

Closed Loop Venturi Valve - CRC-CLV



OVERVIEW:

The Critical Room Control Model CRC-CLV (Closed Loop Exhaust Air Valve) is designed for critical room spaces, hazardous environments, animal holding rooms, and laboratory environments that adhere to stringent ventilation requirements where it is imperative to make sure desired operating conditions are being met and confirmed with precision feedback. These valves, as part of the Critical Room Control system, offer an unequaled user interface and management capabilities while delivering a superior working environment.

The CRC-CLV is uniquely designed to take full advantage of energy saving applications as well as reducing maintenance expenses where long term reliability and system flexibility are important.

The valves closed loop design guarantees a safe, reliable and comfortable working environment for researchers and staff. The CRC-CLV is well suited for any lab space regardless of size or complexity.

FEATURES:

- Long Term Reliability
- Actual flow feedback
- Impervious to Lint, Dust & Dirt
- Closed loop control strategy
- Confirmation of desired set point
- Fail safe actuation
- Fast speed of response
- Quick field calibration reduces commissioning time
- No scheduled maintenance
- Pressure independent Control
- Low pressure drop
- Quiet
- Minimal moving parts
- No critical components in the air stream
- Closed loop control design
- Flexible installation configurations
- High turndown ratio

APPLICATION:

- Flow control in critical spaces and hazardous environments
- Animal Holding Rooms
- Support Spaces
- Lab Spaces
- Normally open or closed fail safe positions using rapid response

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PERFORMANCE:

Accuracy:	±5% of measured true airflow Pressure independent No additional straight duct runs needed before or after valve
Turndown:	10:1
Response to feedback signal:	<1 second
Volumetric Flow Rate:	60-4250 CFM (102-7221 m ³ /hr)

OPERATING RANGE:

Temperature:	0-150°F (-17-66°C) ambient
Relative Humidity:	0-95% non-condensing

VALVE TYPE:

- ◇ **SAV:** Supply Air Valve (CRC-CLV-SAV)
- ◇ **GEX:** General Exhaust Air Valve (CRC-CLV-GEX)
- ◇ **HEX:** Hood Exhaust Air Valve (CRC-CLV-HEX)
- ◇ **MEX:** Miscellaneous Exhaust Air Valve (CRC-CLV-MEX)

CRC – CLV – - - - - - DPT

VALVE USAGE

SAV – SUPPLY AIR VALVE
GEX – GENERAL EXHAUST AIR VALVE
HEX – HOOD EXHAUST AIR VALVE
MEX – MISCELLANEOUS AIR VALVE

SIZE VALVE

06 - 6"
08 - 8"
10 - 10"
12 - 12"
14 - 14"
16 - 16"

VALVE MATERIAL

AL – ALUMINUM
SS – STAINLESS STEEL

**DIFFERENTIAL
PRESSURE
TRANSMITTERS**

COATING

CT – COATED ALUMINUM
LEAVE BLANK FOR NO COATING

DAMPER MATERIAL

GV – GALVANIZED
SS – STAINLESS STEEL

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<p>VALVE BODY CONSTRUCTION:</p> <ul style="list-style-type: none"> ◇ Aluminum ◇ Stainless Steel 	<p>DAMPER CONSTRUCTION:</p> <ul style="list-style-type: none"> ◇ Galvanized W/Solid Steel Shaft ◇ Stainless Steel W/Solid Stainless Steel Shaft
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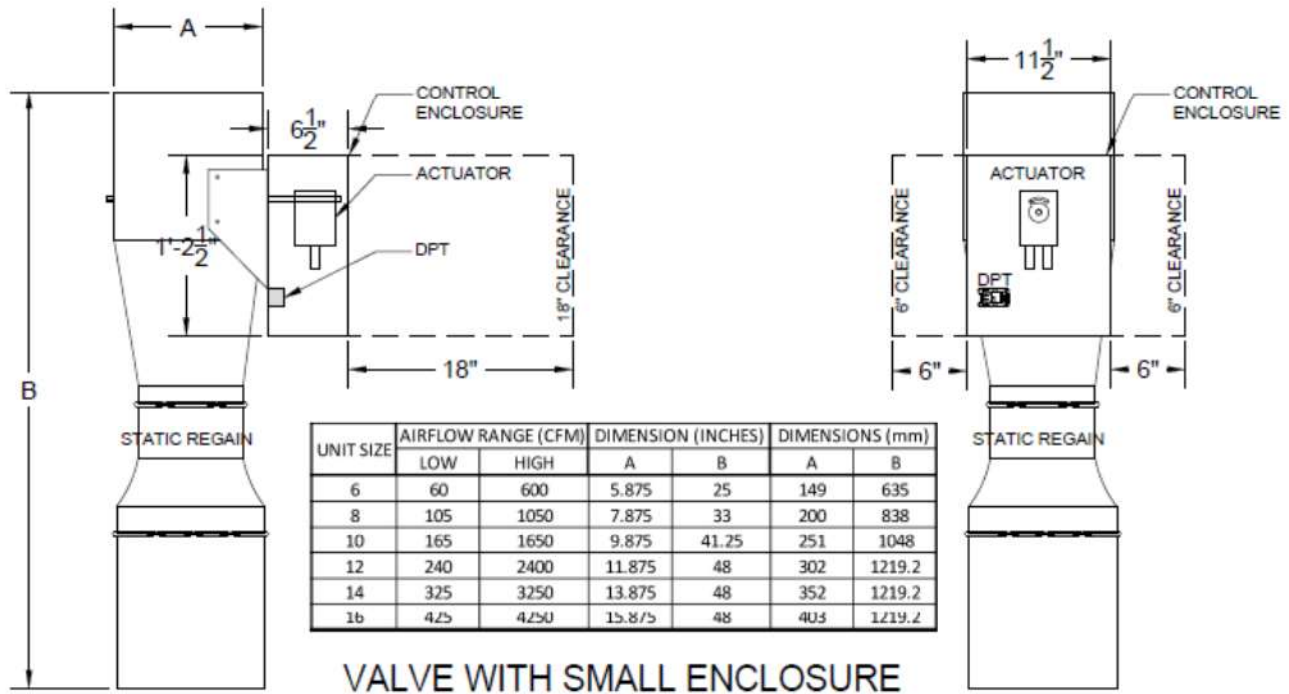
<p>VALVE SPEED:</p> <ul style="list-style-type: none"> ◇ Standard Speed (4va) ◇ High Speed (24va) 	<p>VALVE FAIL POSITION:</p> <ul style="list-style-type: none"> ◇ Fail in position ◇ Fail Open Position ◇ Fail Closed Position
