

# EQUILIBAR® HV SERIES

## MAX FLOW VACUUM VALVES

### MIN OPERATING PRESSURE

Full Vacuum

### 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 vacuum 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 vacuum.

The HV is a pilot operated vacuum 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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inquiry@equilibar.com

**EQUILIBAR®**  
PRECISION PRESSURE CONTROL

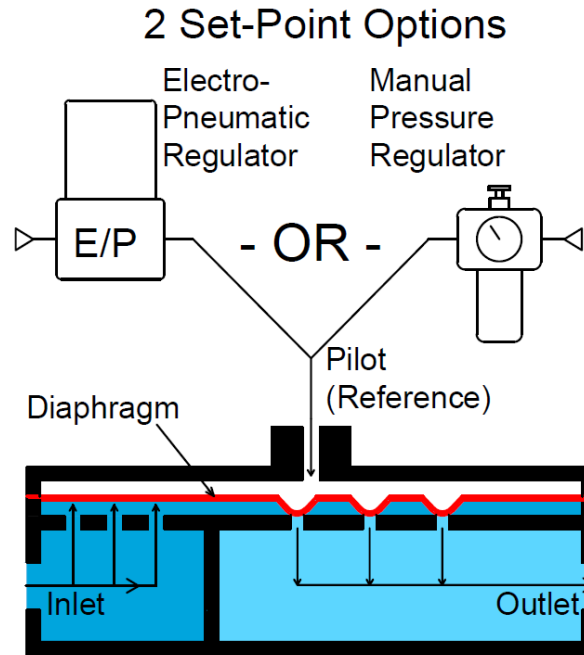


Figure 2: An illustration which details how Equilibar Vacuum Valves work. The sensitive diaphragm acts as a fluid transistor to match the inlet pressure to the reference pressure in a 1:1 ratio.

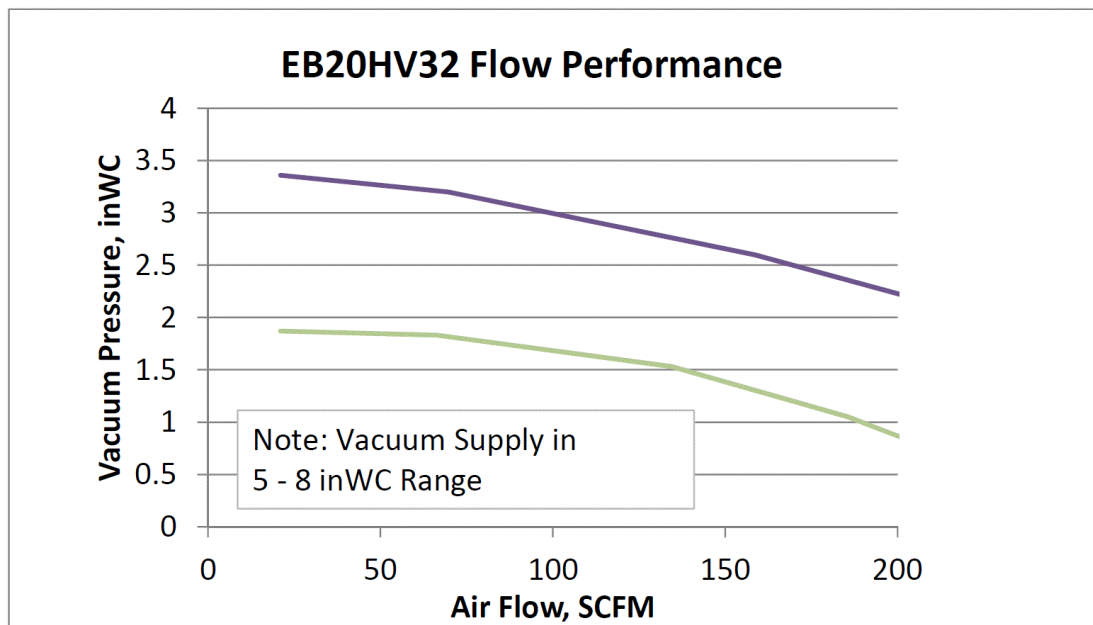
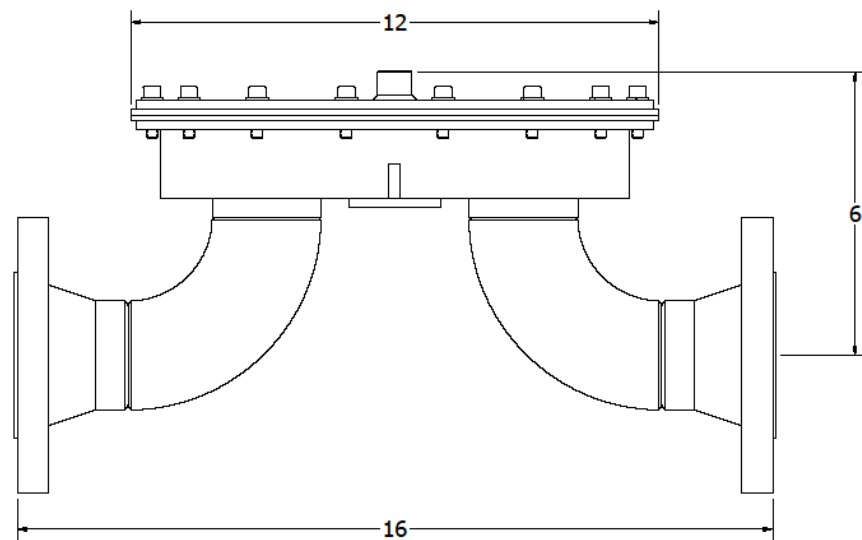
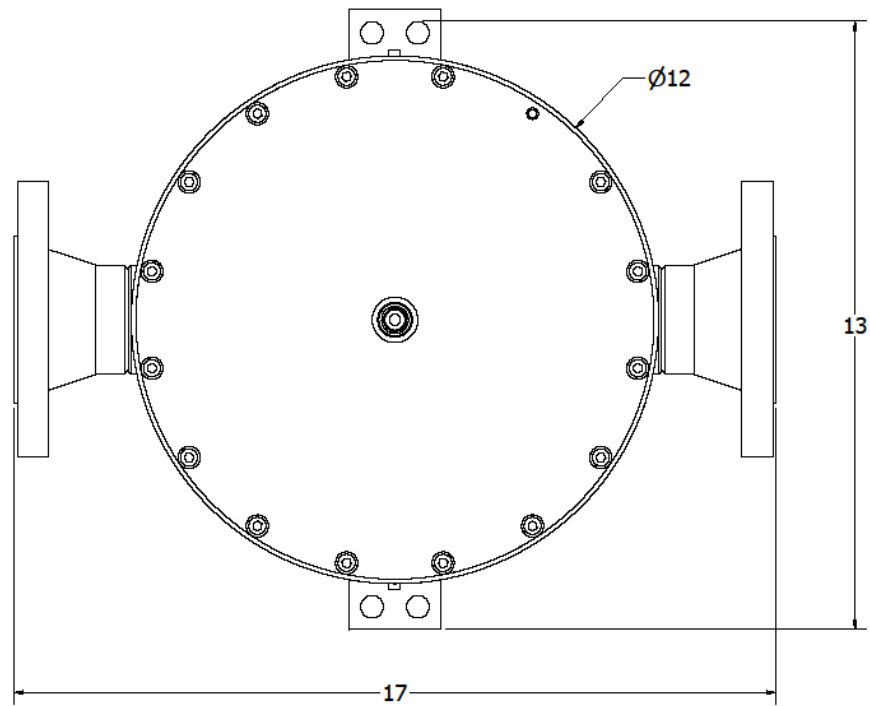


Figure 3: A plot showing the performance of the 4" EB20HV32 Vacuum Valve at ultra-low pressures. Do note that while this graph shows performance in the inches of water column range the unit can be used up to 30 in Hg.

