Model MI61SW

Meets MIL-PRF-83287

The MI61SW series magnetic latching fault indicator displays highly visible dual color internal flag when the indicator coil is pulsed by a BITE (Built-In Test Equipment) system. The "cloverleaf" pattern provides a high contrast visual indication and an effective warning of system results.

MI61SW

FEATURES

- Manual reset return
- Magnetic latching
- Environmentally sealed
- Random vibration capability
- Internal switch

OPERATION

The indicator is set by energizing the coil with a 40 millisecond (or longer) pulse. The indicator will change from a normally all-black display to a distinctive black/white pattern visible through a window on the front of the indicator. The internal switch will also close. The display disc and the switch will remain magnetically latched to the core in the position last pulsed. Even if the fault signal is removed, the indicator and the switch will "remember" that a fault had occurred.

Return to the "No-fault" position is accomplished mechanically by rotating the knurled knob clockwise 60°. The knob automatically returns to its normal position.

ELECTRICAL SPECIFICATIONS

Standard coil voltages and resistances

Model Number	Anti-Reflection Coated Lens No	Anti-Reflection Coated Lens Yes	Operating Voltage (DC) Rated	Min.	Max.	DC Coil Resistance in Ohms @25°C
MI61SW-6-M06	X		6.0	4.8	7.2	30-36
MI61SW-6-M08		X				
MI61SW-12-M14	X		12.0	9.6	14.4	248-303
MI61SW-12-M16		X				
MI61SW-24-M18	X		24.0	19.2	28.8	513-627
MI61SW-24-M20		X				
MI61SW-28-M22	X		28.0	22.4	30.0	1090-1331
MI61SW-28-M24		X				

Nominal Pulse Length: 40 milliseconds minimum with a maximum risetime of 5 milliseconds

Dielectric Withstanding Voltage: 500 VAC RMS

Resistance: 100 megohms minimum at 500 VDC

Electromagnetic Interference and Magnetic Susceptibility: Per MIL-PRF-83287. MI61SW will not malfunction or false transfer when subjected to a 20 ampere turn field at 400Hz.

Switch Rating: 250mA at 28 VDC, non-inductive load

MECHANICAL SPECIFICATIONS

Case: Black anodized aluminum

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

Weight: 20 grams

Display Colors: "No-fault" is black (Switch Open) "Fault" is black/white, as shown (Switch Closed)

Leads: Turret terminals (TT), only

ENVIRONMENTAL SPECIFICATIONS

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

Vibration*:

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

Random: 11.6 Gs rms per MIL STD 202, Method 214, Test Condition D, Curve 1

Shock: 100 Gs MIL STD 202, Method 213, Test Condition I

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

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

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

Barometric Pressure: 100,000 ft., MIL STD 202, Method 105, Test Condition D, with 350 VAC, RMS

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.

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ORDERING INFORMATION

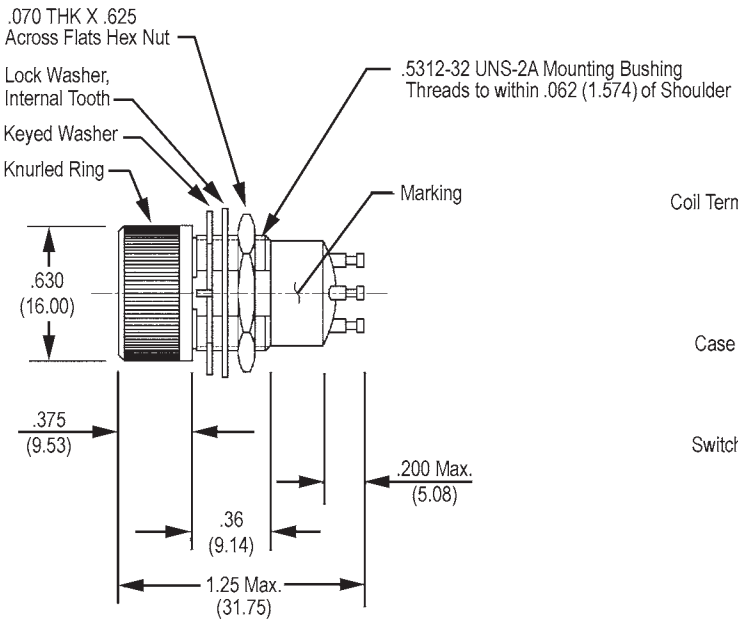
When ordering, show model number first, coil voltage, and the lens coating desired. If this is a special part, a factory assigned modification number will be added at the end of the ordering number. Consult the factory for special configurations.

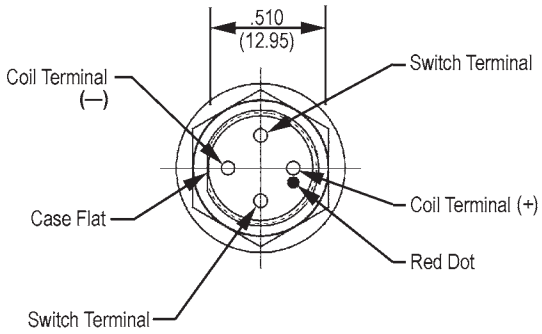
Example:
Basic model for 12 volts with anti-reflection coated lens would be Model MI61SW-12-M16.

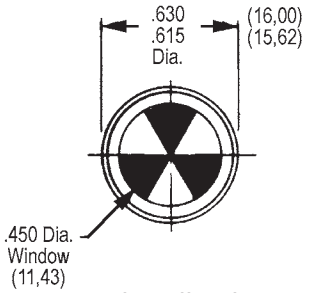
MI61SW - 12 - M16 - ( )

Standard factory options are designated by "-Sxxx"

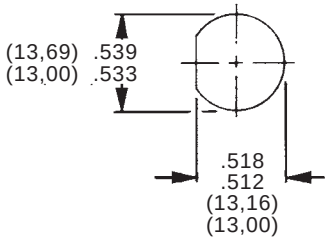
Basic Model Number	Coil Voltage	Coated Lens
MI61SW	6	(Refer to chart on previous page)
	12	
	24	
	28	



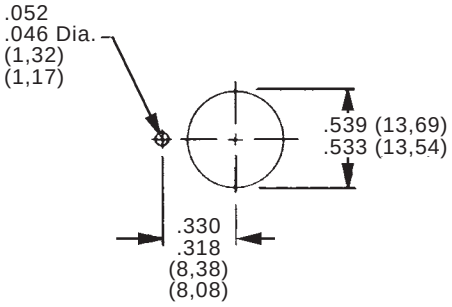




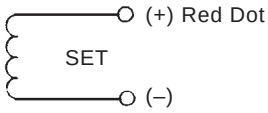
Fault Indication
(Black & White)



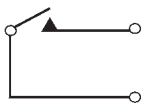
Panel Layout



Optional Panel Layout
Using Keyed Washer



Coil Diagram



Switch Diagram
(Switch shown in
Reset Position)

MI61SW

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.

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