

### General Description

The Model 31520 Edge Guide Sensor is designed primarily for photoelectrically sensing the lateral edge position of materials in motion, in particular web material of an opaque quality. This information is transmitted electrically to a electro-hydraulic controller for final control action.

Model 31520 is used exclusively with the DYNAGUIDE\* controller and requires a separate transistorized amplifier, Model 33130D Digital Controller.

### Principle of Operation

The Model 31520 (used with Dynaguide) continuously senses the web edge position with a light beam directed at a photo-conductive cell, whose resistance is directly proportional to the amount of light falling on its surface.

This resistance varies with the lateral position of the web edge. The change in resistance controls — the input signal to the transistorized amplifier.

#### ■ High Sensitivity

Detects better than .005" of lateral web displacement.

#### ■ Simplified Installation

Pre-wired sensor requires only connection to amplifier or controller. Compact size allows installation in confined areas.

#### ■ Simple Adjustments

Requires only gain and bias adjustments to match line process requirements.

The amplifier provides the output (in direct proportion to the lateral edge position of the web) to the electric portion of the Dynaguide Controller, which in turn provides hydraulic power to the final control element.

\*Trademark of GPE Controls.

PRODUCT DATA SHEET

## Specifications

<b>Power Input</b>	(Options 00 & 01) 2.3 VAC, 400mA from Model 33130D Digital Controller.
<b>Input Span</b>	1/8" lateral web displacement
<b>Output</b>	Photoresistive signal from sensor
<b>Sensitivity</b>	Full correction speed with less .005 inches of lateral web displacement of an opaque material when used in a typical GPE Control System.
<b>Resolution</b>	Infinite
<b>Construction</b>	Cast Aluminum
<b>Weight</b>	1 lb.
<b>Temperature Range</b>	0°F to +120°F 10 to 90% RH

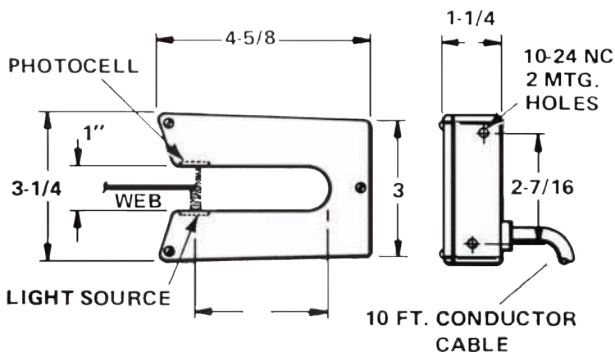
## How to Order

**Specify:**

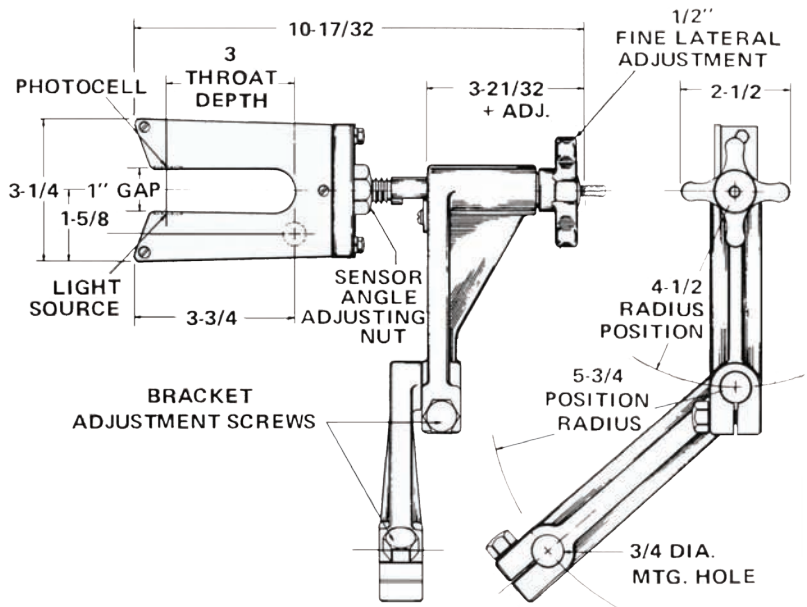
- Model 31520 (Miniature) Edge Guide Sensor**
- Sensor requiring Model 33130 Amplifier, \*** without mounting or with dual lever mounting.
- Controllers, Pump Units, Guide Rolls and Accessories** as required.

\* Digital Controller and related components must be ordered separately. See Product Data Sheets for ordering information.

## Outline Dimensions



**Sensor with Fixed Mounting**



**Sensor with Dual Level Mounting  
for Universal Adjustment**