

EQUILIBAR® HV SERIES

MAX FLOW LOW PRESSURE BACK PRESSURE VALVES

MAX OPERATING PRESSURE

15 psig

FLANGE SIZE & FLOW COEFFICIENT (Cv)

Model	Flange Size	Cv
EB10HV16	2" ANSI 150#	50
EB20HV32	4" ANSI 150#	150
EB28HV48	6" ANSI 150#	320

Reference (pilot) port 1/4" NPT (all models)
(Custom fittings optional)

BODY MATERIAL

Stainless Steel 304 (Standard)
Stainless Steel 316L (Optional)

DIAPHRAGM MATERIAL

PTFE (Standard)
FKM Fluoroelastomer (Optional)
Buna-N (Optional)
Polyethylene (Optional)
EPDM (Optional)

GASKET MATERIAL

EPDM (Standard)
Silicone (Optional)

CONTROL MODE

1 unit reference pressure
controls 1 unit inlet pressure



Figure 1: The EB20HV32 Max Flow Low Pressure valve with an integrated manual set point kit.

The Equilibar HV Series is a high flow back pressure valve targeted for applications with high flow rates and small differential pressures.

A typical application for the HV low pressure valve would be controlling exhaust gases at 2 to 4 inches of water column pressure.

The HV is a pilot operated back pressure valve. The pressure signal applied to the pilot port commands the HV to control its inlet port to that same pressure. This signal to controlled pressure is a 1:1 relationship.

The pilot pressure may be applied with a manually adjusted mechanical pressure regulator or with an electronic pressure regulator where automation of the pressure control is required.

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EQUILIBAR®
PRECISION PRESSURE CONTROL

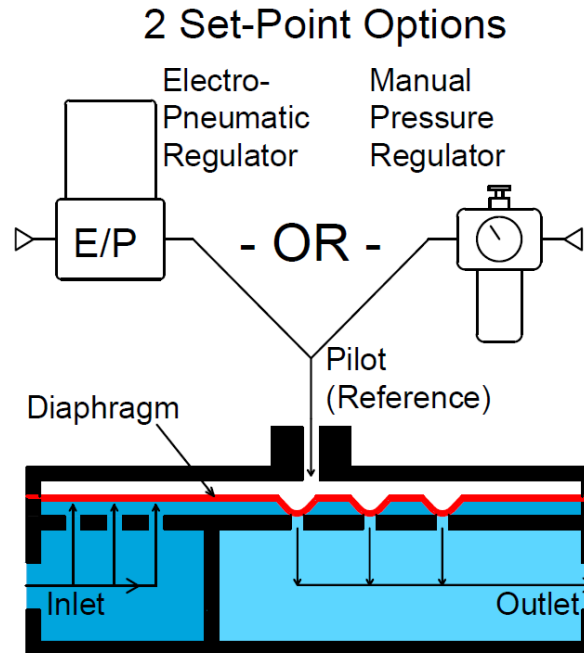


Figure 2: An illustration which details how Equilibar Back Pressure Valves work. The sensitive diaphragm acts as a fluid transistor to match the inlet pressure to the reference pressure in a 1:1 ratio.

