET 1-3/4" OPERAT.MECHAN.AC-REPLACEM.  | 35500-006700   |
|             | AQUANET 1-3/4" OPERAT.MECHAN. DC REPLACEM. | 35500-006800   |
| 2           | AQUANET ELECTRIC VALVE DIAPHRAGM NT2       | 35500-004100   |
| 3           | AQUANET 1-3/4" DIAPHRAGM KIT               | 35500-004350   |

# AquaNet™

1½" - 2"

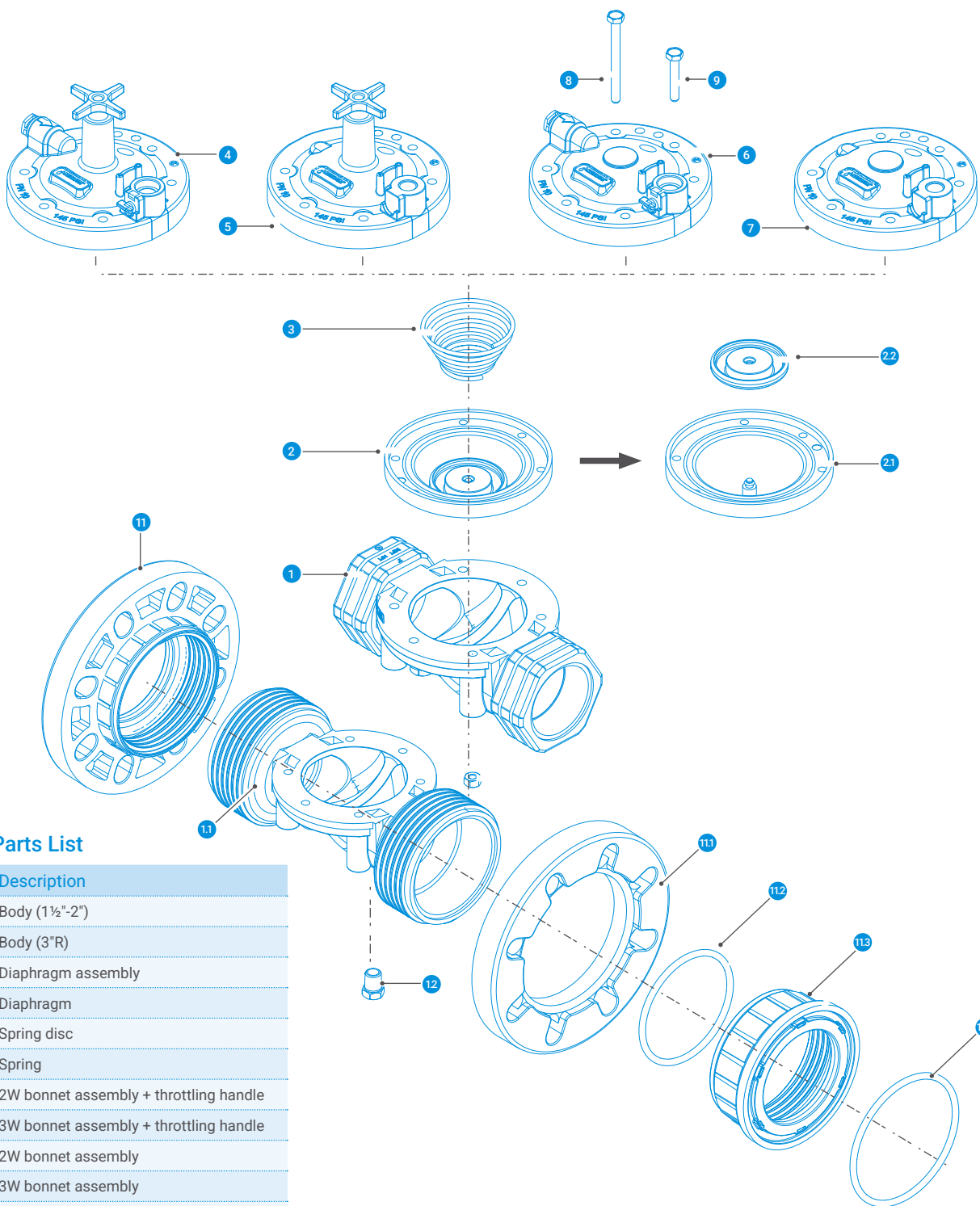


→ **Parts List & Catalog Numbers**

| Part List # | Description                             | Catalog Number |
|-------------|-----------------------------------------|----------------|
| 1           | AQUANET 1½-2" OPERAT.MECHAN.AC REPLACEM | 35500-011100   |
|             | AQUANET 1½-2" OPERAT.MECHAN DC REPLACEM | 35500-011200   |
| 2           | AQUANET 1½-2" COMMAND DIAPHRAGM         | 35500-010800   |
| 3           | AQUANET 1½-2" MAIN DIAPHRAGM KIT        | 35500-010200   |
| 4           | AQUANET PILOT ASSY F/PRESSURE REGULATOR | 35500-001100   |
| 5           | COMBI-COVER ASSEMBLY FOR VLAVE          | 35500-015830   |

# 75 Series Plastic Valves

1½" - 3"R



## → Parts List

| #    | Description                            |
|------|----------------------------------------|
| 1    | Body (1½"-2")                          |
| 1.1  | Body (3"R)                             |
| 2    | Diaphragm assembly                     |
| 2.1  | Diaphragm                              |
| 2.2  | Spring disc                            |
| 3    | Spring                                 |
| 4    | 2W bonnet assembly + throttling handle |
| 5    | 3W bonnet assembly + throttling handle |
| 6    | 2W bonnet assembly                     |
| 7    | 3W bonnet assembly                     |
| 8    | Bolt                                   |
| 9    | Short bolt                             |
| 10   | Nut                                    |
| 11   | Flange assembly                        |
| 11.1 | Flange                                 |
| 11.2 | O-ring                                 |
| 11.3 | Flange adapter                         |
| 12   | Plug                                   |

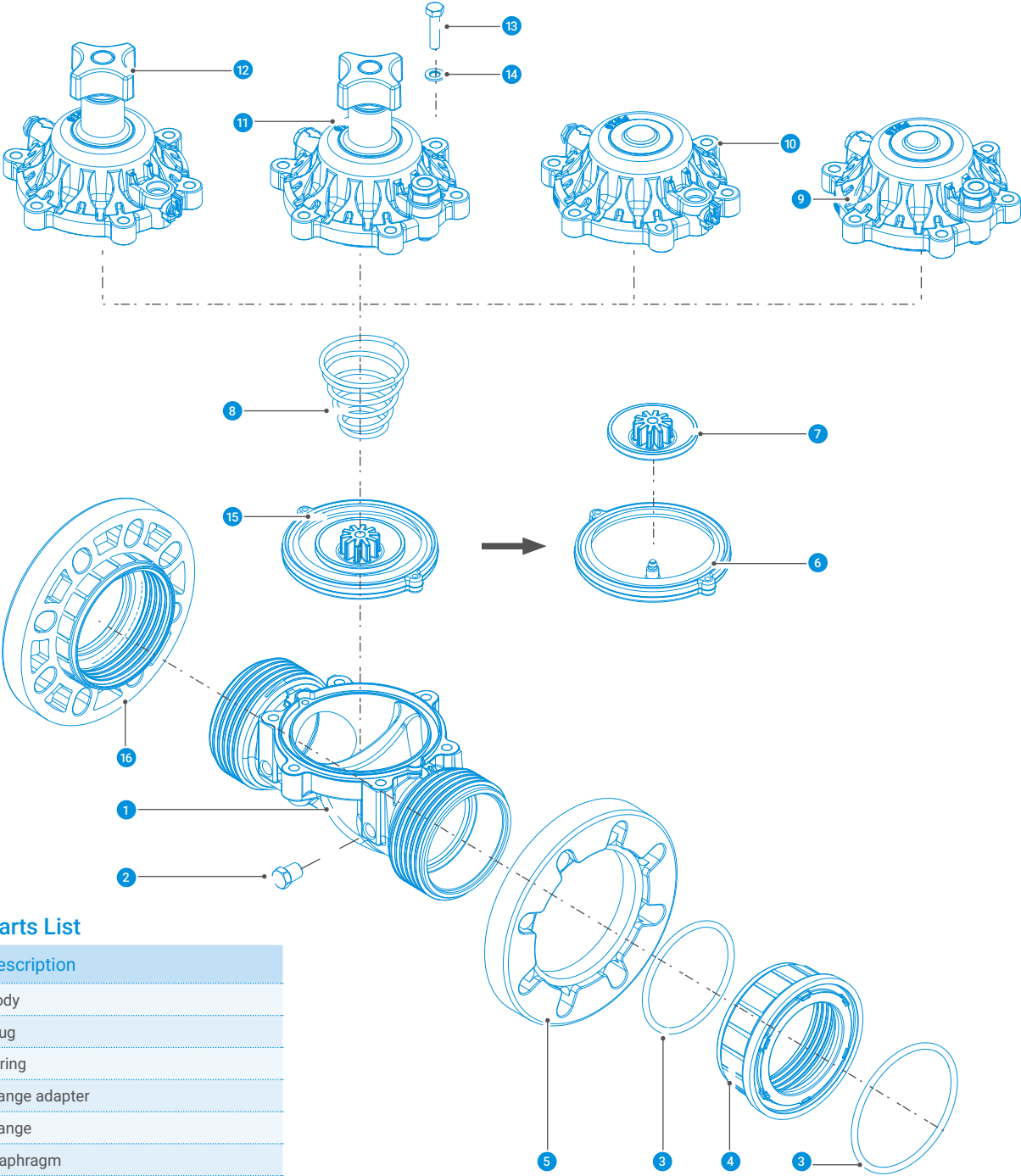
## → Catalog Numbers

| Part List #      | Description                            | Catalog Number |
|------------------|----------------------------------------|----------------|
| 2 (2.1, 2.2)     | 2W, DIAPHRAGM KIT                      | 71680-007250   |
|                  | 3W, DIAPHRAGM KIT                      | 71680-006170   |
| 3                | SPRING NO. 22                          | 71680-008400   |
| 11 (11.1 - 11.3) | SET OF UNIVERSAL FLANGE 3" (1 SIDES) * | 71680-000610   |

\* Set of universal flange 2 sides is available upon request

# 75 Series Plastic Valves

## 3" - 4"R



### → Parts List

| #  | Description                            |
|----|----------------------------------------|
| 1  | Body                                   |
| 2  | Plug                                   |
| 3  | O-ring                                 |
| 4  | Flange adapter                         |
| 5  | Flange                                 |
| 6  | Diaphragm                              |
| 7  | Spring disc                            |
| 8  | Spring                                 |
| 9  | 3W bonnet assembly                     |
| 10 | 2W bonnet assembly                     |
| 11 | 3W bonnet assembly + throttling handle |
| 12 | 2W bonnet assembly + throttling handle |
| 13 | Bolt                                   |
| 14 | Washer                                 |
| 15 | Diaphragm assembly                     |
| 16 | Flange assembly                        |

Threaded body assembly parts: 1, 2  
Two-sided flanged body assy parts: 1, 2, 17 (2 qty)

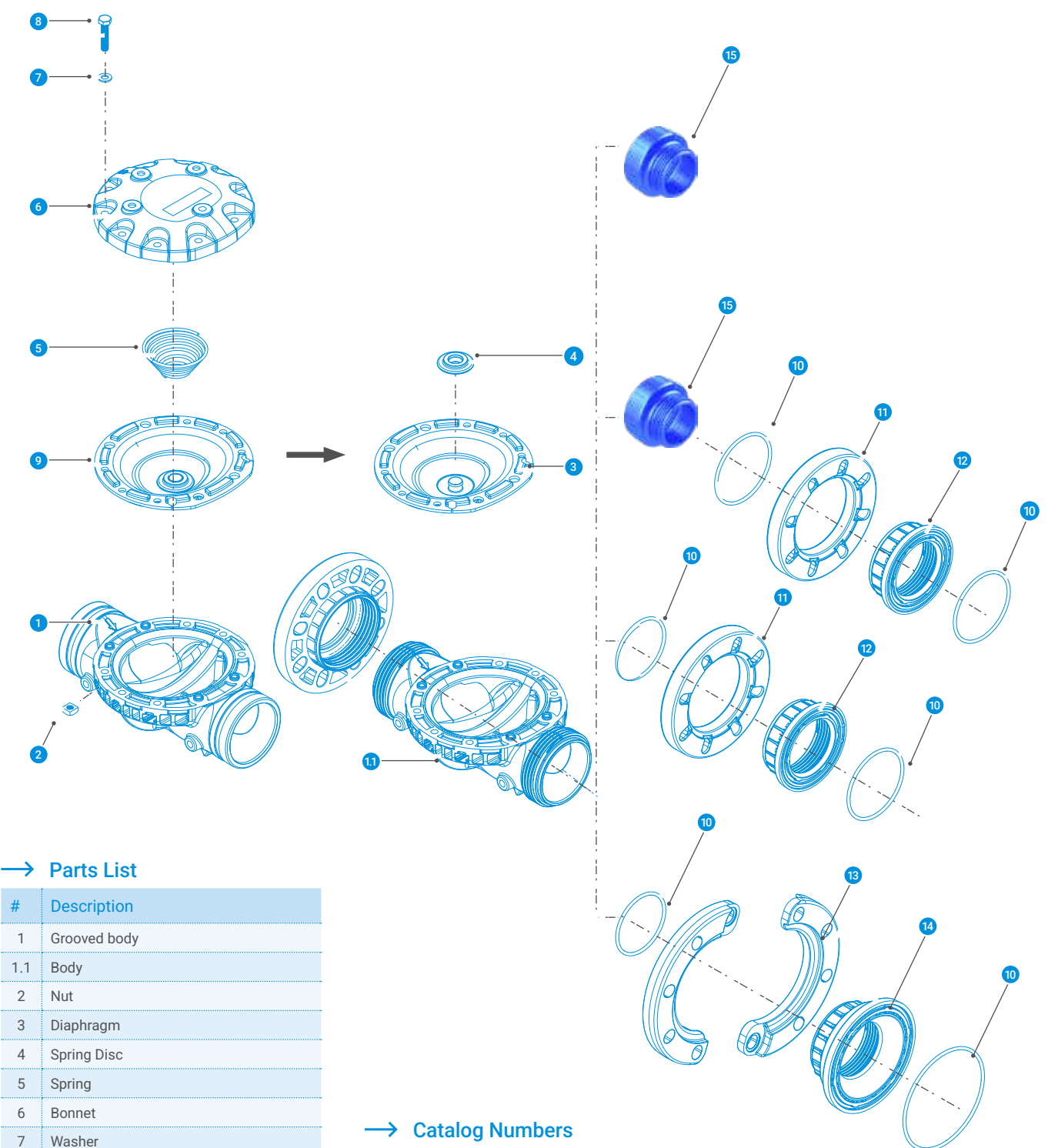
### → Catalog Numbers

| Part List #    | Description                            | Catalog Number |
|----------------|----------------------------------------|----------------|
| 15 (6 & 7)     | 2W, DIAPHRAGM KIT                      | 71680-000156   |
|                | 3W, DIAPHRAGM KIT                      | 71680-006380   |
| 8              | SPRING NO. 6                           | 71680-011022   |
| 16 (3 & 4 & 5) | SET OF UNIVERSAL FLANGE 3" (1 SIDES)   | 71680-000610   |
|                | SET OF UNIVERSAL FLANGE 4" (1 SIDES) * | 71680-000620   |

\* Set of universal flange 2 sides is available upun request

# 75 Series Plastic Valves

## 3H" - 6"R



### → Parts List

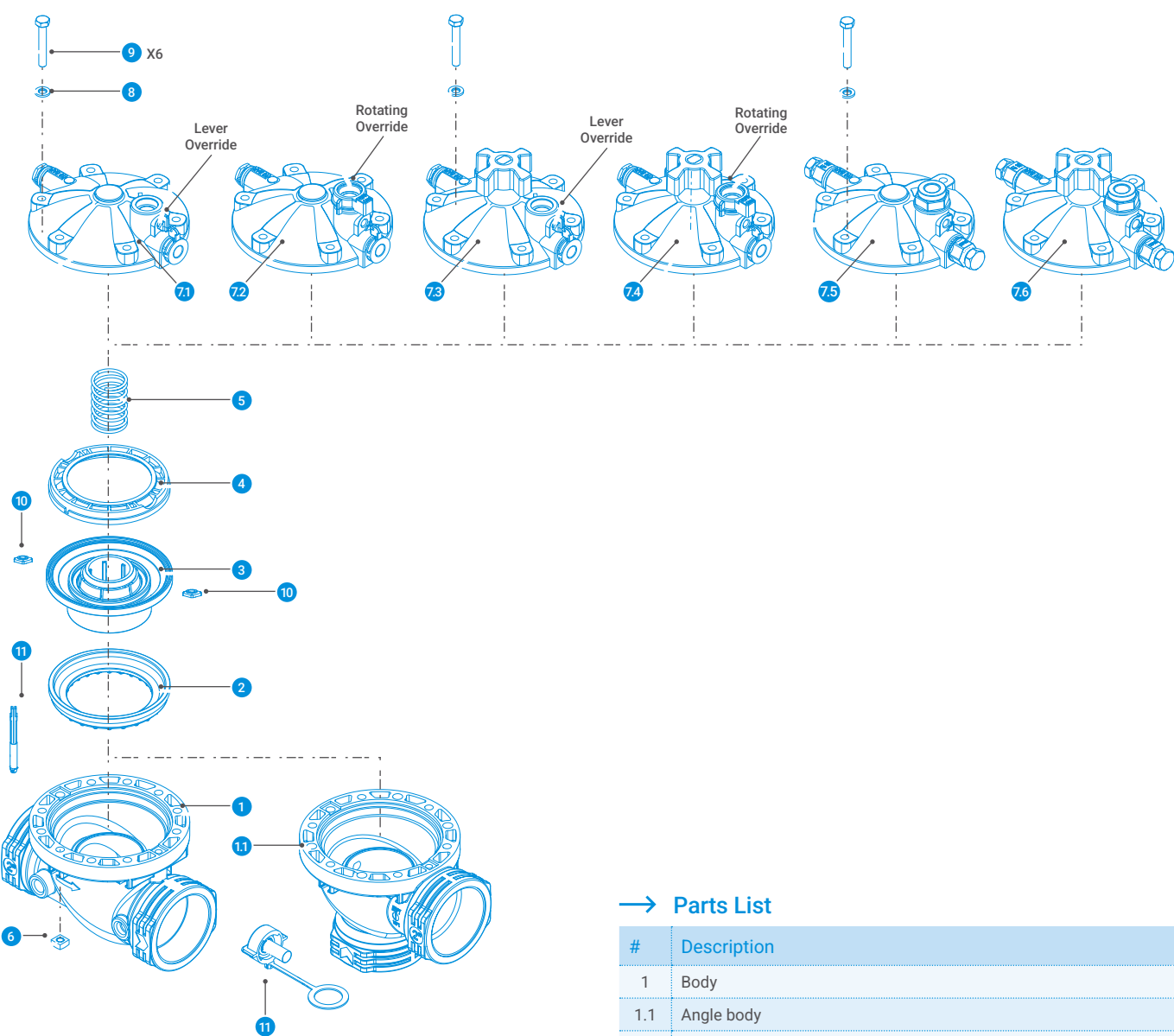
| #   | Description       |
|-----|-------------------|
| 1   | Grooved body      |
| 1.1 | Body              |
| 2   | Nut               |
| 3   | Diaphragm         |
| 4   | Spring Disc       |
| 5   | Spring            |
| 6   | Bonnet            |
| 7   | Washer            |
| 8   | Bolt              |
| 9   | Diaphragm kit     |
| 10  | O-ring            |
| 11  | Flange            |
| 12  | Flange adapter    |
| 13  | 6" Flange (2 pcs) |
| 14  | Flange adapter 6" |
| 15  | 3" thread adapter |

### → Catalog Numbers

| Part List #  | Description                          | Catalog Number |
|--------------|--------------------------------------|----------------|
| 3 & 4        | 3W, DIAPHRAGM                        | 71680-000229   |
| 5            | SPRING NO. 9                         | 71680-008100   |
| 10 & 13 & 14 | SET OF UNIVERSAL FLANGE 6" (2 SIDES) | 71680-000145   |
| 10 & 11 & 12 | SET OF UNIVERSAL FLANGE 4" (2 SIDES) | 71680-051283   |
| 15           | 3"H THR. NPT (2 SIDES)               | 71680-051280   |
| 15           | 3"H THR. BSP (2 SIDES)               | 71680-051281   |
| 10 & 11 & 12 | 3"H FLANGE ASSY. (2 SIDES)           | 71680-051282   |

# 80 Series Plastic Valves

1½" - 2"



## → Catalog Numbers

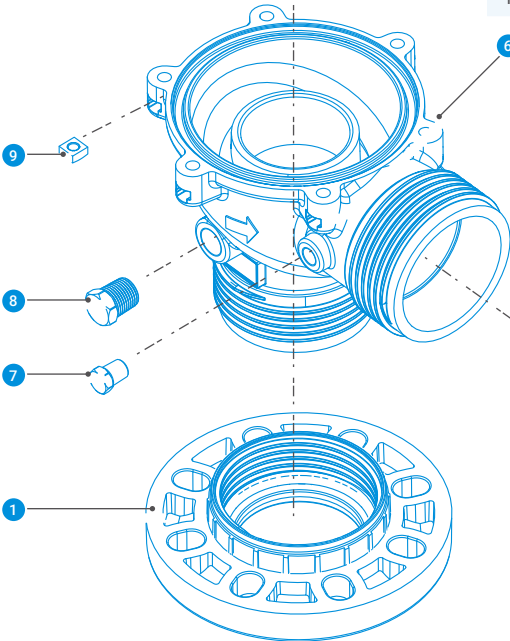
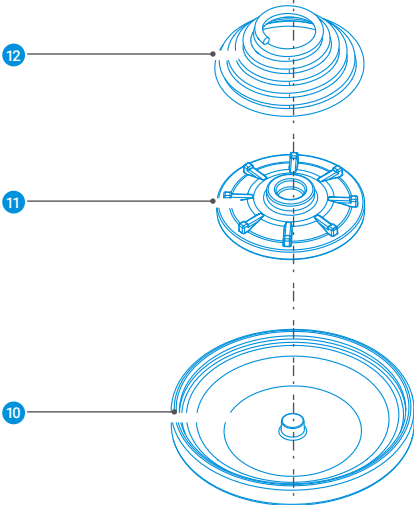
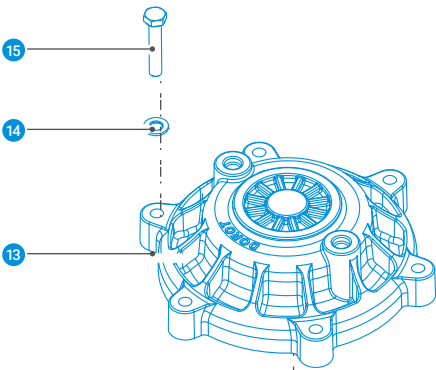
| Part List # | Description                       | Catalog Number |
|-------------|-----------------------------------|----------------|
| 3 (3 & 10)  | DIAPHRAGM KIT                     | 71680-006175   |
| 5           | SPRING - NO. 116 FOR 2-WAY VALVES | 71680-008150   |
|             | SPRING - NO. 117 FOR 3-WAY VALVES | 71680-008155   |
| 11          | STRAIGHT BODY FILTER KIT          | 71680-010430   |
|             | ANGLE BODY FILTER KIT             | 71680-010420   |
| 2           | LOWER DIAPHRAGM SUPPORT           | 71680-018270   |
| 4           | UPPER DIAPHRAGM SUPPORT           | 71680-018260   |

## → Parts List

| #   | Description                                             |
|-----|---------------------------------------------------------|
| 1   | Body                                                    |
| 1.1 | Angle body                                              |
| 2   | Lower diaphragm support                                 |
| 3   | Diaphragm assembly                                      |
| 4   | Upper diaphragm support                                 |
| 5   | Spring                                                  |
| 6   | Nut                                                     |
| 7.1 | 2W bonnet assembly + lever override                     |
| 7.2 | 2W bonnet assembly + rotating override                  |
| 7.3 | 2W bonnet assembly + throttling handle & lever override |
| 7.4 | Bonnet assembly + throttling handle & rotating override |
| 7.5 | 3W bonnet assembly                                      |
| 7.6 | 3W bonnet assembly + throttling handle                  |
| 8   | Washer                                                  |
| 9   | Bolt                                                    |
| 10  | Diaphragm kit rings                                     |
| 11  | Finger filter                                           |

# 80 Series Plastic Valves

## 3" - 4"R

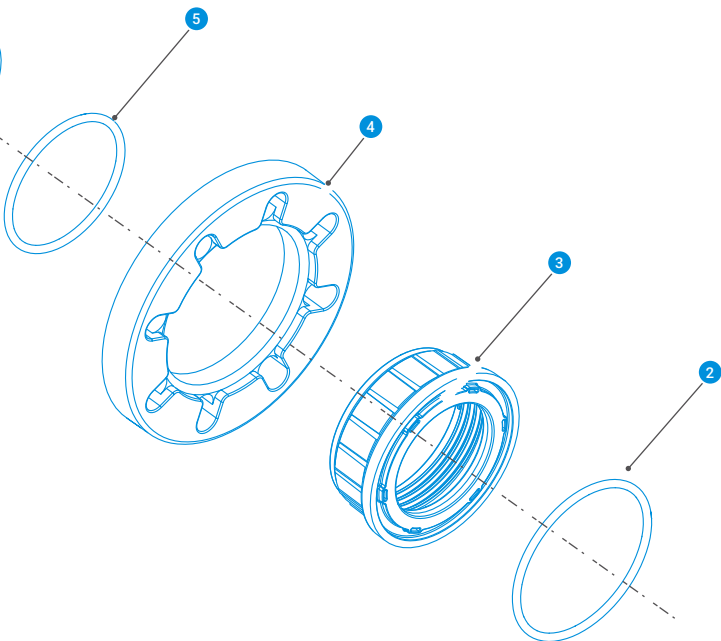


### → Catalog Numbers

| Part List #       | Description                         | Catalog Number |
|-------------------|-------------------------------------|----------------|
| 3 (3 & 10)        | DIAPHRAGM                           | 71680-007710   |
| 11                | SPRING SEAT SELA                    | 71680-009105   |
| 12                | SPRING NO. 140                      | 71680-000081   |
| 1 (2 & 3 & 4 & 5) | SET OF UNIVERSAL FLANGE 3" (1 SIDE) | 71680-000610   |
|                   | SET OF UNIVERSAL FLANGE 4" (1 SIDE) | 71680-000620   |

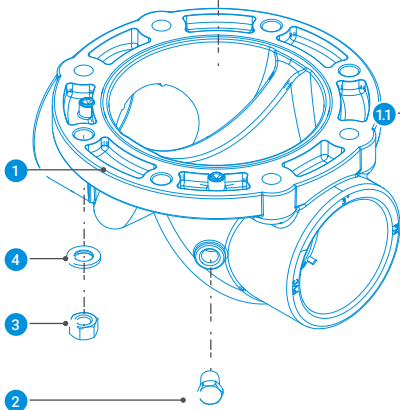
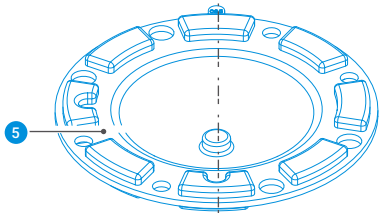
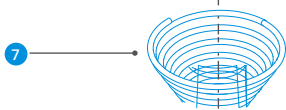
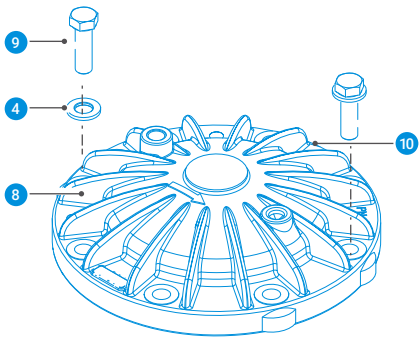
### → Parts List

| #  | Description      |
|----|------------------|
| 1  | Flange assy.     |
| 2  | O-ring           |
| 3  | Threaded adaptor |
| 4  | Flange           |
| 5  | O-ring           |
| 6  | Body             |
| 7  | Plug ¼           |
| 8  | Plug ½           |
| 9  | Nut              |
| 10 | Diaphragm        |
| 11 | Spring seat      |
| 12 | Spring           |
| 13 | Bonnet           |
| 14 | Washer           |
| 15 | Bolt             |



# 90 Series PVC Valves

## 3" - 6"



### → Diaphragm & Spring Selection

| Diameter   | Type         | Diaphragm # | Spring # |
|------------|--------------|-------------|----------|
| 3" / 90mm  | Standard     | #95         | #9       |
|            | Low pressure | #179        | #12      |
| 4" / 110mm | Standard     | #95         | #9       |
|            | Low pressure | #179        | #12      |
| 6" / 160mm | Standard     | #52         | #6       |
|            | Low pressure | #264        | #6       |

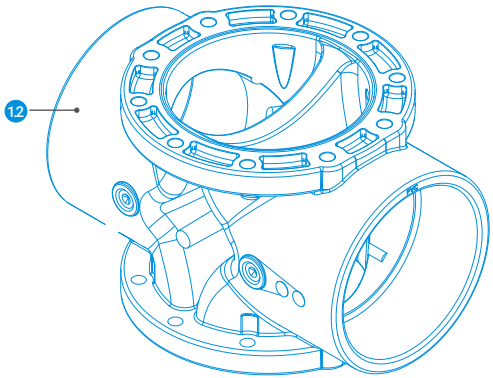
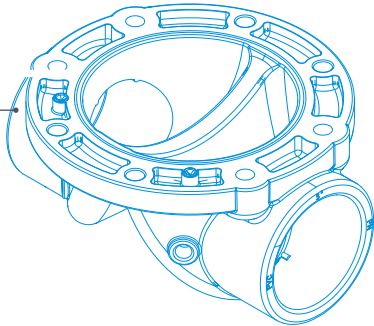
### → Parts List

| #   | Description                                                            |
|-----|------------------------------------------------------------------------|
| 1   | Solvent welded body<br>(3", 4", 6", 80mm, 90mm, 100mm,<br>110mm,160mm) |
| 1.1 | Threaded body (only in 3")                                             |
| 1.2 | 160mm/6" body                                                          |
| 3   | Nut                                                                    |
| 4   | Washer                                                                 |

|    |             |
|----|-------------|
| 5  | Diaphragm   |
| 6  | Spring disc |
| 7  | Spring      |
| 8  | Bonnet      |
| 9  | Bolt        |
| 10 | Short bolt  |

### → Catalog Numbers

| # | Description                    | Catalog Number |
|---|--------------------------------|----------------|
| 5 | DIAPHRAGM NO. 095              | 71680-007660   |
|   | DIAPHRAGM NO. 052              | 71680-007670   |
| 6 | SPRING SEAT, PVC VALVE 3" - 4" | 71680-008905   |
|   | SPRING SEAT, PVC VALVE 6"      | 71680-008990   |
| 7 | SPRING NO. 9                   | 71680-008100   |
|   | SPRING NO. 6                   | 71680-008190   |



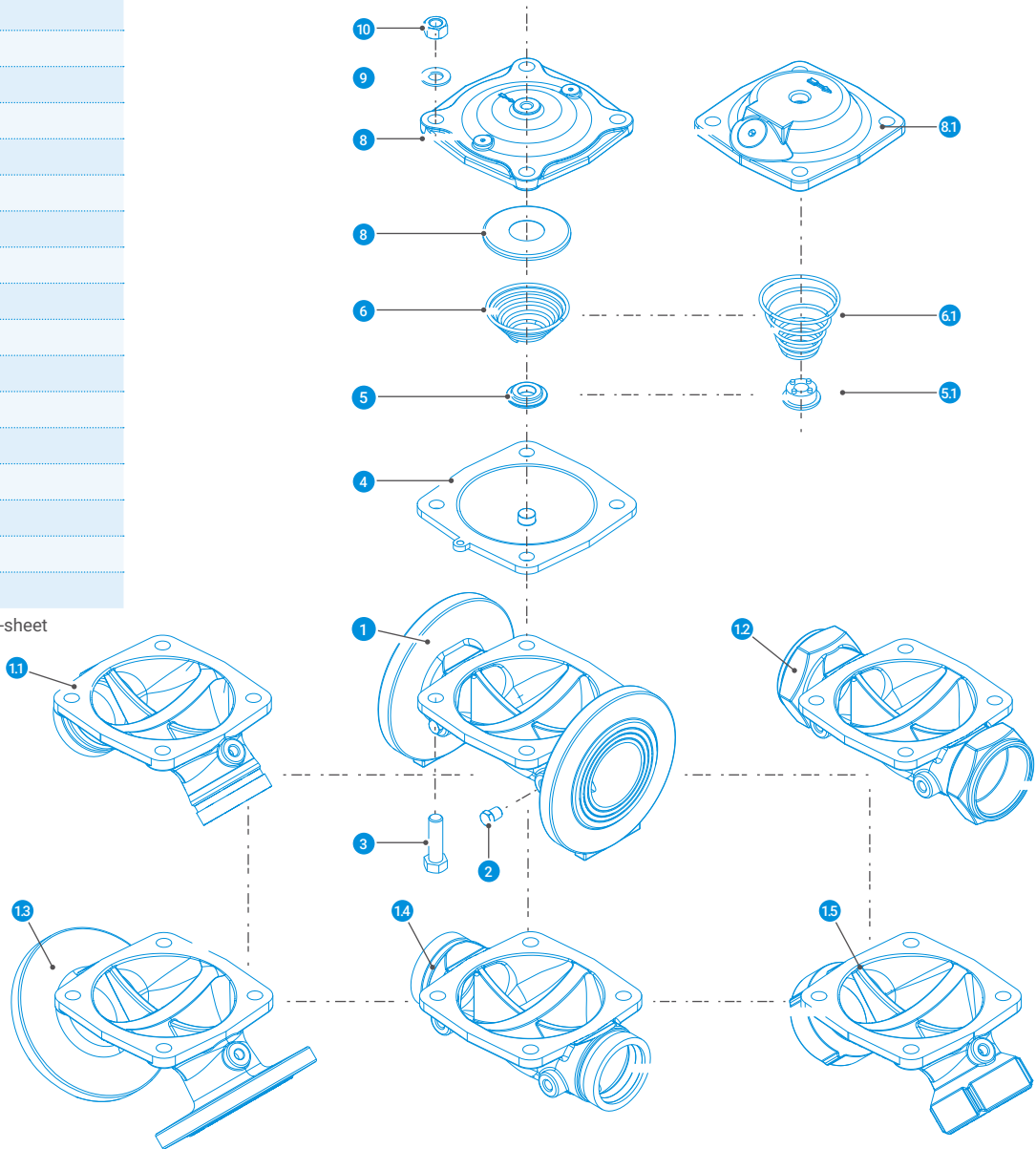
# 100 Series Metal Valves

## 1½" - 4"

### → Parts List

| #   | Description         |
|-----|---------------------|
| 1   | Body                |
| 1.1 | Angle grooved body  |
| 1.2 | Threaded body       |
| 1.3 | Angle body          |
| 1.4 | Grooved body        |
| 1.5 | Angle threaded body |
| 2   | Plug                |
| 3   | Bolt                |
| 4   | Diaphragm           |
| 5   | Bottom spring disc  |
| 5.1 | Bottom spring disc  |
| 6   | Spring              |
| 6.1 | Spring              |
| 7   | Upper spring disc   |
| 8   | Bonnet 1.5"-3"R     |
| 8.1 | Bonnet 3"-4"        |
| 9   | Washer              |
| 10  | Nut                 |

\* Optional kit - refer to detailed data-sheet

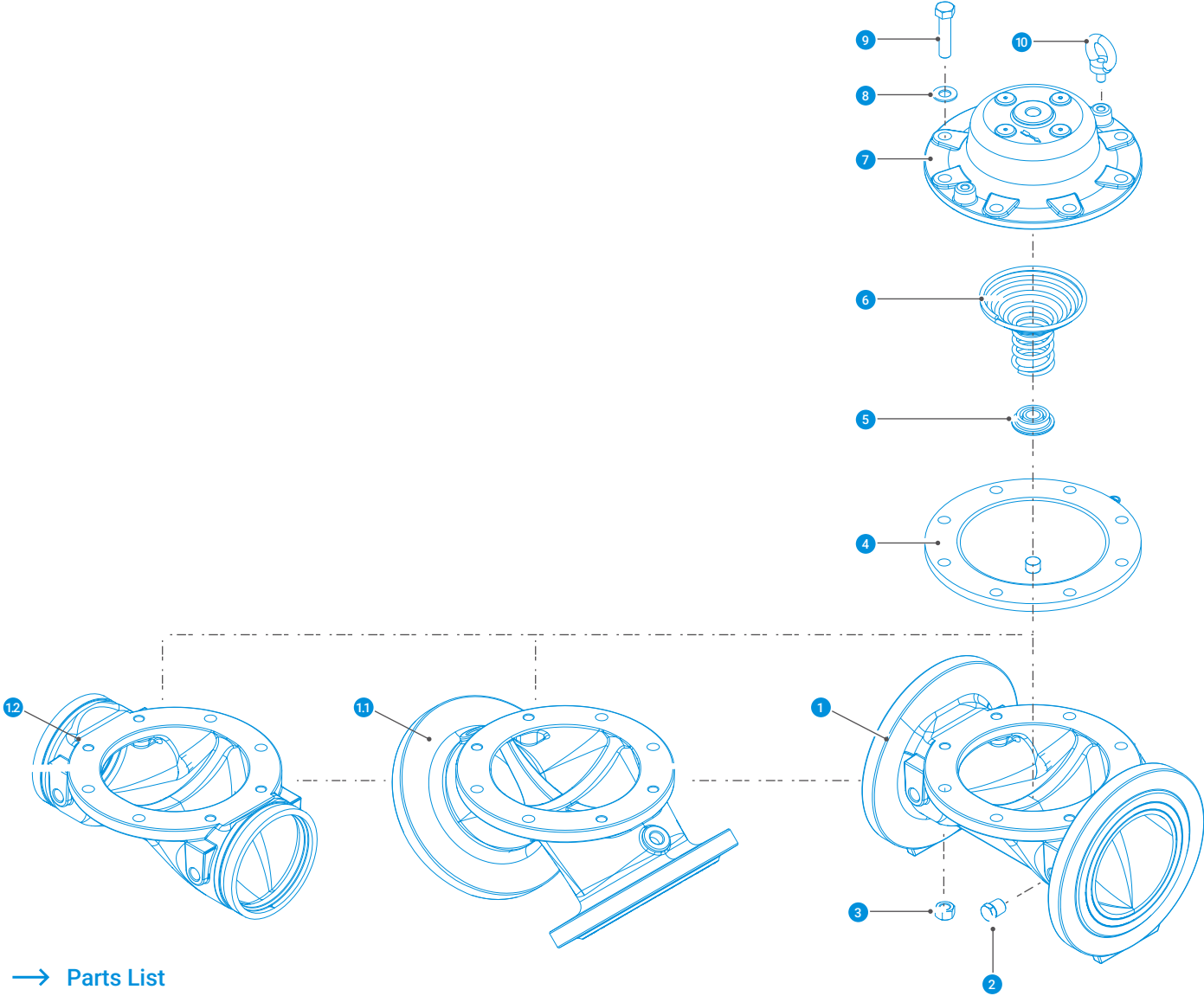


### → Catalog Numbers

| Part List # | Description                       | Catalog Number |
|-------------|-----------------------------------|----------------|
| 4           | DIAPHRAGM - NO. 013               | 71680-007100   |
|             | DIAPHRAGM - NO. 003, S100, 2"     | 71680-007300   |
|             | L.P DIAPHRAGM - NO. 002, S100, 2" | 71680-007400   |
|             | DIAPHRAGM - NO. 032, S100, 3"     | 71680-006300   |
|             | L.P DIAPHRAGM - NO. 005, S100 3"  | 71680-006400   |
| 5           | SPRING SEAT, S100 1½" - 2"        | 71680-008905   |
|             | SPRING SEAT, S100 3" - 4"         | 71680-008900   |
| 6           | SPRING - NO. 52, S100 1½" - 2"    | 71680-008000   |
|             | SPRING - NO. 9, S100 3"           | 71680-008100   |

# 100 Series Metal Valves

6" - 10"



→ **Parts List**

| #   | Description  |
|-----|--------------|
| 1   | Body         |
| 1.1 | Angle body   |
| 1.2 | Grooved body |
| 2   | Plug         |
| 3   | Nut          |
| 4   | Diaphragm    |
| 5   | Spring disc  |
| 6   | Spring       |
| 7   | Bonnet       |
| 8   | Washer       |
| 9   | Bolt         |
| 10  | Lifting ring |

\* Optional kit - refer to detailed data-sheet

→ **Catalog Numbers**

| Part List # | Description                             | Catalog Number |
|-------------|-----------------------------------------|----------------|
| 4           | DIAPHRAGM - NO. 062, S100 6" - 686      | 71680-006520   |
|             | L.P DIAPHRAGM - NO. 009, S100 6" - 686" | 71680-006600   |
|             | DIAPHRAGM - NO. 036, S100 8"            | 71680-006850   |
|             | L.P DIAPHRAGM - NO. 037, S100 8"        | 71680-006860   |
|             | DIAPHRAGM - NO. 040, S100 10"           | 71680-006800   |
| 5           | SPRING SEAT, S100 6"                    | 71680-009000   |
|             | SPRING SEAT, S100 8" - 10"              | 71680-008995   |
| 6           | SPRING - NO. 57, S100 6"                | 71680-008200   |
|             | SPRING - NO. 61, S100 8" - 10"          | 71680-008300   |

# Diaphragms



→ Series 75

| Diameter                                    | Config. | Diaphragm Type | Diaph. Material | Diaph. Number | Pressure Range |        | Full Description                                         | Catalog Number |
|---------------------------------------------|---------|----------------|-----------------|---------------|----------------|--------|----------------------------------------------------------|----------------|
|                                             |         |                |                 |               | mwc            | psi    |                                                          |                |
| ¾ in.-20mm<br>1 in.-25mm                    | 2W      | Standard       | NR              | 025           | 9-100          | 15-115 | DIAPHRAGM KIT FOR 75T 3/4"-1" 2W PN10 <sup>(1)</sup>     | 71680-006150   |
|                                             | 3W      | Standard       | NR              | 001           | 9-100          | 15-115 | DIAPH N°001 NR S75 3/4"-1" PN10                          | 71680-006950   |
|                                             | 3W      | Standard       | NR              | 164           | 6-100          | 9-115  | DIAPH KIT N°164 NR S75-3W 3/4"-1" PN10 <sup>(2)</sup>    | 71680-007445   |
| 1.5 in.- 40mm<br>2 in.-50mm<br>323 in.-80mm | 2W      | Standard       | NR              | 021           | 5-100          | 7-140  | DIAPH KIT N°021 NR S75-2W 1.5-323" PN10 <sup>(3)</sup>   | 71680-007250   |
|                                             | 3W      | Standard       | NR              | 022           | 5-100          | 7-140  | DIAPH KIT N°022 NR S75-3W 1.5-323" PN10 <sup>(3)</sup>   | 71680-006170   |
|                                             | 3W      | Low Pressure   | NR              | 229           | 3.5-80         | 5-115  | DIAPH N°229 NR S75-3W 1.5-323" PN05 LP                   | 71680-006272   |
|                                             | 3W      | Special        | EPDM            | 252           | 5-100          | 7-140  | DIAPH KIT N°252 EPDM S75-3W 1.5-323" PN10 <sup>(3)</sup> | 71680-000234   |
|                                             |         | Special        | ALD             | 255           | 5-100          | 7-140  | DIAPH N°255 ALD S75-3W 1.5-323" PN10                     | 71680-022160   |
| 3 in.-80mm<br>434 in.-100mm                 | 2W      | Standard       | NR              | 331           | 5-100          | 7-140  | DIAPH N°331 NR S75-2W 3"-434" PN10                       | 71680-006370   |
|                                             | 3W      | Standard       | NR              | 330           | 5-100          | 7-140  | DIAPH KIT N°330 NR S75-3W 3"-434" PN10 <sup>(3)</sup>    | 71680-006380   |
| 4 in.-100mm<br>3"H-100mm<br>6"R-100mm       | 3W      | Standard       | NR              | 370           | 5-120          | 7-175  | DIAPH KIT N°370 NR S75-3W 4"-868" PN10 <sup>(3)</sup>    | 71680-000229   |
| 6 in.-150mm                                 | 3W      | Standard       | NR              | 370           | 5-120          | 7-175  | DIAPH KIT N°370 NR S75-3W 4"-868" PN10 <sup>(3)</sup>    | 71680-000229   |
| 8 in.-200mm                                 | 3W      | Standard       | NR              | 370           | 5-120          | 7-175  | DIAPH KIT N°370 NR S75-3W 4"-868" PN10 <sup>(4)</sup>    | 71680-000229   |

(1) Refers to S75-T model

(2) The Kit includes Spring + Spring Disc + Diaphragm

(3) The Kit includes Spring Disc + Diaphragm

(4) 6" and 8" Double chamber come with 2 diaphragms



→ Series 80

| Diameter   | Config. | Diaphragm Type | Diaph. Material | Diaph. Number | Pressure Range |        | Full Description                   | Catalog Number |
|------------|---------|----------------|-----------------|---------------|----------------|--------|------------------------------------|----------------|
|            |         |                |                 |               | mwc            | psi    |                                    |                |
| 1.5-2 in.  | 2W/3W   | Standard       | NR              | 231           | 5-100          | 7-140  | DIAPH KIT ASSEMBLY F/ S-801 1/2"-2 | 71680-006175   |
| 3 in.-80MM | 3W      | Standard       | NR              | 345           | 7-100          | 10-140 | DIAPH N°345 NR S80 3" PN10         | 71680-007710   |



→ Series 90

| Diameter              | Config. | Diaphragm Type | Diaph. Material | Diaph. Number | Pressure Range |       | Full Description                 | Catalog Number |
|-----------------------|---------|----------------|-----------------|---------------|----------------|-------|----------------------------------|----------------|
|                       |         |                |                 |               | mwc            | psi   |                                  |                |
| 3-4 in. /<br>90-110mm | 3W      | Standard       | NR              | 095           | 6-80           | 8-120 | DIAPH N°95 NR S90 3" PN10        | 71680-007660   |
|                       |         | Low Pressure   | NR              | 179           | 4-80           | 6-120 | DIAPH N°179 NR S90 3" PN05       | 43020-015980   |
|                       |         | Special        | ALD             | 187           | 6-80           | 8-120 | DIAPH N°187 ALD N704 S90 3" PN10 | 71680-006660   |
| 6 in. / 160mm         | 3W      | Standard       | NR              | 052           | 5-100          | 7-140 | DIAPH N°52 NR S90 6" PN10        | 71680-007670   |
|                       |         | Low Pressure   | NR              | 264           | 4-80           | 6-120 | DIAPH N°264 NR S90 6" PN05       | 43020-016040   |

\* Missing catalog numbers are available upon request



→ Series 100

| Diameter    | Config. | Diaphragm Type     | Diaph. Material | Diaph. Number | Pressure Range |        | Full Description                      | Catalog Number |
|-------------|---------|--------------------|-----------------|---------------|----------------|--------|---------------------------------------|----------------|
|             |         |                    |                 |               | mwc            | psi    |                                       |                |
| 1in.-25mm   | 3W      | Standard           | NR              | 018           | 12-160         | 17-250 | DIAPH N°018 NR S100 1" PN16           | 71680-006900   |
|             |         | Low pressure       | NR              | 085           | 5-100          | 7-140  | DIAPH N°085 NR S100 1" PN05           | 71680-007050   |
|             |         | Special            | EPDM            | 051           | 12-160         | 17-250 | DIAPH N°051 EPDM S100 1" PN06         | *              |
|             |         | Potable water      | EPDM-E701A      | 307           | 12-160         | 17-250 | DIAPH N°307 EPDM-E701A S100 1" PN16   | *              |
| 1.5in.-40mm | 3W      | Standard           | NR              | 013           | 12-160         | 17-250 | DIAPH N°013 NR S100 1.5" PN16         | 71680-007100   |
|             |         | Super low pressure | NR              | 082           | 5-50           | 7-70   | DIAPH N°082 NR S100 1.5" PN05         | 71680-007200   |
|             |         | Low pressure       | NR              | 017           | 5-100          | 7-140  | DIAPH N°017 NR S100 1.5" PN10         | 71680-007150   |
|             |         | Special            | EPDM            | 055           | 12-160         | 17-250 | DIAPH N°055 EPDM S100 1.5" PN16       | 71680-007205   |
|             |         | Potable water      | EPDM-E701A      | 312           | 12-160         | 17-250 | DIAPH N°312 EPDM-E701A S100 1.5" PN16 | *              |
| 2in.-50mm   | 3W      | Standard           | NR              | 003           | 15-160         | 21-250 | DIAPH N°003 NR S100 2" PN16           | 71680-007300   |
|             |         | Super low pressure | NR              | 012           | 4-50           | 6-70   | DIAPH N°012 NR S100 2" PN05           | 71680-006271   |
|             |         | Low pressure       | NR              | 002           | 7-100          | 10-140 | DIAPH N°002 NR S100 2" PN10           | 71680-007400   |
|             |         | Special            | ALD             | 334           | 12-160         | 17-250 | DIAPH N°334 ALD N704 S100 2" PN16     | *              |
|             |         | Special            | EPDM            | 054           | 12-160         | 17-250 | DIAPH N°054 EPDM S100 2" PN16         | 71680-007380   |
|             |         | Special            | NBR             | 042           | 12-160         | 17-250 | DIAPH N°042 NBR S100 2" PN16          | 71680-007420   |
|             |         | Lp / potable water | EPDM-E701A      | 053           | 5-100          | 7-140  | DIAPH N°053 EPDM-E701A S100 2" PN10   | 71680-007350   |
|             |         | Potable water      | EPDM-E701A      | 198           | 15-160         | 21-250 | DIAPH N°198 EPDM-E701A S100 2" PN16   | *              |
| 3in.-80mm   | 3W      | Standard           | NR              | 041           | 12-160         | 17-250 | DIAPH N°041 3" ANGLE VLV              | 71680-006350   |
|             |         | Special            | EPDM            | 056           | 12-160         | 17-250 | DIAPH N°056 EPDM S100 3" PN16         | 71680-006430   |
|             |         | Potable water      | EPDM-E701A      | 199           | 12-160         | 17-250 | DIAPH N°199 EPDM-E701A S100 3" PN16   | *              |
|             |         | Standard           | NR              | 032           | 12-160         | 17-250 | DIAPH N°032 NR S100 3" PN16           | 71680-006300   |
|             |         | Low pressure       | NR              | 005           | 4-100          | 6-140  | DIAPH N°005 NR S100 3" PN10           | 71680-006400   |
|             |         | Special            | NBR             | 043           | 12-160         | 17-250 | DIAPH N°043 NBR S100 3" PN16          | 71680-006420   |
|             |         | Potable water      | EPDM-E701A      | 313           | 4-100          | 6-140  | DIAPH N°313 EPDM-E701A S100 3" PN10   | *              |
| 6in.-150mm  | 3W      | Standard           | NR              | 062           | 20-160         | 28-250 | DIAPH N°062 NR S100 6" PN16           | 71680-006520   |
|             |         | Super low pressure | NR              | 091           | 2-60           | 3-85   | DIAPH N°091 NR S100 6" PN05           | 71680-006620   |
|             |         | Low pressure       | NR              | 009           | 5-100          | 7-140  | DIAPH N°009 NR S100 6" PN10           | 71680-006600   |
|             |         | Special            | EPDM            | 011           | 5-100          | 7-140  | DIAPH N°011 EPDM S100 6" PN10         | *              |
|             |         | High pressure      | NR              | 035           | 20-160         | 28-250 | DIAPH N°035 NR S100 6" PN16           | 71680-006500   |
|             |         | Special            | ALD             | 327           | 12-160         | 17-250 | DIAPH N°327 ALD N704 S100 6" PN16     | *              |
|             |         | Potable water      | EPDM-E701A      | 038           | 7-160          | 10-250 | DIAPH N°038 EPDM-E701A S100 6" PN06   | 71680-006530   |
|             |         | Potable water      | EPDM-E701A      | 200           | 20-160         | 28-250 | DIAPH N°200 EPDM-E701A S100 6" PN16   | *              |
| 8in.-200mm  | 3W      | Standard           | NR              | 036           | 7-160          | 10-250 | DIAPH N°036 NR S100 8" PN16           | 71680-006850   |
|             |         | Low Pressure       | NR              | 037           | 2-100          | 3-140  | DIAPH N°037 NR S100 8" PN05           | 71680-006860   |
|             |         | High pressure      | NR              | 063           | 20-160         | 28-250 | DIAPH N°063 NR S100 8" PN16           | 71680-007010   |
|             |         | Special            | ALD             | 332           | 7-160          | 10-250 | DIAPH N°332 ALD N704 S100 8" PN16     | *              |
|             |         | Special            | EPDM            | 033           | 7-160          | 10-250 | DIAPH N°033 EPDM S100 8" PN16         | *              |
|             |         | Special            | EPDM            | 240           | 5-100          | 7-140  | DIAPH N°240 EPDM S100 8" PN10         | *              |
|             |         | Special            | NBR             | 045           | 7-160          | 10-250 | DIAPH N°045 NBR S100 8" PN16          | 71680-006601   |
|             |         | Potable water      | EPDM-E701A      | 326           | 7-160          | 10-250 | DIAPH N°326 EPDM-E701A S100 8" PN16   | *              |
| 10in.-250mm | 3W      | Standard           | NR              | 040           | 7-160          | 10-250 | DIAPH N°040 NR S100 10" PN16          | 71680-006800   |
|             |         | Low pressure       | NR              | 050           | 2-50           | 3-70   | DIAPH N°050 NR S100 10" PN05          | 71680-006820   |
|             |         | Special            | EPDM            | 119           | 7-160          | 10-250 | DIAPH N°119 EPDM S100 10" PN16        | *              |
|             |         | Potable water      | EPDM-E701A      | 360           | 7-160          | 10-250 | DIAPH N°360 EPDM-E701A S100 10" PN16  | *              |

\* Missing catalog numbers are available upon request



### → Plastic BF Valves

| Diaph.     | Config. | Diaphragm Type | Diaph. Material | Diaph. Number | Pressure Range |        | Full Description                  | Catalog Number |
|------------|---------|----------------|-----------------|---------------|----------------|--------|-----------------------------------|----------------|
|            |         |                |                 |               | mwc            | psi    |                                   |                |
| 3in.-80mm  | 3W      | Standard       | NR              | 263           | 2-10           | 30-145 | DIAP. ASSY. NO 263 C 3" PLASL.    | 71680-012890   |
|            |         | Standard       | NR              | 263           | 2-10           | 30-145 | DIAP. ASSY. NO 263 C 3" PLASL. SK | 71680-013930   |
| 4in.-100mm | 3W      | Standard       | NR              | 263           | 2-10           | 30-145 | DIAP. ASSY. NO 263 C 4" PLASL.    | 71680-006250   |



### → Metal BF Valves

| Diaph.    | Config. | Diaphragm Type | Diaph. Material | Diaph. Number | Pressure Range |        | Full Description                             | Catalog Number |
|-----------|---------|----------------|-----------------|---------------|----------------|--------|----------------------------------------------|----------------|
|           |         |                |                 |               | mwc            | psi    |                                              |                |
| 2in.-50mm | 3W      | Low pressure   | NR              | 337           | 0.7-10         | 10-150 | DIAPHRAGM-NO.337 NR S51-S52 2in.-UP TO 10BAR | 79900-007500   |
|           |         | Standard       | NR              | 302           | 0.7-16         | 10-250 | DIAPHRAGM-NO.302 NR GALIL 2in.-UP TO 16BAR   | 71680-007430   |
|           |         | Standard       | NR              | 302           | 0.7-16         | 10-250 | DOROT DIAPHRAGM NR KIT 51 F FLUSHGAL 2       | 71680-007480   |
| 3in.-80mm | 3W      | Low pressure   | NR              | 005           | 4-100          | 6-140  | DOROT DIAPHRAGM KIT 4"x3"GRAVEL LP           | 71680-007800   |
|           |         | Standard       | NR              | 89            | 12-160         | 17-250 | DOROT DIAPHRAGM FOR FLUSHGAL3*2"             | 71680-007500   |
|           |         | Standard       | NR              | 005           | 4-100          | 6-140  | DOROT DIAP.&SHAFT ASSY FOR 3*2VALVE          | 71680-007750   |
|           |         | Standard       | NR              | 89            | 12-160         | 17-250 | KIT DIAF. SK-HP                              | 71680-006180   |



### → Galil Valves

| Full Description                           | Catalog Number |
|--------------------------------------------|----------------|
| DIAPHRAGM-NO.302 NR GALIL 2IN.-UP TO 16BAR | 71680-007430   |

\* Missing catalog numbers are available upon request

# / Pilots, Relays & Floats

# Pilots Standards Table

| Valve                                |                   |                                                                                                                       | Accessories                                          |             |            |                |            |
|--------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------|------------|----------------|------------|
| Function                             | Type              | Pressure Grade                                                                                                        | Pilot *                                              | Check Point |            | Pressure Gauge |            |
|                                      |                   |                                                                                                                       |                                                      | Upstream    | Downstream | Upstream       | Downstream |
| Pressure Reducing Valve              | Plastic up to 8"R | PN-10                                                                                                                 | 29-100 / 29-50M                                      |             | ✓          |                |            |
|                                      | Metal up to 6"    | PN-10                                                                                                                 | 29-100 / 29-50M                                      |             | ✓          |                |            |
|                                      |                   | PN-16                                                                                                                 | 31-100M (3W)<br>68-410 (2W)                          |             |            |                | ✓          |
|                                      | Metal 8" & up     | All standards                                                                                                         | 31-310                                               |             |            |                | ✓          |
| Pressure Sustaining Valve            | Plastic up to 8"R | PN-10                                                                                                                 | 29-200 / 29-50M                                      | ✓           |            |                |            |
|                                      | Metal up to 6"    | PN-10                                                                                                                 | 29-200 / 29-50M                                      | ✓           |            |                |            |
|                                      |                   | PN-16                                                                                                                 | 31-100M (3W)<br>68-510 (2W)                          |             |            | ✓              |            |
|                                      | Metal 8" & up     | All standards                                                                                                         | 31-310                                               |             |            | ✓              |            |
| Pressure Reducing & Sustaining Valve | Plastic up to 8"R | PN-10 *                                                                                                               | 29-100 / 29-200 / 29-50M                             | ✓           | ✓          |                |            |
|                                      | Metal up to 6"    | PN-10 *                                                                                                               | 29-100 / 29-200 / 29-50M                             | ✓           | ✓          |                |            |
|                                      |                   | PN-16                                                                                                                 | 31-100M + 31-100M (3W)<br>68-410 (2W)<br>68-510 (2W) |             |            | ✓              | ✓          |
|                                      | Metal 8" & up     | All standards                                                                                                         | 31-310 / 31-310                                      |             |            | ✓              | ✓          |
| Quick Relief Valve                   | Plastic up to 4"R | PN-10                                                                                                                 | 29-500                                               | ✓           |            |                |            |
|                                      | Metal up to 4"    | PN-16                                                                                                                 | 68-215                                               | ✓           |            |                |            |
|                                      | Metal 6" & up     | PN-16                                                                                                                 | 68-510                                               |             |            | ✓              |            |
| Control Tubes                        | 8mm PE Tube       | All PN-10 Valves or valves with Plastic pilot supplied with 8mm PE tubes                                              |                                                      |             |            |                |            |
|                                      | Parker Tube       | All PN-16 Valves or valves with Metal pilot supplied with High Pressure tubes (other tubings - optional upon request) |                                                      |             |            |                |            |

