



# Miniature BITE Indicators

## Self-Restoring Type

### Model BIS

#### FEATURES

- Self Restoring
- Small, Light Weight
- Sunlight Readable
- Ultra Reliable

Our BIS series indicators provide visual indication of the status of any circuit parameter being monitored. This series is a self-restoring design that automatically returns to a neutral state when power is removed.

#### OPERATION

When the indicator coil is energized, the highly visible two color display ball changes color by spinning 180°. It does not latch to the core magnet, but remains suspended in that position until power is removed.

The BIS indicator offers excellent visibility in high ambient light and does not contain any bearings, springs, or filaments that can wear out.

Optional Features include insulated lead wire termination, special lenses (radius dome, cylindrical, non-glare), "O"ring panel seal, and RFI panel shield. Consult the factory for details.

Care should be taken in the application of this device. As a magnetic component, it is subject to magnetic interference from other devices which may emit magnetic fields. Consult the factory if any possibility of interaction exists.

#### ELECTRICAL SPECIFICATIONS

Nominal Voltage DC	Operating Voltage		DC Coil Resistance in Ohms
	Min	Max	
1.5	1.25	1.75	3.1-3.8
3.0	2.5	3.5	12-15.2
5.0	4.5	5.5	34-42
6.0	5.5	6.5	49-61
12.0	9.0	15.0	198-242
24.0	17.0	27.0	792-968
28.0	20.0	30.0	1080-1320

**Nominal Pulse Power:** 650 milliwatts.

**Operating Pulse Length:** will operate at 40 milliseconds or greater

**Dielectric Withstanding Voltage:** 500 VAC RMS case-to-terminals

**Insulation Resistance:** 100 megohms minimum at 500 VDC

#### MECHANICAL SPECIFICATIONS

**Case:** Aluminum, black anodized with sealed glass window.

**Mounting:** Front panel threaded, rear panel threaded, and press fit sleeve.

**Weight:** Models BIS 21, BIS 21T, BIS 27T 2.5 grams

Model BIS 37T 3.0 grams

**Display Colors:** Any combination of: Red (R), White (W), Black (BLK), Green (G), Yellow (Y), or Orange (O)

**Mounting Hardware:** Lockwasher, internal tooth bronze, Nylon mounting sleeve, Hex nuts are black anodized aluminum.

See page 7 for Indicator dimensions.

**Display Area:** all units measure .200 (5,06) diameter

#### ENVIRONMENTAL SPECIFICATIONS

**Operating Temperature Range:** -65°C to +125°C.

**Vibration\*:** Sinusoidal: .06" D.A. or 20 G Peak, whichever is less, 10Hz to 2kHz, MIL STD 202, Method 204, Test Condition D.

**Shock:** 100 G's MIL STD 202, Method 213, Test Condition I.

**Moisture Resistance:** (Humidity): MIL STD 202, Method 106.

**Barometric Pressure:** 100,000 ft., MIL STD 202, Method 105, Test Condition D.

**Thermal Shock:** MIL STD 202, Method 107, Test Condition B.

**Salt Spray:** MIL STD 202, Method 101, Test Condition B.

**Immersion:** 3-ft. head of water for two minutes. Ip67.

**Life:** 1,000,000 cycles at cycling rate of 10 per minute.

\* (During vibration testing caution should be taken to shield the indicator from the strong magnetic field.)

#### ORDERING INFORMATION

When ordering, show model number first, then coil voltage desired, then the color combination desired. If this is a special part, a factory assigned modification number will be added at the end of the ordering number.

Example:

A basic model with a front panel threaded case for 12 volts with black as an un-energized color and white as an energized color would be Model BIS21T-12-BLK/W.

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#### BIS21T - 12 - BLK / W - S

Basic Model Number	Coil Voltage	Un-energized Color	Energized Color	Factory Modification Number, if Special S.+ ID No.
BIS 21	1.5	R Red	R Red	
BIS 21T	3	W White	W White	
BIS 27T	5	BLK Black	BLK Black	
BIS 37T	6	G Green	G Green	
	12	Y Yellow	Y Yellow	
	24	O Orange	O Orange	
	28			



# Miniature BITE Indicators

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### Model BIS



BIS 27T



BIS 21T



BIS 21



BIS 37T

BALL INDICATORS

<p><b>BIS21</b></p>	<p><b>BIS27T</b></p> <p>Note: Threads 5/16-32 UNEF -2A</p>
<p><b>BIS21T</b></p> <p>Note: Threads 5/16-32 UNEF -2A</p>	<p><b>BIS37T</b></p> <p>Note: Threads 3/8-32 UNEF -2A</p>
<p>Red Dot</p> <p>Energize as shown for Energized Color Remove Power For Unenergized Color</p> <p>SCHMATIC</p> <p><b>ELECTRICAL DATA</b></p>	<p><b>OPTIONS AVAILABLE (consult factory)</b></p>
<p><b>MECHANICAL DATA</b></p>	

**NOTE:**

Dimensions in ( ) are mm. Tolerances: Decimals: ± .010 (0,25), Fractions: ± 1/64—All mounting hardware is black anodized aluminum. Mounting Torque: 5-7 in. lbs.