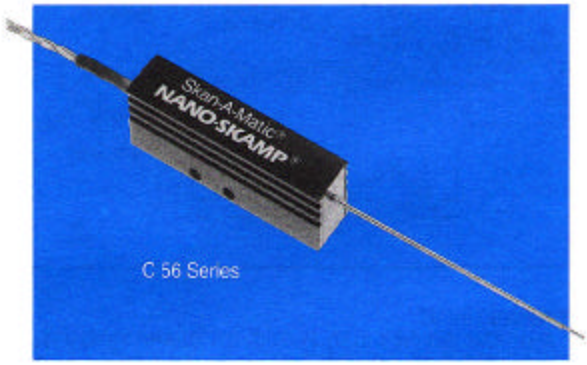
SKAN-A-MATIC®

CLAROSTAT
SENSORS AND CONTROLS GROUP

SELF-CONTAINED PHOTOELECTRIC CONTROLS

Fiber Optic Flexible Snout
C56 Series
NANO-SKAMP®



Features:

- Smallest Detectable Object: .007 in.
- Optimum Distance to Target: .010 in.
- Field of View: .020 in.
- Maximum Usable Distance: .070 in.
- Skanner/amplifier in one package
- Open collector output
- Coaxial optical system
- Programmable Controller Compatible
- Formable snout
- Works in places normally inaccessible to other skanners
- Light or Dark energize models

Description:

The C56 NANO-SKAMP® is a self-contained photoelectric skanner/amplifier designed to provide sensing and control capability from a single convenient point. It combines the fiber optic construction of the NANO-SKAN® with a hybrid amplifier in a compact integral package.

NANO-SKAMP® is available with either 5 VDC or 8–25 VDC input voltages in models wired for light energized or dark energized operation. Its internal amplifier has a sensitivity control and LED output indicator to allow adjustment without additional equipment. The amplifier has a fixed amount of hysteresis and provides an open collector output, which is compatible with programmable controllers and microprocessors.

When light is reflected to the sensor of the light energized models, the LED output indicator is activated and the output transistor conducts, pulling the output to ground potential. In dark energized models, the absence of reflection causes the output to energize.

The semi-rigid snout containing the coaxial fiber bundle can be bent easily by hand to position the tip at the target and the desired shape is self-retaining. The snout tip is hardened stainless steel to enable clamping with a nylon set screw.

Typical Applications:

- Direct wiring to counters
- Tachometer pickup
- For inspection and sorting
- Detecting semiconductors
- Encoder
- Programmable controller input
- Small parts handling
- Accurate edge and position control
- Vibratory bowl feeders

Specifications: (at 25°C)

POWER INPUT	+5 VDC ±5%, 185mA max. or 8 to 25 VDC 60mA max.
OUTPUT	Open collector NPN transistor to switch up to 30 VDC at 100 mA max.
SENSITIVITY ADJUSTMENT	15 turn
RESPONSE TIME	500 µs typical
BODY	Aluminum/plastic composite—black
SPECTRAL EMISSION	880 nm
SPECTRAL RESPONSE	910 nm peak; filtered to respond to less than 5% at 750 nm and less than 0.1% at 700 nm
TEMPERATURE	Operating: 0° to 50°C Storage: −40° to 50°C
LEADS	3 cond. 28 ga., teflon covered cable with shield, 6 ft. long, Type N

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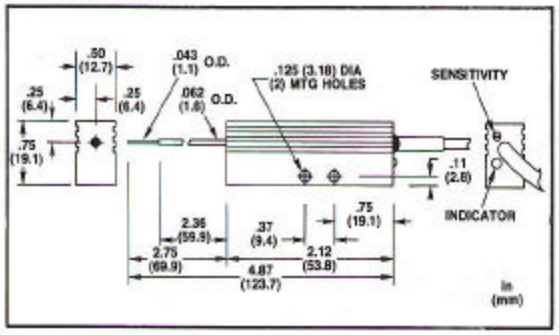
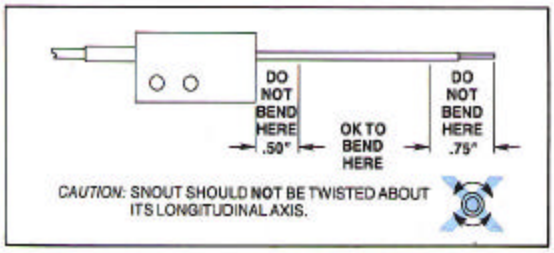
Dimensions:

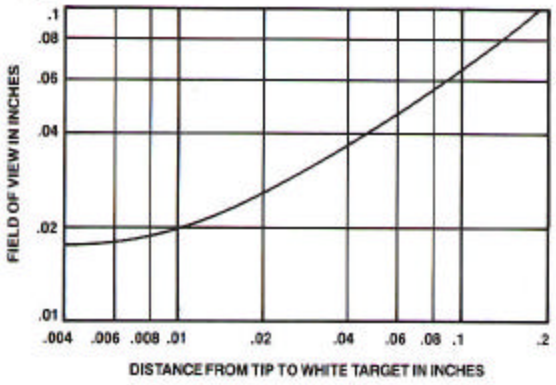


FORMING SNOUT

CAUTION: DO **NOT** USE PLIERS OR SHARP CORNERS FOR FORMING. Use of pliers or sharp corners for forming will destroy units. Bend snout by hand on a pencil or similar cylindrical object that is .25" diameter or larger. The snout is annealed stainless steel and will work harden if bent repeatedly.



Typical Performance Chart:



Model Selection Guide:

Model	Voltage	Output Energizes	Light Source
C56200	5 VDC	Light	LED
C56210	5 VDC	Dark	LED
C56230	5 VDC	Light	Lamp
C56240	5 VDC	Dark	Lamp
C56260	8–25 VDC	Light	LED
C56270	8–25 VDC	Dark	LED

Variations:

LEADS

Extra lead lengths available. Use Type N — *see pg. 129.*

SNOUTS

Lengths from .500 in. to 12 in. maximum are available. See *Price List* for further information.

Snouts can be factory-formed to customer specifications.

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.*

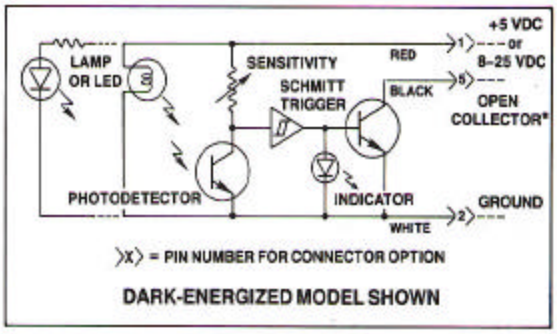
CONNECTOR

The C56 Series skanners are 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: C56200-P
- **-F** For connector pair with flanged, panel-mount receptacle. Example: C56200-F

See *Options* for a more detailed description.

Wiring Diagram:



*See *Technical Information* for output connections