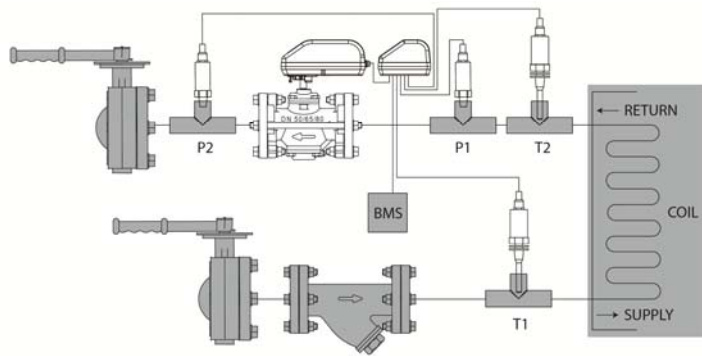


ENERGY-SAVING PRESSURE-INDEPENDENT SYSTEM



Non-shaded Components = EPIC System
Shaded Components = System Components

The EPIC System measures energy usage while monitoring coil performance to adjust a Pressure Independent (PI) Control Valve to optimize coil performance.

The PI Valve maintains the correct flow, in spite of pressure changes, and guarantees the flow only changes when demand requirements change or Delta T is outside of specification.

The pressure transducers measure upstream and downstream pressure allowing the Building Management System (BMS) to reduce system pressures to save pump energy when pressure drop is higher than the PI valve's requirements.

The Griswold EPIC Controller calculates the BTU and displays the data on an Android and iPhone mobile device

PI VALVE SPECIFICATIONS

Static Pressure:	580psid
Media Temperature:	-4° to 248°F
Ambient Temperature:	14° to 122°F
Body Material:	Ductile Iron, ASTM A395, Class 60-40-18
Flow Regulation Unit:	316 Stainless Steel
Diaphragm:	Hydrogenated acrylonitrile butadiene rubber
End Connections¹:	ANSI Class 150/300
Stem Seals:	EPDM and Nitrile O-Rings
Test Ports:	1/4" ISO
Maximum Close Off Pressure:	100 PSID
Maximum Operational ΔP:	87 PSID
Shut Off Leakage:	ANSI/FCI 70-2 2006 /IEC 60534-4 Class IV

PI VALVE ACTUATOR SPECIFICATIONS

Supply Voltage:	24V DC
Power Consumption:	12 VA
Frequency:	50/60 HZ
Feedback Position Output:	Automatic Match of Control Input
Turn Time:	190 seconds (from closed to fully open)
Electrical Connection:	5 wires 22AWG halogen free cable, 1 meter
Direction of Rotation:	Bi-directional
Humidity Rating:	5-95% RH non condensing
Housing Insulation:	IP 54 including upside down mounting
Housing Material:	UL94 V0-rated plastic



Listed temperature regulating equipment 41 X 9

Class 2 circuit

NOTES

¹ Studs and bolts for installation are supplied by others.

Programming: External programming of all settings, interface buttons and display
Calibration: Automatic calibration at start-up

GRISWOLD EPIC CONTROLLER SPECIFICATIONS

Supply Voltage: 24V DC
Housing Insulation: IP 54 including upside down mounting
Housing Material: UL94 V0-rated plastic

TEMPERATURE SENSOR (T1 & T2) SPECIFICATIONS

Supply Voltage: 24V DC
Media Temperature: 32° to 212°F
Connection: 1/4" NPT
Housing Material: UL94 V0-rated plastic
Signal Output: 0-5 V (3-wire)
Electrical Connection: Directly Outlet Cable IP67
Probe Length: 50 mm

