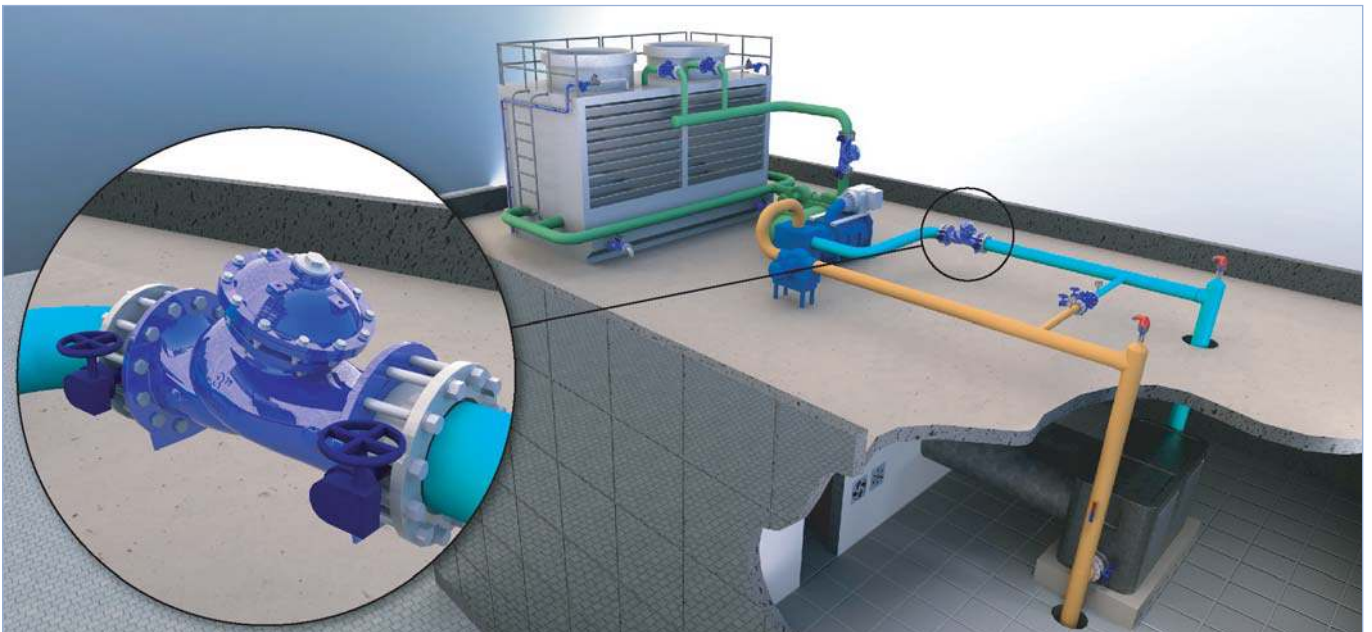


## Flow Control Valve

Hydraulically operated flow control valve that maintains pre-set maximum flow, regardless of fluctuating demand or varying system pressure.

BERMAD 700ES series valves are hydraulically operated globe valves in standard oblique (Y) pattern with hydrodynamic body providing an unobstructed flow path, with seat assembly and double chamber unitized actuator that can be disassembled from the body as a separate integral unit. The 700ES 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 operation conditions.



For illustration only

### Typical Application

- Flow regulation in close circuit energy systems such as air conditioning and cold/hot water supply networks; preventing excessive flow in cases of varying consumer demand
- Flow regulation and overflow protection of chillers downstream lines
- Flow regulation in energy systems pumping stations; preventing pump overload and cavitation damage

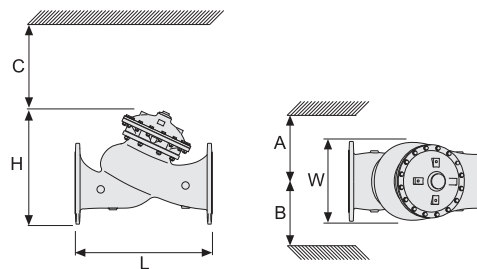


### Features and Benefits

- Excellent quality construction materials ensure reliable, resilient and long lasting operation
- Durable, sophisticated and lightweight design ensure minimal cavitation damage and noise even under difficult and highly intensive operation conditions
- Hydrodynamic body and high performance actuator provide an unobstructed flow path with minimal pressure loss and outstanding modulation capability under conditions of high differential-pressure operation
- Double chamber actuator, fully operational under very low pressure conditions including optional full opening & closing action under zero line pressure; provides smooth, immediate valve response with no hammer effect.
- Near maintenance-free straightforward balanced design including an actuator that can be easily disassembled from the valve body as a separate integral unit for minimal downtime.
- Hydraulic flow sensor – no moving parts, no electronic components no need of flow straightening
- Easy on-site set point change – enable calibration of the control loop to various operation regimes
- Energy systems ready control loop - easily accommodates isolation wrapping
- Optional electric shutoff device – enables control of multi-branch systems

### Technical Data

| Table |      | Kv  | A, B (mm) | C (mm) | L (mm) | H (mm) | W (mm) | Weight (kg) |
|-------|------|-----|-----------|--------|--------|--------|--------|-------------|
| DN    | inch |     |           |        |        |        |        |             |
| 50    | 2"   | 50  | 350       | 180    | 230    | 250    | 250    | 10.8        |
| 80    | 3"   | 65  | 370       | 180    | 310    | 260    | 260    | 15          |
| 100   | 4"   | 150 | 395       | 230    | 350    | 320    | 320    | 26          |
| 150   | 6"   | 360 | 430       | 275    | 480    | 390    | 390    | 55          |
| 200   | 8"   | 620 | 475       | 385    | 600    | 507    | 507    | 95          |



### End Connections:

**Flanged:** ISO 7005-2 (ISO 10, 16 & 25)

**Pressure Rating:** 16, 25 bar (230, 362 psi)

**Valve Pattern:** Y

**Working Temperature:** Water up to 80°C (180°F)

### Main Construction Materials:

**Body, Cover and Actuator:** Ductile iron to EN 1563 or ASTM A-536

**Internals:** Stainless steel, bronze & epoxy coated steel

**Control Trim System:** Brass control components / accessories

Copper & Brass tubing & fittings

Optional: Stainless Steel 316

**Elastomers:** Synthetic Rubber

**Coating / Colour:** Electrostatic Polyester Powder Blue

Optional: Epoxy Fusion-Bonded Blue

For other optional materials consult BERMAD

### How to Order

Please specify the requested valve in the following sequence:

| Size                       | Model | Category | End Connections  |
|----------------------------|-------|----------|--|
| 2"<br>3"<br>4"<br>6"<br>8" | 770ES | BE       | ISO-16 16<br>ISO-25 25<br>ABNT16 B6<br>ABNT25 B2<br>ANSI150 A5 |



For full technical specifications, see Engineering section or consult BERMAD

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