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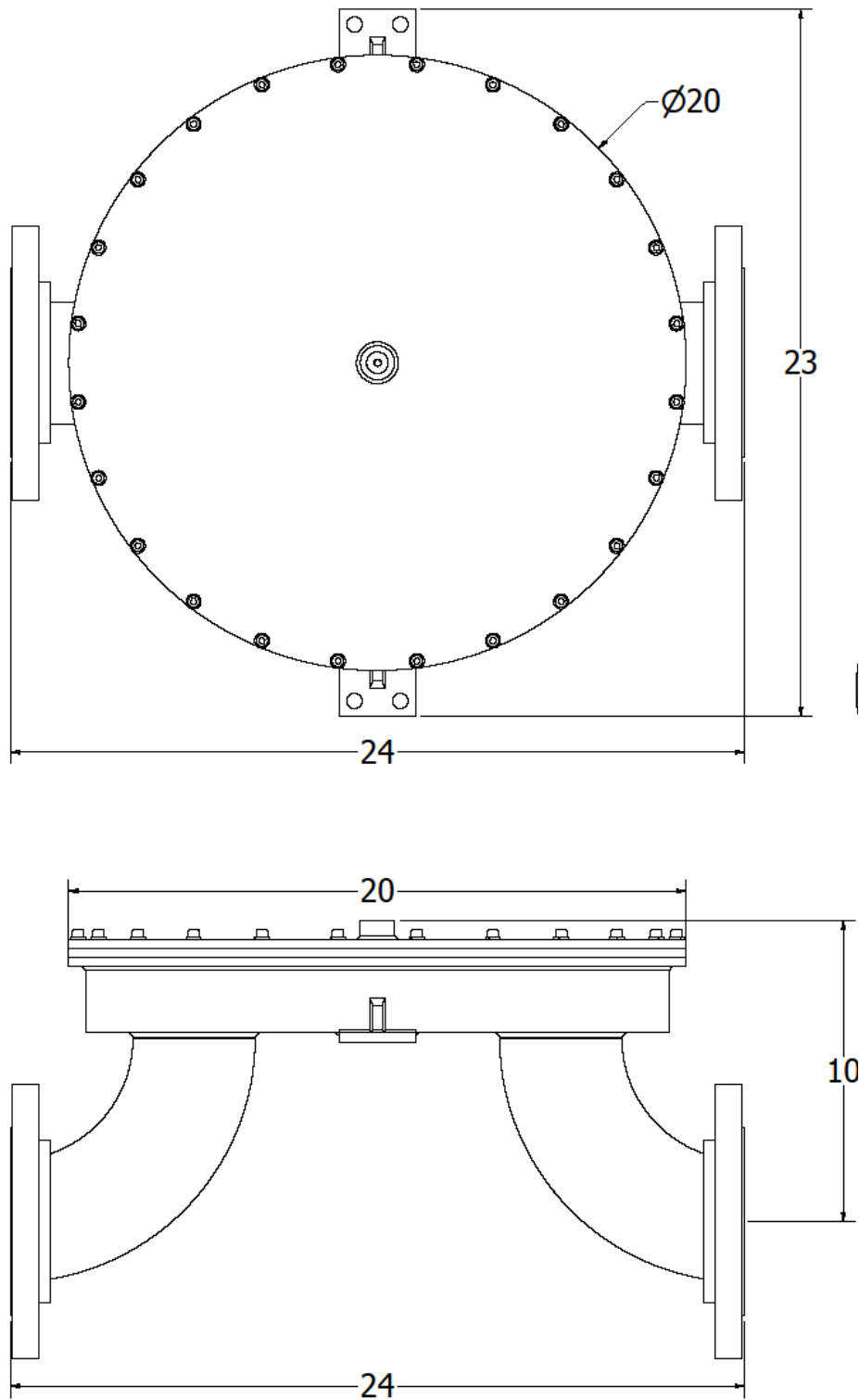
## EB10HV16 Dimensional Drawings (2" Flanges)



