

#### APPLICATION:

The Electronic Pilot Controller is used in any application where a 4-20mA valve actuator can be controlled by reading a 4-20mA sensor.

#### FEATURES

- Multiple control schemes
- \* PID Control (Pressure Reducing or Back Pressure)
- \* High Limit shutdown
- \* Low Limit shutdown
- \* GAP Control (example: plunger lift application)
- \* High Low shutdown
- Multiple applications
- \* Pressure control
- \* Flow control
- \* Temperature control
- \* Level control
- Powered from actuator supply
- Reverse Battery Protection
- Bright OLED display technology
- User-friendly menus for installation/operation
- PID Autotuning available for ease of installation

#### CONSTRUCTION:

Cast aluminum housing for hazardous location areas.

#### OPERATION:

The Electronic Pilot receives an analog (4-20mA) signal from a sensor which measures a process valve. The signal is conditioned and sent to an electronically controlled valve via 4-20mA output signal. A PID control loop is utilized along with auto-tune and manual tuning capabilities. The pilot can connect directly to an electric actuator and share a common input power source.

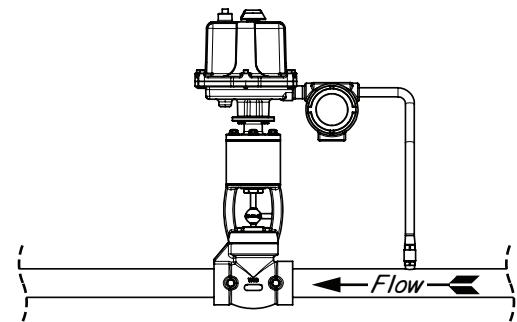
#### INSTALLATION AND COMMISSION:

- 1) Mount appropriate hardware
- 2) Specify sensor using the menu
- 3) Select control scheme
- 4) Perform auto-tuning or manual-tuning

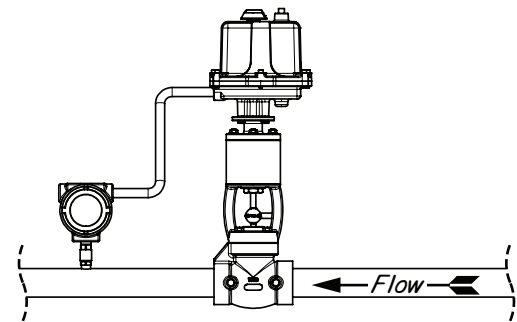
#### CERTIFICATIONS:

CSA HAZARDOUS LOCATION  
 Class I, Div 1, Groups B, C, D  
 Class II, Groups E, F, G  
 Class III, T6  
 Type 4X enclosure, IP66 rated

IECEX/ATEX (see label)  
 Ex db IIC T6 Gb  
 Ex tb IIIC T80°C Db  
 TA = -40°C to 60°C  
 IP66



