

# BTA® Size 3EV

Part Numbers: Clockwise Rotation 195191-0XX  
Counter-Clockwise Rotation 195623-0XX

All catalog products manufactured after  
April 1, 2006 are RoHS Compliant

ROTARY BTA®

## Performance

|                                                                |                       |                         |              |              |              |              |
|----------------------------------------------------------------|-----------------------|-------------------------|--------------|--------------|--------------|--------------|
| Maximum Duty Cycle                                             | 100%                  | 50%                     | 25%          | 10%          |              |              |
| Maximum ON Time (sec)<br>when pulsed continuously <sup>1</sup> | ∞                     | 10                      | 3            | 1            |              |              |
| Maximum ON Time (sec)<br>for single pulse <sup>2</sup>         | ∞                     | 26                      | 10           | 4            |              |              |
| Typical Energize Time (msec) <sup>3</sup>                      | 25                    | 17                      | 12           | 9            |              |              |
| Watts (@ 20°C)                                                 | 13                    | 26                      | 52           | 130          |              |              |
| Ampere Turns (@ 20°C)                                          | 362                   | 512                     | 729          | 1,144        |              |              |
| Coil Data                                                      |                       |                         |              |              |              |              |
| awg<br>(0XX) <sup>4</sup>                                      | Resistance<br>(@20°C) | #<br>Turns <sup>5</sup> | VDC<br>(Nom) | VDC<br>(Nom) | VDC<br>(Nom) | VDC<br>(Nom) |
| 23                                                             | 0.26                  | 44                      | 1.9          | 2.6          | 3.7          | 5.9          |
| 24                                                             | 0.38                  | 50                      | 2.2          | 3.1          | 4.4          | 7.0          |
| 25                                                             | 0.53                  | 56                      | 2.6          | 3.7          | 5.2          | 8.3          |
| 26                                                             | 1.54                  | 126                     | 4.5          | 6.3          | 9.0          | 14.2         |
| 27                                                             | 2.15                  | 140                     | 5.3          | 7.5          | 10.6         | 16.7         |
| 28                                                             | 3.04                  | 158                     | 6.3          | 8.9          | 12.6         | 19.9         |
| 29                                                             | 4.24                  | 176                     | 7.4          | 10.5         | 14.9         | 23.5         |
| 30                                                             | 9.16                  | 297                     | 10.9         | 15.4         | 21.8         | 34.5         |
| 31                                                             | 12.90                 | 333                     | 12.9         | 18.3         | 25.9         | 40.9         |
| 32                                                             | 18.04                 | 372                     | 15.3         | 21.6         | 30.6         | 48.4         |
| 33                                                             | 34.10                 | 552                     | 21.0         | 29.8         | 42.1         | 66.5         |
| 34                                                             | 47.70                 | 616                     | 25.0         | 35.2         | 49.8         | 78.7         |

## Specifications

|                               |                                                                                                                                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dielectric Strength           | 1,000 VRMS (23-28 awg); 1,200 VRMS (29-34 awg)                                                                                                                                            |
| Recommended Minimum Heat Sink | Maximum watts dissipated by solenoid are based on an unrestricted flow of air at 20°C, with solenoid mounted on the equivalent of an aluminum plate measuring 4-5/8" square by 1/8" thick |
| Thermal Resistance            | 8.53 (°C/watt)                                                                                                                                                                            |
| Rotor Inertia                 | 9.14 (gm-cm <sup>2</sup> )                                                                                                                                                                |
| Weight                        | 5.0 oz (142 gms)                                                                                                                                                                          |
| Dimensions                    | Ø1.375" x 0.890" (See page C10)                                                                                                                                                           |

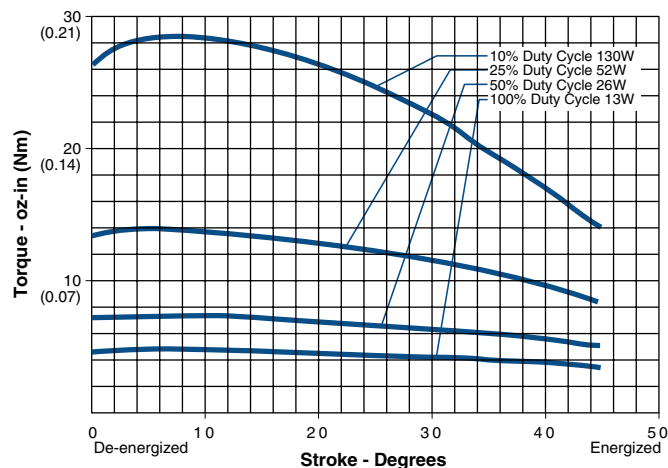
## How to Order

Add the coil awg number (0XX) to the part number (for example: to order a 25% duty cycle clockwise rotation unit rated at 25.9 VDC, specify 195191-031).

