

SMARTEYE® MARK III Specifications

SUPPLY VOLTAGE

- 12 to 24 VDC
- Polarity Protected

CURRENT REQUIREMENTS

- 85 milliamps (exclusive of load)

OUTPUT TRANSISTORS

- (1) NPN and (1) PNP output transistors:
NPN: Sink up to 150 milliamps.
PNP: Source up to 150 milliamps.
- Momentary short circuit protected.
- Outputs protected from pulsing during power up.
- Light/Dark switch determines output status:
Light = Light "ON" operate.
Dark = Dark "ON" operate.

RESPONSE TIME

- Minimum duration of input event:
Light state response = 50 microseconds.
Dark state response = 140 microseconds.
- Leading edge variation less than 20 microseconds.

HYSTERESIS

- Less than 400 millivolts for maximum sensitivity and resolution.

LED LIGHT SOURCE

- Choice of color: A. Infrared = 880NM B. Red = 660NM
C. Green = 550NM D. Blue = 480NM E. White = Continuous Spectrum

LIGHT IMMUNITY

- Responds to sensor's pulsed modulated light source... immune to most ambient light.

OFFSET/EDR® ADJUSTMENT*

- Sets initial level on the CONTRAST INDICATOR in relation to mid-scale switch point of 5... functions as sensitivity adjustment.
- Controls Enhanced Dynamic Range circuit (EDR®) which functions to avoid saturation.

INDICATORS

- **OUTPUT INDICATOR** - RED LED illuminates when the output transistors are in the "ON" state as determined by the position of the light/dark switch.
- **BEAM STATUS INDICATOR** - RED LED illuminates when returned light level exceeds "5" on the CONTRAST INDICATOR.
- **EDR® INDICATOR** - Intensity of GREEN LED provides indication of where in the dynamic operating range the offset/EDR® adjustment has been set.
- **CONTRAST INDICATOR** - Displays scaled reading of sensor's response to contrasting light levels (light vs. dark) on a 10 bar LED display.

AMBIENT TEMPERATURE

- -40°C to +70°C (-40°F to 158°F) operating range.

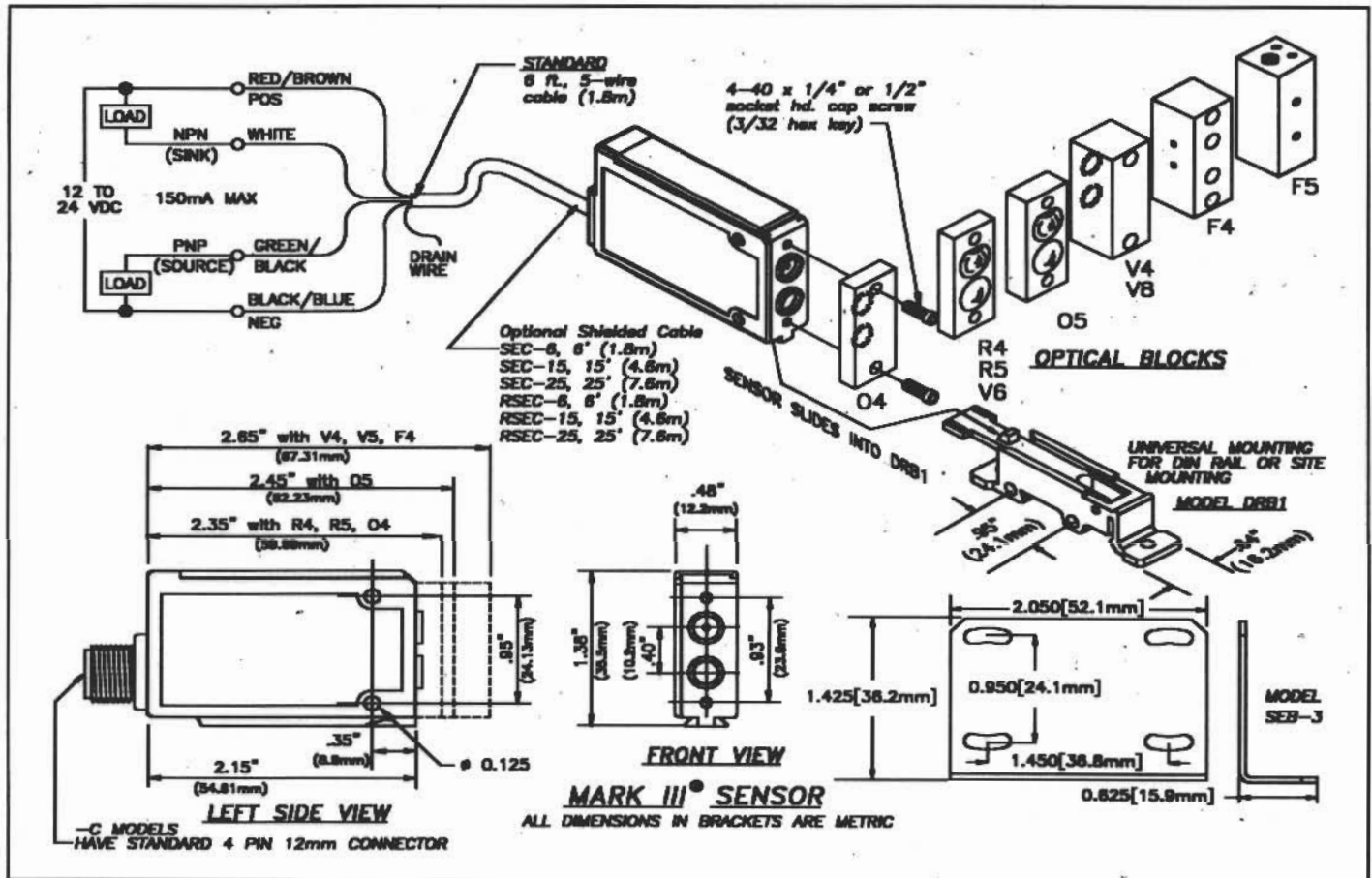
RUGGED CONSTRUCTION

- Chemical resistant housing.
- Waterproof, ratings: NEMA 1 and 4.
- Epoxy encapsulated for mechanical strength.



* EDR® Pat. No. #5,621,205
Product subject to change without notice.

CONNECTIONS AND DIMENSIONS



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