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<p>VALVE COATING:</p> <ul style="list-style-type: none"> ◇ No Coating ◇ Corrosion-Resistant powder coating ◇ Corrosion-Resistant baked phenolic coating 	<p>VALVE ENCLOSURE:</p> <ul style="list-style-type: none"> ◇ No Enclosure ◇ Small Enclosure ◇ Large Enclosure
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<p>VALVE COILS (Supply only):</p> <ul style="list-style-type: none"> ◇ Single (1) Row ◇ Two (2) Row ◇ Four (4) Row 	<p>VALVE BAND CLAMPS</p> <ul style="list-style-type: none"> ◇ Steel ◇ Stainless Steel
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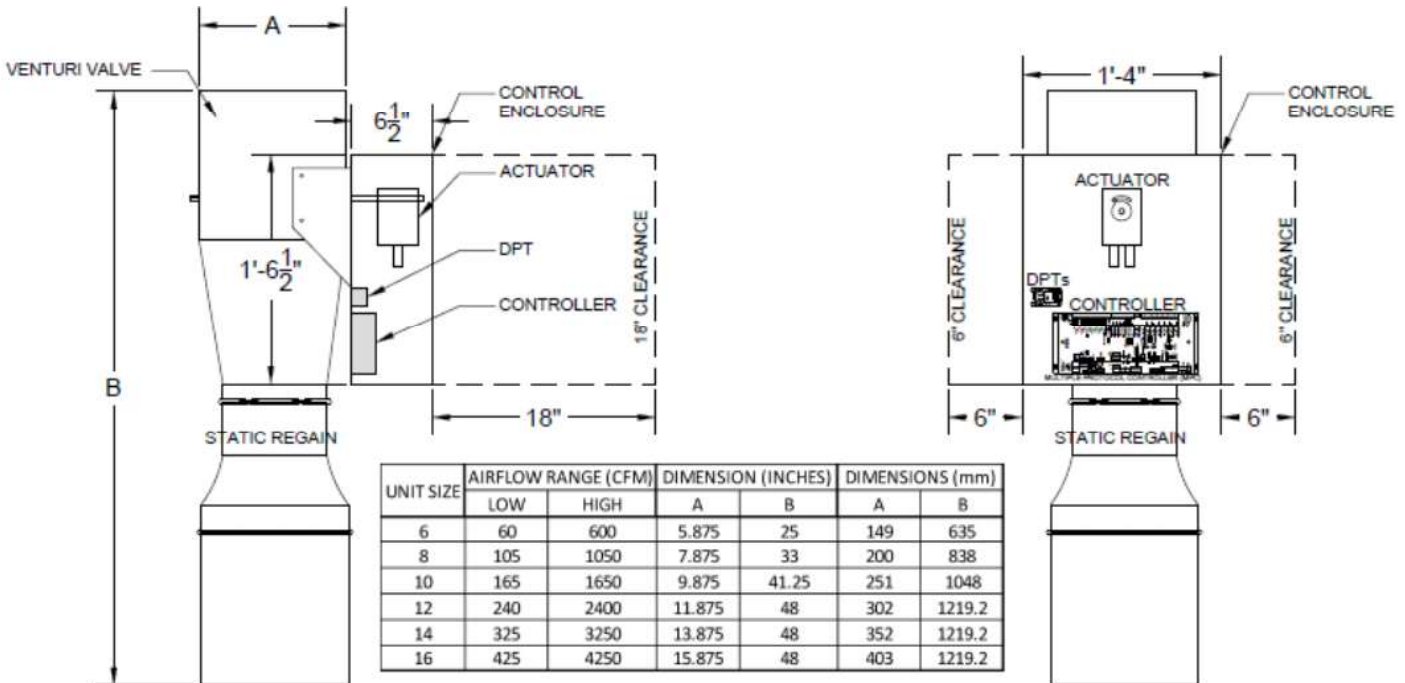
<p>K Factor:</p> <ul style="list-style-type: none"> ◇ 6" Inlet: 425 ◇ 8" Inlet: 750 ◇ 10" Inlet: 1166 	<ul style="list-style-type: none"> ◇ 12" Inlet: 1675 ◇ 14" Inlet: 2275 ◇ 16" Inlet: 2967
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VALVE WITH SMALL ENCLOSURE