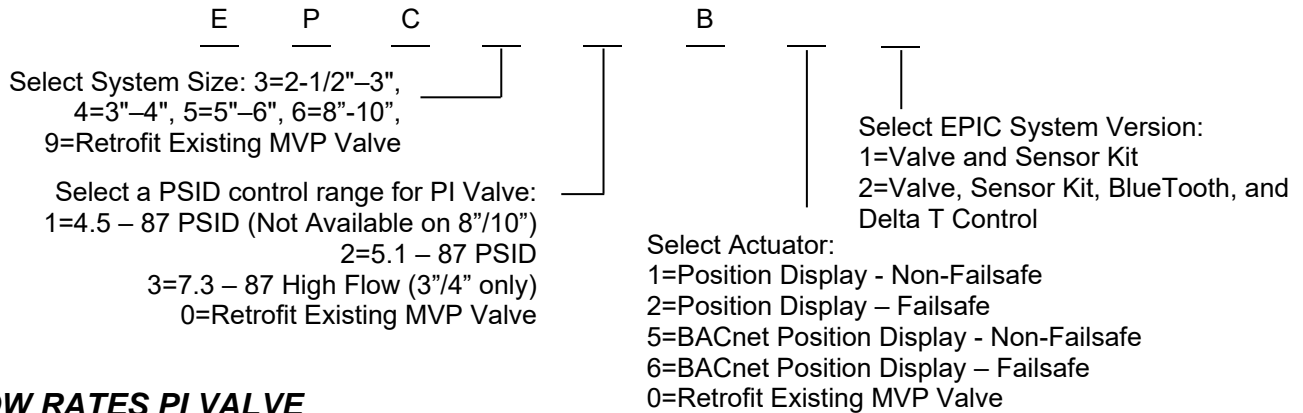
PRESSURE TRANSDUCER (P1 & P2) SPECIFICATIONS

Accuracy RSS: ±0.5% FS
Non-Linearity, BFSL ±0.20% FS
Hysteresis 0.5% FS
Non-Repeatability ±0.05% FS
Connection: 1/4" NPT
Thermal Effects °F (°C) Compensated 14 to 140 (-10 to 60)
Zero Shift %FS/°F(%FS/°C) < ±0.02 (<±0.04)
Span Shift %FS/°F(%FS/°C) < ±0.02 (<±0.04)
Line Pressure Effect Zero shift approx. ±0.004% FS/psig line pressure
Resolution Infinite, limited only by output noise level (0.02% FS)
Static Acceleration Effect 2% FS/g (most sensitive axis)
Natural Frequency > 500 Hz (gaseous media)
Response Time 30 to 50 milliseconds
Maximum Working Pres: 150 psig
Circuit: 2-wire
Output at Zero Pressure: 4mA (1V with filter)
Output at Full Range: 20mA (5V with filter)
Pressure²: 0-16 Bar (0-401.8"WC)
Full Scale Output: 16mA (4V with filter)
External Load: 0 to 1000 Ω
Minimum Supply Voltage: 12vDC + 0.02 x (Resistance of receiver plus line)
Maximum Supply Voltage: 30vDC + 0.004 x (Resistance of receiver plus line)

NOTES

² Calibrated at factory at 24Vdc.

MODEL NUMBER SELECTION



FLOW RATES PI VALVE

MODEL NO.	SIZE	PSID RANGE	MAXIMUM FLOW GPM	TURN DOWN RATIO – MAX FLOW	LOWEST MAX SETTING GPM	TURN DOWN RATIO – LOWEST MAX FLOW
EPC31__	2-1/2" / 3"	4.5 – 87	113	1:228	40.7	1:38
EPC32__	2-1/2" / 3"	5.1 – 87	157		56.3	
EPC41__	3" / 4"	4.5 – 87	149		55.4	
EPC42__	3" / 4"	5.1 – 87	225		75.0	
EPC43__	3" / 4"	7.3 – 87	320		58.3	
EPC51__	5" / 6"	4.5 – 87	369		103	
EPC52__	5" / 6"	5.1 – 87	468		113	
EPC62__	8" / 10"	5.1 - 87	1220		146	

DIMENSIONS & WEIGHTS (NOMINAL)

MODEL NO.	SIZE	L	H1	H2	ASME B16.5 WELD NECK		ASME B16.5 SLIP ON		WEIGHT ³
					CLASS 150	CLASS 300	CLASS 150	CLASS 300	
EPC3__	2-1/2"	8.8"	9.7"	3.74"	•	•	•	•	27.8
	3"				•	•	•	•	
EPC4__	3"	12.6"	11.4"	5.3"	•	•	•	•	75
	4"				•	•	•	•	
EPC5__	5"	16.6"	13.3"	7.1"	•	•	•	•	148
	6"				•	•	•	•	
EPC6__	8"	28.5"	18.6"	11.5"	•	•	•	•	547
	10"				•	•	•	•	

NOTES

³ Weight includes valve and actuator.