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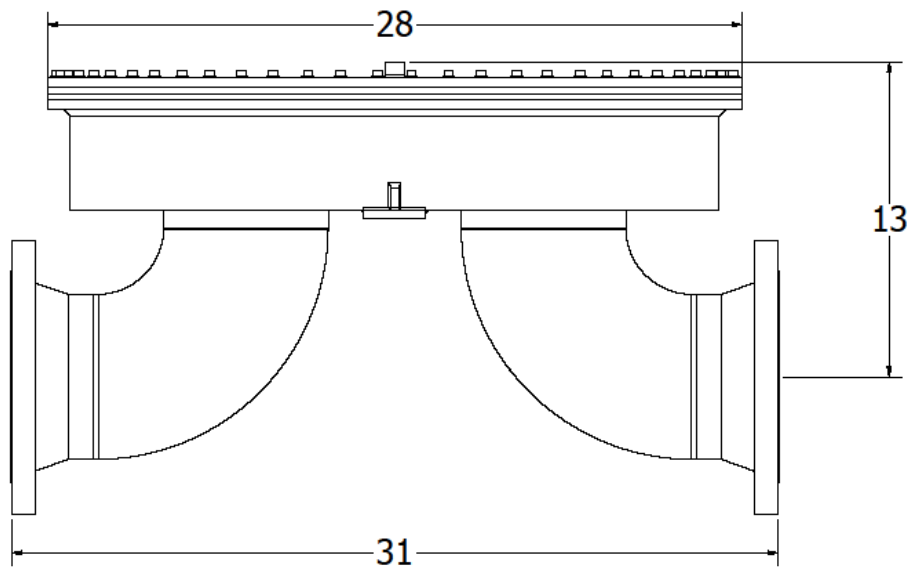
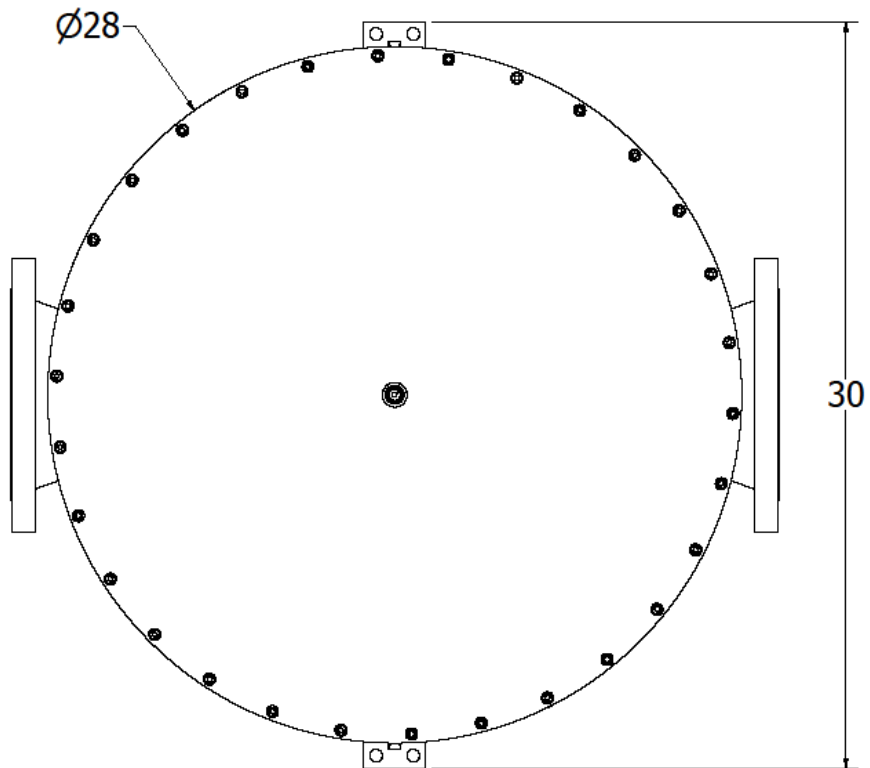
## EB20HV32 Dimensional Drawings (4" Flanges)



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## EB28HV48 Dimensional Drawings (6" Flanges)



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