\* Available pilots in this configuration

## → Pilots

|                          | 29-100                                                                              | 29-10R                                                                              | 29-200                                                                              | 29-50M                                                                              | 29-500                                                                               | 68-215                                                                                | 31-100M                                                                               | 31-310                                                                                |
|--------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Pilot                    |  |  |  |  |  |  |  |  |
| Pressure Range bar (psi) | 0.3-3 / 4-40                                                                        | 0.4-3.5 / 6-50                                                                      | 0.3-3 / 5-45                                                                        | 0.3-3 / 4-40                                                                        | 1-8 / 15-115                                                                         |                                                                                       |                                                                                       | 0.3-6 / 4.5-90                                                                        |
|                          | 0.5-4.5 / 7-65                                                                      | 0.5-5.5 / 7-80                                                                      | 0.5-4.5 / 7-65                                                                      | 0.5-4.5 / 7-65                                                                      | 1-10 / 15-150                                                                        | 0.8-13 / 10-190                                                                       | 0.5-6 / 7-85                                                                          | 0.5-10 / 7-150                                                                        |
|                          | 1-7.5 / 15-110                                                                      | 1-8.5 / 15-125                                                                      | 1-7.5 / 15-110                                                                      | 1-7.5 / 15-110                                                                      |                                                                                      | 2-16 / 30-230                                                                         | 1.5-12 / 22-175                                                                       | 0.6-15 / 9-220                                                                        |

# Plastic Pilots

## → Catalog Numbers

| 29-100 / 3-Way Pressure Reducing                                                  |              |          |           |                |              |                |
|-----------------------------------------------------------------------------------|--------------|----------|-----------|----------------|--------------|----------------|
|  | Spring Color | Range    |           | Catalog Number |              |                |
|                                                                                   |              |          |           | Pilot          | Spring       | Internal Parts |
|                                                                                   | #72          | bar      | 0.3 - 3   | 71680-001183   | 71680-010800 | 71680-001027   |
|                                                                                   |              | psi      | 4 - 40    |                |              |                |
|                                                                                   | #54          | bar      | 0.5 - 4.5 | 71680-001182   | 71680-010850 |                |
|                                                                                   |              | psi      | 7 - 65    |                |              |                |
|                                                                                   | #65          | bar      | 1 - 7.5   | 71680-001181   | 71680-010700 |                |
| psi                                                                               |              | 15 - 110 |           |                |              |                |

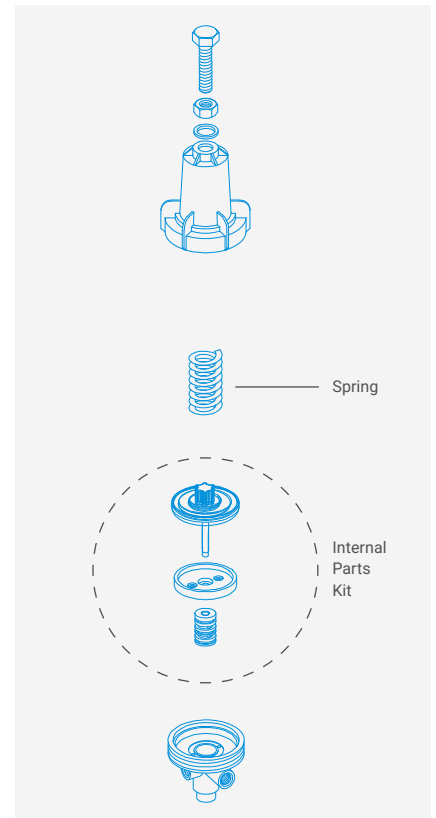
| 29-10R / 3-Way Pressure Reducing                                                   |              |       |           |                |              |                |
|------------------------------------------------------------------------------------|--------------|-------|-----------|----------------|--------------|----------------|
|  | Spring Color | Range |           | Catalog Number |              |                |
|                                                                                    |              |       |           | Pilot          | Spring       | Internal Parts |
|                                                                                    | #72          | bar   | 0.4 - 3.5 | 71680-001184   | 71680-010800 | 71680-000113   |
|                                                                                    |              | psi   | 6 - 50    |                |              |                |
|                                                                                    | #54          | bar   | 0.5 - 5.5 | 71680-000975   | 71680-010850 |                |
|                                                                                    |              | psi   | 7 - 70    |                |              |                |
|                                                                                    | #65          | bar   | 1 - 8.5   | 71680-001179   | 71680-010700 |                |
|                                                                                    |              | psi   | 15 - 125  |                |              |                |

| 29-500 / 2-Way Quick Relief                                                         |              |       |          |                |              |                        |
|-------------------------------------------------------------------------------------|--------------|-------|----------|----------------|--------------|------------------------|
|  | Spring Color | Range |          | Catalog Number |              |                        |
|                                                                                     |              |       |          | Pilot          | Spring       | Internal Parts         |
|                                                                                     | #72          | bar   | 1 - 8    | 71680-000109   | 71680-010800 | Available upon request |
|                                                                                     |              | psi   | 15 - 115 |                |              |                        |
|                                                                                     | #54          | bar   | 1 - 10   | 71680-001228   | 71680-010850 |                        |
|                                                                                     |              | psi   | 15 - 150 |                |              |                        |

| 29-200 / 3-Way Mutli-purpose (Pressure Sustaining / Reducing)                       |              |       |           |                |              |                |
|-------------------------------------------------------------------------------------|--------------|-------|-----------|----------------|--------------|----------------|
|  | Spring Color | Range |           | Catalog Number |              |                |
|                                                                                     |              |       |           | Pilot          | Spring       | Internal Parts |
|                                                                                     | #72          | bar   | 0.3 - 3.5 | 71680-001115*  | 71680-010800 | 71680-001030   |
|                                                                                     |              | psi   | 4.5 - 50  |                |              |                |
|                                                                                     | #54          | bar   | 0.5 - 5   | 71680-001100*  | 71680-010850 |                |
|                                                                                     |              | psi   | 7 - 70    |                |              |                |
|                                                                                     | #65          | bar   | 1 - 8     | 71680-001066*  | 71680-010700 |                |
|                                                                                     |              | psi   | 15 - 115  |                |              |                |

\* Arrives with brackets

## → Spare Parts



### 29-50M / 3-Way Mutli-purpose (Pressure Sustaining / Reducing)

|  | Spring Color | Range |           | Catalog Number |                |                |
|-----------------------------------------------------------------------------------|--------------|-------|-----------|----------------|----------------|----------------|
|                                                                                   |              |       |           | Pilot          | Spring + Label | Internal Parts |
|                                                                                   | #72          | bar   | 0.3 - 3   | 71680-051268   | 71680-000119   | 71680-000113   |
|                                                                                   |              | psi   | 4 - 40    |                |                |                |
|                                                                                   | #54          | bar   | 0.5 - 4.5 | 71680-051269   | 71680-000117   |                |
|                                                                                   |              | psi   | 7 - 65    |                |                |                |
|                                                                                   | #65          | bar   | 1 - 7.5   | 71680-051270   | 71680-000118   |                |
|                                                                                   |              | psi   | 15 - 110  |                |                |                |

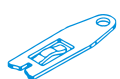
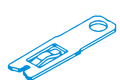
### 29-310 / 3-Way Flow Control (Differential PR)

|  | Spring Color | Range |           | Catalog Numbers |                        |
|-----------------------------------------------------------------------------------|--------------|-------|-----------|-----------------|------------------------|
|                                                                                   |              |       |           | Pilot           | Internal Parts         |
|                                                                                   | #82          | bar   | 0.2 - 0.5 | 71680-001175    | Available upon request |
|                                                                                   |              | psi   | 3-7       |                 |                        |

### 29-50F / 3-Way Flow Control (Differential PR)

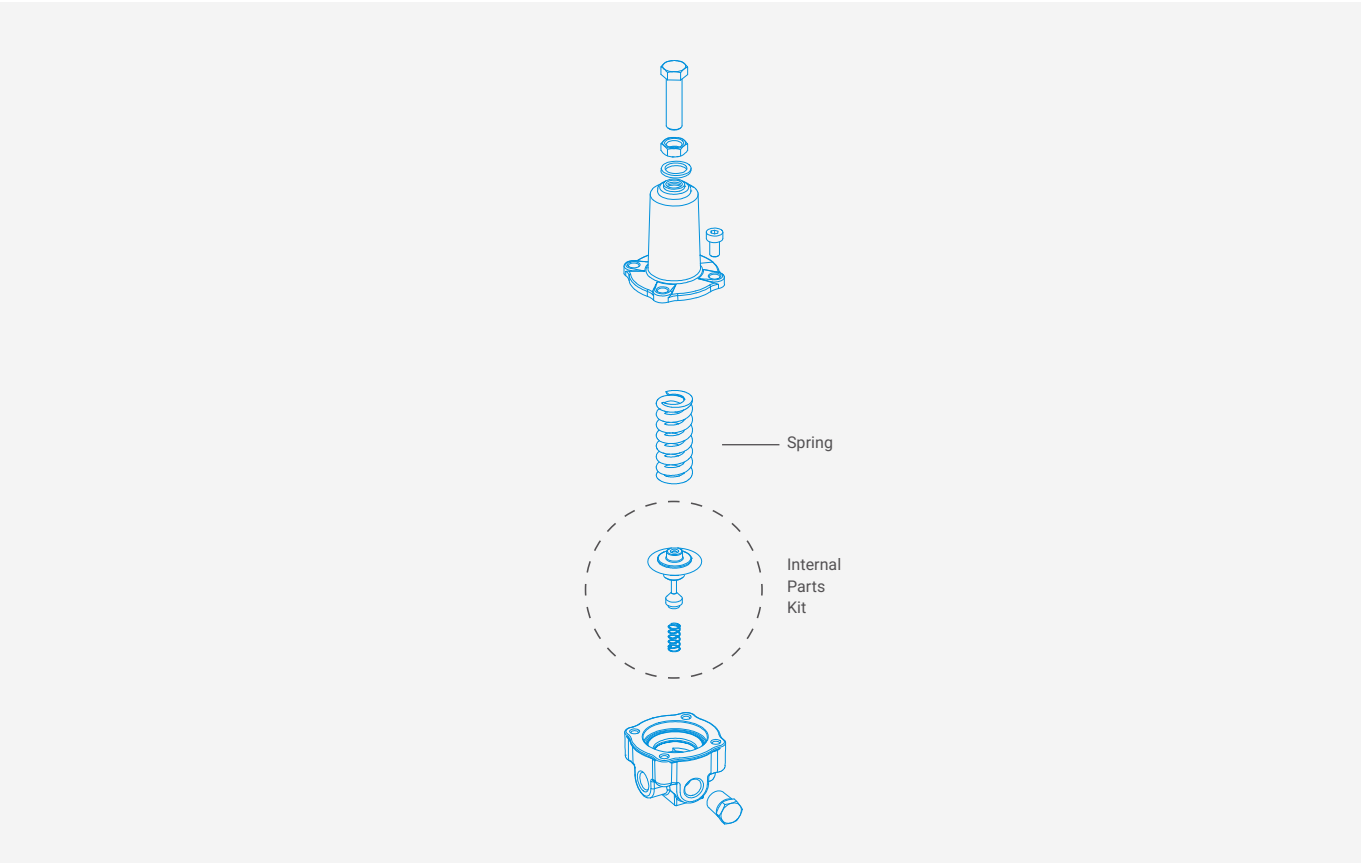
|  | Spring Color | Range |           | Catalog Numbers        |                        |
|-------------------------------------------------------------------------------------|--------------|-------|-----------|------------------------|------------------------|
|                                                                                     |              |       |           | Pilot                  | Internal Parts         |
|                                                                                     | #82          | bar   | 0.2 - 0.5 | Available upon request | Available upon request |
|                                                                                     |              | psi   | 3-7       |                        |                        |

### → Pilot Brackets

| Bracket                                                                             | Brackets / Pilot Type                                       | 29-100 / 200 / 310 / 10R | 29-50M/F     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------|--------------------------|--------------|
|  | Bracket 7mm pilot 2950m SST304 for plastic valves up to 3"R |                          | 71680-000004 |
|  | 3/8" for plastic valves 3" and above                        | 71680-011120             | 71680-000005 |
|  | 5/8" (for metal & PVC valves)                               | 71680-011122             | 71680-000003 |

# Metal Pilots

→ Spare Parts



→ Catalog Numbers

| 31-100 / 3-Way Mutli-purpose (Pressure Sustaining / Reducing)                       |              |        |         |                |              |                |
|-------------------------------------------------------------------------------------|--------------|--------|---------|----------------|--------------|----------------|
|  | Spring Color | Range  |         | Catalog Number |              |                |
|                                                                                     |              |        |         | Pilot          | Spring       | Internal Parts |
|                                                                                     | #130         | bar    | 0.5 - 6 | 71680-000082   | 71680-010860 | 71680-000083   |
|                                                                                     |              | psi    | 7 - 85  |                |              |                |
|                                                                                     | #124         | bar    | 1.5- 12 | 71680-001730   | 71680-008510 |                |
| psi                                                                                 |              | 22-175 |         |                |              |                |

\* Up to 6" valves

| 31-310 / 3-Way Mutli-purpose (Pressure Sustaining / Reducing)*                      |              |       |          |                |              |                |
|-------------------------------------------------------------------------------------|--------------|-------|----------|----------------|--------------|----------------|
|  | Spring Color | Range |          | Catalog Number |              |                |
|                                                                                     |              |       |          | Pilot          | Spring       | Internal Parts |
|                                                                                     | #42          | bar   | 0.3 - 6  | 71680-001220   | 71680-010600 | 71680-001225   |
|                                                                                     |              | psi   | 4 - 90   |                |              |                |
|                                                                                     | #47          | bar   | 0.5 - 10 | 71680-001205   | 71680-010550 |                |
|                                                                                     |              | psi   | 7 - 150  |                |              |                |
|                                                                                     | #50          | bar   | 0.6 - 15 | 71680-001210   | 71680-010500 |                |
|                                                                                     |              | psi   | 9 - 220  |                |              |                |

\* For 8" valves or up

### 68-410 / 2-Way Pressure Reducing

|  | Spring Color | Range |          | Catalog Number         |              |                |
|-----------------------------------------------------------------------------------|--------------|-------|----------|------------------------|--------------|----------------|
|                                                                                   |              |       |          | Pilot                  | Spring       | Internal Parts |
|                                                                                   | #78          | bar   | 0.5 - 3  | Available upon request | 71680-010810 | 71680-001571   |
|                                                                                   |              | psi   | 7 - 45   |                        |              |                |
|                                                                                   | #66          | bar   | 1 - 11   | 71680-041130           | 71680-010720 |                |
|                                                                                   |              | psi   | 15 - 160 |                        |              |                |
|                                                                                   | #67          | bar   | 2 - 25   | Available upon request | 71680-011020 |                |
|                                                                                   |              | psi   | 30 - 360 |                        |              |                |

### 68-510 / 2-Way Pressure Sustaining / Quick Relief

|  | Spring Color | Range |          | Catalog Number |              |                |
|-----------------------------------------------------------------------------------|--------------|-------|----------|----------------|--------------|----------------|
|                                                                                   |              |       |          | Pilot          | Spring       | Internal Parts |
|                                                                                   | #66          | bar   | 0.8 - 13 | 71680-001430   | 71680-010720 | 71680-051260   |
|                                                                                   |              | psi   | 10 - 190 |                |              |                |
|                                                                                   | #67          | bar   | 2 - 40   | 71680-041140   | 71680-011020 |                |
|                                                                                   |              | psi   | 30 - 580 |                |              |                |

### CXPR / 2-Way Pressure Reducing\*

|  | Spring Color | Range |          | Catalog Number |              |                        |
|------------------------------------------------------------------------------------|--------------|-------|----------|----------------|--------------|------------------------|
|                                                                                    |              |       |          | Pilot          | Spring       | Internal Parts         |
|                                                                                    | #53          | bar   | 3 - 19   | 71680-001263   | 71680-008440 | Available upon request |
|                                                                                    |              | psi   | 44 - 275 |                |              |                        |

\* For 8" valves or up

### CXPS / 2-Way Pressure Sustaining\*

|  | Spring Color | Range |          | Catalog Number |              |                        |
|-------------------------------------------------------------------------------------|--------------|-------|----------|----------------|--------------|------------------------|
|                                                                                     |              |       |          | Pilot          | Spring       | Internal Parts         |
|                                                                                     | #53          | bar   | 3 - 19   | 71680-001265   | 71680-008440 | Available upon request |
|                                                                                     |              | psi   | 44 - 275 |                |              |                        |

\* For 8" valves or up

### 68-215 / 2-Way Quick Relief

|  | Spring Color | Range |          | Catalog Number         |              |                        |
|-------------------------------------------------------------------------------------|--------------|-------|----------|------------------------|--------------|------------------------|
|                                                                                     |              |       |          | Pilot                  | Spring       | Internal Parts         |
|                                                                                     | #66          | bar   | 0.8 - 13 | Available upon request | 71680-000086 | Available upon request |
|                                                                                     |              | psi   | 10 - 190 |                        |              |                        |
|                                                                                     | #67          | bar   | 2 - 16   | Available upon request | 71680-001401 |                        |
|                                                                                     |              | psi   | 30 - 230 |                        |              |                        |

# Relays & Floats

## / Floats

|                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 70-300 / 2-Way Modulating Plastic Float                                           | 70-400 / 2-Way Modulating Metal Float                                             | 70-550 / 3-Way Differential Vertical Metal Float                                    |
|  |  |  |
| 71680-001527                                                                      | 71680-013300                                                                      | 71680-001517                                                                        |

## / Plastic Relays

|                                                                                     |                                                                                       |              |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------------|
| 25-300 / 3-Way Hydraulic Relay                                                      | Galit / 3-Way Hydraulic Relay                                                         |              |
|  |  |              |
| 71680-000800                                                                        | GALIT 3W HYDRAULIC RELAY                                                              | 73220-001900 |
|                                                                                     | GALIT 3W HYDRAULIC RELAY + WHITE SPRING                                               | 73220-002754 |
|                                                                                     | GALIT 3W HYDRAULIC RELAY + YELLOW SPRING                                              | 73220-002752 |
|                                                                                     | GALIT 3W HYDRAULIC RELAY + GREEN SPRING                                               | 73220-002751 |
|                                                                                     | GALIT 3W HYDRAULIC RELAY + RED SPRING                                                 | 73220-002753 |

## / Metal Relays

|                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 28-200 2-Way Hydraulic Relay                                                        | 66-21X 3-Way Hydraulic Relay                                                        | 76-200 3-Way Hydraulic Relay                                                          |
|  |  |  |
| 71680-000960                                                                        | 71680-001370                                                                        | 71680-041150                                                                          |

# / Solenoids

# Aquative™

Suitable for operation in all applications - agriculture, landscape and industry (water supply system).



Energy saving



Long distance operation



3 position knob, On/Off/Auto

## / Benefits & Features

- Large orifice Enables smooth operation in tough water conditions
- Manual override Close / Auto / Open
- Very low energy consumption For maximal wire distance
- Options Optional NC (Normally Closed) or NO (Normally Open) configuration

## / Specifications & Recommendations

|                                  | AC Model            | DC Model |
|----------------------------------|---------------------|----------|
| Voltage                          | 18-28VAC            | 12-40VDC |
| Pressure Range (No, Nc)          | 0 - 10 bar 0-140psi |          |
| Ambient Temp. Max                | 60°C (140°F)        |          |
| Fluid Temp. Max                  | 60°C (140°F)        |          |
| Filtration Requirements          | 80 mesh             |          |
| Inrush                           | 90mA                | -        |
| Holding                          | 75mA                | -        |
| Plastic Parts Raw Material       | Reinforced Nylon    |          |
| Command Diaphragm Raw Material   | EPDM                |          |
| Hydraulic Ports                  | 1/8" BSP            |          |
| Leads                            | 2 X AWG22 (1.2m)    |          |
| Delay from Command to Activation | 2-5sec.             |          |

Note: Operating within the specified voltage range outlined above is crucial to ensure the proper functionality of the product

→ Recommended Working Conditions Capacitor Mode - for DC Models

| Voltage (VDC) | Capacitor (μF) | Min. Pulse (ms) |
|---------------|----------------|-----------------|
| 12-18         | 4,700          | 80              |
| 18-28         | 3,300          | 80              |
| 28-40         | 2,200          | 80              |

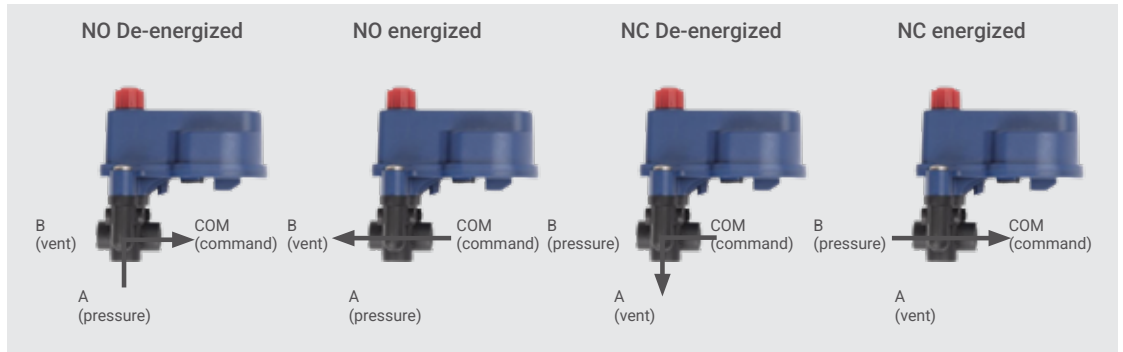
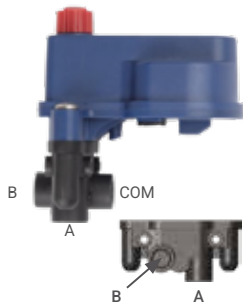
Two wires: red + / black - common, Changing wire connections will change NC to NO

→ Hydraulic Characteristics / Water Passage

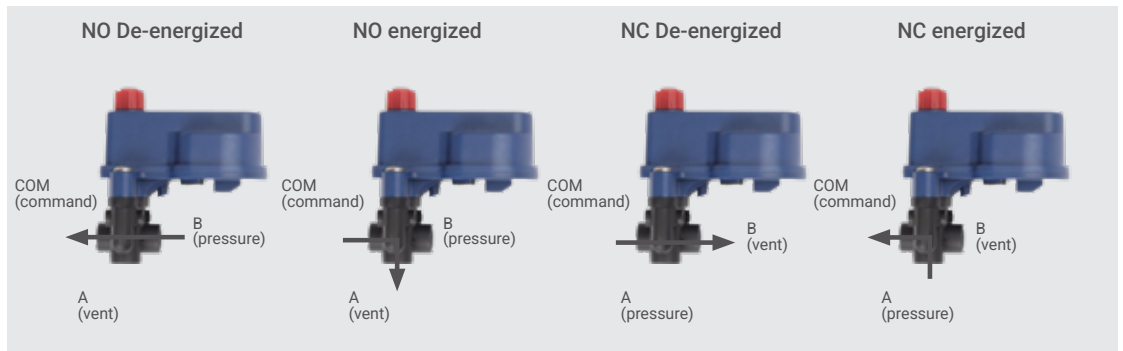
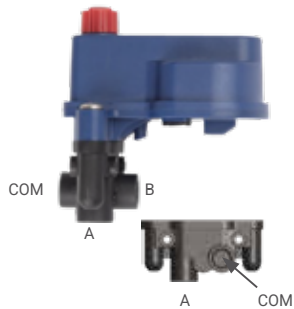
| Model          | Orifice (mm) |
|----------------|--------------|
| Aquative Plus™ | 2            |

→ Configuration

Configuration 1 - Standard



Configuration 2 - Non-Standard



→ Packaging Data

| Model                      | Model Weight (gr) | Units per Carton | Carton Dimensions (cm x cm x cm) | Carton Weight (gr) |
|----------------------------|-------------------|------------------|----------------------------------|--------------------|
| Aquative Plus (1 actuator) | 147.5             | 50               | 28 x 28 x 56                     | 7,375              |
| Aquative Plus (2 actuator) | 457.5             | 14               |                                  | 6,405              |
| Aquative Plus (4 actuator) | 783.5             | 8                |                                  | 6,268              |
| Aquative Plus (6 actuator) | 1,100             | 8                |                                  | 8,800              |

→ Maximum Distance from Controller to Aquative™

| Cable Gauge (awg) | Diameter (mm) | Cross Section (mm²) | AC                | DC                |
|-------------------|---------------|---------------------|-------------------|-------------------|
|                   |               |                     | Max. Distance (m) | Max. Distance (m) |
| 24                | 0.5           | 0.2                 | 600               | -                 |
| 20                | 0.8           | 0.5                 | 1,250             | 150               |
| 18                | 1.0           | 0.8                 | 2,000             | -                 |
| 17                | 1.1           | 1.0                 | 2,500             | 240               |
| 16                | 1.3           | 1.3                 | 3,500             | -                 |
| 15                | 1.4           | 1.5                 | 5,000             | 380               |

→ Catalog Numbers

| No. of Actuator(s) | Aquative Plus Config. 1 |              | Aquative Plus Config. 2 |
|--------------------|-------------------------|--------------|-------------------------|
|                    | AC                      | DC           | DC                      |
| 1 w/o brackets     | 35500-001200            | 35500-001900 | 35500-001920            |
| 1 w/ brackets      | 35500-001300            | 35500-002000 | -                       |
| 2 w/ brackets      | 35500-001400            | 35500-002100 | 35500-000710            |
| 3 w/ brackets      | 35500-001500            | 35500-002200 | 35500-000711            |
| 4 w/ brackets      | 35500-001600            | 35500-002300 | 35500-000712            |
| 5 w/ brackets      | 35500-001700            | 35500-002400 | 35500-000713            |
| 6 w/ brackets      | 35500-001800            | 35500-002500 | 35500-000714            |
| 7 w/ brackets      | 35500-001360            | 35500-001361 | 35500-000715            |
| 8 w/ brackets      | 35500-001850            | 35500-002530 | 35500-000716            |
| 9 w/ brackets      | 35500-002531            | 35500-001860 | 35500-000717            |
| 10 w/ brackets     | 35500-001870            | 35500-002550 | 35500-000718            |

\* Anchoring with 2 screws 10x1.5"  
\* Bracket material: Aluminum

# G75 Solenoids

G75-A is suitable for operation in all applications - agriculture, landscape and industry (water supply system).

G75-A3P is specially designed for filtration systems and large-diameter control valves.



High corrosion  
& UV resistance



Large  
orifice



Versatility

## / Benefits & Features

- Large orifice      G75-A – 1.2mm / G75-A3P – 2.6mm
- Versatility      AC/DC/DCL, NO/NC configurations
- High corrosion & UV resistance      Made from robust polymers materials
- 3W manual override      Close / Auto / Open



G75-A



G75-A3P

## / Specifications & Recommendations

|                                | G Model 75-A     | Model G75-A3P     |
|--------------------------------|------------------|-------------------|
| Voltage                        | 24 VAC           | 12-18 VDC (latch) |
| Pressure Range                 | 0 - 12 bar       | 0 - 10 bar        |
| Ambient Temp. Max              | 50°C (122°F)     |                   |
| Fluid Temp. Max                | 50°C (122°F)     |                   |
| Filtration Requirements        | 80 mesh          |                   |
| Inrush                         | 125mA            | -                 |
| Holding                        | 125mA            | -                 |
| Plastic Parts Raw Material     | Reinforced Nylon |                   |
| Command Diaphragm Raw Material | EPDM             | NBR               |
| Hydraulic Ports                | 1/8" BSP/NPT     |                   |
| Leads                          | 2 X AWG22 (0.4m) | 2 X AWG22 (0.3m)  |
| Pulse Width                    | -                | 50ms              |
| Protection Class               | IP66             |                   |

## → Recommended Working Conditions capacitor mode - for DC Models

| Voltage (VDC) | Capacitor (μF) | Min. Pulse (ms) |
|---------------|----------------|-----------------|
| 12-18         | 4700           | 50              |
| 18-28         | 3300           | 50              |
| 28-40         | 2200           | 50              |

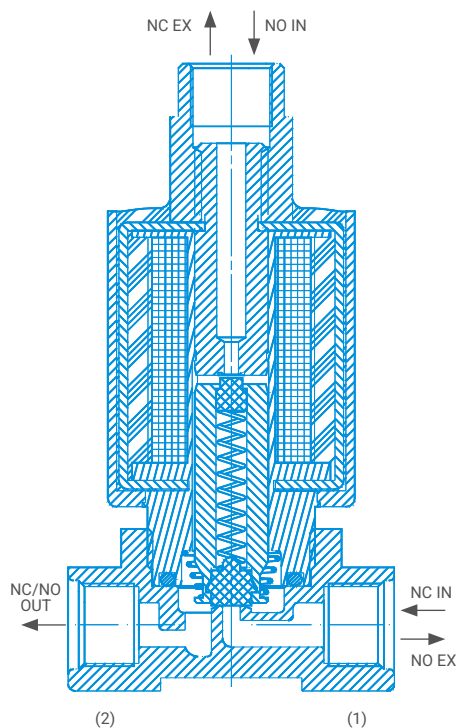
G75-A3P NC and NO has to have the same hydraulic connection ports

G75-A3P Two wires: red / black (Polarity is restricted)

G75-A NC and NO Ring: Black (Polarity is not restricted)

## → Configuration

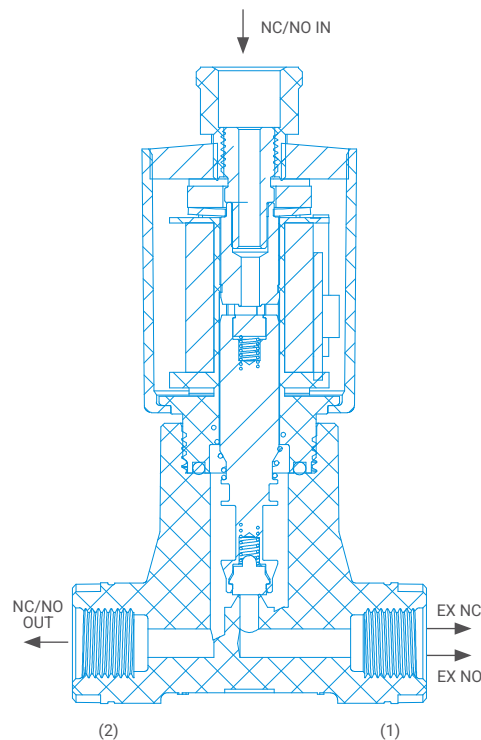
### G75-A Model



## → Hydraulic Characteristics / Water Passage

| Model   | Orifice |
|---------|---------|
| G75-A   | 1.2     |
| G75-A3P | 2.6     |

### G75-A3P Model



## → Max. Distance from Controller to G75 Solenoids

| No. of Solenoids    | 1    | 2   | 3    | 4   | Distance |
|---------------------|------|-----|------|-----|----------|
| Cross section (mm²) | 0.5  | 0.5 | 0.75 | 1.0 | 100m     |
|                     | 0.5  | 1.0 | 1.5  | 2.5 | 200m     |
|                     | 0.75 | 1.5 | 2.5  | 2.5 | 300m     |
|                     | 1.0  | 2.5 | 2.5  | 4.0 | 400m     |
|                     | 1.5  | 2.5 | 4.0  | 6.0 | 500m     |
|                     | 1.5  | 4.0 | 4.0  | 6.0 | 600m     |
|                     | 2.5  | 4.0 | 6.0  | 6.0 | 700m     |
|                     | 2.5  | 4.0 | 6.0  |     | 800m     |
|                     | 2.5  | 4.5 | 6.0  |     | 900m     |
|                     | 2.5  | 6.0 |      |     | 1000m    |

Wires cross-section selection for distance installation of G75 solenoids

## → Catalog Numbers

| No. of Acuator(s) | G75-A        | G75-A3P        |                |
|-------------------|--------------|----------------|----------------|
|                   | AC           | DC Latch (N.O) | DC Latch (N.C) |
| 1 w/ brackets     | 70800-006810 | 70800-006805   | 70800-006905   |
| 2 w/ brackets     | 70800-006820 | 70800-006815   | 70800-006910   |
| 3 w/ brackets     | 70800-006830 | 70800-006825   | 70800-006915   |
| 4 w/ brackets     | 70800-006840 | 70800-006835   | 70800-006920   |
| 5 w/ brackets     | 70800-006850 | 70800-006845   | 70800-006925   |
| 6 w/ brackets     | 70800-006860 | 70800-006855   | 70800-006930   |
| 7 w/ brackets     | 70800-006870 | 70800-006865   | 70800-006935   |
| 8 w/ brackets     | 70800-006880 | 70800-006875   | 70800-006940   |
| 9 w/ brackets     | 70800-006890 | 70800-006885   | 70800-006945   |
| 10 w/ brackets    | 70800-006900 | 70800-006895   | 70800-006950   |

\* Anchoring with 2 screws 10x1.5"

\* Bracket material: Aluminum

# G75 Solenoid with Galit Relay

N.C solenoid specially designed for filtration systems and control valves of large diameters.



High corrosion  
& UV resistance



Large  
orifice



Versatility

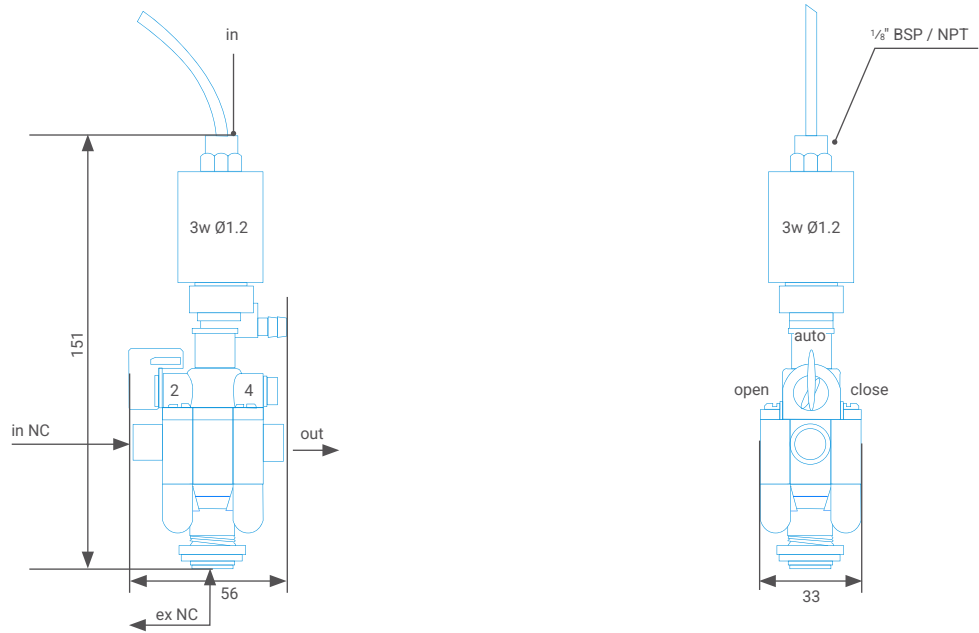
## / Benefits & Features

- Large orifice 5mm
- Versatility AC/DC/DCL, NO/NC configurations
- High corrosion & UV resistance Made from robust polymers materials
- 3W manual override Close / Auto / Open

## / Specifications & Recommendations

|                                 |                                                                                                                                                                                                                                            |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Function                        | 3 Way N.C                                                                                                                                                                                                                                  |
| Ports Size                      | 1/8" BSP & NPT                                                                                                                                                                                                                             |
| Orifice Size                    | 5mm                                                                                                                                                                                                                                        |
| Pressure Range                  | 1 to 10 bar                                                                                                                                                                                                                                |
| Temperature Range               | Fluid: 5°C to 50°C (no freezing)<br>Ambient: -10°C to 50°C                                                                                                                                                                                 |
| Materials In Contact with Media | Solenoid Operator: Stainless Steel<br>Seals: NBR<br>Spring: Stainless Steel AISI 300 series                                                                                                                                                |
| Manual Override                 | Manual override with 3 positions: <ul style="list-style-type: none"><li>• Auto - for automatic operation (valve is open when solenoid is energized)</li><li>• Manual - valve is kept open</li><li>• Close - valve is kept closed</li></ul> |
| Standard Protection Class       | IP66                                                                                                                                                                                                                                       |
| Resistance (Ω)                  | 12 (other options available)                                                                                                                                                                                                               |
| Input Current Range             | 14-16 (other options available)                                                                                                                                                                                                            |

→ Technical Dimensions & Ports



→ Catalog Numbers

| Description                              | Catalog Numbers |
|------------------------------------------|-----------------|
| GALIT SOL 1 UNIT 12DCL 120HM W/O BRACKET | 70800-000919    |
| GALIT SOL 2 UNITS 12DCL 120HM 2WIRES NC  | 70800-000910    |
| GALIT SOL 3 UNITS 12DCL 120HM 2WIRES NC  | 70800-000911    |
| GALIT SOL 4 UNITS 12DCL 120HM 2WIRES NC  | 70800-000912    |
| GALIT SOL 5 UNITS 12DCL 120HM 2WIRES NC  | 70800-000913    |
| GALIT SOL 6 UNITS 12DCL 120HM 2WIRES NC  | 70800-000914    |
| GALIT SOL 7 UNITS 12DCL 120HM 2WIRES NC  | 70800-000915    |
| GALIT SOL 8 UNITS 12DCL 120HM 2WIRES NC  | 70800-000916    |
| GALIT SOL 9 UNITS 12DCL 120HM 2WIRES NC  | 70800-000917    |
| GALIT SOL 10 UNITS 12DCL 120HM 2WIRES NC | 70800-000918    |

Catalog numbers refer to DC Latch. Product available in AC mode as well.

# Baccara™ Solenoids Manifold

## G75-VM MODULAR MANIFOLD



Easy  
installation



Large  
orifice



Versatility

## / Benefits & Features

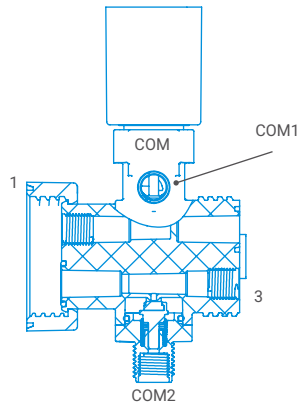
- Easy installation      Modular units
- Large orifice      1.8mm
- Versatility      NO/NC configurations

## / Specifications & Recommendations

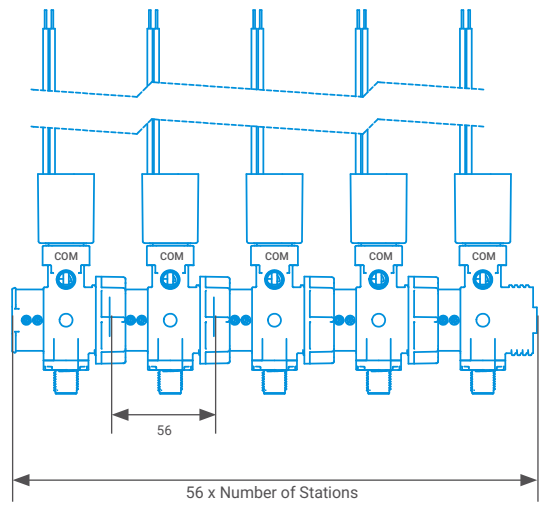
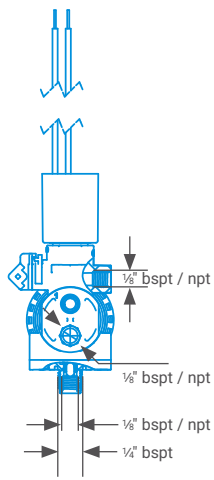
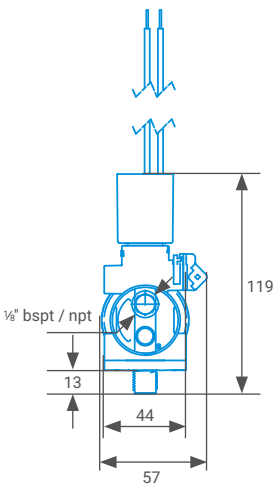
- Function – 3 Way NC, NO
- Orifice Size – 1.8mm
- Pressure Range – 0 - 8 bar
- Temperature Range – Fluid: 0°C to 50°C (no freezing), Ambient: -10°C to 50°C
- Materials in Contact with Media –  
Manual Override: Plastic (Reinforced Nylon)  
Main Valve: Plastic (reinforced nylon & POM)  
Solenoid Operator: Stainless steel AISI 300 & 400 series  
Seals: EPDM
- Mounting – With bracket
- Modular Connection Type –  
Thread type connection
- Modular Connection Assembly Recommendation –  
Manually tighten one station to another  
Using tools and/or excessive torques may lead to irreversible damage
- Manual Override 3 Positions Latch –  
Auto, close, open
- Media – Air, water
- Coil Voltage – Latch
- Standard Protection Class – IP66

→ Ports Scheme

| Port | NO       | NC       |
|------|----------|----------|
| 1    | Exhaust  | Pressure |
| 3    | Pressure | Exhaust  |
| COM  | Out      | Out      |



→ Technical Dimensions



# GEM-SOL Solenoids

Recommended for heavy-duty applications where high performance is required. Can be used for industrial and irrigation control and automation systems. Suitable for working with air, water, and oil.



High durability



Large orifice



Versatility

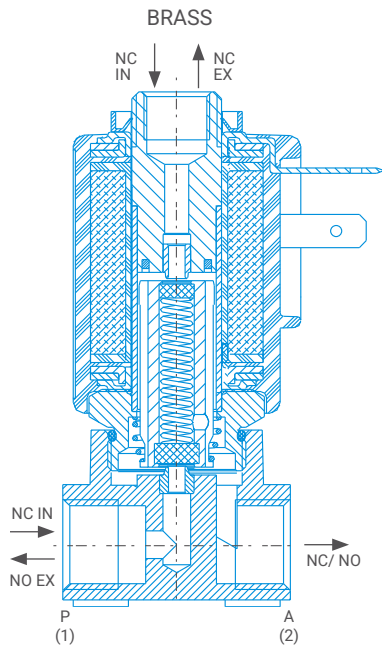
## / Benefits & Features

- High durability      Made of robust materials
- Large orifice      Wide range of orifice sizes
- Versatility      AC/DC/DCL, NO/NC configurations

## / Specifications & Recommendations

- Function – 3/2 way NC & NO
- Ports Size – 1/8" and 1/4" BSP & NPT
- Orifice – See table
- Kv – See table
- Pressure Range – See table
- Temperature Range (Fluid) – max 80°C
- Temperature Range (Ambient) – -10°C - 50°C
- Manual Override – Plastic, brass screw or brass finger knob, st.st for st.st valves
- Weight (with coil) – 248gr for mazak valve
- Media – Air, water, oil
- Coil Voltage – All Baccara coils voltages 10% AC 8W, 5.5W and 2.5W & DC 10W, 5.5 and 3.5W

→ Configuration



→ Material Specifications

|                   |                                     |
|-------------------|-------------------------------------|
| Main Valve        | Mazak, brass or stainless steel 303 |
| solenoid Operator | Stainless steel 300 & 400 series    |
| seals             | Nbr, viton, epdm or kalrez          |

→ Max. Pressure (bar)

3W NC

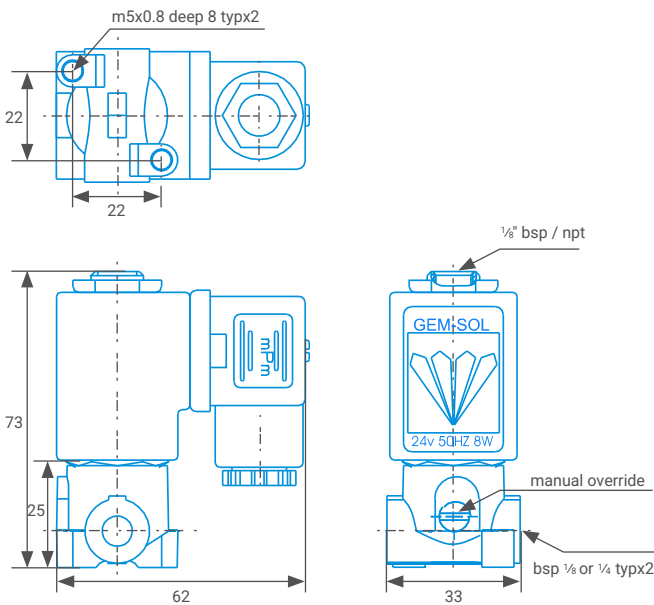
| Coil Current / Power      | Orifice |     |     |     |     |     |
|---------------------------|---------|-----|-----|-----|-----|-----|
|                           | 0.8     | 1.2 | 1.6 | 2.0 | 2.4 | 3.0 |
| ADC                       | 23      | 20  | 15  | 10  | 8   | 5.5 |
| AC/8W DC/10W              | 35      | 30  | 17  | 14  | 10  | 6   |
| AC/5.5W                   | 23      | 20  | 15  | 10  | 8   | 5.5 |
| AC/2.5W, DC/5.5W, DC/3.5W | 20      | 16  | 10  | 9   | 5   | 4   |
| Flow Factor Kv (Lmin)     | 0.6     | 1.1 | 1.7 | 2.5 | 3.5 | 4.5 |

3W NO

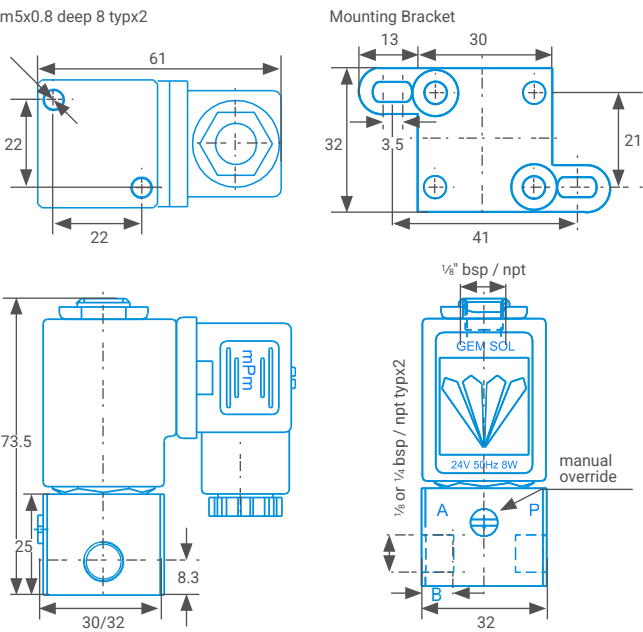
| Coil Current / Power  | Orifice |     |     |     |     |     |
|-----------------------|---------|-----|-----|-----|-----|-----|
|                       | 0.8     | 1.2 | 1.6 | 2.0 | 2.4 | 3.0 |
| ADC                   | 25      | 20  | 15  | 11  | 8   | 6   |
| AC/8W, DC/10W         | 30      | 22  | 17  | 12  | 10  | 7   |
| AC/5.5W FC/5.5W       | 25      | 20  | 15  | 11  | 8   | 6   |
| AC/2.5W DC/3.5W       | 20      | 18  | 12  | 8   | 6   | 4   |
| Flow Factor Kv (Lmin) | 0.6     | 1   | 1.4 | 2.2 | 3.0 | 3.5 |

→ Technical Dimensions

Brass Model



Mazak / Stainless Steel Model



## → Catalog Numbers

| Description                              | Catalog Number |
|------------------------------------------|----------------|
| BAC.GEM-A BR 1/4 3W NC 1.6 NBR 12VDC+CON | 70800-002073   |
| BAC.GEM-A BR 1/4N 3WNO 1.2 12VDC 10W+CON | 70800-006579   |
| BAC.GEM-A BR 1/4N 3WNO 1.6 12VDC 10W+COM | 70800-006578   |
| BAC.GEM-A BR.1/4 3W NC 1.6 110VAC8W+CON  | 70800-002055   |
| BAC.GEM-A BR.1/4 3W NC 1.6 24VAC 8W+CON. | 70800-002050   |
| BAC.GEM-A BR.1/4 3W NO 1.6 110VAC8W+CON. | 70800-002065   |
| BAC.GEM-A BR.1/4 3W NO 1.6 12VDC 10W+CON | 70800-002040   |
| BAC.GEM-A BR.1/4 3W NO 1.6 24VAC 8W+CON. | 70800-002060   |
| BAC.GEM-A BR.1/4 3WNO 1.6 230VAC 8W+CON. | 70800-002070   |
| BACCARA GEM SERVO 2WNO 1" BSP 12V DC 10W | 70800-001751   |
| BACCARA GEMSOL 2.4MM 12VDC 3W NC 2WIRES  | 70800-006625   |
| BACCARA GEMSOL 2.4MM 24V AC 8W NO        | 70800-003600   |
| BACCARA GEMSOL 2.4MM NC 24VAC 8W         | 70800-003400   |
| BACCARA GEMSOL 3W 0.8MM 24VAC 8W NO PN25 | 70800-003620   |
| BACCARA SOLENOID BAR F/10 GEMSOL NC AC   | 70800-006420   |
| BACCARA SOLENOID BAR F/3 GEMSOL NC AC    | 70800-006440   |
| BACCARA SOLENOID BAR F/3 GEMSOL NC AC    | 70800-006445   |
| BACCARA SOLENOID BAR F/4 GEMSOL NC AC    | 70800-006441   |
| BACCARA SOLENOID BAR F/4 GEMSOL NC AC    | 70800-006446   |
| BACCARA SOLENOID BAR F/5 GEMSOL NC AC    | 70800-006442   |
| BACCARA SOLENOID BAR F/5 GEMSOL NC AC    | 70800-006447   |
| BACCARA SOLENOID BAR F/6 GEMSOL NC AC    | 70800-006370   |
| BACCARA SOLENOID BAR F/7 GEMSOL NC AC    | 70800-006443   |
| BACCARA SOLENOID BAR F/8 GEMSOL NC AC    | 70800-006400   |
| BACCARA SOLENOID BAR F/9 GEMSOL NC AC    | 70800-006410   |
| GEM SOL COIL + CONN 415V AC 8W 50HZ      | 70800-002777   |
| GEM SOL MZK 3WNO 1/8" BSP 1.6MM NBR      | 70800-002778   |
| GEM SOL ST.ST 2WNO 1/4" BSP 2.4MM NBR    | 70800-002916   |
| GEMA BRASS BSP 3WNC 1.6MM 24VAC 8W 60HZ  | 70800-006580   |
| GEM-A-BR.1/4BSP 3WNO 1.6 48V/50HZ8W+CONN | 70800-001222   |
| GEMSOL BASE 3WNO 1/8" BSP 1.6 LOW POWER  | 70800-005601   |

# Dorot 2-Way/ 3-way Solenoids

Suitable for operation in all applications - agriculture, landscape and industry (water supply system).



High corrosion  
& UV resistance



Versatility



Easy  
installation

→ Catalog Numbers

| Product Name<br>& Illustration                                                      | Configuration | Voltage      | Catalog Number |              |                |                 |
|-------------------------------------------------------------------------------------|---------------|--------------|----------------|--------------|----------------|-----------------|
|                                                                                     |               |              | Operator       | Base         | Base + Bracket | Operator + Base |
| S-80 2-Way                                                                          |               |              |                |              |                |                 |
|  | 2-Way (NC)    | 24AC         | 71640-007140   | -            | -              | -               |
|                                                                                     |               | 24DC         | 71680-031060   |              |                | -               |
|                                                                                     |               | 12DC         | 71640-007020   |              |                | -               |
|                                                                                     |               | 9-30DC LATCH | 71680-018370   |              |                |                 |
| S-80 3-Way                                                                          |               |              |                |              |                |                 |
|  | 3-Way (NO)    | 24AC         | 71640-007120   | 71680-018350 | 71680-000240   | 71640-006980    |
|                                                                                     |               | 24DC         | 71680-018310   |              |                | 71640-006990    |
|                                                                                     |               | 12DC         | 71640-007021   |              |                | -               |
|                                                                                     | 3-Way (NC)    | 24AC         | 71640-007130   |              | 71640-007090   |                 |
| S-92 3-Way Latch                                                                    |               |              |                |              |                |                 |
|  | 3-Way (NO)    | DC Latch     | 71680-000180   | 71680-000185 | -              | 71640-006992    |

# / Complementary Accessories

# Complementary Accessories

## → Fittings

| Illustration                                                                        | Description                                   | Catalog Numbers |
|-------------------------------------------------------------------------------------|-----------------------------------------------|-----------------|
|    | ELBOW CONNECTOR 1/8" - 8MM                    | 76400-003400    |
|                                                                                     | ELBOW CONNECTOR 1/4" - 8MM                    | 76400-003500    |
|    | STRAIGHT CONNECTOR 1/8" - 8MM                 | 76400-002100    |
|                                                                                     | STRAIGHT CONNECTOR 1/4" - 8MM                 | 76400-002300    |
|    | T - CONNECTOR FOR TUBE 8MM - 1/8" - 8MM       | 76400-004450    |
|                                                                                     | T - CONNECTOR FOR TUBE 8MM - 1/4" - 8MM       | 71680-018575    |
|    | MALE PLUG 1/4" NPT                            | 71610-000800    |
|                                                                                     | MALE PLUG 3/8" NPT                            | 71610-000810    |
|   | 1/4" SELF - FLUSHING, INLINE CONTROL - FILTER | 76400-013755    |
|  | UNION CONNECTOR 8MM                           | 76400-001300    |
|  | UNION TEE 8MM                                 | 76400-004000    |
|  | MALE RUN TEE 8 X 8 X 1/8                      | 76400-004550    |
|  | PIPE REDUCING NIPPLE 1/4" - 1/8"              | 76400-006600    |
|                                                                                     | PIPE REDUCING NIPPLE 1/2" - 1/4"              | 76400-006900    |
|  | KIT CHECK POINT TEE 8 X 1/8" X 1/4" (CP)      | 76400-015901    |
|                                                                                     | KIT CHECK POINT TEE 1/8" X 8 X 1/4" (CP)      | 76400-015902    |
|                                                                                     | KIT CHECK POINT TEE 1/4" X 1/8" X 1/8" (CP)   | 71680-000030    |
|  | SELF - FLUSHING, INLINE CONTROL FILTER 1/2"   | 71680-014100    |
|  | BUSHING MALE - FEMALE 1/2" - 1/4"             | 78301-003170    |

## → Pressure Gauges

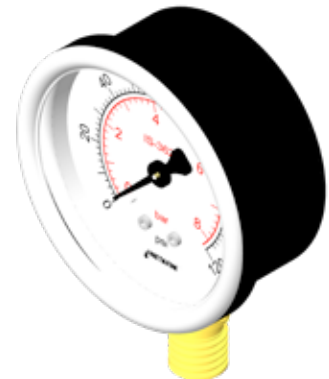
| Description                        | Catalog Number |
|------------------------------------|----------------|
| <b>Bottom Inlet Glycerin Gauge</b> |                |
| NPG 2½" GLC 0-4 BAR ¼" BSP         | 77456-000222   |
| NPG 2½" GLC 0-6 BAR ¼" BSP         | 77456-000223   |
| NPG 2½" GLC 0-8 BAR ¼" BSP         | 77456-000224   |
| NPG 2½" GLC 0-10 BAR ¼" BSP        | 77456-000225   |
| NPG 2½" GLC 0-16 BAR ¼" BSP        | 77456-000226   |
| NPG 2½" GLC 0-4 BAR ¼" NPT         | 77456-000227   |
| NPG 2½" GLC 0-6 BAR ¼" NPT         | 77456-000228   |
| NPG 2½" GLC 0-8 BAR ¼" NPT         | 77456-000229   |
| NPG 2½" GLC 0-10 BAR ¼" NPT        | 77456-000230   |
| NPG 2½" GLC 0-16 BAR ¼" NPT        | 77456-000231   |



|                                  |              |
|----------------------------------|--------------|
| <b>Rear Inlet Glycerin Gauge</b> |              |
| NPG AX 2½" GLC 0-4 BAR ¼" BSP    | 77456-000232 |
| NPG AX 2½" GLC 0-6 BAR ¼" BSP    | 77456-000233 |
| NPG AX 2½" GLC 0-8 BAR ¼" BSP    | 77456-000234 |
| NPG AX 2½" GLC 0-10 BAR ¼" BSP   | 77456-000235 |
| NPG AX 2½" GLC 0-16 BAR ¼" BSP   | 77456-000236 |
| NPG AX 2½" GLC 0-4 BAR ¼" NPT    | 77456-000237 |
| NPG AX 2½" GLC 0-6 BAR ¼" NPT    | 77456-000238 |
| NPG AX 2½" GLC 0-8 BAR ¼" NPT    | 77456-000239 |
| NPG AX 2½" GLC 0-10 BAR ¼" NPT   | 77456-000240 |
| Npg ax 2½" glc 0-16 bar ¼" npt   | 77456-000241 |



|                               |              |
|-------------------------------|--------------|
| <b>Bottom Inlet Dry Gauge</b> |              |
| NPG 2½" DRY 0-4 BAR ¼" BSP    | 77456-000100 |
| NPG 2½" DRY 0-6 BAR ¼" BSP    | 77456-000101 |
| NPG 2½" DRY 0-8 BAR ¼" BSP    | 77456-000210 |
| NPG 2½" DRY 0-10 BAR ¼" BSP   | 77456-000103 |
| NPG 2½" DRY 0-16 BAR ¼" BSP   | 77456-000104 |
| NPG 2½" DRY 0-4 BAR ¼" NPT    | 77456-000120 |
| NPG 2½" DRY 0-6 BAR ¼" NPT    | 77456-000121 |
| NPG 2½" DRY 0-8 BAR ¼" NPT    | 77456-000211 |
| NPG 2½" DRY 0-10 BAR ¼" NPT   | 77456-000123 |
| NPG 2½" DRY 0-16 BAR ¼" NPT   | 77456-000124 |



|                                |              |
|--------------------------------|--------------|
| <b>Rear Inlet Dry Gauge</b>    |              |
| NPG AX 2½" DRY 0-4 BAR ¼" BSP  | 77456-000212 |
| NPG AX 2½" DRY 0-6 BAR ¼" BSP  | 77456-000213 |
| NPG AX 2½" DRY 0-8 BAR ¼" BSP  | 77456-000214 |
| NPG AX 2½" DRY 0-10 BAR ¼" BSP | 77456-000215 |
| NPG AX 2½" DRY 0-16 BAR ¼" BSP | 77456-000216 |
| NPG AX 2½" DRY 0-4 BAR ¼" NPT  | 77456-000217 |
| NPG AX 2½" DRY 0-6 BAR ¼" NPT  | 77456-000218 |
| NPG AX 2½" DRY 0-8 BAR ¼" NPT  | 77456-000219 |
| NPG AX 2½" DRY 0-10 BAR ¼" NPT | 77456-000220 |
| NPG AX 2½" DRY 0-16 BAR ¼" NPT | 77456-000221 |



# 3-Way Selectors

3-Way brass ball valve for hydraulic flow control. Automatic and computerized irrigation systems for agriculture and landscape gardening, filtering, industrial, and domestic water supply systems.



