

# Time/Flow/Volume Controller

## BEC PM1

The BEC PM1 allows the control of Pressure Management by flow or by time when used in conjunction with BERMAD's dynamic PRV. The BEC PM1 is programmed to change the system pressure during high and low demand. The BEC PM1 enables volumetric control when used with BERMAD On/Off control valves. The BEC PM1 is a self-contained unit that can operate without the need for external terminal or laptop for programming.



### Features and Benefits

- **Pressure management**
  - Optimize network pressure management
  - Alternate between high pressure and low pressure periods **by time or by flow**
  - Up to three time windows for high pressure per day
  - Flow switch override for fire flow - require additional equipment
- **Flushing dead ends by volume**
  - Account for water flushed out of the pipe to refresh the system
  - Optimize water quality
  - Automatic refreshing reservoirs
- **Ease of programming**
  - Up to three start times per day
  - Weekly schedule or Interval scheduling
  - 12 or 24 hours clock
  - Schedule adjustment 10%-200%
  - Preset volume up-to 9999 pulses
- **Installation in remote areas and confined spaces**
  - Operated by 9 VDC Alkaline battery
  - Battery last for one year
- **User friendly**
  - "Next Step" programming
  - Self-contained, no need for special cables, programmers or laptop for adjustments

### Technical Specifications

#### Hardware:

Power Supply: 9 Volt Alkaline battery

#### Output:

##### Voltage:

12 VDC Latch (BERMAD S-392, or S-982 Solenoid)

#### Inputs:

Dry Contact - water meter & flow switch

### Temperature and Humidity:

#### ■ Ambient:

-20°C to 60°C; -4°F to 140°F  
Relative Humidity 0-90%

#### ■ Storage:

-30°C to 70°C; -22°F to 158°F  
Relative Humidity 0-90%

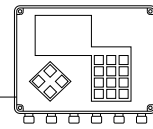
#### Enclosure:

##### ■ Material:

UV Resistant ABS

##### ■ Protection Class:

IP68 / NEMA 6P



Control Valve with Water Meter



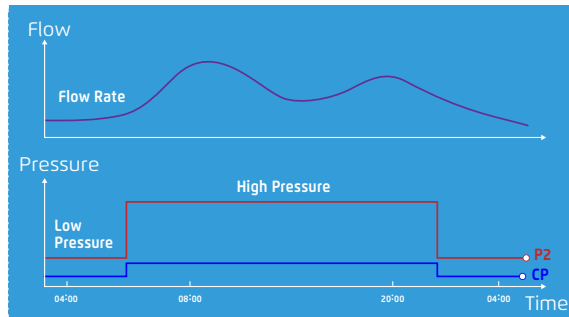
Control Valve with Insertion Flow Meter

One of BERMAD's Pressure Management solutions for optimizing water supply and reducing NRW (Non Revenue Water) - consists of the installation of a two step PRV at the entry point of the DMA (District Metering Area). During low flow demands the PRV is set to low downstream pressure. Due to low water consumption the accumulated head loss is relatively low and the pressure at the farthest consumer point (Critical Point) is almost the same as the pressure setting of the PRV, therefore leakage and bursts are significantly reduced. During high flow demands the PRV is set to high downstream pressure to compensate the relatively high accumulated head loss and maintaining the minimum services level pressure at the CP.

BERMAD's BEC PM1 switches between high/low pressure mode according to time or flow.

## Pressure Management

### Two Level Settings PRV



[Link to Animation](#)