NTS

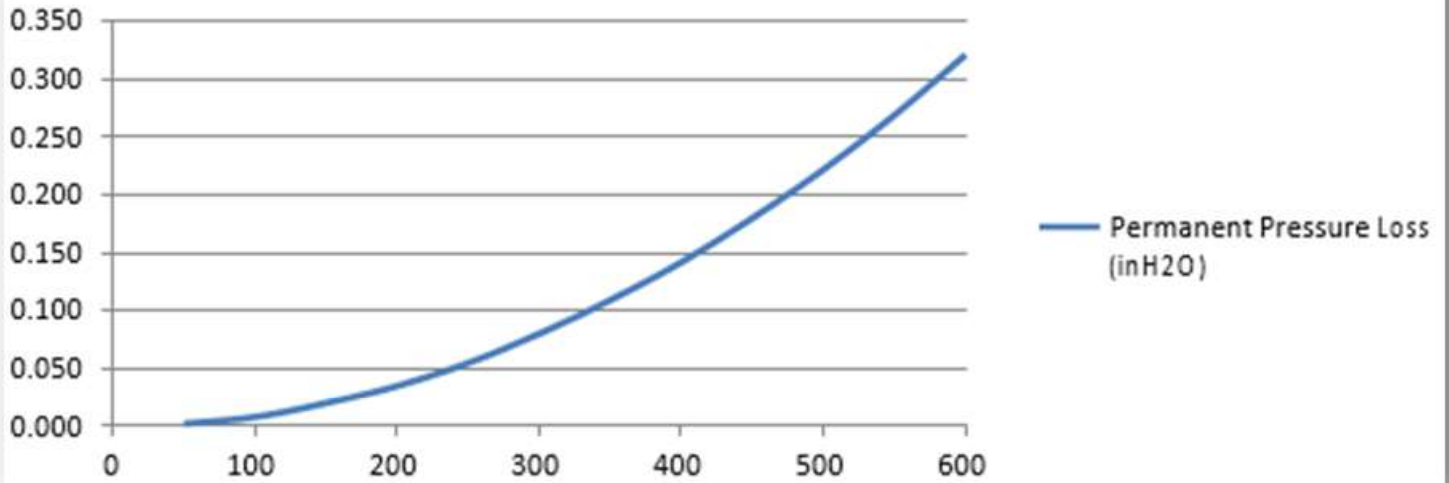


VALVE WITH LARGE ENCLOSURE

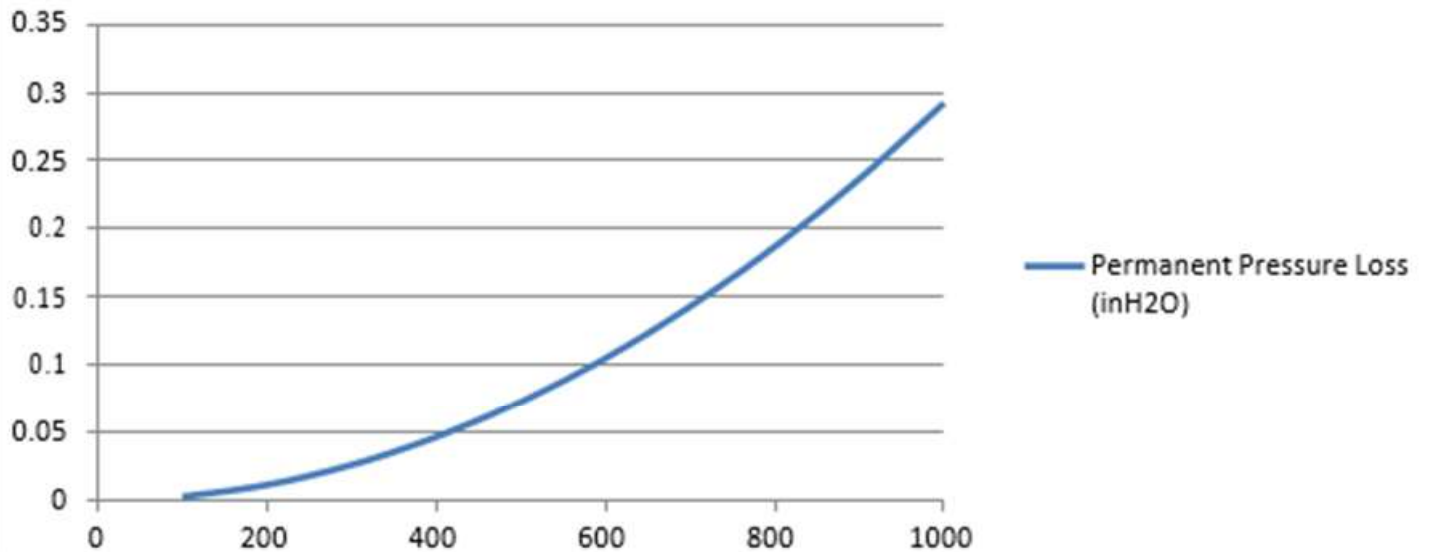
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