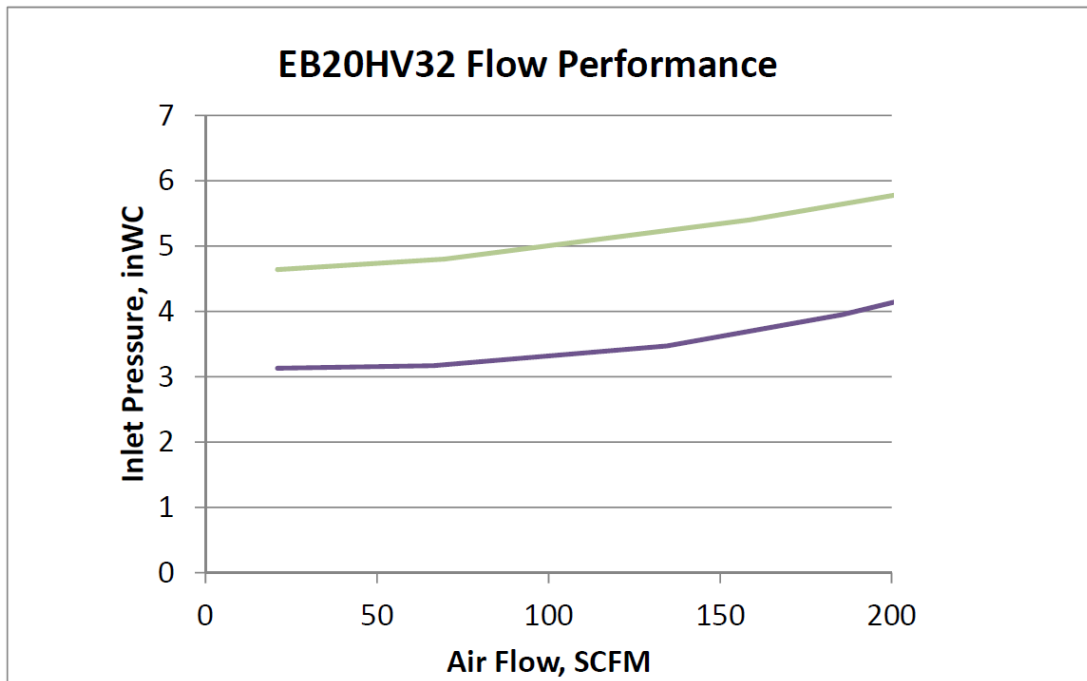
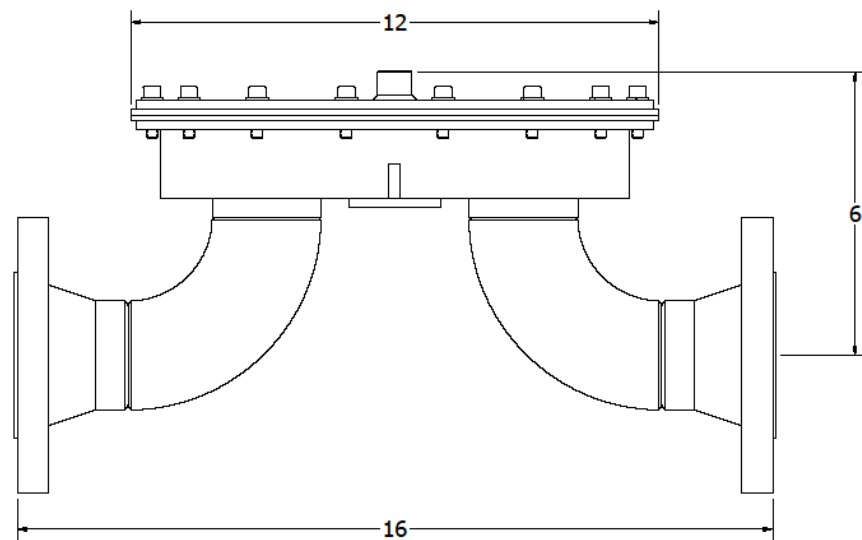
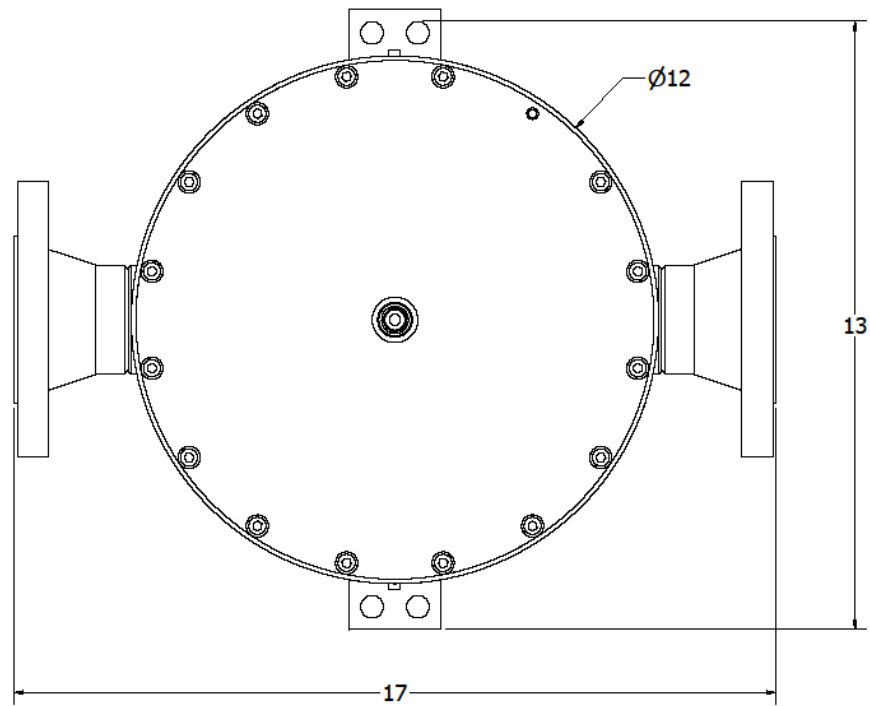


Figure 3: A plot showing the performance of the 4" EB20HV32 Back Pressure Valve at ultra-low pressures. Do note that while this graph shows performance in the inches of water column range the unit can be used with pressures up to 15 psig.

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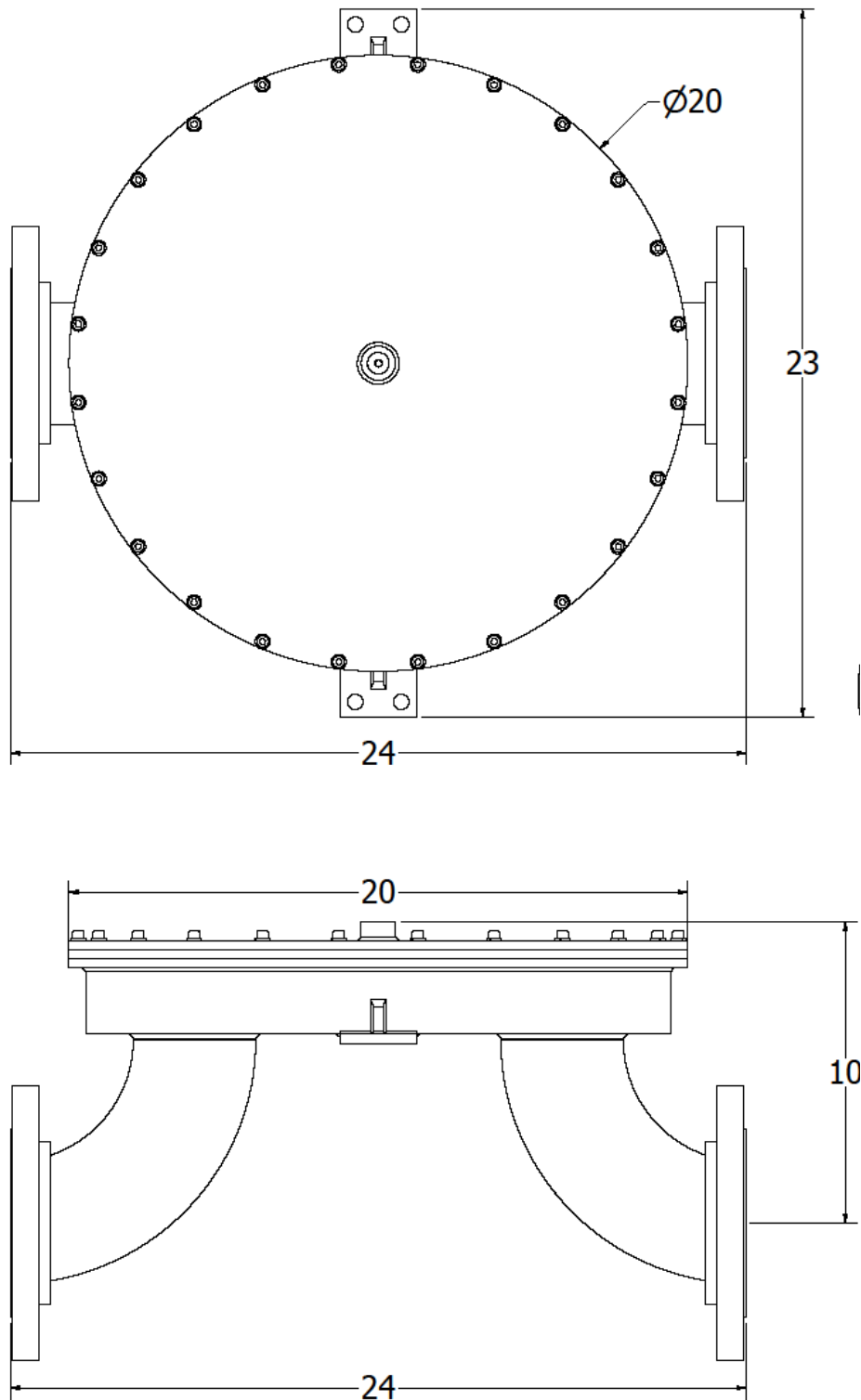
EB10HV16 Dimensional Drawings (2" Flanges)



