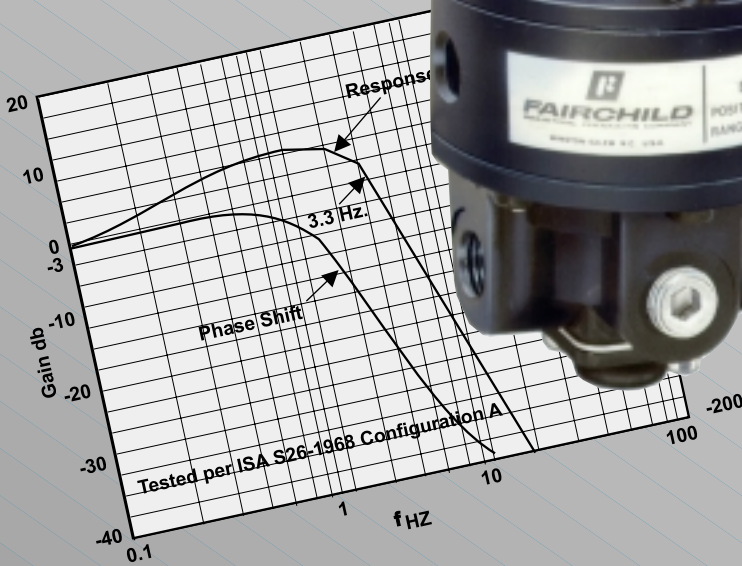
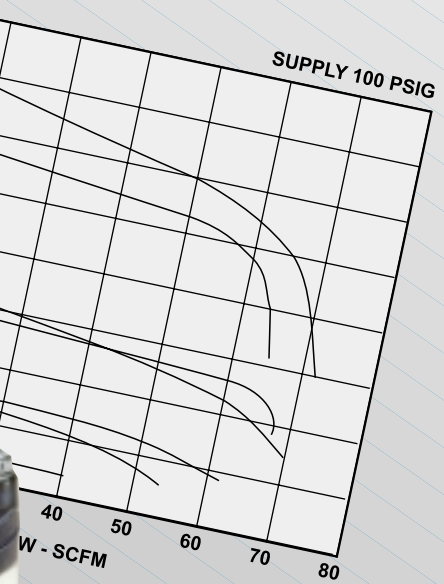
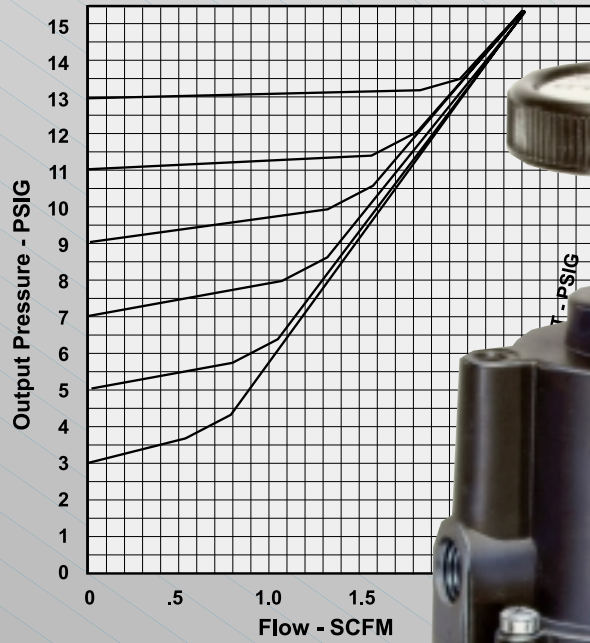


FAIRCHILD

POSITIVE AND NEGATIVE BIAS RELAY

Model 14



FAIRCHILD
INDUSTRIAL PRODUCTS COMPANY

GENERAL INFORMATION

MODEL 14 POSITIVE AND NEGATIVE BIAS RELAY

APPLICATIONS

The Model 14 Positive and Negative Bias Relay is designed for applications that require an output pressure that is the sum of a controlled input signal plus or minus a fixed bias.

FEATURES

Performance

- The Model 14 is sensitive to 1/2" Water Column variation which permits use in precision applications.
- A Balanced Supply Valve minimizes the effects of supply pressure variation.
- Aspirator Tube minimizes downstream pressure droop under flow conditions.

Functional

- Flow of up to 40 SCFM with 100 psig Supply at 20 psig Setpoint allows use in applications requiring high flow capacity.

Physical

- A Separate Control Chamber isolates the diaphragm from the main flow, eliminating hunting and buzzing.
- Mounting Bracket available.

NOTE:

The information for this catalog sheet is being upgraded to electronic format and will be available soon. Please go to the Information Request section of this web site to order the latest printed revision.

