

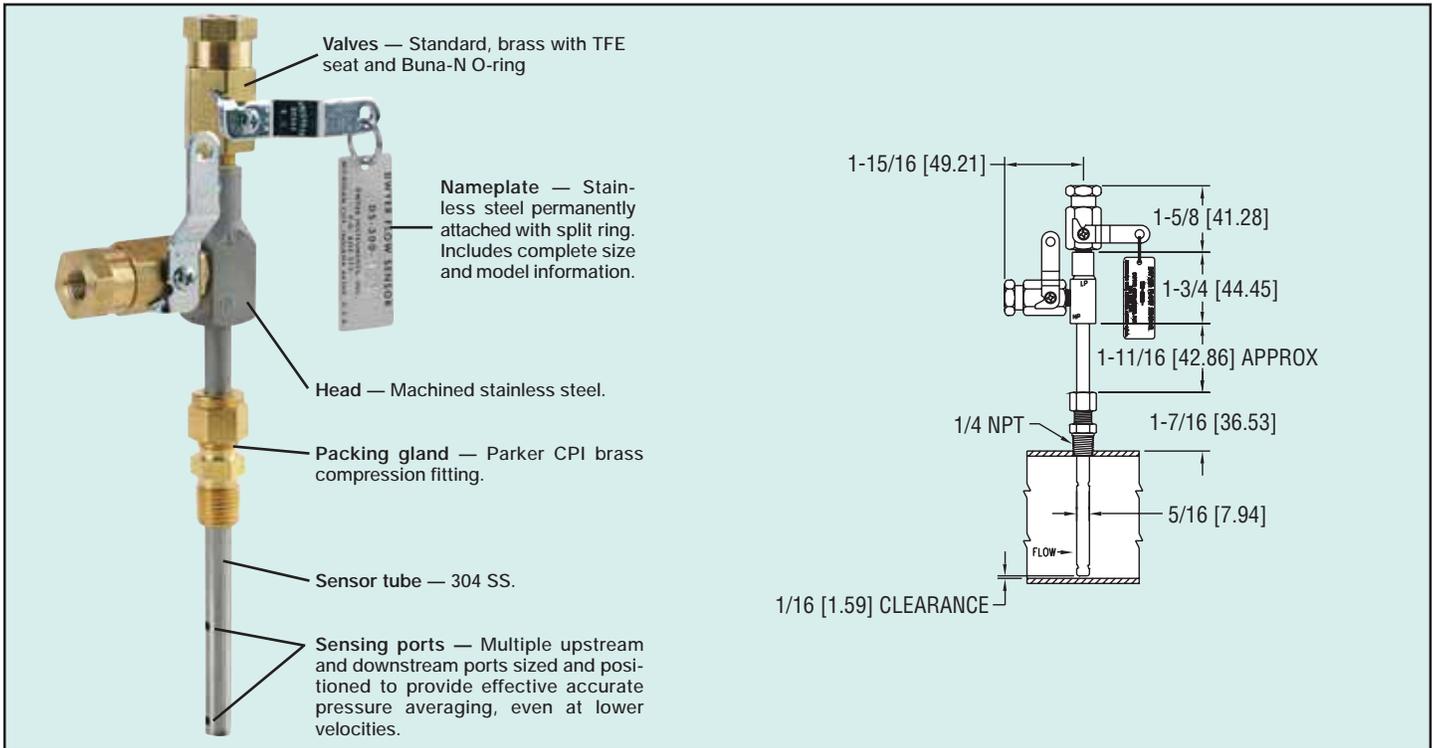


Series  
DS

# In-Line Flow Sensors

Use with the Dwyer® Differential Pressure Gages or Transmitters

Flow



**In-Line Flow Sensors** are averaging Pitot tubes that provide accurate and convenient flow rate sensing for schedule 40 pipe. When purchased with a Dwyer® Capsuhelic® differential pressure gage of appropriate range, the result is a flow indicating system delivered off the shelf at an economical price.

Pitot tubes have been used in flow measurement for years. Conventional pitot tubes sense velocity pressure at only one point in the flowing stream. Therefore, a series of measurements must be taken across the stream to obtain a meaningful average flow rate. The Dwyer® flow sensor eliminates the need for “traversing” the flowing stream because of its multiple sensing points and built-in averaging capability.

**The Series DS-300** flow sensors are designed to be inserted in the pipeline through a compression fitting. They are furnished with instrument shut-off valves on both pressure connections. Valves are fitted with 1/8" female NPT connections. Accessories include adapters with 1/4" SAE 45° flared ends compatible with hoses supplied with the Model A-471 Portable Capsuhelic® gage kit. Standard valves are rated at 200 psig (13.7 bar) and 200°F (93.3°C). Where valves are not required, they can be omitted at reduced cost. Series DS-300 flow sensors are available for pipe sizes from 1" to 10".

**DS-400 Averaging Flow Sensors** are quality constructed from extra strong 3/4" dia. stainless steel to resist increased forces encountered at higher flow rates with both air and water. This extra strength also allows them to be made in longer insertion lengths up to 24 inches (61 cm). All models include convenient and quick-acting quarter-turn ball valves to isolate the sensor for zeroing. Process connections to the valve assembly are 1/8" female NPT. A pair of 1/8" NPT × 1/4" SAE 45° flared adapters are included, compatible with hoses used in the Model A-471 Portable Capsuhelic® Gage Kit. Supplied solid brass mounting adapter has a 3/4" dia. compression fitting to lock in required insertion length and a 3/4" male NPT thread for mounting in a Threaded Branch Connection.

Select model with suffix which matches pipe size

- DS-300-1"
- DS-300-1 1/4"
- DS-300-1 1/2"
- DS-300-2"
- DS-300-2 1/2"
- DS-300-3"
- DS-300-4"
- DS-300-6"
- DS-300-8"
- DS-300-10"

- DS-400-6"
- DS-400-8"
- DS-400-10"
- DS-400-12"
- DS-400-14"
- DS-400-16"
- DS-400-18"
- DS-400-20"
- DS-400-24"

## Options and Accessories

- A-160 Thredolet, 1/8" NPT, forged steel, 3000 psi
- A-161 Brass Bushing, 1/8" x 3/8"
- (DS-300) To order, add suffix -LVdeduct
- ⓑ Items subject to Schedule B discounts