

## Gas Proving & Shutdown Controller (GPSC)

### SPECIFICATIONS

The BeaconMedaes GPSC, a gas pressure proving and shutdown controller, is designed specifically for use in school, college and university laboratories. The controller is used to carry out a gas proving test on the pipe work in order to highlight if there is gas usage or if there is a leak in the laboratory at start-up. The BeaconMedaes GPSC gives the teacher full control over the incoming gas supply with the lockable key-switch operation.

#### **External Instrument Signals & Emergency Gas Supply Shutdown**

The BeaconMedaes GPSC is capable of working in conjunction with several different types of instruments such as (but not limited to) gas monitors, excess flow switches, pressure switches and temperature switches. The gas pressure and shutdown controller is capable of closing a remote gas shutoff solenoid valve, should any of those instruments are triggered.

#### **Timeout**

The BeaconMedaes GPSC is equipped with a built-in "timeout" facility timer that will automatically shut off the gas supply solenoid valve at the end of specific time periods. This time period is field adjustable to 2, 5 or 8 hours or can be overridden when required.

#### **Proving Test**

When used with a pressure transmitter, the BeaconMedaes GPSC is capable of monitoring any pressure loss in the piping network by testing for leaks before allowing the gas to be turned on. The pressure proving test typically last thirty (30) seconds from switch on to ready for use.

#### **Alarm & System Status Indication**

The BeaconMedaes GPSC is equipped with clear LEDs showing the safety status of the gas delivery system where it is installed. In addition to visual indicators, the gas proving and shutdown controller sounds an internal buzzer in case of a shutdown.

#### **Local & Remote Emergency Stop Pushbuttons & Emergency Gas Supply Shutdown**

In addition to external instrument signals, the BeaconMedaes GPSC is capable of shutting down the gas supply via an external solenoid valve whenever any emergency stop pushbutton (local or remote) is pressed.

#### **Building Management System (BMS)**

The BeaconMedaes GPSC is integrated with a BMS to make or break a circuit on gas on/gas off (valve open/valve closed). This tells the BMS whether or not power is being sent to the gas shutoff solenoid valve.

#### **Fire Alarm System**

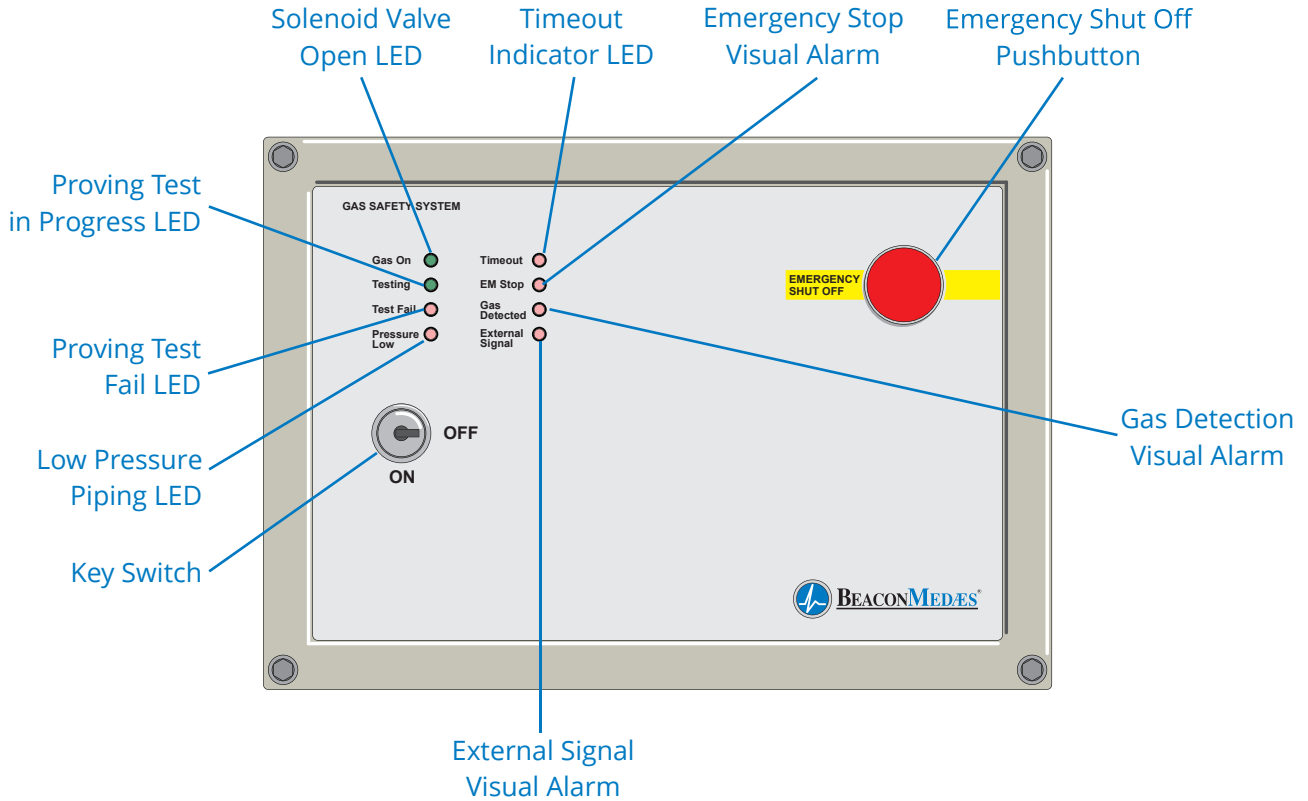
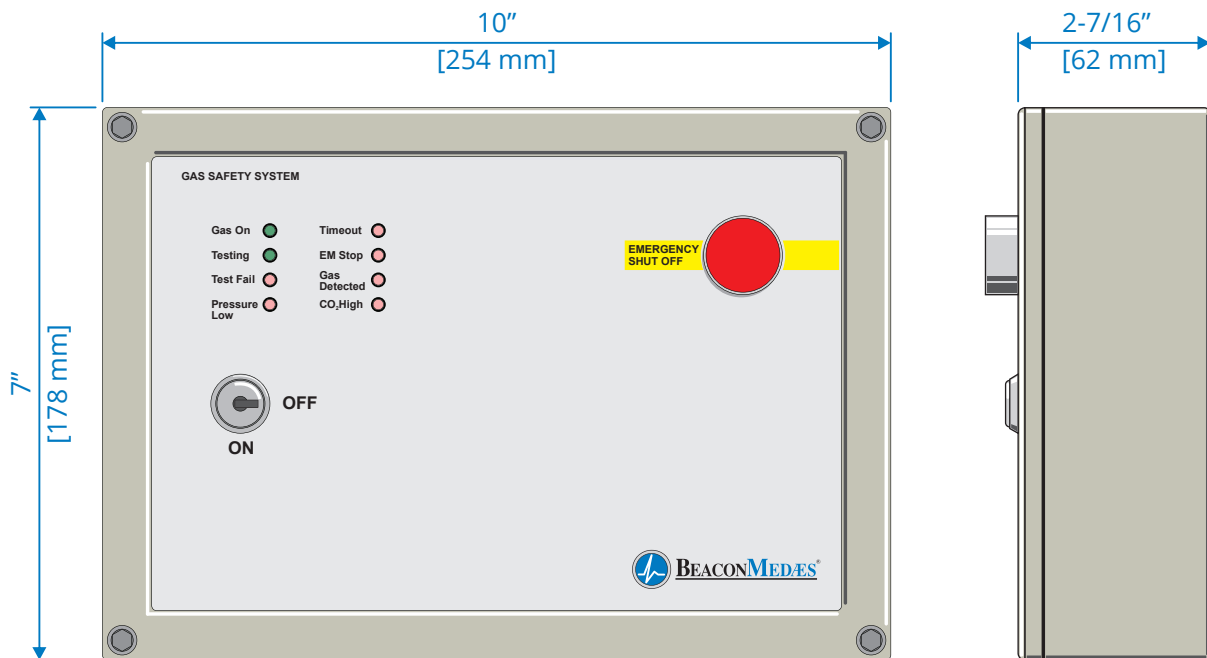
The gas proving and shutdown controller allows for integration with a fire alarm system to close the gas supply automatically in the event of fire. The volt free fire alarm is wired in series with any remote emergency shutoff pushbuttons.

#### **Fan Switch Integration**

The Fan Switch provides the facility to turn on the fan(s) when the key switch on the BeaconMedaes GPSC is in the on position and turn the power off to the fan(s) when the key switch on the BeaconMedaes GPSC is in the off position.

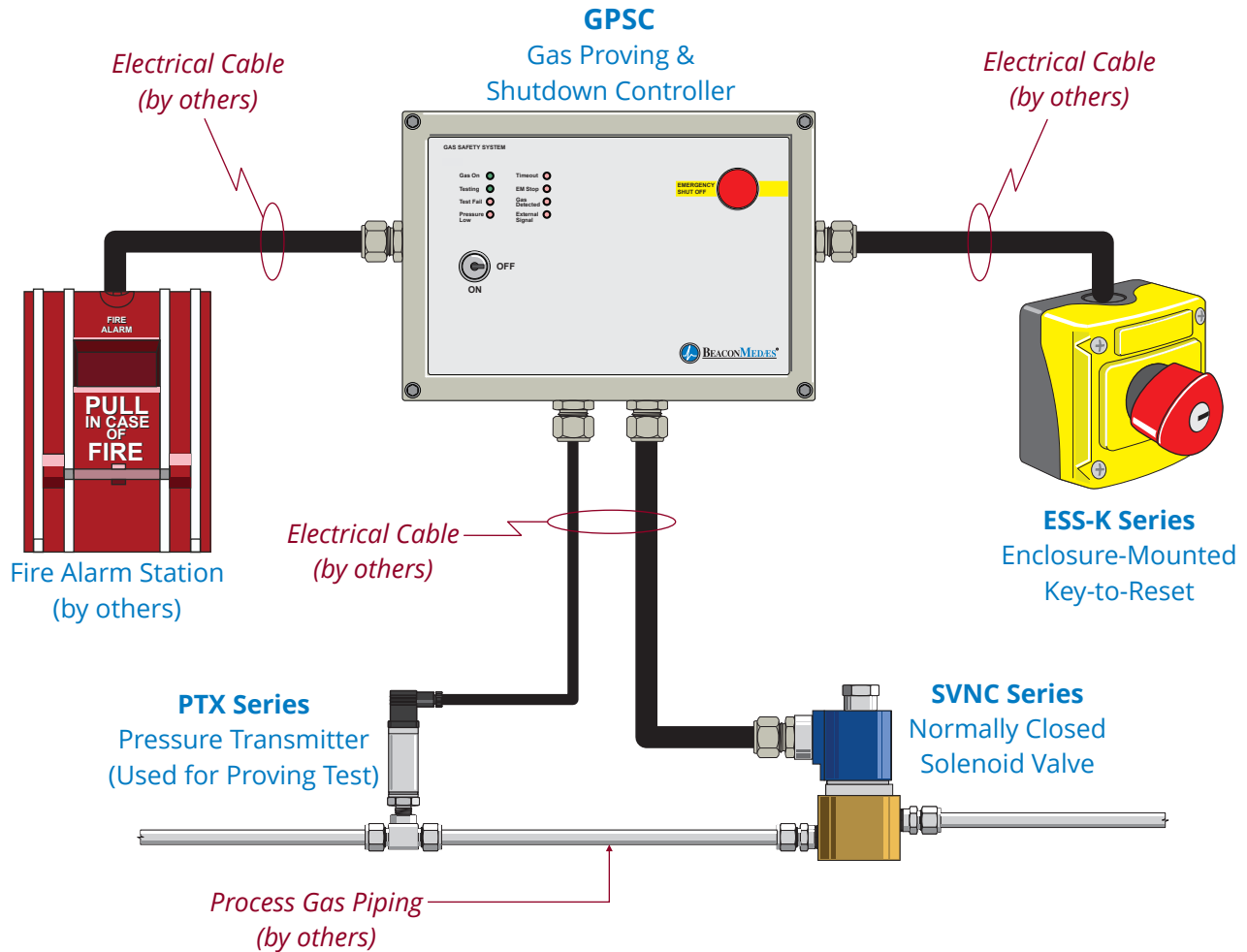
#### **Auto-Reset**

The BeaconMedaes GPSC has a built-in auto reset feature. However, when power is restored after a power cut, the panel has to be restarted manually. *It is NOT recommended to have the panels in "Auto Reset" when being used in a Classroom environment.*

**Equipment Description**

**Dimensions**


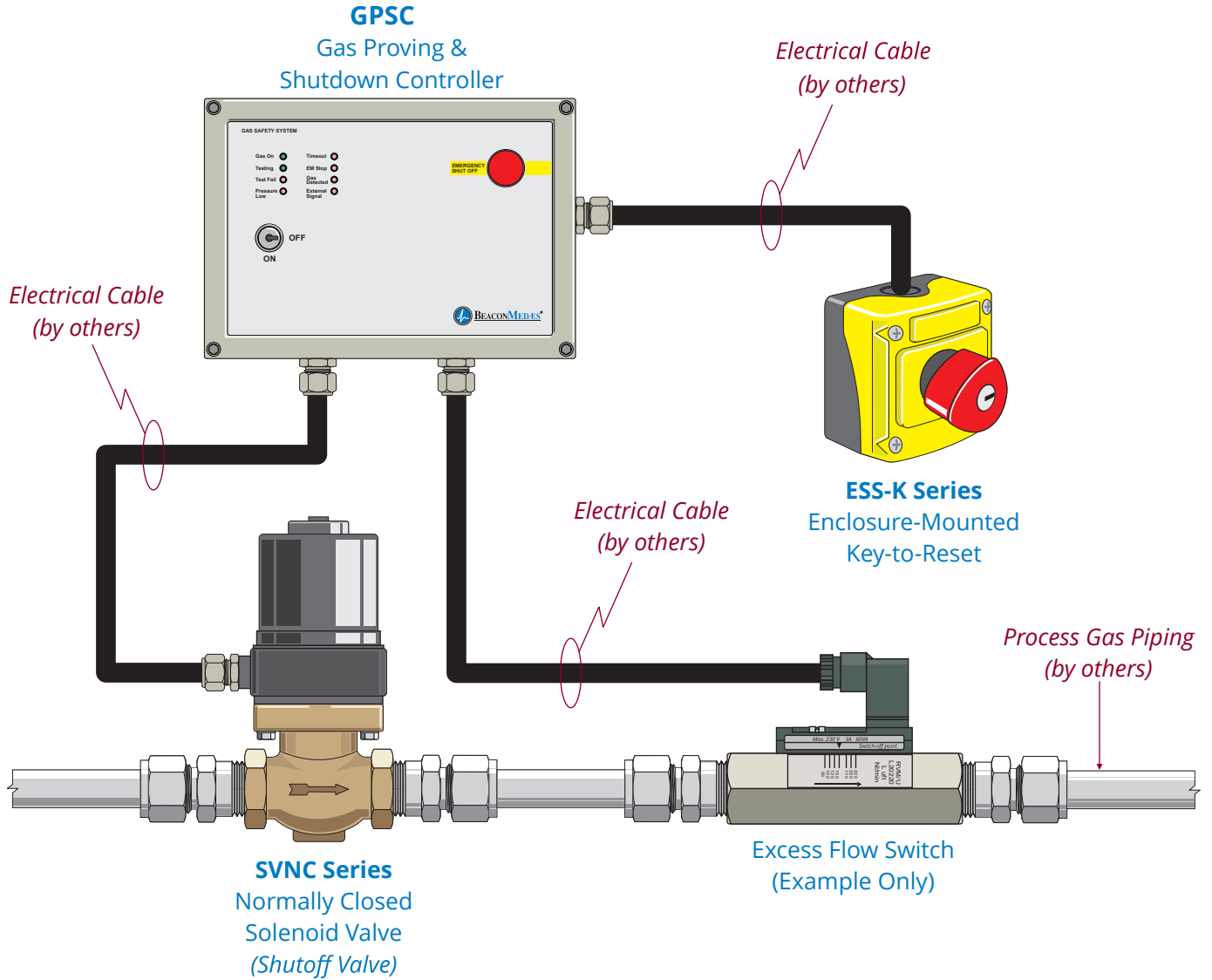
Technical Data			
Power Supply	100/240 VAC - 50/60 Hz	Sensor Power Output	24 VDC
Surge Protection	3 Amp.	Sensor Signal Input	Volt Free (Dry Contact)
Enclosure	UL Certified	Pressure Transmitter Output	12 VDC
Solenoid Valve Output	100/240 VAC - 50/60 Hz	Pressure Transmitter Input	0-5 VDC
BAS Output	N.C., N.O. COM, max. 1 A @ 120 VAC	Timeout Periods	2 Hr, 5 Hr, 8 Hr or Disabled
Emergency Stop Input	Volt Free (Dry Contact)	Adjustable Gas Fill Time	5 Sec. or 10 Sec.
Fan Switch Output	Volt Free (Dry Contact)	Adjustable Prove Time	30 Sec. or 60 Sec.
Gas Detection Signal Input	Volt Free (Dry Contact)	BAS Signal Output	Alarm "ON" or Gas "ON" / " OFF"