Maximum  
reliability



High corrosion  
& UV resistance



High  
durability

## / Benefits & Features

- |                        |                                                                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → Versatile connection | The valves have a common port at the base of the valve body. Any of the three peripheral ports can be connected to the common port – the other ports are totally sealed |
| → 3 control positions  | Designed for three hydraulic control positions: Open, Closed, and Automatic<br>Valves are sealed when handle is in-between port position                                |
| → User friendly        | Design allows smooth operation of handle with position indicator                                                                                                        |
| → Easy viewing         | of the operating position                                                                                                                                               |

## / Specifications & Recommendations

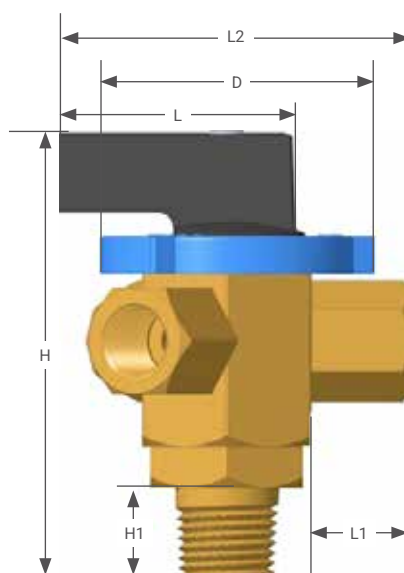
- Common Port – At base of the valve body
- Base Port Thread – Male threaded 1/4" BSP or NPT
- Three Threaded Ports – Female threaded 1/8" BSP or NPT or 1/4" BSP or NPT
- Passage Size – 3.5mm
- Maximum Working Pressure – 10 bar
- One moving part only

## → Packaging Data

| Model               | Qty.<br>p/box unit | Box sizes<br>(cm x cm x cm) | Box weight<br>(kg) | Boxes<br>p/pallet |
|---------------------|--------------------|-----------------------------|--------------------|-------------------|
| ¼" MTH - 3 x ⅛" FTH | 100                | 41.0 x 26.5 x 12.0          | 14.4               | 64                |
| ¼" MTH - 3 x ¼" FTH | 40                 | 26.7 x 19.5 x 13.5          | 9.7                | 120               |

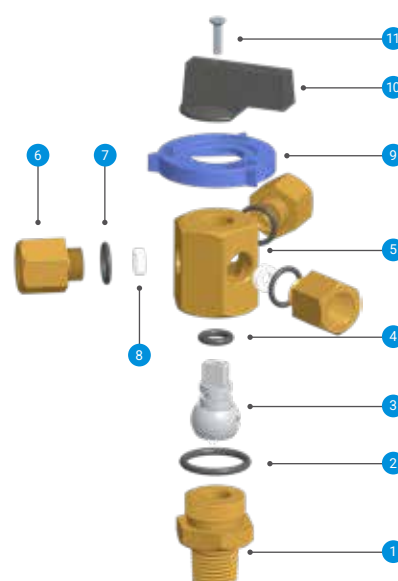
## → Technical Dimensions

| size \ nom          | D<br>(mm) | L<br>(mm) | L1<br>(mm) | L2<br>(mm) | H<br>(mm) | H1<br>(mm) |
|---------------------|-----------|-----------|------------|------------|-----------|------------|
| ¼" MTH - 3 x ⅛" FTH | 33.0      | 43.5      | 13.0       | 58.0       | 53.2      | 12.0       |
| ¼" MTH - 3 x ¼" FTH | 42.3      | 49.0      | 13.6       | 67.6       | 73.2      | 12.0       |



## → Material Specification

| #  | Part Name     | Material            | Quantity |
|----|---------------|---------------------|----------|
| 1  | Base          | Brass               | 1        |
| 2  | Base O-ring   | EPDM                | 1        |
| 3  | Ball          | Nickel-plated brass | 1        |
| 4  | Ball O-ring   | EPDM                | 1        |
| 5  | Body          | Brass               | 1        |
| 6  | Nozzle        | Brass               | 3        |
| 7  | Nozzle O ring | EPDM                | 3        |
| 8  | Seal          | Teflon (PTFE)       | 3        |
| 9  | Body Cover    | ABS                 | 1        |
| 10 | Handle        | ABS                 | 1        |
| 11 | Screw         | Stainless steel     | 1        |



## → Catalog Numbers

| Product Illustration | Product Description                  | Catalog Number |
|----------------------|--------------------------------------|----------------|
|                      | NMV BR BALL VLV 3W ¼" MTH ⅛" FTH BSP | 77455-000200   |
|                      | NMV BR BALL VLV 3W ¼" MTH ⅛" FTH NPT | 77455 000201   |
|                      | NMV BR BALL VLV 3W ¼" MTH ¼" FTH BSP | 77455 000202   |
|                      | NMV BR BALL VLV 3W ¼" MTH ¼" FTH NPT | 77455 000203   |
|                      | DOROT 3-WAY VALVE SY3 1/4M.NPT       | 71610-035900   |
|                      | S.Y-3 1/8F (⅛F X ⅛F X ⅛F)            | 76040-001650   |
|                      | S.Y-3 1/8M (⅛F X ⅛F X ⅛F)            | 76040-001600   |

# Additional Components

| Product Illustration | Product Description | Catalog Number |
|----------------------|---------------------|----------------|
|----------------------|---------------------|----------------|

## 3-Way Brass Valves

|                                                                                   |                                          |              |
|-----------------------------------------------------------------------------------|------------------------------------------|--------------|
|  | NMV BR BALL VLV 3W 1/4" MTH 1/8" FTH BSP | 77455-000200 |
|                                                                                   | NMV BR BALL VLV 3W 1/4" MTH 1/8" FTH NPT | 77455-000201 |
|                                                                                   | NMV BR BALL VLV 3W 1/4" MTH 1/4" FTH BSP | 77455-000202 |
|                                                                                   | NMV BR BALL VLV 3W 1/4" MTH 1/4" FTH NPT | 77455-000203 |

## Brass Model

|                                                                                   |                             |              |
|-----------------------------------------------------------------------------------|-----------------------------|--------------|
|  | PRESSURE GAUGE VALVE 1/4 SM | 76040-001100 |
|-----------------------------------------------------------------------------------|-----------------------------|--------------|

\* 1/4" NPT male x female threaded connection

\* Max. Working Pressure: 25 Bar

## Plastic Model

|                                                                                    |                              |              |
|------------------------------------------------------------------------------------|------------------------------|--------------|
|  | NPG 1/4" MTH - FTH BSP VALVE | 77456-000180 |
|------------------------------------------------------------------------------------|------------------------------|--------------|

\* System vibration does not affect the pressure gauge.

\* 1/4" BSP or NPT male x female threaded connection

\* Max. Working Pressure: 6 Bar

\* All parts are chemical/corrosion resistant, color UV stabilized.

## Pressure Gauge PITOT Needle

|                                                                                     |                           |              |
|-------------------------------------------------------------------------------------|---------------------------|--------------|
|  | NPG PITOT NEEDLE 1/4" BSP | 77456-000200 |
|                                                                                     | NPG PITOT NEEDLE 1/4" NPT | 77456-000201 |

\* 1/4" thread for direct connection to the pressure gauge

\* Fits into dedicated measuring points (see below), allowing measuring pressure at any given point along the system.

## Pressure Measuring Point

|                                                                                     |                                     |              |
|-------------------------------------------------------------------------------------|-------------------------------------|--------------|
|  | PRESSURE MEASURING POINT - BARB     | 63000-002800 |
|  | PRESSURE MEASURING POINT - 1/8" BSP | 63000-002750 |

# DPR

## DIRECT PRESSURE REDUCER



3/4" Angle

1" Straight



Superb  
quality



High  
durability

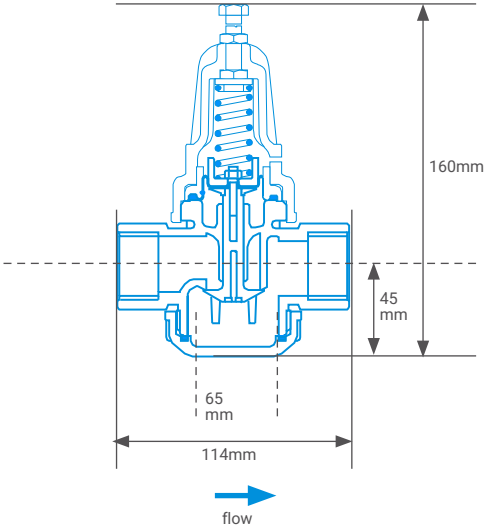
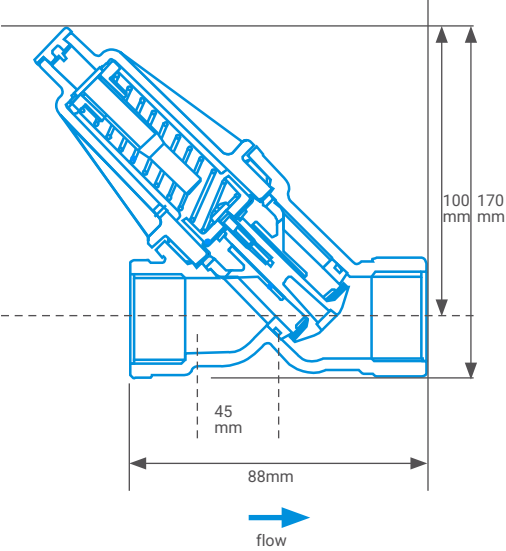


Maximum  
reliability

## / Specifications & Recommendations

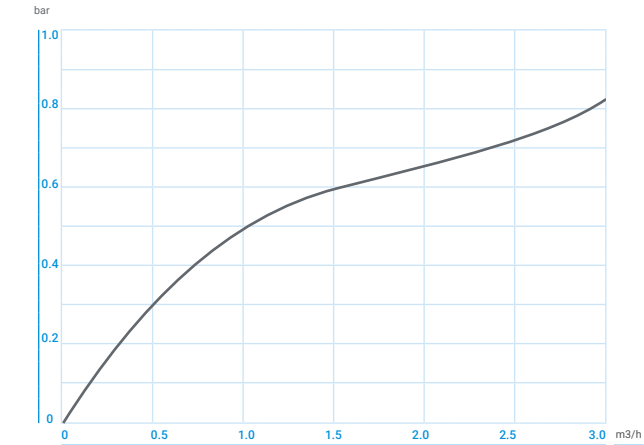
| Function               | 3/4" Angle Model                                               | 1" Straight Model                                      |
|------------------------|----------------------------------------------------------------|--------------------------------------------------------|
| Size                   | 3/4" (DN20), 1" (DN25)                                         | 1" (DN25)                                              |
| End Connections        | Threaded<br>Inlet: Female BSP<br>Outlet: Female BSP / male BSP | Female threads, BSP                                    |
| Flow Range             | 0.2 - 5m³/h (PRV model)<br>0.1 - 3m³/h (PRV-05 model)          | 0.45 - 7m³/h (PRV model)<br>0.1 - 7m³/h (PRV-05 model) |
| Pressure Rating        | 9bar                                                           | 9bar                                                   |
| Opening Pressure Range | 0.7 - 9 bar                                                    | 0.7 - 9 bar                                            |
| Weight                 | 0.13kg                                                         | 0.36kg                                                 |

→ Technical Dimensions

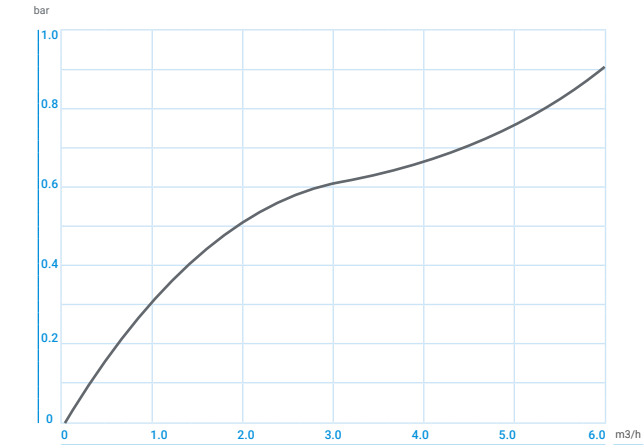


→ Head Loss

3/4" PRV



1" PRV



→ Catalog Numbers

| Connection | Size | Flow Grade   | Thread Type     | Spring Color | Range     | Catalog Number |
|------------|------|--------------|-----------------|--------------|-----------|----------------|
| BSP        | 3/4" | Low flow     | Male / female   | Yellow       | 0.5 - 1.2 | 71000-014650   |
|            |      |              |                 | White        | 0.8 - 2.5 | 71000-014700   |
|            |      |              | Female / female | Red          | 2.0 - 3.5 | 71000-014800   |
|            |      |              |                 | Yellow       | 0.5 - 1.2 | 71000-014850   |
|            |      |              |                 | White        | 0.8 - 2.5 | 71000-014900   |
|            |      |              |                 | Red          | 2.0 - 3.5 | 71000-015700   |
|            |      | Regular flow | Male / female   | Black        | 1.5 - 3.5 | 71000-015750   |
|            |      |              |                 | Yellow       | 0.5 - 1.2 | 71000-015400   |
|            |      |              | Female / female | Red          | 2.0 - 3.5 | 71000-015500   |
|            |      |              |                 | White        | 0.8 - 2.5 | 71000-015600   |
|            |      |              |                 | Black        | 1.5 - 3.5 | 71000-015650   |
|            |      |              |                 | Red          | 2.0 - 3.5 | 71000-015300   |
|            | 1"   | Low flow     | Female / female | Black        | 1.5 - 3.5 | 71000-015320   |
|            |      |              |                 | White        | 0.8 - 2.5 | 71000-015800   |
|            |      | Regular flow |                 | Yellow       | 0.5 - 1.2 | 71000-016380   |
|            |      |              |                 | White        | 0.8 - 2.5 | 71000-016100   |
|            |      |              |                 | Red          | 2.0 - 3.5 | 71000-016200   |
|            |      |              |                 | Brown        | 3.0 - 5.5 | 71000-016350   |
|            |      |              |                 | Black        | 1.5 - 3.5 | 71000-016000   |

# / Manual Valves



Precision  
Agriculture



## Manual Valves Contents

### Plastic Valves

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# True Union Ball Valves

Physical shut-off, manual restrictions, control or service needs in irrigation head controls, field plots, nurseries, greenhouses, Nutrigation™ systems, water conveyance systems.



Superb  
quality



High  
durability



Maximum  
reliability

## / Benefits & Features

→ Saves  
operation  
costs

A quarter turn shut-off valve, threaded or glued socket, user-friendly design allowing smooth handle operation

Corrosion-resistant and UV-stabilized

A true union ball valve, specifically designed for water application and for safe pipeline operation

→ Saves labor  
costs and  
multiple  
investments in  
maintenance

In the closed position, the pipeline can be disconnected downstream from the valve without any leakage

The valve is removable from the pipeline, allowing quick maintenance

Highly reliable operation and durable over time

## / Specifications & Recommendations

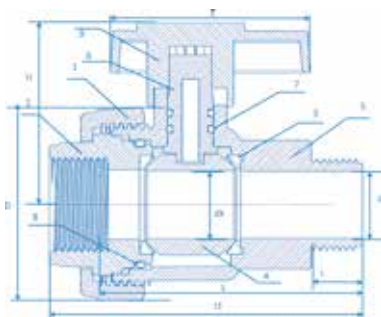
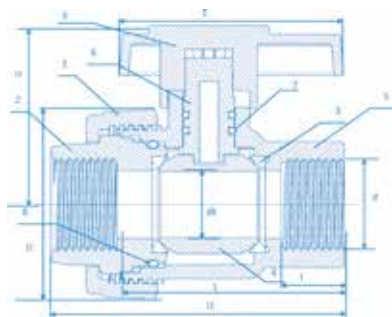
- Ideal for application in temperature range of -5°C and 50°C, guaranteeing optimal performance in terms of mechanical resistance, good rigidity, low coefficients of thermal expansion and optimal safety factors in service
- Operational up to 10 bar
- Low head losses
- Wide range of connections: threaded (BSP or NPT standards) or SG, socket glued (ISO/DIN, ASTM, BS)

## → Packaging Data

| Model       | Quantity P/Box (Unit) | Box Sizes (cm x cm x cm) | Female-Female Threaded Connection Box Weight (kg) | Male-Female Threaded Connection Box Weight (kg) | Socket Glued Connection Box Weight (kg) | Boxes P/Pallet |
|-------------|-----------------------|--------------------------|---------------------------------------------------|-------------------------------------------------|-----------------------------------------|----------------|
| ½" - 20mm   | 150                   | 43.0 x 33.0 x 39.0       | 24.55                                             | 26.00                                           | 24.70                                   | 12             |
| ¾" - 25mm   | 150                   |                          | 22.11                                             | 23.83                                           | 22.33                                   |                |
| 1" - 32mm   | 75                    |                          | 17.03                                             | 17.74                                           | 16.84                                   |                |
| 1¼" - 40mm  | 50                    |                          | 17.54                                             | 18.09                                           | 17.34                                   |                |
| 1½" - 50mm  | 16                    |                          | 10.91                                             | 10.58                                           | 10.53                                   |                |
| 2" - 63mm   | 8                     |                          | 8.68                                              | 8.90                                            | 8.52                                    |                |
| 2½" - 75 Mm | 8                     |                          | 12.08                                             | 12.04                                           | 11.86                                   |                |
| 3" - 90mm   | 4                     |                          | 15.93                                             | 13.09                                           | 12.85                                   |                |
| 4" - 110mm  | 2                     |                          | 9.84                                              | 9.64                                            | 9.84                                    |                |

## → Technical Dimensions

True Union Ball Valves ½", ¾", 1", 1¼"



Inlet Connector - Threaded Male / Outlet Connector - Threaded Female

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| ½"          | 14.00        | 14.00        | 20.00      | 60.00     | 16.00     | 80.20     | 99.15      | 60.80     | 56.50     |
| ¾"          | 14.00        | 14.00        | 20.00      | 60.00     | 18.00     | 80.20     | 99.15      | 60.80     | 56.50     |
| 1"          | 11.00        | 11.50        | 24.50      | 69.00     | 17.70     | 89.00     | 110.40     | 71.00     | 66.45     |
| 1¼"         | 11.00        | 11.50        | 31.80      | 79.50     | 25.70     | 88.00     | 122.80     | 105.00    | 70.30     |

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| ½"          | 14.00        | 14.00        | 20.00      | 60.00     | 16.00     | 63.50     | 82.60      | 60.80     | 56.50     |
| ¾"          | 14.00        | 14.00        | 20.00      | 60.00     | 18.00     | 63.50     | 82.60      | 60.80     | 55.50     |
| 1"          | 11.00        | 11.50        | 24.50      | 69.00     | 19.55     | 70.50     | 93.00      | 71.00     | 66.45     |
| 1¼"         | 11.00        | 11.50        | 31.80      | 79.50     | 27.40     | 88.00     | 122.80     | 105.00    | 70.30     |

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| 20mm        | 20.20        | 20.20        | 20.00      | 60.00     | 16.00     | 63.50     | 82.60      | 60.80     | 56.60     |
| 25mm        | 25.00        | 25.00        | 20.00      | 60.00     | 18.00     | 63.50     | 82.60      | 60.80     | 55.60     |
| 32mm        | 32.00        | 32.00        | 24.50      | 69.00     | 19.55     | 70.50     | 93.00      | 71.00     | 66.45     |
| 40mm        | 40.00        | 40.00        | 31.80      | 79.50     | 27.40     | 88.00     | 122.80     | 105.00    | 70.30     |

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| ½"          | 21.20        | 21.40        | 20.00      | 60.00     | 18.00     | 63.50     | 82.60      | 60.80     | 55.60     |
| ¾"          | 26.67        | 26.00        | 20.00      | 60.00     | 18.00     | 63.50     | 82.60      | 60.80     | 55.60     |
| 1"          | 33.40        | 34.00        | 24.50      | 69.00     | 19.55     | 70.50     | 93.00      | 71.00     | 66.45     |
| 1¼"         | 42.16        | 42.00        | 31.80      | 79.50     | 27.40     | 88.00     | 122.80     | 105.00    | 70.30     |

## → Material Specifications

PVC Ball Valves ½", ¾", 1", 1¼"

| #  | Part Name          | Material | Qty. |
|----|--------------------|----------|------|
| 1  | Ring               | UPVC     | 1    |
| 2  | Bush**             | UPVC     | 1    |
| 3  | Seal               | TPE      | 2    |
| 4  | Ball               | UPVC     | 1    |
| 5  | Body               | UPVC     | 1    |
| 6  | Shaft              | UPVC     | 1    |
| 7  | Shaft o-ring       | HNBR     | 2    |
| 8  | Main o-ring**      | HNBR     | 1    |
| 9  | Handle             | ABS      | 1    |
| 10 | Threaded bush*     | UPVC     | 1    |
| 11 | Bush big o-ring*   | HNBR     | 1    |
| 12 | Bush small o-ring* | HNBR     | 1    |
| 13 | Socket*            | UPVC     | 1    |

\* 1¼" Ball Valve

\*\* ¾" Ball Valve

## → Material Specifications

Polypropylene Ball Valves ½", ¾", 1", 1¼"

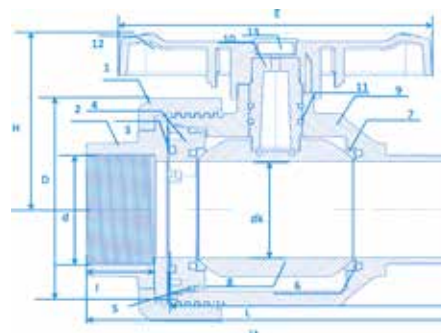
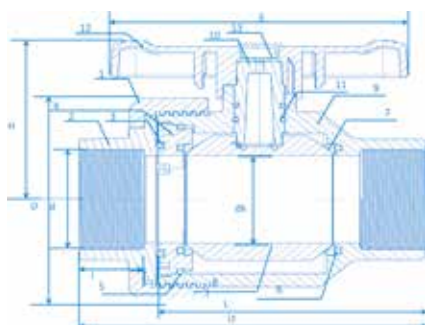
| # | Part Name     | Material | Qty. |
|---|---------------|----------|------|
| 1 | Ring          | UPVC     | 1    |
| 2 | Bush**        | UPVC     | 1    |
| 3 | Seal          | TPE      | 2    |
| 4 | Ball          | UPVC     | 1    |
| 5 | Body          | UPVC     | 1    |
| 6 | Shaft         | UPVC     | 1    |
| 7 | Shaft o-ring  | HNBR     | 2    |
| 8 | Main o-ring** | HNBR     | 1    |
| 9 | Handle        | ABS      | 1    |

\* 1¼" Ball valve

\*\* ¾" Ball valve

## → Technical Dimensions

True Union Ball Valves 1½", 2", 2½", 3"



## → Material Specifications

PVC Ball Valves 1½", 2", 2½", 3"

| #  | Part Name         | Material | Qty. |
|----|-------------------|----------|------|
| 1  | Ring              | UPVC     | 1    |
| 2  | Socket            | UPVC     | 1    |
| 3  | Bush small o-ring | HNBR     | 1    |
| 4  | Bush              | UPVC     | 1    |
| 5  | Bush big o-ring   | HNBR     | 1    |
| 6  | Seal washer*      | HNBR     | 2    |
| 7  | Seal              | TPE      | 2    |
| 8  | Ball              | UPVC     | 1    |
| 9  | Body              | UPVC     | 1    |
| 10 | Shaft             | UPVC     | 1    |
| 11 | Shaft o-ring**    | HNBR     | 1    |
| 12 | Handle            | ABS      | 1    |
| 13 | Handle logo       | ABS      | 1    |

\* 3" Ball valve

\*\* 2" Model

## → Material Specifications

Polypropylene Ball Valves 1½", 2", 2½", 3"

| #  | Part Name         | Material      | Qty. |
|----|-------------------|---------------|------|
| 1  | Ring              | PPGF          | 1    |
| 2  | Socket            | ***UPVC /PPGF | 1    |
| 3  | Bush small o-ring | HNBR          | 1    |
| 4  | Bush              | UPVC          | 1    |
| 5  | Bush big o-ring   | HNBR          | 1    |
| 6  | *Seal washer      | HNBR          | 2    |
| 7  | Seal              | TPE           | 2    |
| 8  | Ball              | UPVC          | 1    |
| 9  | Body              | PPGF          | 1    |
| 10 | Shaft             | UPVC          | 1    |
| 11 | Shaft o-ring      | HNBR          | **2  |
| 12 | Handle            | PPGF          | 1    |
| 13 | Handle logo       | PPGF          | 1    |

\* Only in 3" Ball valve, \*\* one in 2" Model

\*\*\* UPVC for solvent socket and PPGF for Threaded socket

Inlet - Threaded Male / Outlet Connector - Threaded Female

| size \ nom | BSP (TPI) | NPT (TPI) | DK (mm) | D (mm) | I (mm) | L (mm) | LT (mm) | E (mm) | H (mm) |
|------------|-----------|-----------|---------|--------|--------|--------|---------|--------|--------|
| 1½"        | 11.00     | 11.50     | 39.40   | 94.40  | 32.00  | 98.50  | 136.60  | 121.00 | 90.80  |
| 2"         | 11.00     | 11.50     | 49.50   | 116.00 | 35.40  | 119.00 | 164.80  | 150.00 | 97.00  |
| 2½"        | 11.00     | 8.00      | 59.00   | 131.60 | 45.50  | 139.50 | 197.20  | 162.00 | 110.00 |
| 3"         | 11.00     | 8.00      | 76.00   | 178.80 | 42.80  | 180.00 | 230.40  | 200.40 | 139.00 |

Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

| size \ nom | BSP (TPI) | NPT (TPI) | DK (mm) | D (mm) | I (mm) | L (mm) | LT (mm) | E (mm) | H (mm) |
|------------|-----------|-----------|---------|--------|--------|--------|---------|--------|--------|
| 1½"        | 11.00     | 11.50     | 39.40   | 94.40  | 32.00  | 76.60  | 148.80  | 121.00 | 88.30  |
| 2"         | 11.00     | 11.50     | 49.50   | 116.00 | 35.40  | 119.00 | 164.80  | 150.00 | 97.00  |
| 2½"        | 11.00     | 8.00      | 59.00   | 131.60 | 45.50  | 140.85 | 195.40  | 162.00 | 110.00 |
| 3"         | 11.00     | 8.00      | 76.00   | 178.80 | 42.80  | 178.10 | 250.00  | 200.40 | 139.00 |

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

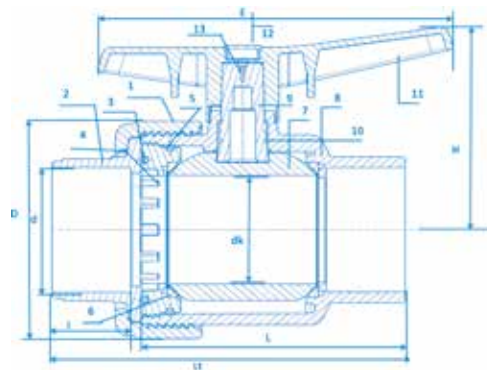
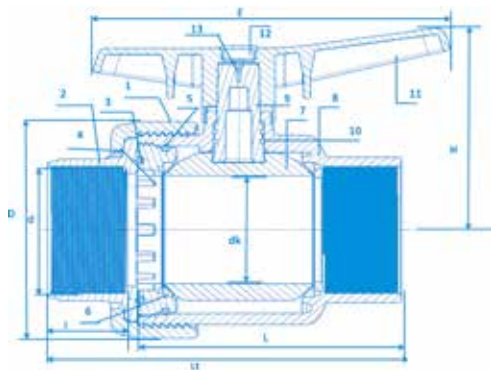
| size \ nom | BSP (TPI) | NPT (TPI) | DK (mm) | D (mm) | I (mm) | L (mm) | LT (mm) | E (mm) | H (mm) |
|------------|-----------|-----------|---------|--------|--------|--------|---------|--------|--------|
| 50mm       | 50.00     | 50.00     | 39.40   | 94.40  | 32.00  | 76.60  | 148.80  | 121.00 | 88.30  |
| 63mm       | 63.00     | 63.00     | 49.50   | 116.00 | 35.40  | 88.00  | 175.40  | 150.00 | 97.00  |
| 75mm       | 75.00     | 75.00     | 59.00   | 131.60 | 45.50  | 140.85 | 195.40  | 162.00 | 110.00 |
| 90mm       | 90.00     | 90.00     | 76.00   | 178.80 | 42.80  | 178.10 | 250.00  | 200.40 | 139.00 |

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

| size \ nom | BSP (TPI) | NPT (TPI) | DK (mm) | D (mm) | I (mm) | L (mm) | LT (mm) | E (mm) | H (mm) |
|------------|-----------|-----------|---------|--------|--------|--------|---------|--------|--------|
| 1½"        | 48.26     | 48.00     | 39.40   | 94.40  | 32.00  | 76.60  | 148.80  | 121.00 | 88.30  |
| 2"         | 60.33     | 60.00     | 49.50   | 116.00 | 35.40  | 88.00  | 175.40  | 150.00 | 97.00  |
| 2½"        | 73.03     | 75.00     | 59.00   | 131.60 | 45.50  | 140.85 | 195.40  | 162.00 | 110.00 |
| 3"         | 88.90     | 89.00     | 76.00   | 178.80 | 42.80  | 178.10 | 250.00  | 200.40 | 139.00 |

## → Technical Dimensions

### True Union Ball Valves 4"



#### Inlet Connector - Threaded Male / Outlet Connector - Threaded Female

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| 4"          | 11.00        | 8.00         | 98.30      | 197.00    | 60.00     | 200.00    | 268.00     | 270.10    | 186.00    |

#### Inlet Connector - Threaded Female / Outlet Connector - Threaded Female

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| 4"          | 11.00        | 8.00         | 98.30      | 197.00    | 60.00     | 200.00    | 268.00     | 270.10    | 186.00    |

#### Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| 110mm       | 110.00       | 110.00       | 98.30      | 196.50    | 60.00     | 200.00    | 268.00     | 270.10    | 186.00    |

#### Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

| nom<br>size | BSP<br>(TPI) | NPT<br>(TPI) | DK<br>(mm) | D<br>(mm) | I<br>(mm) | L<br>(mm) | LT<br>(mm) | E<br>(mm) | H<br>(mm) |
|-------------|--------------|--------------|------------|-----------|-----------|-----------|------------|-----------|-----------|
| 4"          | 114.30       | 114.00       | 98.30      | 196.50    | 60.00     | 200.00    | 268.00     | 270.10    | 186.00    |

## → Material Specifications

### PVC Ball Valves 4"

| #  | Part Name         | Material | Qty. |
|----|-------------------|----------|------|
| 1  | Ring              | UPVC     | 1    |
| 2  | Socket            | UPVC     | 1    |
| 3  | Bush small o-ring | HNBR     | 1    |
| 4  | Bush              | UPVC     | 1    |
| 5  | Bush big o-ring   | HNBR     | 1    |
| 6  | Seal              | TPE      | 2    |
| 7  | Ball              | UPVC     | 1    |
| 8  | Body              | UPVC     | 1    |
| 9  | Shaft             | UPVC     | 1    |
| 10 | Shaft o-ring      | HNBR     | 3    |
| 11 | Handle            | ABS      | 1    |
| 12 | Handle logo       | ABS      | 1    |

## → Material Specifications

### Polypropylene Ball Valves 4"

| #  | Part Name         | Material      | Qty. |
|----|-------------------|---------------|------|
| 1  | Ring              | PPGF          | 1    |
| 2  | Socket            | ***UPVC /PPGF | 1    |
| 3  | Bush small o-ring | NBR           | 1    |
| 4  | Bush              | UPVC          | 1    |
| 5  | Bush big o-ring   | NBR           | 1    |
| 6  | Seal              | TPE           | 2    |
| 7  | Ball              | UPVC          | 1    |
| 8  | Body              | PPGF          | 1    |
| 9  | Shaft             | UPVC          | 1    |
| 10 | Shaft o-ring      | NBR           | 3    |
| 11 | Handle            | PPGF          | 1    |
| 12 | Handle logo       | PPGF          | 1    |
| 13 | Handle screw      | SS            | 1    |

\*\*\* UPVC for solvent socket and PPGF for Threaded socket

## → Catalog Numbers

### True Union Ball Valves

| Description                          | Cat. Number  |
|--------------------------------------|--------------|
| NMV PVC BALL VLV 1 UNION ½" FFT BSP  | 77450-000216 |
| NMV PVC BALL VLV 1 UNION ¾" FFT BSP  | 77450-000100 |
| NMV PVC BALL VLV 1 UNION 1" FFT BSP  | 77450-000101 |
| NMV PVC BALL VLV 1 UNION 1¼" FFT BSP | 77450-000102 |
| NMV PVC BALL VLV 1 UNION 1½" FFT BSP | 77450-000103 |
| NMV PVC BALL VLV 1 UNION 2" FFT BSP  | 77450-000104 |
| NMV PVC BALL VLV 1 UNION 2½" FFT BSP | 77450-000105 |
| NMV PVC BALL VLV 1 UNION 3" FFT BSP  | 77450-000106 |
| NMV PVC BALL VLV 1 UNION 4" FFT BSP  | 77450-000107 |
| NMV PVC BALL VLV 1 UNION ½" FFT NPT  | 77450-000217 |
| NMV PVC BALL VLV 1 UNION ¾" FFT NPT  | 77450-000208 |
| NMV PVC BALL VLV 1 UNION 1" FFT NPT  | 77450-000209 |
| NMV PVC BALL VLV 1 UNION 1¼" FFT NPT | 77450-000210 |
| NMV PVC BALL VLV 1 UNION 1½" FFT NPT | 77450-000211 |
| NMV PVC BALL VLV 1 UNION 2" FFT NPT  | 77450-000212 |
| NMV PVC BALL VLV 1 UNION 2½" FFT NPT | 77450-000213 |
| NMV PVC BALL VLV 1 UNION 3" FFT NPT  | 77450-000214 |
| NMV PVC BALL VLV 1 UNION 4" FFT NPT  | 77450-000215 |
| NMV PVC BALL VLV 1 UNION ½" FMT BSP  | 77450-000218 |
| NMV PVC BALL VLV 1 UNION ¾" FMT BSP  | 77450-000120 |
| NMV PVC BALL VLV 1 UNION 1" FMT BSP  | 77450-000121 |
| NMV PVC BALL VLV 1 UNION 1¼" FMT BSP | 77450-000122 |
| NMV PVC BALL VLV 1 UNION 1½" FMT BSP | 77450-000123 |
| NMV PVC BALL VLV 1 UNION 2" FMT BSP  | 77450-000124 |
| NMV PVC BALL VLV 1 UNION 2½" FMT BSP | 77450-000125 |
| NMV PVC BALL VLV 1 UNION 3" FMT BSP  | 77450-000126 |
| NMV PVC BALL VLV 1 UNION 4" FMT BSP  | 77450-000127 |
| NMV PVC BALL VLV 1 UNION ½" FMT NPT  | 77450-000219 |
| NMV PVC BALL VLV 1 UNION ¾" FMT NPT  | 77450-000149 |
| NMV PVC BALL VLV 1 UNION 1" FMT NPT  | 77450-000150 |
| NMV PVC BALL VLV 1 UNION 1¼" FMT NPT | 77450-000152 |
| NMV PVC BALL VLV 1 UNION 1½" FMT NPT | 77450-000153 |
| NMV PVC BALL VLV 1 UNION 2" FMT NPT  | 77450-000151 |
| NMV PVC BALL VLV 1 UNION 2½" FMT NPT | 77450-000154 |
| NMV PVC BALL VLV 1 UNION 3" FMT NPT  | 77450-000155 |
| NMV PVC BALL VLV 1 UNION 4" FMT NPT  | 77450-000156 |

| Description                             | Cat. Number  |
|-----------------------------------------|--------------|
| NMV PVC BALL VLV 1 UNION 20MM SG ISO/D  | 77450-000220 |
| NMV PVC BALL VLV 1 UNION 25MM SG ISO/D  | 77450-000200 |
| NMV PVC BALL VLV 1 UNION 32MM SG ISO/D  | 77450-000201 |
| NMV PVC BALL VLV 1 UNION 40MM SG ISO/D  | 77450-000202 |
| NMV PVC BALL VLV 1 UNION 50MM SG ISO/D  | 77450-000203 |
| NMV PVC BALL VLV 1 UNION 63MM SG ISO/D  | 77450-000204 |
| NMV PVC BALL VLV 1 UNION 75MM SG ISO/D  | 77450-000205 |
| NMV PVC BALL VLV 1 UNION 90MM SG ISO/D  | 77450-000206 |
| NMV PVC BALL VLV 1 UNION 110MM SG ISO/D | 77450-000207 |
| NMV PVC BALL VLV 1 UNION ½" SG BS       | 77450-000221 |
| NMV PVC BALL VLV 1 UNION ¾" SG BS       | 77450-000360 |
| NMV PVC BALL VLV 1 UNION 1" SG BS       | 77450-000361 |
| NMV PVC BALL VLV 1 UNION 1¼" SG BS      | 77450-000362 |
| NMV PVC BALL VLV 1 UNION 1½" SG BS      | 77450-000108 |
| NMV PVC BALL VLV 1 UNION 2" SG BS       | 77450-000350 |
| NMV PVC BALL VLV 1 UNION 2½" SG BS      | 77450-000109 |
| NMV PVC BALL VLV 1 UNION 3" SG BS       | 77450-000110 |
| NMV PVC BALL VLV 1 UNION 4" SG BS       | 77450-000367 |
| NMV PVC BALL VLV 1 UNION ½" SG ASTM     | 77450-000380 |
| NMV PVC BALL VLV 1 UNION ¾" SG ASTM     | 77450-000381 |
| NMV PVC BALL VLV 1 UNION 1" SG ASTM     | 77450-000382 |
| NMV PVC BALL VLV 1 UNION 1¼" SG ASTM    | 77450-000383 |
| NMV PVC BALL VLV 1 UNION 1½" SG ASTM    | 77450-000384 |
| NMV PVC BALL VLV 1 UNION 2" SG ASTM     | 77450-000385 |
| NMV PVC BALL VLV 1 UNION 2½" SG ASTM    | 77450-000386 |
| NMV PVC BALL VLV 1 UNION 3" SG ASTM     | 77450-000387 |
| NMV PVC BALL VLV 1 UNION 4" SG ASTM     | 77450-000388 |

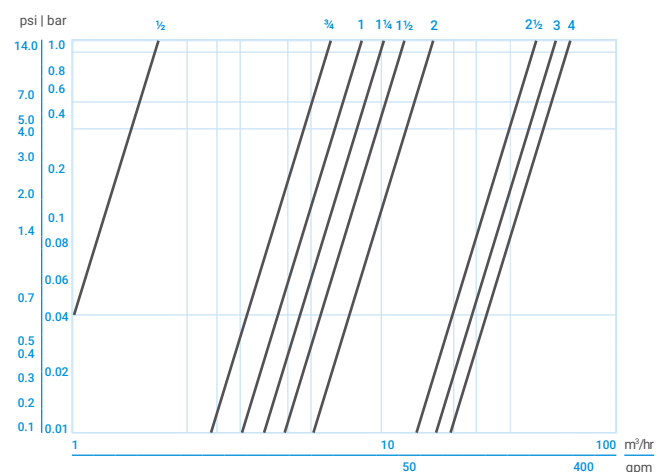
## → Catalog Numbers

### Polypropylene True Union Ball Valves

| Description                         | Cat. Number  |
|-------------------------------------|--------------|
| NMV PP BALL VLV 1 UNION ¾" FFT BSP  | 77449-000101 |
| NMV PP BALL VLV 1 UNION 1" FFT BSP  | 77449-000102 |
| NMV PP BALL VLV 1 UNION 1½" FFT BSP | 77449-000103 |
| NMV PP BALL VLV 1 UNION 1½" FFT BSP | 77449-000104 |
| NMV PP BALL VLV 1 UNION 2" FFT BSP  | 77449-000105 |
| NMV PP BALL VLV 1 UNION 2½" FFT BSP | 77449-000106 |
| NMV PP BALL VLV 1 UNION 3" FFT BSP  | 77449-000107 |
| NMV PP BALL VLV 1 UNION 4" FFT BSP  | 77449-000108 |
| NMV PP BALL VLV 1 UNION ¾" FFT NPT  | 77449-000131 |
| NMV PP BALL VLV 1 UNION 1" FFT NPT  | 77449-000132 |
| NMV PP BALL VLV 1 UNION 1½" FFT NPT | 77449-000133 |
| NMV PP BALL VLV 1 UNION 1½" FFT NPT | 77449-000134 |
| NMV PP BALL VLV 1 UNION 2" FFT NPT  | 77449-000135 |
| NMV PP BALL VLV 1 UNION 2½" FFT NPT | 77449-000136 |
| NMV PP BALL VLV 1 UNION 3" FFT NPT  | 77449-000137 |
| NMV PP BALL VLV 1 UNION 4" FFT NPT  | 77449-000138 |
| NMV PP BALL VLV 1 UNION ¾" FMT BSP  | 77449-000151 |
| NMV PP BALL VLV 1 UNION 1" FMT BSP  | 77449-000152 |
| NMV PP BALL VLV 1 UNION 1½" FMT BSP | 77449-000153 |
| NMV PP BALL VLV 1 UNION 1½" FMT BSP | 77449-000154 |
| NMV PP BALL VLV 1 UNION 2" FMT BSP  | 77449-000155 |
| NMV PP BALL VLV 1 UNION 2½" FMT BSP | 77449-000156 |
| NMV PP BALL VLV 1 UNION 3" FMT BSP  | 77449-000157 |
| NMV PP BALL VLV 1 UNION 4" FMT BSP  | 77449-000158 |
| NMV PP BALL VLV 1 UNION ¾" FMT NPT  | 77449-000171 |
| NMV PP BALL VLV 1 UNION 1" FMT NPT  | 77449-000172 |
| NMV PP BALL VLV 1 UNION 1½" FMT NPT | 77449-000173 |
| NMV PP BALL VLV 1 UNION 1½" FMT NPT | 77449-000174 |
| NMV PP BALL VLV 1 UNION 2" FMT NPT  | 77449-000175 |
| NMV PP BALL VLV 1 UNION 2½" FMT NPT | 77449-000176 |
| NMV PP BALL VLV 1 UNION 3" FMT NPT  | 77449-000177 |
| NMV PP BALL VLV 1 UNION 4" FMT NPT  | 77449-000178 |

| Description                            | Cat. Number  |
|----------------------------------------|--------------|
| NMV PP BALL VLV 1 UNION 25MM SG ISO/D  | 77449-000201 |
| NMV PP BALL VLV 1 UNION 32MM SG ISO/D  | 77449-000202 |
| NMV PP BALL VLV 1 UNION 40MM SG ISO/D  | 77449-000203 |
| NMV PP BALL VLV 1 UNION 50MM SG ISO/D  | 77449-000204 |
| NMV PP BALL VLV 1 UNION 63MM SG ISO/D  | 77449-000205 |
| NMV PP BALL VLV 1 UNION 75MM SG ISO/D  | 77449-000206 |
| NMV PP BALL VLV 1 UNION 90MM SG ISO/D  | 77449-000207 |
| NMV PP BALL VLV 1 UNION 110MM SG ISO/D | 77449-000208 |
| NMV PP BALL VLV 1 UNION ¾" SG ASTM     | 77449-000221 |
| NMV PP BALL VLV 1 UNION 1" SG ASTM     | 77449-000222 |
| NMV PP BALL VLV 1 UNION 1¼" SG ASTM    | 77449-000223 |
| NMV PP BALL VLV 1 UNION 1½" SG ASTM    | 77449-000224 |
| NMV PP BALL VLV 1 UNION 2" SG ASTM     | 77449-000225 |
| NMV PP BALL VLV 1 UNION 2½" SG ASTM    | 77449-000226 |
| NMV PP BALL VLV 1 UNION 3" SG ASTM     | 77449-000227 |
| NMV PP BALL VLV 1 UNION 4" SG ASTM     | 77449-000228 |
| NMV PP BALL VLV 1 UNION ¾" SG BS       | 77449-000241 |
| NMV PP BALL VLV 1 UNION 1" SG BS       | 77449-000242 |
| NMV PP BALL VLV 1 UNION 1¼" SG BS      | 77449-000243 |
| NMV PP BALL VLV 1 UNION 1½" SG BS      | 77449-000244 |
| NMV PP BALL VLV 1 UNION 2" SG BS       | 77449-000245 |
| NMV PP BALL VLV 1 UNION 2½" SG BS      | 77449-000246 |
| NMV PP BALL VLV 1 UNION 3" SG BS       | 77449-000247 |
| NMV PP BALL VLV 1 UNION 4" SG BS       | 77449-000248 |

## → Head Loss



# Dual Union Ball Valves

Physical shut-off, manual restrictions, control or service needs in irrigation head controls, field plots, nurseries, greenhouses, Nutrigation™ systems, water conveyance systems.



Superb  
quality



High  
durability



Maximum  
reliability

## / Benefits & Features

→ Saves  
operation  
costs

A quarter turn shut-off valve, threaded or glued socket, user-friendly design allowing smooth handle operation

Corrosion-resistant and UV-stabilized

A true union ball valve, specifically designed for water application and for safe pipeline operation

→ Saves labor  
costs and  
multiple  
investments in  
maintenance

In the closed position, the pipeline can be disconnected downstream from the valve without any leakage

The valve is removable from the pipeline, allowing quick maintenance

Highly reliable operation and durable over time

## / Specifications & Recommendations

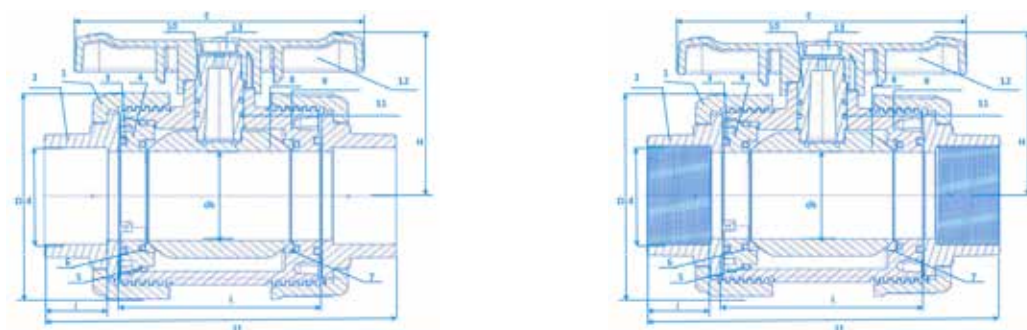
- Ideal for application in temperature range of -5°C and 50°C, guaranteeing optimal performance in terms of mechanical resistance, good rigidity, low coefficients of thermal expansion and optimal safety factors in service
- Operational up to 10bar
- Low head losses
- Wide range of connections: threaded (BSP or NPT standards) or SG, socket glued (ISO/DIN, ASTM, BS)

## → Packaging Data

| Model      | Quantity P/Box (unit) | Box Sizes (cm x cm x cm) | Female-Female Thd Conn. Box Weight (kg) | Socket Glued Conn. Box Weight (kg) | Boxes P/Pallet |
|------------|-----------------------|--------------------------|-----------------------------------------|------------------------------------|----------------|
| 1" - 32mm  | 75                    | 43.0 x 33.0 x 39.0       | 21.98                                   | 21.49                              | 12             |
| 1½" - 50mm | 16                    | 43.0 x 33.0 x 39.0       | 13.30                                   | 12.83                              |                |
| 2" - 63mm  | 8                     | 43.0 x 33.0 x 39.0       | 10.93                                   | 10.62                              |                |
| 2½" - 75mm | 8                     | 43.0 x 33.0 x 44.5       | 14.84                                   | 14.60                              |                |
| 3" - 90mm  | 4                     | 43.0 x 33.0 x 39.0       | 15.69                                   | 15.55                              |                |

## → Technical Dimensions

Dual Union Ball Valves 1", 1½", 2", 2½", 3"



Inlet Connector - Female Threaded / Outlet Connector - Female Threaded

| size \ nom | BSP (TPI) | NPT (TPI) | DK (mm) | D (mm) | I (mm) | L (mm) | LT (mm) | E (mm) | H (mm) |
|------------|-----------|-----------|---------|--------|--------|--------|---------|--------|--------|
| 1"         | 11.00     | 11.50     | 24.50   | 69.00  | 20.20  | 55.50  | 112.60  | 71.00  | 66.50  |
| 1½"        | 11.00     | 11.50     | 39.50   | 94.40  | 32.00  | 73.25  | 149.60  | 121.00 | 88.30  |
| 2"         | 11.00     | 11.50     | 49.50   | 116.00 | 35.40  | 84.20  | 177.40  | 150.00 | 97.00  |
| 2½"        | 11.00     | 8.00      | 59.00   | 131.60 | 45.50  | 100.00 | 212.10  | 162.00 | 107.50 |
| 3"         | 11.00     | 8.00      | 76.00   | 178.80 | 42.80  | 138.10 | 241.10  | 200.40 | 140.00 |

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

| size \ nom | BSP (TPI) | NPT (TPI) | DK (mm) | D (mm) | I (mm) | L (mm) | LT (mm) | E (mm) | H (mm) |
|------------|-----------|-----------|---------|--------|--------|--------|---------|--------|--------|
| 32mm       | 32.00     | 32.00     | 24.50   | 69.00  | 20.20  | 55.50  | 110.00  | 71.00  | 66.50  |
| 50mm       | 50.00     | 50.00     | 39.50   | 94.40  | 32.00  | 73.25  | 149.60  | 121.00 | 88.30  |
| 63mm       | 63.00     | 63.00     | 49.50   | 116.00 | 35.40  | 84.20  | 177.40  | 150.00 | 97.00  |
| 75mm       | 75.00     | 75.00     | 59.00   | 131.60 | 45.50  | 100.00 | 212.10  | 162.00 | 107.50 |
| 90mm       | 90.00     | 90.00     | 76.00   | 178.80 | 42.80  | 138.10 | 241.10  | 200.40 | 140.00 |

Inlet Connector - Socket Glued / Outlet Connector - Socket Glued

| size \ nom | BSP (TPI) | NPT (TPI) | DK (mm) | D (mm) | I (mm) | L (mm) | LT (mm) | E (mm) | H (mm) |
|------------|-----------|-----------|---------|--------|--------|--------|---------|--------|--------|
| 1"         | 33.40     | 34.00     | 24.50   | 69.00  | 20.20  | 55.50  | 110.00  | 71.00  | 66.50  |
| 1½"        | 48.26     | 48.00     | 39.50   | 94.40  | 32.00  | 73.25  | 149.60  | 121.00 | 88.30  |
| 2"         | 60.33     | 60.00     | 49.50   | 116.00 | 35.40  | 84.20  | 177.40  | 150.00 | 97.00  |
| 2½"        | 73.03     | 75.00     | 59.00   | 131.60 | 45.50  | 100.00 | 212.10  | 162.00 | 107.50 |
| 3"         | 88.90     | 89.00     | 76.00   | 178.80 | 42.80  | 138.10 | 241.10  | 200.40 | 140.00 |

## → Material Specifications

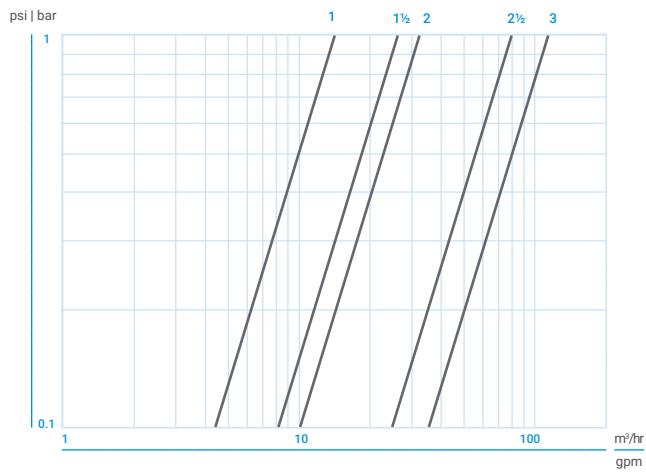
Dual Union Ball Valves 1", 1½", 2", 2½", 3"

| #  | Part Name         | Material | Qty. |
|----|-------------------|----------|------|
| 1  | Ring              | UPVC     | 2    |
| 2  | Socket            | UPVC     | 2    |
| 3  | Bush small o-ring | HNBR     | 2    |
| 4  | Bush              | UPVC     | 1    |
| 5  | Bush big o-ring   | HNBR     | 1    |
| 6  | Seal washer*      | HNBR     | 2    |
| 7  | Seal              | TPE      | 2    |
| 8  | Ball              | UPVC     | 1    |
| 9  | Body              | UPVC     | 1    |
| 10 | Shaft             | UPVC     | 1    |
| 11 | Shaft o-ring      | HNBR     | 2**  |
| 12 | Handle            | ABS      | 1    |
| 13 | Handle logo       | ABS      | 1    |

\* Only in 3" valve

\*\* One in 2" valve

→ Head Loss



→ Catalog Numbers

| Description                            | Catalog Number |
|----------------------------------------|----------------|
| NMV PVC BALL VLV 2 UNION 1" FFT BSP    | 77451-000150   |
| NMV PVC BALL VLV 2 UNION 1½" FFT BSP   | 77451-000152   |
| NMV PVC BALL VLV 2 UNION 2" FFT BSP    | 77451-000153   |
| NMV PVC BALL VLV 2 UNION 2½" FFT BSP   | 77451-000154   |
| NMV PVC BALL VLV 2 UNION 3" FFT BSP    | 77451-000155   |
| NMV PVC BALL VLV 2 UNION 32MM SG ISO/D | 77451-000200   |
| NMV PVC BALL VLV 2 UNION 50MM SG ISO/D | 77451-000202   |
| NMV PVC BALL VLV 2 UNION 63MM SG ISO/D | 77451-000203   |
| NMV PVC BALL VLV 2 UNION 75MM SG ISO/D | 77451-000204   |
| NMV PVC BALL VLV 2 UNION 90MM SG ISO/D | 77451-000205   |
| NMV PVC BALL VLV 2 UNION 1" FFT NPT    | 77451-000220   |
| NMV PVC BALL VLV 2 UNION 1½" FFT NPT   | 77451-000221   |
| NMV PVC BALL VLV 2 UNION 2" FFT NPT    | 77451-000222   |
| NMV PVC BALL VLV 2 UNION 2½" FFT NPT   | 77451-000223   |
| NMV PVC BALL VLV 2 UNION 3" FFT NPT    | 77451-000224   |
| MV PVC BALL VLV 2 UNION 1" SG ASTM     | 77451-000250   |
| NMV PVC BALL VLV 2 UNION 1½" SG ASTM   | 77451-000251   |
| NMV PVC BALL VLV 2 UNION 2" SG ASTM    | 77451-000252   |
| NMV PVC BALL VLV 2 UNION 2½" SG ASTM   | 77451-000253   |
| NMV PVC BALL VLV 2 UNION 3" SG ASTM    | 77451-000254   |

# Angle Seat Valves

## ACTUATED PISTON VALVES

The piston actuator provides a linear motion to lift the seal off its seat.



Superb  
quality



High  
durability



Maximum  
reliability

## / Benefits & Features

- **Excellent flow rate**      The flow is minimally impeded in the open position, resulting in an excellent flow rate and a low pressure loss
- **Sturdy**      Solid design
- **Multi-turn linear motion throttling valve**
- **High durability**      Engineering plastic raw material used for strength and durability
- **Easy maintenance**      Easy to open and clean when used in underground valve box
- **Smooth movement**      using throttling wheel, makes the user operate the valve easily
- **No leakage**      within operating pressure range, when valve completely shut off  
Direction of flow mentioned
- **Versatility**      Can be installed in horizontal and vertical lines
- **No vibration**      Not water hammering when operated
- **Less turbulence**      during throttling
- **High durability**      Chemical / Corrosion-resistant and UV-protected

# / Specifications & Recommendations

- Operating Pressure Range – up to 10bars (PN10)
- High-strength polypropylene
- 2" BSP or NPT male threaded
- Manual, hand operated
- Recommended Flow – up to 50m<sup>3</sup>/h
- High-quality nitrile seal

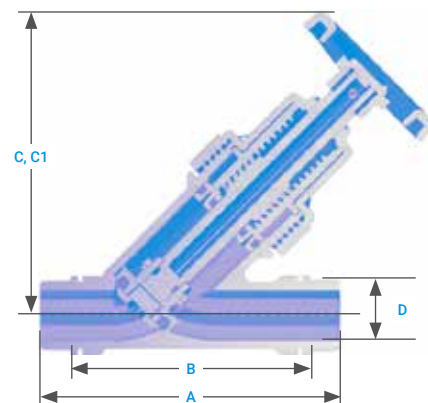
## → Technical Dimensions

Inlet - Threaded Male / Outlet Connector - Threaded Male

| Size | Nom | BSP (TPI) | NPT (TPI) | A (mm) | B (mm) | C* (mm) | C1** (mm) |
|------|-----|-----------|-----------|--------|--------|---------|-----------|
| 2"   |     | 11.00     | 11.50     | 252.0  | 200.0  | 254.0   | 292.0     |

\* When valve is fully closed

\*\* When valve is fully opened



## → Packaging Data

| Model | Quantity Per Box (unit) | Box Sizes (cm x cm x cm) | Box Weight (kg) | Boxes Per Pallet |
|-------|-------------------------|--------------------------|-----------------|------------------|
| 2"    | 2                       | 39.5 x 36.5 x 14.5       | 2.8             | 63               |

## → Material Specifications

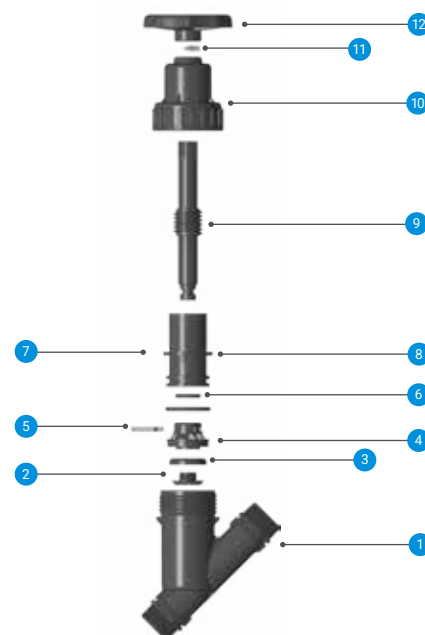
Standard Version

| #  | Part Name                     | Material | Qty. |
|----|-------------------------------|----------|------|
| 1  | Body                          | PP       | 1    |
| 2  | Seal cup lock                 | PP       | 1    |
| 3  | Seal                          | NBR      | 1    |
| 4  | Seal cup                      | PP       | 1    |
| 5  | Lock clip                     | PP       | 1    |
| 6  | Stem housing O-ring (outer)   | NBR      | 1    |
| 7  | Stem housing O-ring (inner)   | NBR      | 1    |
| 8  | Stem housing                  | PP       | 1    |
| 9  | Shaft                         | PP       | 1    |
| 10 | Cap                           | PP       | 1    |
| 11 | Lock pin                      | PP       | 1    |
| 12 | Throttle wheel (purple color) | PP       | 1    |

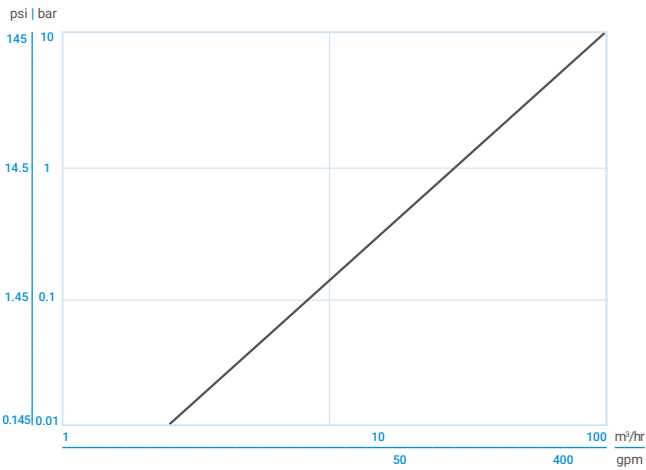
"Viton" Version

| #  | Part Name                     | Material | Qty. |
|----|-------------------------------|----------|------|
| 1  | Body                          | PP       | 1    |
| 2  | Seal cup lock                 | PP       | 1    |
| 3  | Seal                          | VITON    | 1    |
| 4  | Seal cup                      | PP       | 1    |
| 5  | Lock clip                     | PP       | 1    |
| 6  | Stem housing O-ring (outer)   | VITON    | 1    |
| 7  | Stem housing O-ring (inner)   | VITON    | 1    |
| 8  | Stem housing                  | PP       | 1    |
| 9  | Shaft                         | PP       | 1    |
| 10 | Cap                           | PP       | 1    |
| 11 | Lock pin                      | PP       | 1    |
| 12 | Throttle wheel (purple color) | PP       | 1    |

PP = Polypropylene



→ Head Loss



→ Catalog Numbers

| Product Illustration                                                                | Product Description                | Catalog Number |
|-------------------------------------------------------------------------------------|------------------------------------|----------------|
|    | NMV PP ANGLE SEAT "Y" 2" BSP       | 77457-000100   |
|                                                                                     | NMV PP ANGLE SEAT "Y" 2" NPT       | 77457-000101   |
|  | NMV PP ANGLE SEAT "Y" 2" BSP VITON | 77457-000102   |
|                                                                                     | NMV PP ANGLE SEAT "Y" 2" NPT VITON | 77457-000103   |

\* Additional diameters are available upon request

# Butterfly Valves

Physical shut-off, manual restrictions, control or service needs in irrigation head controls, field plots, nurseries, greenhouses, water conveyance systems.