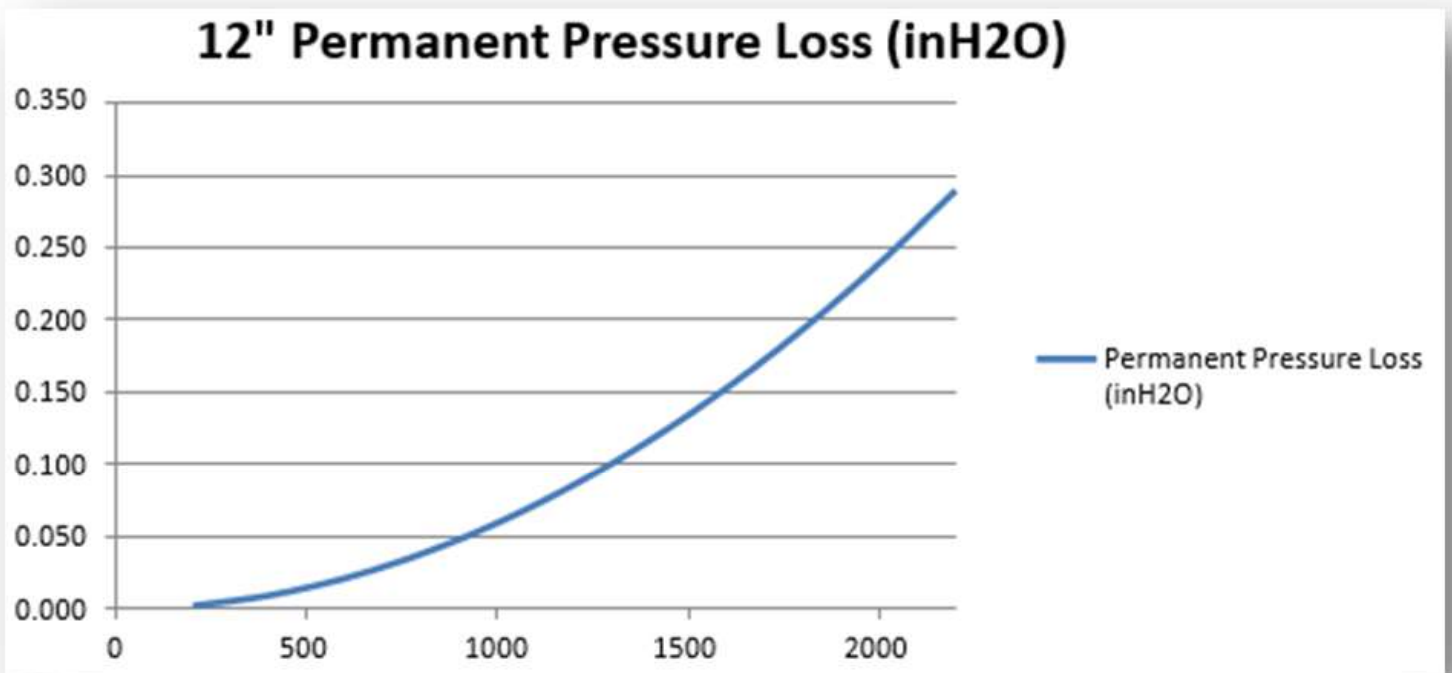
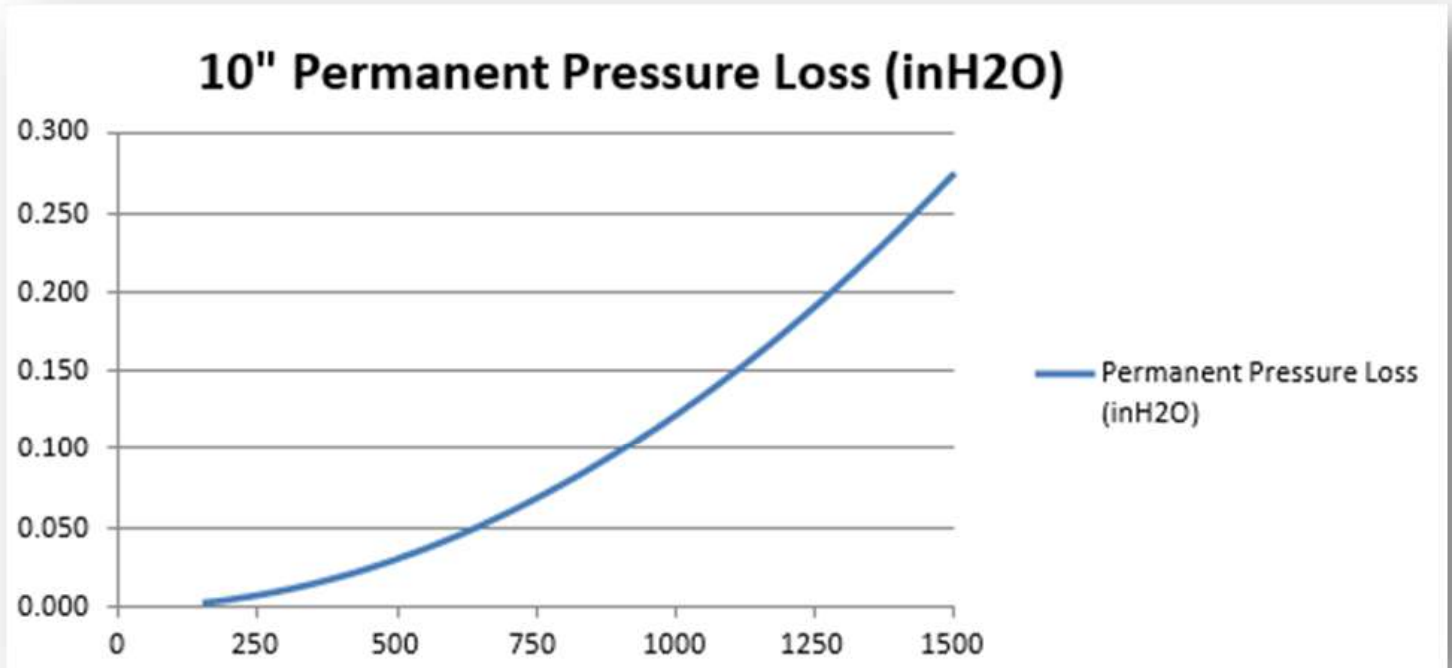
6" Permanent Pressure Loss (inH2O)



8" Permanent Pressure Loss (inH2O)

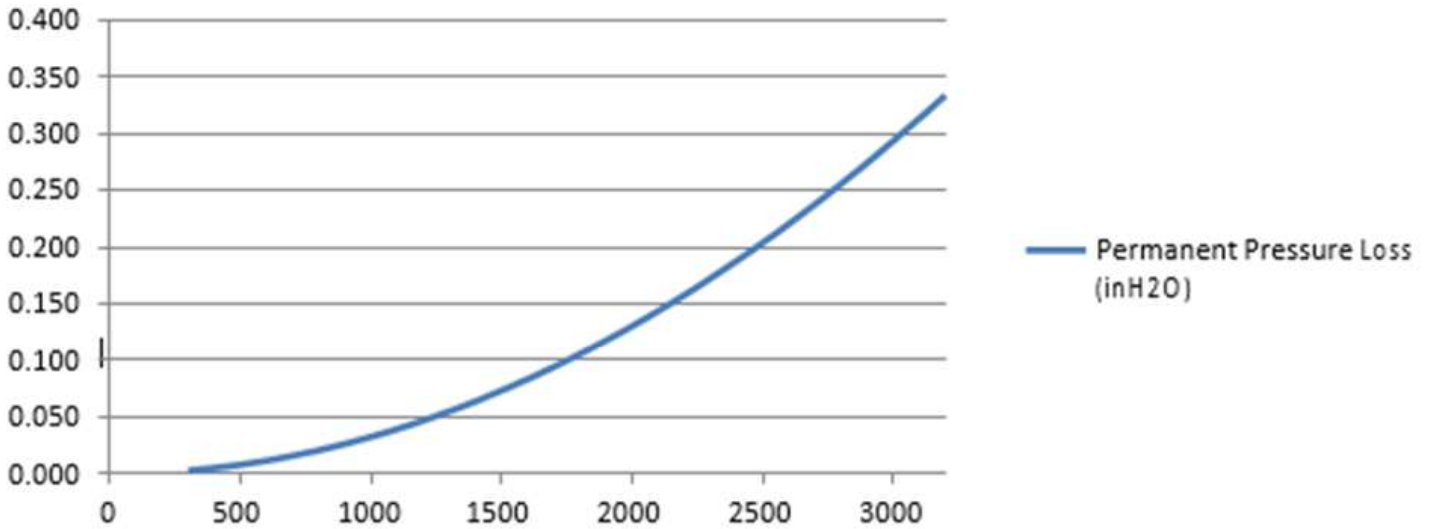


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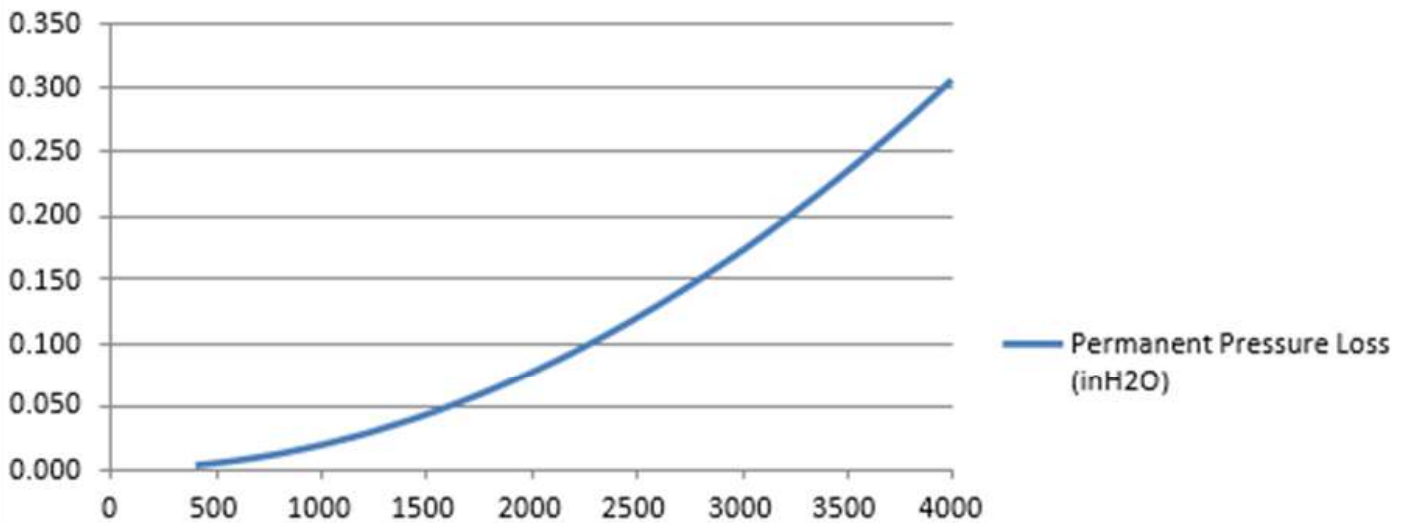


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14" Permanent