

Gator Hydraulic Control Valves

Product Specifications





Gator Hydraulic Control Valves

A weir-type, single chamber control valve specifically designed for simple, maintenance free operation.

Gator Hydraulic Control Valves are used in many industrial, mining, wastewater and irrigation applications. These robust, reliable valves are engineered to enable multiple control options to suit many applications and are manufactured with high quality materials to ensure durability and reliable performance.

The Gator valves have been designed for excellent hydraulic performance with improved flow dynamics resulting in very quiet and smooth flow during operation.

With a range of control accessories, Gator valves can be pre-configured with a range of control mechanisms to suit any application making them extremely flexible and adaptable.

Key characteristics

- Minimal head loss
- Low pressure required to operate the valve
- Minimal moving parts, provides years of reliable service
- Many operating functions such as: Manual, Electrical, Pressure Reducing, Pressure Sustaining, Pressure Relieving, Remote Control and many other control combinations
- Control options supplied in kit form for easy installation, or valve can be supplied with control system pre-installed

Applications

- For horizontal, vertical and 90 degree angle installation
- Pressure reducing, pressure sustaining or pressure relieving situations
- Agriculture, mining, wastewater, turf and landscape

Sizes and Configurations

- Female BSP inlet/outlet (25mm, 40mm, 50mm, 80/65/80mm, 80mm)
- Angle entry female BSP inlet/outlet (50mm, 80/65/80mm and 80mm)
- Table D flanged inlet/outlet (80mm, 100mm, 150mm, 200/150/200mm)

GENERAL SPECIFICATIONS

End Connections – Threaded	Female BSP
End Connections – Flanged	Table D
Control Ports	¼" Threaded Female BSP
Mechanical Throttle Mounting Port	DN25 – DN65 valves = ¼" Threaded Female BSP DN80 – DN100 valves = ½" Threaded Female BSP

Product Operation

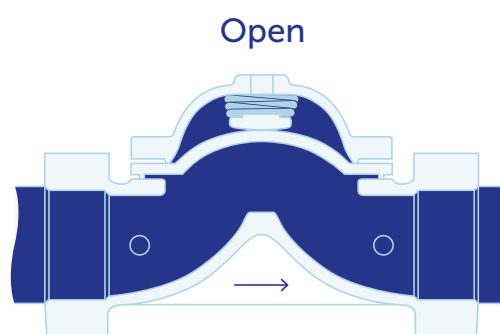
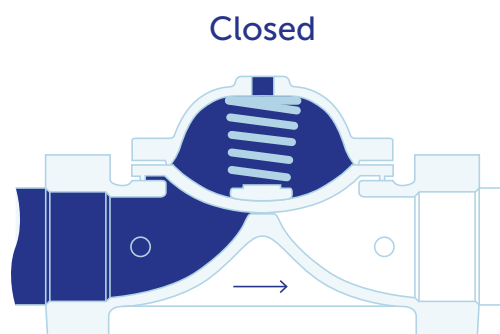
Gator Valves operate using the available pressure within the pipeline or an external pressure supply of air or water, provided this pressure is equal to or greater than the pressure within the pipeline in which the control valve is installed.

To close the valve, water or air pressure is induced into the upper chamber forcing the diaphragm to close against the weir within the valve and thereby stopping the flow of water within the pipeline.

To open the valve, the water or air trapped within the upper chamber is released into atmosphere or into the downstream of the valve, through the pipeline.

By incorporating other control mechanisms, such as a pilot valve, the valve can be adapted to regulate flow and pressure without being fully closed or fully open.

The diaphragm is the only moving part of the valve and is assisted to close under all pressures with the aid of a spring.



OPERATING PARAMETERS

Minimum Opening Pressure	70 kPa (10 psi)
Maximum Operating Pressure	1600 kPa (232 psi)
Maximum Operating Temperature	70°C
Maximum Pressure Reduction Ratio	3:1
Flow Velocity Range	0.5 m/sec to 5 m/sec
Maximum Flow Velocity	15 m/sec for max. 60 sec

MATERIALS

Body and Bonnet	Cast Iron
Diaphragm	Styrene- Butadiene Rubber
Spring	Stainless Steel
Spring Retainer Disc	Glass Reinforced Nylon
Nuts and Washers	Stainless Steel
Coatings	Fusion Bonded Polyester Powder Coated

Accessories



Brass Pilot Valves

- 2-way or 3-way format
- Suitable for operating pressures up to 1600 kPa
- Set pressures between 70 and 1200 kPa
- For pressure reducing, pressure sustaining and pressure relief applications



Plastic Pilot Valves

- 3-way format
- Suitable for operating pressures up to 1000 kPa
- Set pressures between 70 and 700 kPa
- For pressure reducing, pressure sustaining and pressure relief applications

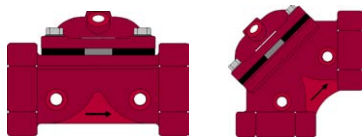
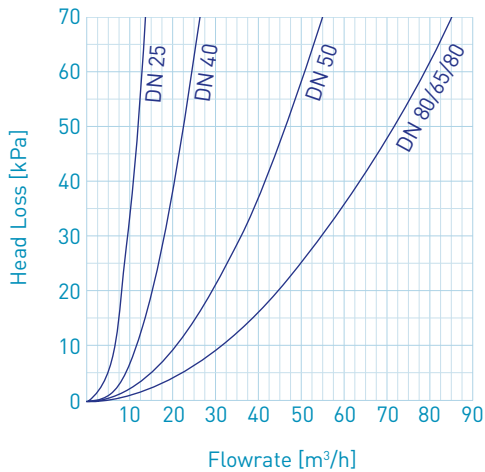


Solenoid Actuators

- 3-way format
- Suitable for operating pressures up to 1600 kPa
- For normally open or normally closed applications
- Available in AC or DC versions

⊕ Full range of other accessories are available.

Threaded Inline & Angle Valves



Flanged Inline Valves