High corrosion  
& UV resistance



High  
durability



Easy  
installation

## / Benefits & Features

→ Saves  
operation  
costs

A quarter turn shut-off valve, user-friendly design allowing smooth handle operation

Corrosion-resistant and UV-stabilized

Lightweight and very easy to install between two flanges, at any position, saves labor costs and multiple investments in maintenance

Highly reliable operation and durable over time

## / Specifications & Recommendations

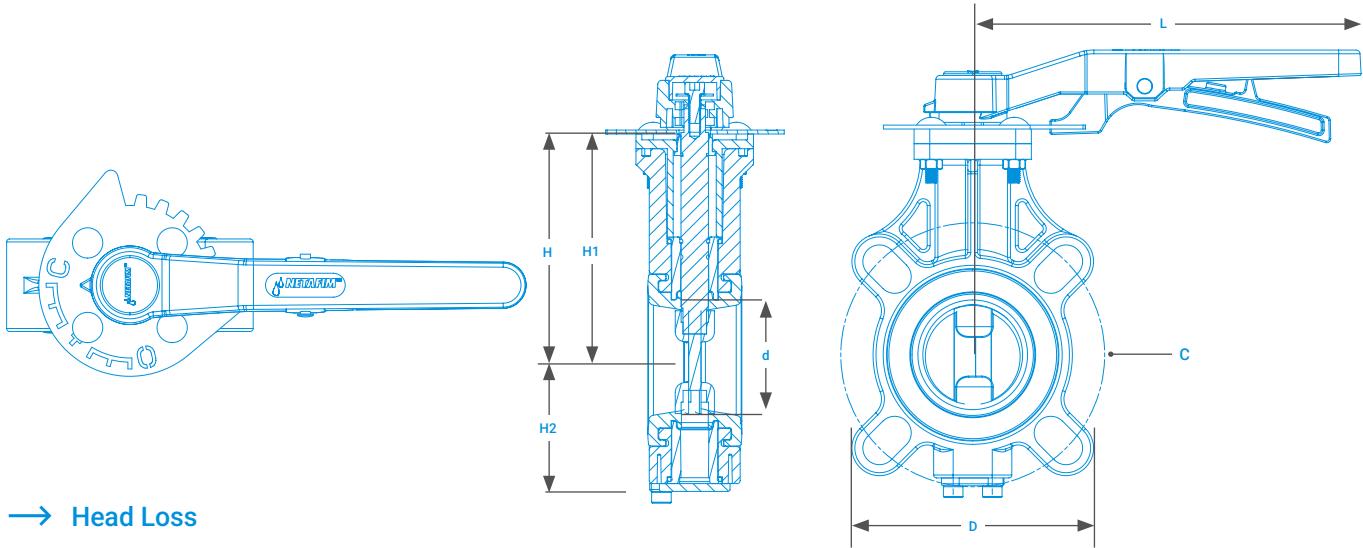
- For shutting off or manually regulating flow. Specifically designed for water and irrigation systems applications
- Ergonomic multifunctional handle enabling quick operation, with 15° adjustment graduations
- Drilling pattern with oval slots allowing coupling to flanges and complying with numerous international standards
- Can also be installed as an end line valve, bottom discharge valve or tank dump valve
- Operational up to 10bar
- Low torque required to activate the valve under pressure, due to low-friction stem bushing
- PVC resins feature high value material strength and extremely long lifetime
- Low head losses
- One-piece body made of PVC-U
- Disc is designed to ensure low torque and low head loss
- Suitable for piping in a limited space: 46mm (models 2", 2½", 3") and 56mm (model 4")

→ Packaging Data

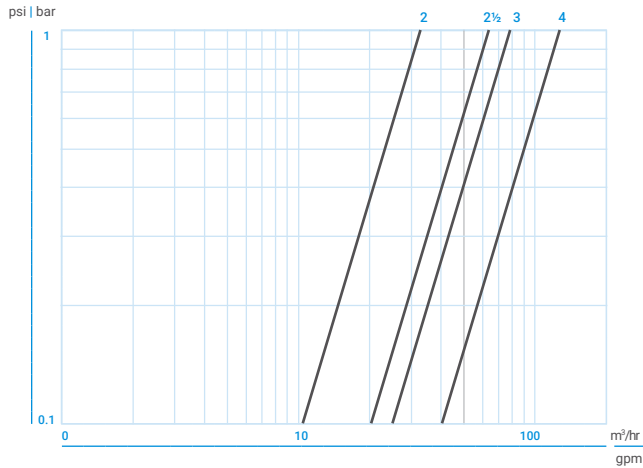
| Model | QuantityP/Box<br>(unit) | Box Sizes<br>(cm x cm x cm) | Box Weight<br>(kg) | Boxes<br>P/Pallet |
|-------|-------------------------|-----------------------------|--------------------|-------------------|
| 2"    | 2                       | 39.5 x 28.5 x 13.0          | 2.98               | 48                |
| 2½"   |                         |                             | 3.40               |                   |
| 3"    |                         |                             | 3.73               |                   |
| 4"    |                         | 40.0 x 37.5 x 13.5          | 5.79               | 30                |

→ Technical Dimensions

| Mode<br>Part | 2"    | 2½"   | 3"    | 4"    |
|--------------|-------|-------|-------|-------|
| d            | 50    | 65    | 80    | 100   |
| D            | 117   | 112   | 128   | 162   |
| H1           | 130   | 134   | 144   | 152   |
| H2           | 71    | 88    | 91    | 106   |
| H            | 165   | 174   | 182   | 197   |
| L            | 198.5 | 198.5 | 198.5 | 279.0 |
| C (POD)      | 120.8 | 137.5 | 155.5 | 183.0 |



→ Head Loss

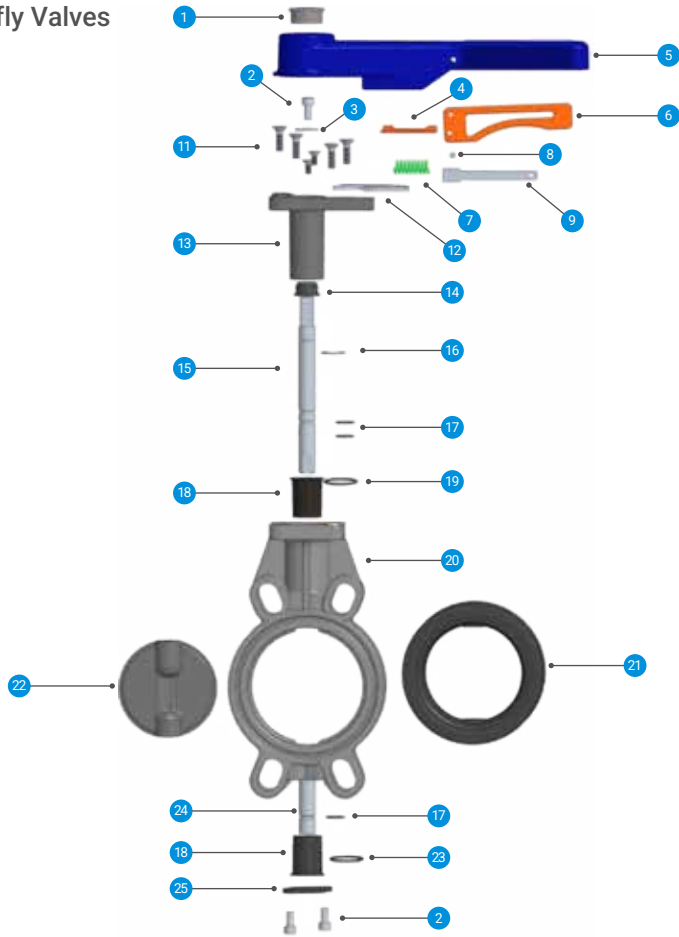


→ Catalog Numbers

| Product Description                 | Catalog Number |
|-------------------------------------|----------------|
| NMV PVC B.FLY VLV 2" 4 S BTW FLNG   | 77452-000100   |
| NMV PVC B.FLY VLV 2½" 4 S BTW FLNG  | 77452-000101   |
| NMV PVC B.FLY VLV 3" 4 S BTW FLNG   | 77452-000102   |
| NMV PVC B.FLY VLV 4" 4/8 S BTW FLNG | 77452-000103   |

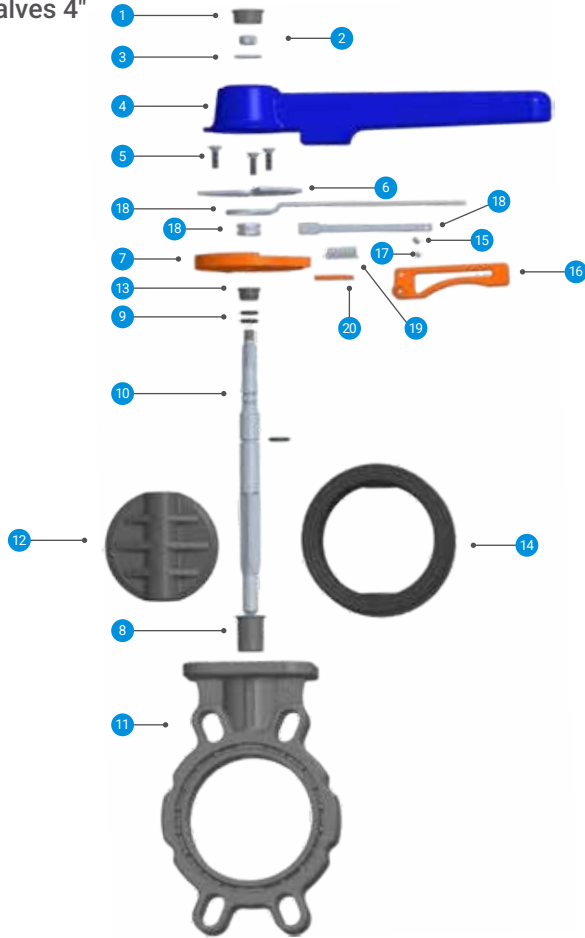
→ Material Specification

PVC Butterfly Valves  
2", 2½", 3"



| #  | Part Name     | Material  |
|----|---------------|-----------|
| 1  | Logo cap      | ABS       |
| 2  | Allen screw   | SS304     |
| 3  | Handle washer | SS304     |
| 4  | Handle dowel  | SS304/316 |
| 5  | Handle        | PPGF      |
| 6  | Lever         | ABS       |
| 7  | Spring        | SS304/316 |
| 8  | Lever pin     | SS304/316 |
| 9  | Lever patti   | SS304/316 |
| 10 | Spring cover  | PPGF      |
| 11 | Csk screw     | SS304/316 |
| 12 | Cutch plate   | SS304/316 |
| 13 | Sleeve        | PVC       |
| 14 | Locking bush  | MOS2      |
| 15 | Big shaft     | SS304/316 |
| 16 | E-ring        | SS304/316 |
| 17 | Shaft O-ring  | NBR       |
| 18 | Big bush      | MOS2      |
| 19 | Bush O-ring   | NBR       |
| 20 | Body          | PVC       |
| 21 | Seal          | EPDM      |
| 22 | Disc          | SS304/316 |
| 23 | Bush O-ring   | NBR       |
| 24 | Small shaft   | SS304     |
| 25 | Base plate    | POM       |

PVC Butterfly Valves 4"



| #  | Part Name         | Material  |
|----|-------------------|-----------|
| 1  | Logo cap          | ABS       |
| 2  | Hex bolt          | SS304     |
| 3  | Handle washer     | SS304     |
| 4  | Handle            | ABS       |
| 5  | Csk bolt          | SS304/316 |
| 6  | Clutch plate      | SS304/316 |
| 7  | Handle guider     | ABS       |
| 8  | Big bush          | MOS2      |
| 9  | Shaft O-ring      | NBR       |
| 10 | Shaft             | SS304/316 |
| 11 | Body              | PVC       |
| 12 | Disc              | PVC       |
| 13 | Locking bush      | MOS2      |
| 14 | Rubber seal       | EPDM      |
| 15 | Handle dowel      | SS304/316 |
| 16 | Lever             | ABS       |
| 17 | Lever dowel       | SS304/316 |
| 18 | Lever patti       | SS304/316 |
| 19 | Spring            | SS304/316 |
| 20 | Spring lock plate | ABS       |

# Throttle Valves

Manual restrictions in irrigation head controls, field plots, Nutrigation™ systems, filtration heads systems.



Accurate



High corrosion  
& UV resistance



High  
durability

## / Benefits & Features

- Saves operation costs
  - User-friendly design allows smooth handle operation
- Saves labor costs and multiple investments in maintenance
  - Highly reliable operation and durable over time
  - Chemical/corrosion resistant, UV stabilized

## / Specifications & Recommendations

- Multi-turn, vertical motion
- Straight throughflow with minimal head loss
- Visual float position indicator to show % throttle of piping system
- Slow operation pavement water hammer
- Maintaining seat leakage permissible limit as per Standard ANSI/FCI-70-2-2006 in class III (0.10%)
- Operational up to 6bar
- Threaded connections (BSP or NPT standards)

## → Packaging Data

| Model | Quantity P/Box (unit) | Box Sizes (cm x cm x cm) | Box Weight (kg) | Boxes P/Pallet |
|-------|-----------------------|--------------------------|-----------------|----------------|
| 2"    | 5                     | 69.0 x 19.5 x 30.0       | 6.85            | 15             |
| 2½"   |                       | 78.5 x 23.0 x 41.5       | 14.67           | 8              |
| 3"    |                       |                          | 13.82           |                |

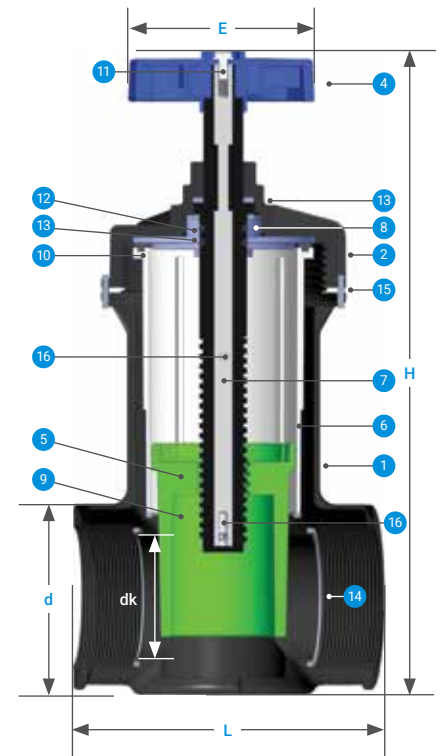
## → Technical Dimensions

Inlet Connector - Female Threaded / Outlet Connector - Female Threaded

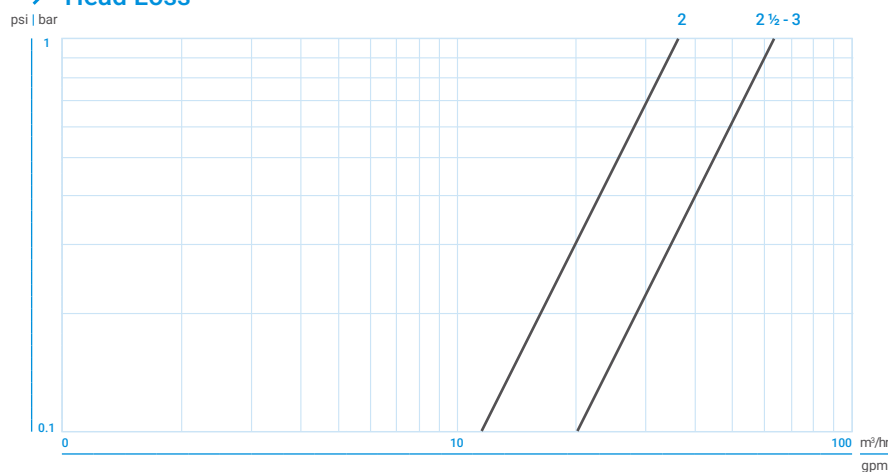
| Size \ Nom | BSP (TPI) | NPT (TPI) | d (mm) | dk (mm) | E (mm) | L (mm) | H (mm) |
|------------|-----------|-----------|--------|---------|--------|--------|--------|
| 2"         | 11.00     | 11.50     | 65.00  | 48.00   | 117.00 | 130.00 | 275.00 |
| 2½"        | 11.00     | 8.00      | 74.00  | 63.00   | 117.00 | 182.00 | 390.00 |
| 3"         | 11.00     | 8.00      | 93.00  | 74.00   | 117.00 | 182.00 | 390.00 |

## → Material Specifications

| #  | Part Name           | Material         | Qty. |
|----|---------------------|------------------|------|
| 1  | Body                | Reinforced PP    | 1    |
| 2  | Flange              | Reinforced PA    | 1    |
| 3  | Disc                | Reinforced PA    | 1    |
| 4  | Handle              | Reinforced PA    | 1    |
| 5  | Cylinder            | Reinforced PP    | 1    |
| 6  | Pc housing          | PP               | 1    |
| 7  | Shaft               | Reinforced PA+MS | 1    |
| 8  | Shaft O-ring        | HNBR             | 2    |
| 9  | Bottom gasket       | HNBR             | 1    |
| 10 | Sleeve gasket       | HNBR             | 1    |
| 11 | Handle screw        | SS-304           | 1    |
| 12 | Teflon seal big     | Teflon           | 1    |
| 13 | Teflon seal small   | Teflon           | 1    |
| 14 | Housing gasket      | HNBR             | 2    |
| 15 | Locking pin         | SS-304           | 2    |
| 16 | Dowel pin (4*30) ss | SS-304           | 2    |



## → Head Loss



\* When valve is fully closed

## → Catalog Numbers

| Product Description             | Catalog Number |
|---------------------------------|----------------|
| NMV PP THROTTLE VLV 2" FFT BSP  | 77453-000200   |
| NMV PP THROTTLE VLV 2½" FFT BSP | 77453-000201   |
| NMV PP THROTTLE VLV 3" FFT BSP  | 77453-000202   |

\* Can be also ordered in NPT standard if required

# Swing Check Valves

In-line non return valve to stop fluids flowing back through the system.



Maximum  
reliability



High corrosion  
& UV resistance



High  
durability

## / Benefits & Features

- Saves operation costs
  - The check valve is designed for free flow of water without interference and with minimal head loss
  - Made from PVC-U corrosive-resistant composite materials
- Saves labor costs and multiple investments in maintenance
  - The valve is made from composite materials to withstand highly abrasive conditions and to ensure long-term service also in corrosive liquid environments
  - The valve connects between flanges and is supplied with seals for flange to flange installation
  - Light weight

## / Specifications & Recommendations

- Straight throughflow with minimal head loss
- Slow operation pavement water hammer
- Operational up to 6bar
- Minimum return pressure: 0.2bar (to keep the valve closed)

## → Packaging Data

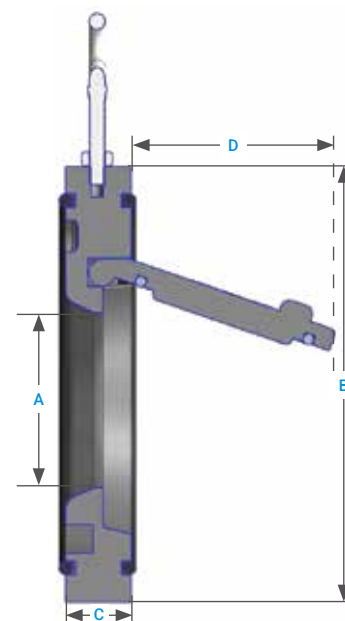
| Model | Quantity P/Box (unit) | Box Sizes (cm x cm x cm) | Box Weight (kg) | Boxes P/Pallet |
|-------|-----------------------|--------------------------|-----------------|----------------|
| 3"    | 40                    | 30.0 x 30.0 x 31.5       | 17.2            | 27             |
| 4"    | 20                    | 34.0 x 34.0 x 18.0       | 11.5            | 458            |

## → Material Specification

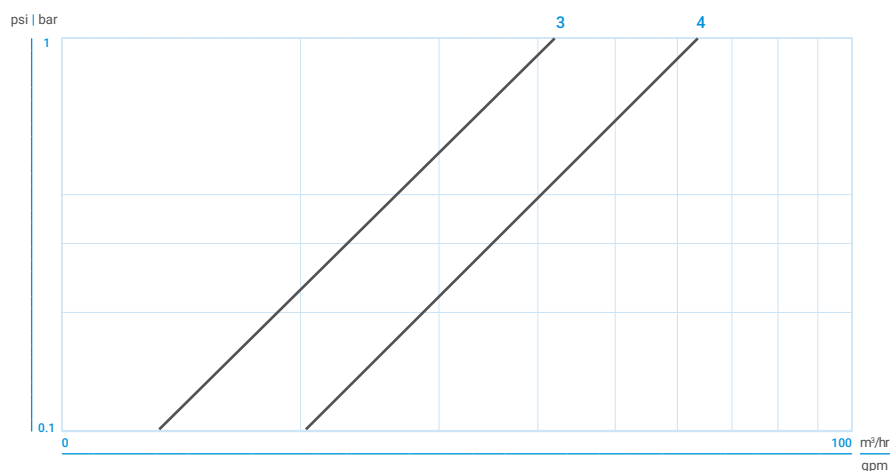
| # | Part Name   | Material  | Qty. |
|---|-------------|-----------|------|
| 1 | Body        | PVC-U     | 1    |
| 2 | Flap        | PVC-U     | 1    |
| 3 | Cap         | PVC-U     | 2    |
| 4 | Body O-ring | EPDM      | 2    |
| 5 | Flap O-ring | EPDM      | 1    |
| 6 | H screw     | Plated MS | 1    |

## → Technical Dimensions

| Nom<br>Size | A (mm) | B (mm) | C (mm) | D (mm) |
|-------------|--------|--------|--------|--------|
| 3"          | 54.3   | 129.0  | 21.0   | 68.0   |
| 4"          | 64.0   | 159.0  | 25.0   | 78.0   |



## → Head Loss



## → Catalog Numbers

| Product Illustration | Product Description               | Catalog Number |
|----------------------|-----------------------------------|----------------|
|                      | NMV PVC S.CHECK VLV 3" BTW 2 FLNG | 77454-000200   |
|                      | NMV PVC S.CHECK VLV 4" BTW 2 FLNG | 77454-000201   |

# Ball Check Valves

In-line non return valve to stop fluids flowing back through the system. As a foot valve at a pump inlet.



Maximum  
reliability



High corrosion  
& UV resistance



High  
durability

## / Benefits & Features

- Saves operation costs
  - The check valve is designed for free flow of water with minimal head loss
  - Made from PP corrosive-resistant composite materials
- Saves labor costs and multiple investments in maintenance
  - The valve is made from composite materials to withstand highly abrasive conditions and to ensure long-term service also in corrosive liquid environments
  - Light weight

## / Specifications & Recommendations

- Spring loaded ball check valve
- Flow with minimal head loss
- Slow operation pavement water hammer
- Operational up to 6bar
- Minimum return pressure: 0.1bar (to keep the valve closed)
- Horizontal or vertical installation
- Universal flanges, fits ISO, ANSI, BS10 standards

→ Packaging Data

| Model | Quantity P/Box (unit) | Box Sizes (cm x cm x cm) | Box Weight (kg) | Boxes P/Pallet |
|-------|-----------------------|--------------------------|-----------------|----------------|
| 2"    | 8                     | 62.0 x 31.5 x 18.0       | 8.9             | 15             |
| 2½"   | 4                     | 43.6 x 43.6 x 26.0       | 8.2             | 16             |
| 3"    |                       |                          | 9.1             |                |

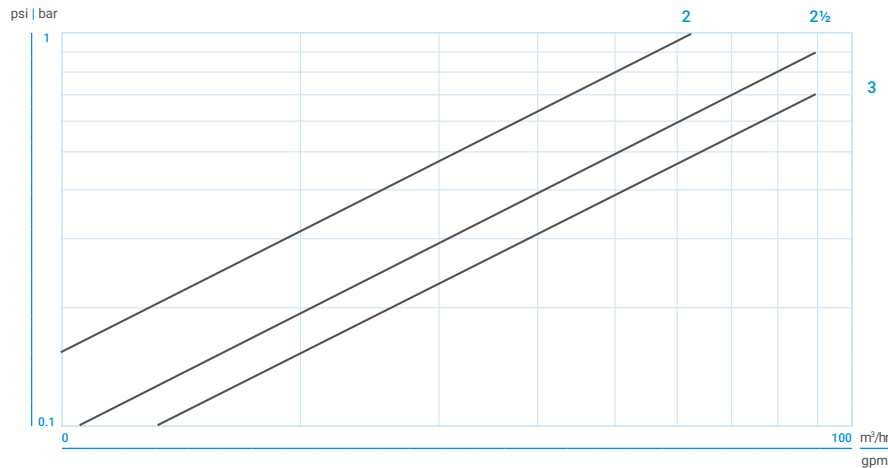
→ Technical Dimensions

| Size \ Nom | Nominal Diameter (mm) | A (mm) | B (mm) | C (mm) | D (mm) |
|------------|-----------------------|--------|--------|--------|--------|
| 2"         | 50                    | 150    | 164    | 50     | 18.5   |
| 2½"        | 65                    | 188    | 235    | 65     | 20.5   |
| 3"         | 80                    | 205    | 237    | 82     | 24.0   |

→ Material Specification

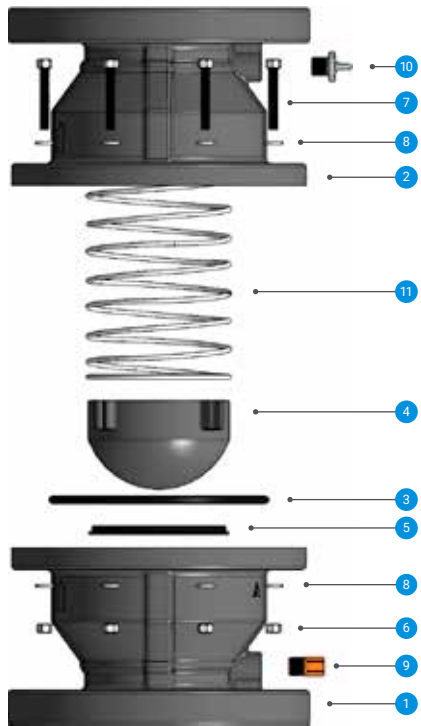
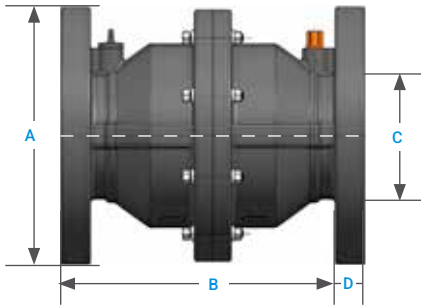
| #  | Part Name      | Material | Qty. |
|----|----------------|----------|------|
| 1  | Body (inlet)   | PPGF     | 1    |
| 2  | Body (outlet)  | PPGF     | 1    |
| 3  | Body O-ring    | NBR      | 1    |
| 4  | Ball           | ABS      | 1    |
| 5  | Ball seal      | NBR      | 1    |
| 6  | Nut            | SS       | 8    |
| 7  | Bolt           | SS       | 8    |
| 8  | Washer         | SS       | 16   |
| 9  | Vacuum breaker | BRASS    | 1    |
| 10 | Plug           | PPGF     | 1    |
| 11 | Spring         | SS       | 1    |

→ Head Loss



→ Catalog Numbers

| Product Illustration                                                                | Product Description         | Catalog Number |
|-------------------------------------------------------------------------------------|-----------------------------|----------------|
|  | NMV PP BALL CHECK VALVE 2"  | 77454-000200   |
|                                                                                     | NMV PP BALL CHECK VALVE 2½" | 77454-000221   |
|                                                                                     | NMV PP BALL CHECK VALVE 3"  | 77454-000222   |



# NR10 Check Valves

Prevents the return flow of water to its source and provides quiet closure and total sealing of the sealing face.



NR-010 1 1/2", 2"

NR-010 3", 4"

NR-010 6" - 10"



Tight  
closing



High  
durability



Compact  
size

## / Benefits & Features

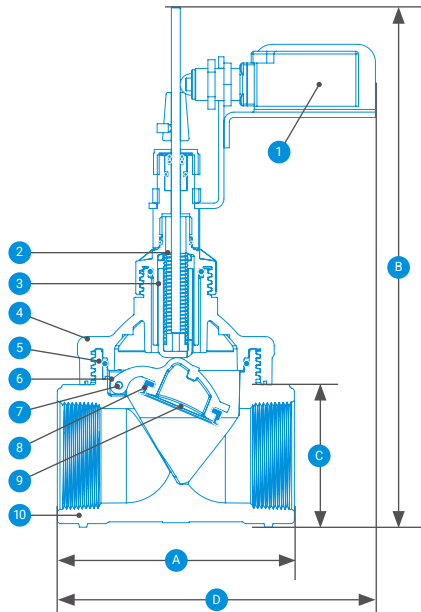
- Working pressures Up to 10bar, 16bar
- Minimum working pressure 0.2bar
- Max. working temperature 60°C
- Composite materials for body of the valve
- NR-010 1 1/2", 2"
  - Female threaded BSPT of NPT for easy and secure connection to the pipeline
  - Removable cover allows for easy cleaning, maintenance and seal replacement without removing the valve from the pipeline
- NR-010 3" – 10"
  - The valve connects between flanges
  - The valve is supplied together with seals for flanges
  - The spring assembly mechanism is outside of the flow cross-section and can be replaced without removing the valve from the line

# / Applications

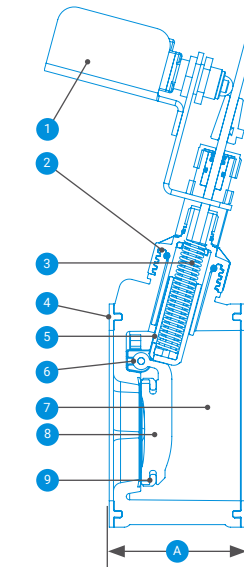
- After pumps/boosters
- Filtration systems
- Fertilizer system
- Greenhouses
- Swimming pools (additional modifications are required for this application)

## → Technical Dimensions & Weights

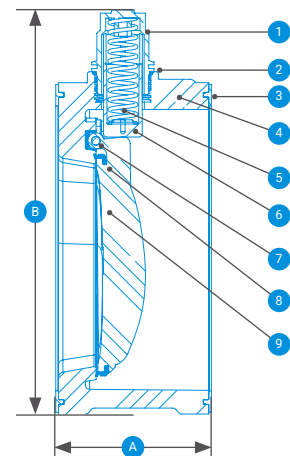
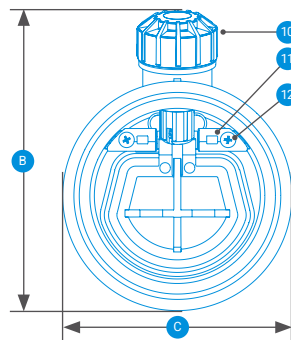
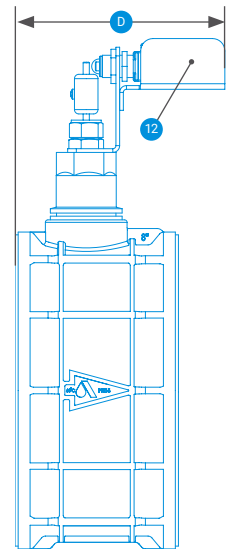
NR-010 1½", 2"



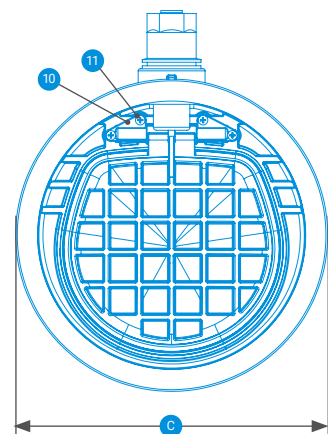
NR-010 3", 4"



NR-010 6" - 10"



| Nominal Size | A   | B   | C   | D   | Weight (Gr) |
|--------------|-----|-----|-----|-----|-------------|
| NR10 1½"     | 133 | 149 | 65  | 180 | 605         |
| NR10 LS 1½"  | 133 | 285 | 65  | 180 | 1050        |
| NR10 2"      | 133 | 157 | 80  | 180 | 620         |
| NR10 LS 2"   | 133 | 291 | 80  | 180 | 1070        |
| NR10 3"      | 80  | 172 | 131 | -   | 571         |
| NR10 LS 3"   | 80  | 305 | 131 | -   | 1070        |
| NR10 4"      | 91  | 191 | 151 | -   | 732         |
| NR10 LS 4"   | 91  | 324 | 151 | -   | 1250        |
| NR10 6"      | 112 | 291 | 220 | 112 | 2600        |
| NR10 LS 6"   | 112 | 380 | 220 | 162 | 3100        |
| NR10 8"      | 132 | 323 | 259 | 132 | 3700        |
| NR10 LS 8"   | 132 | 413 | 259 | 170 | 3800        |
| NR10 10"     | 145 | 376 | 310 | 145 | 5200        |
| NR10 LS 10"  | 145 | 465 | 310 | 145 | 5700        |



For determining the height of a check valve with a limit switch, add an additional space of 2 - 3 cm.

→ **Parts List**

NR-010 1½", 2"

| #  | Part Name          | Material            |
|----|--------------------|---------------------|
| 1  | Limit switch assy. |                     |
| 2  | Spring             | Stainless steel 302 |
| 3  | Spring housing     | Acetal              |
| 4  | Cover              | Reinforced nylon    |
| 5  | O-ring             | Buna-n              |
| 6  | Shaft housing      | Acetal              |
| 7  | Shaft              | Stainless steel 316 |
| 8  | Seal               | EPDM                |
| 9  | Disc               | Reinforced nylon    |
| 10 | Body               | Reinforced nylon    |

NR-010 3", 4"

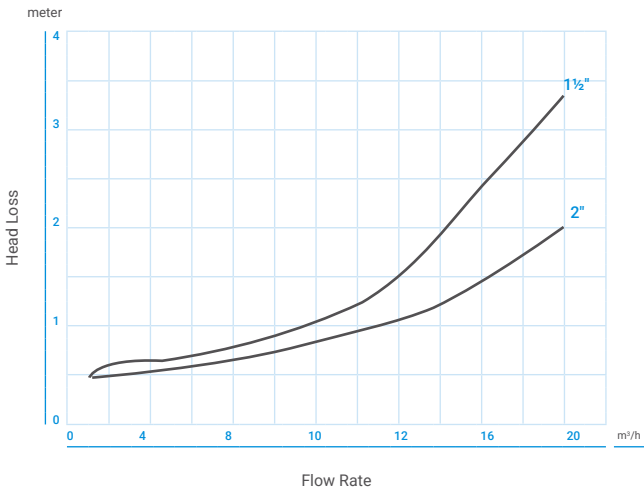
| #  | Part Name          | Material            |
|----|--------------------|---------------------|
| 1  | Limit switch assy. |                     |
| 2  | O-ring             | Buna-n              |
| 3  | Spring             | Stainless steel 302 |
| 4  | Flange seals       | EPDM                |
| 5  | Spring housing     | Acetal              |
| 6  | Shaft              | Stainless steel 316 |
| 7  | Body               | Reinforced nylon    |
| 8  | Disc               | Reinforced nylon    |
| 9  | Seal               | EPDM                |
| 10 | Spring cover       | Reinforced nylon    |
| 11 | Shaft housing      | Acetal              |
| 12 | Bolt (x2)          | Stainless steel 316 |

NR-010 6" - 10"

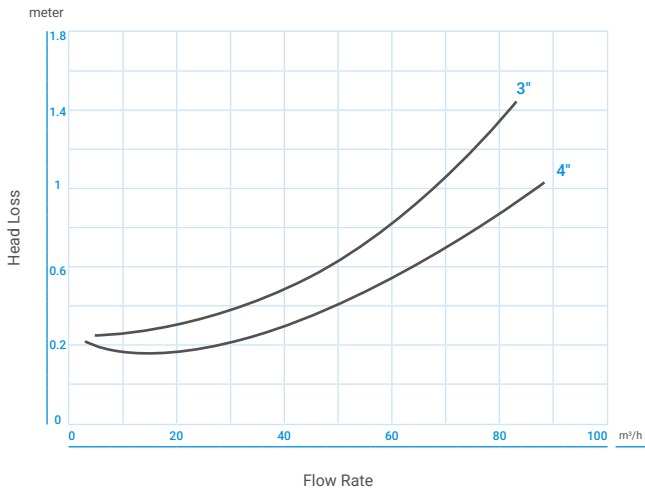
| #  | Part Name          | Material            |
|----|--------------------|---------------------|
| 1  | Spring cover       | Reinforced nylon    |
| 2  | O-ring             | Buna-n              |
| 3  | Flange seals       | EPDM                |
| 4  | Body               | Reinforced nylon    |
| 5  | Spring             | Stainless steel 302 |
| 6  | Spring housing     | Acetal              |
| 7  | Shaft              | Stainless steel 316 |
| 8  | Flap seal          | EPDM                |
| 9  | Flap               | Reinforced nylon    |
| 10 | Shaft housing      | Acetal              |
| 11 | Bolt (x2)          | Stainless steel 316 |
| 12 | Limit switch assy. |                     |

→ **Head Loss**

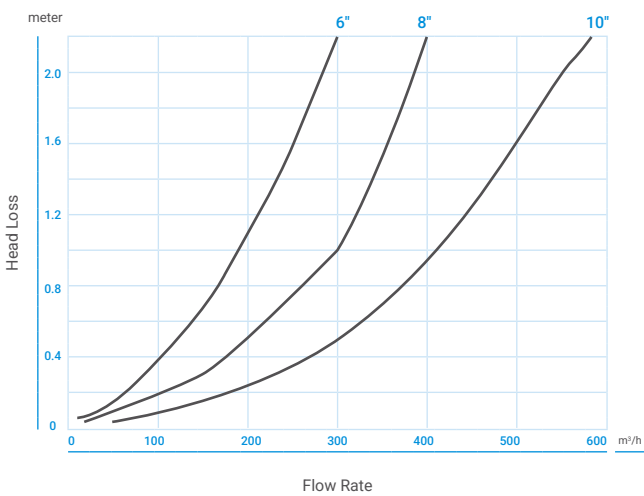
NR-010 1½", 2"



NR-010 3", 4"



NR-010 6" - 10"



→ Catalog Numbers

| Diameter | Connection    |     | Description                        | Catalog Numbers |
|----------|---------------|-----|------------------------------------|-----------------|
| 1 1/2"   | 40mm          | BSP | CHECK VALVE NR-010 1.5" PN10       | 70420-000600    |
|          |               | NPT | CHECK VALVE NR-010 1.5" PN10       | 70420-006000    |
|          | 40mm (ls)     | BSP | CHECK VA NR-010 1.5" W/LS PN10     | 70420-006010    |
|          |               | NPT | CHECK VAL NR-010 1.5" W/LS PN10    | 70420-005500    |
| 2"       | 50mm          | BSP | CHECK VALVE NR-010 2" PN10 BSP     | 70420-000700    |
|          |               | NPT | CHECK VALVE NR-010 2" PN10 NPT     | 70420-006020    |
|          | 50mm (ls)     | BSP | CH. VAL NR-010 2" W/LS PN10 BSP    | 70420-005550    |
|          |               | NPT | CH. VAL NR-010 2" W/LS PN10 NPT    | 70420-006030    |
| 3"       | PN-10 (80mm)  |     | CHECK VALVE NR-010 3" PN10         | 70420-000800    |
|          |               |     | CHECK VALVE NR-010 3" W/LS PN10    | 70420-005600    |
|          | PN-16 (80mm)  |     | CHECK VALVE NR-010 3" PN16         | 70420-006040    |
|          |               |     | CHECK VALVE NR-010 3" W/LS PN16    | 70420-006041    |
| 4"       | PN-10 (100mm) |     | CHECK VALVE NR-010 4" PN10         | 70420-001180    |
|          |               |     | CHECK VALVE NR-010 4" W/LS PN10    | 70420-005650    |
|          | PN-16 (100mm) |     | CHECK VALVE NR-010 4" PN16         | 70420-006050    |
|          |               |     | CHECK VALVE NR-010 4" W/LS PN16    | 70420-006051    |
| 6"       | PN-10 (150mm) |     | CHECK VALVE NR-010 6" PN10         | 70420-005660    |
|          |               |     | CHECK VALVE NR-010 6" W/LS PN10    | 70420-006070    |
|          | PN-16 (150mm) |     | CHECK VALVE NR-010 6" PN16         | 70420-006081    |
|          |               |     | CHECK VALVE NR-010 6" W/LS PN16    | 70420-006083    |
|          |               |     | CHECK VALVE NR-010 6" W/STEM PN16  | 70420-006082    |
|          |               |     |                                    |                 |
| 8"       | PN-10 (200mm) |     | CHECK VALVE NR-010 8" PN10         | 70420-005670    |
|          |               |     | CHECK VALVE NR-010 8" W/LS PN10    | 70420-006100    |
|          |               |     | CHECK VALVE NR-010 8" W/STEM PN10  | 70420-006090    |
|          | PN-16 (200mm) |     | CHECK VALVE NR-010 8" PN16         | 70420-006101    |
|          |               |     | CHECK VALVE NR-010 8" W/LS PN16    | 70420-006103    |
|          |               |     | CHECK VALVE NR-010 8" W/STEM PN16  | 70420-006102    |
| 10"      | PN-10 (250mm) |     | CHECK VALVE NR-010 10" PN10        | 70420-006110    |
|          |               |     | CHECK VALVE NR-010 10" W/LS PN10   | 70420-006130    |
|          |               |     | CHECK VALVE NR-010 10" W/STEM PN10 | 70420-006120    |

\* W/LS = With Limit Switch

# NR-10 Check Foot Valves

A one-way or anti-siphon valve with a filtration net. The valve is installed on the pick-up end of the water pipe near the bottom of the well or at the bottom of a pump station suction pipe.



Tight  
closing



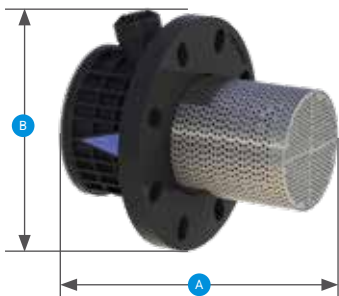
High  
durability



Light  
& compact

## → Technical Dimensions

3" - 4"



6" - 10"



| Nominal Size        | A   | B   | Weight (gr) |
|---------------------|-----|-----|-------------|
| NR10 foot valve 3"  | 204 | 226 | 1300        |
| NR10 foot valve 4"  | 231 | 286 | 2000        |
| NR10 foot valve 6"  | 414 | 324 | 5500        |
| NR10 foot valve 8"  | 575 | 365 | 8000        |
| NR10 foot valve 10" | 688 | 427 | 11000       |

| Nominal Size                                               | 3"    | 4"    | 6"     | 8"     | 8"     | 10"    | 10"    |
|------------------------------------------------------------|-------|-------|--------|--------|--------|--------|--------|
| Screen Hole Diameter (mm)                                  | 3     | 3     | 3      | 3      | 6      | 3      | 6      |
| Screen Area (mm <sup>2</sup> )                             | 41684 | 60936 | 118771 | 153311 | 153311 | 204905 | 204905 |
| Screen Open Area (mm <sup>2</sup> )                        | 33%   | 33%   | 33%    | 33%    | 62%    | 35%    | 62%    |
|                                                            | 13756 | 20109 | 39194  | 50592  | 95053  | 71717  | 127041 |
| Inlet Passage Area (mm <sup>2</sup> )                      | 3249  | 5315  | 13449  | 19410  | 19410  | 31934  | 31934  |
| Ratio Screen Passage Area / Inlet Passage Area             | 4.2   | 3.8   | 2.9    | 2.6    | 4.9    | 2.2    | 4.0    |
| Inlet Passage Area for Nominal Diameter (mm <sup>2</sup> ) | 4416  | 7850  | 17663  | 31400  | 31400  | 49063  | 49063  |
| Ratio Nominal Inlet Screen Passage / Area                  | 3.1   | 2.6   | 2.2    | 1.6    | 3.0    | 1.5    | 2.6    |

# Metal Ball Valves

A line of products designed for flow control systems: commercial, irrigation systems and agriculture. The white line is a line of ball valves and check valves made from lead-free brass.



Male to Female Connections



Female to Female Connections



Robust



Maximum reliability



High durability

## / Benefits & Features

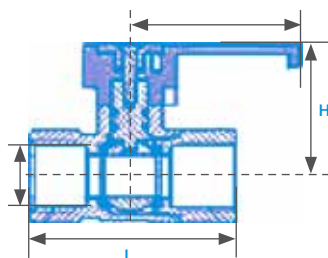
- |                  |                                                         |
|------------------|---------------------------------------------------------|
| → Connection     | Male to female / female to female large bore ball valve |
| → Standard brass | CW617N                                                  |
| → Smart design   | Long handle                                             |
| → Materials      | Nickel or nickel-chrome plating                         |

## / Specifications & Recommendations

- Working Temperature Range –  $-5^{\circ}\text{C}$  -  $+100^{\circ}\text{C}$
- Working Pressure – up to 28ATM (400psi)
- Possible Threads – BSP

## → Technical Dimensions

| Diameter | Height (H) | Length (L) | Short Handle (mm) | Long Handle (mm) |
|----------|------------|------------|-------------------|------------------|
| 1/2"     | 48.0       | 57.5       | 51.0              | 96.0             |
| 3/4"     | 52.0       | 70.0       | 51.0              | 96.0             |
| 1"       | 55.0       | 79.5       | 51.0              | 96.0             |
| 1 1/4"   | 83.0       | 94.0       | -                 | 96.0             |
| 1 1/2"   | 83.0       | 99.0       | -                 | 147.0            |
| 1 3/4"   | 55.0       | 79.5       | 51.0              | 96.0             |
| 2"       | 86.0       | 111.0      | -                 | 147.0            |



## → Material Specifications

| # | Part                     | Material                        |
|---|--------------------------|---------------------------------|
| 1 | Main body                | PAGF                            |
| 2 | Green line               | Standard brass CW617N           |
| 3 | White line & orange line | Standard lead-free brass CW510L |
| 4 | Ball gaskets             | P.T.F.E                         |

## → Catalog Numbers

| Diameter | Thread           | Connection Type | Handle | Catalog Number |
|----------|------------------|-----------------|--------|----------------|
| 1/2"     | Male to female   | BSP             | Short  | 76000-000600   |
|          |                  |                 | Long   | 76000-000601   |
| 3/4"     |                  |                 | Short  | 76000-000604   |
|          |                  |                 | Long   | 76000-000605   |
| 1"       |                  |                 | Short  | 76000-000608   |
|          |                  |                 | Long   | 76000-000609   |
| 1 1/4"   |                  |                 | Long   | 76000-000612   |
| 1 1/2"   |                  |                 | Long   | 76000-000614   |
| 1 3/4"   |                  |                 | Long   | 76000-000618   |
| 2"       |                  |                 | Long   | 76000-000616   |
| 1/2"     | Female to female | BSP             | Short  | 76000-000602   |
|          |                  |                 | Long   | 76000-000603   |
| 3/4"     |                  |                 | Short  | 76000-000606   |
|          |                  |                 | Long   | 76000-000607   |
| 1"       |                  |                 | Short  | 76000-000610   |
|          |                  |                 | Long   | 76000-000611   |
| 1 1/4"   |                  |                 | Long   | 76000-000613   |
| 1 1/2"   |                  |                 | Long   | 76000-000615   |
| 1 3/4"   |                  |                 | Long   | 76000-000619   |
| 2"       |                  |                 | Long   | 76000-000617   |

# Angle Seat Valves

A line of innovative angle seat valves, designed for potable water applications. The valves is based on gas valve mechanism for high reliability.



Leak  
free



Long-lasting  
operation



Easy remote  
identification

## / Benefits & Features

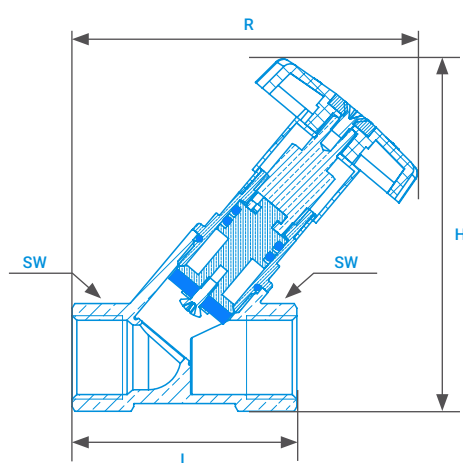
- Leak free Unique and reliable stem sealing mechanism
- Long-lasting operation Manufactured using hot forging technology
- Easy remote identification Clear marking of the valve state (Open/Close)
- Resistant Perfect for Potable Water applications
- High reliability The mechanism is based on gas valves mechanism
- Prevents abrasion Closing and opening produces a continuous, non-spiral mechanism
- Prevents leaks Robust mechanism with wide seals
- Smooth operation A unique mechanism that is not based on tightening nut technique for the valve
- Prevents dirt entry Plastic cover for the mechanism
- Special mechanism All-the-way mechanical seal is in placed when open

# / Specifications & Recommendations

- **Working Pressure** – up to 16ATM (235psi)
- Made from lead-free brass
- Handle is made of glass-reinforced nylon

## → Technical Dimensions

| SW hex | R   | H   | L    |
|--------|-----|-----|------|
| 32     | 113 | 115 | 73   |
| 38     | 135 | 134 | 87.5 |
| 54     | 181 | 184 | 115  |
| 66     | 214 | 224 | 136  |



# Butterfly Valves

Simple, light and reliable for installation wherever there is a need to cut the flow passage in pipes and equipment.



Type A

Type B



Long-lasting performance



High durability



Versatility

## / Benefits & Features

→ Long-lasting performance

Netafim manual valves are manufactured using materials of the highest quality, always complying with the standards for hydraulically operated devices

→ High durability

The quality of the Netafim butterfly valve gives it great resistance over time. The replaceable seat guarantees bidirectional watertightness, easy maintenance due to its innovative design and longer life of the valve

→ Versatility

Different disc material options: ductile iron, stainless steel or aluminum bronze

## / Specifications & Recommendations

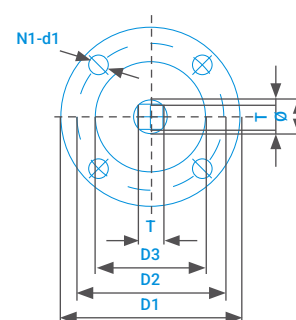
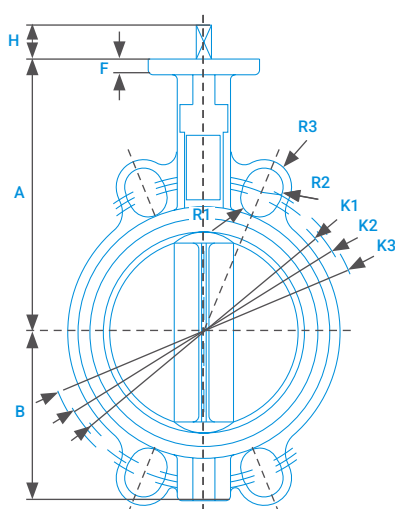
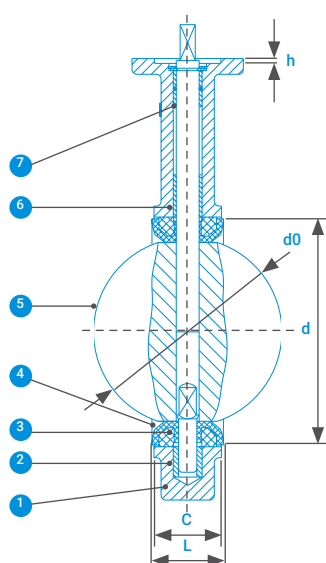
- Type – Concentric
- Pressure Grade – PN16
- Working Pressure – 16bar
- Available Diameters – DN50 to DN600
- Working Temperature – 0°C to 80°C
- Connection – Wafer
- Coating – Fusion bonded epoxy 250µm

\* Other materials and specifications are available upon request.

## → Technical Dimensions

For Body

| dn  | A   | B   | h  | d0    | c  | l  | d     | k1    | k2  | k3    | r1   | r2   | r3   | f  | d1  | d2  | d3 | h | 4-d1 | Ø     | t  |
|-----|-----|-----|----|-------|----|----|-------|-------|-----|-------|------|------|------|----|-----|-----|----|---|------|-------|----|
| 50  | 125 | 73  | 28 | 52.6  | 43 | 46 | 73.3  | 120.6 | 125 | 124   | 10.5 | -    | 10.5 | 10 | 65  | 50  | 35 | 4 | 7    | 12.6  | 9  |
| 65  | 136 | 82  | 28 | 64.3  | 46 | 49 | 86.0  | 139.7 | 145 | 145   | 10.5 | -    | 10.5 | 10 | 65  | 50  | 35 | 4 | 7    | 12.6  | 9  |
| 80  | 142 | 91  | 28 | 78.8  | 46 | 49 | 100.9 | 152.4 | 160 | 160   | 10.5 | -    | 10.5 | 10 | 65  | 50  | 35 | 4 | 7    | 12.6  | 9  |
| 100 | 163 | 107 | 28 | 104   | 52 | 55 | 132   | 180   | 180 | 190.5 | 10.5 | -    | 10.5 | 12 | 90  | 70  | 55 | 4 | 10   | 15.77 | 11 |
| 125 | 176 | 127 | 28 | 123.3 | 56 | 59 | 156   | 210   | 210 | 215.9 | 12.2 | -    | 12.2 | 12 | 90  | 70  | 55 | 4 | 10   | 18.92 | 14 |
| 150 | 197 | 143 | 28 | 155.7 | 56 | 59 | 185.4 | 240   | 240 | 241.3 | 12.2 | -    | 12.2 | 12 | 90  | 70  | 55 | 4 | 10   | 18.92 | 14 |
| 200 | 230 | 170 | 38 | 202.4 | 60 | 64 | 235.2 | 295   | 295 | 298.5 | 12.2 | 12.5 | 12.2 | 15 | 125 | 102 | 70 | 4 | 12   | 22.1  | 17 |
| 250 | 260 | 204 | 38 | 250.4 | 68 | 72 | 289.4 | 350   | 355 | 361.9 | 13.7 | 15   | 13.7 | 15 | 125 | 102 | 70 | 4 | 12   | 28.45 | 22 |
| 300 | 292 | 240 | 38 | 301.5 | 78 | 82 | 341.2 | 400   | 410 | 431.8 | 13.7 | 15   | 13.7 | 15 | 125 | 102 | 70 | 4 | 12   | 31.6  | 22 |



## → Material Specifications

For Body Type A\*

| # | Component       | Material        | Specification |
|---|-----------------|-----------------|---------------|
| 1 | Body            | Ductile iron    | GGG40         |
| 2 | Shaft           | Stainless steel | AISI 420      |
| 3 | Disc            | Ductile iron    | AISI 316      |
| 4 | Seat            | EPDM            | EN681         |
| 5 | Bearing         | PFTE            | Commercial    |
| 6 | Ring seal       | EPDM            | EN681         |
| 7 | Indicator plate | Stainless steel | AISI 420      |

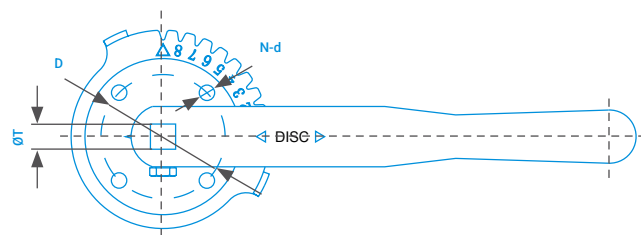
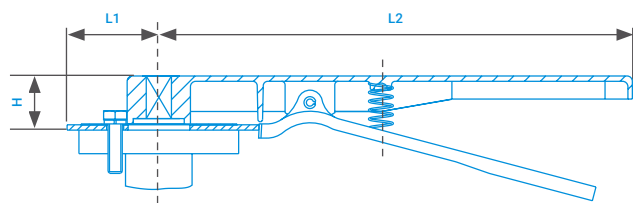
\* For butterfly valves up to 300mm

For Body Type B\*

| # | Component       | Material        | Specification |
|---|-----------------|-----------------|---------------|
| 1 | Body            | Ductile iron    | GGG40         |
| 2 | Shaft           | Stainless steel | AISI 420      |
| 3 | Disc            | Stainless steel | AISI 316      |
| 4 | Seat            | EPDM            | EN681         |
| 5 | Bearing         | PFTE            | Commercial    |
| 6 | Ring seal       | EPDM            | EN681         |
| 7 | Indicator plate | Stainless steel | AISI 420      |

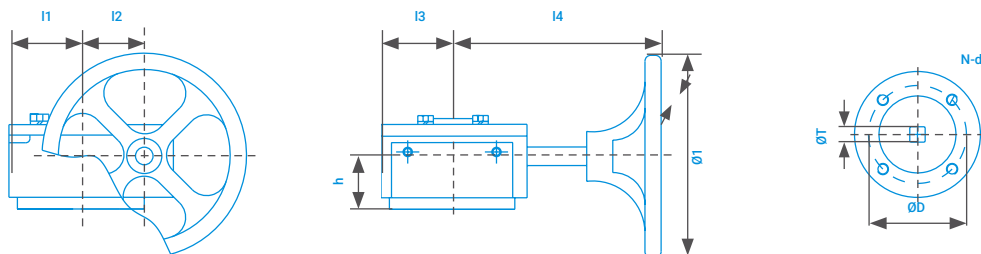
## → Technical Dimensions

### For Lever



| dn  | h  | l1 | l2  | d   | N-d  | ØT |
|-----|----|----|-----|-----|------|----|
| 50  | 28 | 52 | 267 | 50  | 4-7  | 9  |
| 65  | 28 | 52 | 267 | 50  | 4-7  | 9  |
| 80  | 28 | 52 | 267 | 50  | 4-7  | 9  |
| 100 | 28 | 52 | 267 | 70  | 4-10 | 11 |
| 125 | 28 | 52 | 267 | 70  | 4-10 | 14 |
| 150 | 28 | 52 | 267 | 70  | 4-10 | 14 |
| 200 | 38 | 75 | 359 | 102 | 4-12 | 17 |
| 250 | 38 | 75 | 359 | 102 | 4-12 | 22 |
| 300 | 38 | 75 | 359 | 102 | 4-12 | 22 |

### For Gearbox



| dn  | h  | l1 | l2 | l3 | l4  | Ø1  | d1  | N-d   | ØT |
|-----|----|----|----|----|-----|-----|-----|-------|----|
| 50  | 35 | 51 | 43 | 51 | 151 | 154 | 50  | 4-m6  | 9  |
| 65  | 35 | 51 | 43 | 51 | 151 | 145 | 50  | 4-m6  | 9  |
| 80  | 35 | 51 | 43 | 51 | 151 | 145 | 50  | 4-m6  | 9  |
| 100 | 35 | 51 | 43 | 51 | 151 | 145 | 70  | 4-m8  | 11 |
| 125 | 35 | 51 | 43 | 51 | 151 | 145 | 70  | 4-m8  | 14 |
| 150 | 35 | 51 | 43 | 51 | 151 | 145 | 70  | 4-m8  | 14 |
| 200 | 42 | 72 | 65 | 72 | 210 | 285 | 102 | 4-m10 | 17 |
| 250 | 42 | 72 | 65 | 72 | 210 | 285 | 102 | 4-m10 | 22 |
| 300 | 45 | 94 | 79 | 94 | 190 | 285 | 102 | 4-m10 | 22 |

## → Catalog Numbers

### For Type A

| Description                             | Catalog Number |
|-----------------------------------------|----------------|
| GAER BUTTERFLY VALVE 3" LEVER OPERATED  | 71660-000950   |
| GAER BUTTERFLY VALVE 4" LEVER OPERATED  | 71660-000951   |
| GAER BUTTERFLY VALVE 6" LEVER OPERATED  | 71660-000952   |
| GAER BUTTERFLY VALVE 8" LEVER OPERATED  | 71660-000953   |
| GAER BUTTERFLY VALVE 10" LEVER OPERATED | 71660-000954   |
| GAER BUTTERFLY VALVE 12" LEVER OPERATED | 71660-007400   |
| GAER BUTTERFLY VALVE 3" GEAR OPERATED   | 71660-000940   |
| GAER BUTTERFLY VALVE 4" GEAR OPERATED   | 71660-000941   |
| GAER BUTTERFLY VALVE 6" GEAR OPERATED   | 71660-000942   |
| GAER BUTTERFLY VALVE 8" GEAR OPERATED   | 71660-000943   |
| GAER BUTTERFLY VALVE 10" GEAR OPERATED  | 71660-000944   |
| GAER BUTTERFLY VALVE 12" GEAR OPERATED  | 71660-000945   |

### For Type B

| Description                               | Catalog Number |
|-------------------------------------------|----------------|
| GAER BUTTERFLY VALVE 2" LEVER - SST DISC  | 71660-000970   |
| GAER BUTTERFLY VALVE 3" LEVER - SST DISC  | 71660-000971   |
| GAER BUTTERFLY VALVE 4" LEVER - SST DISC  | 71660-000972   |
| GAER BUTTERFLY VALVE 6" LEVER - SST DISC  | 71660-000973   |
| GAER BUTTERFLY VALVE 8" LEVER - SST DISC  | 71660-000974   |
| GAER BUTTERFLY VALVE 10" LEVER - SST DISC | 71660-000975   |
| GAER BUTTERFLY VALVE 12" LEVER - SST DISC | 71660-000976   |
| GAER BUTTERFLY VALVE 2" GEAR - SST DISC   | 71660-000980   |
| GAER BUTTERFLY VALVE 3" GEAR - SST DISC   | 71660-000981   |
| GAER BUTTERFLY VALVE 4" GEAR - SST DISC   | 71660-000982   |
| GAER BUTTERFLY VALVE 6" GEAR - SST DISC   | 71660-000983   |
| GAER BUTTERFLY VALVE 8" GEAR - SST DISC   | 71660-000984   |
| GAER BUTTERFLY VALVE 10" GEAR - SST DISC  | 71660-000985   |

\* Additional diameters, materials and specifications are available upon request.

# Gate Valves

Designed for use in distribution of fluids such as water, and neutral fluids in a wide range of temperatures and working conditions.



Wheel  
Type



Extension Shaft  
for Square Key Type



Long-lasting  
performance



High  
durability



Versatility

## / Benefits & Features

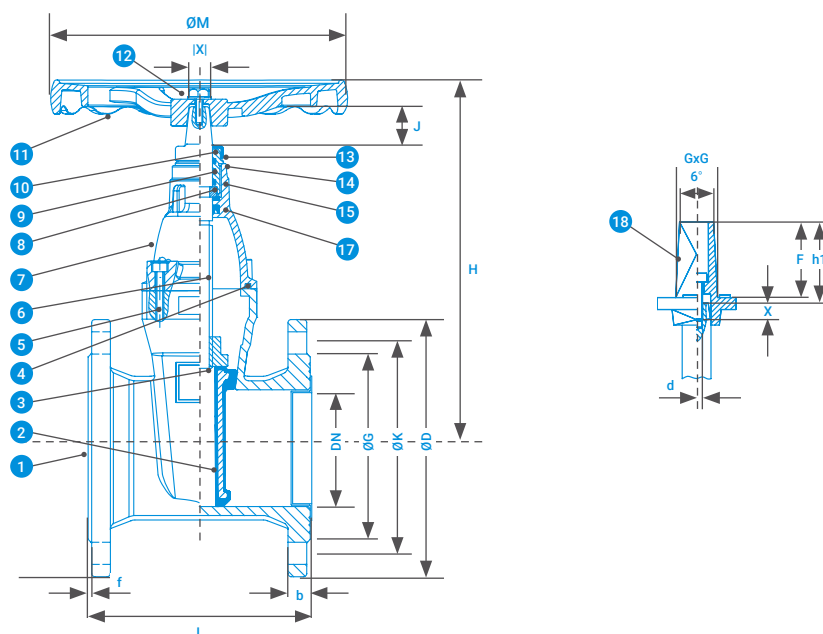
- **Long-lasting performance** The pitch diameter of this type of valve is equal to the nominal diameter when the valve is in totally open position. In this way minimum load losses are obtained
- **High durability** Its configuration guarantees complete and directional tightness in its entire range of pressures, with smooth movement of the shaft during its entire travel
- **Versatility** Resilient seat, operated by handwheel, square cap or extendable shaft according to the application

## / Specifications & Recommendations

- Type – Non-rising stem
- Pressure Grade – PN16
- Working Pressure – 16bar
- Available Diameters – DN50 to DN600
- Working Temperature – 0°C to 80°C
- Connection – Flange
- Coating – Fusion bonded epoxy 250µm

\* Other materials and specifications are available upon request.

## → Technical Dimensions



For PN16 Narrow Model

| DN  | Dimensions (mm) |       |      |     |    |              |     |     |      |   |             |      |       |    |     |    |
|-----|-----------------|-------|------|-----|----|--------------|-----|-----|------|---|-------------|------|-------|----|-----|----|
|     | Shape           |       |      |     |    | Flanges PN16 |     |     |      |   | Square stem |      |       |    |     |    |
|     | L(F4)           | L(F5) | H    | M   | J  | D            | K   | G   | b    | f | IXI         | h1   | GXG   | F  | d   | X  |
| 50  | 150             | 250   | 215  | 200 | 30 | 165          | 125 | 99  | 19   | 3 | 14 x 14     | 285  | 35x35 | 63 | M8  | 15 |
| 65  | 170             | 270   | 235  | 200 | 30 | 185          | 145 | 118 | 19   | 3 | 14 x 14     | 300  | 35x35 | 63 | M8  | 15 |
| 80  | 180             | 280   | 265  | 254 | 30 | 200          | 160 | 132 | 19   | 3 | 17 x 17     | 320  | 35x35 | 63 | M8  | 15 |
| 100 | 190             | 300   | 315  | 254 | 32 | 220          | 180 | 156 | 19   | 3 | 17 x 17     | 390  | 35x35 | 63 | M8  | 15 |
| 125 | 200             | 325   | 350  | 315 | 32 | 250          | 210 | 184 | 19   | 3 | 19 x 19     | 430  | 35x35 | 63 | M8  | 15 |
| 150 | 210             | 350   | 385  | 315 | 32 | 285          | 240 | 211 | 19   | 3 | 19 x 19     | 470  | 35x35 | 63 | M8  | 15 |
| 200 | 230             | 400   | 485  | 315 | 35 | 340          | 295 | 266 | 20   | 3 | 19 x 19     | 560  | 35x35 | 63 | M8  | 15 |
| 250 | 250             | 450   | 600  | 406 | 35 | 405          | 355 | 319 | 22   | 3 | 24 x 24     | 680  | 35x35 | 63 | M10 | 15 |
| 300 | 270             | 500   | 680  | 406 | 35 | 460          | 410 | 370 | 24.5 | 4 | 24 x 24     | 770  | 35x35 | 63 | M10 | 15 |
| 350 | 290             | 550   | 810  | 500 | 45 | 520          | 470 | 429 | 26.5 | 4 | 27 x 27     | 900  | 48x48 | 75 | M10 | 20 |
| 400 | 310             | 600   | 890  | 500 | 45 | 580          | 525 | 480 | 28   | 4 | 27 x 27     | 1000 | 48x48 | 75 | M10 | 20 |
| 450 | 330             | 650   | 1050 | 500 | 50 | 640          | 585 | 548 | 30   | 4 | 27 x 27     | 1150 | 48x48 | 75 | M10 | 20 |
| 500 | 350             | 700   | 1230 | 650 | 55 | 715          | 650 | 609 | 31.5 | 4 | 30 x 30     | 1330 | 48x48 | 75 | M12 | 20 |
| 600 | 390             | 800   | 1260 | 650 | 55 | 840          | 770 | 720 | 36   | 5 | 30 x 30     | 1500 | 48x48 | 75 | M12 | 20 |

For Hole Size Assembly

|        |     | PN10 |         | PN16 |         | ANSI150 |         | BSTD |         |
|--------|-----|------|---------|------|---------|---------|---------|------|---------|
|        |     | K    | n-d     | K    | n-d     | K       | n-d     | K    | n-d     |
| 2"     | 50  | 125  | 4 x 19  | 125  | 4 x 19  | 121     | 4 x 19  | 114  | 4 x 18  |
| 2-1/2" | 65  | 145  | 4 x 19  | 145  | 4 x 19  | 140     | 4 x 19  | 127  | 4 x 18  |
| 3"     | 80  | 160  | 8 x 19  | 160  | 8 x 19  | 152     | 4 x 19  | 146  | 4 x 18  |
| 4"     | 100 | 180  | 8 x 19  | 180  | 8 x 19  | 191     | 8 x 19  | 178  | 4 x 18  |
| 5"     | 125 | 210  | 8 x 19  | 210  | 8 x 19  | 216     | 8 x 22  | 210  | 4 x 18  |
| 6"     | 150 | 240  | 8 x 23  | 240  | 8 x 23  | 241     | 8 x 22  | 235  | 8 x 18  |
| 8"     | 200 | 295  | 8 x 23  | 295  | 12 x 23 | 298     | 8 x 22  | 292  | 8 x 18  |
| 10"    | 250 | 350  | 12 x 23 | 355  | 12 x 28 | 362     | 12 x 25 | 356  | 8 x 22  |
| 12"    | 300 | 400  | 12 x 23 | 410  | 12 x 28 | 432     | 12 x 25 | 406  | 12 x 22 |
| 14"    | 350 | 460  | 16 x 23 | 470  | 16 x 28 | 476     | 12 x 29 | 470  | 12 x 26 |
| 16"    | 400 | 515  | 16 x 28 | 525  | 16 x 31 | 540     | 16 x 29 | 521  | 12 x 26 |
| 18"    | 450 | 565  | 20 x 28 | 585  | 20 x 31 | 578     | 16 x 32 | 584  | 12 x 26 |
| 20"    | 500 | 620  | 20 x 28 | 650  | 20 x 34 | 635     | 20 x 32 | 641  | 16 x 26 |
| 24"    | 600 | 725  | 20 x 31 | 770  | 20 x 37 | 749     | 20 x 35 | 756  | 16 x 30 |

## → Material Specification

For PN16 Narrow Model

|    | Component                | Material            | Specification |
|----|--------------------------|---------------------|---------------|
| 1  | Body                     | Ductile iron        | GGG50         |
| 2  | Disc                     | Ductile iron + EPDM | GGG50         |
| 3  | Shaft nut                | Brass               | CuZn39Pb2     |
| 4  | Cover seal               | NBR                 | UNE-EN 681-1  |
| 5  | Cover screws             | Stainless steel     | A2(AISI 304)  |
| 6  | Shaft                    | Stainless steel     | AISI 420      |
| 7  | Cover                    | Ductile iron        | GGG50         |
| 8  | Clamping ring            | Brass               | CuZn39Pb2     |
| 9  | O-ring                   | NBR                 | UNE-EN 681-1  |
| 10 | Thrust nut               | Brass               | CuZn39Pb2     |
| 11 | Handwheel                | Ductile iron        | GGG50         |
| 12 | Screw                    | Stainless steel     | A2(AISI 304)  |
| 13 | Dust protectors          | NBR                 | UNE-EN 681-1  |
| 14 | O-ring                   | NBR                 | UNE-EN 681-1  |
| 15 | O-ring                   | NBR                 | UNE-EN 681-1  |
| 16 | Units separated of nylon | Nylon 66            |               |
| 17 | Self-closing ring        | NBR                 | UNE-EN 681-1  |
| 18 | Square stem              | Ductile iron        | GGG50         |

## → Catalog Numbers

| Description | Operation     | Connection Type |              |              |
|-------------|---------------|-----------------|--------------|--------------|
|             |               | ISO             | BSTD         | ANSI         |
| 2"          | Wheel         | 71660-000870    | 71660-000871 | 71660-000872 |
|             | Square key ** | 71660-000873    | 71660-000874 | 71660-000875 |
| 3"          | Wheel         | 71660-000880    | 71660-000881 | 71660-000882 |
|             | Square key ** | 71660-000883    | 71660-000884 | 71660-000885 |
| 4"          | Wheel         | 71660-000890    | 71660-000891 | 71660-000892 |
|             | Square key ** | 71660-000893    | 71660-000894 | 71660-000895 |
| 6"          | Wheel         | 71660-000900    | 71660-000901 | 71660-000902 |
|             | Square key ** | 71660-000903    | 71660-000904 | 71660-000905 |
| 8"          | Wheel         | 71660-000910    | 71660-000911 | 71660-000912 |
|             | Square key ** | 71660-000913    | 71660-000914 | 71660-000915 |
| 10"         | Wheel         | 71660-000920    | 71660-000921 | 71660-000922 |
|             | Square key ** | 71660-000923    | 71660-000924 | 71660-000925 |
| 12"         | Wheel         | 71660-000930    | 71660-000931 | 71660-000932 |
|             | Square key ** | 71660-000933    | 71660-000934 | 71660-000935 |

\* Additional diameters, materials and specifications available upon request

\*\* Extension shaft is supplied upon request

# Check Valves

Designed for use in distribution of fluids such as water, and neutral fluids in a wide range of temperatures and working conditions.



Maximum  
reliability



Resilient



High  
durability



Swing



Double Flap



Foot

## / Benefits & Features

### → Double flap check valve

The discs are opened by the pressure of the circulating fluid, and let the fluid pass in the required direction. When the flow is stopped, the valve shuts off rapidly thanks to a closing spring, thus preventing reverse flow

### → Swing check valve

Suited for work with wastewater, dirty water or water with high concentrations of suspended solids. Its shut-off system is free of possible obstructions and requires minimum pressure both for opening and closing

### → Foot check valve

The ideal solution to prevent emptying of the suction lines in pumps. Its design and manufacture guarantee hermetic closing. The stainless steel strainer prevents entry of solid particles into the pipe

## / Specifications & Recommendations

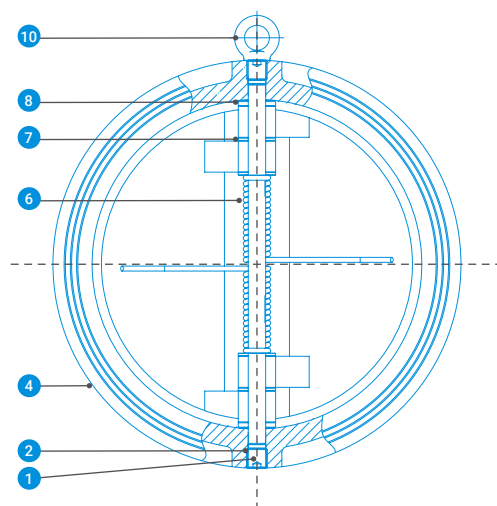
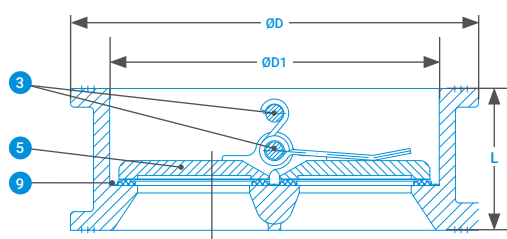
- Type – Resilient swing
- Pressure Grade – PN16
- Working Pressure – 16 bar
- Available Diameters – DN50 to DN600

- Working Temperature – 0°C to 80°C
- Min. Closing Pressure – 1 bar  
(for double flap & swing), 0.3 bar (for foot)
- Coating – Fusion bonded epoxy 250µm

\* Other materials and specifications on request.

## → Technical Dimensions

### For Double Flap



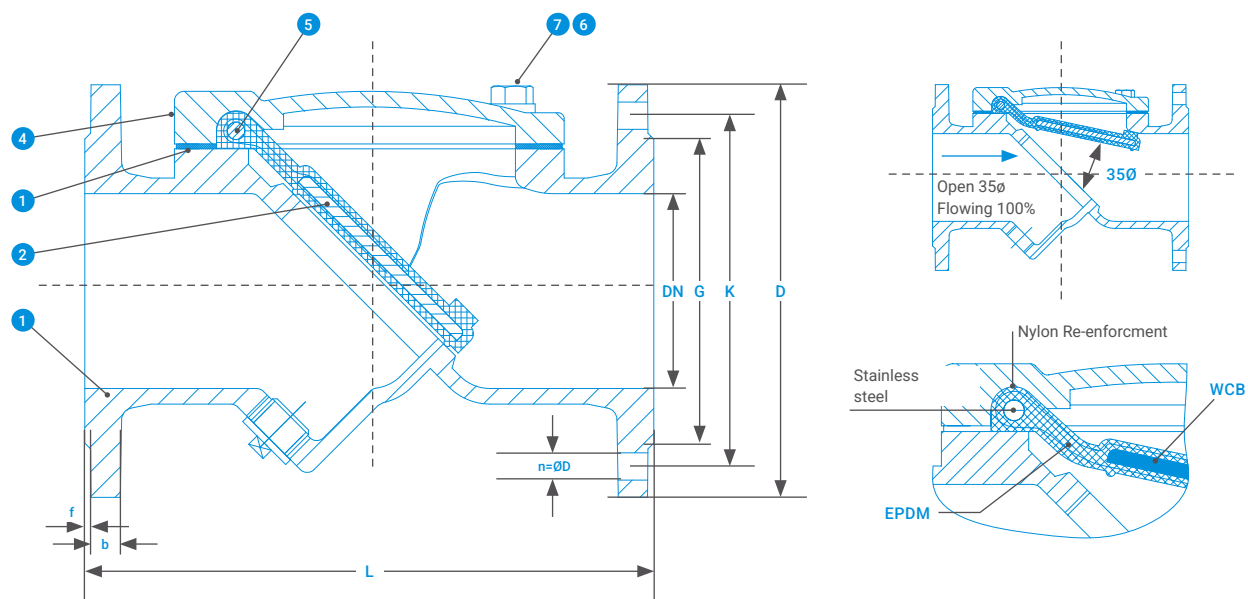
| DN        | L   | ØD1 | ØD  |
|-----------|-----|-----|-----|
| 50 (2")   | 43  | 65  | 103 |
| 65 (2.5") | 46  | 80  | 123 |
| 80 (3")   | 64  | 94  | 129 |
| 100 (4")  | 64  | 117 | 157 |
| 125 (5")  | 70  | 145 | 192 |
| 150 (6")  | 76  | 170 | 218 |
| 200 (8")  | 89  | 224 | 268 |
| 250 (10") | 114 | 265 | 328 |
| 300 (12") | 114 | 310 | 375 |
| 350 (14") | 127 | 360 | 438 |
| 400 (16") | 140 | 410 | 489 |
| 450 (18") | 152 | 450 | 537 |
| 500 (20") | 152 | 505 | 592 |
| 600 (24") | 178 | 624 | 694 |

## → Material Specifications

### For Double Flap

|    | Description  | Material     |
|----|--------------|--------------|
| 1  | Screw        | Carbon steel |
| 2  | Sealing ring | EPDM         |
| 3  | Shaft        | SS316        |
| 4  | Body         | DI           |
| 5  | Disc         | CF8M         |
| 6  | Spring       | SS316        |
| 7  | Gasket       | PTFE         |
| 8  | Gasket       | PTFE         |
| 9  | Seat         | EPDM         |
| 10 | Lifting ring | Carbon steel |

## → Technical Dimensions For Swing Check Valve



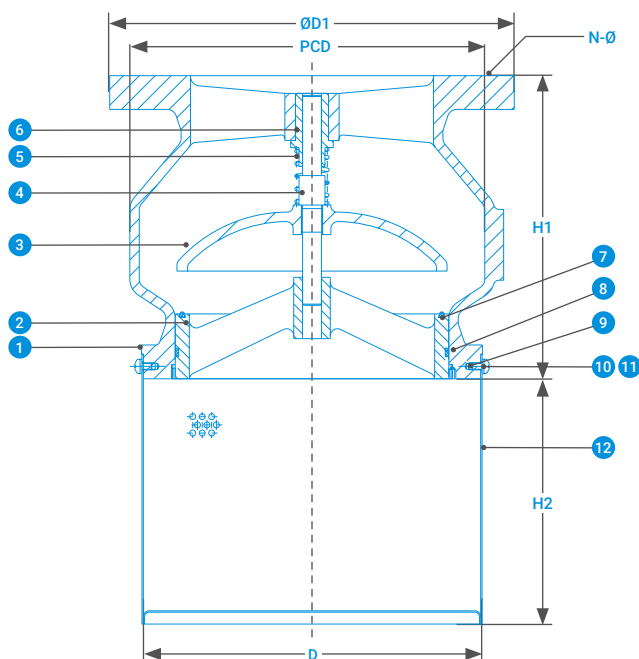
| DN  | L    | D    | G    | B    | F    | kg    | inch   | PN10 |       | PN16 |       | ANSI150 |       | BSTD |       |
|-----|------|------|------|------|------|-------|--------|------|-------|------|-------|---------|-------|------|-------|
|     | (mm) | (mm) | (mm) | (mm) | (mm) |       |        | K    | n-d   | K    | n-d   | K       | n-d   | K    | n-d   |
| 50  | 203  | 165  | 99   | 19   | 3    | 10,45 | 2"     | 125  | 4x19  | 125  | 4x19  | 121     | 4x19  | 114  | 4x18  |
| 65  | 216  | 185  | 118  | 19   | 3    | 13,6  | 2-1/2" | 145  | 4x19  | 145  | 4x19  | 140     | 4x19  | 127  | 4x18  |
| 80  | 241  | 200  | 132  | 19   | 3    | 16    | 3"     | 160  | 8x19  | 160  | 8x19  | 152     | 4x19  | 146  | 4x18  |
| 100 | 292  | 220  | 156  | 19   | 3    | 21    | 4"     | 180  | 8x19  | 180  | 8x19  | 191     | 8x19  | 178  | 4x18  |
| 125 | 330  | 250  | 184  | 19   | 3    | 26    | 5"     | 210  | 8x19  | 210  | 8x19  | 216     | 8x22  | 210  | 4x18  |
| 150 | 356  | 285  | 211  | 19   | 3    | 36    | 6"     | 240  | 8x23  | 240  | 8x23  | 241     | 8x22  | 235  | 8x18  |
| 200 | 495  | 340  | 266  | 20   | 3    | 73    | 8"     | 295  | 8x23  | 295  | 12x23 | 298     | 8x22  | 292  | 8x18  |
| 250 | 622  | 405  | 319  | 22   | 3    | 120   | 10"    | 350  | 12x23 | 355  | 12x28 | 362     | 12x25 | 356  | 8x22  |
| 300 | 698  | 460  | 370  | 24.5 | 4    | 215   | 12"    | 400  | 12x23 | 410  | 12x28 | 432     | 12x25 | 406  | 12x22 |
| 350 | 787  | 520  | 429  | 26.5 | 4    | 230   | 14"    | 460  | 16x23 | 470  | 16x28 | 476     | 12x29 | 470  | 12x26 |
| 400 | 914  | 580  | 480  | 28   | 4    | 335   | 16"    | 515  | 16x28 | 525  | 16x31 | 540     | 16x29 | 521  | 12x26 |
| 450 | 978  | 640  | 548  | 30   | 4    | 401   | 18"    | 565  | 20x28 | 585  | 20x31 | 578     | 16x32 | 584  | 12x26 |
| 500 | 978  | 715  | 609  | 31.5 | 4    | 502   | 20"    | 620  | 20x28 | 650  | 20x34 | 635     | 20x32 | 641  | 16x26 |
| 600 | 1295 | 840  | 720  | 36   | 5    | 818   | 24"    | 725  | 20x31 | 770  | 20x37 | 749     | 20x35 | 756  | 16x30 |

## → Material Specifications For Swing Check Valve

| # | Component | Material        | Specification |
|---|-----------|-----------------|---------------|
| 1 | Body      | Ductile iron    | GGG50         |
| 2 | Seat      | NBR             | EN 681        |
| 3 | Disc      | WCB + NBR       | WCB + NBR     |
| 4 | Cover     | Ductile iron    | GGG50         |
| 5 | Pin       | Stainless steel | AISI 316      |
| 6 | Screw     | Stainless steel | AISI 316      |
| 7 | Washer    | Stainless steel | AISI 316      |
| 8 | Nut       | Ductile iron    | GGG50         |

## → Technical Dimensions

For Foot Valve



| Size | H1  | H2  | D   | BS EN 1092-2 PN16 |        | D1   |
|------|-----|-----|-----|-------------------|--------|------|
|      |     |     |     | PCD               | N-Ø    |      |
| 2"   | 133 | 68  | 114 | Ø125              | 4-Ø19  | Ø165 |
| 2,5" | 140 | 93  | 130 | Ø145              | 4-Ø19  | Ø185 |
| 3"   | 152 | 108 | 144 | Ø160              | 8-Ø19  | Ø200 |
| 4"   | 185 | 138 | 177 | Ø180              | 8-Ø19  | Ø220 |
| 5"   | 216 | 163 | 203 | Ø210              | 8-Ø19  | Ø250 |
| 6"   | 229 | 189 | 237 | Ø240              | 8-Ø23  | Ø285 |
| 8"   | 257 | 208 | 290 | Ø295              | 12-Ø23 | Ø340 |
| 10"  | 293 | 225 | 330 | Ø355              | 12-Ø28 | Ø405 |
| 12"  | 362 | 245 | 383 | Ø410              | 12-Ø28 | Ø460 |
| 14"  | 400 | 270 | 470 | Ø470              | 16-Ø28 | Ø520 |
| 16"  | 448 | 290 | 520 | Ø525              | 16-Ø31 | Ø580 |
| 18"  | 476 | 315 | 570 | Ø585              | 20-Ø31 | Ø640 |
| 20"  | 524 | 340 | 630 | Ø650              | 20-Ø34 | Ø715 |
| 24"  | 610 | 365 | 740 | Ø770              | 20-Ø37 | Ø840 |

## → Material Specifications

For Foot Valve

| #  | Description | Material  |
|----|-------------|-----------|
| 1  | Body        | DI        |
| 2  | Seat        | DI        |
| 3  | Disc        | DI        |
| 4  | Stem        | SS410     |
| 5  | Spring      | SS304     |
| 6  | Bushing     | ASTM B584 |
| 7  | O-Ring      | EPDM      |
| 8  | O-Ring      | EPDM      |
| 9  | Screw       | SS316     |
| 10 | Screw       | SS316     |
| 11 | Washer      | SS316     |
| 12 | Screen      | SS304     |

→ **Catalog Numbers**  
for Check Valves

| Description                 | Connection Type |              |              |
|-----------------------------|-----------------|--------------|--------------|
|                             | ISO             | ANSI         | Wafer        |
| CHECK VALVE 2" DOUBLE FLAP  | -               | -            | 71660-000800 |
| CHECK VALVE 2" SWING        | 71660-000801    | 71660-000802 | -            |
| CHECK VALVE 2" FOOT         | 71660-000803    | 71660-000804 | -            |
| CHECK VALVE 3" DOUBLE FLAP  | -               | -            | 71660-000810 |
| CHECK VALVE 3" SWING        | 71660-000811    | 71660-000812 | -            |
| CHECK VALVE 3" FOOT         | 71660-000813    | 71660-000814 | -            |
| CHECK VALVE 4" DOUBLE FLAP  | -               | -            | 71660-000820 |
| CHECK VALVE 4" SWING        | 71660-000821    | 71660-000822 | -            |
| CHECK VALVE 4" FOOT         | 71660-000823    | 71660-000824 | -            |
| CHECK VALVE 6" DOUBLE FLAP  | -               | -            | 71660-000830 |
| CHECK VALVE 6" SWING        | 71660-000831    | 71660-000832 | -            |
| CHECK VALVE 6" FOOT         | 71660-000833    | 71660-000834 | -            |
| CHECK VALVE 8" DOUBLE FLAP  | -               | -            | 71660-000840 |
| CHECK VALVE 8" SWING        | 71660-000841    | 71660-000842 |              |
| CHECK VALVE 8" FOOT         | 71660-000843    | 71660-000844 |              |
| CHECK VALVE 10" DOUBLE FLAP |                 |              | 71660-000850 |
| CHECK VALVE 10" SWING       | 71660-000851    | 71660-000852 |              |
| CHECK VALVE 10" FOOT        | 71660-000853    | 71660-000854 |              |
| CHECK VALVE 12" DOUBLE FLAP |                 |              | 71660-000860 |
| CHECK VALVE 12" SWING       | 71660-000861    | 71660-000862 |              |
| CHECK VALVE 12" FOOT        | 71660-000863    | 71660-000864 |              |

\* Additional diameters, materials and specifications are available upon request

# "Y" Strainers

Strainers, also known as stone trappers, are installed at the entrance of pumps, water meters, valves and control devices to protect them from solid remains that may cause damage to the installation.



Very high efficiency



Superior design



High durability

## / Benefits & Features

- **Very high efficiency**
  - Very small head losses are achieved, a critical point in most installations
- **Superior design**
  - Perfect geometry to allow a laminar and constant flow
  - Very small head losses are achieved, that are a critical point in most installations
- **High durability**
  - The cover is completely sealed throughout the range of pressures and incorporates a threaded plug for easy and quick evacuation of retained solids
  - Screen is in stainless steel, allowing corrosive fluids to flow without difficulty

## / Specifications & Recommendations

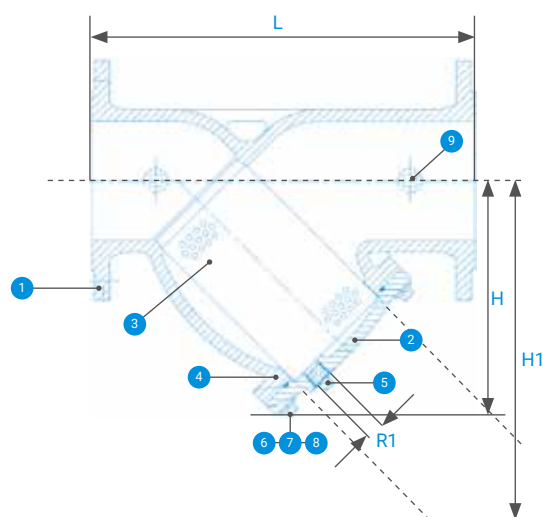
- Working Pressure – PN16
- Dimensions Range – DN50-DN600
- Working Temperature – 0°C – 80°C
- Connection – Flange
- Coating – Fusion bonded epoxy 250µm

## → Technical Data

| DN  | Cv Value | Weight (kg) | Standard Screens   |                    |                  |
|-----|----------|-------------|--------------------|--------------------|------------------|
|     |          |             | Hole Diameter (mm) | Free Flow Area (%) | Total Area (mm²) |
| 50  | 16       | 10          | 1.5                | 33                 | 4624             |
| 65  | 32       | 14.5        |                    |                    | 7709             |
| 80  | 47       | 19          |                    |                    | 9549             |
| 100 | 73       | 32          |                    |                    | 25485            |
| 125 | 108      | 40          | 3.0                | 40                 | 37780            |
| 150 | 158      | 62          |                    |                    | 45065            |
| 200 | 278      | 109         |                    |                    | 85166            |
| 250 | 474      | 197         |                    |                    | 128827           |
| 300 | 632      | 253         |                    |                    | 161697           |
| 350 | 885      | 458         |                    |                    | 300324           |
| 400 | 1297     | 556         |                    |                    | 374732           |
| 450 | 1739     | 627         |                    |                    | 480342           |
| 500 | 2245     | 780         |                    |                    | 548323           |
| 600 | -        | 1080        |                    |                    | 834423           |

## → Technical Dimensions

| Dn     | L   | H     | H1  | R1    | Mesh Dia. | Weight (kg) |
|--------|-----|-------|-----|-------|-----------|-------------|
| 2"     | 50  | 230   | 124 | 183   | 3/8"      | 8           |
| 2 1/2" | 65  | 290   | 137 | 205   | 3/8"      | 10          |
| 3"     | 80  | 310   | 152 | 238   | 3/8"      | 13          |
| 4"     | 100 | 350   | 205 | 318   | 3/8"      | 16          |
| 5"     | 125 | 400   | 244 | 358   | 3/8"      | 24          |
| 6"     | 150 | 480   | 269 | 380   | 3/8"      | 33          |
| 8"     | 200 | 600   | 341 | 508   | 1/2"      | 56          |
| 10"    | 250 | 730   | 455 | 700   | 1/2"      | 96          |
| 12"    | 300 | 850   | 476 | 730   | 1/2"      | 189         |
| 14"    | 350 | 980   | 625 | 940   | 3/4"      | 320         |
| 16"    | 400 | 1.100 | 685 | 1.230 | 3/4"      | 378         |
| 18"    | 450 | 1.200 | 746 | 1.110 | 3/4"      | 600         |
| 20"    | 500 | 1.250 | 845 | 1.550 | 3/4"      | 750         |
| 24"    | 600 | 1.450 | 984 | 1.560 | 1"        | 1150        |

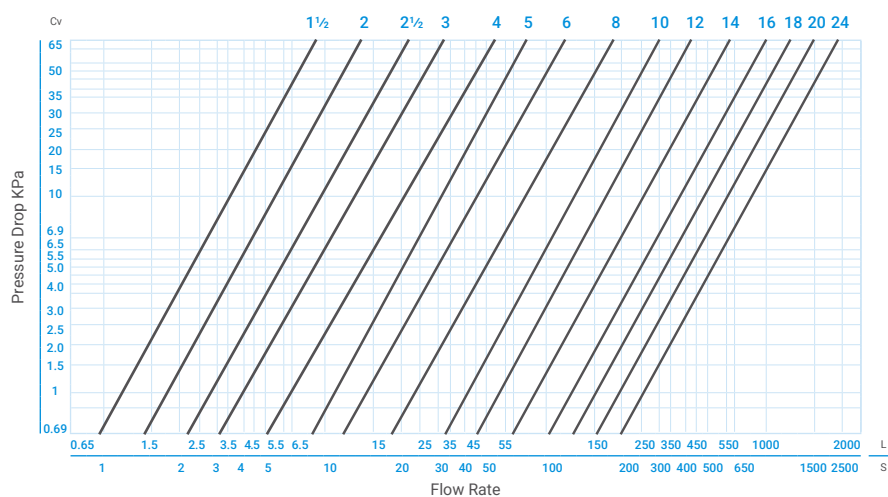


## → Material Specifications

| # | Part            | Material        | Standard |
|---|-----------------|-----------------|----------|
| 1 | Body            | Ductile Iron    | GGG40    |
| 2 | Cover           | Ductile Iron    | GGG40    |
| 3 | Screen          | Stainless Steel | SS304    |
| 4 | Packing         | Rubber          | EPDM 5   |
| 5 | Drain Plug      | Stainless Steel | SS304    |
| 6 | Hex Bolt        | Carbon Steel    | Q235-A   |
| 7 | Lock Washer     | Carbon Steel    | 65Mn     |
| 8 | Plain Washer    | Carbon Steel    | Q235-A   |
| 9 | Test Point Plug | Stainless Steel | SS304    |

\*Other materials available upon request

## → Head Loss



# / Air Valves

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##### Combination

NAVc .....146

DT40 (Mini).....149

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D43 (Pro) .....158

##### Dynamic

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#### → Metal Air Valves

##### Kinetic / Vacuum Breaking

K10 / K60 .....167

##### Automatic

S15 .....172

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NAVmc .....174

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# Product Portfolio - Plastic Air Valves

## Kinetic / Vacuum

### NAVk

Diameter: 3/4" - 2"  
Max. Pres.: PN10



### AV10

Diameter: 3/4" - 1"  
Max. Pres.: PN10



## Automatic

### NAVa

Diameter: 1/2" - 1"  
Max. Pres.: PN10, PN16



### SG10

Diameter: 1/2" - 1"  
Max. Pres.: PN10



### S50

Diameter: 1/2" - 1"  
Max. Pres.: PN16



## Combination

### NAVc

Diameter: 1/2" - 2"  
Max. Pres.: PN10, PN16



### DT40 (Mini)

Diameter: 1/2" - 3/4"  
Max. Pres.: PN10, PN16



### DG10 / D40

Diameter: 3/4" - 2"  
Max. Pres.: PN10, PN16



### D40L

Diameter: 1/2" - 2"  
Max. Pres.: PN



### D43 (Pro)

Diameter: 2" - 3"  
Max. Pres.: PN10, PN16



## Dynamic

### D70

Diameter: 2" - 3"  
Max. Pres.: PN10, PN16



### D70PQ

Diameter: 2" - 3"  
Max. Pres.: PN10, PN16



# Product Portfilio - Metal Air Valves

## Kinetic / Vacuum

### K10, K60

Diameter: 2"  
Max. Pres.: PN16



## Automatic

### S15

Diameter: 1"  
Max. Pres.: PN16



## Combination

### NAVmc

Diameter: 2" - 6"  
Max. Pres.: PN16



### D43 / D46

Diameter: 2" - 6"  
Max. Pres.: PN16



### D50

Diameter: 2" - 6"  
Max. Pres.: PN16



### D60

Diameter: 1" - 6"  
Max. Pres.: PN16



# / Plastic Air Valves

# NAVk

## KINETIC / VACUUM BREAKING VALVE

This valve has been designed for efficient discharge and intake of air in water transport systems, filtering systems, containers, and other locations where confined air could impair the system's operation.



Maximum  
reliability



Superior  
design



Ease of  
maintenance

## / Benefits & Features

- |                       |                                                                                                                                                                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → Maximum reliability | The valve offers leak-proof sealing even at a low system pressure                                                                                                                                                                        |
| → Superior design     | <ul style="list-style-type: none"><li>- The aerodynamic design of the valve enables air flow at very high velocities</li><li>- The outlet port directs the "blowout" flow away, protecting sensitive devices and the operators</li></ul> |
| → Ease of maintenance | The valve design contains a very limited number of parts, allowing easy dismantling for maintenance                                                                                                                                      |

## / Specifications & Recommendations

- Operating Pressure – 0.1 to 10bar / 1½ to 150psi
- Maximal Operating Temperature – 60°C / 140°F
- 2" BSP or NPT Threaded Base – As per the customer's choice
- Materials – Corrosion-resistant reinforced plastic materials and synthetic rubber

→ Technical Dimensions

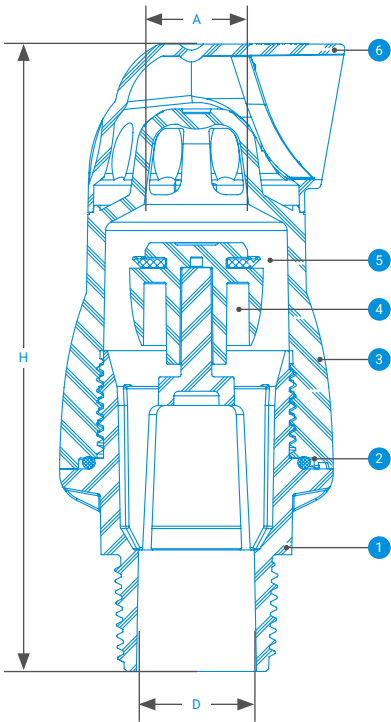
| Valve           | 20 mm / 3/4"       |                      | 25 mm / 1"         |                     | 50 mm / 2"         |                      |
|-----------------|--------------------|----------------------|--------------------|---------------------|--------------------|----------------------|
| Dimension       | SI                 | US                   | SI                 | US                  | SI                 | US                   |
| D - Thread      | 3/4" BSP           | 3/4" NPT             | 1" BSP             | 1" NPT              | 2" BSP             | 2" NPT               |
| H - Height      | 132mm              | 5.2"                 | 132mm              | 5.2"                | 132mm              | 5.2"                 |
| A - Nozzle Area | 380mm <sup>2</sup> | 0.59 in <sup>2</sup> | 380mm <sup>2</sup> | 0.59in <sup>2</sup> | 804mm <sup>2</sup> | 1.25 in <sup>2</sup> |
| Weight          | 125g               | 0.27lbs.             | 125g               | 0.27lbs.            | 200g               | 0.4lbs.              |

→ Material Specifications

3/4", 1"

| # | Part Name | Material |
|---|-----------|----------|
| 1 | Base      | PA GF    |
| 2 | O ring    | NBR      |
| 3 | Body      | PA GF    |
| 4 | Float     | POM      |
| 5 | Seal      | EPDM     |
| 6 | Cover     | POM      |

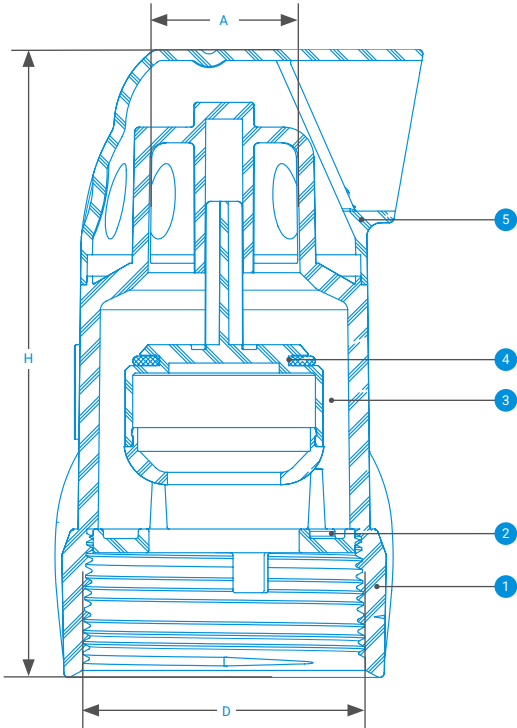
3/4", 1"



2"

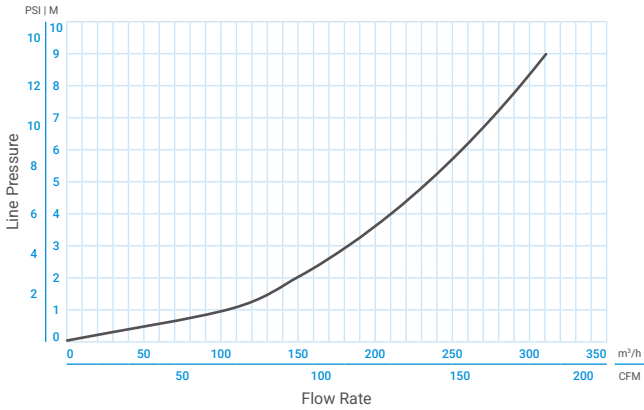
| # | Part Name | Material |
|---|-----------|----------|
| 1 | Body      | PA GF    |
| 2 | Ring      | PA GF    |
| 3 | Float     | POM      |
| 4 | Seal      | EPDM     |
| 5 | Cover     | PA GF    |

2"

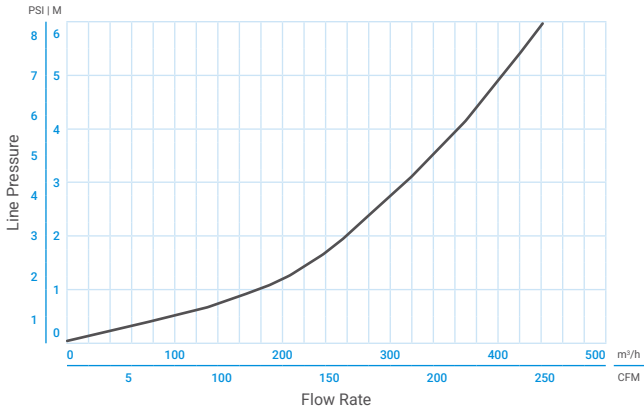


→ Head Loss

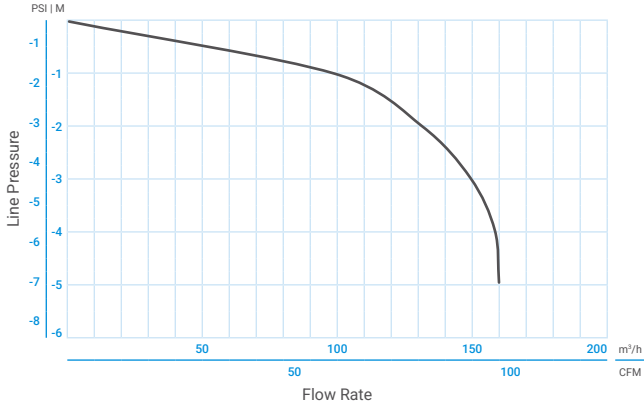
Discharge Data - Free Air Flow - ¾", 1"



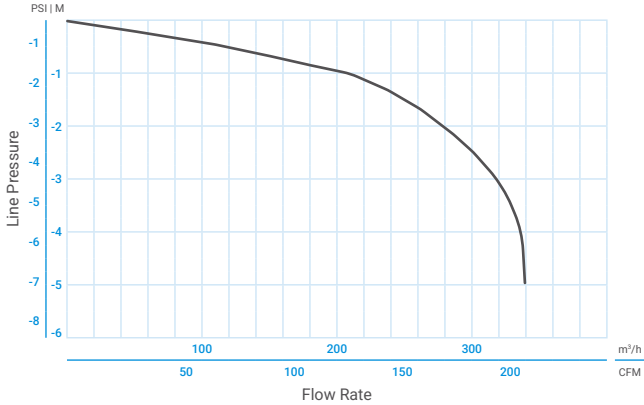
Discharge Data - Free Air Flow - 2"



Inflow Data - Free Air Flow - ¾", 1"



Inflow Data - Free Air Flow - 2"



→ Catalog Numbers

| Diameter | Connection | Catalog Number |
|----------|------------|----------------|
| ¾"       | BSP        | 32600-005912   |
|          | NPT        | 32600-006000   |
| 1"       | BSP        | 32600-006004   |
|          | NPT        | 32600-006001   |
| 2"       | BSP        | 32600-006003   |
|          | NPT        | 32600-006002   |

# AV10

## KINETIC / VACUUM BREAKING AIR VALVE

The AV-010 Air & Vacuum Valve discharges air at high flow rates during the filling of the system and admits air at high flow rates during drainage, pump shut-off or at water column separation.



3/4", 1" model



2" model



High  
durability



Simple  
operation



Maximum  
reliability

## / Benefits & Features

- |                       |                                                                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| → High durability     | Made of high strength composite materials, and all operating parts are made of specially selected corrosion-resistant and UV resistant materials |
| → Simple operation    | Lightweight and small dimensions                                                                                                                 |
| → Maximum reliability | For all parts                                                                                                                                    |
| → Drip-tight          | Sealing at low pressure                                                                                                                          |

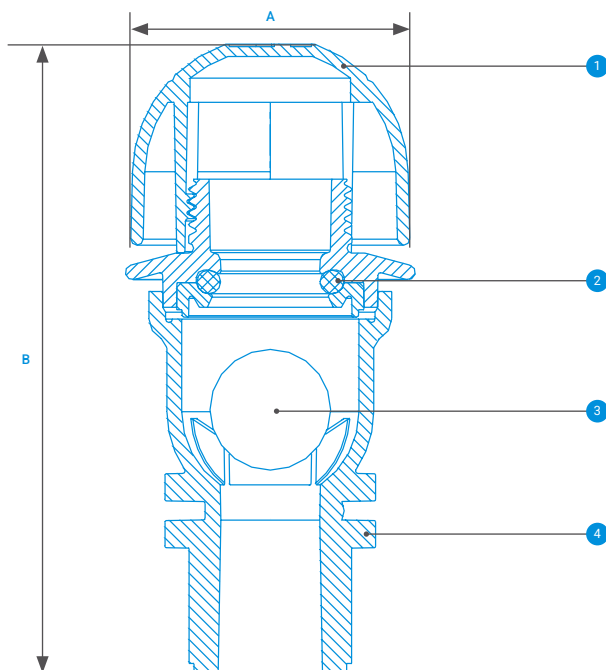
## / Specifications & Recommendations

- Working Pressure Range – 0.2 - 10bar
- Testing Pressure – 16bar
- Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C
- Available in 3/4" (20mm), 1" (25mm) male threaded, 2" (50mm), 3" (80mm) female threaded NPT/BSPT
- Optional Addition – Shrader valve for measuring local line pressure (3/4", 1" only)

## → Technical Dimensions

| Nominal Size | Dimensions (mm) |     | Weight (gr) | Orifice Area (mm <sup>2</sup> ) |
|--------------|-----------------|-----|-------------|---------------------------------|
|              | A               | B   |             |                                 |
| ¾" (20mm)    | 60              | 124 | 0.1         | 314                             |
| 1" (25mm)    | 60              | 124 | 0.1         | 314                             |
| 2" (50mm)    | 73              | 122 | 0.2         | 800                             |
| 3" (80mm)    | 104             | 165 | 0.6         | 2000                            |

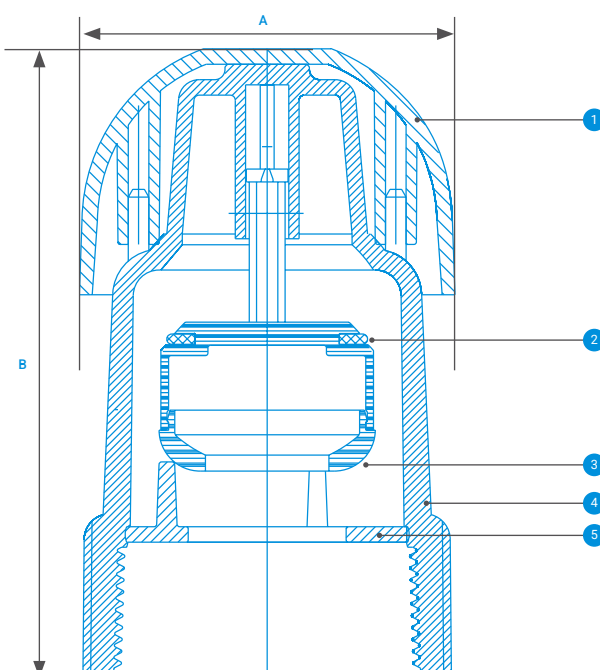
¾", 1" Model



## → Material Specifications

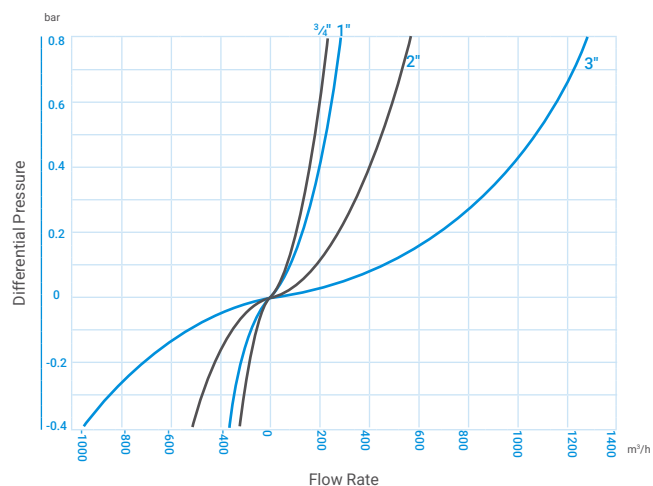
| # | Part Name | ¾", 1"        | 2"               | 3"               |
|---|-----------|---------------|------------------|------------------|
| 1 | Cover     | Polypropylene | Polypropylene    | Polypropylene    |
| 2 | Seal      | BUNA-N        | EPDM             | EPDM             |
| 3 | Float     | Polypropylene | Reinforced nylon | Reinforced nylon |
| 4 | Body      | Polypropylene | Reinforced nylon | Reinforced nylon |
| 5 | Disc      | -             | Reinforced nylon | Reinforced nylon |

2" Model



## → Head Loss

Air & Vacuum Flow Rate



## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| AV10  | ¾"       | BSP        | PN10          | 70540-001300   |
|       |          | NPT        | PN10          | 70561-002950   |
|       | 1"       | BSP        | PN10          | 70540-001400   |
|       |          | NPT        | PN10          | 70561-002610   |
|       | 2"       | BSP        | PN10          | 70540-001500   |
|       |          | NPT        | PN10          | 70561-002720   |
|       | 3"       | BSP        | PN10          | 70540-001550   |
|       |          | NPT        | PN10          | 70561-002820   |

# NAVa

## AUTOMATIC AIR VALVE

Designed for an efficient release of entrapped air from the pipeline, while the network is at normal working pressure. Due to the relatively large orifice, compared to other automatic valves in the market, it can also release the air through initial filling of a small-diameter pipe, or admit air into it while it is drained.



Maximum  
reliability



Superior  
design



High  
durability

## / Benefits & Features

### → Maximum reliability

- Automatic air valve enables the release of dissolved air that accumulates in the pipeline. The valve releases the air at normal operation pressures of the pipeline
- Air outlet opening mechanism
- The Hydraulic sealing of the orifice provides a drip-tight closure at a pressure of 2mwc (3psi)

### → Superior design

Large orifice, compare to other automatic valves in the market

### → High durability

- Float material made of naturally buoyant material
- Float mechanism activates a sealing stripe, that closes the outlet when the water will fill the valve body

## / Specifications & Recommendations

- **Operating Pressure** – 0.1bar / 1.5psi to 16bar / 230psi
- **Maximal Water Temp. for Continuous Operation** – 60°C / 140°F
- **Maximal Water Temp. for Intermittent Operation** – 80°C / 175°F
- **1/2", 3/4", 1" BSP or NPT threaded base** - as per the customer's choice
- **Structure Materials** –  
Cover - GRP (UV resistant) / polypropylene  
Base - GRP / polypropylene or brass
- **Internal Parts** – Corrosion-resistant, reinforced plastic materials and synthetic rubber
- The valve allows the discharge of 40m³/h / 24CFM of air at pipe pressure of 6bar / 90psi

## → Technical Dimensions

| Valve                 | 12mm / 1/2"          |                     | 20mm / 3/4"          |                     | 25mm / 1"            |                     |
|-----------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| Dimension             | SI                   | US                  | SI                   | US                  | SI                   | US                  |
| H - Height            | 147mm                | 5 3/4"              | 147mm                | 5 3/4"              | 147mm                | 5 3/4"              |
| W - Width             | 86mm                 | 3 1/3"              | 86mm                 | 3 1/3"              | 86mm                 | 3 1/3"              |
| D - Thread            | 1/2" BSP             | 1/2" NPT            | 3/4" BSP             | 3/4" NPT            | 1" BSP               | 1" NPT              |
| A - Nozzle Area       | 12.85mm <sup>2</sup> | 0.02in <sup>2</sup> | 12.85mm <sup>2</sup> | 0.02in <sup>2</sup> | 12.85mm <sup>2</sup> | 0.02in <sup>2</sup> |
| L - Total Width       | 110mm                | 4 1/3"              | 110 mm               | 4 1/3"              | 110 mm               | 4 1/3"              |
| E - Drainage Diameter | 1/4" BSP             | 1/4" BSP            | 1/4" BSP             | 1/4" BSP            | 1/4" BSP             | 1/4" BSP            |
| Weight                | 400g                 | 0.88lbs.            | 400g                 | 0.88lbs.            | 400g                 | 0.88lbs.            |

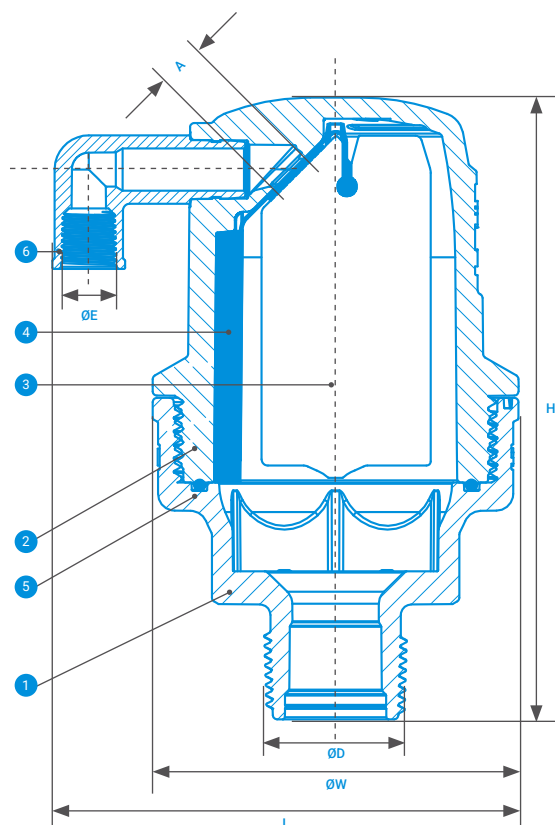
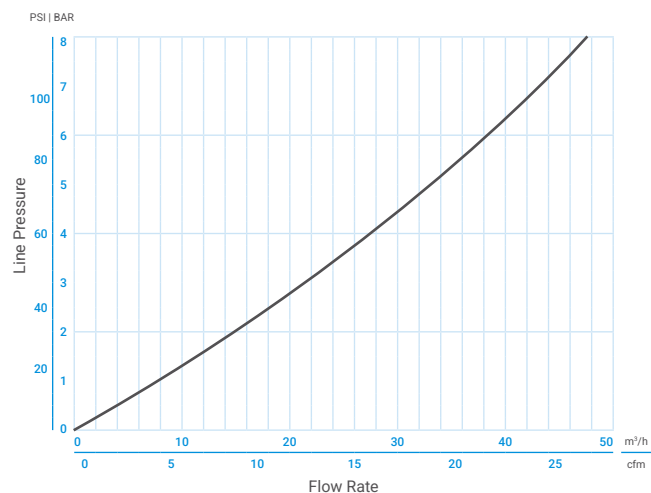
## → Material Specifications

| # | Part Name      | Material                                                 |
|---|----------------|----------------------------------------------------------|
| 1 | Base           | Glass reinforced nylon<br>Optional: brass, polypropylene |
| 2 | Bonnet         | Glass reinforced nylon<br>Optional: polypropylene        |
| 3 | Float          | Foamed polypropylene                                     |
| 4 | Seal           | EPDM                                                     |
| 5 | O-ring         | NBR                                                      |
| 6 | Drainage elbow | Polypropylene                                            |

## → Head Loss

Discharge data (Free air flow) Small Nozzle

1/2", 3/4", 1", 2"



## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| NAVD  | 1/2"     | BSP        | PN10          | 32600-006010   |
|       | 1/2"     | NPT        | PN10          | 32600-006020   |
|       | 1/2"     | BSP        | PN16          | 32600-006030   |
|       | 1/2"     | NPT        | PN16          | 32600-006040   |
|       | 3/4"     | BSP        | PN10          | 32600-006011   |
|       | 3/4"     | NPT        | PN10          | 32600-006021   |
|       | 3/4"     | BSP        | PN16          | 32600-006031   |
|       | 3/4"     | NPT        | PN16          | 32600-006041   |
|       | 1"       | BSP        | PN10          | 32600-006012   |
|       | 1"       | NPT        | PN10          | 32600-006022   |
|       | 1"       | BSP        | PN16          | 32600-006013   |
|       | 1"       | NPT        | PN16          | 32600-006023   |

# SG10

## AUTOMATIC AIR VALVE

The Automatic Air Release Valve releases accumulated air from the system while it is under pressure. The presence of air in a water system can reduce the effective cross sectional flow area resulting in increased head loss and decreased flow.