Pressure Loss (inH2O)



16" Permanent Pressure Loss (inH2O)



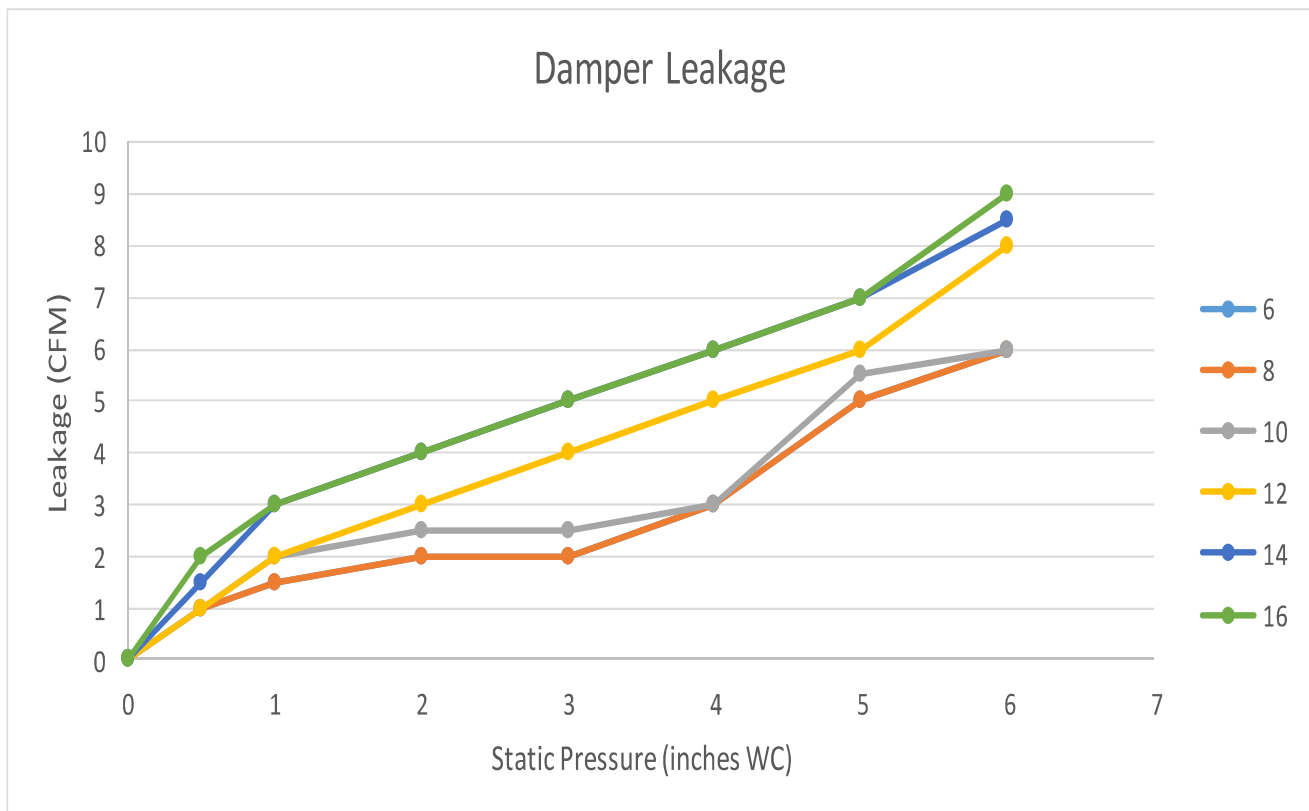
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VALVE DAMPER LEAKAGE:

