

# Plastic valve

## Plastic valve

The Bermad 200 Series is a plastic valves series in the sizes ½" to 2", and is made from high-quality fibreglass-reinforced nylon. This makes these valves perfectly resistant to mechanical forces caused by pressure, temperature (expansion coefficient), and vibrations.

The nylon and stainless steel parts are resistant to acids and salts of fertilisers used in various irrigation systems.

The operating and pressure losses of the plastic diaphragm-actuated valves are low, and the flow capacity is high.

Available in both straight and angled versions.

The advanced design guarantees the gradual opening and closing of the valve. This prevents damage caused by water hammer.

Equipped with a self-cleaning filter in the control loop (3W), the valve is not affected by soiled water. This makes the 200 Series a suitable and reliable solution for a large number of applications.





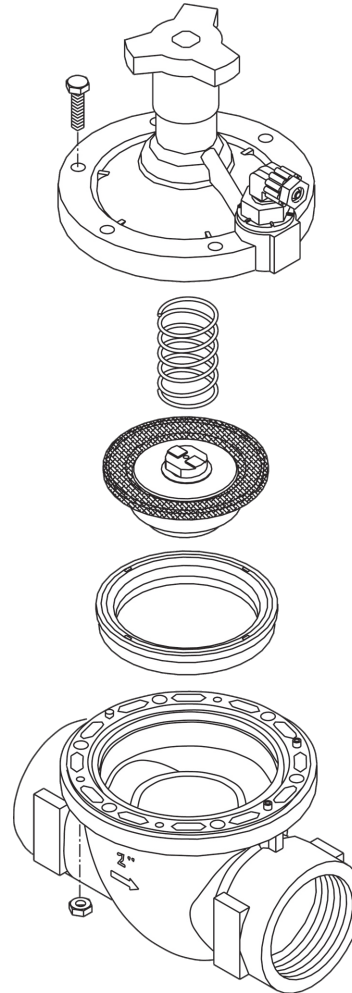
# Plastic valve Technical data

### Applications:

- Sprinkler systems
- Eb & flood systems
- Substrate systems
- Irrigation systems
- Industry
- Automation
- Recirculation systems
- Filter flushing valves
- Safeguard
- Pressure control
- Pressure relief valve

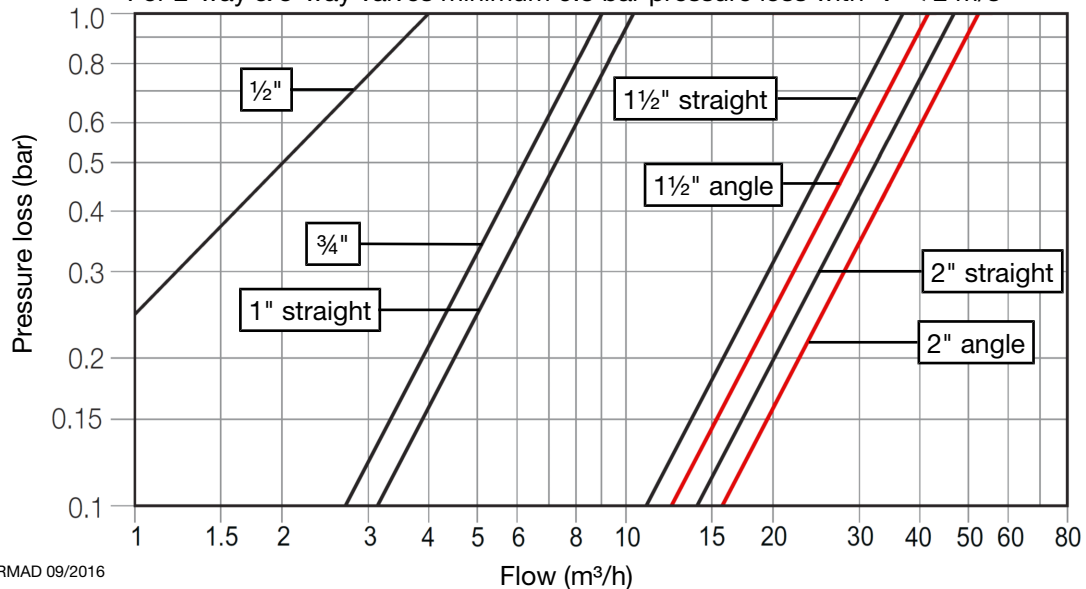
### Option:

- Flowstem
- Various solenoids
- N.O. version-electrically closing
- Combination of functions
- Pneumatic control



### Flow diagram for completely open valves:

For 2-way & 3-way valves minimum 0.3 bar pressure loss with 'V' < 2 m/s



## Plastic valve Technical data

### Specifications:

- Working pressure: 0,7 – 10 bar
- Max. temperature: 60 °C
- Connection: BSP female
- Pressure class: ISO PN10

### Materials:

- Body and cover: fibreglass-reinforced nylon
- Spring: Stainless steel
- Diaphragm: NBR (option: EPDM)
- Seals: NBR

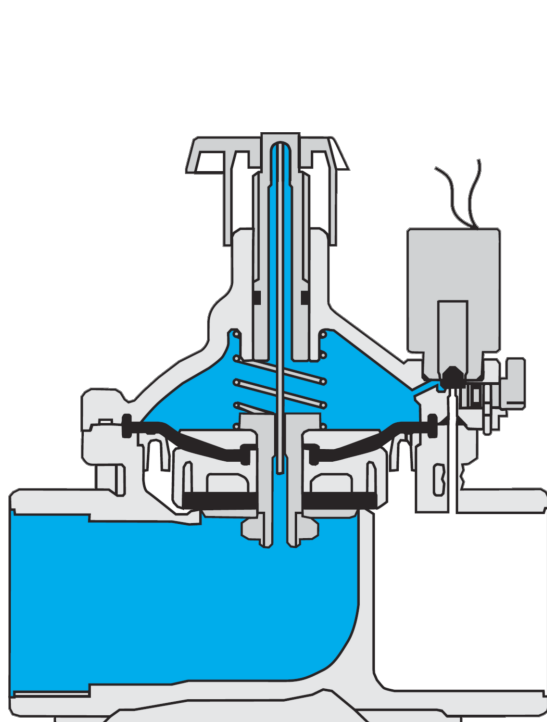
### Models:

- 1/2" straight BSP
- 3/4" straight BSP
- 1" straight BSP
- 1 1/2" straight BSP
- 1 1/2" angled BSP
- 2" straight BSP
- 2" angled BSP

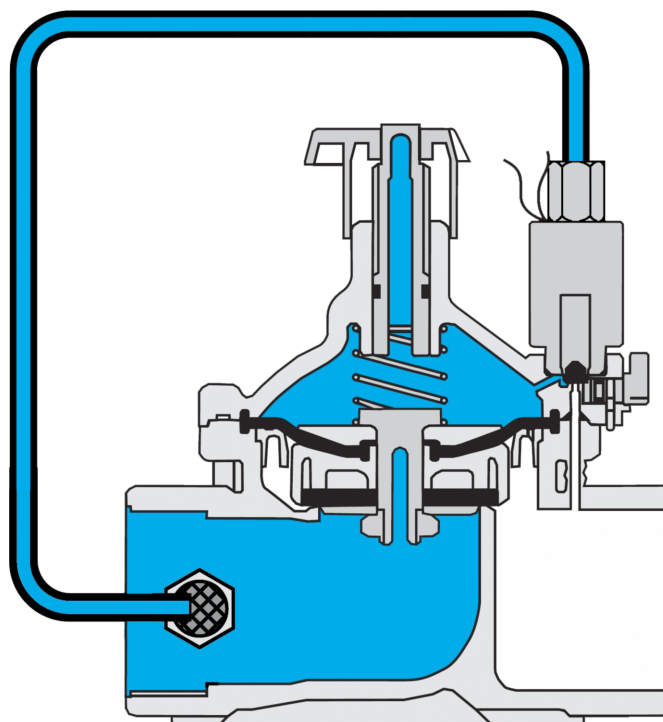
### Option:

- Electrically closing (NO)

### Connection options:



2-way design for filtered water



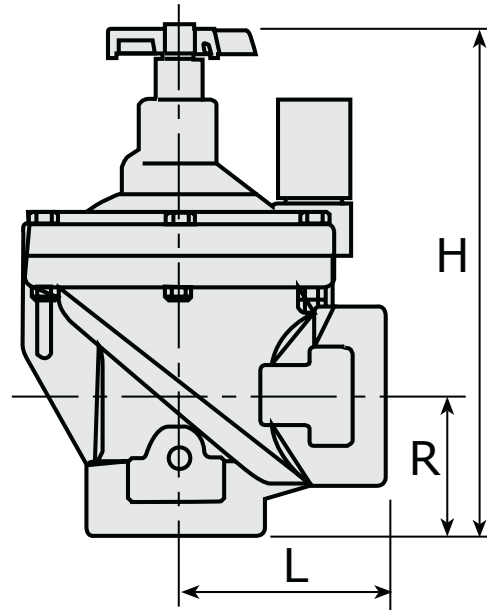
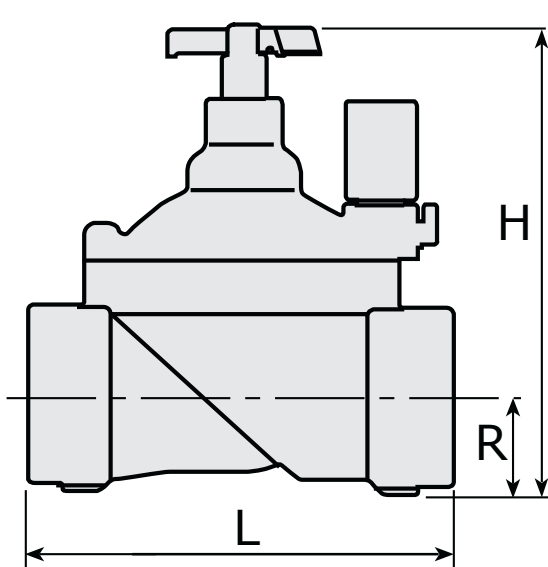
3-way design with stagnation filter



# Plastic valve Technical data

## Dimensions and weights:

Model		1/2" straight	3/4" straight	1" straight	1 1/2" straight	1 1/2" angled	2" straight	2" angled
Type		2U21X05G	2U21007G	2U21010G	2U21015G	2U21015A	2U21020G	2U21020A
L	mm	67	110	110	160	80	170	85
H	mm	92	115	115	180	190	190	210
R	mm	16	22	22	35	40	38	60
Width	mm	43	78	78	125	125	125	125
Weight	kg	0,18	0,35	0,33	1	0,95	1,1	0,91
KV		4	9	10,5	37	41	47	52
CCDV	ltr	0,007	0,015	0,015	0,072	0,072	0,072	0,072



## Plastic valve Variations



### **2w 24 VAC, Electrically operated valve 1/2"**

This valve is one-off a kind by means of its manual override which can be set to Open/Auto/Close. The Open and Close positions lock the position of the solenoid.



### **2-way 24 VAC, Electrically operated valve**

The electrically operated valve is fitted with a solenoid. The valve is normally closed (NC). An electric control signal is required to open the valve. (Option: normally open valve)



### **Hydraulically operated valve**

The hydraulically operated valve is controlled by external water pressure. When the pressure is equal to or higher than the system pressure, the valve closes.



## Plastic valve Variations



### **Pressure sustaining valve / relief valve**

A pressure sustaining valve / relief valve is closed until the pressure reaches the pre-set pressure set on the navaton/pilot.

By this means, overpressure or too-low pressure upstream from the valve is prevented



### **3-way 24 VDC, Pressure reducing valve**

The pressure reducing valve regulates a constant pressure downstream of the valve through the navaton/pilot. The valve modulates close by increasing upstream pressure.