OUTLINE DIMENSIONS

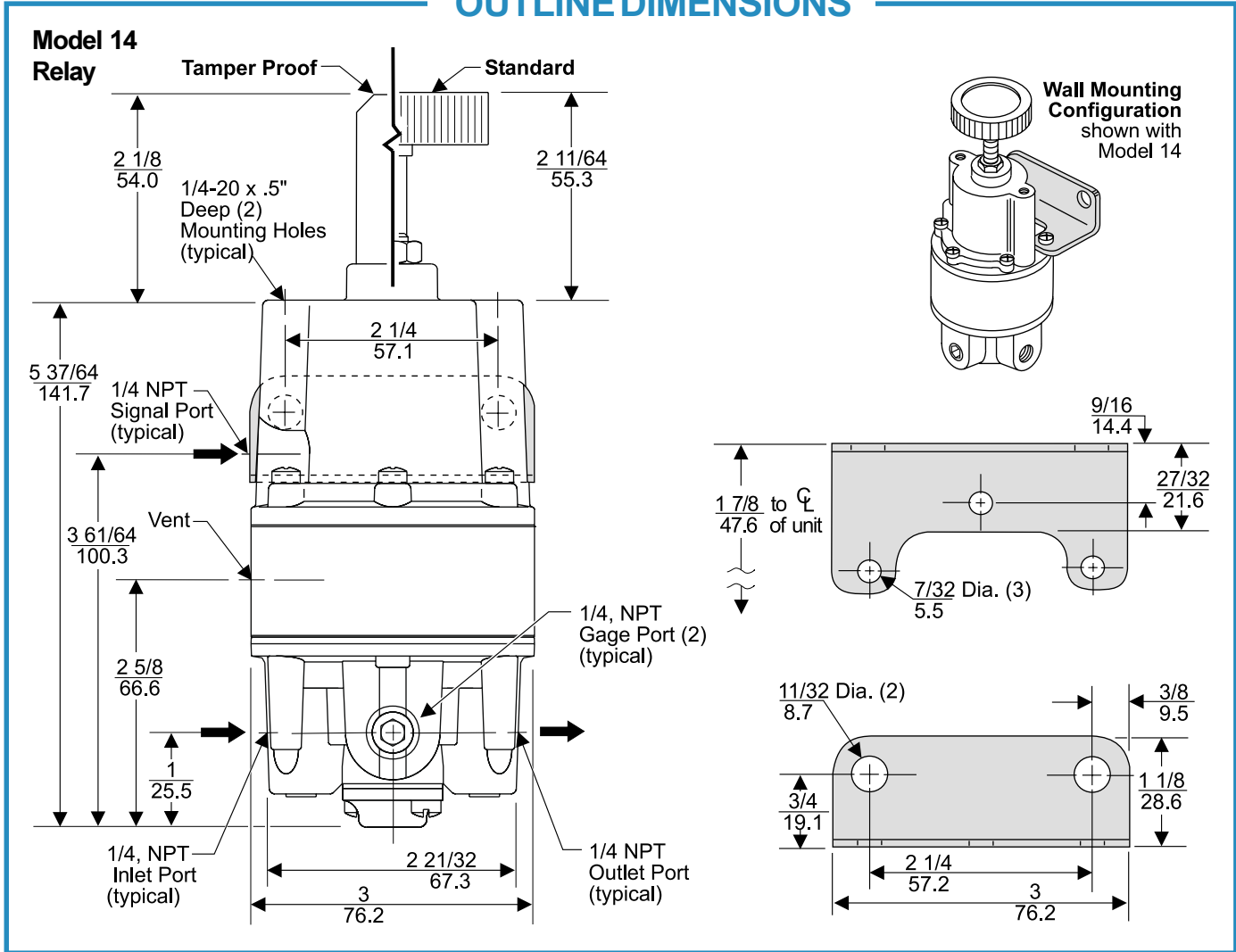


Figure 1. Outline Dimensions.

Figure 2. Mounting Bracket EB-09921. (Sold Separately)

SPECIFICATIONS

FUNCTIONAL SPECIFICATIONS

Supply Pressure	250 psig, [17.0 BAR], (1700 kPa) Maximum
Signal or Output Pressure	150 psig, [10.0 BAR], (1000 kPa) Maximum
Flow Capacity (SCFM)	40 (68 m ³ /HR) @ 100 psig, [7.0 BAR], (700 kPa) supply & 20 psig, [1.5 BAR], (1500 kPa) setpoint.
Exhaust Capacity (SCFM)	5.5 (9.4 m ³ /HR) where downstream pressure is 5 psig, [.35 BAR], (35 kPa) above 20 psig, [1.5 BAR], (150 kPa) setpoint.
Ambient Temperature	-40°F to +200°F (-40°C to +93°C)

PERFORMANCE SPECIFICATIONS

Sensitivity	Less than 1/2" (1.27 cm) Water Column.
Supply Pressure Effect	Less than 0.1 psig, [.007 BAR], (.7 kPa) for 100 psig, [7.0 BAR], (700 kPa) change in supply pressure.
Materials of Construction	Body and Housing Aluminum
	Trim Stainless Steel, Brass, Zinc Plated Steel
	Diaphragms Nitrile on Dacron

— ORDERING INFORMATION —

Catalog Number	1 4 2	□	□	□
Pressure Range				
psig	[BAR]	(kPa)		
-18 to 2	[-1.2 to .15]	(-120 to 15)	(1)	
-18 to 10	[-1.2 to .7]	(-120 to 70)	(2)	
-18 to 30	[-1.2 to 2]	(-120 to 200)	(3)	
-18 to 100	[-1.2 to 7]	(-120 to 700)	(5)	
Pipe Size				
1/4" NPT				(2)
3/8" NPT				(3)
Options				
Tamper Proof				(T)
Tapped Exhaust				(E)
Non-Relieving				(N)
Silicone Elastomers ¹				(A)
Viton Elastomers				(J)
BSPT (Tapered)				(U)

¹ Maximum Supply Pressure - 75 psig, [5.0 BAR], (500 kPa)



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