



**Weather Proof
(NEMA 4 and 13)**

DESCRIPTION

Adjustable Nega-Rate® Belleville spring sensing mechanism (operator) and 3-way pneumatic valve combination. Especially suited for pneumatic (or low impulse hydraulic) to pneumatic interface applications.

Operating Pressure Data

Adjustable Range Number	Adjustable Set Point Range		Deadband (approximate)	Maximum Recommended System Pressure	Proof Pressure
	Increasing	Decreasing (approx.)			
2	15 to 50	9 to 44	6	600	1000
4	35 to 100	25 to 90	10	600	1000
6	80 to 200	68 to 188	12	3000	5000
8	150 to 450	110 to 410	40	3000	5000
10	350 to 950	270 to 870	80	3000	5000
12	750 to 1850	600 to 1700	150	3000	5000

All values given in psig.

Standard Specifications

AIR RELAY

Configuration

3-Way Pneumatic Valve

Line Pressure

Form D - Normally not passing
200 psig maximum
Form F - Normally passing
200 psig maximum

Pressure Connection

1/8" - 27 NPT Female

Equivalent Orifice

C_v .076

Leakage

Internal and External –
Maximum 6cc per minute/air
at 50 psig

Wetted Material

Aluminum, Buna-N and
Polyurethane

PRESSURE OPERATOR

Pressure Connection

Wetted Material 1
1/4" - 18 NPT Female

Wetted Material 4
1/2" - 14 NPT Female

Temperature Range

Ambient: -30°F to +160°F
(-34°C to +71°C)
Media: -30°F to +250°F
(-34°C to +121°C)

Adjustment

Concealed wrench flat adjustment
with range scale

Shipping Weight

Approximately 3 pounds

Ordering Sequence — Select desired option for each category

OPTIONS

Wetted Material

- 1 Aluminum port and piston, Teflon seal, Buna-N O-Ring
- 4 316 Stainless steel port, Teflon coated polyimide diaphragm, Buna-N O-Ring

Adjustable Range

- 2 9 psig dec. to 50 psig inc. (.62 bar dec. to 3.5 bar inc.)
- 4 25 psig dec. to 100 psig inc. (1.7 bar dec. to 6.9 bar inc.)
- 6 68 psig dec. to 200 psig inc. (4.7 bar dec. to 13.8 bar inc.)
- 8 110 psig dec. to 450 psig inc. (7.6 bar dec. to 31.0 bar inc.)
- 10 270 psig dec. to 950 psig inc. (18.6 bar dec. to 65.5 bar inc.)
- 12 600 psig dec. to 1850 psig inc. (41.4 bar dec. to 127.6 bar inc.)

Valve Form

- D Normally not passing — 3 way
- F Normally passing — 3 way

Enclosure

- 3 Meets or exceeds the requirements of NEMA Type 3, 3R, 3S, 4, 4X and 13

Miscellaneous

- A Epoxy paint exterior — extra protection for severe environments
- B Viton O-Ring
- C EPR O-Ring
- E 1/16" - 20 SAE port — (Wetted Material 1 only)
- W Stainless steel screws — exterior

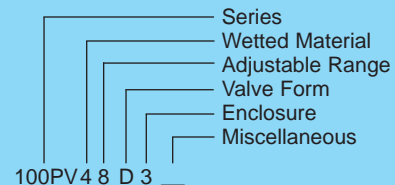
Special (Consult representative or factory)

- Non-catalog adjustable range and/or set point, deadband and proof pressure
- 316 Stainless steel port and diaphragm heliarc welded
- Chemical seal installed

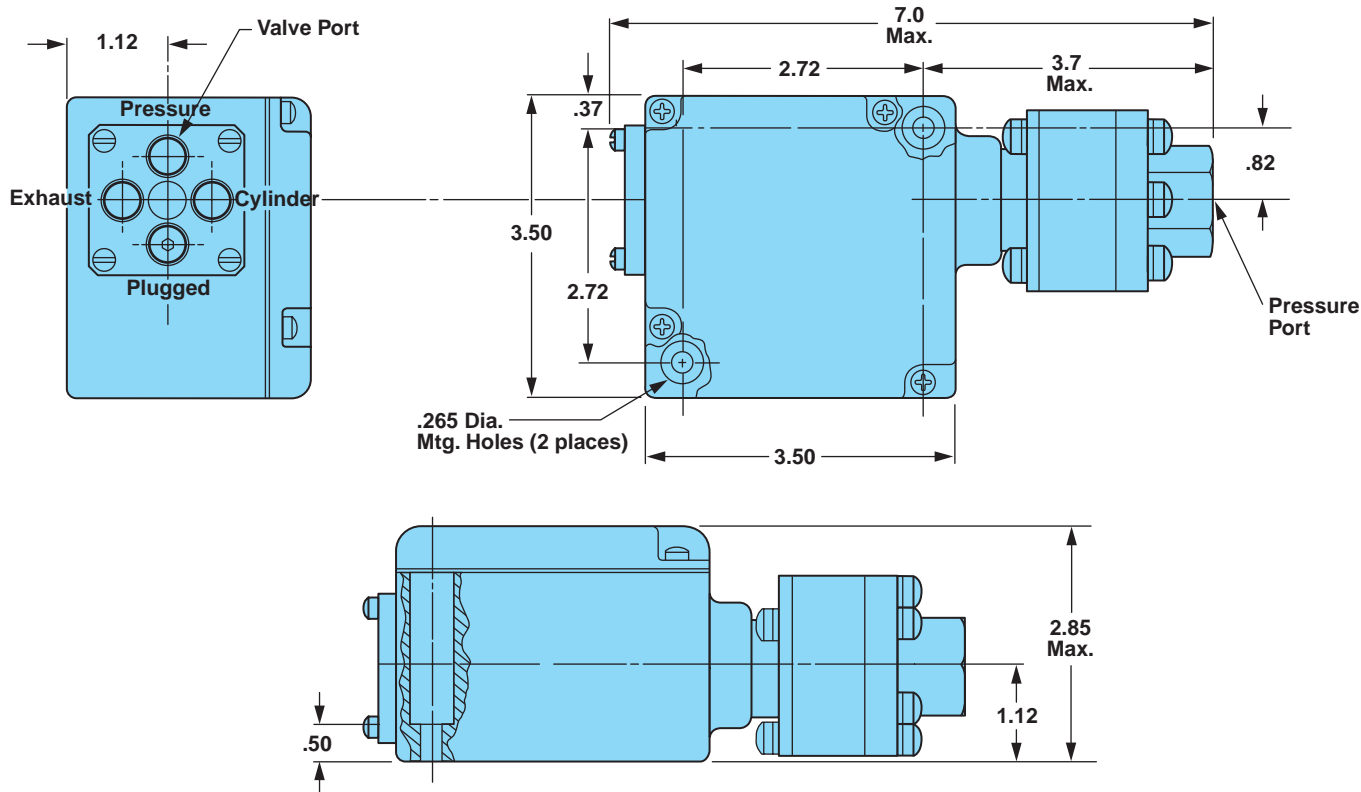
Ordering Procedure

- When factory presetting is desired, stipulate set point, increasing or decreasing
- Insert available option number or letter designation as required

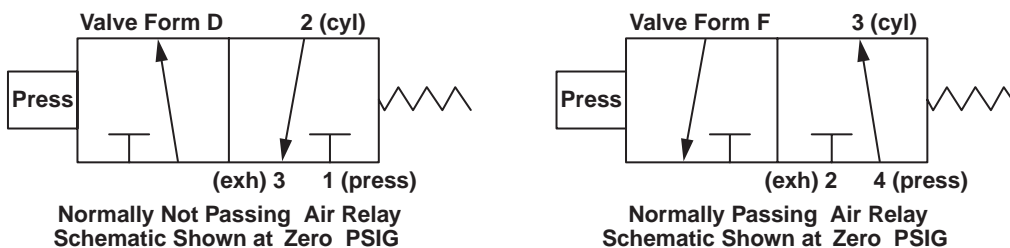
Example



Envelope Dimensions



Valve Form



Basic Principles of Design