**BACK PRESSURE INSTALLATION**



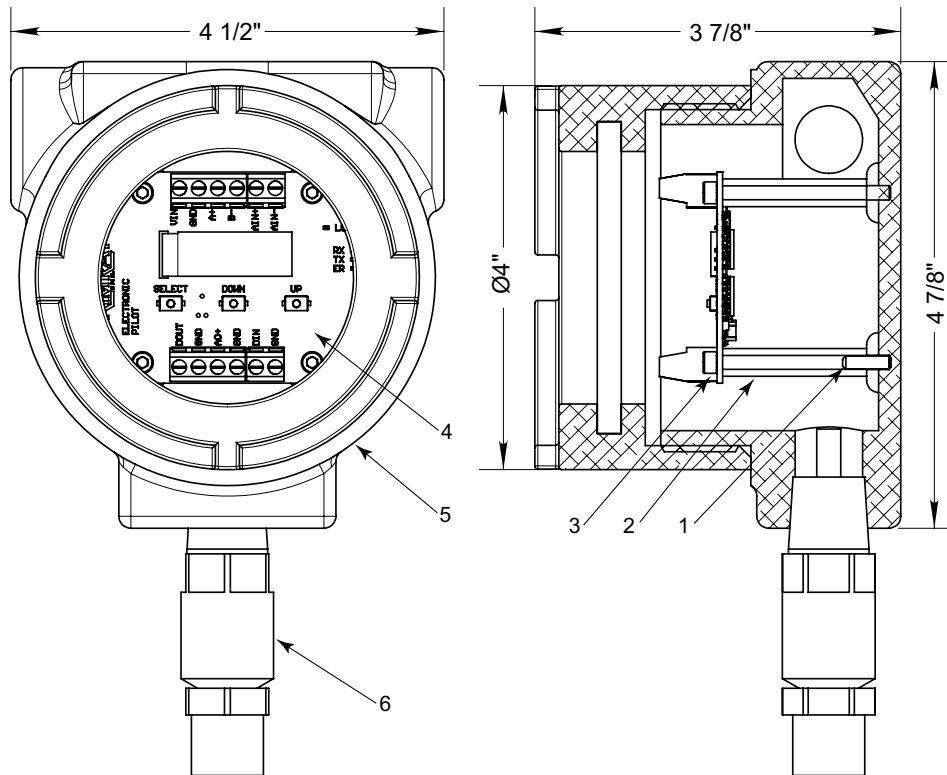
**PRESSURE REDUCING INSTALLATION**

ELECTRICAL RATINGS			
	Min	Max	Units
Input Voltage (VIN)	10	30	VDC
Input Current	0.05	0.10	ADC
Ambient Temperature	-40	60	°C
	-40	140	°F
Analog input From Sensor	4-20 mA (powered by VIN)		
Discrete input	Dry Contacts only		
Analog Output to Actuator	4-20 mA (powered by VIN)		
Communications	RS-485 (MODBUS RTU)		
Discrete Output	0 VDC or VIN, up to 1A		

Order Code	Description
YEP	ELECTRIC PILOT CONTROLLER

# PILOTS & RELAYS

## ELECTRIC PILOT CONTROLLER DRAWING & PARTS LIST



ITEM	QTY.	DESCRIPTION	PART NO
1	4	SET SCREW 6-32	7472A
2	4	PCB STANDOFF 6-32 x 3/8" HEX	7472B
3	4	6-32 x 1/4 SOCKET HEAD SCREW	7495
4	1	MAIN PCB	KA7509
5	1	ENCLOSURE	7483
6	1	PRESSURE TRANSDUCER	SEE BELOW

ACCESSORIES AVAILABLE		
PART NO	PRESSURE RANGE	DESCRIPTION
KSW4363090	0-100 psig	PRESSURE TRANSDUCER
KSGS300PG	0-300 psig	PRESSURE TRANSDUCER
KSGS750PG	0-750 psig	PRESSURE TRANSDUCER
KSW4363146	0-2000 psig	PRESSURE TRANSDUCER
KSGS40CPS	0-4000 psig	PRESSURE TRANSDUCER
KSGS60CPS	0-6000 psig	PRESSURE TRANSDUCER
KSW4363163	0-8000 psig	PRESSURE TRANSDUCER
7513		1/2 NPT CONDUIT PLUG

All Pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

CODE BUILDER  
P SERIES (RELAYS)

Series:

P = Pilots & Relays

Model:

VL = 30 Volume Booster  
VH = 300 Volume Booster  
BR = Bistable Relay  
PT = Pressurestat

Action

0 = N/A (VH, BR, PT only)  
S = Snap (VL only)  
T = Throttle (VL only)  
M = Manual Reset (VL only)

Shell Material:

**D = Ductile Iron**  
C = 316SS (C service type only)

Control Range:

0 = N/A

Service Type:

**S = Standard**  
C = Corrosive (C shell material only)

P	VL	S	D	0	S	
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Options: Additional cost and lead times will apply  
If multiple options required input in sequential order  
Leave blank if no options required

1 = NACE Certification (Corrosive Option Only)  
V = FKM Elastomer

Not all selections available on all products listed.  
See product pages 01:40.1 - 01:70.2 for available options