# BERMAD IRRIGATION CONTROL VALVES

Ensure optimal performance and longevity of your irrigation system by choosing a state-of-the-art valve system that matches your setup.















# IRRIGATION CONTROL VALVES

holistic approach.

We ensure a perfect interplay of technologies and equipment, from the water source to the plant – for maximal results, optimal return on investment, and longevity of your agricultural irrigation setup.

Ask your Pipelife contact to find out more about our comprehensive irrigation solutions from water sourcing to irrigation and full service from conception to installation. Or visit our website, www.pipelife.com

With an irrigation setup tailored to your agricultural conditions, you can create the perfect conditions for crops to thrive. It will increase yields, improve product quality, and protect the soil while saving time and resources.

As the choice of technologies and equipment is vast and there are multiple aspects to consider for every part of the system, it can be challenging to piece together an optimal setup. This is why we offer a

With years of expertise in irrigation and agriculture, our experts will help you find the ideal balance between performance and benefit, investment and return, high-tech and usability. Leave the weighing of advantages and disadvantages to us and benefit from an irrigation setup that is designed to your specific needs and expectations.

To offer our clients top-quality solutions from A to Z, we hold quality standards high for our in-house manufactured product systems as much as for our carefully selected manufacturing partners, such as BERMAD.



## **IRRIGATION VALVE 100-DC SERIES**

## **IRRIGATION VALVE IR-100 SERIES HYFLOW**



#### DESCRIPTION

The double chamber actuator assembly design consists of both upper and lower control chambers. The valves can easily be configured on-site from single to double chamber control valves. The shaft sub-assembly is center guided, providing an unobstructed seat area.

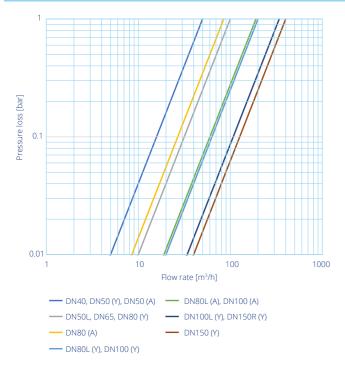
IR-100-DC Series are now upgrading the best irrigation valves in the world to also be double chamber, available in the range: oblique (Y) - 1½", 2", 2"L, 2½", 3"; angle - 2", 3"; "T" & double (D) "T" patterns - 3" Easier installation with stripes for markings.

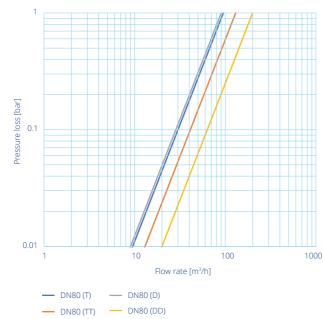
Various end connections for easy installation: plastic flanges, metal flanges, glue-in PVC adaptors, grooved adaptors, thread.

#### APPLICATIONS

- Drip systems
- Sprinklers & micro-sprinklers
- Greenhouses
- Flooding tables drainage (with external pressure)
- Irrigation machine and distribution line flush-'n-stop
- Downhill irrigation and distribution lines
- Low flow and low-pressure operations
- Serial pressure reducing

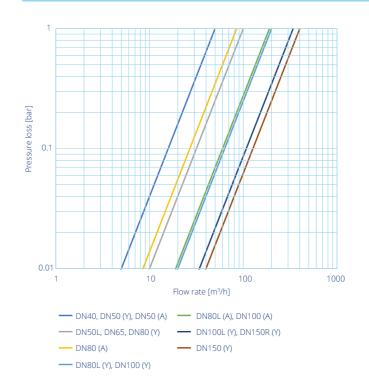
#### FLOW CHART





2-way circuit "Added head loss" (for "V" below 2 m/s): 0.3 bar

#### **FLOW CHART**





#### DESCRIPTION

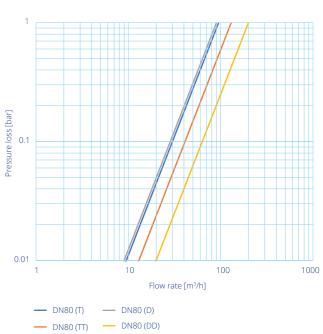
A unitized flexible super-travel diaphragm and guided plug provide a significantly "look through" passage resulting in accurate and stable regulation and ultra-high flow capacity.

The hYflow unique body design allows on-site adaption to a wide range of end connection types and sizes. Its articulated flange connections isolate the valve from pipeline bending and pressure stresses.

Available in sizes: oblique (Y) - 1½", 2", 2"L, 2½", 3", 3"L, 4", 4"L, 6"R & 6"; angle - 2", 3", 3"L, 4" "T" and double (D) "T" patterns – 3".

#### **APPLICATIONS**

- Irrigation control head
- In-Field control head
- LPS Low Pressure Systems
- Energy saving irrigation systems
- Computerized irrigation systems



2-way circuit "Added head loss" (for "V" below 2 m/s): 0.3 bar

## **IRRIGATION VALVE IR-200 SERIES**

## **IRRIGATION VALVE IR-350 SERIES**



#### DESCRIPTION

The BERMAD IR-200 series valves are hydro-efficient control valves made from composites, Hydraulically/electrically operated with flexible, balanced diaphragm and seal for agricultural commercial and residential irrigation systems.

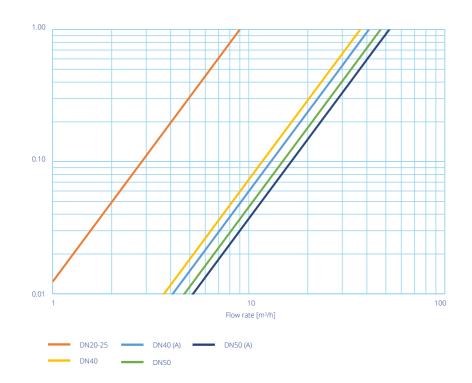
The 200 series ranges from 1/2" to 2" in size, in either globe or angle pattern. These control valves provide superior hydraulic performance, demonstrating state-of-the-art hydraulics and composite material technology.

#### **APPLICATIONS**

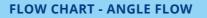
- Drip-tape systems
- LPS Low Pressure Systems
- Remote and/or elevated plots
- Head control or main control head
- Main and secondary control head
- Energy saving irrigation systems

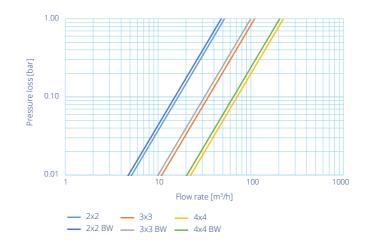


#### **FLOW CHART**



2-way circuit "Added head loss" (for "V" below 2 m/s): 0.3 bar





### DESCRIPTION

Designed for automatic backwashing of filtration systems, valves are available in angle flow (A) and straight flow (S) configurations.

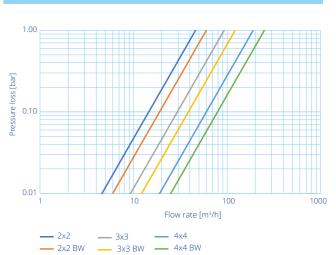
The IR-350 is a double-chambered valve with long valve travel resulting in protected diaphragm, higher flow, quick and smooth mode change, and eliminating mixing of supply and wastewater.

Available in sizes of 2"x2", 3"x3/2", 3"x3" 4"x4/3", 4"x4" composite materials.

#### **APPLICATIONS**

- · Automatic backwash of filter batteries
  - gravel filters
  - sand filters
  - disc filters
  - screen filters
- Single filter autonomic backwash system
- Angled or straight installations
- Backwash flow limit (IR-470-beKU, IR-170-beU)

**FLOW CHART - STRAIGHT FLOW** 



## **IRRIGATION VALVE IR-400 SERIES**

## **IRRIGATION VALVE IR-700 SIGMA SERIES**



#### DESCRIPTION

The body design includes a full-bore seat with an unobstructed flow path. The internal design is using advanced rubber-based materials to achieve a solid, one-piece elastomeric assembly including a flexible diaphragm, vulcanized with a rugged radial seal disc. The diaphragm is carefully balanced and peripherally supported to avoid distortion and to protect the elastomer, resulting in long-life and controlled actuation even under harsh conditions. One diaphragm and spring fully meet the valve's operating pressure range requirements.

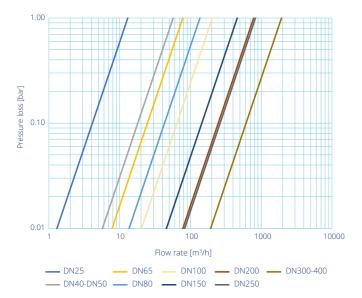
The IR-400 series valves are available in diameters from 1"-16", PN16.

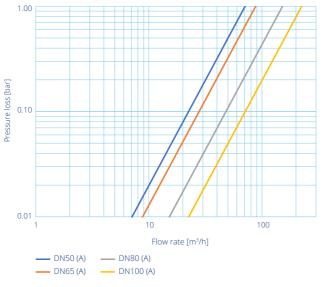
#### **APPLICATIONS**

- Computerized irrigation systems
- Distribution centers
- LPS Low Pressure Systems
- Level control valves
- Filter stations

