

# BTA® Size 5EV

Part Numbers: Clockwise Rotation 190835-0XX  
Counter-Clockwise Rotation 195625-0XX

All products are RoHS Compliant

ROTARY BTA®

## Performance

Maximum Duty Cycle	100%	50%	25%	10%
Maximum ON Time (sec) when pulsed continuously <sup>1</sup>	∞	40	15	4
Maximum ON Time (sec) for single pulse <sup>2</sup>	∞	109	36	10
Typical Energize Time (msec) <sup>3</sup>	27	18	14	10
Watts (@ 20°C)	21	42	84	210
Ampere Turns (@ 20°C)	621	878	1242	1964

## Specifications

Dielectric Strength	1000 VRMS (23 awg); 1200 VRMS (24-33 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 7-1/2" square by 1/8" thick
Thermal Resistance	5.36 (°C/watt)
Rotor Inertia	30.36 (gm-cm <sup>2</sup> )
Weight	13.5 oz (382 gms)

## Coil Data

awg (0XX) <sup>4</sup>	Resistance (@20°C)	# Turns <sup>5</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (Nom)
23	1.05	128	4.7	6.6	9.4	14.8
24	2.24	213	6.9	9.7	13.7	21.7
25	3.16	240	8.1	11.5	16.3	25.8
26	4.45	270	9.7	13.7	19.3	30.6
27	8.50	404	13.4	18.9	26.7	42.2
28	11.90	452	15.8	22.3	31.6	50.0
29	21.10	630	21.0	29.7	42.1	67.0
30	29.50	705	24.9	35.2	49.8	78.7
31	50.30	948	32.5	46.0	65.0	103.0
32	82.70	1232	41.7	59.0	83.0	132.0
33	134.00	1576	53.0	75.0	106.0	168.0



## 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 26.7 VDC, specify 190835-027).

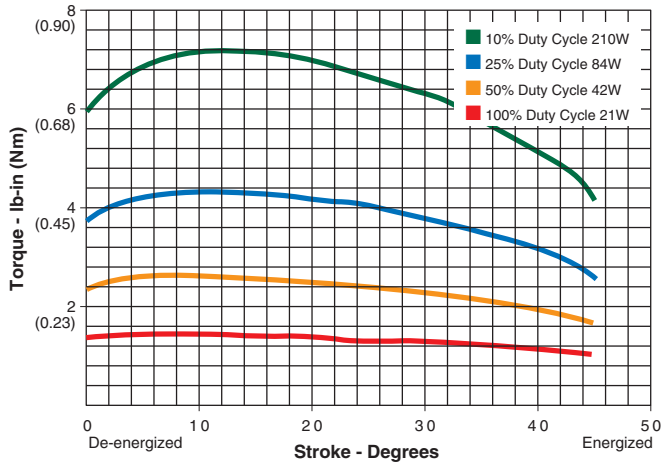
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- <sup>1</sup> Continuously pulsed at stated watts and duty cycle
- <sup>2</sup> Single pulse at stated watts (with coil at ambient room temperature 20°C)
- <sup>3</sup> Typical energize time based on a 5.0 oz-in torque load including 14 gm-cm<sup>2</sup> of inertia
- <sup>4</sup> Other coil awg sizes available — please consult factory
- <sup>5</sup> Reference number of turns

All specifications subject to change without notice.

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## Typical Torque @ 20°C (see notes)



### Notes:

Torque curves shown are without spring.  
 Typical standard spring has a torque of 4.0 oz-in.  
 Torque values are for reference only.

## Dimensions (in)

