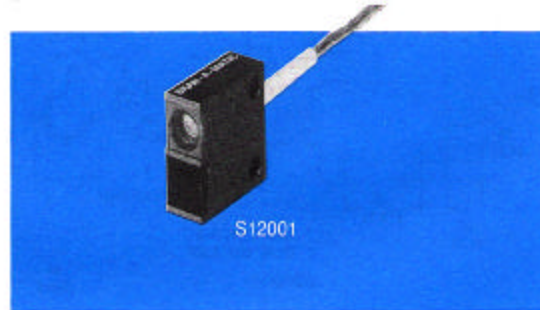


REFLECTIVE SKANNERS

Miniature LED S12 Series SQUINT-SKAN®

Features:

- Smallest Detectable Object: .12 in.
- Optimum Distance to Target: .18 in.
- Field of View: .35 in.
- Maximum Usable Distance: 1.5 in.
- Glass filter blocks visible ambient light
- Can be modulated
- Shock and vibration resistant



Description:

The SQUINT-SKAN® is a rugged LED reflective scanner in a miniature size designed for use under conditions of severe shock and vibration. A specially selected Light Emitting Diode and photodetector are mounted in an aluminum housing with a cover glass to keep out dust and contamination. The filter over the photodetector

blocks visible light from fluorescent lamps and some radiation from incandescent lamps. The IR energy emitted from the LED is invisible to the human eye. The SQUINT-SKAN® is suitable for modulated operation.

Typical Applications:

- Proximity sensing
- Registration mark detection

Specifications: (at 25°C)

LIGHT SOURCE—LED

Input	100 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	1 A max., 10% duty cycle at 1 kHz min.
Reverse Voltage	2 V max.
Spectral Emission	940 nm peak

PHOTODETECTOR

Operating Voltage	20 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

Red anodized aluminum

TEMPERATURE

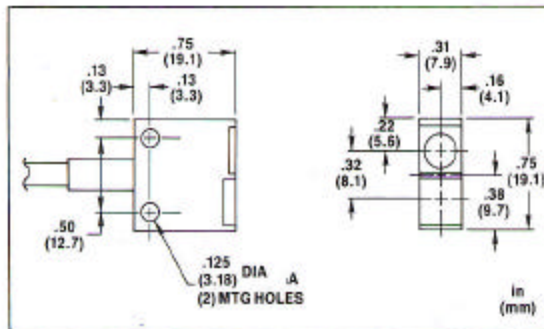
Operating: 0° to 70°C
Storage: -40° to 70°C

LEADS

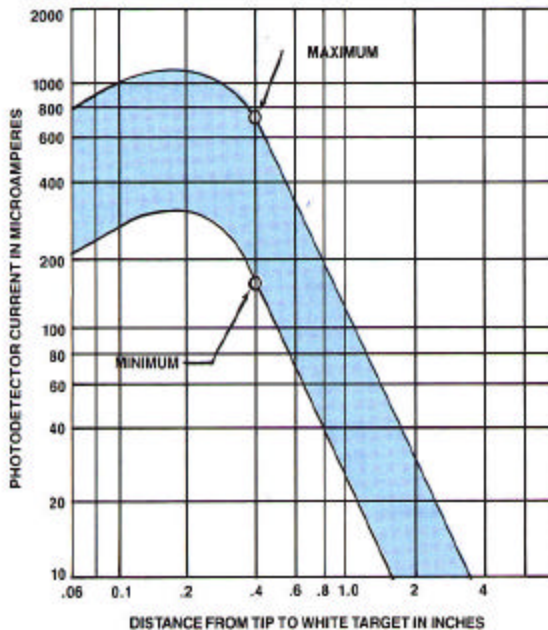
4 cond. 26 AWG., teflon covered cable with shielded photodetector leads and overall shield, 6 ft. long, Type J (Shielded Quad)

S12 Series

Dimensions:



Typical Performance Chart:



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

Compatibility With Controls:

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

This skanner utilizes a 100 mA Light Emitting Diode. A 39 ohm, 1 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 and R43/T43, no current limiting resistor is used.

Model Selection Guide:

Part #	Description
S12001	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.

PROTECTIVE SHEATH

Can be factory installed over standard Type J lead (Shielded Quad) only. Order by adding the suffix as follows:

- M For square locked galvanized steel with black PVC jacket, 9/32" O.D. Example: S12001-M
- S For square locked stainless steel armor, 3/16" O.D. Example: S12001-S

CONNECTOR

The S12 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: S12001-P
- F For connector pair with flanged, panel-mount receptacle. Example: S12001-F

See Options for a more detailed description.

Wiring Diagram:

