

## Water management solutions for General Industry

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

All build options are available from Mack on special order, which enables clients to create specifications to suit their specific needs, but our stock is based around common material specifications favoured by the Water, Mining and Infrastructure industries.

### > 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

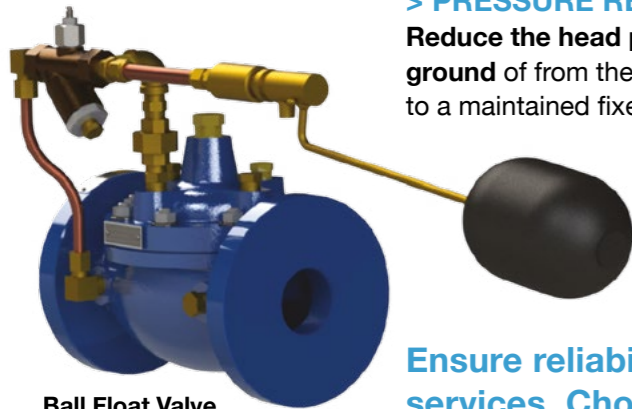
Reduce the head pressure below ground of from the pump outlet, to a maintained fixed set point.

### > FIRE PROTECTION

Varying configurations can be used in Fire Control Systems for plant and asset protection.

### > SELECTION & APPLICATION

The new 33 Series comes standard in ductile iron, FBE coated and is available in sizes from 50mm to 300mm for a whole range of liquid mediums including potable water, seawater, aviation fuel and diesel. Specialist application pilot systems allow the valve to be used in all 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

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



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 world markets with a range of industrial valves manufactured to the highest quality and in conformity with appropriate international standards. The Company will maintain its position as a recognised leader in valve design and manufacturing techniques at all times seeking to employ 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 more than eighty years, Mack has been manufacturing Automatic Control Valves following our strict quality control standards. Our tried and tested designs ensure reliability in critical environments. Beyond our standard valves, our technical department can work with you to design bespoke solutions to your exact requirements.

Controlling the rate at which pressure is applied and released

to the top chamber allows the valve to modulate control at any position between fully open and fully closed. Different pilot systems change how the control of the diaphragm chamber is achieved.

Products can be supplied in all sizes and materials to suit various applications and pressures. These include; cast and ductile iron, stainless steel, bronze, nickel/aluminium/bronze and more. Specialised application pilot systems are also available.

**Our skilled engineering team will work with you to build the Automatic Control Valve to suit your needs.**

## Water Management

Mack is one of Australia's and Asia Pacific's leading manufacturers of Automatic Control Valves (ACV) for the management of water and fluids that are non-injurious to construction.

### > PRESSURE REDUCING

**Keep downstream pressure constant** with 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 back-flow** 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 unloading 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 maximum allowable flow rate** to prevent the lowering of supply pressure and limit the primary water supply to a pre-set flow, which is actuated by differential pressure.

### > ALTITUDE

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

### > FLOAT LEVEL CONTROL

**On/Off Float Valves are non-modulating valves** that accurately control the liquid level in tanks. These valves are designed to open fully when the liquid level falls and close drip-tight at top water level. Valves can be supplied with a simple cistern cock pilot or a bi-level control that allows adjustment of the opening-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 in-flow or the out-flow rates. The addition of a pressure sustaining valve means a minimum pressure can be sustained.

### > PUMP CONTROL

**Prevent reverse flow regardless of the solenoid or diaphragm assembly position** using the line pressure for its operation. The pump starts against a closed valve and regulates both the opening and closing rates which can be adjusted and controlled separately.

### > PUMP CONTROL AND 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

**Get automatic control dual pressure** with the application of a pilot system with two independent reducing pilots, 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 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.



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

**Mack understands the needs of councils and public infrastructure. Our engineers will work with your asset management team to ensure minimal downtime.**