Please see [www.ledex.com](http://www.ledex.com) (click on Stock Products tab) for our list of stock products available through our North American distributors.

- <sup>1</sup> Continuously pulsed at stated watts and duty cycle
- <sup>2</sup> Single pulse at stated watts (with coil at ambient room temperature 20°C)
- <sup>3</sup> Typical energize time based on a 0.8 oz-in torque load including 14 gm-cm<sup>2</sup> of inertia
- <sup>4</sup> Other coil awg sizes available — please consult factory
- <sup>5</sup> Reference number of turns

## Size 3EV — Typical Torque @ 20°C



### Notes:

Torque curves shown are without spring.

Typical standard spring has a torque of 1.9 oz-in.

Torque values are for reference only.

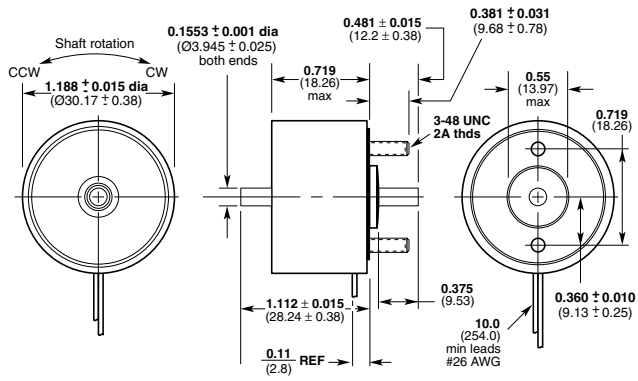
All specifications subject to change without notice.

# BTA® Dimensions

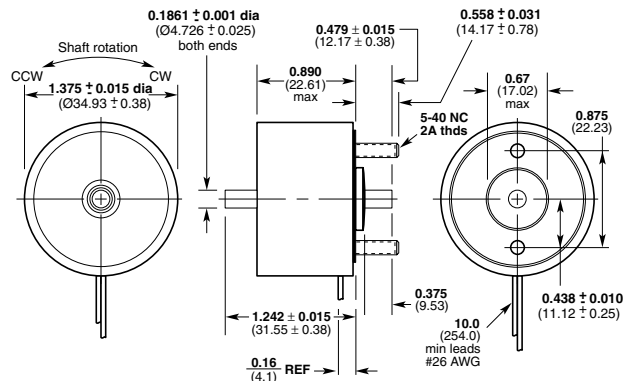
inches (mm)

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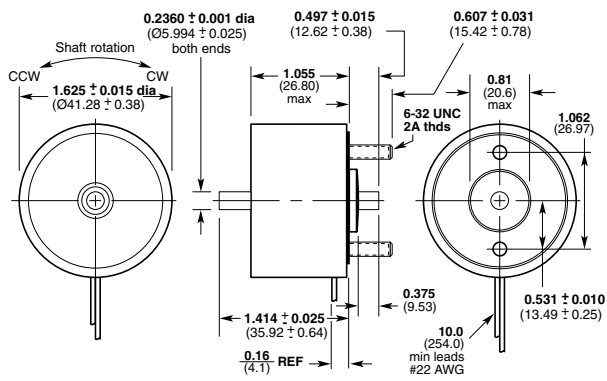
## Size 2EV



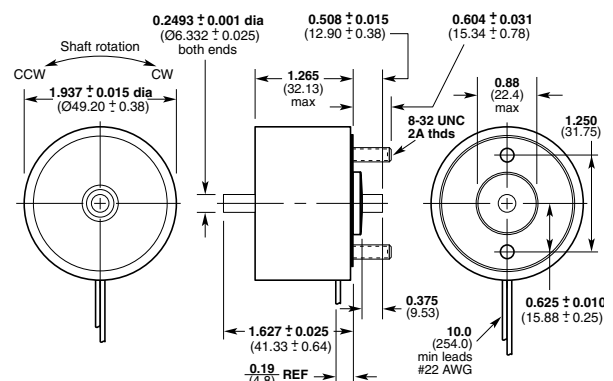
## Size 3EV



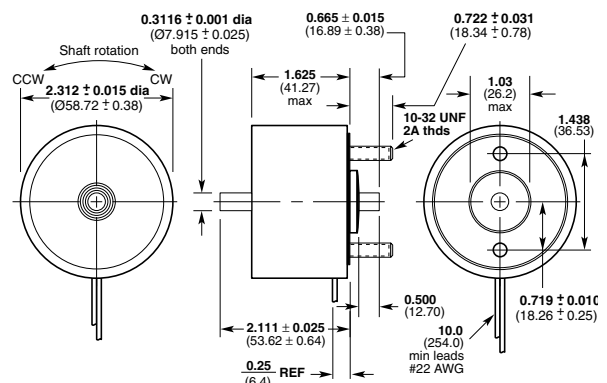
## Size 4EV



## Size 5EV



## Size 6EV



All specifications subject to change without notice.