High  
durability



Superior  
design



Versatility

## / Benefits & Features

- |                           |                                                                                                                                                                                                                                                                                                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → High durability         | Body and parts made of specially selected corrosion- resistant and high-strength composite materials                                                                                                                                                                                                                       |
| → Superior design         | <ul style="list-style-type: none"><li>- Larger orifice to enable the release of air at higher flow rates than other valves of its kind</li><li>- Rolling seal mechanism makes it less sensitive to different pressures than a direct float seal</li><li>- Discharge outlet enables the connection of a vent pipe</li></ul> |
| → Versatility             | One size orifice for a wide pressure range (from 0.2 up to 10/16bar)                                                                                                                                                                                                                                                       |
| → Self-cleaning mechanism | Dramatically reduces obstruction caused by debris                                                                                                                                                                                                                                                                          |
| → Durable                 | Lightweight, simple and reliable structure with body made of high strength composite materials                                                                                                                                                                                                                             |

## / Specifications & Recommendations

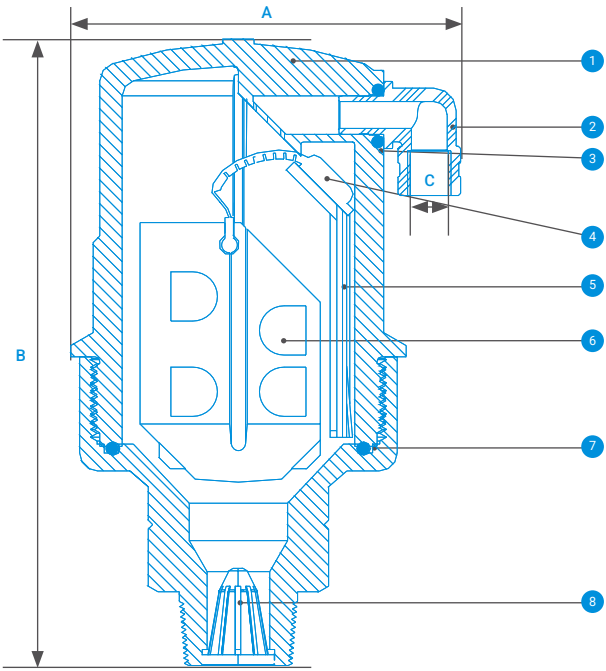
- Working Pressure Range – 0.1 - 10bar
- Test pressure for the air valve is 1.5 times its working pressure
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

→ Technical Dimensions

| Dimensions (mm) |     | Connection      | Weight (gr.) | Orifice Area (mm <sup>2</sup> ) |
|-----------------|-----|-----------------|--------------|---------------------------------|
| A               | B   | C               |              |                                 |
| 100             | 140 | 1/8" BSP female | 0.3          | 12                              |

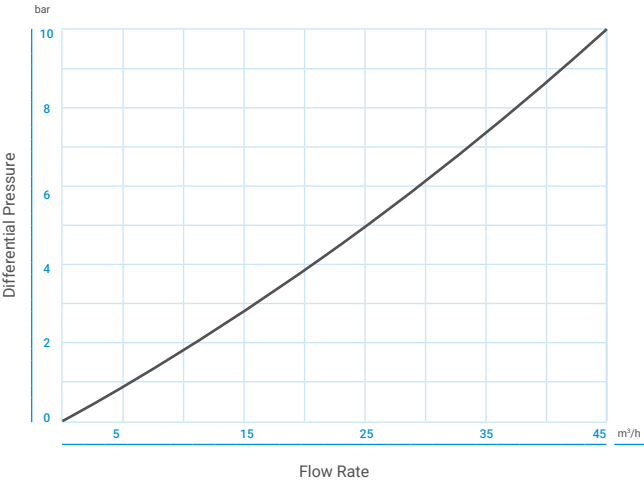
→ Material Specifications

| # | Part Name          | Material                 |
|---|--------------------|--------------------------|
| 1 | Cover              | Reinforced nylon         |
| 2 | Air release outlet | Polypropylene            |
| 3 | O-ring             | BUNA-N                   |
| 4 | Rolling seal       | EPDM                     |
| 5 | Clamping stem      | Reinforced nylon         |
| 6 | Float              | Foamed polypropylene     |
| 7 | O-ring             | BUNA-N                   |
| 8 | Base               | Reinforced nylon / brass |
| 9 | Strainer           | Nylon                    |

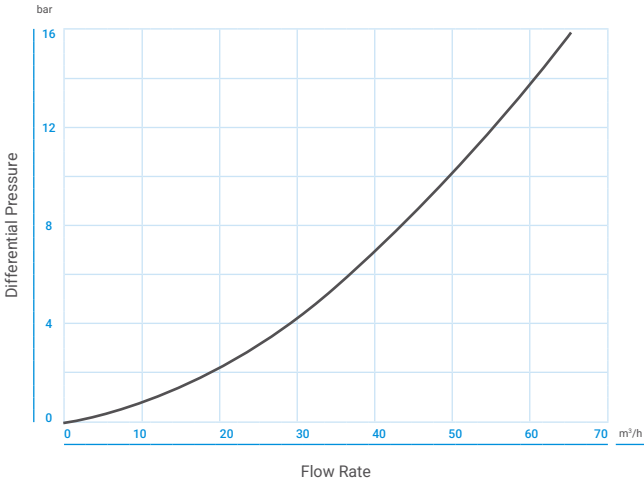


→ Head Loss

Air & Vacuum Flow Rate



Automatic Air Release Flow Rate



→ Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| SG10  | 1/2"     | BSP        | PN10          | 70440-001350   |
|       | 3/4"     | BSP        | PN10          | 70440-001450   |
|       | 1"       | BSP        | PN10          | 70440-001550   |

# S50

## AUTOMATIC AIR VALVE

Automatic air release valve releases accumulated air from the system while it is under pressurized. The presence of air in a water system can reduce the effective cross-sectional flow area resulting in increased head loss and decreased flow.



High  
durability



Superior  
design



Versatility

## / Benefits & Features

- |                           |                                                                                                                                                                                                                                                                                                                            |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → High durability         | Body and parts made of specially selected corrosion- resistant and high-strength composite materials                                                                                                                                                                                                                       |
| → Superior design         | <ul style="list-style-type: none"><li>- Larger orifice to enable the release of air at higher flow rates than other valves of its kind</li><li>- Rolling seal mechanism makes it less sensitive to different pressures than a direct float seal</li><li>- Discharge outlet enables the connection of a vent pipe</li></ul> |
| → Versatility             | One size orifice for a wide pressure range (from 0.2 up to 10/16bar)                                                                                                                                                                                                                                                       |
| → Self-cleaning mechanism | Dramatically reduces obstruction caused by debris                                                                                                                                                                                                                                                                          |
| → Robust                  | Lightweight, simple and reliable structure with body made of high strength composite materials                                                                                                                                                                                                                             |

## / Specifications & Recommendations

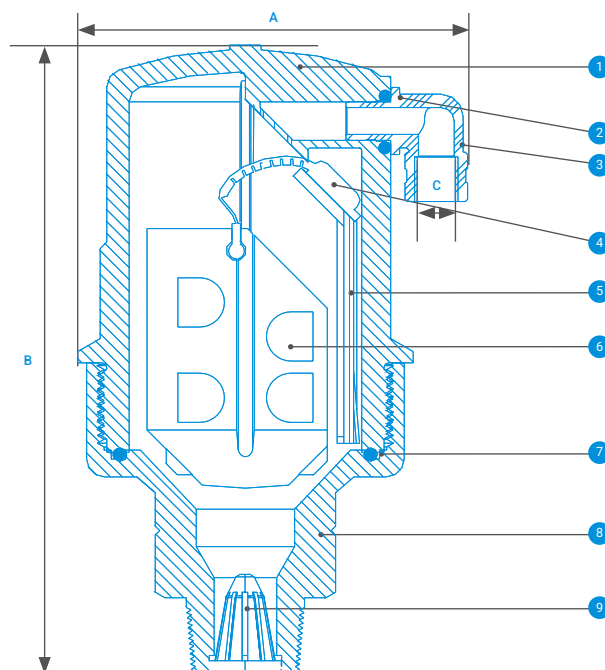
- Working Pressure Range – 0.2 - 16bar
- Test pressure for the air valve is 1.5 times its working pressure
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

## → Technical Dimensions

| Dimensions (mm) |     | Connection      | Weight (gr) | Orifice Area (mm <sup>2</sup> ) |
|-----------------|-----|-----------------|-------------|---------------------------------|
| A               | B   | C               |             |                                 |
| 87              | 143 | 1/8" BSP female | 0.3         | 12                              |

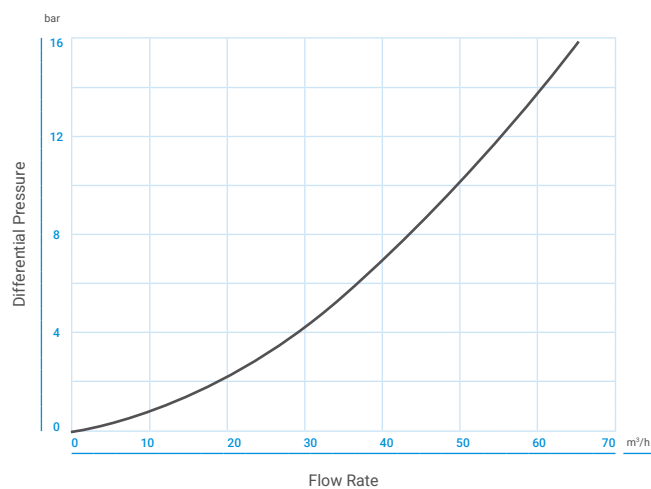
## → Material Specifications

| # | Part Name          | Material                 |
|---|--------------------|--------------------------|
| 1 | Body               | Reinforced nylon         |
| 2 | Air release outlet | Polypropylene            |
| 3 | O-ring             | BUNA-N                   |
| 4 | Rolling seal       | EPDM                     |
| 5 | Clamping stem      | Reinforced nylon         |
| 6 | Float              | Foamed polypropylene     |
| 7 | O-ring             | BUNA-N                   |
| 8 | Base               | Reinforced nylon / brass |
| 9 | Strainer           | Nylon                    |

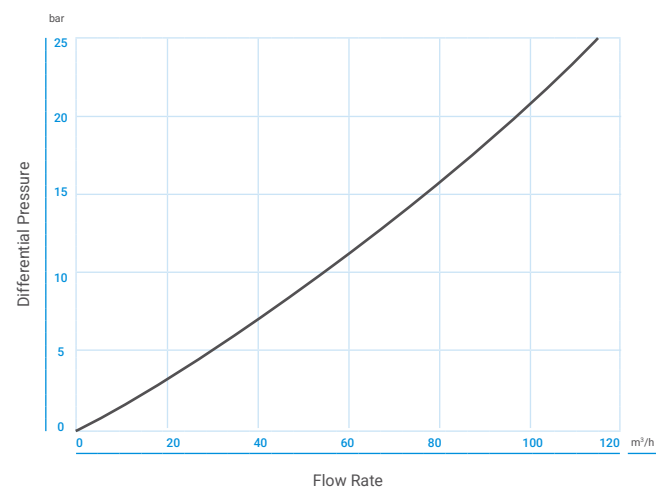


## → Head Loss

PN 16 Automatic Air Release Flow Rate



PN 25 Automatic Air Release Flow Rate



## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| S50   | 1/2"     | BSP        | PN16          | 70440-001300   |
|       | 3/4"     | BSP        | PN16          | 70440-001400   |
|       |          | NPT        | PN16          | 70561-003610   |
|       | 1"       | BSP        | PN16          | 70440-001500   |
|       |          | NPT        | PN16          | 70561-003900   |

# NAVc

## COMBINATION AIR VALVE

This valve has been designed for efficient discharge and intake of air in water transport systems, filtering systems, containers, and other places where confined air could impair the system's operation.



PN-10

PN-16



High  
durability



Superior  
design



Efficient air  
relief

## / Benefits & Features

- **Reliable**      Leak-proof sealing at all conditions, including low system pressure
- **Superior design**
  - The aerodynamic design of the float provides air flow at a very high velocity
  - Threaded outlet elbow allows various possibilities of drain connection
- **Easy maintenance**      The valve design contains a very limited number of parts, allowing easy dismantling for maintenance

## / Specifications & Recommendations

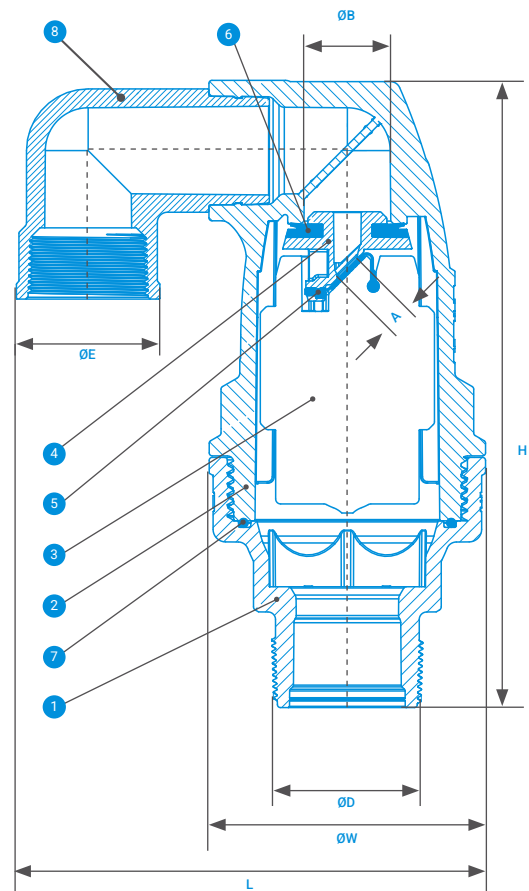
- **Operating Pressure** – 0.1bar / 1.5psi to 16bar / 230psi
- **Maximal Water Temp. for Continuous Operation** – 60°C / 140°F
- **Maximal Water Temp. for Intermittent Operation** – 80°C / 175°F
- **1/2", 3/4", 1", 2" BSP or NPT threaded base** - as per the customer's choice
- **Structure Materials** –
  - Cover - GRP (UV resistant) / polypropylene
  - Base - GRP / polypropylene or brass
- **Internal Parts** – Corrosion-resistant, plastic materials and synthetic rubber
- **At Pipe Pressure of 0.5bar / 7psi** –
  - The 2"/50mm valve allows the discharge of 260m³/h / 153CFM of air
  - The 1"/25mm valve allows the discharge of 60m³/h / 35CFM of air

## → Technical Dimensions

| Valve                   | 12 mm / ½" |          | 20 mm / ¾" |          | 25 mm / 1" |          | 50 mm / 2" |          |
|-------------------------|------------|----------|------------|----------|------------|----------|------------|----------|
| Dimension               | SI         | US       | SI         | US       | SI         | US       | SI         | US       |
| H - Height              | 183mm      | 7¼"      | 183mm      | 7¼"      | 183mm      | 7¼"      | 249mm      | 9⅞"      |
| W - Width               | 86mm       | 3⅓"      | 86mm       | 3⅓"      | 86mm       | 3⅓"      | 110mm      | 4⅓"      |
| D - Thread              | ½" BSP     | ½" NPT   | ¾" BSP     | ¾" NPT   | 1" BSP     | 1" NPT   | 2" BSP     | 2" NPT   |
| A - Nozzle Area         | 12.85mm²   | 0.02in²  | 12.85mm²   | 0.02in²  | 12.85mm²   | 0.02in²  | 12.85mm²   | 0.02in²  |
| K - Kinetic Nozzle Area | 314mm²     | 0.49in²  | 314mm²     | 0.49in²  | 314mm²     | 0.49in²  | 908mm²     | 1.41in²  |
| L - Total Width         | 134mm      | 5¼"      | 134mm      | 5¼"      | 134mm      | 5¼"      | 187mm      | 7⅜"      |
| E - Drainage Diameter   | ¾" BSP     | ¾" BSP   | ¾" BSP     | ¾" BSP   | ¾" BSP     | ¾" BSP   | 1½" BSP    | 1½" BSP  |
| Weight                  | 470g       | 1.04lbs. | 470g       | 1.04lbs. | 470g       | 1.04lbs. | 1052g      | 2.32lbs. |

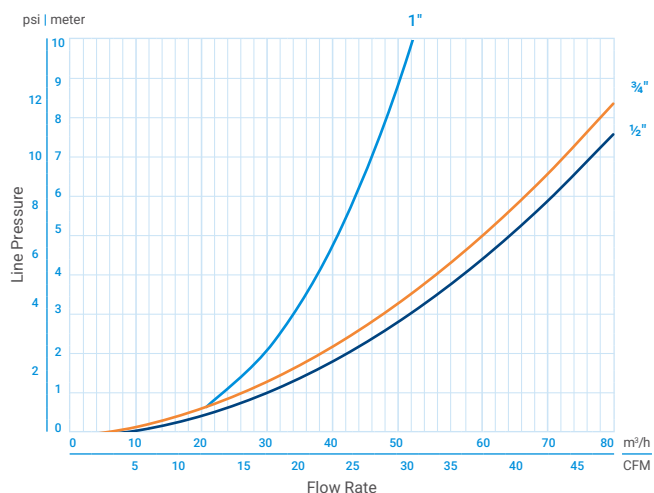
## → Material Specifications

| # | Part Name      | Material                                                 |
|---|----------------|----------------------------------------------------------|
| 1 | Body           | Glass reinforced nylon<br>Optional: brass, polypropylene |
| 2 | Bonnet         | Glass reinforced nylon<br>Optional: polypropylene        |
| 3 | Float          | Foamed polypropylene                                     |
| 4 | Slider         | Glass reinforced nylon                                   |
| 5 | Automatic seal | EPDM                                                     |
| 6 | Kinetic seal   | EPDM                                                     |
| 7 | O-ring         | NBR                                                      |
| 8 | Drainage elbow | Polypropylene                                            |

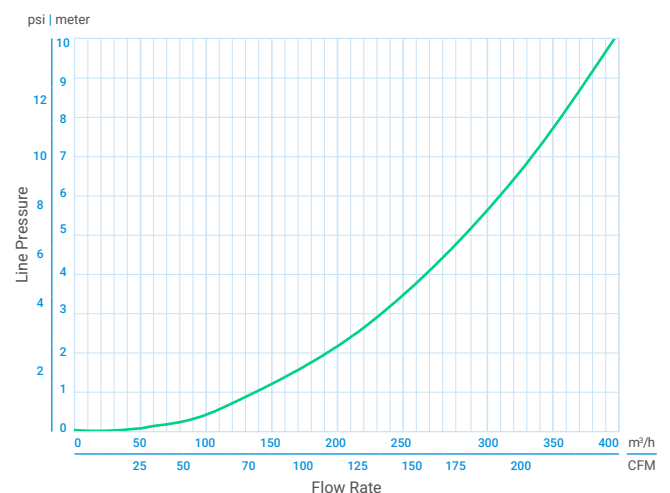


## → Head Loss

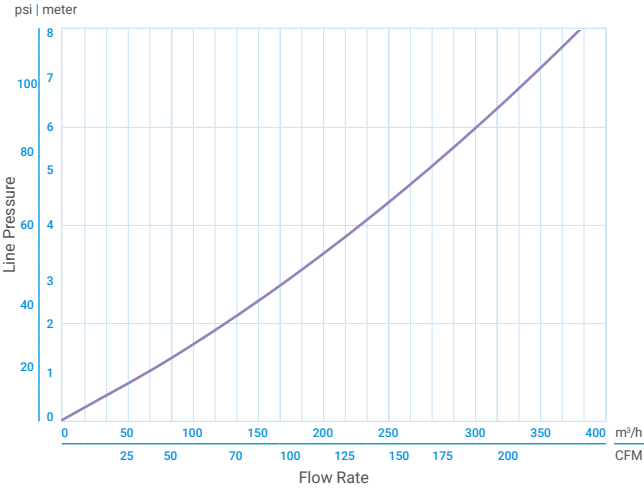
Discharge Data (Free Air Flow) - ½", ¾", 1"



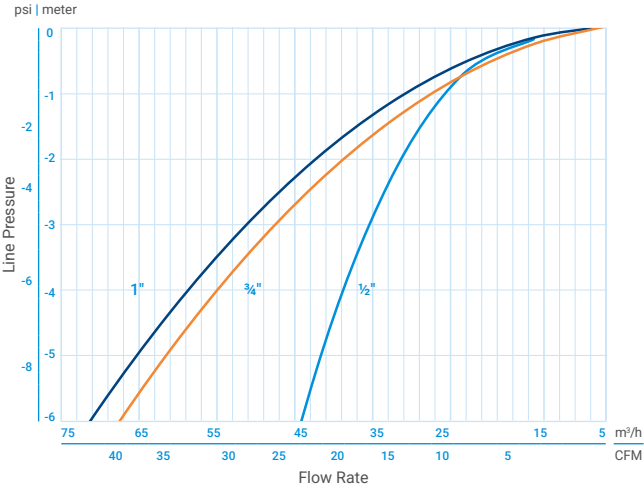
Discharge Data (Free Air Flow) - 2"



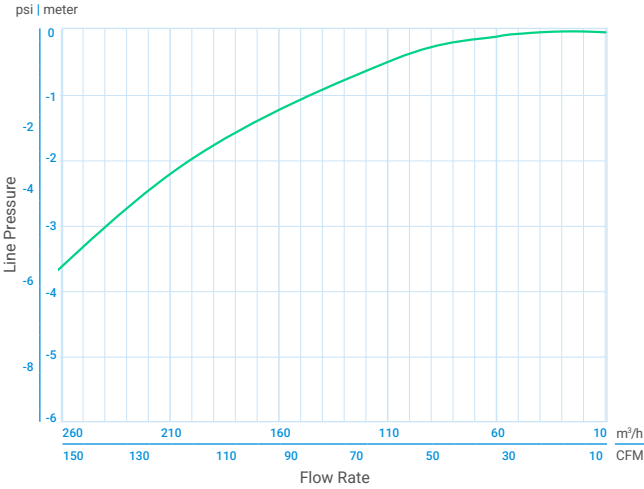
Discharge Data  
(Free Air Flow) Small Nozzle - 1/2", 3/4", 1", 2"



Inflow Data  
(Free Air Flow) - 1/2", 3/4", 1"



Inflow Data (Free Air Flow) - 2"



→ Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| NAVd  | 1/2"     | BSP        | PN10          | 32600-006060   |
|       | 1/2"     | NPT        | PN10          | 32600-006070   |
|       | 1/2"     | BSP        | PN16          | 32600-006065   |
|       | 1/2"     | NPT        | PN16          | 32600-006080   |
|       | 3/4"     | BSP        | PN10          | 32600-006061   |
|       | 3/4"     | NPT        | PN10          | 32600-006071   |
|       | 3/4"     | BSP        | PN16          | 32600-006063   |
|       | 3/4"     | NPT        | PN16          | 32600-006081   |
|       | 1"       | BSP        | PN10          | 32600-006062   |
|       | 1"       | NPT        | PN10          | 32600-006072   |
|       | 1"       | BSP        | PN16          | 32600-006066   |
|       | 1"       | NPT        | PN16          | 32600-006082   |
|       | 2"       | BSP        | PN10          | 32600-006064   |
|       | 2"       | NPT        | PN10          | 32600-006074   |
|       | 2"       | BSP        | PN16          | 32600-006067   |
|       | 2"       | NPT        | PN16          | 32600-006075   |

# DT40 (Mini)

## COMBINATION AIR VALVE WITH ORIFICE SHUT-OFF

Designed to prevent disturbances caused by presence or absence of air in small water supply systems. Combines an air & vacuum large orifice and an automatic small orifice in a single body.



DT040  
Regular



DT040  
Low Pressure



Superior  
design



Self-cleaning  
mechanism



Compact  
size

## / Benefits & Features

- **Superior design**
  - Innovative integral orifice shut-off valve enables the closure of the air valve orifices with no interference to water flow in the pipe
  - Allows high-velocity air discharge and preventing premature closure
  - Discharge outlet enables for the connection of a 10mm polyethylene discharge tube
- **Self-cleaning mechanism**
  - Dramatically reduces obstruction due to debris
- **Compact size**
  - Small structure. Weights only 144gr.
- **Flow option**
  - One-way

# / Specifications & Recommendations

- Working Pressure Range – 0.2 - 10bar / 0.05 - 6bar (LP model)
- Testing Pressure – 16bar
- Working Temperature – 60°C
- Connections – Threaded 1/2", 3/4", 1" BSPT / NPT

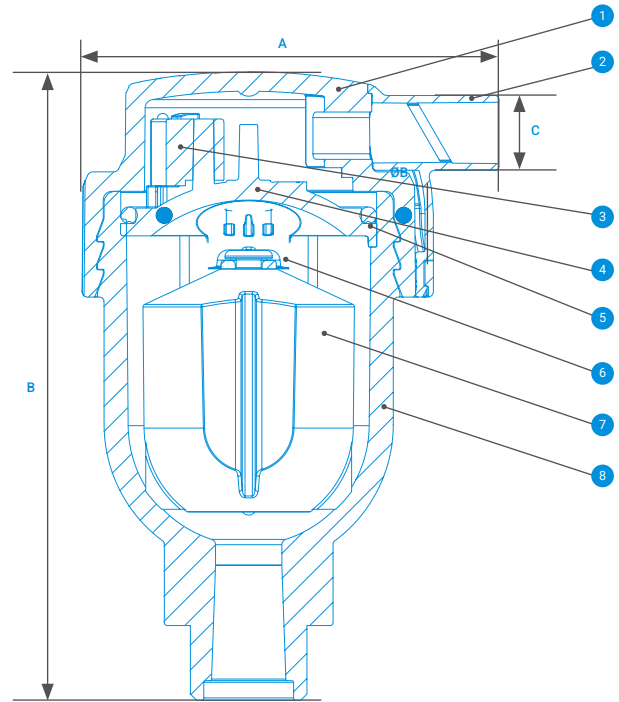
- Optional model DT-040 (max. working pressure 10bar)
- Optional barbed and threaded connection for low pressure systems: model DT-040 LP (max. working pressure 6 bar)

## → Technical Dimensions

| Dimensions (mm) |     |    | Weight Gr. | Orifice Area (mm <sup>2</sup> ) |     |
|-----------------|-----|----|------------|---------------------------------|-----|
| A               | B   | C  |            | Auto.                           | a/v |
| 60              | 115 | 11 | 144        | 5.6                             | 4.2 |

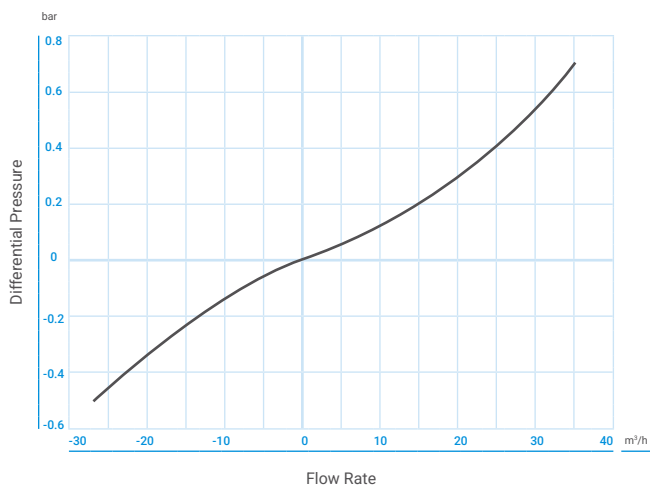
## → Material Specifications

| # | Part Name              | Material             |
|---|------------------------|----------------------|
| 1 | Cover & shut-off valve | Acetal               |
| 2 | Discharge outlet       | Acetal               |
| 3 | Flat plug              | EPDM                 |
| 4 | Seat                   | Polypropylene        |
| 5 | O-ring                 | BUNA-N               |
| 6 | Seal                   | EPDM                 |
| 7 | Float                  | Foamed polypropylene |
| 8 | Body                   | Polypropylene        |

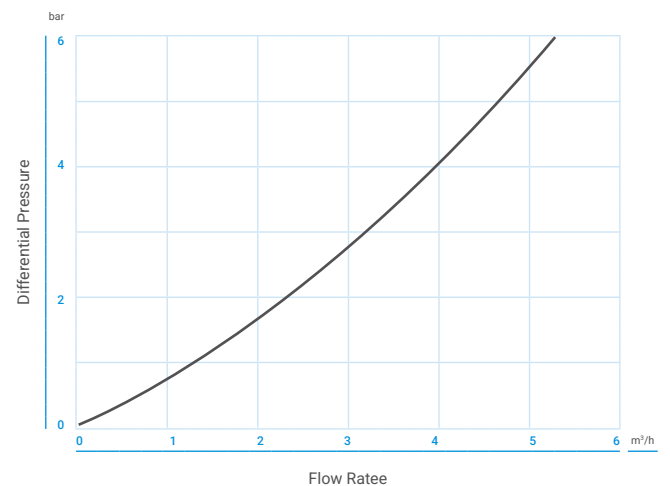


## → Head Loss

### Air & Vacuum Flow Rate



### Automatic Air Release Flow Rate



## → Catalog Numbers

| Model  | Diameter | Connection | Max. Pressure | Catalog Number |
|--------|----------|------------|---------------|----------------|
| DT40   | 1/2"     | BSP        | PN10          | 70500-001255   |
|        | 1/2"     | NPT        | PN10          | 70561-000800   |
|        | 3/4"     | BSP        | PN10          | 70500-001260   |
| DT40LP | 1/2"     | BSP        | PN6           | 70500-001270   |
|        | 3/4"     | BSP        | PN6           | 70500-001272   |

# DG10 / D40

## COMBINATION AIR VALVE

The Combination Air Valve has the features of both an air release valve and an air & vacuum valve. The air release component is designed to automatically release small pockets of air to the atmosphere as they accumulate at peaks or along a pipeline or piping system when it is full and operating under pressure.



DG 10 (PN10)



D40 (PN16)



Maximum  
reliability



Superior  
design



Ease of use

## / Benefits & Features

- |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → Maximum reliability   | Reduces water hammer incidents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| → Superior design       | Allows for high velocity air discharge while preventing premature closure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| → Ease of use           | Lightweight, simple and reliable structure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| → Discharge outlet      | The discharge outlet enables removal of excess fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| → Automatic air release | <p>The large size of the automatic air release orifice relative to the air valve body:</p> <ul style="list-style-type: none"><li>- Discharges air at high flow rates</li><li>- Lessens the danger of its obstruction by debris</li><li>- Enables the usage of the patented rolling seal mechanism, making it less sensitive to pressure differential than a direct float seal</li><li>- The body is made of high-strength composite materials and all operating parts are made of specially selected, corrosion-resistant materials</li><li>- Due to its light weight, the valve may be installed on plastic piping systems, as well as other lightweight piping systems</li></ul> |

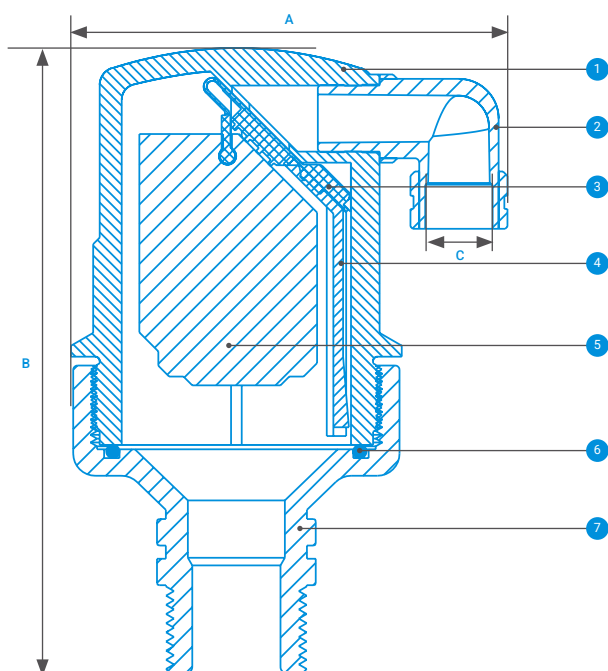
# / Specifications & Recommendations

- Working Pressure Range – DG10: 0.1-10bar / D40: 0.2-16bar
- Testing Pressure – DG10: 16bar / D40: 25bar
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

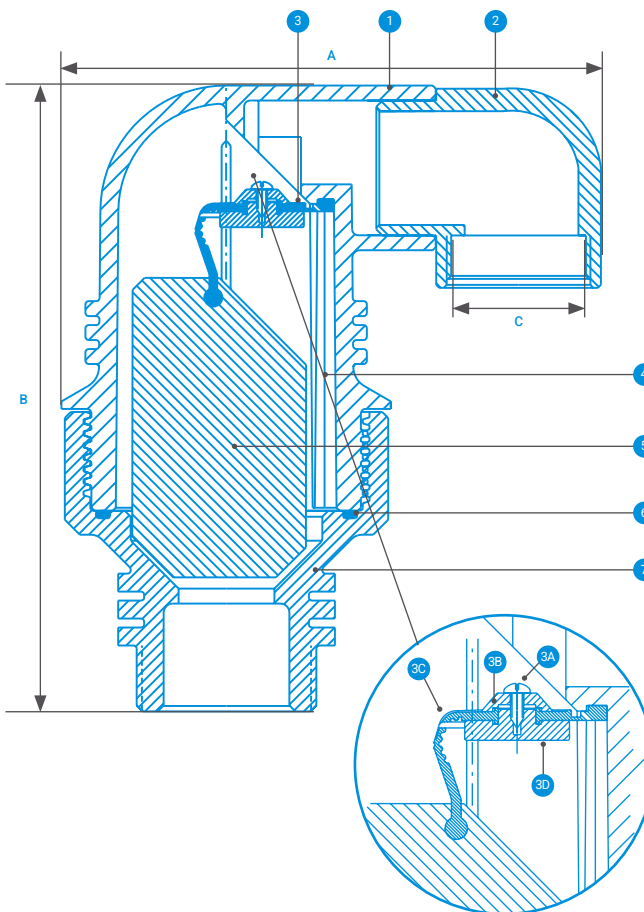
## → Technical Dimensions

| Nominal Size   | Dimensions (mm) |     | Connections (mm)  | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |     |
|----------------|-----------------|-----|-------------------|-------------|---------------------------------|-----|
|                | A               | B   |                   |             | auto.                           | a/v |
| 1/2", 3/4", 1" | 100             | 143 | 3/8" BSP female   | 0.33        | 7.8                             | 100 |
| 2"             | 183             | 215 | 1 1/2" BSP female | 1.10        | 12                              | 804 |

1/2", 3/4", 1" Model



2" Model

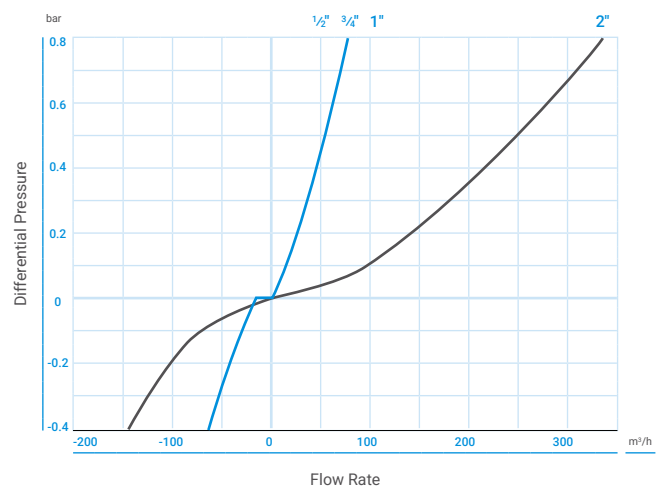


## → Material Specifications

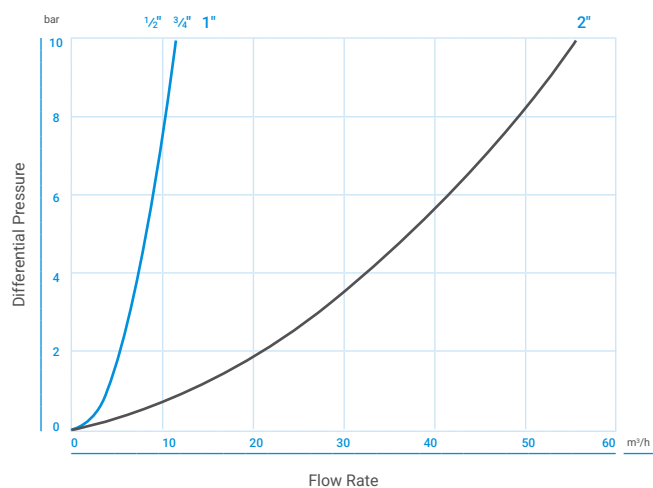
| #                         | Part Name                   | Material                                       |
|---------------------------|-----------------------------|------------------------------------------------|
| 1                         | Body                        | Reinforced nylon                               |
| 2                         | Discharge outlet            | Polypropylene                                  |
| 3                         | 1/2", 3/4", 1" Rolling seal | EPDM                                           |
| 2" rolling seal assembly: |                             |                                                |
| 3a                        | Screws                      | Stainless steel 304                            |
| 3b                        | Plug cover                  | Reinforced nylon                               |
| 3c                        | Rolling seal                | EPDM                                           |
| 3d                        | Plug                        | Reinforced nylon                               |
| 4                         | Clamping stem               | Reinforced nylon                               |
| 5                         | Float                       | Foamed polypropylene                           |
| 6                         | O-ring                      | BUNA-N                                         |
| 7                         | Base                        | Reinforced nylon / brass / stainless steel 316 |
| 8                         | Optional: ball valves       | Brass nickel plated                            |

## → Head Loss

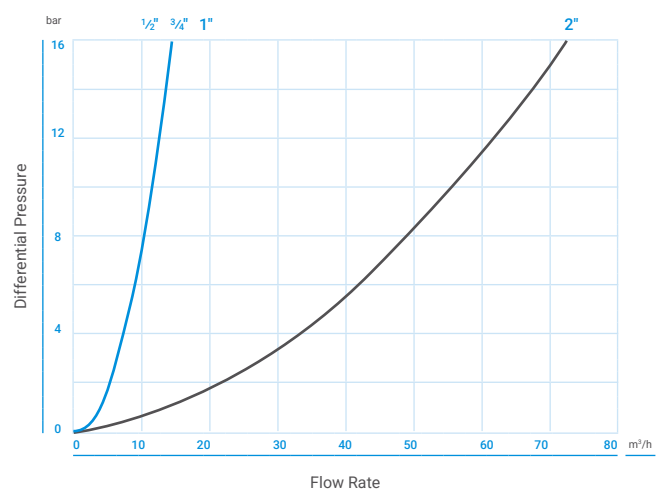
### Air & Vacuum Flow Rate



### GD10 / PN 10 Automatic Air Release Flow Rate



### D40 / PN 16 Automatic Air Release Flow Rate



## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| DG10  | 3/4"     | BSP        | PN10          | 70500-000520   |
|       |          | NPT        | PN10          | 70561-001050   |
|       | 1"       | BSP        | PN10          | 70500-000650   |
|       |          | NPT        | PN10          | 70561-001200   |
|       |          | NPT        | PN10          | 70561-001660   |
|       |          | BSP        | PN10          | 70500-001170   |
| D40   | 3/4"     | BSP        | PN16          | 70500-000500   |
|       |          | NPT        | PN16          | 70561-000850   |
|       | 1"       | BSP        | PN16          | 70500-000600   |
|       |          | NPT        | PN16          | 70561-001240   |
|       | 2"       | BSP        | PN16          | 70500-001100   |
|       |          | NPT        | PN16          | 70561-001400   |

# D40L

## COMBINATION AIR VALVE FOR SMALL SUSPENDED SOLIDS

Features of both an air release valve and an air & vacuum valve in a single body. This air valve is specifically designed to operate with liquids containing small suspended solids.



D-040L PP  
Model



D-040L 2"  
Model



High  
durability



Light



Superior  
design

## / Benefits & Features

### → High durability

- Lightweight, simple, and reliable structure
- Body and all operating parts are made of specially selected, corrosion-resistant materials

### → Light

Enables valve to be installed on plastic piping systems or other lightweight piping systems

### → Superior design

- Allows for high-capacity air discharge while preventing premature closure
- Discharge outlet enables the connection of a vent pipe
- The large size of the automatic air release orifice relative to the air valve body releases air at high flow rates, lessens the danger of its obstruction by debris, and the valve's rolling seal mechanism design is less sensitive to different pressures than a direct float seal
- Air gap building separates the liquids with suspended particles from the sealing mechanism

# / Specifications & Recommendations

- **Working Pressure Range – Polypropylene:**  
0.02 - 10bar, St.St. 316 / duplex / reinforced nylon / PVDF: 0.05 - 16bar
- **Testing Pressure – 1.5 times the maximum working pressure**
- **Maximum Working Temperature – 60°C**
- **Maximum Intermittent Temperature – 90°C**

## → Technical Dimensions

PP / Nylon / PVDF

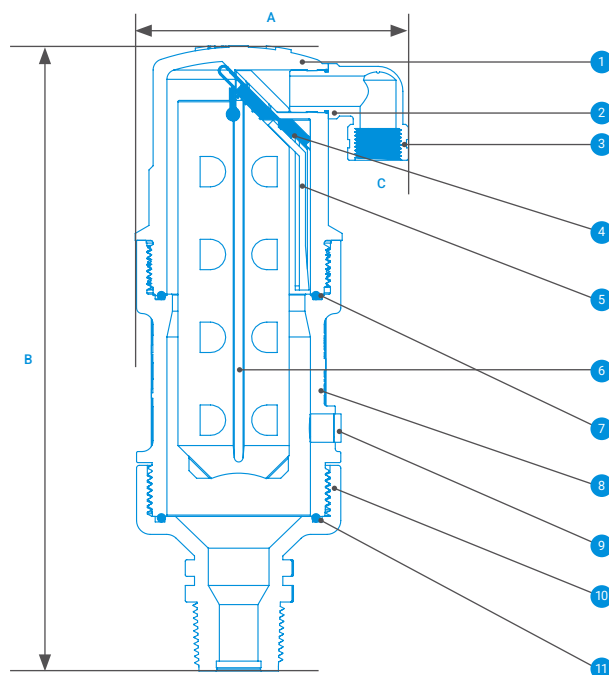
| Model 1/2", 3/4", 1" | Dimensions (mm) |     | Connection       | Weight (gr) | Orifice Area (mm²) |     |
|----------------------|-----------------|-----|------------------|-------------|--------------------|-----|
|                      | A               | B   |                  |             | auto               | a/v |
| pp / NYLON / PVDF    | 99              | 227 | 3/8" BSP female  | 0.6         | 100                | 7.8 |
| STST / duplex        | 94              | 216 | 3/8" BSPT female | 1.7         | 100                | 7.8 |

## → Material Specifications

PP / Nylon / PVDF

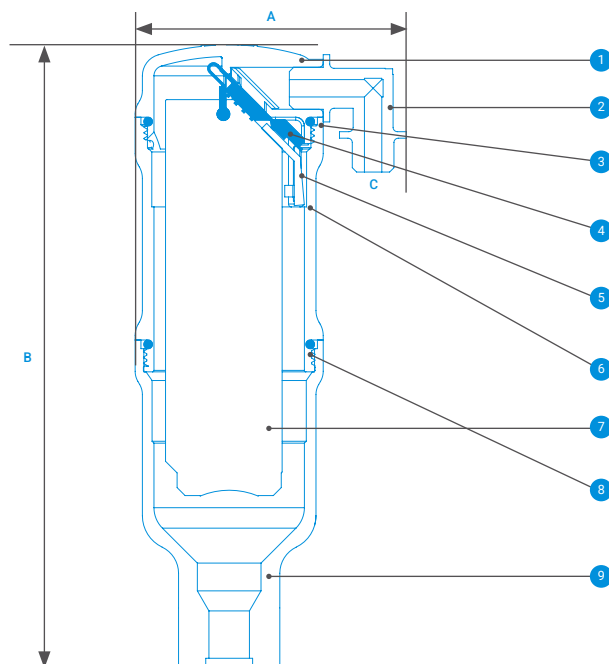
| #  | Part Name              | Material                                |
|----|------------------------|-----------------------------------------|
| 1  | Body                   | Polypropylene / reinforced nylon / PVDF |
| 2  | O-ring                 | BUNA-N / viton / EPDM                   |
| 3  | Discharge outlet       | Polypropylene                           |
| 4  | Rolling seal           | EPDM / viton                            |
| 5  | Clamping stem          | Polypropylene                           |
| 6  | Float                  | Foamed polypropylene                    |
| 7  | O-ring                 | BUNA-N / viton / EPDM                   |
| 8  | Extension              | Polypropylene / reinforced nylon / pvdf |
| 9  | Closed port* (default) |                                         |
| 10 | Base                   | Polypropylene / reinforced nylon / PVDF |
| 11 | O-ring                 | Buna-n / viton                          |

\* Optional: Open Port / Schrader Valve / Plug



STST / Duplex

| # | Part Name          | Material                     |
|---|--------------------|------------------------------|
| 1 | Cover              | Stainless steel 316 / duplex |
| 2 | Air release outlet | Polypropylene                |
| 3 | O-ring             | Buna-n / viton / EPDM        |
| 4 | Rolling seal       | EPDM / viton                 |
| 5 | Clamping stem      | Reinforced nylon             |
| 6 | Extension          | Stainless steel 316 / duplex |
| 7 | Float              | Foamed polypropylene         |
| 8 | O-ring             | Buna-n / viton / EPDM        |
| 9 | Body               | Stainless steel 316 / duplex |



→ Technical Dimensions

2"

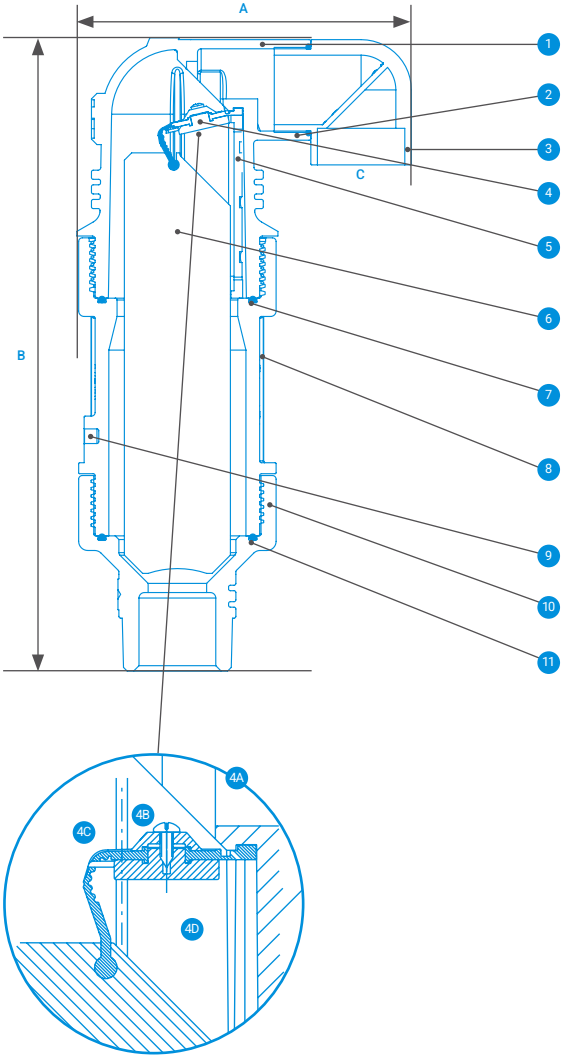
| Size | Dimensions (mm) |     | Connection      | Weight (gr) | Orifice Area (mm <sup>2</sup> ) |     |
|------|-----------------|-----|-----------------|-------------|---------------------------------|-----|
|      | A               | B   | C               |             | auto                            | a/v |
| 2"   | 99              | 227 | 3/8" bsp female | 0.6         | 100                             | 7.8 |

→ Material Specifications

2"

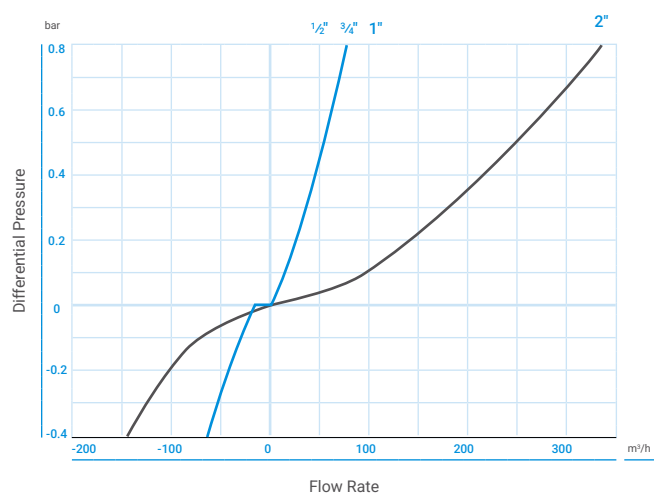
| #  | Part Name              | Material                                                      |
|----|------------------------|---------------------------------------------------------------|
| 1  | Body                   | Polypropylene / reinforced nylon / stainless steel 316 / PVDF |
| 2  | O-ring                 | BUNA-N / viton                                                |
| 3  | Discharge outlet       | Polypropylene                                                 |
| 4  | Rolling seal assembly  |                                                               |
| 4a | Screws                 | Stainless steel                                               |
| 4b | Plug cover             | Reinforced nylon                                              |
| 4c | Rolling seal           | EPDM                                                          |
| 4d | Plug                   | Reinforced nylon                                              |
| 5  | Clamping stem          | Polypropylene                                                 |
| 6  | Float                  | Foamed polypropylene                                          |
| 7  | O-ring                 | BUNA-N / viton                                                |
| 8  | Extension              | Polypropylene / reinforced nylon / stainless steel 316 / PVDF |
| 9  | Closed port* (default) |                                                               |
| 10 | Base                   | Polypropylene / reinforced nylon / stainless steel 316 / PVDF |
| 11 | O-ring                 | BUNA-N / viton                                                |

\* Optional: open port / Schrader valve / plug

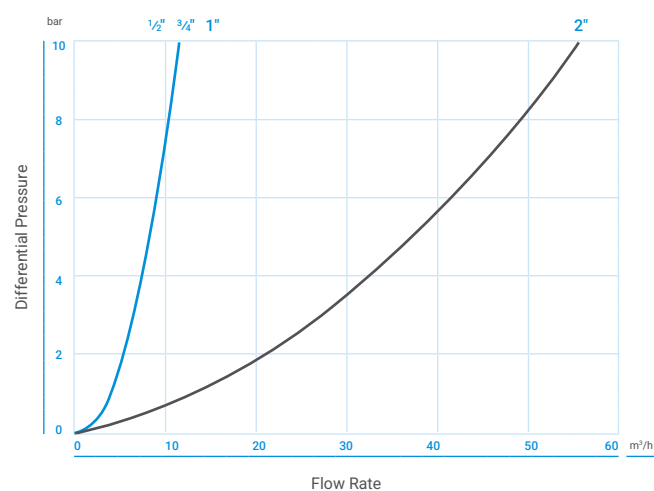


## → Head Loss

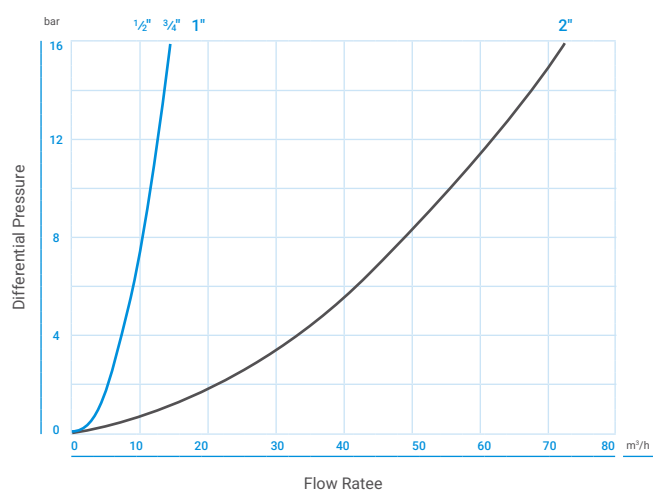
### Air & Vacuum Flow Rate



### Automatic Air Release Flow Rate



### Automatic Air Release Flow Rate



## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| D40L  | 1/2"     | NPT        | PN10          | 70561-000815   |
|       | 3/4"     | NPT        | PN10          | 70561-000050   |
|       | 1"       | NPT        | PN10          | 70561-000060   |
|       | 2"       | NPT        | PN10          | 70561-000100   |
| D40LP | 1"       | BSP        | PN10          | 70500-000590   |

# D43 (Pro)

## COMBINATION AIR VALVE

The Combination Air Valve has the features of both an air release valve and an air & vacuum valve. The air release component is designed to automatically release small pockets of air to the atmosphere as they accumulate along a pipeline or piping system when it is full and operating under pressure.



High  
durability



Superior  
design



Ease of  
maintenance

## / Benefits & Features

- High durability      Lightweight, simple and reliable structure
- Superior design      Allows for high-capacity air discharge while preventing premature closure
- Ease of maintenance      Minimum down-time– all operating parts are consolidated into one replaceable cartridge
- Reliable operation      Reduces water hammer incidents
- Discharge outlet      Enables the connection of a vent hose/pipe
- Automatic air release      The large size of the automatic air release orifice relative to the air valve body:
  - Discharges air at high flow rates
  - Lessens the danger of its obstruction by debris
  - Enables the usage of the rolling seal mechanism, making it less sensitive to pressure differential than a direct float seal
- Durable material      Body made of high-strength UV-protected composite and all operating parts of specially selected, corrosion-resistant materials
- Versatile installation      Due to its light weight, the valve may be installed on plastic piping systems, as well as other lightweight piping systems

# / Specifications & Recommendations

- Working Pressure Range – 1 - 10bar
- Testing pressure – 1.5 times the maximum working pressure of the air valve
- Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

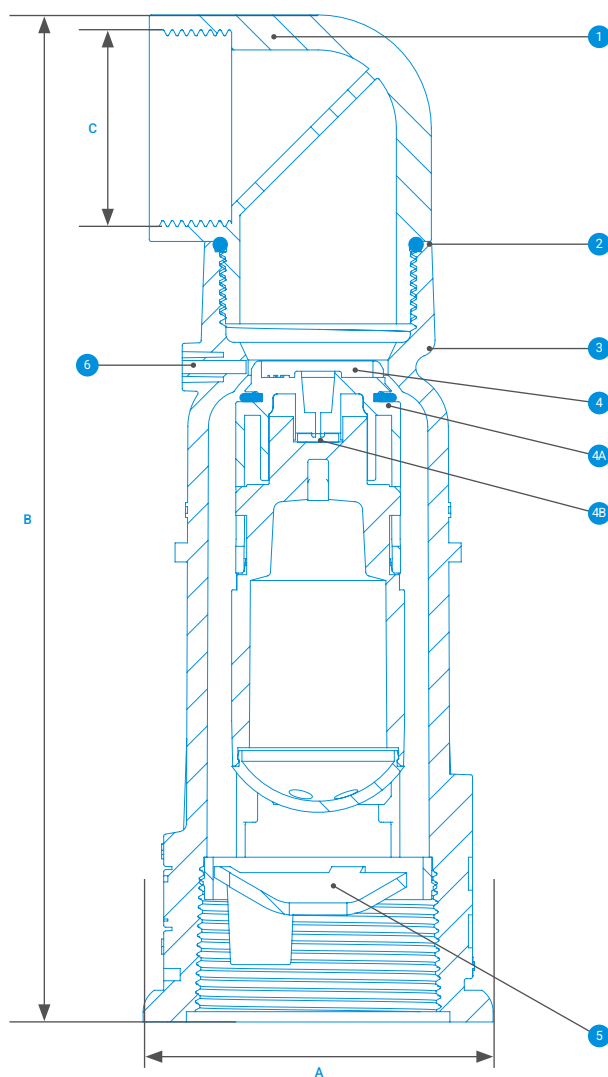
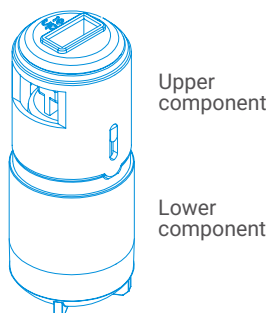
## → Technical Dimensions

| Model | Dimensions (mm) |     | Connections    | Weight (kg) |          | Orifice Area (mm <sup>2</sup> ) |      |
|-------|-----------------|-----|----------------|-------------|----------|---------------------------------|------|
|       | A               | B   | C              | Standard    | NS Model | auto                            | a/v  |
| 2"    | 85              | 245 | 1½" bsp female | 0.4         | 0.5      | 908                             | 11.7 |

## → Material Specifications

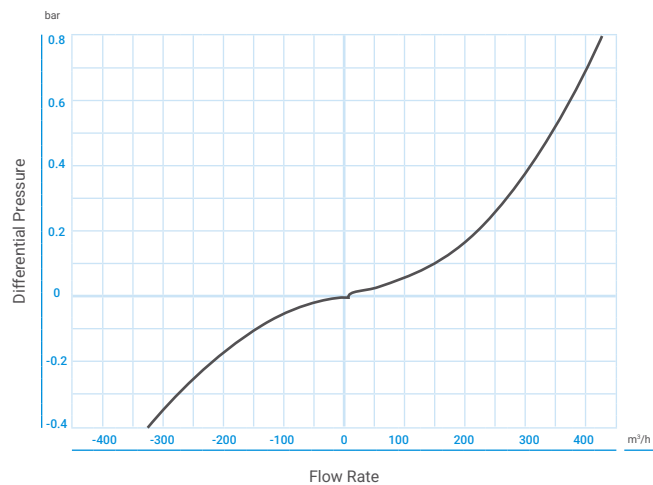
| #  | Part Name                | Material                      |
|----|--------------------------|-------------------------------|
| 1  | Discharge outlet         | Polypropylene                 |
| 2  | O-ring                   | BUNA-N                        |
| 3  | Body                     | Polypropylene                 |
| 4  | Float & seal assembly    | Polypropylene + acetal + EPDM |
| 4a | Air vacuum seal          | EPDM                          |
| 4b | Air release rolling seal | EPDM                          |
| 5  | Float lock               | Polypropylene                 |
| 6  | Upper drain outlet       |                               |

### Float & Seal Assembly

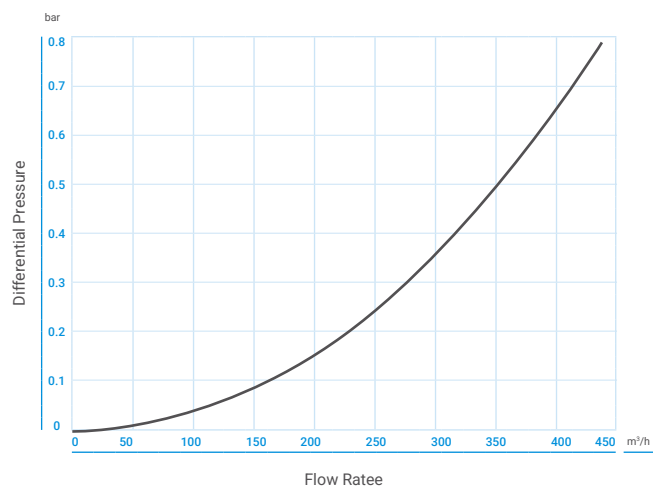


## → Head Loss

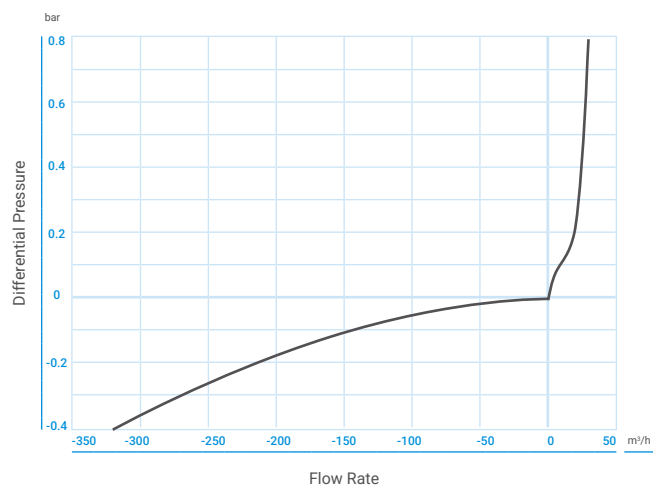
Air & Vacuum Flow Rate



D43 V Air & Vacuum Flow Rate

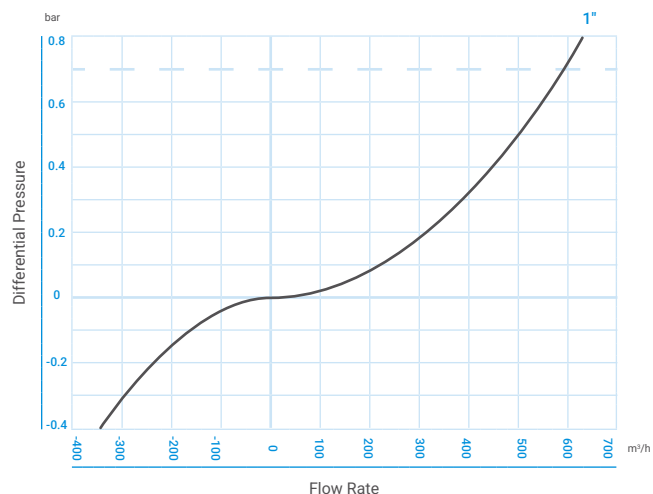


D43 NS Air & Vacuum Flow Rate

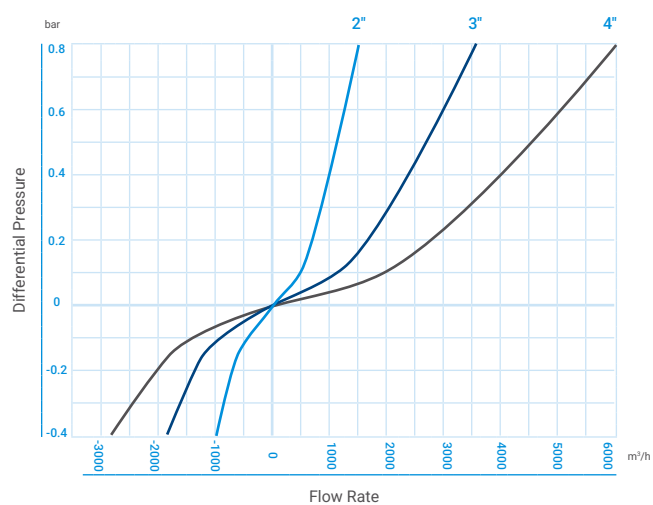
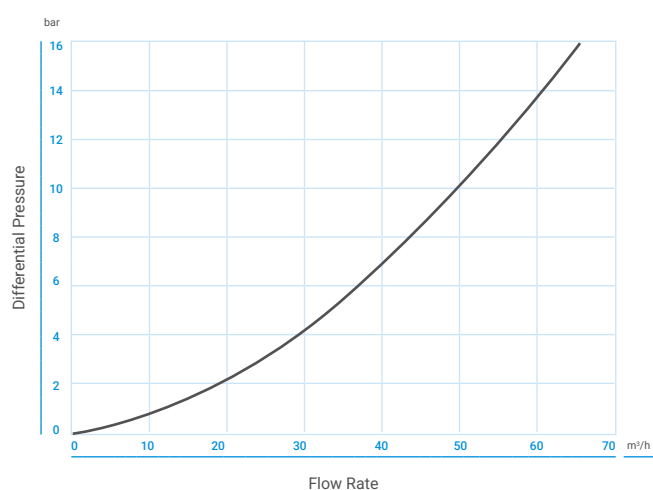


## → Head Loss

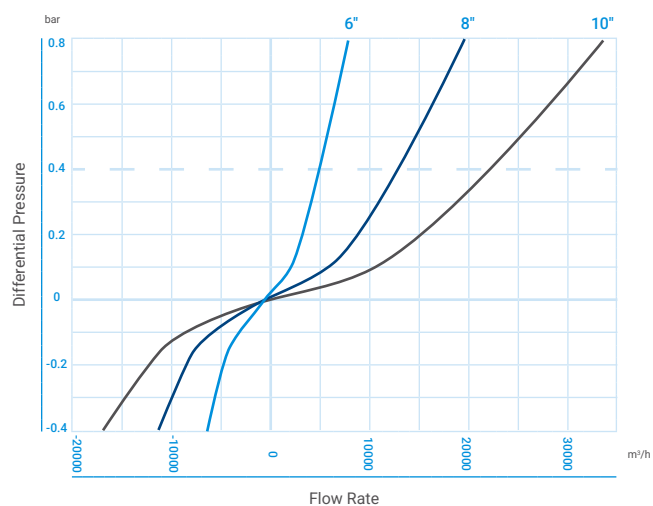
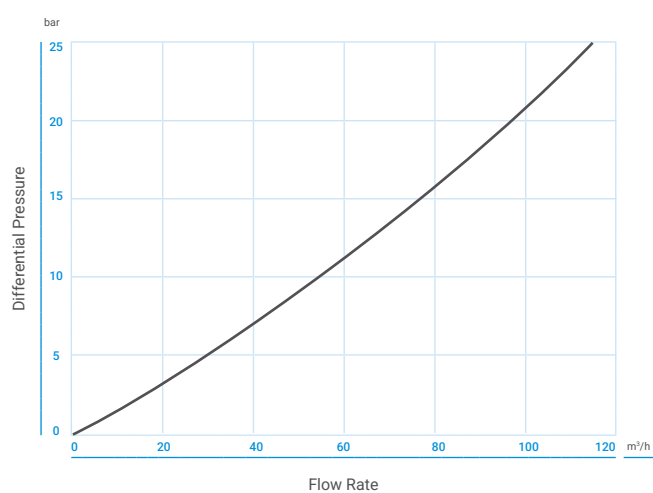
### Air & Vacuum Flow Rate



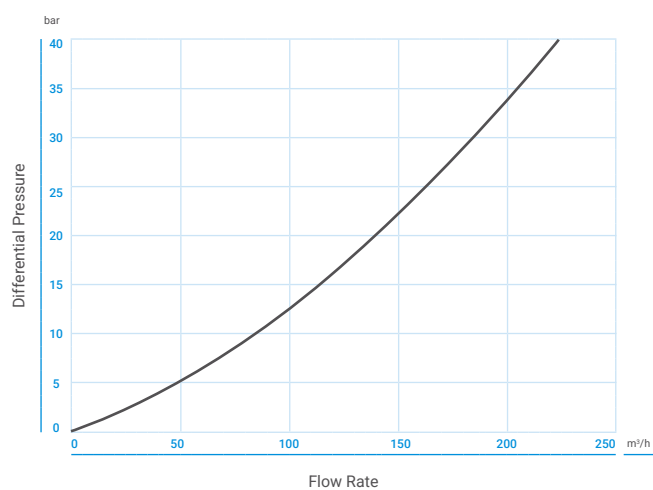
### PN 16 Automatic Air Release Flow Rate



### PN 25 Automatic Air Release Flow Rate



### PN 40 Automatic Air Release Flow Rate



--- Max recommended design air discharge

## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| D43   | 2"       | BSP        | PN10          | 70500-002810   |
|       |          | BSP        | PN16          | 70500-002820   |
|       |          | BSP        | PN10          | 70500-002825   |
|       |          | NPT        | PN10          | 70500-005710   |
|       | 3"       | ANSI       | pn10          | 70500-001615   |

# D70

## DYNAMIC COMBINATION AIR VALVE

A unique valve, operating without a float and utilizing the rolling diaphragm principle. This unique structure allows the dynamic air valve to discharge air from the water system in a controlled and gradual manner, thus preventing slam and local up-surges.