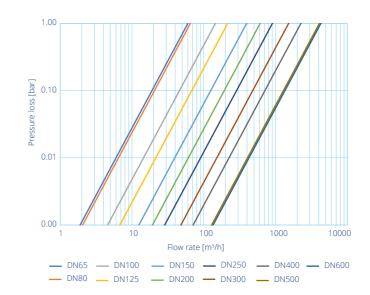
#### FLOW CHART - GLOBE PATTERN

#### **FLOW CHART - ANGLE PATTERN**





#### **FLOW CHART - 700 SIGMA ES**



2-way circuit "Added head loss" (for "V" below 2 m/s): 0.3 bar

### DESCRIPTION

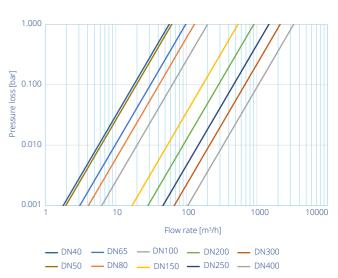
700 series valves are hydraulically operated globe valves in standard oblique "Y" pattern with full bore (IR-700-SIGMA-EN only) hydrodynamic body providing an unobstructed flow path, with raised seat assembly and double chamber unitized actuator that can be disassembled from the body as a separate integral unit. The 700 Series valves have an excellent and highly effective modulation capacity for high differential pressure applications and are designed to operate with minimal cavitation and noise under difficult operating conditions. Both IR-700-SIGMA-ES and SIGMA-EN series valves meet the ISO face-to-face standard requirements. IR-700-SIGMA-EN Series range in diameter sizes from 1½"-16" and IR-700-SIGMA-ES range in diameter sizes from 2½"-24".

#### **APPLICATIONS**

- Extreme high or low pressure, flow, water quality, and pressure differential conditions.
- Where required pressure rating exceeds PN16
- When required diameters are above 16" and up to 48"
- When the application requires a double chamber actuator:
  - Pump control active check valve

**FLOW CHART - 700 SIGMA EN** 

- Proportional "pilotless" pressure reducing valves
- Power opening and closing level control valves
- Safe burst control valves, surge protection valves



## **IRRIGATION VALVE IR-900 SERIES HYDROMETER**

## **IRRIGATION AIR VALVE SERIES**



#### DESCRIPTION

A unique product that integrates both a vertical turbine Woltmantype water meter and a diaphragm actuated control valve. The flow metering unit is vertical to the pipeline. It includes an impeller with integrated inlet and outlet flow straighteners, eliminating the need for straightening distances, enabling vertical installation, and ensuring accuracy during control tasks. The raised seal seat results in remarkable cavitation resistance due to the valve body's distance from the flow.

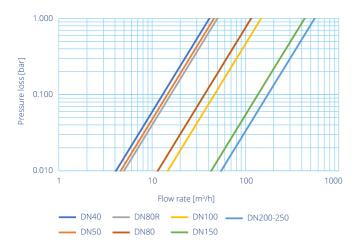
IR-900 provides the full spectrum of metering functions — from simple visual readout through non-computerized dose control to pulse output for computerized data capture and control — while simultaneously allowing for numerous control valve features such as pressure, level, and flow control.

IR-900 series range in diameter sizes of 11/2"-10".

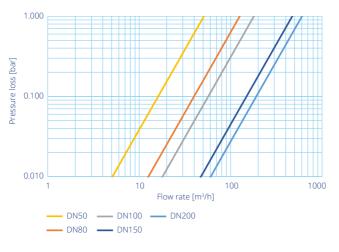
#### **APPLICATIONS**

- Computerized irrigation systems (irrigation control head, in-field control head)
- Remote flow data read-out (flow monitoring and leakage control, water treatment systems, volumetric irrigation systems)

#### **FLOW CHART - GLOBE PATTERN**



#### **FLOW CHART - ANGLE PATTERN**







Standards: 900-E - Electronic; 900-M series approved to MID 2004/22/EC

Standards: 900-E - Electronic; 900-M series approved to MID 2004/22/EC

The advanced line of air valves (automatic, kinetic, combination) joins an extensive line of hydraulic control valves to create comprehensive control solutions for pressurized pipelines and networks. System engineers and end-users can now design and install far more optimized solutions for their system requirements. The Air Valves series includes plastic and metal Air Valves ranging from 2" to 8" for main networks and irrigation heads, and plastic Air Valves from <sup>3</sup>/<sub>4</sub>" to 2" for infield systems and landscape irrigation.

#### **FEATURES AND BENEFITS:**

#### **Higher flow rates**

Advanced aerodynamic design with a straight-flow body allowing higher than ever before flow rates.

#### Low pressure sealing

BERMAD Air Valves operate with a minimal operating pressure (0.1 bar) based on dynamic sealing properties.

#### **Minimal spray effect**

Minimizing the spray effect during automatic air release to negligible quantities.

#### Built-in surge protection (anti-slam feature)

Responds to the approach of high-velocity water columns by slow air release, preventing damage to the valve and to the entire system.

#### Versatile design for easy installation

Three types of outlets — downwards, sideways (that can swivel 360°), and circular.

#### **Reliable structure**

All parts are fully resistant to corrosion, chemicals, and fertilizers, assuring lower maintenance and increased life span.





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