

## PRODUCT DATA SHEET

### General Description

The Model 21512 Pneumatic Sensor is a fixed gap nozzle, designed primarily for use with non-polarizing films such as polyethylene. This sensor detects the edge position pneumatically and transmits this information to a pneumatic-hydraulic controller.

The unique and new sensor design incorporates a sturdy, but light weight, plastic construction material streamlined to prevent snagging of the web on sharp edges.

This non-contact sensor directs a stream of very low pressure air across the edge of the web as illustrated below. The recovery pressure is proportional to the web position.

A small air bleed through the purge orifice (patented) puts a positive pressure at both sensing orifices and prevents foreign material from entering the sensor and clogging the orifices. This preventative measure does not affect the control at the recovery orifice.

The proportional pressure signal is generally transmitted to a diaphragm on a hydraulic controller. The very low pressure at which this sensor operates will not offset even the lightest film, and requires only a pressure reducing valve to operate from normal plant air supply.



#### ■ Non-Clogging Design

Sensor is supplied with an integral air purge (patented) which eliminates any possibility of clogging in applications where lint or dust are encountered.

#### ■ Minimum Edge Deflection

Ultra-low recovery pressure as low as 1/4 in. w.c. Ideal for operation on light films such as 1/4 mil polyethylene.

#### ■ Rugged

Constructed of sturdy molded plastic. Not affected by vibration.

#### ■ Multiple Position Adjustment

Fixed mounting for no adjustments. Universal mountings for fine linear adjustment by hand-wheel and lateral adjustment. Screw type mounting for fine linear adjustment only.

#### ■ Compact

Optional right angle connection available for limited space mounting.

## How to Order

### Specify:

#### 1. Model 21512 Pneumatic Sensor - Miniature Type.

#### 2. Sensor mounting:

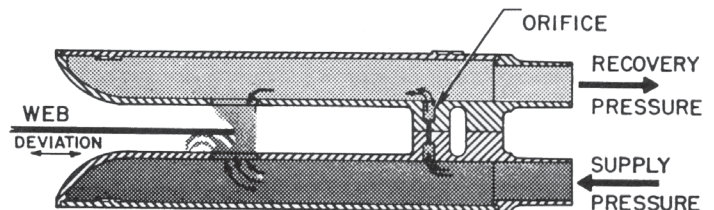
- a) Fixed mounting.
- b) Dual lever mounting for universal adjustment.
- c) Screw type mounting for linear adjustment only.

#### 3. Two right angle connections (optional) for limited space mounting.

#### 4. Accessories as required:

- a) **Piping Kit**, includes air filter, pressure reducing valve, pressure gauge and reducing bushing.
- b) **Primary pressure reducing valve** for plant air supply over 10 psi.

#### 5. For other related components, see Product Data Sheets on Controllers, Pump Supply Units and Hydraulic Cylinders.



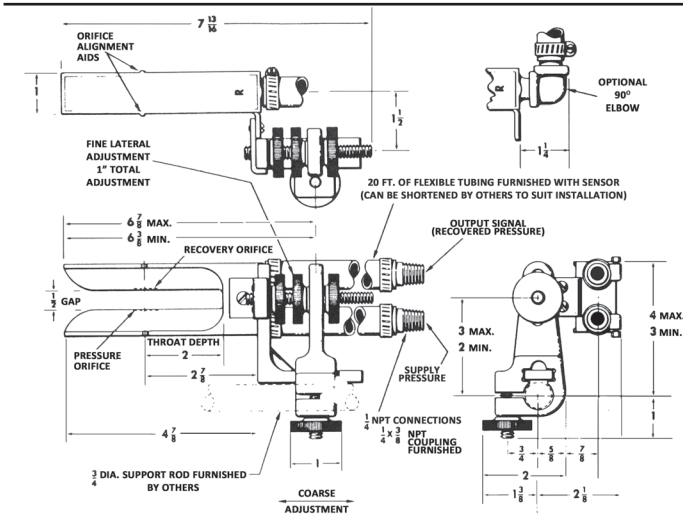
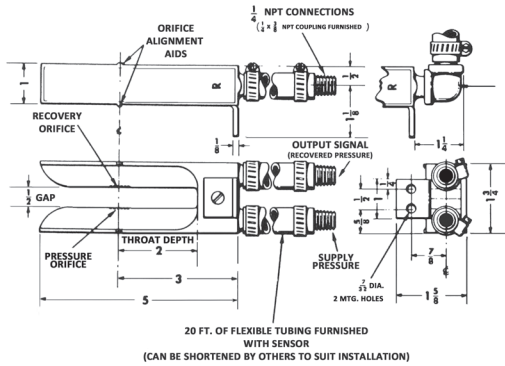
Sensor Schematic Showing Purge

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**Specifications**

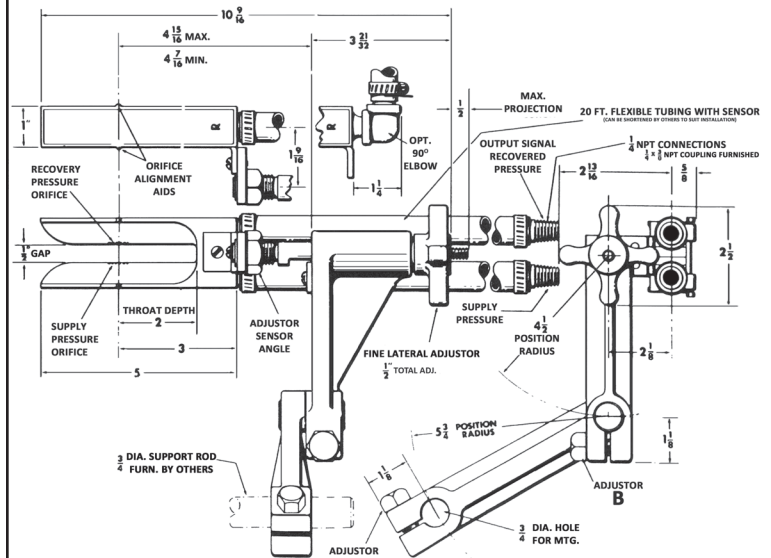
<b>Input</b>	Edge position deviation from sensing center line of 1/4 ".	<b>Construction</b>	Molded plastic with gray finish.
<b>Output</b>	1/4 to 4.0 in. w.c. air recovery pressure.	<b>Weight</b>	4 ounces.
<b>Air Supply</b>	6 to 14 w.c. (regulated). Nominal consumption of 5 CFM. 4 in. w.c. with integral air supply.	<b>Gap</b>	Fixed – 1/2 inch.
<b>Accuracy</b>	Better than ± 0.015 inches when incorporated in a Dynaguide System and installed in accordance with standard specifications.	<b>Throat</b>	2 in. fixed depth.
<b>Temperature</b>	10°F to 190°F.	<b>Connection</b>	20 feet of plastic (vinyl) tubing with 1/4" male NPT connection, or 3/8" female. Tubing can be cut to desired lengths. Clamps furnished for connections to sensor.

**Sensor with Fixed Mounting**



**Sensor with Linear Adjustment**

**Outline Dimensions**



**Sensor with Universal Adjustment**