

VEL-trol II

ULTRA-LOW RANGE DIFFERENTIAL PRESSURE/ FLOW TRANSMITTER / CONTROLLER

OPTIONS				
<input type="checkbox"/> Alarms or <input type="checkbox"/> AUTO-purge Mgmt <input type="checkbox"/> Auxiliary Output <input type="checkbox"/> Terminal Cover/Conduit Connection	Display <input type="checkbox"/> 2x20 LCD (std) <input type="checkbox"/> 5x20 LCD	Certification <input type="checkbox"/> Standard <input type="checkbox"/> NIST Traceable	Special Function <input type="checkbox"/> % Deviation <input type="checkbox"/> Differential Flow <input type="checkbox"/> Summed Flow <input type="checkbox"/> Averaged Flow <input type="checkbox"/> Low Select <input type="checkbox"/> High Select	Network <input type="checkbox"/> None (std) <input type="checkbox"/> Modbus TCP/IP over Ethernet <input type="checkbox"/> LonWorks
Power <input type="checkbox"/> 24VAC <input type="checkbox"/> 20-40VDC <input type="checkbox"/> 120VAC (via ext transformer)	Controller <input type="checkbox"/> Ext. Setpoint <input type="checkbox"/> P,I,1/2 Control			

PERFORMANCE SPECIFICATIONS

Accuracy. ±0.1% of Natural Span, Including non-linearity, hysteresis, deadband, and non-repeatability.

Stability. ±0.5% of Natural Span for six months.

Temperature Effect.
 Zero. None; corrected by AUTO-zero.
 Span. 0.015% of Full Span/°F.

Mounting Position Effect. None; corrected by AUTO-zero.

Transducer Response Time. 0.5 second to reach 98% of a step change.

Power Consumption.

	Standard		w/AUTO-purge	
	In Rush	Hold	In Rush	Hold
24VAC	14.4VA	14VA	85VA	73VA
24VDC	9.6W	9.0W	37W	37W
120VAC	19.2VA	18.67VA	106VA	92VA

FUNCTIONAL SPECIFICATIONS

Digital Outputs.
 Dual Form C dry contacts and dual Form A dry contacts rated for 3 amps at 24VAC/VDC are used for optional Hi/Lo alarm or AUTO-purge activation and acknowledgment.

Digital Inputs.
 Dry contact for soft start command, AUTO-purge external start command, and switch to external setpoint command.

Analog Outputs.
 The single transmitter and controller outputs are individually configurable via jumper for 0-5VDC, 0-10VDC, or 4-20 mADC. Two additional outputs are optionally available.

Analog Inputs.
 Dual inputs are field configurable via jumper for 0-5VDC, 0-10VDC, or 4-20mADC. For use with optional special function and controller external setpoint.

AUTO-purge Management.
 AUTO-purge cycle is initiated via an external dry contact input, or via an internal timer with field selectable frequencies of 1 to 24 hours, in 1 hour increments. Three internal relays provide remote purge activation & acknowledgment.

Controller.
 Controller output type is P,I,1/D, user selectable forward or reverse acting. Controller setpoint is user selectable as internal or via external analog input.

Low Pass Filtration.
 Response time to reach 98% of a step change is adjustable from 2.0 to 250.0 seconds.

Power Supply.
 Standard 24VAC (20-28VAC) or 24VDC (20-40VDC), with automatic selection. Optional 120VAC (100-132VAC), via external transformer.

Automatic Zeroing.
 Accuracy. Within 0.1% of calibrated span.
 Frequency. Every 1 to 24 hours on 1 hour intervals.

Overpressure and Static Pressure Limit. 25 psig.

Circuit Protection.
 Power input is isolated, fused, and reverse polarity protected.

Span and Zero Adjustment.
 Digital, via internally located push-buttons.

Displays.
 Standard 2 line x 20 character backlit graphical LCD provides one line of data display. Optional 5 line x 20 character backlit graphical LCD provides up to 5 lines of data display.

LED's indicate CPU activated, AUTO-zero in progress, AUTO-zero over-ranged, AUTO-purge in progress, and auxiliary alarm "on" status.

Humidity Limits. 0-95% RH, non-condensing.

Temperature Limits.
 -20°F to 180°F Storage.
 +40°F to 140°F Operating.

