



## Active Check Valve

### Pressure Control Valve

Double chambered, hydraulically operated, active check pump control valve that opens fully or shuts off in response to electric signals. It isolates the pump from the system during pump startup and shutdown, thereby preventing pipeline surges.

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

- Downstream of each high pressure pump in pumping stations where surge prevention is required
- In pumping stations where smooth start/stop operation is essential
- In pumping stations with duty cycled operation regime
- In pumping stations with combined operation of variable and fix speed pumps



## 700ES Series Pump Applications

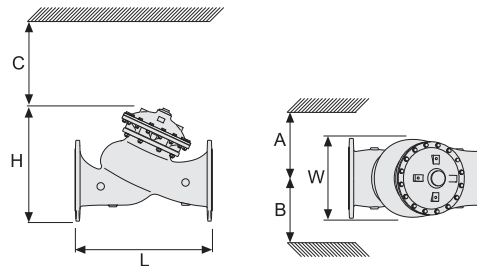
Model WW-740ES-BP

### 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.
- Advanced control loop design, fully coordinated with pump start/stop circuitry
- The pump start/stop process is gradual and smooth with no pipeline vibrations
- Protects the pump station from surge damage
- Prolonging the pumps life span
- Optional independent lift check; fast and smooth check feature minimizes water hammer in the event of sudden power failure

### 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" 3" 4" 6" 8"	740ES	BP	ISO-16 16 ISO-25 25 ABNT16 B6 ABNT25 B2 ANSI150 A5



For full technical specifications, see Engineering section or consult BERMAD

[info@bermad.com](mailto:info@bermad.com) • [www.bermad.com](http://www.bermad.com)

The information herein is subject to change without notice. BERMAD shall not be held liable for any errors. All rights reserved. © Copyright by BERMAD. PC7BE12-740ES-BP