Robust



Superior  
design



High  
durability

## / Benefits & Features

### → Robust

- Valve, body, and interior components are made from composite corrosion-resistant materials
- Prevents intrusion of debris and contaminants into the system

### → Superior design

- Built-in connection at the outlet for surplus water drainage
- Extremely quiet closing, smooth and gradual unaffected by water flow
- Prevents slam and reduces water surges in the air valve and the pipeline
- Automatic air release component releases large quantities of air without obstruction

### → High durability

Lightweight, simple and reliable structure

## / Specifications & Recommendations

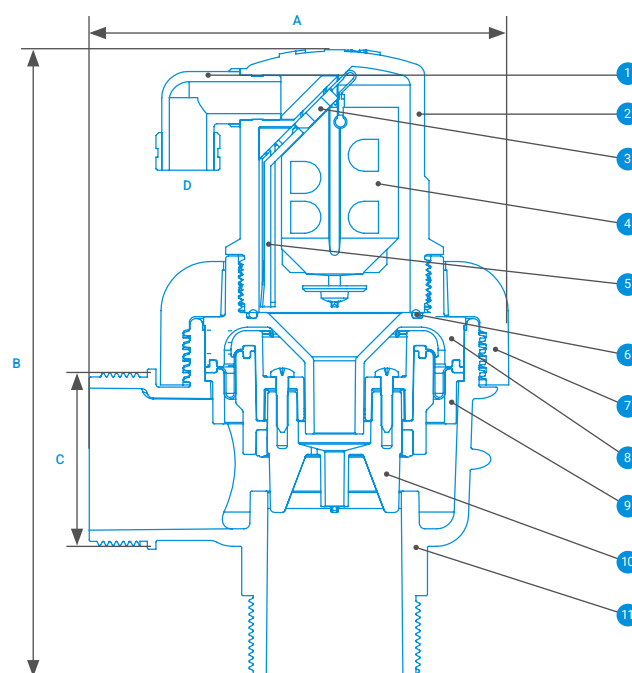
- Working Pressure Range – 0.2 - 10bar
- Testing Pressure – 16bar
- Maximum Working Temperature – 60°C
- Maximum Maximum Intermittent Temperature – 90°C
- Optional Bug Screen – Attached to the valve outlet, prevents the penetration of debris or insects into the air valve

## → Technical Dimensions

| Nominal Size              | Dimensions (mm) |     | Connections (mm) |                 | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |      |
|---------------------------|-----------------|-----|------------------|-----------------|-------------|---------------------------------|------|
|                           | A               | B   | C                | D               |             | Auto.                           | a/v  |
| D70 2" (50mm) Threaded    | 144             | 216 | 2" BSP male      | 3/8" BSP female | 1.040       | 7.8                             | 1963 |
| D70 2" (50mm) Flanged     | 165             | 224 | 2" BSP male      | 3/8" BSP female | 1.440       | 7.8                             | 1963 |
| D70 M1 3" (80mm) Threaded | 144             | 217 | 2" BSP male      | 3/8" BSP female | 1.075       | 7.8                             | 1963 |
| D70 M1 3" (80mm) Flanged  | 200             | 228 | 2" BSP male      | 3/8" BSP female | 1.665       | 7.8                             | 1963 |
| D70 M2 4" (100mm) Flanged | 228             | 217 | 2" BSP male      | 3/8" BSP female | 1.860       | 7.8                             | 1963 |

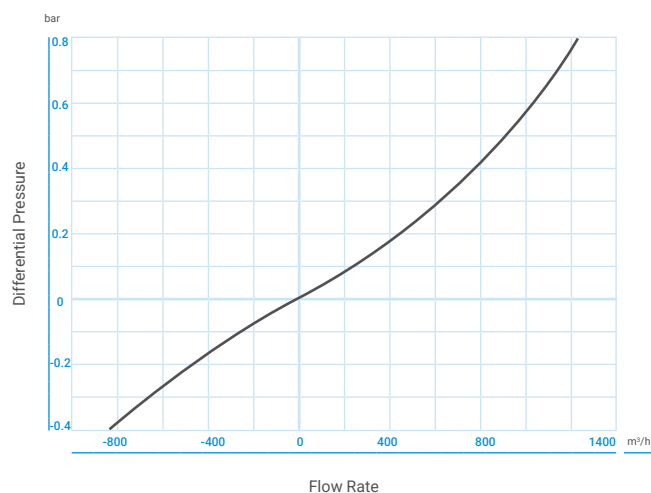
## → Material Specifications

| #  | Part Name                          | Material                                                               |
|----|------------------------------------|------------------------------------------------------------------------|
| 1  | Discharge outlet                   | Polypropylene                                                          |
| 2  | Operating valve body               | Reinforced nylon                                                       |
| 3  | Rolling seal                       | EPDM                                                                   |
| 4  | Operating assembly                 | Foamed polypropylene +acetal +ST ST 316                                |
| 5  | Clamping stem                      | Reinforced nylon                                                       |
| 6  | O-ring                             | BUNA-N                                                                 |
| 7  | Locking ring                       | Reinforced nylon                                                       |
| 8  | Base adaptor                       | Reinforced nylon                                                       |
| 9  | Support ring                       | Reinforced nylon                                                       |
| 10 | Rolling diaphragm sealing assembly | Reinforced nylon + EPDM + ST ST 316 / ST ST 316 + cataphoretic coating |
| 11 | Body                               | Reinforced nylon                                                       |

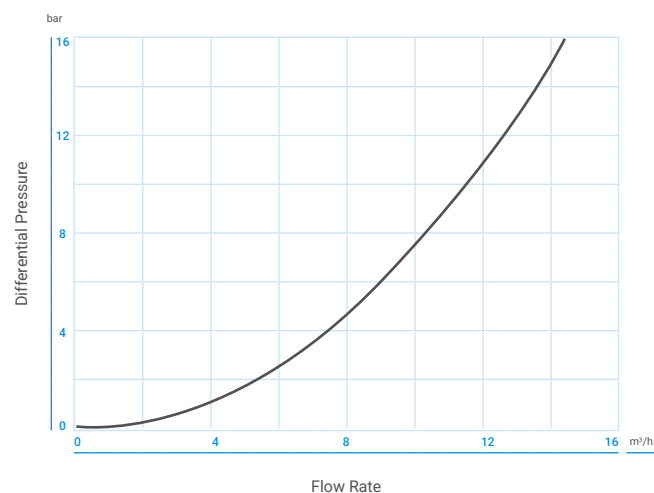


## → Head Loss

### Air & Vacuum Flow Rate



### Automatic Air Release Flow Rate



## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| D70   | 2"       | BSP        | PN10          | 70440-005730   |
|       |          | BSP        | PN16          | 70440-005130   |
|       |          | NPT        | PN10          | 70561-001735   |
|       | 3"       | BSP        | PN10          | 70440-005600   |
|       |          | NPT        | PN10          | 70561-001760   |

# D70PQ

## DYNAMIC COMBINATION & PRESSURE RELIEF

Protects the pipeline from excessive pressure, eliminates bursts and water loss. It prevents up-surges by discharging initial pressure in a controlled and gradual manner. It prevents the energy loss caused by air pockets, by discharging air from pressurized water lines.



High  
durability



User friendly



Superior  
design

## / Benefits & Features

- |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → High durability | Corrosion-resistant valve, body, and interior components are made from composite materials                                                                                                                                                                                                                                                                                                                                                                |
| → User friendly   | Valve is lightweight and small for easy installation                                                                                                                                                                                                                                                                                                                                                                                                      |
| → Superior design | <ul style="list-style-type: none"><li>- Prevents slam and reduces water surges in the air valve and the pipeline</li><li>- Prevents intrusion of debris and contaminants into the system</li><li>- Built-in connection at the outlet for surplus</li><li>- Smooth and gradual closing unaffected by water flow</li><li>- Extremely quiet closing</li><li>- Automatic air release component releases large quantities of air without obstruction</li></ul> |

## / Specifications & Recommendations

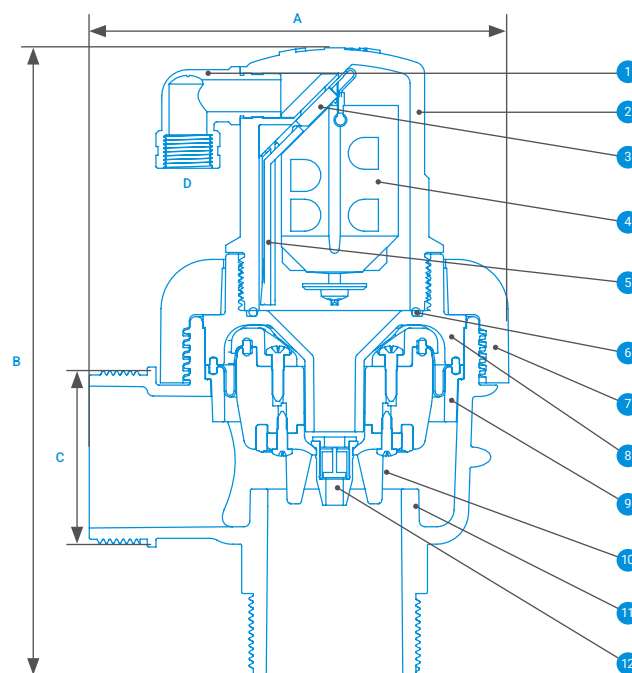
- Working Pressure Range – 0.2 - 16bar
- Testing Pressure – 25bar
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

## → Technical Dimensions

| Nominal Size                | Dimensions (mm) |     | Connections (mm) |                 | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |      |
|-----------------------------|-----------------|-----|------------------|-----------------|-------------|---------------------------------|------|
|                             | A               | B   | C                | D               |             | Auto.                           | a/v  |
| D70-p 2" (50mm) Threaded    | 144             | 216 | 2" BSP male      | 3/8" BSP female | 1.040       | 7.8                             | 1963 |
| D70-p 2" (50mm) Flanged     | 165             | 224 | 2" BSP male      | 3/8" BSP female | 1.440       | 7.8                             | 1963 |
| D70-p M1 3" (80mm) Threaded | 144             | 217 | 2" BSP male      | 3/8" BSP female | 1.075       | 7.8                             | 1963 |
| D70-p M1 3" (80mm) Flanged  | 200             | 228 | 2" BSP male      | 3/8" BSP female | 1.665       | 7.8                             | 1963 |
| D70-p M2 4" (100mm)         | 228             | 217 | 2" BSP male      | 3/8" BSP female | 1.860       | 7.8                             | 1963 |

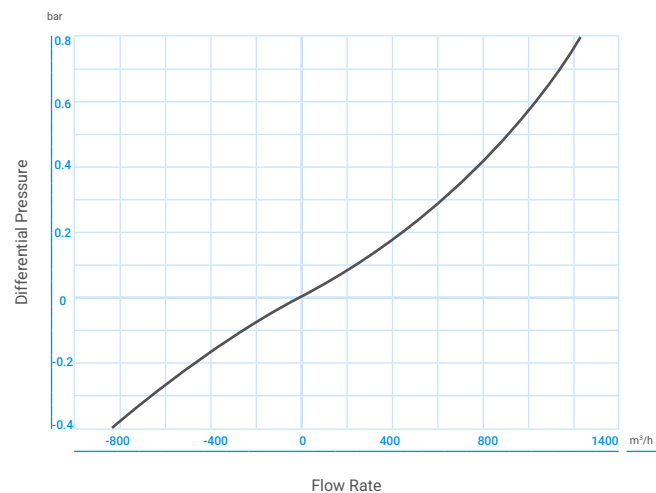
## → Material Specifications

| #  | Part Name                          | Material                                                               |
|----|------------------------------------|------------------------------------------------------------------------|
| 1  | Discharge outlet                   | Polypropylene                                                          |
| 2  | Operating valve body               | Reinforced nylon                                                       |
| 3  | Rolling seal                       | EPDM                                                                   |
| 4  | Operating assembly                 | Foamed polypropylene + acetal + ST ST 316                              |
| 5  | Clamping stem                      | Reinforced nylon                                                       |
| 6  | O-ring                             | BUNA-N                                                                 |
| 7  | Locking ring                       | Reinforced nylon                                                       |
| 8  | Base adaptor                       | Reinforced nylon                                                       |
| 9  | Support ring                       | Reinforced nylon                                                       |
| 10 | Rolling diaphragm sealing assembly | Reinforced nylon + EPDM + ST ST 316 / ST ST 316 + cataphoretic coating |
| 11 | Body                               | Reinforced nylon                                                       |
| 12 | Option: one way out                |                                                                        |

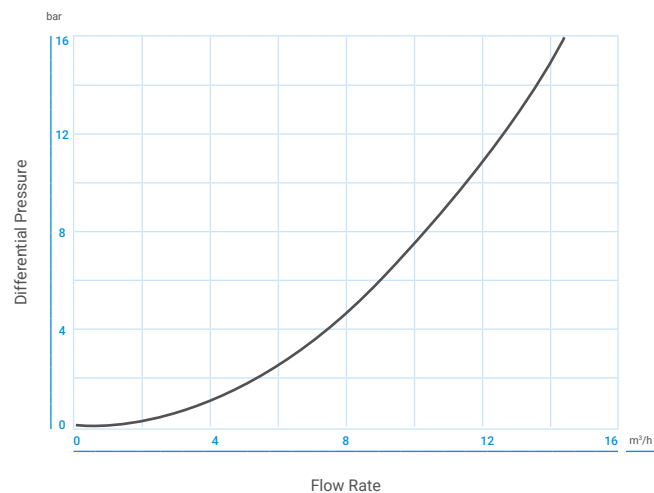


## → Head Loss

### Air & Vacuum Flow Rate



### Automatic Air Release Flow Rate



## → Catalog Numbers

| Model | Diameter | Connection | Max. Pressure | Catalog Number |
|-------|----------|------------|---------------|----------------|
| D70PQ |          |            |               |                |
|       |          |            |               |                |
|       |          |            |               |                |
|       |          |            |               |                |

# / Metal Air Valves

orbia



Precision  
Agriculture



# K10 / K60

## KINETIC AIR VALVE

The air & vacuum valves are designed to automatically discharge or admit large volumes of air during the filling or draining of a pipeline or piping system. This valve will open to relieve negative pressures valve at pump shut-off and at water column separation.



K10

K60



Maximum  
reliability



Superior  
design



High  
durability

## / Benefits & Features

### K10 Model

- **Maximum reliability** Reduces water hammer incidents
- **Dynamic design** Allows for high-capacity air discharge while preventing premature closure
- **High durability** Lightweight, simple and reliable structure
- **Special orifice seat design** Combination of bronze and e.P.D.M. Rubber assures long-term, maintenance-free operation
- **Discharge outlet** Enables attachment of a vent/drainpipe (2" - 8")

### K60 Model

- **Main flow cross-sections** Equal or greater than the nominal port area
- **Aero - dynamic design** Enables high flow rates of air both at intake and at discharge
- **Maximum reliability** Reduces water hammer incidents
- **Dynamic design** Allows for high-capacity air discharge while preventing premature closure
- **Special orifice design** Bronze & EPDM. rubber, assures long-term maintenance-free operation
- **Screen protected outlet** The upper screen is protected with a protective cover
- **FBE coating** Interior & exterior, in accordance with the international standard DIN 30677-2

# / Specifications & Recommendations

- Working Pressure Range – K10: 0.2 - 100bar / K60: 0.2 - 16bar
- Testing Pressure – 1.5 times the maximum working pressure of the air valve
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

## → Technical Dimensions

### K10

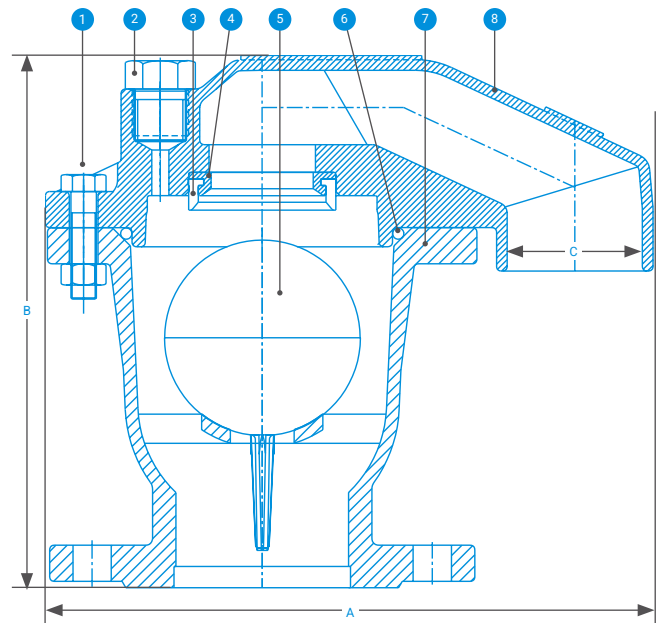
| Nominal Size       | Dimensions (mm) |     | Connection     | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |
|--------------------|-----------------|-----|----------------|-------------|---------------------------------|
|                    | A               | B   | C              |             |                                 |
| 2" (50mm) Threaded | 149             | 217 | 1½" BSP female | 4.0         | 794                             |
| 2" (50mm) Flanged  | 149             | 229 | 1½" BSP female | 6.1         | 794                             |
| 3" (80mm) Threaded | 160             | 266 | 2" BSP female  | 9.6         | 1809                            |
| 3" (80mm) Flanged  | 160             | 264 | 2" BSP female  | 12.6        | 1809                            |

| Nominal Size | Dimensions (mm) |     | Connection C |          | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |
|--------------|-----------------|-----|--------------|----------|-------------|---------------------------------|
|              | A               | B   | Internal     | External |             |                                 |
| 4" (100mm)   | 342             | 285 | 80           | 96       | 27          | 3317                            |
| 6" (150mm)   | 400             | 334 | 90           | 124      | 43          | 7850                            |
| 8" (200mm)   | 553             | 530 | 124          | 140      | 116         | 17671                           |
| 10" (250mm)  | 463             | 642 | NA           | NA       | 149         | 31415                           |
| 12" (300mm)  | 586             | 789 | NA           | NA       | 163         | 49087                           |

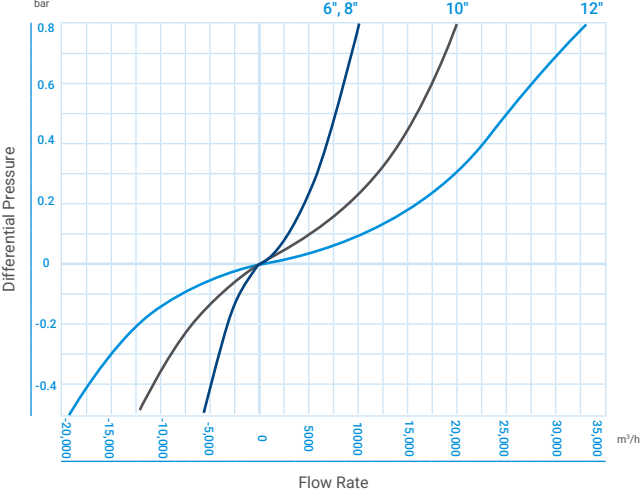
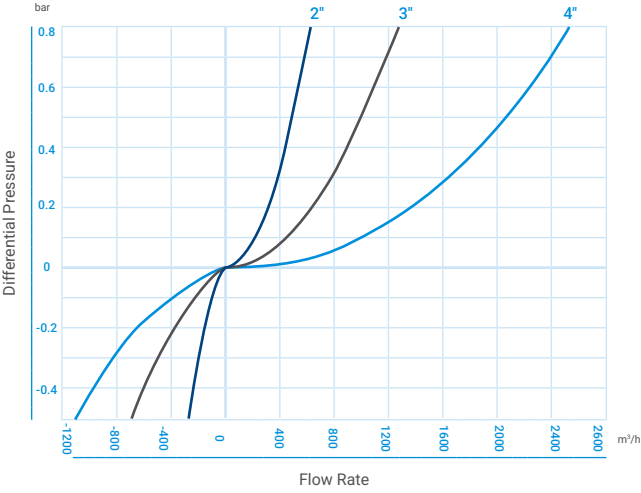
## → Material Specifications

### K10

| # | Part Name             | Material                                                         |
|---|-----------------------|------------------------------------------------------------------|
| 1 | Bolt, nut & washer    | Steel zinc cobalt plated                                         |
| 2 | Plug                  | Brass ASTM B124                                                  |
| 3 | Orifice seal          | EPDM                                                             |
| 4 | Orifice seat          | Bronze ASTM B-62 B271 C83600                                     |
| 5 | Float                 | Polycarbonate / stainless steel                                  |
| 6 | O-ring                | BUNA-N                                                           |
| 7 | Body 16, 25, 40bar    | Ductile iron ASTM A-536-60-40-18                                 |
|   | 40, 64, 100bar        | Cast steel ASTM A-216 WCB                                        |
| 8 | Cover 16, 25, 50bar   | Ductile iron ASTM A-536-60-40-18                                 |
|   | 40, 64, 100bar        | 2", 3", 4" Cast steel DIN ST. 37<br>6" 8" Cast steel A148-115-95 |
|   | *Screen cover 10"-12" | Polyethylene                                                     |
|   |                       | Cast iron ASTM A-28 CL35B                                        |
|   |                       | Ductile iron ASTM A-536-60-40-18                                 |



→ Head Loss



→ Catalog Numbers

| Model | Diameter | Connection | Material | Catalog Number |
|-------|----------|------------|----------|----------------|
| K10   | 2"       | NPT        | SST      | 70561-001290   |

→ Technical Dimensions

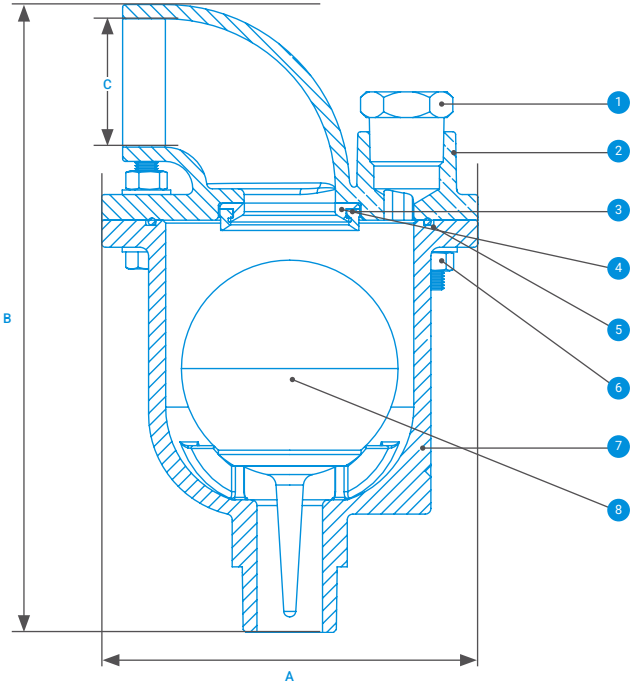
K60

| Nominal Size       | Dimensions (mm) |     | Connection | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |
|--------------------|-----------------|-----|------------|-------------|---------------------------------|
|                    | A               | B   | C          |             |                                 |
| 1" (25mm) threaded | 132             | 220 | 1½" female | 3.8         | 506.7                           |
| 1" (25mm) flanged  | 132             | 220 | 1½" female | 4.8         | 506.7                           |
| 2" (50mm) threaded | 185             | 231 | NA         | 9.7 - 10    | 1960                            |
| 2" (50mm) flanged  | 185             | 218 | NA         | 9.7 - 10    | 1960                            |
| 3" (80mm)          | 219             | 286 | NA         | 17 - 18     | 5030                            |
| 4" (100mm)         | 262             | 346 | NA         | 25.5 - 27   | 7850                            |
| 6" (200mm)         | 375             | 507 | NA         | 72.5 - 77   | 17662                           |
| 8" (200mm)         | 463             | 641 | NA         | 107.7 - 116 | 31400                           |
| 10" (300mm)        | 586             | 788 | NA         | 231.7 - 244 | 49087                           |

→ Material Specifications

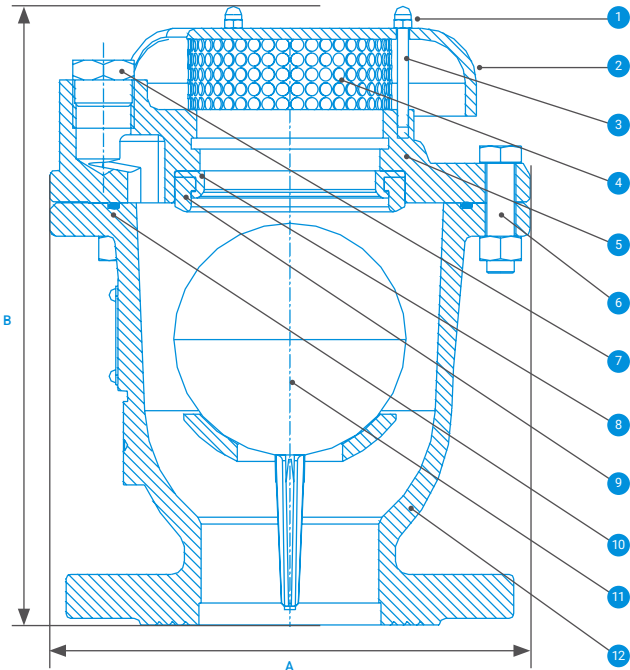
K60 1"

| # | Part Name          | Material                            |
|---|--------------------|-------------------------------------|
| 1 | Plug               | Brass                               |
| 2 | Cover              | Ductile iron                        |
| 3 | Orifice seat       | Bronze                              |
| 4 | Orifice seal       | EPDM                                |
| 5 | O-ring             | BUNA-N                              |
| 6 | Bolt, nut & washer | Steel, zinc cobalt plated           |
| 7 | Body               | Ductile iron                        |
| 8 | Float              | Polycarbonate / stainless steel 304 |



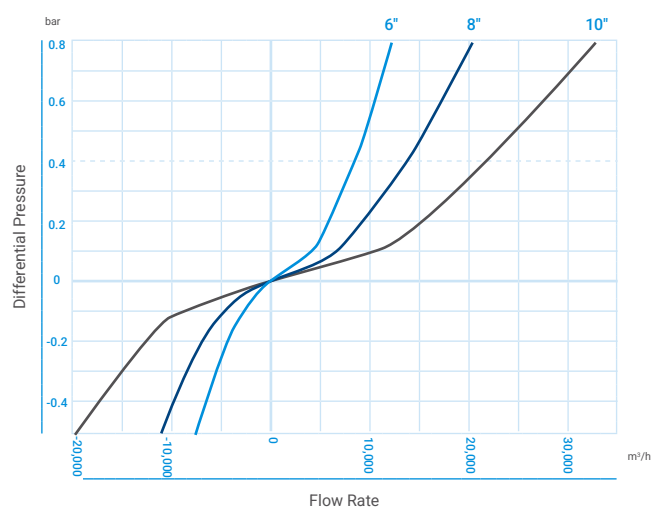
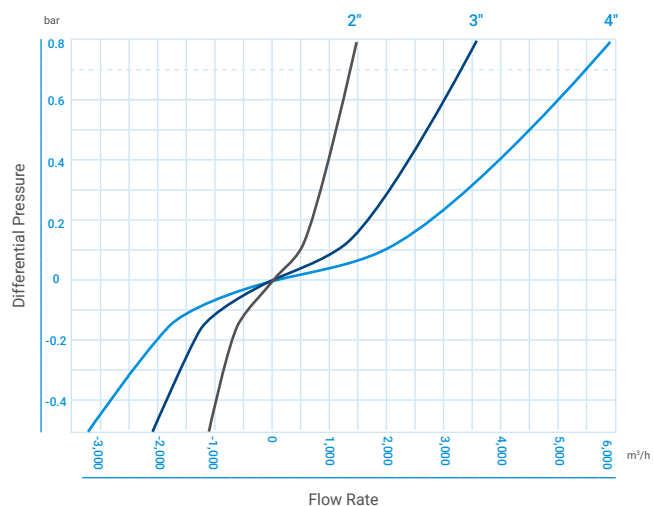
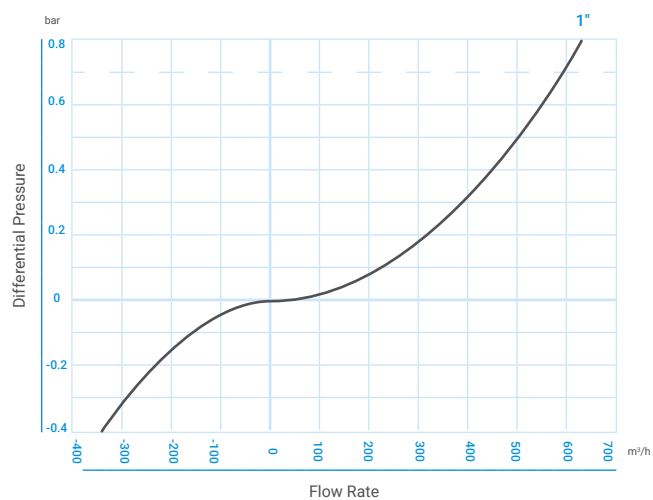
K60 2"-10"

| #  | Part Name          | Material                            |
|----|--------------------|-------------------------------------|
| 1  | Domed nut & washer | Stainless steel 304                 |
| 2  | Screen cover 2"-4" | Ductile iron                        |
|    | 6"-10"             | Polyethylene / sphero nodular       |
| 3  | Threaded rod       | Stainless steel 304                 |
| 4  | Screen             | Stainless steel 304                 |
| 5  | Cover              | Ductile iron                        |
| 6  | Bolt, nut & washer | Steel, zinc cobalt coated           |
| 7  | Plug               | Brass                               |
| 8  | Orifice seat       | Bronze                              |
| 9  | Orifice seal       | EPDM                                |
| 10 | O-ring             | BUNA-N                              |
| 11 | Float PN16, PN25   | Polycarbonate / stainless steel 304 |
|    | PN 40 2"-4"        | Polycarbonate / stainless steel 304 |
|    | PN 40 6"-10"       | Stainless steel                     |
| 12 | Body               | Ductile iron                        |



## → Head Loss

K60



## → Catalog Numbers

| Model | Diameter | Connection | Material | Catalog Number |
|-------|----------|------------|----------|----------------|
| K60   | 2"       | NPT        | SST      | 70561-000040   |

# S15

## AUTOMATIC AIR VALVE

The automatic air release valves release accumulated air from the system while it is under pressure. The presence of air in a water system can reduce the effective cross-sectional flow area resulting in increased head loss and decreased flow. Unwanted air may also cause water hammer and metering inaccuracies, while hastening corrosion.



High  
durability



Superior  
design



Ease of  
maintenance

## / Benefits & Features

- |                       |                                                                                                                                                                                                                |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → High durability     | Operating parts are made of specially selected corrosion-resistant materials                                                                                                                                   |
| → Superior design     | <ul style="list-style-type: none"><li>- Unique rolling seal mechanism dramatically reduces the possibility of obstruction by debris</li><li>- One size orifice for a wide pressure-range up to 64bar</li></ul> |
| → Ease of maintenance | <ul style="list-style-type: none"><li>- Self-cleaning</li><li>- Lightweight, small dimensions, simple and reliable structure</li></ul>                                                                         |

## / Specifications & Recommendations

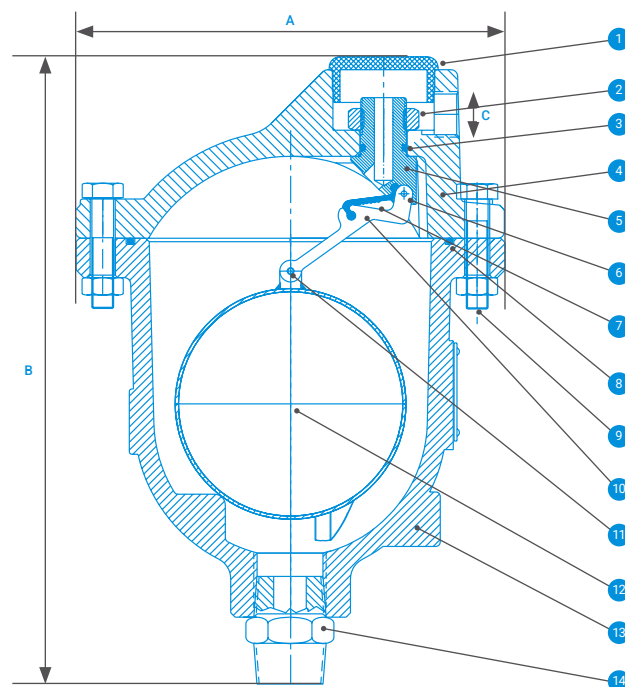
- Working Pressure Range – 0.2 - 64bar
- Testing Pressure – 1.5 times the maximum working pressure of the air valve
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

## → Technical Dimensions

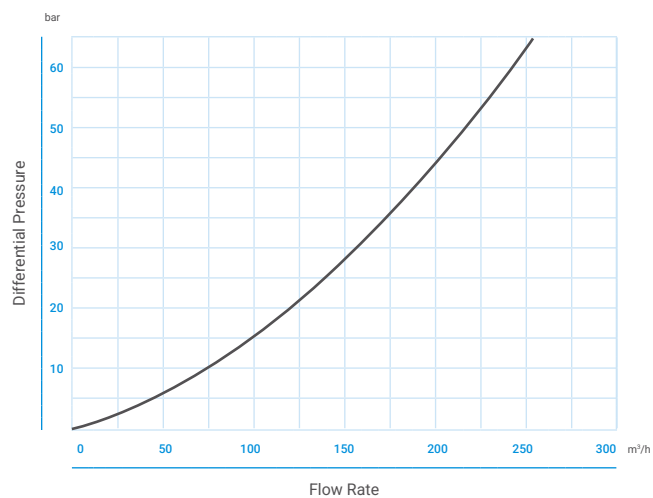
| Dimensions (mm) |     | Connection     | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |
|-----------------|-----|----------------|-------------|---------------------------------|
| A               | B   | C              |             |                                 |
| 197             | 295 | 1½" BSP female | 13          | 15                              |

## → Material Specifications

| #  | Part Name     | Material                                 |
|----|---------------|------------------------------------------|
| 1  | Orifice cover | Polypropylene                            |
| 2  | Nut           | Brass                                    |
| 3  | O-ring        | BUNA-N                                   |
| 4  | Cover         | Cast steel                               |
| 5  | Orifice       | Reinforced nylon                         |
| 6  | Rollpin       | Stainless steel 304                      |
| 7  | Rolling swal  | EPDM                                     |
| 8  | O-ring        | BUNA-N                                   |
| 9  | Bolt and nut  | Steel zinc cobalt plated                 |
| 10 | Lever         | Reinforced nylon                         |
| 11 | Rollpin       | Stainless steel 304                      |
| 12 | Float         | Polycarbonate / stainless steel SAE 316L |
| 13 | Body          | Cast steel                               |
| 14 | Adapter       | Brass                                    |



## → Head Loss



## → Catalog Numbers

| Model | Diameter | Connection | Material | Catalog Number |
|-------|----------|------------|----------|----------------|
| S15   | 1"       | NPT        | SST      | 70561-003714   |

# NAVmc

## COMBINATION AIR VALVE

The valve allows discharge of trapped air while the system is being filled with liquid. The valve will remain open, even at very high air flow velocity until the liquid has reached the float and lifted it to its closed position.



Maximum  
reliability



Superior  
design



Ease of  
maintenance

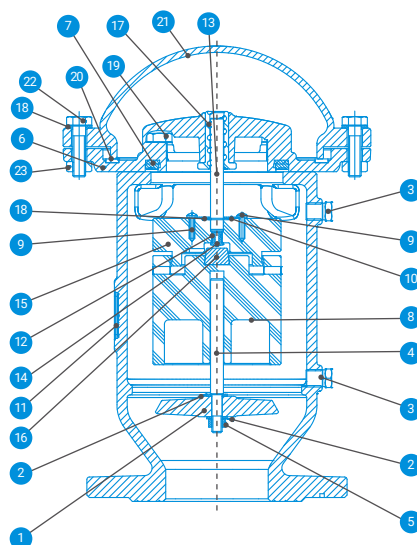
## / Benefits & Features

- |                       |                                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------------------------|
| → Maximum reliability | Leak-proof sealing at all conditions, including low system pressure                                 |
| → Superior design     | The aerodynamic design of the float provides air flow at a very high velocity                       |
| → Ease of maintenance | The valve design contains a very limited number of parts, allowing easy dismantling for maintenance |

## / Specifications & Recommendations

- Nominal Sizes – 2" / 50mm to 10" / 250mm, 3" / 80mm to 12" / 300mm
- Pressure Rating – PN16 (250psi), PN25 (350psi) and PN40 (580psi)
- Minimal Pressure for Drip-Tight Sealing – 0.1bar
- Temp. Range Operating – 0-60°C / 32-140°F, Storage: -10-70°C / 15-160°F

## → Material Specifications

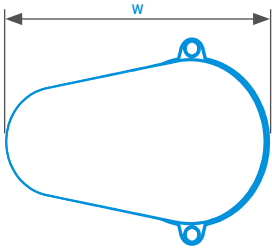
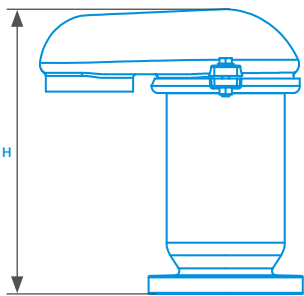


| #  | Part Name            | Material | Optional                                                 |
|----|----------------------|----------|----------------------------------------------------------|
| 1  | Body                 | D.I.     | Steel A-216 WCB, SST CF8M, NI aluminium bronze, s.duplex |
| 2  | Washer               | SST      | SST 316, s.duplex                                        |
| 3  | Plug                 | BRS      | SST 316, s.duplex                                        |
| 4  | Bottom guiding shaft | SST      | SST 316, s.duplex                                        |
| 5  | Nut                  | SST      | SST 316, s.duplex                                        |
| 6  | Plate                | D.I.     | Steel A-216 WCB, SST CF8M, NI aluminium bronze, s.duplex |
| 7  | Seal                 | EPDM     | NBR, viton                                               |
| 8  | Float body           | PE-H.D.  |                                                          |
| 9  | Bolt                 | SST      | SST 316, s.duplex                                        |
| 10 | Disc                 | SST      | SST 316, s.duplex                                        |
| 11 | I.D. Plate           | AL       | SST 316                                                  |
| 12 | O-ring 2-009         | NBR      | EPDM, viton                                              |
| 13 | Top guiding shaft    | SST      | SST 316, s.duplex                                        |
| 14 | Nozzle               | SST      | SST 316, s.duplex                                        |
| 15 | Float cover          | PE-H.D.  |                                                          |
| 16 | Nozzle seal          | EPDM     | NBR, viton                                               |
| 17 | Guiding insert       | POM      |                                                          |
| 18 | Washer               | SST      | SST 316, s.duplex                                        |
| 19 | Bolt                 | SST      | SST 316, s.duplex                                        |
| 20 | Cover seal           | EPDM     | NBR, viton                                               |
| 21 | Cover                | D.I.     | Steel A-216 WCB, SST CF8M, NI aluminium bronze, s.duplex |
| 22 | Bolt                 | SST      | SST 316, s.duplex                                        |
| 23 | Nut                  | SST      | SST 316, s.duplex                                        |

→ Technical Dimensions High Capacity

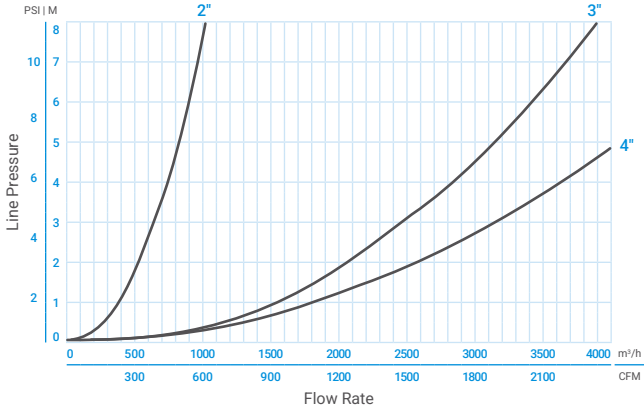
| Nom. Diameter |     | Height - H |       | Width - W |       | D-Kinetic Orifice Area |                 | Approx. Shipping Weight |       |
|---------------|-----|------------|-------|-----------|-------|------------------------|-----------------|-------------------------|-------|
| inch          | mm  | inch       | mm    | inch      | mm    | inch <sup>2</sup>      | mm <sup>2</sup> | kg                      | lbs.  |
| 2             | 50  | 10.7       | 273.5 | 9.2       | 236   | 3.0                    | 1960            | 11                      | 24.2  |
| 3             | 80  | 14         | 355   | 12.8      | 326   | 7.7                    | 5000            | 18                      | 39.6  |
| 4             | 100 | 15.5       | 395   | 15.4      | 393   | 12.2                   | 7855            | 30                      | 66.1  |
| 6             | 150 | 19.1       | 586.5 | 24.4      | 621   | 27.4                   | 17670           | 60                      | 132.2 |
| 8             | 200 | 22.3       | 567   | 19.8      | 503   | 48.7                   | 31415           | 100                     | 220.5 |
| 10            | 250 | 29.6       | 752   | 27.8      | 707.5 | 76                     | 49090           | 200                     | 441   |

Connections: ISO, ANSI, BS, JIS flanges, BSP, NPT threads (50mm valves only)

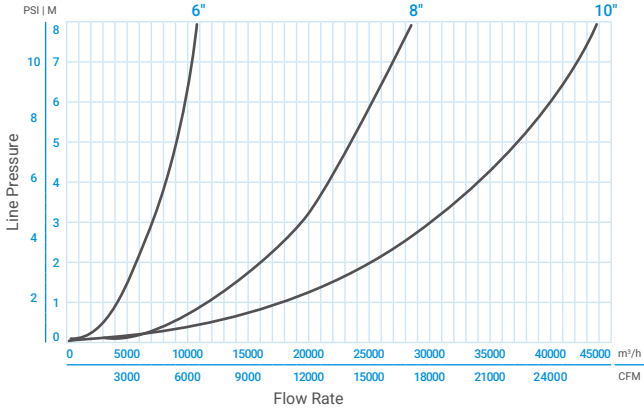


→ Head Loss

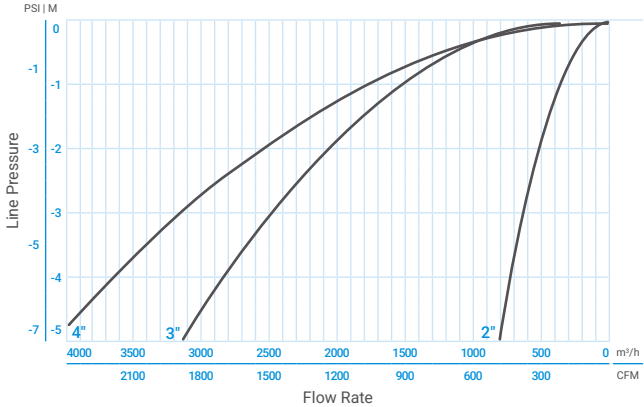
Discharge Data (Free Air Flow) - 2", 3", 4"



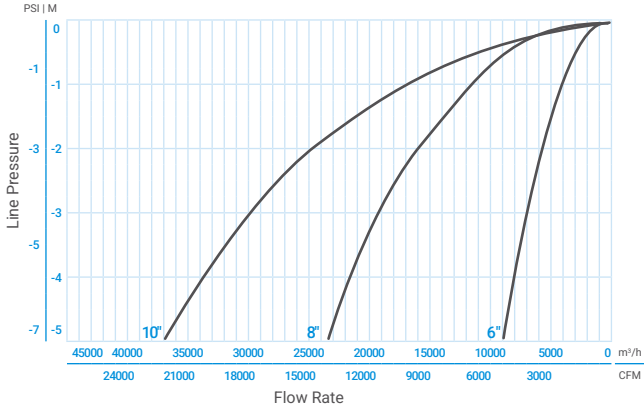
Discharge Data (Free Air Flow) 6", 8", 10"



Inflow Data (Free Air Flow) 2", 3", 4"



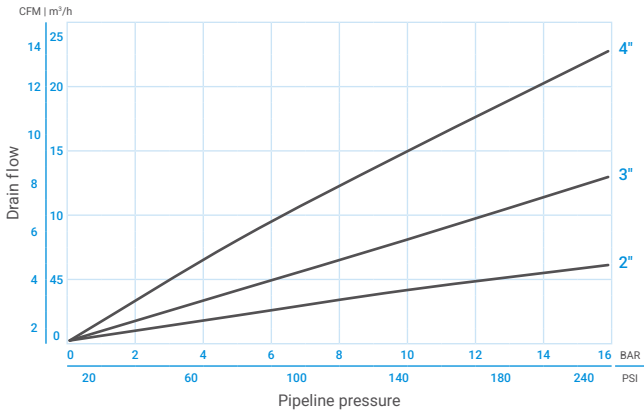
Inflow Data (Free Air Flow) 6", 8", 10"



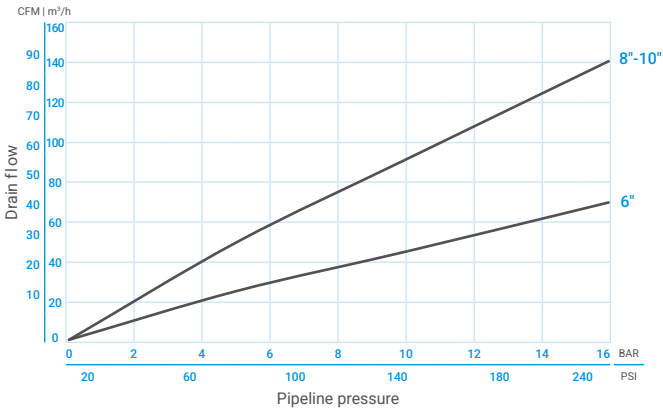
→ Head Loss

Small-Orifice ('Automatic') Discharge Flow

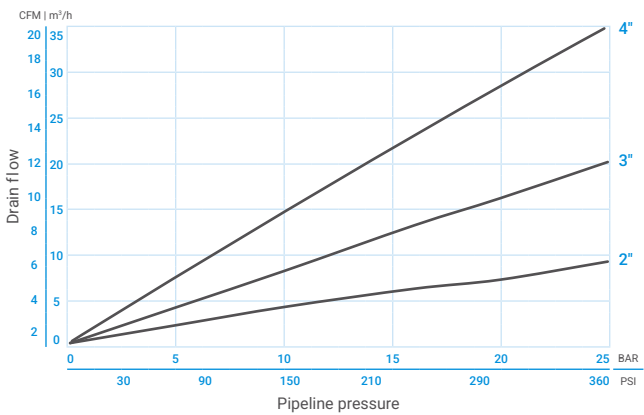
Small Orifice Discharge PN16 - 2", 3", 4"



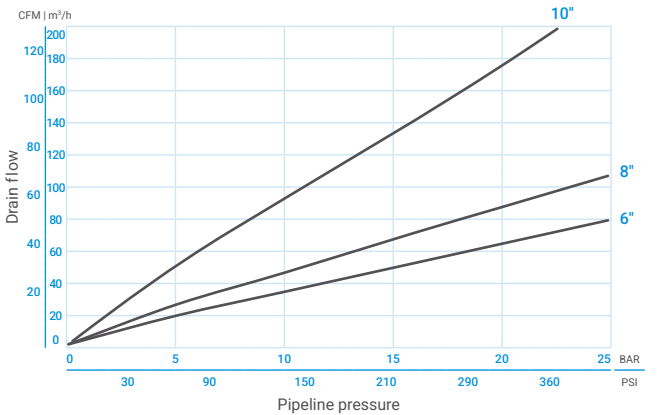
Small Orifice Discharge PN16 - 6", 8", 10"



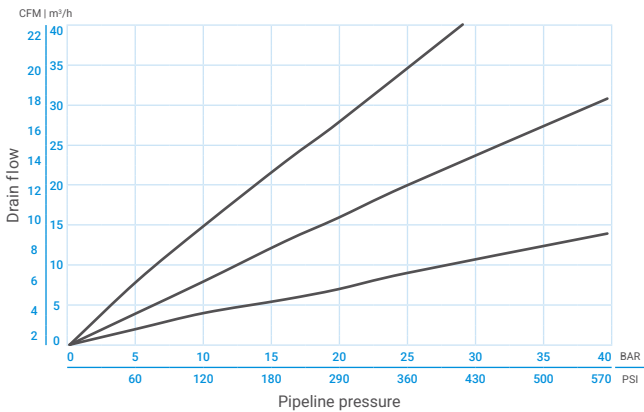
Small Orifice Discharge PN16 - 2", 3", 4"



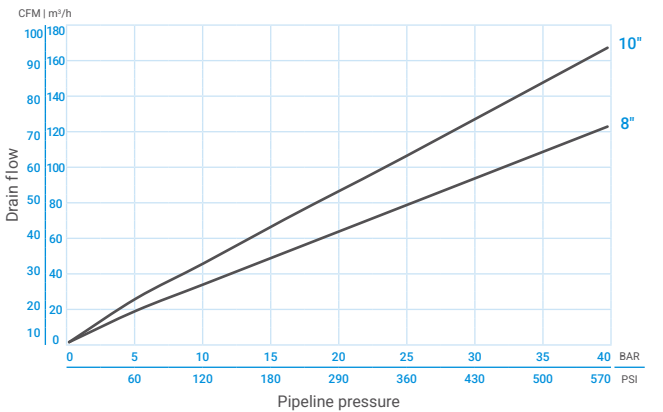
Small Orifice Discharge PN25 - 6", 8", 10"



Small Orifice Discharge PN40 - 2", 3", 4", 6"



Small Orifice Discharge PN40 - 8", 10"



→ Catalog Numbers

| Model      | Diameter | Connection | Max. Pressure | Catalog Number |
|------------|----------|------------|---------------|----------------|
| DAV MH, MS | 2"       | ISO16      | PN16          | 71600-012915   |
|            |          | BSP        | PN16          | 71680-020920   |
|            |          | AN30       | PN16          | 71680-020929   |
|            | 3"R      | ISO16      | PN16          | 71600-012920   |
|            | 3"       | ISO16      | PN16          | 71600-012919   |
|            |          | ABNT       | PN16          | 71680-020935   |
|            | 4"       | ISO16      | PN16          | 71680-020380   |
|            | 6"       | ISO16      | PN16          | 71680-040300   |

# D43 / D46

## COMBINATION AIR VALVE

Combines both an air release valve and air & vacuum valve features. The air release component is designed to automatically release small pockets of air to the atmosphere as they accumulate along a pipeline or piping system when it is full and operating under pressure.



