



## Model MI51LP

The MI51LP is a miniature, dual-drum, magnetic latching indicator featuring a nonvolatile two-drum display, excellent positive indication of a fault condition with superior visibility in high ambient light. It is designed to monitor electronic systems where space is limited.

### FEATURES

- 50 milliwatt
- Manual reset
- Magnetic latching
- Environmentally sealed

### OPERATION

When the indicator coil is energized with a 25 millisecond (or longer) pulse, the highly visible drums spin 180° and latch to the magnetic core. The drums will remain magnetically latched to the core in the position last pulsed. Even if the fault signal is removed, the indicator will “remember” that a fault had occurred. Reset is accomplished manually by rotating the knurled ring clockwise 60°. The knob returns to its normal position automatically.

### ELECTRICAL SPECIFICATIONS

Standard coil voltages and resistances			
Nominal Voltage DC	Operating Voltage Minimum	Operating Voltage Maximum	DC Coil Resistance in Ohms, ± 10% @ 25°C
1.5	1.2	1.8	45
3.0	2.4	3.6	180
5.0	4.0	6.0	500
6.0	4.8	7.2	720
12.0	9.6	14.4	2,880
24.0	19.2	28.8	11,500
28.0	22.4	30.0	15,700

**Pulse Power:** 50 mw.

**Nominal Pulse Length:** 25 milliseconds, minimum.

**Dielectric Withstanding Voltage:** 500 VAC RMS

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

**Electromagnetic Interference and Magnetic Susceptibility:** MI51LP will not malfunction or false transfer when subjected to a 20 ampere turn field at 400Hz.



### MECHANICAL SPECIFICATIONS

**Case:** Black, anodized aluminum

**Mounting:** Front-panel mount (D-hole or keyed washer)

**Weight:** 6.5 grams for loop or turret terminals; 10 grams for wire leads.

**Display Colors:** “No-fault” (reset) is black, “Fault” (set) is white, as shown.

**Terminations:** Solder terminals (turret type), solder loops, and wire leads are also available.

**Glass:** Standard (S), Non-glare (N)

### ENVIRONMENTAL SPECIFICATIONS

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

**Vibration\*:** .06" D.A. or 15 Gs Peak, whichever is less, 10Hz to 2kHz per MIL STD 202, Method 204, Test Condition B

**Shock:** 100 Gs 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 350 volts AC RMS

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

**Life:** 10,000 cycles

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

This page consists of basic marketing information that is not defined as technical data under EAR Part 772.

# LOW POWER BITE INDICATORS



## ORDERING INFORMATION

When ordering, show model number first, coil voltage, the color combination desired, terminal type, and glass type. If this is a special part, a factory assigned modification number will be added at the end of the ordering number. Consult the factory for special configurations.

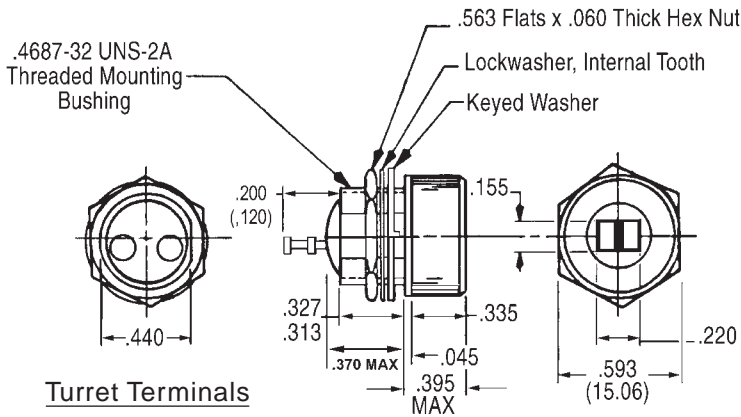
Example:

Basic model for 12 volts with white as set color and black as reset color, turret terminals, and non-glare glass would be MI51LP-12-W/BLK-TT-N.

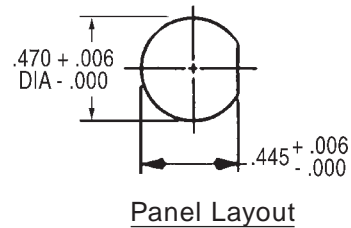
MI51LP - 12 - W / BLK - TT - S - ( )

Standard factory options are designated by "-Sxxx"

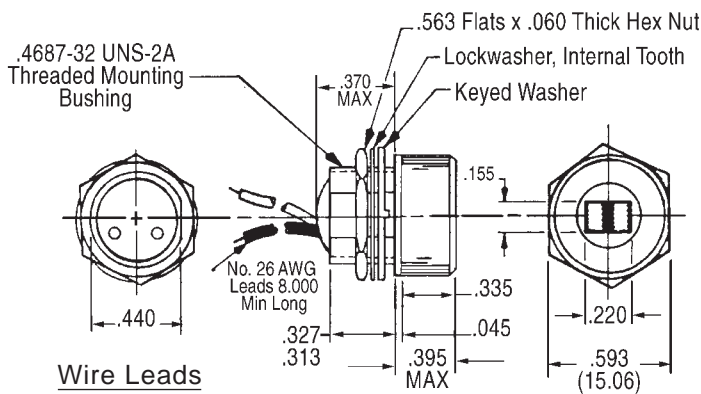
Basic Model Number	Coil Voltage	Fault Color	No-fault or Reset Color	Terminal Type	Glass Type
MI51LP	1.5	W White	BLK Black	LT Loop Terminals	S Standard Glass
	3			TT Turret Terminals	N Non-glare Glass
	5			WL Wire Leads	
	6				
	12				
	24				
	28				



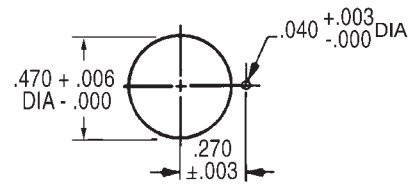
Turret Terminals



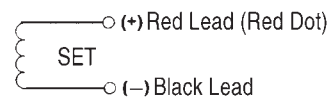
Panel Layout



Wire Leads



Optional Panel Layout Using Keyed Washer



Schematic

MI 51LP

NOTE: Dimensions in ( ) are mm. Tolerances: Decimals:  $\pm .010$  (0.25)  
Fractions:  $\pm 1/64$ —All mounting hardware is black anodized aluminum. Mounting Torque: 5-7 in. lbs.

This page consists of basic marketing information that is not defined as technical data under EAR Part 772.