

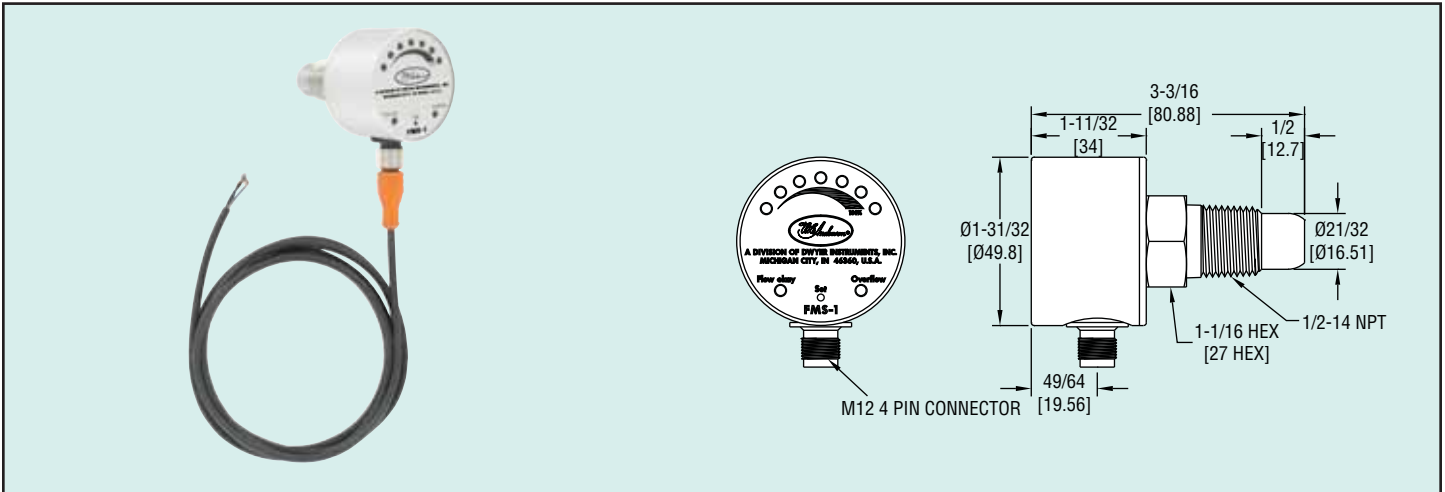


Series  
FMS

# Flow Sensor

For Water and Water Based Liquids/Oil and Oil-Based Liquids

Flow



## FMS Series Flow Sensor

- Automatic scaling and set-point
- No moving parts
- Learn function for flow rate
- Push-button re-scaling if needed
- Easy to install

**Series FMS Flow Sensor FMS-1** is for applications requiring RELATIVE measurement and set-point of flow rate. This means that the actual velocity of the flow or the quantitative measurement in GPM is not known and is not important. What is important is that the set-point can be set as a “percentage of” or “relative to” the full flow rate. No other flow sensor could do it this simply or effectively.

## How It Operates

The model FMS uses a set of flashing LED's to indicate flow. All 7 of the LED's will remain lit to show 100% flow rate. The flow OK light will also be lit showing that the established full flow rate is what is flowing in the pipe. When you initially set the flow rate, it will mark that as your 100% mark. If your flow reduces below the 50% mark, you will get an alarm from the sensor. If flow increases beyond the initially established flow rate, the “Overflow” LED light will come on. It is then the operator's decisions as to whether to ignore it if too much flow is not a problem and may actually choose this flow rate to be the new “normal” flow rate. This can be done by just depressing the “set” button until all LED's flash. The FMS has now recalibrated itself to the new flow rate. The “flow ok” LED will again light and the set-point will automatically be re-set at the 50% of flow point.

**Model FMS-1**, Flow Sensor PNP N.O.

**Model FMS-2**, Flow Sensor PNP N.C.

## SPECIFICATIONS

- Service:** Water and water based liquids/oil and oil-based liquids.
- Wetted Materials:** Sensor Head: 303 SS.
- Low Flow Set Point:** Auto set @ 50% / Adjustable via “set” push button.
- Set Point Range:** 5.0 ft/sec (0-150 cm/sec.)
- Repeatability:** < 0.5%.
- Hysteresis:** 10% of set-point value typical.
- Medium Temperature Limits:** -4 to 176°F (-20 to 80°C.)
- Pressure:** 450 psi (30 bar).
- Response Time:** 25 seconds (typical).
- Supply Voltage:** 20-30 VDC (short circuit protected).
- Switching Current:** < 200 mA.
- Power Consumption:** 6 W max.
- Electical Connection:** M12 male socket 4pin. Comes with 6.5 ft (2m) cable with M12 connector and pigtail.
- Process Connection:** 1/2” male NPT.
- Enclosure Rating:** IP 65 (NEMA 4).
- Initial Operation:** After 15 seconds.
- Switch Type:** PNP N.O. (switch closed with flow), PNP N.C. (switch open with flow).
- Weight:** .55 lb. (.25 kg).