### How to use it - Example with Proving Pressure Transmitter



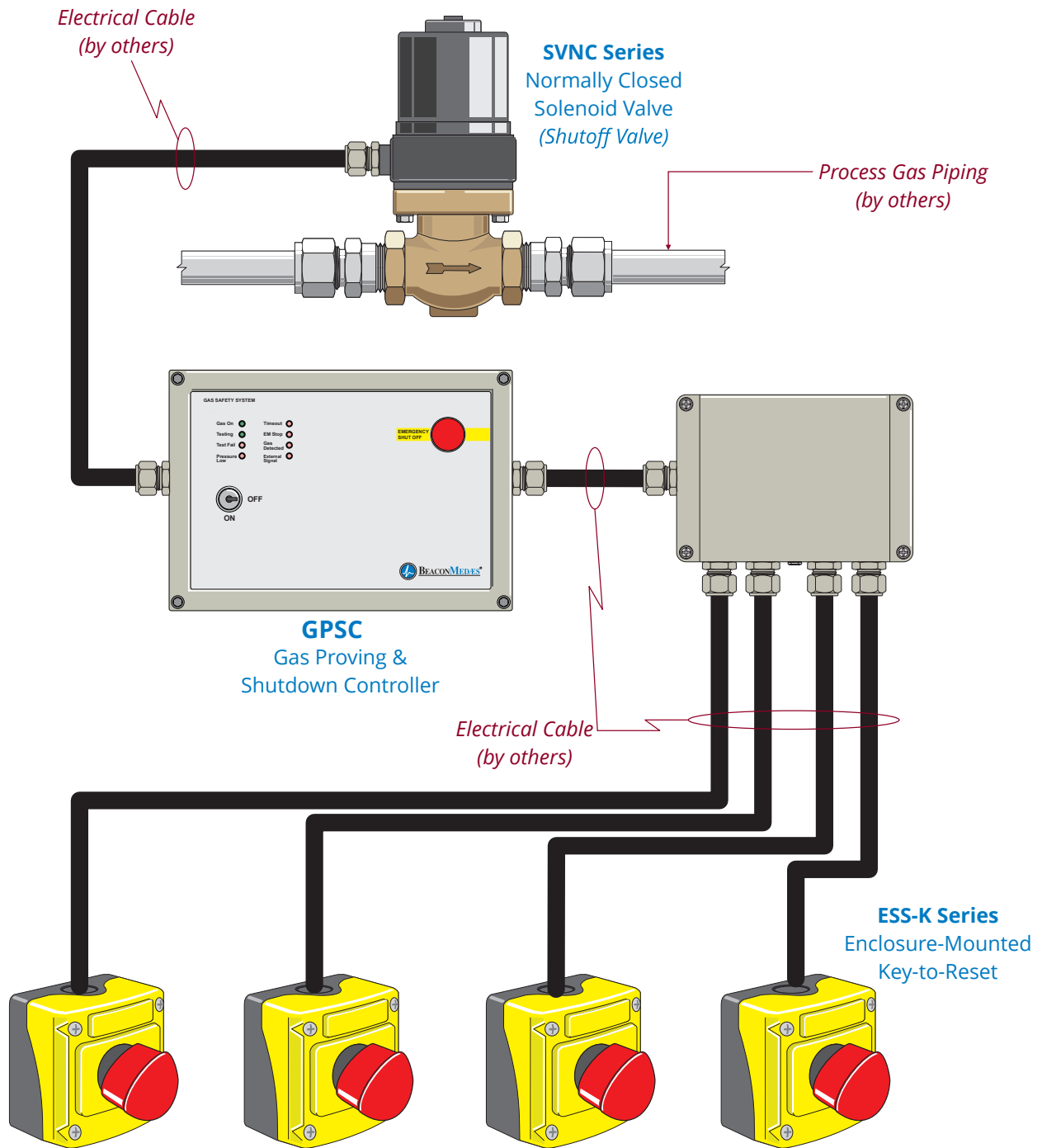
Example setup only - Multiple configurations are available

**How to use it - Example with Excess Flow Switch**



*Example setup only - Multiple configurations available*

**How to use it - Example with Multiple Emergency Stop Pushbuttons**



*Example setup only - Multiple configurations available*