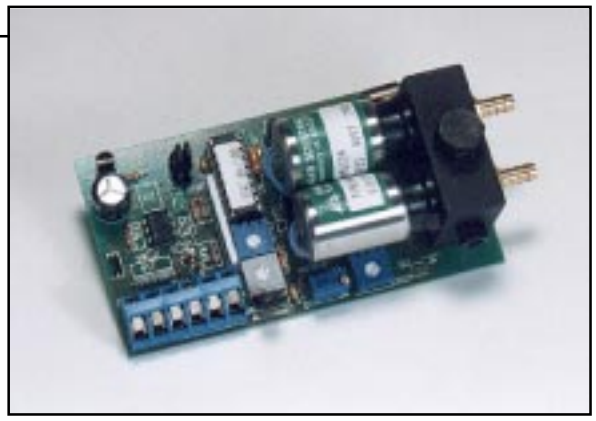
PWP100

Pulse Width Modulated to 100 psig
Pneumatic Output, Closed Loop

FEATURES:

- Accepts contact closure, transistor, or triac inputs
- Field Selectable Input Pulse Ranges, plus Phase Cut and 0-10 second window measured PWM
- Field adjustable min/max pressure output
- Adjustable Manual Override
- Closed loop control, maintains last commanded branch pressure
- LED Status indicator for power
- Branch pressure feedback signal
- Aluminum manifold



PRODUCT DESCRIPTION:

The PWP100 converts a pulse, phase cut, or digital PWM signal into a proportional pneumatic signal ranging from 0-100 psig. The pneumatic output is proportional to the signal input. The PWP100 has an adjustable manual override to INCREASE or DECREASE the pneumatic output and an LED for power and signal status indication. The full scale pneumatic output is 100 psi and has 255 steps of resolution.

The PWP100 maintains the last commanded pneumatic pressure by nature of its closed loop electronic design, regardless of branch line leaks. If power fails to the PWP100, branch line pressure remains constant if the branch line does not leak air. The output will not "wraparound" if the pulse length exceeds the maximum of the range selected. The PWP100 has a branch line feedback signal of 0-5 VDC, which the controller can use to monitor the branch line pressure.

The input can be a relay contact closure, transistor, triac, phase cut, or 0-10 second Duty Cycle Pulse measured within a 10 second window.

ORDERING INFORMATION

Specify: **PWP100** with_____ ENC1 Enclosure? _____ DRC Kit?

All factory calibrated products are NIST traceable. Certificates of Compliance must be ordered with products.

SPECIFICATIONS

ELECTRICAL REQUIREMENTS

Power Supply:

Supply Voltage	24 VDC or 24 VAC (+/- 10%)
Current	150 mA maximum

Input:

Pulse Source	Relay contact closure, triac, or transistor (solid state relay)
Pulse Trigger Level	9 to 24 VAC or VDC
Off Time Between Pulses	10 milliseconds minimum
Pulse Duration/Resolution	Selectable ranges:
Version #1	In seconds of relay contact closure, triac or transistor (solid state relay), 255 steps of resolution.
	.1 to 10 seconds in 0.1 second increments
	0.02 to 5 seconds in 0.02 second increments
	0.1 to 25 seconds in 0.1 second increments

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Version #2	.023 to 6 seconds
	0 to 10 second Duty Cycle Pulse, measured within a 10 second window. For Barber Colman™, Robershaw™, and Staefa™
Version #3	0 to 20V Staefa™ Phase Cut

Feedback Output:

Feedback Signal Range:	0-5 VDC = 0-100 psig (standard factory calibration)

MECHANICAL REQUIREMENTS

Air Supply:

Supply Pressure	110 psig maximum

Output

Pressure Range	0 -100 psig , +/- 4% accuracy between 20 and 100 psig only.
Air Flow:	All supply valves @ 100 psig main/ 95 psig out, 750 scim. Two cubic inches minimum volume on branch required.
Filtering:	Furnished with integral-in-barb 80-100 micron filter (Part # PN004)

Connections:

Wire Size	Up to two 18 AWG wires per terminal
Terminal Type	45^{O} soldered (standard) or 90^{O} plug-in (custom) screw clamp terminal blocks with 5 mm spacing.
Pneumatic Fitting	Removable brass barbed fittings for Main and Branch tubing mounted in machined aluminum manifold.
Pneumatic Tubing Size/Type	1/4" O.D. nominal polyethylene

Dimensions	3.75"L x 2.175"W x 1"H
Shipping Weight	9.0 oz.
Mounting	Furnished with 2.25" wide x 2.375" length of snaptrack. DIN Rail Clips for 1-3/8" DIN rail (DRC Kit), or Enclosure (ENC1) Optional.

ENVIRONMENTAL REQUIREMENTS

Operating Temperature Range	32 to 120 deg F
Storage Temperature Range	-20 to 150 deg F
Operating Humidity Range	5 to 95% non-condensing

PWP100 Specifications may change without notice to improve performance or functionality.

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