Type: Single duct Critical Room Control CLV air valve
Valve Size: 6" to 16"
Pressure Range: 0 to 6.0"WC

VALVE TYPE:

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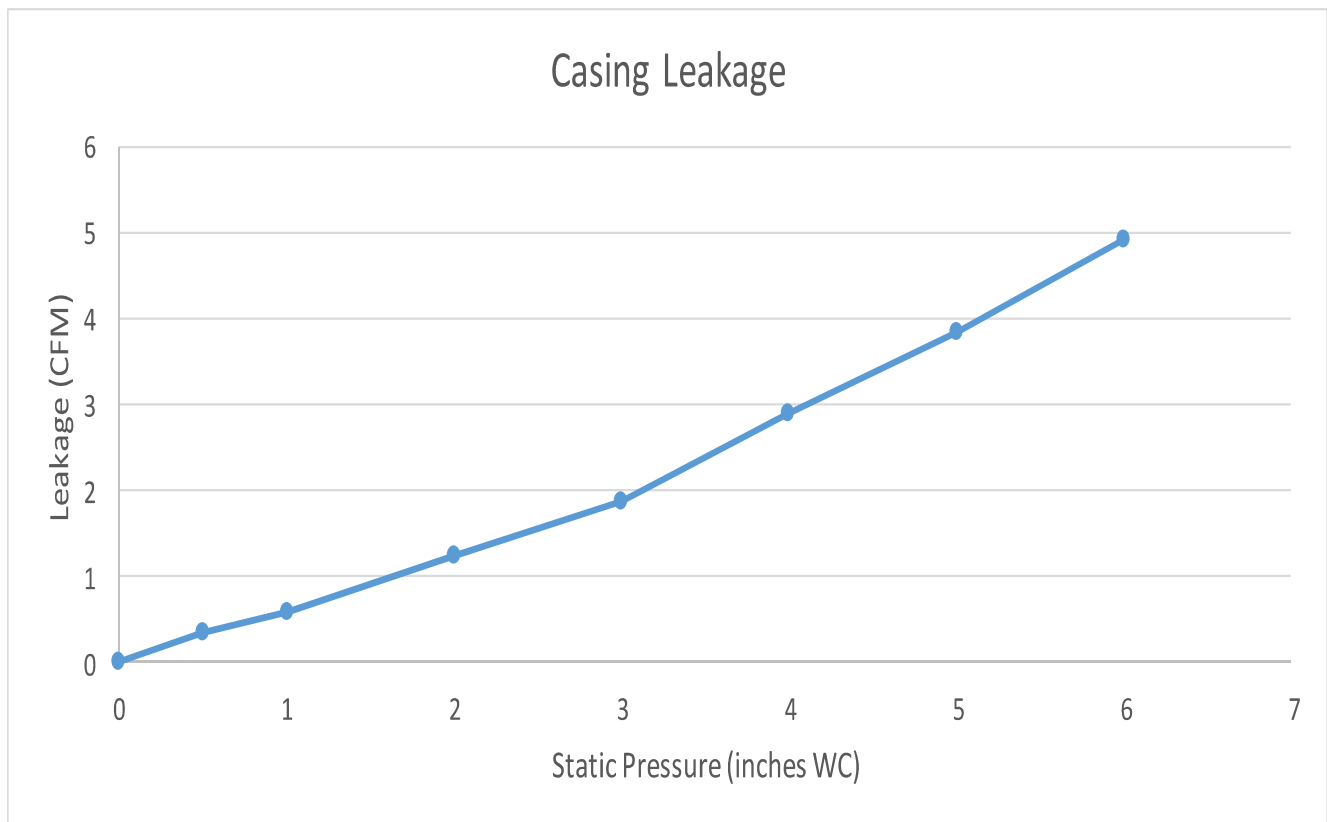
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CASING LEAKAGE:

Type: Single duct Critical Room Control CLV air valve
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