

## Water management solutions for general industry

Mack's Automatic Control Valves are also used in industrial applications and manufacturing across the country.

Ensure total reliability in critical environments and essential services. Choose a Mack quality product you can trust.

### > DUST SUPPRESSION

Dampen dust and prevent wind-blown dust contamination, fire, or dust explosion with the use of Solenoid or Air Pilot configurations in the dust suppression sprinkler system.

### > DEWATERING

ACVs can be supplied in various configurations to assist in mine dewatering applications.

### > PRESSURE REDUCING

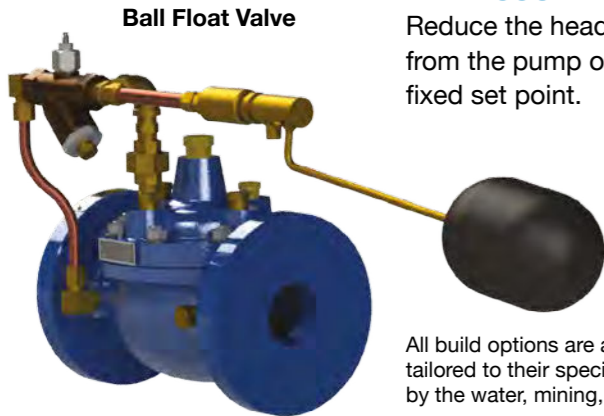
Reduce the head pressure below ground from the pump outlet, to a maintained fixed set point.

### > FIRE PROTECTION

Varying configurations can be used in fire control systems for the plant and asset protection.

### > SELECTION & APPLICATION

The new 33 Series comes standard in ductile iron, FBE-coated, and is available in sizes ranging from 50mm to 300mm for a wide range of liquid media, including potable water, seawater, aviation fuel, and diesel. Specialist application pilot systems enable the valve to be used in a wide range of applications, from water level management to pump and flow control. It has been certified to AS4020 for products in contact with drinking water.



Ball Float Valve



All build options are available from Mack on special order, which enables clients to create specifications tailored to their specific needs. However, our stock is based on common material specifications favoured by the water, mining, and infrastructure industries.

Learn more about our extensive range of Water Management products at [mackvalves.com](http://mackvalves.com)

To speak directly to our specialist sales team to discuss your Water Management valve needs, or to get a personalised quote, call +61 3 9737 5200



### YOUR MACK QUALITY GUARANTEE

Mack Valves Pty Ltd is committed to providing Australian and global markets with a range of industrial valves manufactured to the highest standards and in conformity with relevant international standards. We will maintain our position as a recognised leader in valve design and manufacturing techniques at all times, seeking to employ the world's best practice. The requirements and recommendations of ISO 9001:2015 have been adopted without exclusions as the basis for the Company's Quality Management System.

Proud member of the HEROSE Group



Water Management

# Directing the flow

Trusted valves to manage our most precious resource

# Directing the flow

For over 85 years, Mack Valves has manufactured automatic control valves to our strict quality standards. Our proven designs ensure reliability in critical environments. In addition to our standard valves, our technical team can also design bespoke valves tailored to meet your exact requirements.

The control valve modulates between fully open and fully closed by adjusting the rate at which pressure is applied and released to the top chamber. This regulation is achieved

through various pilot systems, which control the diaphragm chamber. Specialised pilot systems are also available for specific applications.

Our products are available in a wide range of sizes and materials, including cast and ductile iron, stainless steel, bronze, nickel aluminium bronze, and more, to suit various applications and pressures. Depending on your application, we can supply valves with standard or specialised pilot systems, ensuring precise control and reliability.

## Water Management

Mack Valves is one of Australia's and Asia Pacific's leading manufacturers of automatic control valves (ACV) for the management of water and fluids.

### > PRESSURE REDUCING

Maintain a constant downstream pressure using a pilot control valve. Sensing the downstream pressure, it activates the ACV to allow flow when the downstream pressure is lower than the spring pressure, setting on the pilot valve.

### > PRESSURE REDUCING & CHECK

Prevent backflow when the downstream pressure exceeds the upstream pressure. The valve closes slowly to prevent water hammer and to protect the system from damage.

### > PRESSURE SUSTAINING & PRESSURE RELIEF

Eliminate problems with sustaining back pressure, pressure relief, and uploading functions in bypass systems. Its rapid opening capability helps to maintain steady line pressure, while its slow closing prevents surges and makes it easy to set a maximum flow rate.

### > PRESSURE SUSTAINING & CHECK

Maintain constant upstream pressure to close system tolerances by relieving the excess pressure downstream. The valve closes and positively prevents return flow, over-pumping, and pump cavitation caused by excessive downstream demands.

### > RATE OF FLOW

Maintain the maximum allowable flow rate to prevent a drop in supply pressure and limit the primary water supply to a pre-set flow, which is actuated by differential pressure.

### > ALTITUDE

Control high water levels in reservoirs. The non-throttling valve allows the reservoir to fill and close when it reaches its set point at the top water level. Add-on features include back pressure sustaining, rate of flow control, solenoid shut-off, pressure reduction, speed control for closing and opening, position indicator, and delayed opening.

### > FLOAT LEVEL CONTROL

On/Off Float Valves are non-modulating valves that accurately control the liquid level in tanks. They are designed to open fully when the liquid level falls and close drip-tight at the top water level. Valves can be supplied with a simple cistern cock pilot or a bi-level control that allows for adjustment of the opening and closing level.

### > MODULATING FLOAT CONTROL

Equalise variations in supply and demand to maintain a constant level in a reservoir. Can be balanced to either the inflow or the outflow rates. The addition of a pressure-sustaining valve enables the maintenance of a minimum pressure.

### > PUMP CONTROL

The pump starts against a closed valve and regulates both the opening and closing rates, which can be adjusted and controlled separately.

### > PUMP CONTROL & CHECK VALVE

Control surges in a pipeline on the discharge side of a booster pump. By starting and stopping against a closed valve, it's possible to prevent reverse flow, regardless of solenoid or diaphragm assembly position, and to regulate both

the opening and closing rates to protect the system.

### > DUAL STAGE PRESSURE REDUCING

Achieve automatic dual pressure control with the application of a pilot system featuring two independent reducing pilots, equipped with a calibrated orifice plate or a three-way solenoid. As the flow increases, so does the flow across the orifice plate until it reaches the set point of the second pilot, causing the valve to switch over and control at a higher pressure.

### > SOLENOID ON/OFF

Mack solenoid-controlled automatic control valves are available with a range of three-way or two-way solenoid pilot valves of various voltages, and open or closed when energised.

High Capacity Solenoid Valve



ACVs are used extensively in water distribution systems for maintaining water levels, pressures, flow rates and protection of pipe work and equipment.

We understand the needs of councils and public infrastructure. Our engineers will collaborate with your asset management team to minimize downtime.

Our skilled engineering team will work closely with you to design and build an automatic control valve tailored to your specific needs.