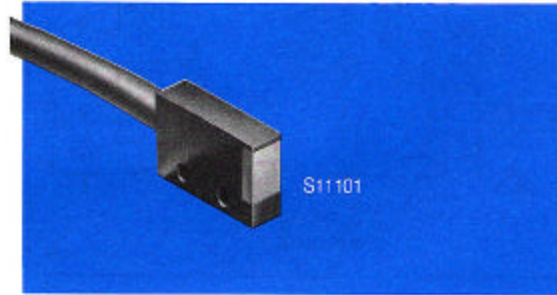


REFLECTIVE SKANNERS

Miniature LED S111 Series PLASTI-SKAN®

Features:

- Smallest Detectable Object: .06 in.
- Optimum Distance to Target: .15 in.
- Field of View: .18 in.
- Maximum Usable Distance: 1.3 in.
- Glass filter blocks visible ambient light
- Sealed cover glass



Description:

The PLASTI-SKAN is an inexpensive skanner suitable for general use where metal units are not considered necessary. Quality components and construction assure Skan-A-Matic's usual reliability and long life, and the use of a Light Emitting Diode provides

excellent shock and vibration resistance. An infrared filter blocks ambient light to the photodetector and serves to keep out dust and contamination.

Typical Applications:

- Proximity detection
- Web break detection
- End of tape detection
- General purpose skanning

Specifications: (at 25°C)

LIGHT SOURCE—LED

| | |
|--------------------------|--|
| Input | 40 mA max. with resultant voltage drop of 1.1 to 1.7 VDC; derate at 1 mA per degree above 25°C ambient |
| Modulated Input | 80 mA max., 50% duty cycle at 1 kHz min. |
| Reverse Voltage | 2 V max. |
| Spectral Emission | 940 nm |

PHOTODETECTOR

| | |
|--------------------------|---|
| Operating Voltage | 30 VDC max. |
| Response Time | See Response Time Chart under <i>Technical Information</i> |
| Spectral Response | 910 nm peak; filtered to respond to less than 5% at 700 nm and less than 0.1% at 600 nm |

BODY

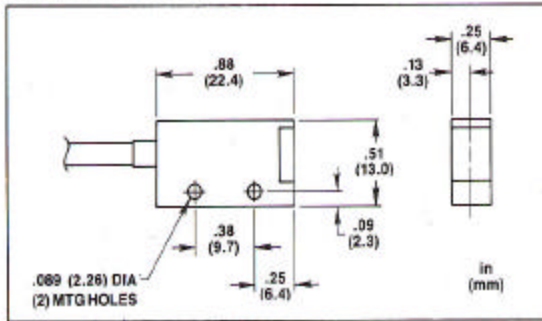
| | |
|--------------------|--|
| TEMPERATURE | Operating: 0° to 50°C Storage: -40° to 50°C |
|--------------------|--|

LEADS

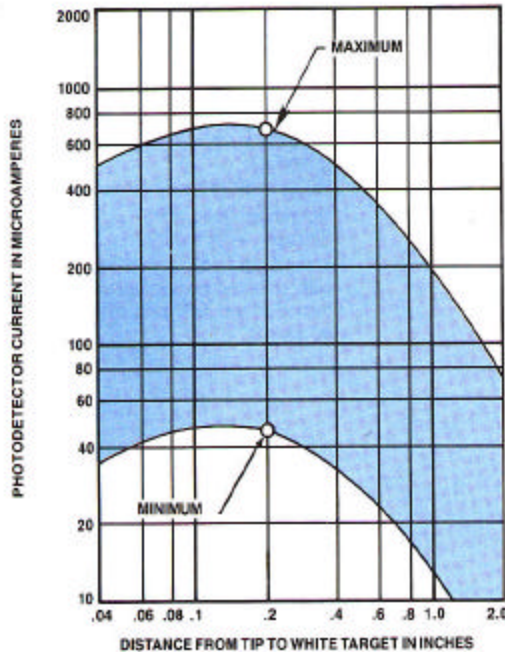
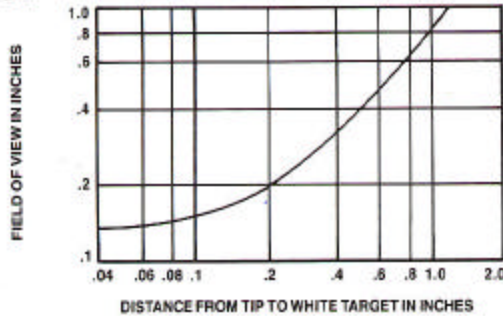
| | |
|--|--|
| | 4 cond. 26 AWG., PVC covered cable with shield, 6 ft. long, Type G |
|--|--|

S111 Series

Dimensions:



Typical Performance Chart:



Circles indicate guaranteed test limits. See Quality Control under Technical Information, pg. 16.

Compatibility With Controls:

The PLASTI-SKAN is compatible with most Skan-A-Matic controls. For high speed operation use the T41300 High Speed Amplifier.

This skanner utilizes a 40 mA Light Emitting Diode. A 100 ohm, 1/4 W current limiting resistor is supplied and must be used with Skan-A-Matic controls furnishing 5 VDC for light source power. With modulating controls such as our R42/T42, a 27 ohm, 1/4 W current limiting resistor must be used. The S111 Series is not compatible with the R43/T43 modulating controls.

Model Selection Guide:

| Part # | Description |
|--------|---------------|
| S11101 | Standard Unit |

Variations:

LEADS

Extra lead lengths available. See pg. 129.

Options:

COIL CORD

Four conductor, 28 gauge, coil cord with shield available in 10 ft. (fully extended) or 20 ft. (fully extended) lengths — see pg. 129.

SHIELDED QUAD

Four conductor, 26 gauge, Teflon covered cable with shielded photodetector leads and overall shield. Order by adding the suffix -J. Example: S11101-J

PROTECTIVE SHEATH

Can be factory installed over Shielded Quad. It is not necessary to order the Shielded Quad separately; it is included with the protective sheath at no extra charge. Order by adding the suffix as follows:

-S For square locked stainless steel armor, 3/16" O.D. Example: S11101-S

CONNECTOR

The S111 Series skanner is available with connector installed. The mating half is furnished for field connection. Order by adding a suffix as follows:

-P For connector pair with in-line receptacle. Example: S11101-P

-F For connector pair with flanged, panel-mount receptacle. Example: S11101-F

See Options for a more detailed description.

Wiring Diagram:

