

85-09-1

(Full Internal Port)

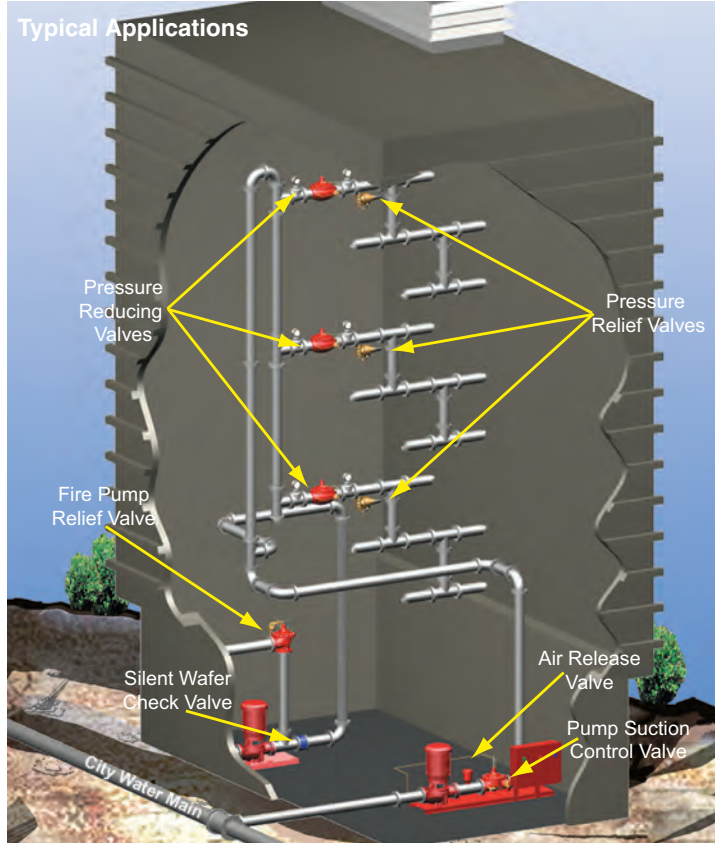
MODEL _____

685-09-1

(Reduced Internal Port)



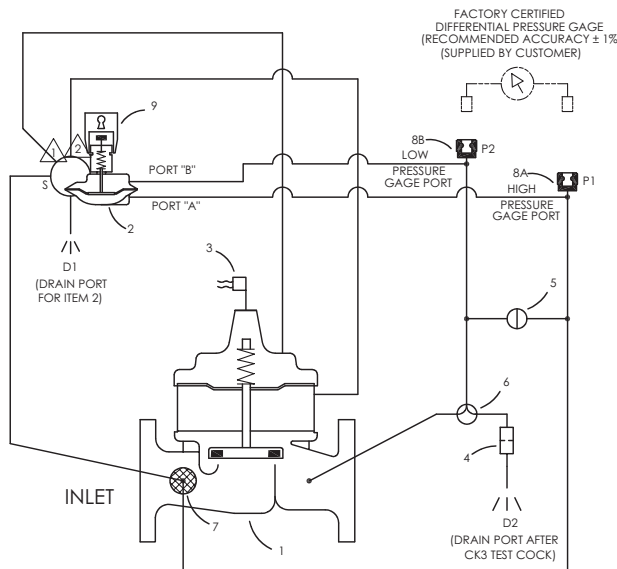
AUTOMATIC BREACH CONTROL VALVE



- Simple Proven Design
- Non-Surge Operation
- Drip-Tight Shut-Off
- No Packing Glands or Stuffing Boxes
- Static System Operational Testing
- Available in a Variety of Materials

The Cla-Val Model 85-09-1/685-09-1 Automatic Breach Containment Valve (ABCV) will isolate portions of distribution piping when catastrophic downstream breach occurs. The ABCV is designed for protecting commercial building water distribution systems, such as fire protection, potable water service, or chill water circulation. Strategically located to isolate portions of water systems, the ABCV prevents significant water losses and resultant damage, and allows limited continued service when distribution systems are damaged or out of service.

During normal conditions the ABCV is fully open allowing normal water flows. When excessive flows occur due to pipe damage or breach, the ABCV closes drip-tight, isolating the breached downstream portion of system. When the ABCV is closed, normal water flow occurs through remaining upstream distribution piping. Once closed, the ABCV will automatically re-open when downstream pressure is restored.



Schematic Diagram

Item	Description
1	100-02 Powertrol (Main Valve)
2	CDH4-A3 Differential Control
3	X105L Limit Switch
4	X58C Restriction
5	CK2 Isolation Valve Manual Reset
6	CK3 (Isolation Valve) DP Test
7	X46A Flow Clean Strainer
8	QD Socket, Gage Connection
9	X140 Locking Security Cap

The Cla-Val Model 85-09-1/685-09-1 Automatic Breach Containment Valve is a pilot controlled, hydraulically-operated, diaphragm-actuated, globe pattern valve. The valve consists of a Powertrol main valve and a pre-installed pilot control system. Using line fluid as operating medium, the ABCV is completely self-contained, requiring no additional power to operate. The Powertrol can be supplied with optional fusion bonded epoxy coating for longer service life and lower maintenance costs.

The custom pilot control senses pressure differential across valve, and is factory-preset to shift at differential corresponding to specified breach flow. The control smoothly closes Powertrol hydraulically. The pilot control has locking cap to protect calibrated settings. Supplied valve position electric switch assembly provides remote confirmation or alarm signal that ABCV is fully closed. Two quick-connect ports allow verification of differential pressure setting and conducting operational ABCV testing when water system is static. Test Kit consisting of differential gauge and hose connections is available option. The ABCV operates most efficiently when installed in horizontal pipe with Powertrol cover and internal-stem oriented vertically up.