# Option 12 — Setting Up the Sensor Purge

When a relay is configured to the Purge Output from Option 8, Setup Relay Outputs, the meter advances to the Setup Sensor Purge menu.

To access the Sensor Purge menu in Program mode:

1. Press **P**.
2. Enter your **Advanced** access password, and then press **E**.
3. Press **2** to invoke the Quick Jump option.
4. Press **12** for the **Sensor Purge** menu, and then press **E**.

```
PURGE TIMER
>ON           ^v
```

A prompt appears for the state of the PURGE TIMER.

5. Use the arrow keys to select **ON**, and then press **E**.

```
PURGE OUTPUT
ASSIGNED to DO2
```

A confirmation prompt for the relay assignment appears.

6. Press **E** or **P** to continue.

```
PURGE TIME MSEC
>500
```

A prompt for the PURGE TIME appears.

7. The PURGE TIME is the length of time the purge solenoid is held open.

   Enter the number of milliseconds using the number keys, and then press **E**.
   A short blast generally works best.

```
HOLD TIME MSEC
>2000
```

The HOLD TIME prompt appears.

The HOLD TIME allows the sensor to recover from the purge by masking off the large flow spike following the purge.
It can be a function of the purge gas temperature compared with the temperature of the process gas being measured.
A longer HOLD TIME may be needed if there is a large temperature difference between these two variables.
Lower flow rates typically need more recovery time than higher flow rates following a purge.

**Note:** A cleaned sensor changes the flow readings following a purge regardless of the specified hold time. Additionally, the rate at which the shift occurs is filtered by the meter time constant setting.

The HOLD TIME applies to the update of the flow rate, velocity, and temperature values with respect to the 4-20mA output, Modbus output, and display.

The HOLD TIME is the total time for the entire purge cycle. For example, a HOLD TIME of 2000 milliseconds with a PURGE TIME of 500 milliseconds means that the Purge Relay will be pulsed for 500 milliseconds, followed by an additional 1500 milliseconds of idle time to allow for sensor recovery.

**Note:** The HOLD TIME value must be greater than or equal to the PURGE TIME value.

8. Use the numeric keys and type in the number of milliseconds for the desired HOLD TIME, and then press **E**.

```
PURGE INTV MIN
> 60
```

The PURGE INTERVAL prompt appears. The PURGE INTERVAL is used to set the frequency (in minutes) of the purge cycle when it is triggered by the internal timer. For example, a PURGE INTERVAL of 60 minutes will trigger one purge per hour.

If the internal timer and the external purge contact closure are used to start the purge, set the internal timer PURGE INTERVAL to a value higher than is specified by the external closure. This will prevent the internal timer from purging too soon after the last externally commanded purge.

The PURGE INTERVAL can be from 1 to 1440 minutes.

9. Use the numeric keypad and type the number of minutes for the desired PURGE INTERVAL, and then press **E**. Press **P** if you want to skip entering a value.