Maximum  
reliability



Superior  
design



Ease of  
maintenance

## / Benefits & Features

- **Maximum reliability** Reduces water hammer incidents
- **Superior design** Allows for high-capacity air discharge while preventing premature closure
- **Ease of maintenance**
  - 2"- 3" - All operating parts are consolidated into one replaceable cartridge
  - 4"- 6" - Air release component can be maintained without dismantling the air valve
- **Durable** Lightweight, simple and reliable structure
- **Unique one-piece body** Lessens the chance of leaks and vandalism
- **Discharge outlet** Enables the connection of a vent pipe
- **Air release**
  - The large size of the automatic air release orifice relative to the air valve body:
  - Releases air at high flow rates. Lessens the danger of its obstruction by debris
  - Enables the usage of the rolling seal, making it less sensitive to pressure differential than a direct float seal

# / Specifications & Recommendations

- Working Pressure Range – D43: 2" - 0.1 - 10bar, 3" - 6" - 0.1 -16bar / D46: 0.1 -16bar
- Testing Pressure – D43: 1.5 times the working pressure of the air valve / D46: 25bar
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

## → Technical Dimensions

D43 2"

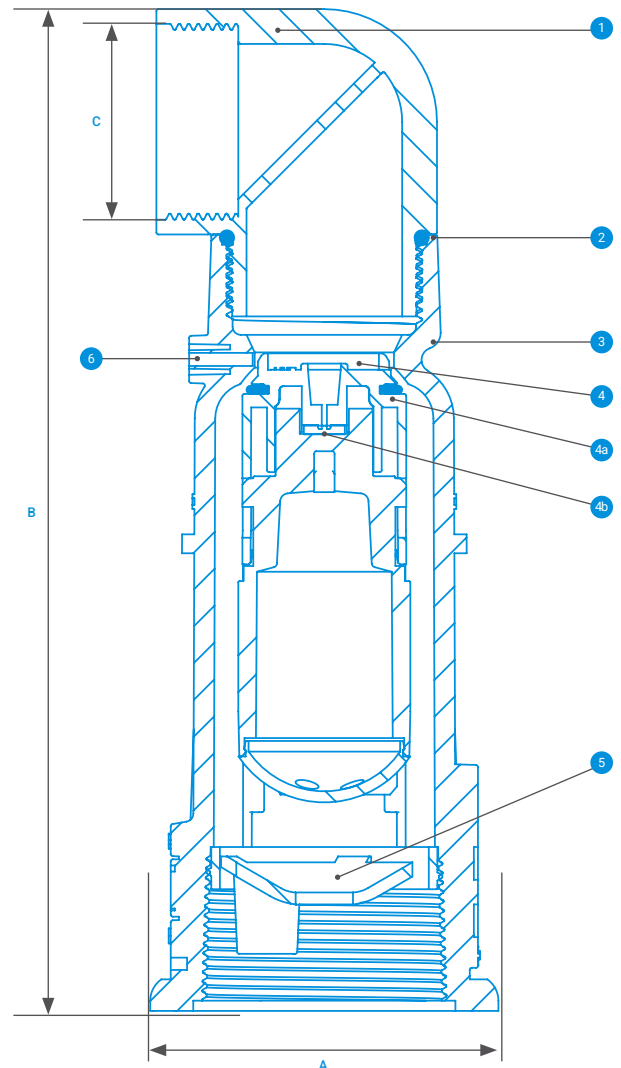
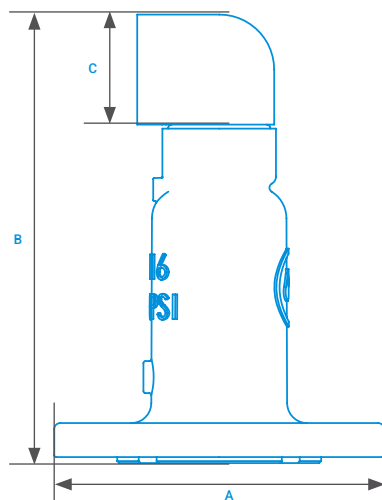
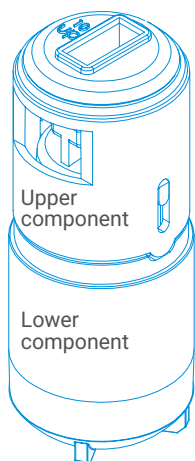
| Model                    | Dimensions (mm) |     | Connection     | Weight (kg.) |          | Orifice Area (mm <sup>2</sup> ) |       |
|--------------------------|-----------------|-----|----------------|--------------|----------|---------------------------------|-------|
|                          | A               | B   |                | Standard     | NS Model | a/v                             | Auto. |
| 2" (50mm) Nylon Threaded | 85              | 245 | 1½" BSP female | 0.4          | 0.5      | 908                             | 11.7  |
| 2" (50 mm) D.I Threaded  | 85              | 245 | 1½" BSP Fem.   | 1.7          | 1.8      | 908                             | 11.7  |
| 2" (50mm) D.I Flanged    | 165             | 222 | 1½" BSP Fem.   | 3.9          | 4        | 908                             | 11.7  |
| 2" (50mm) S.S Threaded   | 85              | 245 | 1½" BSP Fem.   | 1.8          | 1.9      | 908                             | 11.7  |

## → Material Specifications

D43 2"

| #  | Part Name                | Material                      |
|----|--------------------------|-------------------------------|
| 1  | Discharge outlet         | Polypropylene                 |
| 2  | O-ring                   | BUNA-N                        |
| 3  | Body                     | Reinforced nylon              |
|    |                          | Ductile iron                  |
|    |                          | Stainless steel 316           |
| 4  | Float & seal assembly    | Polypropylene + acetal + EPDM |
| 4a | Air vacuum seal          | EPDM                          |
| 4b | Air release rolling seal | EPDM                          |
| 5  | Float lock               | Polypropylene                 |
| 6  | Upper drain outlet       |                               |

### Float & Seal Assembly



→ Technical Dimensions

D43 3"-6", D46

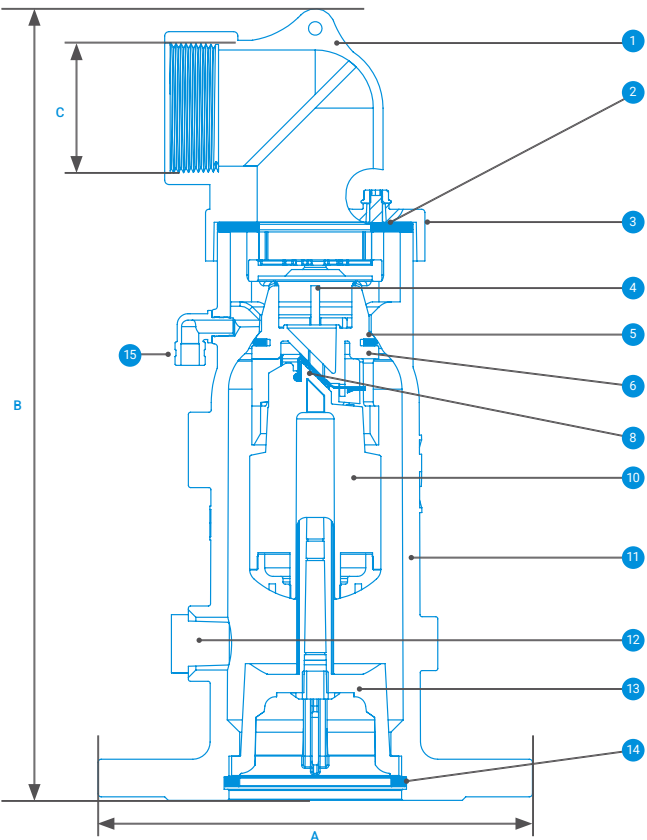
| Model |            | Dimensions (mm) |     | Connection    | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |       |
|-------|------------|-----------------|-----|---------------|-------------|---------------------------------|-------|
|       |            | A               | B   | C             |             | a/v                             | Auto. |
| D43   | 3" (80mm)  | 200             | 336 | 2" BSP female | 8.4         | 1963                            | 13.8  |
|       | 4" (100mm) | 220             | 467 | 3" BSP female | 14.0        | 5027                            | 13.8  |
|       | 6" (150mm) | 285             | 537 | 4" BSP female | 22.         | 7854                            | 13.8  |
| D46   | 2" (50mm)  | 165             | 336 | 2" BSP female | 7.3         | 1963                            | 13.8  |
|       | 3" (80mm)  | 200             | 467 | 3" BSP female | 13.0        | 5027                            | 13.8  |
|       | 4" (100mm) | 220             | 537 | 4" BSP female | 18.2        | 7854                            | 13.8  |

→ Material Specifications

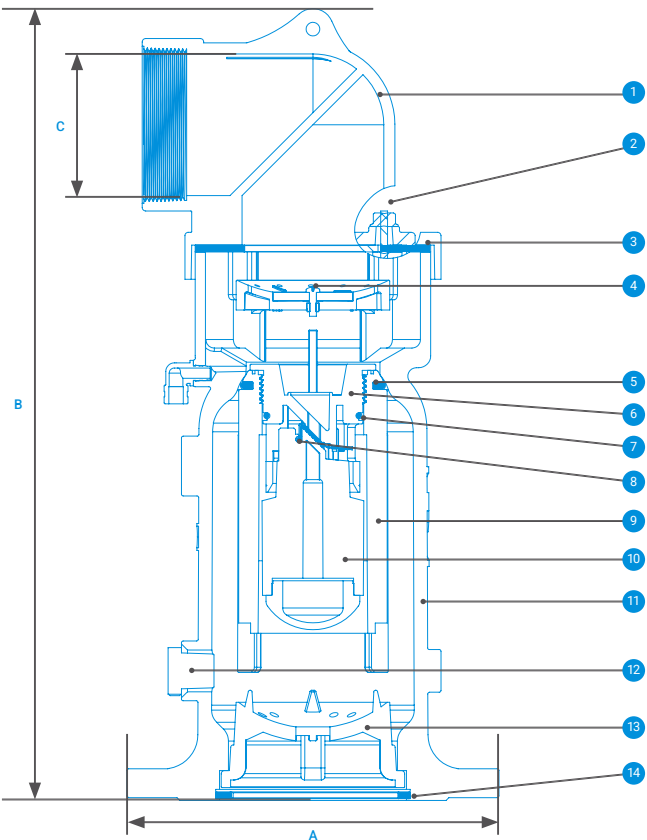
D43 3"-6", D46

| #  | Part Name             | Material                                                                |
|----|-----------------------|-------------------------------------------------------------------------|
| 1  | Discharge outlet      | Polypropylene                                                           |
| 2  | Threaded rod          | Stainless steel 304                                                     |
| 3  | Discharge outlet seal | BUNA-N                                                                  |
| 4  | Ns disc (optional)    | Reinfoced nylon                                                         |
| 5  | Air & vacuum seal     | EPDM                                                                    |
| 6  | Automatic float cover | Acetal                                                                  |
| 7  | O-ring                | EPDM                                                                    |
| 8  | Rolling seal          | EPDM                                                                    |
| 9  | Air & vacuum float    | Reinforced polypropylene D43 4", D46 3"<br>Polypropylene D43 6", D46 4" |
| 10 | Automatic float       | Polypropylene                                                           |
| 11 | Body                  | Ductile iron                                                            |
| 12 | Pressure release plug | Stainless steel 316                                                     |
| 13 | Float lock            | Acetal                                                                  |
| 14 | Snap ring             | Reinforced nylon                                                        |
| 15 | Drain outlet          | Polypropylene                                                           |

D43 3", D46 2"



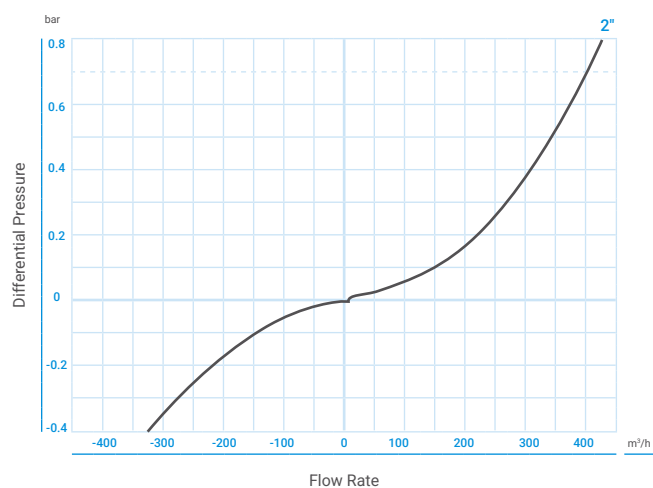
D43 4", 6", D46 3", 4"



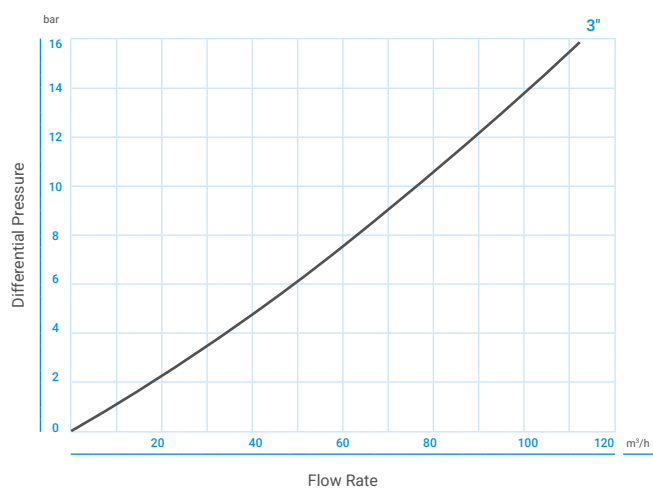
## → Head Loss

D43

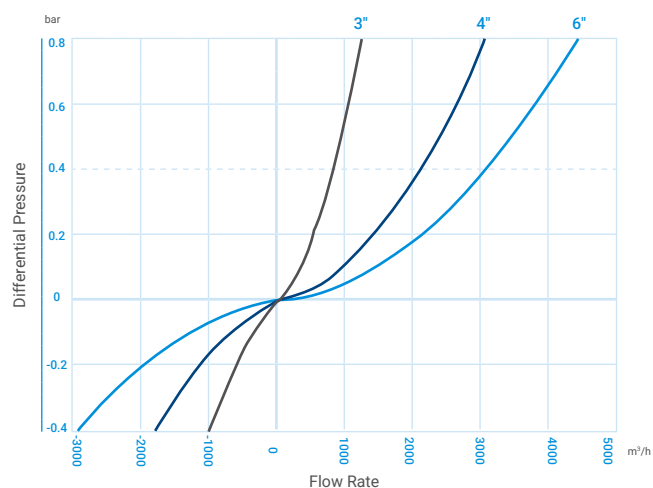
Air & Vacuum Flow Rate 2"



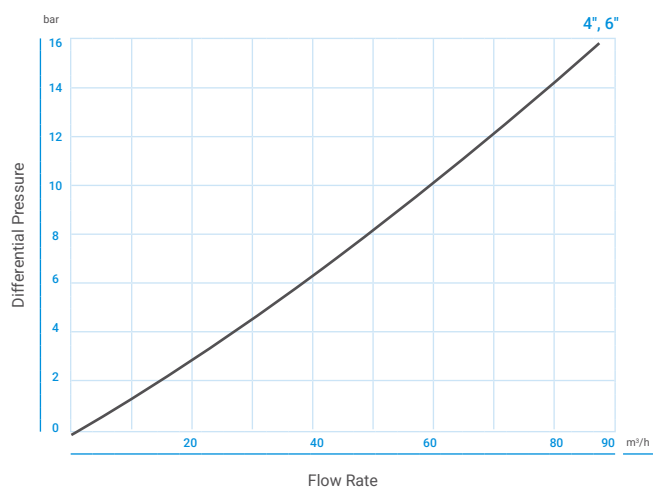
PN16 Automatic Air Release Flow Rate 3"



Air & Vacuum Flow Rate 3", 4", 6"



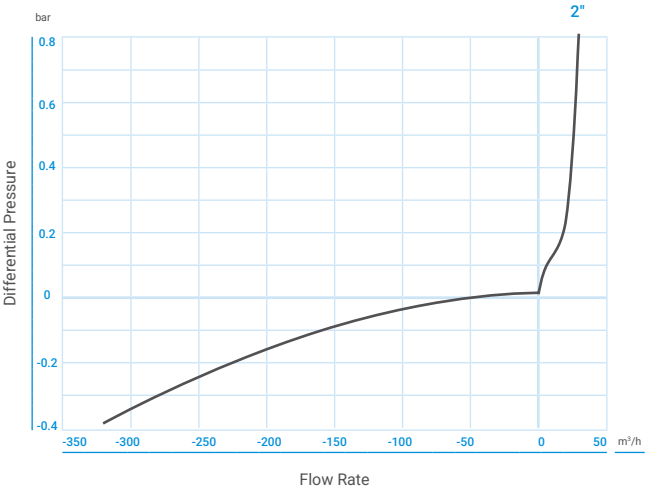
PN16 Automatic Air Release Flow Rate 4", 6"



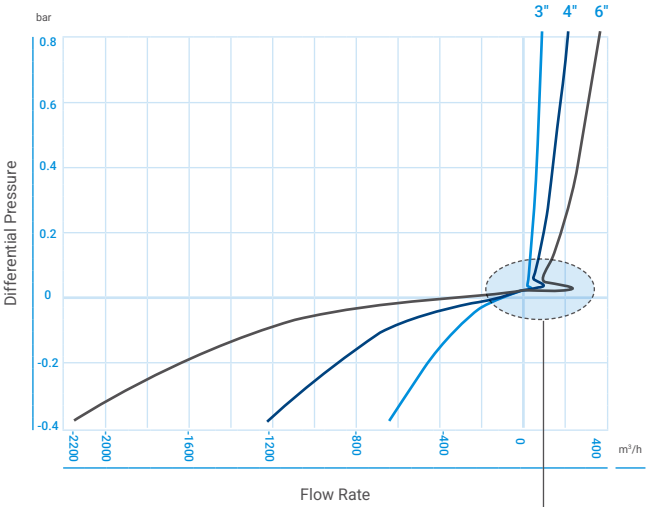
--- Max recommended design air discharge

D43NS

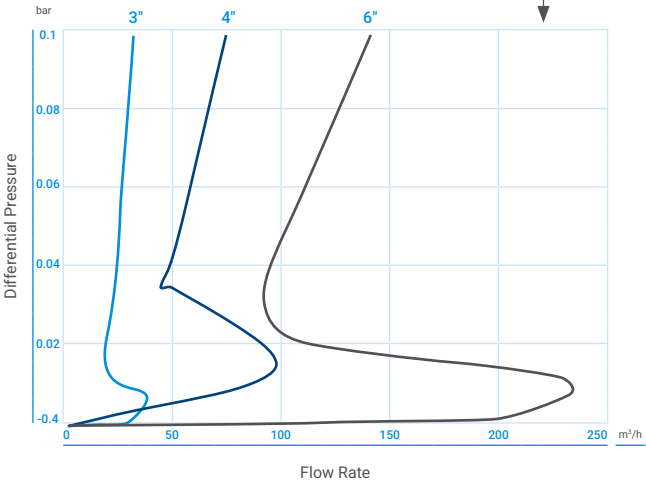
Air & Vacuum Flow Rate 2"



Air & Vacuum Flow Rate 3", 4", 6"



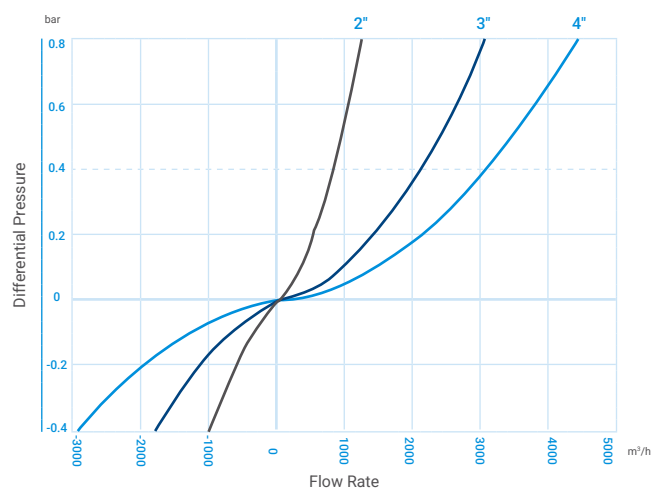
Air Discharge Switching Region



## → Head Loss

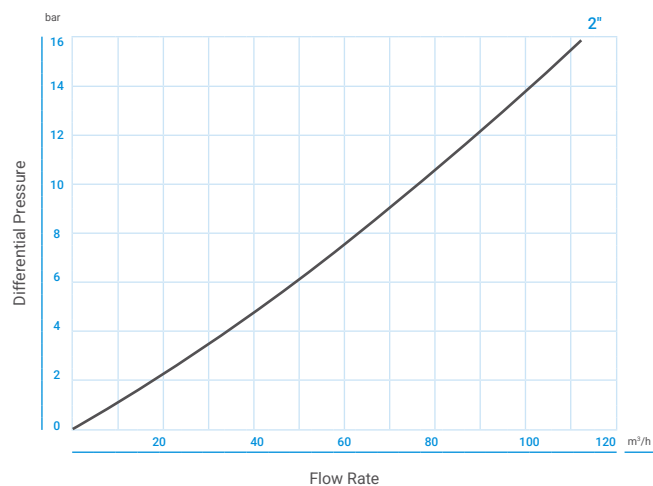
D46

Air & Vacuum Flow Rate 2", 3", 4"

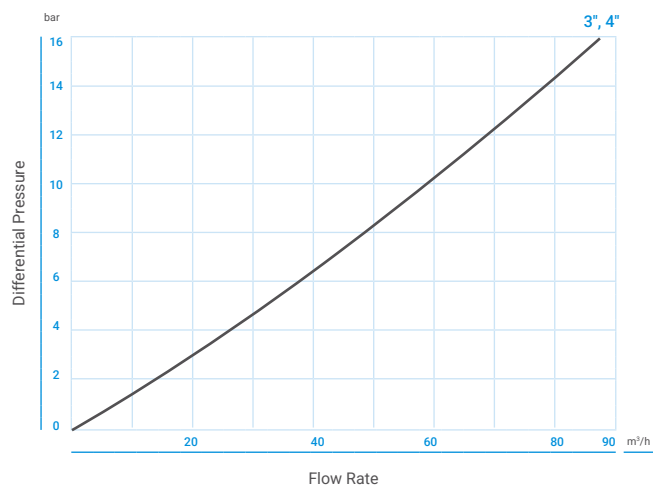


--- Max recommended design air discharge

Automatic Air Release Flow Rate 2"

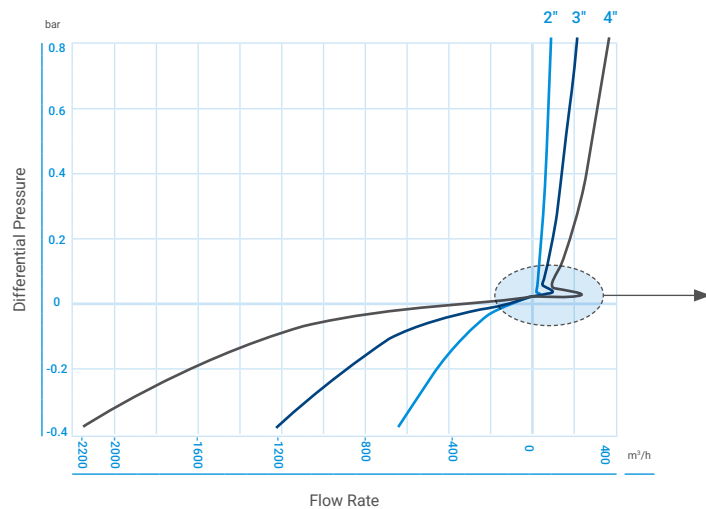


PN16 Automatic Air Release Flow Rate 4", 6"

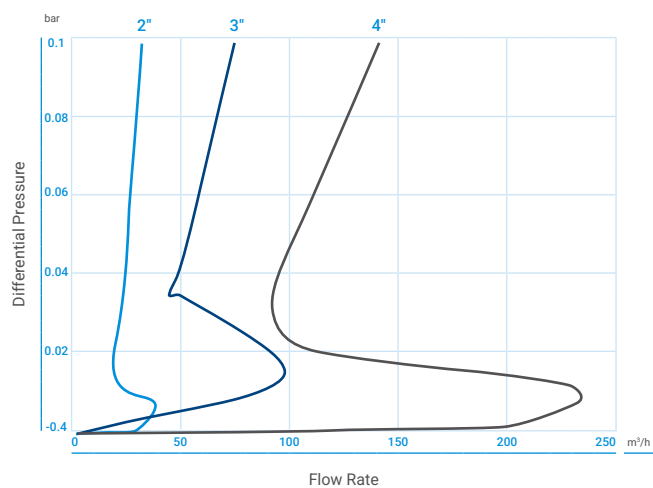


D46NS

Air & Vacuum Flow Rate 2", 3", 4"



Air Discharge Switching Region



# D50

## COMBINATION AIR VALVE

Combines both an air release valve and air & vacuum valve features. The air release component is designed to automatically release small pockets of air to the atmosphere as they accumulate along a pipeline or piping system when it is full and operating under pressure.



Maximum  
reliability



Superior  
design



High  
durability

## / Benefits & Features

- |                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| → Maximum reliability         | Reduces water hammer incidents                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| → Superior design             | Allows for high-capacity air discharge while preventing premature closure                                                                                                                                                                                                                                                                                                                                                                                                                                |
| → High durability             | Lightweight, simple and reliable structure                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| → Special orifice seat design | Combination of bronze and EPDM rubber assures long-term maintenance-free operation                                                                                                                                                                                                                                                                                                                                                                                                                       |
| → Discharge outlet            | Enables the connection of a vent pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| → Air release component       | <ul style="list-style-type: none"><li>- Body made of high-strength materials</li><li>- All operating parts are made of specially selected corrosion-resistant polymer materials</li><li>- Large-sized air release orifice:<ul style="list-style-type: none"><li>- Dramatically reduces the possibility of obstruction by debris</li><li>- Discharges high air flow rates</li></ul></li><li>- One size orifice for a wide pressure range (up to 25 bar), achieved by the rolling seal mechanism</li></ul> |

## / Specifications & Recommendations

- Working Pressure Range – D-050, D-050-C – 0.2 - 16bar | D-052: 0.2 - 25bar
- Testing Pressure – 1.5 times the working pressure of the air valve
- Maximum Working Temperature – 60°C
- Maximum Intermittent Temperature – 90°C

## → Technical Dimensions

D50

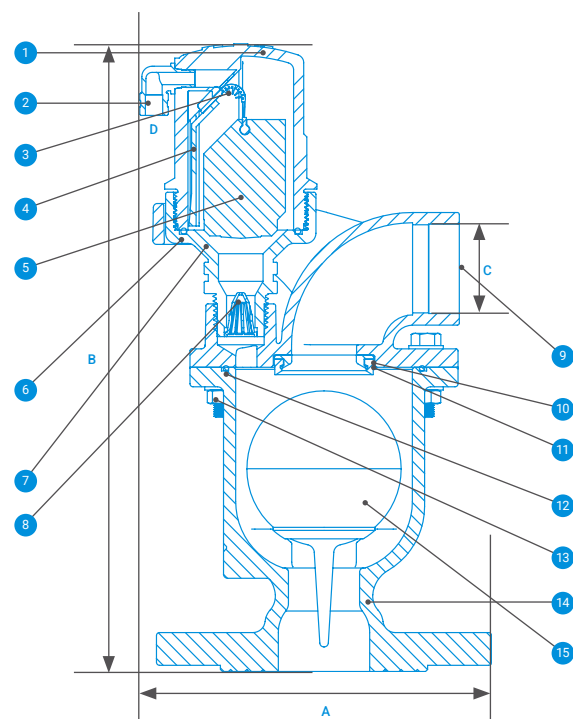
| Nominal Size       | Dimensions (mm) |     | Connections    |               | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |      |
|--------------------|-----------------|-----|----------------|---------------|-------------|---------------------------------|------|
|                    | A               | B   | C              | D             |             | a/v                             | Auto |
| 2" (50mm) threaded | 173             | 293 | 1½" BSP female | ⅜" BSP female | 4.3         | 794                             | 12   |
| 2" (50mm) flanged  | 173             | 306 | 1½" BSP female | ⅜" BSP female | 6.4         | 794                             | 12   |
| 3" (80mm) threaded | 184.3           | 329 | 2" BSP female  | ⅜" BSP female | 10          | 1809                            | 12   |
| 3" (80mm) flanged  | 211             | 328 | 2" BSP female  | ⅜" BSP female | 13          | 1809                            | 12   |

| Nominal Size | Dimensions (mm) |     |            |          | Connection    | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |      |
|--------------|-----------------|-----|------------|----------|---------------|-------------|---------------------------------|------|
|              | A               | B   | C Internal | External |               |             | a/v                             | Auto |
| 4" (100mm)   | 342             | 382 | 80.0       | 96.0     | ⅜" BSP female | 26.4        | 3317                            | 12   |
| 6" (150mm)   | 399             | 432 | 90         | 106      | ⅜" BSP female | 43.5        | 7850                            | 12   |
| 8" (200mm)   | 553             | 554 | 124.0      | 140.0    | ⅜" BSP female | 117         | 17662                           | 12   |

## → Material Specifications

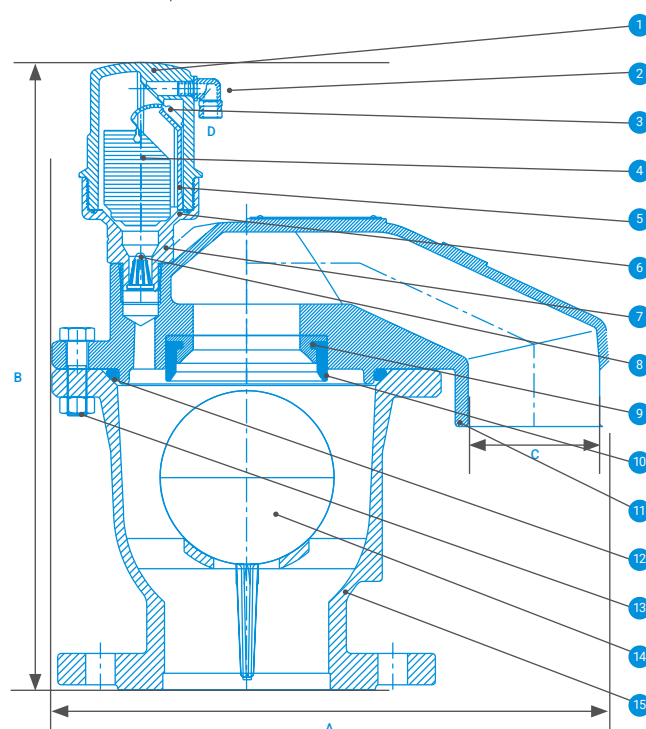
2", 3"

| #  | Part Name          | Material                            |
|----|--------------------|-------------------------------------|
| 1  | Body               | Reinforced nylon                    |
| 2  | Air release outlet | Polypropylene                       |
| 3  | Rolling seal       | EPDM                                |
| 4  | Clamping stem      | Reinforced nylon                    |
| 5  | Float              | Foamed polypropylene                |
| 6  | O-ring             | BUNA-N                              |
| 7  | Base               | Reinforced nylon                    |
| 8  | Strainer           | Nylon                               |
| 9  | Cover              | Ductile iron                        |
| 10 | Orifice seat       | Bronze                              |
| 11 | Orifice seal       | EPDM                                |
| 12 | O-ring             | BUNA-N                              |
| 13 | Bolt, nut & washer | Steel, zinc cobalt coated           |
| 14 | Body               | Ductile iron                        |
| 15 | Float              | Polycarbonate / stainless steel 316 |



4", 6", 8"

| #  | Part Name          | Material                        |
|----|--------------------|---------------------------------|
| 1  | Body               | Reinforced nylon                |
| 2  | Air release outlet | Polypropylene                   |
| 3  | Rolling seal       | EPDM                            |
| 4  | Float              | Foamed polypropylene            |
| 5  | Clamping stem      | Reinforced nylon                |
| 6  | O-ring             | BUNA-N                          |
| 7  | Base               | Brass                           |
| 8  | Strainer           | Nylon                           |
| 9  | Orifice seat       | Bronze                          |
| 10 | Orifice seal       | EPDM                            |
| 11 | Cover              | Ductile iron                    |
| 12 | O-ring             | BUNA-N                          |
| 13 | Blot, nut & washer | Steel, zinc cobalt plated       |
| 14 | Float              | Polycarbonate / stainless steel |
| 15 | Body               | Ductile iron                    |



\* Screen cover 10"-12" polyethylene / ductile iron

→ Technical Dimensions

D50C, D52

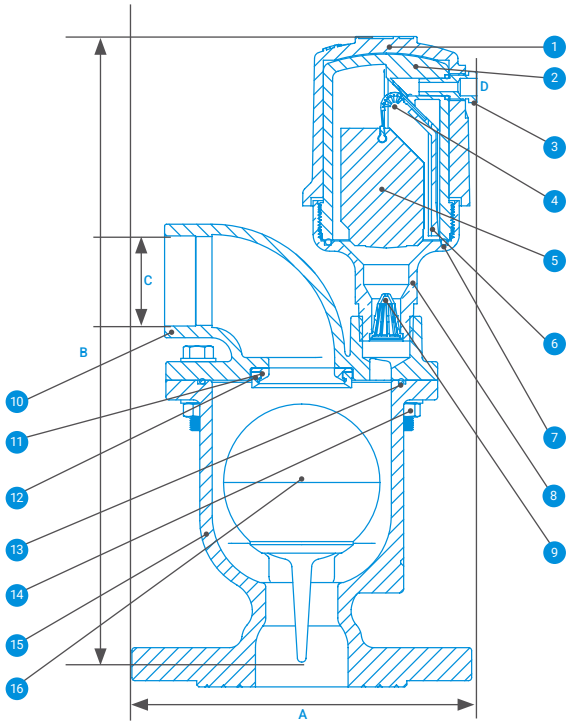
| Nominal Size       | Dimensions (mm) |       | Connections    |               | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |              |            |
|--------------------|-----------------|-------|----------------|---------------|-------------|---------------------------------|--------------|------------|
|                    | A               | B     | C              | D             |             | A/V                             | Auto D-050-C | Auto D-052 |
| 2" (50mm) threaded | 168             | 302   | 1½" BSP Female | ⅛" BSP Female | 5.7         | 794                             | 12           | 9          |
| 2" (50mm) flanged  | 168             | 315   | 1½" BSP Female | ⅛" BSP Female | 7.8         | 794                             | 12           | 9          |
| 3" (80mm) threaded | 182             | 336.5 | 2" BSP Female  | ⅛" BSP Female | 11.5        | 1809                            | 12           | 9          |
| 3" (80mm) flanged  | 205             | 339   | 2" BSP Female  | ⅛" BSP Female | 14.4        | 1809                            | 12           | 9          |

| Nominal Size | Dimensions (mm) |     |            |          | Connection    | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |              |            |
|--------------|-----------------|-----|------------|----------|---------------|-------------|---------------------------------|--------------|------------|
|              | A               | B   | C Internal | External |               |             | A/V                             | Auto D-050-C | Auto D-052 |
| 4" (100mm)   | 342             | 393 | 80.0       | 96.0     | ⅛" BSP Female | 27.4        | 3317                            | 12           | 9          |
| 6" (150mm)   | 399             | 439 | 90         | 106      | ⅛" BSP Female | 44.9        | 7850                            | 12           | 9          |
| 8" (200mm)   | 553             | 560 | 124.0      | 140.0    | ⅛" BSP Female | 118         | 17662                           | 12           | 9          |

→ Material Specifications

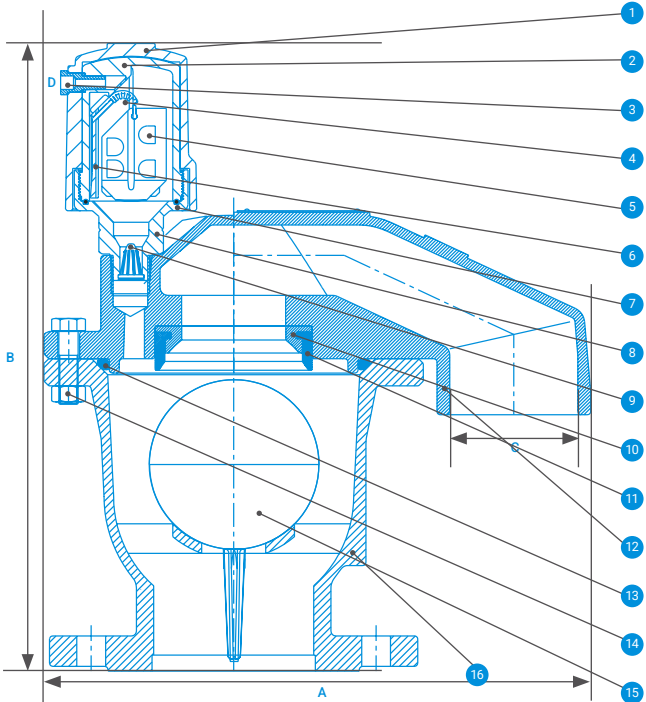
2", 3"

| #  | Part Name          | Material                            |
|----|--------------------|-------------------------------------|
| 1  | Shell              | Ductile iron                        |
| 2  | Body               | Reinforced nylon                    |
| 3  | Air release outlet | Brass                               |
| 4  | Rolling seal       | EPDM                                |
| 5  | Float              | Foamed polypropylene                |
| 6  | Clamping stem      | Reinforced nylon                    |
| 7  | O-ring             | BUNA-N                              |
| 8  | Base               | Brass                               |
| 9  | Strainer           | Nylon                               |
| 10 | Cover              | Ductile iron                        |
| 11 | Orifice seat       | Bronze                              |
| 12 | Orifice seal       | EPDM                                |
| 13 | O-ring             | BUNA-N                              |
| 14 | Bolt, nut & washer | Steel, zinc cobalt coated           |
| 15 | Body               | Ductile iron                        |
| 16 | Float              | Polycarbonate / stainless steel 316 |



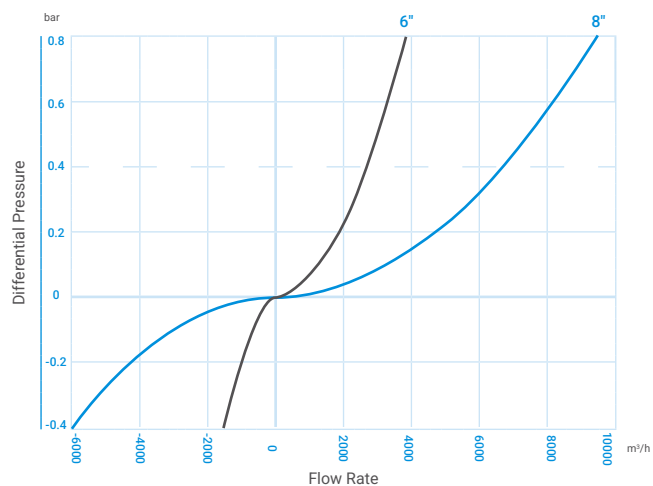
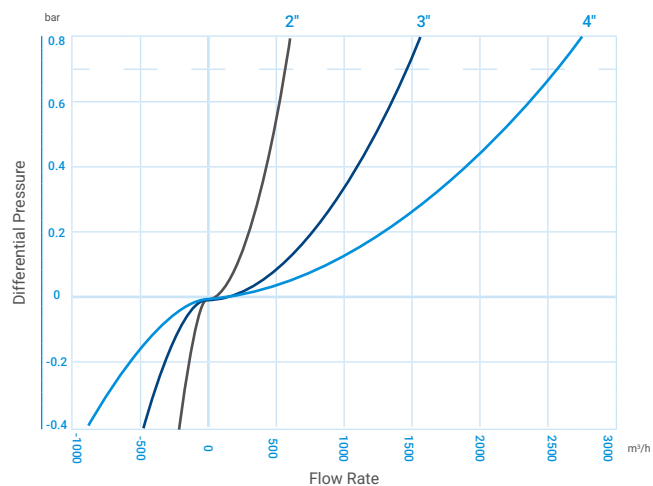
4", 6", 8"

| #  | Part Name          | Material                             |
|----|--------------------|--------------------------------------|
| 1  | Shell              | Ductile iron                         |
| 2  | Body               | Reinforced nylon                     |
| 3  | Air release outlet | Brass                                |
| 4  | Rolling seal       | EPDM                                 |
| 5  | Float              | Foamed polypropylene                 |
| 6  | Clamping stem      | Reinforced nylon                     |
| 7  | O-ring             | BUNA-N                               |
| 8  | Base               | Brass                                |
| 9  | Strainer           | Nylon                                |
| 10 | Cover              | Bronze                               |
| 11 | Orifice seat       | EPDM                                 |
| 12 | Orifice seal       | Ductile iron                         |
| 13 | O-ring             | BUNA-N                               |
| 14 | Bolt, nut & washer | Steel, zinc cobalt coated            |
| 15 | Body               | Polycarbonate / stainless steel 304L |
| 16 | Float              | Ductile iron                         |



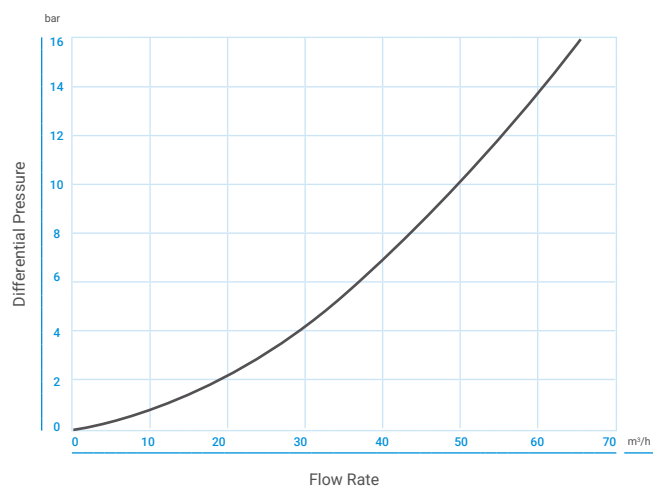
## → Head Loss

### Air & Vacuum Flow Rate

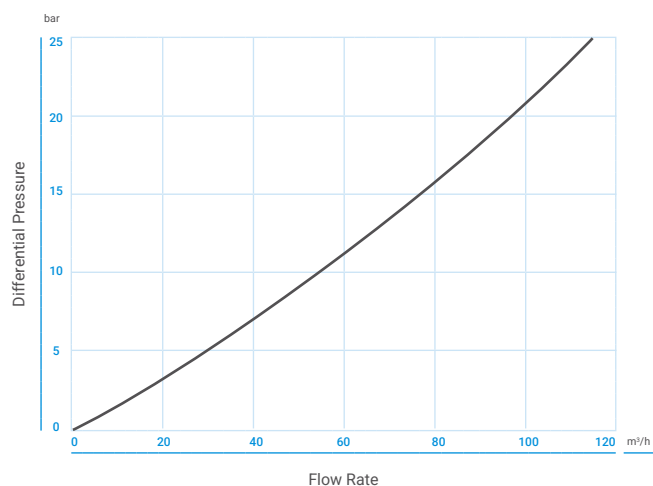


--- Max recommended design air discharge

### PN16 Automatic Air Release Flow Rate



### PN25 Automatic Air Release Flow Rate



## → Catalog Numbers

| Model | Diameter | Connection | Material | Catalog Number |
|-------|----------|------------|----------|----------------|
| D50   | 2"       | BSP        | DI       | 70500-001220   |
|       | 3"       | ISO16      | BRPL     | 70500-000265   |
|       | 3"       | BSP        | DI       | 70500-001230   |
|       | 3"       | ISO16      | DI       | 70460-001020   |
|       | 4"       | ISO16      | DI       | 70440-005950   |
|       | 6"       | ISO16      | DI       | 70440-005960   |

# D60

## COMBINATION AIR VALVE FOR HIGH FLOW SYSTEMS

Combines both air release valve and air & vacuum valve features. The air release component is designed to automatically release small pockets of air to the atmosphere as they accumulate along a pipeline or piping system when it is full and operating under pressure.



Maximum  
reliability



Superior  
design



Ease of  
maintenance

## / Benefits & Features

→ Maximum  
reliability

Reduces water hammer incidents

→ Superior  
design

- All main flow cross-sections are equal or greater than the nominal port area
- Aerodynamic design enables high flow rates of air both at intake and at discharge
- Allows for high-capacity air discharge while preventing premature closure
- Upper screen is protected with a protective cover

→ Ease of  
maintenance

Special orifice seat design, a combination of bronze and EPDM rubber, assures long-term maintenance-free operation

# / Specifications & Recommendations

- **Working Pressure Range** – D-060: 0.2 - 16 bar, D-060-C: 0.2 - 16bar, D-062: 0.2 - 25bar, D-065: 0.2 - 40bar
- **Testing Pressure** – for the air valve is 1.5 times its working pressure
- **Maximum Working Temperature** – 60°C
- **Maximum Intermittent Temperature** – 90°C

## → Technical Dimensions

D60

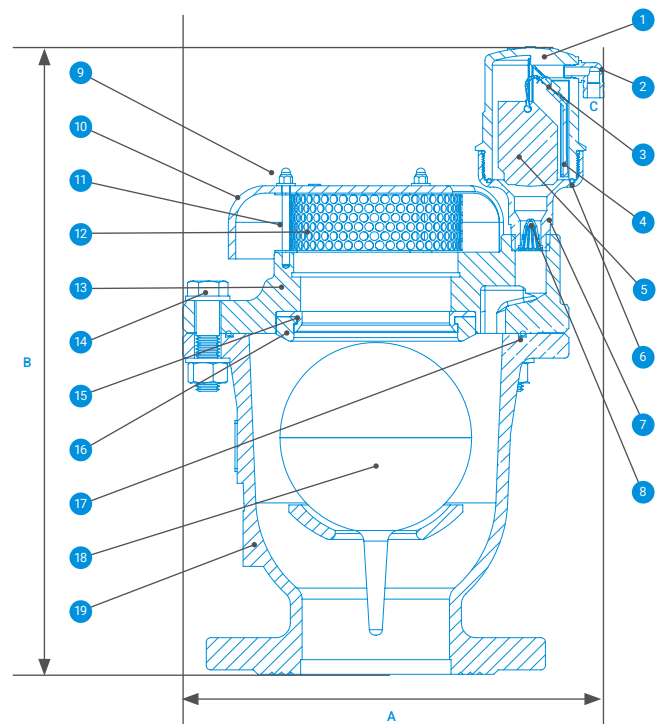
| Nominal Size       | Dimensions (mm) |     | Connections |           | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |      |
|--------------------|-----------------|-----|-------------|-----------|-------------|---------------------------------|------|
|                    | A               | B   | C           | D         |             | a/v                             | Auto |
| 1" (25mm) threaded | 158             | 303 | 1½" female  | ⅛" female | 4.4         | 506.7                           | 12   |
| 1" (25mm) flanged  | 158             | 303 | 1½" female  | ⅛" female | 5.4         | 506.7                           | 12   |

| Nominal Size       | Dimensions (mm) |     | Connection | Weight (Kg.) | Orifice Area (mm <sup>2</sup> ) |      |
|--------------------|-----------------|-----|------------|--------------|---------------------------------|------|
|                    | A               | B   | D          |              | a/v                             | Auto |
| 2" (50mm) threaded | 215             | 323 | ⅛" female  | 9.7-10       | 1960                            | 12   |
| 2" (50mm) flanged  | 215             | 336 | ⅛" female  | 10.7-11      | 1960                            | 12   |
| 3" (80mm)          | 249             | 387 | ⅛" female  | 17-18        | 5030                            | 12   |
| 4" (100mm)         | 286             | 431 | ⅛" female  | 23.6-25      | 7850                            | 12   |
| 6" (150mm)         | 375             | 588 | ⅛" female  | 73.5-78      | 17662                           | 12   |
| 8" (200mm)         | 463             | 630 | ⅛" female  | 108.6-117    | 31400                           | 12   |
| 10" (250mm)        | 586             | 788 | ⅛" female  | 137.7-150    | 49087                           | 12   |

## → Material Specifications

2" - 10"

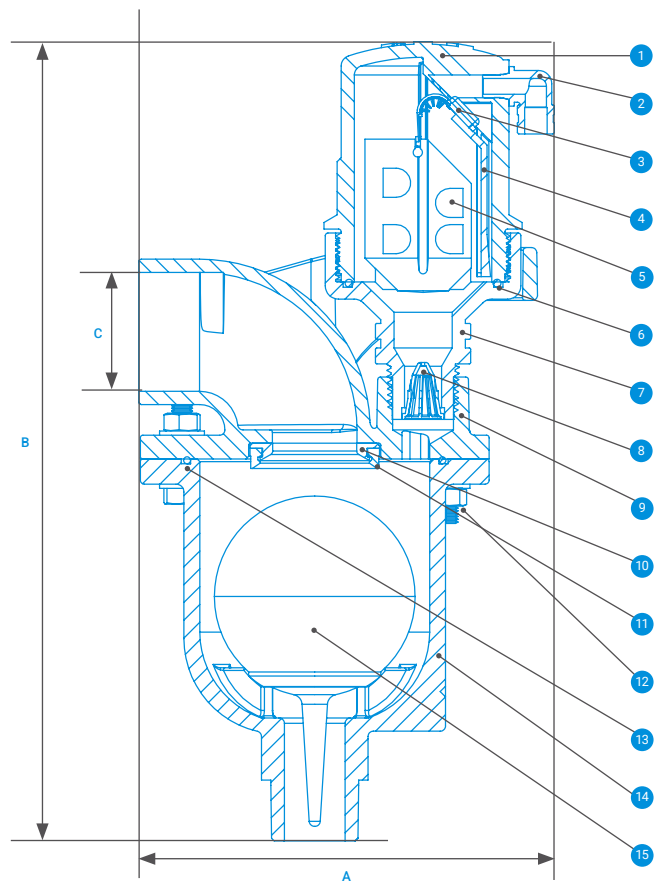
| #  | Part Name          | Material                        |
|----|--------------------|---------------------------------|
| 1  | Body               | Reinforced nylon                |
| 2  | Air release outlet | Polypropylene                   |
| 3  | Rolling seal       | EPDM                            |
| 4  | Clamping stem      | Reinforced nylon                |
| 5  | Float              | Foamed polypropylene            |
| 6  | O-ring             | BUNA-N                          |
| 7  | Base               | Brass                           |
| 8  | Strainer           | Nylon                           |
| 9  | Domed nut & washer | Stainless steel 304             |
| 10 | Screen cover 2"-4" | Ductile iron                    |
|    | 6"-10"             | Polyethylene / ductile iron     |
| 11 | Threaded rod       | Stainless steel 304             |
| 12 | Screen             | Stainless steel 304             |
| 13 | Cover              | Ductile iron                    |
| 14 | Bolt, nut & washer | Steel, zinc cobalt coated       |
| 15 | Orifice seat       | Bronze                          |
| 16 | Orifice seal       | EPDM                            |
| 17 | O-ring             | BUNA-N                          |
| 18 | Float              | Polycarbonate / stainless steel |
| 19 | Body               | Ductile iron                    |



## → Material Specifications

2" - 10"

| #  | Part Name          | Material                        |
|----|--------------------|---------------------------------|
| 1  | Body               | Reinforced nylon                |
| 2  | Discharge outlet   | Polypropylene                   |
| 3  | Rolling seal       | EPDM                            |
| 4  | Clamping stem      | Reinforced nylon                |
| 5  | Float              | Foamed polypropylene            |
| 6  | O-ring             | BUNA-N                          |
| 7  | Base               | Reinforced nylon                |
| 8  | Strainer           | Nylon                           |
| 9  | Cover              | Ductile iron                    |
| 10 | Orifice seat       | Bronze                          |
| 11 | Orifice seal       | EPDM                            |
| 12 | Bolt, nut & washer | Steel, zinc cobalt coated       |
| 13 | O-ring             | BUNA-N                          |
| 14 | Body               | Ductile iron                    |
| 15 | Float              | Polycarbonate / stainless steel |



## → Technical Dimensions

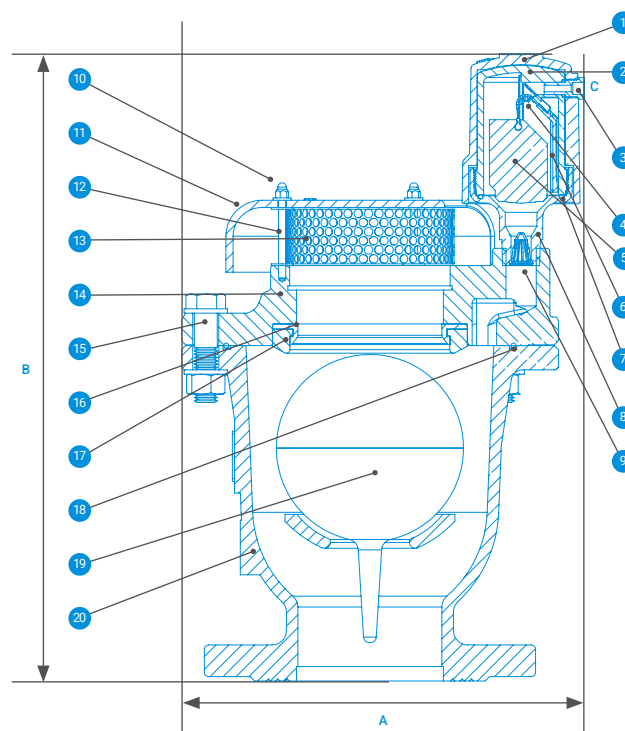
D60C, D62

| Nominal Size       | Dimensions (mm) |     | Connections |           | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |              |            |
|--------------------|-----------------|-----|-------------|-----------|-------------|---------------------------------|--------------|------------|
|                    | A               | B   | C           | D         |             | a/v                             | Auto D-060-C | Auto D-062 |
| 1" (25mm) threaded | 152             | 291 | 1½" female  | ⅛" female | 5.3         | 506.7                           | 12           | 9          |
| 1" (25mm) flanged  | 152             | 311 | 1½" female  | ⅛" female | 6.3         | 506.7                           | 12           | 9          |

| Nominal Size       | Dimensions (mm) |     | Connection | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |              |            |
|--------------------|-----------------|-----|------------|-------------|---------------------------------|--------------|------------|
|                    | A               | B   |            |             | A/V                             | Auto D-050-C | Auto D-052 |
| 2" (50mm) threaded | 210             | 357 | ⅛" female  | 9.7-10      | 1960                            | 12           | 9          |
| 2" (50mm) flanged  | 210             | 325 | ⅛" female  | 11.7-12     | 1960                            | 12           | 9          |
| 3" (80mm)          | 243             | 393 | ⅛" female  | 18-19       | 5030                            | 12           | 9          |
| 4" (100mm)         | 280             | 438 | ⅛" female  | 24.6-26     | 7850                            | 12           | 9          |
| 6" (150mm)         | 375             | 596 | ⅛" female  | 74.5-79     | 17662                           | 12           | 9          |
| 8" (200mm)         | 463             | 638 | ⅛" female  | 109.6-118   | 31400                           | 12           | 9          |
| 10" (250mm)        | 586             | 788 | ⅛" Female  | 138.7-151   | 49087                           | 12           | 9          |

## → Material Specifications

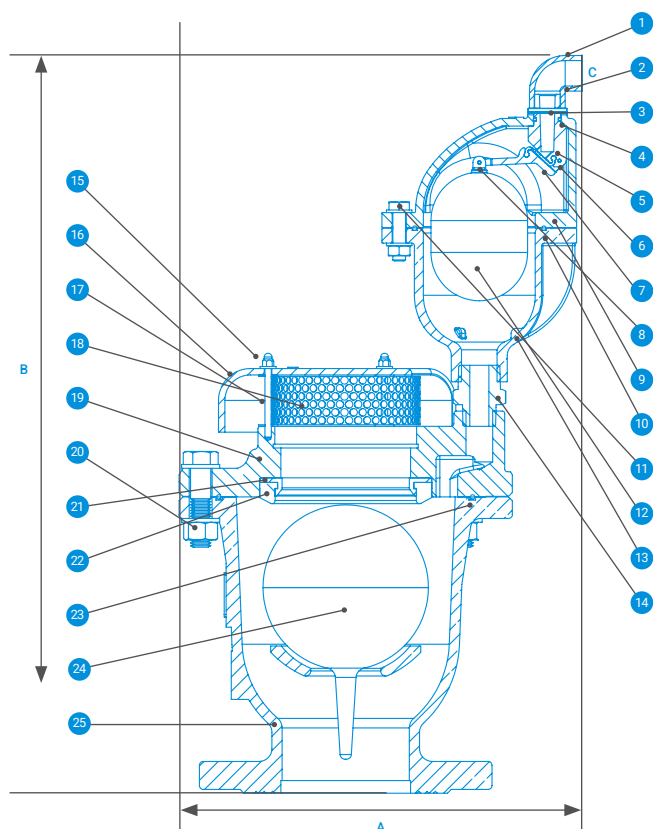
| #  | Part Name          | Material                        |
|----|--------------------|---------------------------------|
| 1  | Shell              | Ductile iron                    |
| 2  | Body               | Reinforced nylon                |
| 3  | Air release outlet | Brass                           |
| 4  | Rolling seal       | EPDM                            |
| 5  | Float              | Foamed polypropylene            |
| 6  | Clamping stem      | Reinforced nylon                |
| 7  | O-ring             | BUNA-N                          |
| 8  | Base               | Brass                           |
| 9  | Strainer           | Nylon                           |
| 10 | Domed nut & washer | Stainless steel 304             |
| 11 | Screen cover 2"-4" | Ductile iron                    |
|    | 6"-10"             | Polyethylene / ductile iron     |
| 12 | Threaded rod       | Stainless steel 304             |
| 13 | Screen             | Stainless steel 304             |
| 14 | Cover              | Ductile iron                    |
| 15 | Bolt, nut & washer | Steel, zinc cobalt coated       |
| 16 | Orifice seat       | Bronze                          |
| 17 | Orifice seal       | EPDM                            |
| 18 | O-ring             | BUNA-N                          |
| 19 | Float              | Polycarbonate / stainless steel |
| 20 | Body               | Ductile iron                    |



## → Technical Dimensions

D65

| Nominal Size       | Dimensions (mm) |     | Connection      | Weight (kg) | Orifice Area (mm <sup>2</sup> ) |      |
|--------------------|-----------------|-----|-----------------|-------------|---------------------------------|------|
|                    | A               | B   |                 |             | A/V                             | Auto |
| 2" (50mm) threaded | 246             | 500 | 1/2" BSP female | 13.4-13.7   | 1960                            | 15   |
| 2" (50mm) flanged  | 246             | 487 | 1/2" BSP female | 15.4-15.7   | 1960                            | 15   |
| 3" (80mm)          | 280             | 536 | 1/2" BSP female | 21.8-22.8   | 5030                            | 15   |
| 4" (100mm)         | 317             | 580 | 1/2" BSP female | 28.2-32.7   | 7850                            | 15   |
| 6" (150mm)         | 382             | 775 | 1/2" BSP female | 28.2-32.7   | 17662                           | 15   |
| 8" (200mm)         | 472             | 813 | 1/2" BSP female | 109.4-121.7 | 31400                           | 15   |



## → Material Specifications

| #  | Part Name          | Material                        |
|----|--------------------|---------------------------------|
| 1  | Air release outlet | PVC                             |
| 2  | Orifice            | Reinforced nylon                |
| 3  | Rollpin            | Stainless steel 304             |
| 4  | O-ring             | BUNA-N                          |
| 5  | Rolling seal       | EPDM                            |
| 6  | Rollpin            | Stainless steel 304             |
| 7  | Lever              | Reinforced nylon                |
| 8  | Rollpin cover      | Stainless steel SAE 304         |
| 9  | Cover              | Ductile iron                    |
| 10 | O-ring             | BUNA-N                          |
| 11 | Bolt nut & washer  | Steel, zinc cobalt coated       |
| 12 | Float              | Polycarbonate / stainless steel |
| 13 | Body               | Ductile iron                    |
| 14 | Adaptor            | Brass                           |
| 15 | Domed nut & washer | Stainless steel 304             |
| 16 | Screen cover 2"-4" | Ductile iron                    |
|    | 6"-8"              | Polyethylene / ductile iron     |
| 17 | Threaded rod       | Stainless steel 304             |
| 18 | Screen             | Stainless steel 304             |
| 19 | Cover              | Ductile iron                    |
| 20 | Bolt nut & washer  | Steel, zinc cobalt coated       |
| 21 | Orifice seat       | Bronze                          |
| 22 | Orifice seal       | EPDM                            |
| 23 | O-ring             | BUNA-N                          |
| 24 | Float 2"-4"        | Polycarbonate / stainless steel |
|    | 6"-8"              | Stainless steel                 |
| 25 | Body               | Ductile iron                    |

## → Catalog Numbers

| Model | Diameter | Connection | Material | Catalog Number |
|-------|----------|------------|----------|----------------|
| D60   | 3"       | ANSI       | SST      | 70561-000047   |
|       | 4"       | ANSI       | SST      | 70561-016218   |
|       | 6"       | ANSI       | SST      | 70561-007905   |

# AIR VALVES

## DESCRIPTION GUIDE

D40<sup>1</sup> PP<sup>2</sup> COMB<sup>3</sup> 2"<sup>4</sup> BSP<sup>5</sup> PN10<sup>6</sup> MN<sup>7</sup>

Sample description

### 1 Model

|       |                           |
|-------|---------------------------|
| NAVK  | Nav kinetic (plastic)     |
| NAVA  | Nav automatic (plastic)   |
| NAVC  | Nav combination (plastic) |
| NAVMC | Nav combination (metal)   |
| AV10  | ARI AV10                  |
| D40   | ARI D40                   |
| D40L  | ARI D40L                  |
| D43   | ARI D43                   |
| D46   | ARI D46                   |
| D50   | ARI D50                   |

|        |            |
|--------|------------|
| D60    | ARI D60    |
| D70    | ARI D70    |
| D70PQ  | ARI D70PQ  |
| DG10   | ARI DG10   |
| DT40   | ARI DT40   |
| DT40LP | ARI DT40LP |
| K10    | ARI K10    |
| K60    | ARI K60    |
| S50    | ARI S50    |
| SG10   | ARI SG10   |

### 2 Material

|      |                                    |
|------|------------------------------------|
| PL   | Reinforced nylon                   |
| PP   | Polypropylene                      |
| DI   | Ductile iron                       |
| SST  | Stainless steel                    |
| BZPL | Bronze base, reinforced nylon body |
| BRPL | Brass base, reinforced nylon body  |

### 3 Function

|      |                  |
|------|------------------|
| KINT | Kinetic & vacuum |
| AUTO | Automatic        |
| COMB | Combination      |
| DYN  | Dynamic          |

### 4 Diameter

|      |                   |
|------|-------------------|
| 1/2" | 1/2" (15mm)       |
| 3/4" | 3/4" (20mm)       |
| 1"   | 1" (25mm)         |
| 1.5" | 1.5" (40mm)       |
| 2"   | 2" (50mm)         |
| 2.5" | 2.5" (65mm)       |
| 3"R  | 3" (80x50x80mm)   |
| 3"   | 3" (80mm)         |
| 4"R  | 4" (100x80x100mm) |
| 4"   | 4" (100mm)        |
| 6"   | 6" (150mm)        |
| 8"   | 8" (200mm)        |

### 5 Connection

|      |          |
|------|----------|
| NPT  | NPT      |
| BSP  | BSP      |
| DN10 | ISO PN10 |
| DN16 | ISO PN16 |
| AN12 | ANSI 125 |
| AN15 | ANSI 150 |
| AN30 | ANSI 300 |
| BSTD | BSTD     |
| BSTE | BSTE     |
| ABNT | ABNT     |

### 6 Max. Pressure

|      |                |
|------|----------------|
| PN6  | 6bar / 90psi   |
| PN10 | 10bar / 145psi |
| PN16 | 16bar / 250psi |
| PN25 | 25bar / 380psi |
| PN40 | 40bar / 600psi |

### 7 Unique Features

|     |                    |
|-----|--------------------|
| AS  | Non flow return    |
| CP  | Check point        |
| MN  | Mining             |
| GAS | Gas application    |
| MTN | Male thread nozzle |
| FCO | Female connection  |
| HW  | Hot water          |
| NS  | Non slam           |
| STF | S. steel float     |

# / Control Valves Application



Precision  
Agriculture



# Netafim Valves App

A one-of-a-kind tool for designers, dealers & end-users!



Easy of use



Smart



Maximum reliability

## / Benefits & Features

### → Easy of use

- Find everything you need under the same roof: digital product catalog that contains various product sheets
- Any technical material that can assist to select, install and maintain a valve

### → Smart

Simply calculate the valves head loss, recommended flow rates, etc

### → Maximum reliability

Find a list of standard products extremely easy to select from as well as a quick guide for selecting unique products

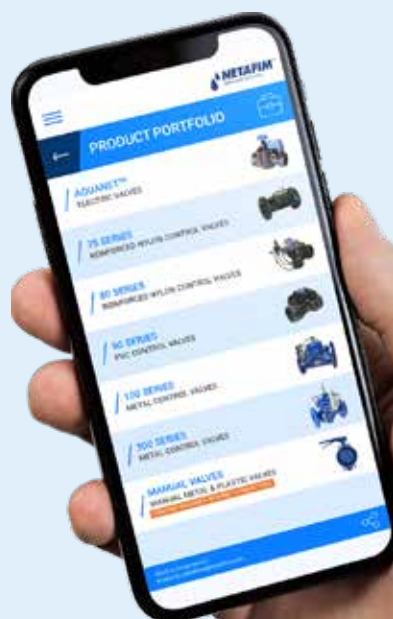
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→ Homescreen



→ Product Sheets



→ Hydraulic Calculations



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