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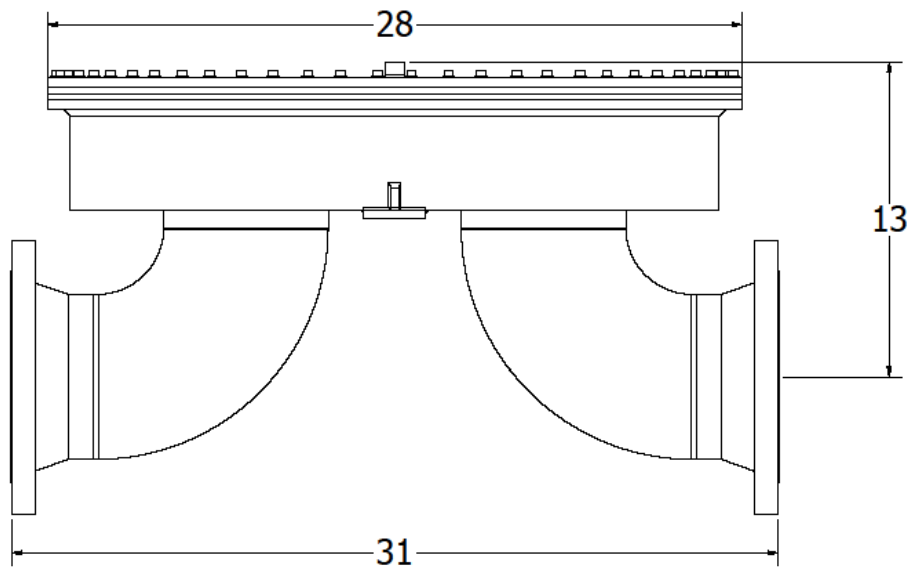
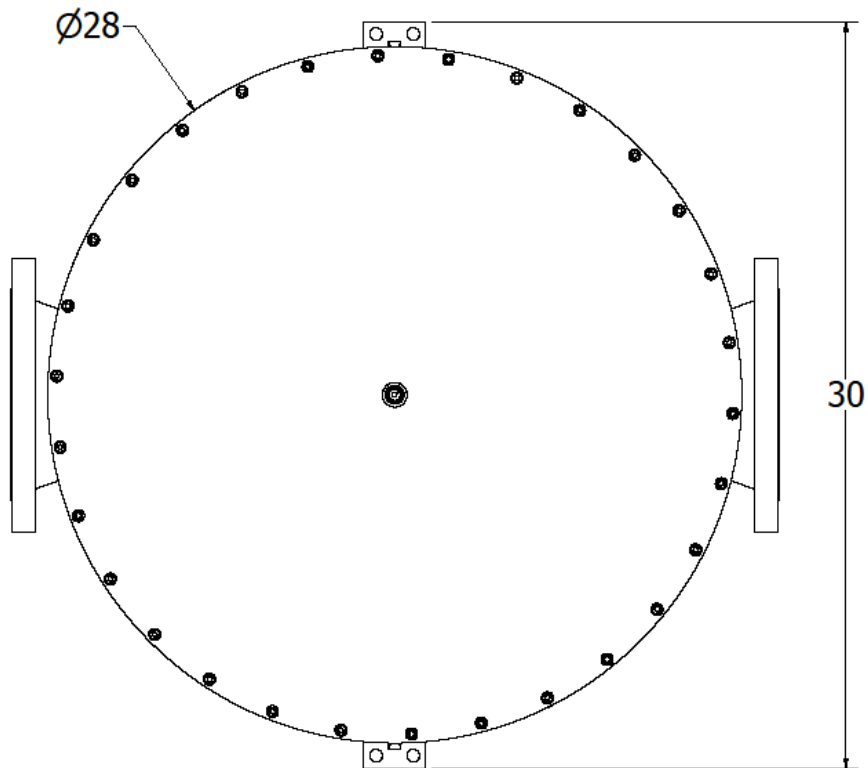
EB20HV32 Dimensional Drawings (4" Flanges)



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EQUILIBAR
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EB28HV48 Dimensional Drawings (6" Flanges)



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