

# Series 30

## Status indicators

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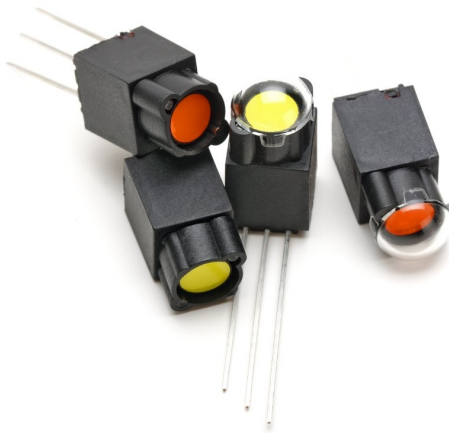
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Electromagnetic status indicators are ideal for applications which require great visibility in difficult light conditions and built – in memory which allows to display critical information after all power is gone. Typical applications include transient recorders, industrial process displays, portable field measuring equipment displays, contact status indicators and any binary on / off indicators.

### OPERATING CHARACTERISTICS

Each disk contains a permanent magnet which interacts with an electromagnet. A current pulse activates a reversal of the magnetic field induced in the electromagnet which determines whether the segment is exposed (set) or retracted (reset). Indicators are available in many different styles and sizes, in a range of fluorescent colors including green, yellow, red and orange, in addition to white. For a complete listing refer to our color chart, available on request.



Series AZ30 status indicators

### BENEFITS and FEATURES

- **VISIBILITY**  
The light reflecting, rotating fluorescent disks in these indicators provide excellent visibility in most ambient light conditions
- **RELIABILITY**  
The disks are the only moving parts and are rated at the minimum of 100 million operations the indicators are extremely rugged and ideal for use in applications over a wide range of environmental conditions. Magnetic memory retains the indicators' status through shock, vibration or power failure making them ideal for mobile applications.

- **ECONOMY**  
Power is only required to change the data displayed. Inherent magnetic memory in each segment retains the display indefinitely without power being applied. Multiple displays can be operated on a few watts of total power.

### AVAILABLE OPTIONS:

- C30 series—with plastic cap and pins at standard angle
- 30 series - without plastic cap and pins at standard angle
- R30 series—with pins at right angle and no plastic cap
- CR30 series—with pins at right angle and plastic cap
- SR30 series with mounting shield and pins bent twice to allow low profile PCB assemble

### AVAILABLE PIN CONFIGURATION

There are two pins configuration available as a standard:

- **NR**—Two pins configuration with one coil. The direction of flow of current is determining orientation of disk. The control circuit must be able to reverse polarity what usually requires usage of H-bridge.
- **ND**—three pins configuration. There are two coils connected in reverse direction between SET and COMMON / RESTE and Common pins. Control pulse polarity is not changed but disk orientation is determined by application positive pulse at either SET or RESET pin.

### AVAILABLE COLOURS

06—yellow, 01—white, 05—red, 03—green, 02—orange  
All other colors upon request



AZ30	
<b>Overall size</b>	11.5 mm (0.45 in) x 11.5 mm (0.45 in)
<b>Disk size</b>	7.00 mm (0.30 in)
<b>Weight</b>	4.5 g (0.16 oz)
<b>Driver requirements</b>	Current pulse of 1.5 ms duration @250 mA minimum amplitude, Minimum voltage 4.5 V. Maximum voltage 125 V Maximum current 500mA, Maximum power 750 mW.
<b>Coil resistance (At 20°C ambient)</b>	12 ohms ± 10%
<b>Disk transfer time</b>	Typically 0.5 s (includes time required by the disk to stabilize in magnetic field)
<b>Maximum coil Temperature</b>	95°C
<b>Power to maintain displayed data</b>	ZERO
<b>Temperature range</b>	40°C to 92°C (-40 °F to 196°F)
<b>Relative humidity</b>	Up to 95% provided no condensation occurs
<b>Outdoor application</b>	Requires a weatherproof enclosure
<b>Remarks</b>	<b>Electrical characteristics</b> All indicators are current operated devices. Applied voltages must be sufficient to develop minimum specified current over full operating temperature range. Drive pulse duration requirements include current rise time. Coil drive requirements are specified at the module input terminals.