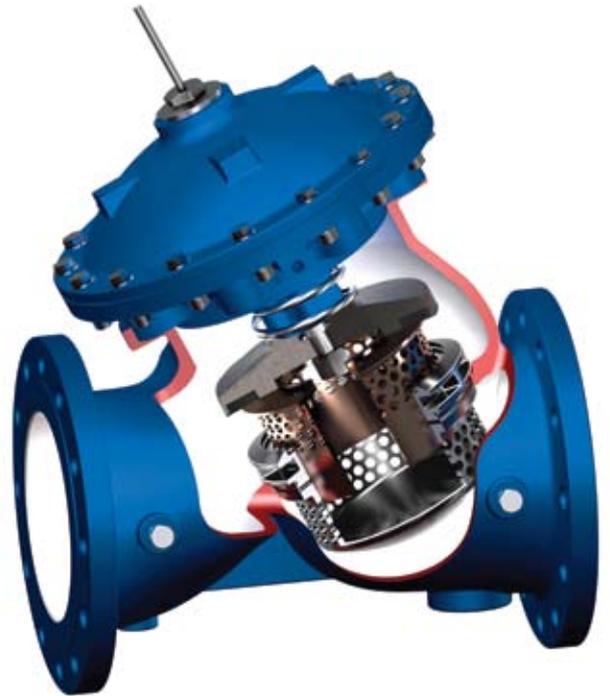


Anti-Cavitation Valve

Model 700-C2

- Eliminates cavitation damage
- High differential pressure operation
- Reduces noise and vibration
- Excellent control at near zero flow
- Drip tight sealing
- In-line serviceable
- Possible retrofit of 700 & 800 valves

The Bermad Model 700-C2 Anti-Cavitation Control Valve is designed to operate under high differential pressure conditions without suffering cavitation damage



Typical Applications

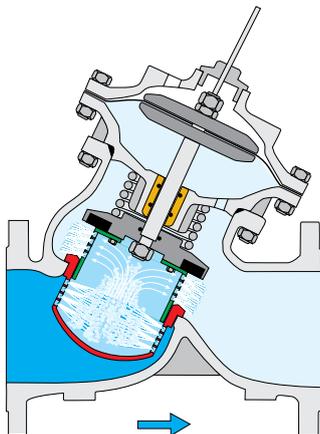
High differential pressure systems such as:

- Pressure Reduction
- Pressure Relief
- Level Control
- Flow Control

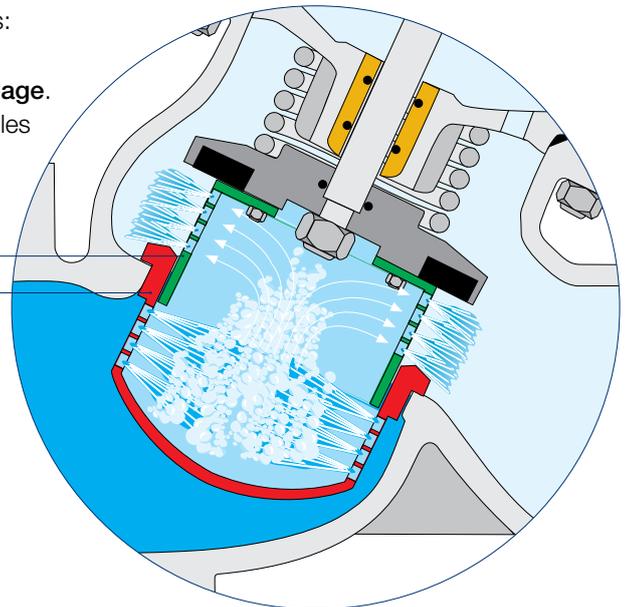
Operation

High pressure energy dissipates as flow passes through three stages:

- Stage 1: Entering the **Seat Cage** through a set of radial holes.
- Stage 2: Converging in the cavitation protected area of the **Seat Cage**.
- Stage 3: Exiting the cavitation protected area through the radial holes of the **Cavitation Sleeve**.



Cavitation Sleeve
Seat Cage





Technical Specifications

Available series, patterns & size range

Series	700		700ES	800	
Pattern	Y	Angle	Y	Y	Angle
Pressure Rating	PN16/25 ANSI Class #150 / #300		PN25	PN40 ANSI Class #150 / #300 / #400	
Size Range	1 1/2"-20" DN40-500	1 1/2"-18" DN40-450	1 1/2"-24" DN40-600	1 1/2"-20" DN40-500	1 1/2"-18" DN40-450

Operational Data

- Maximum differential pressure: 25 bar ; 350 psi
 - Minimum downstream pressure: Atmospheric pressure
 - Recommended flow velocity: 3 m/sec; 10 ft/sec
 - Maximum flow velocity: 5.5 m/sec; 18 ft/sec
 - Water Temperature: Up to 80°C; 180°F
- * Consult factory for operating conditions exceeding the above.
* Specify: Inlet/Outlet Pressures, flow rate, pipe diameter & valve function

Standard Construction Materials

- Seat Cage & Cavitation Sleeve: Stainless Steel 316 or 304
- Main valve body and cover: Ductile Iron, Carbon Steel, Stainless Steel
- Main valve internal parts: Stainless Steel, Bronze & Epoxy coated steel
- Elastomers: Synthetic Rubber
- Coating: Fusion Bonded Epoxy Blue RAL 5005, 250µ
- Other materials are readily available

Dimensions

Refer to Bermad Water Works Catalog, Engineering Section

Certificates and Approvals

IQNET ISO9001-2000, NSF, WRAS, DVGW, GOST.

Engineer Specifications

The main valve shall be an anti-cavitation type designed to operate under high differential pressure conditions with out suffering cavitation damage.

Main Valve: The main valve shall be a center guided, diaphragm actuated globe valve of either oblique (Y) or angle pattern design. The body shall have a replaceable, raised, stainless steel seat cage. The body and cover shall be ductile iron. All valve components shall be accessible and serviceable without removing the valve from the pipeline.

Actuator: The actuator assembly shall be double chambered with an inherent separating partition between the lower surface of the diaphragm and the main valve. The entire actuator assembly (seal disk to top cover) shall be removable from the valve as an integral unit. The stainless steel valve shaft shall be center guided by a bearing in the separating partition. The replaceable radial seal disk shall include a resilient seal.

Anti Cavitation Feature: The anti-cavitation trim shall include two parts: A cavitation Seat-Cage as a part of the valve body assembly and a Cavitation Sleeve as a part of the seal disc assembly. Both parts shall include a set of equally spaced radial holes around its circumference. The anti-cavitation trim construction material shall be Stainless Steel.

Quality Assurance: The valve manufacturer shall be certified according to the ISO 9001 Quality Assurance Standard. The main valve shall meet ANSI/AWWA Standard C530-07 and be certified as a complete drinking water valve according to NSF, WRAS, and other recognized standards

