

# BTA® Size 3EV

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

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>	∞	10	3	1
Maximum ON Time (sec) 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 (0XX) <sup>4</sup>	Resistance (@20°C)	# Turns <sup>5</sup>	VDC (Nom)	VDC (Nom)	VDC (Nom)	VDC (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)

## 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.johnsonelectric.com](http://www.johnsonelectric.com) for our list of stock products available through distribution.

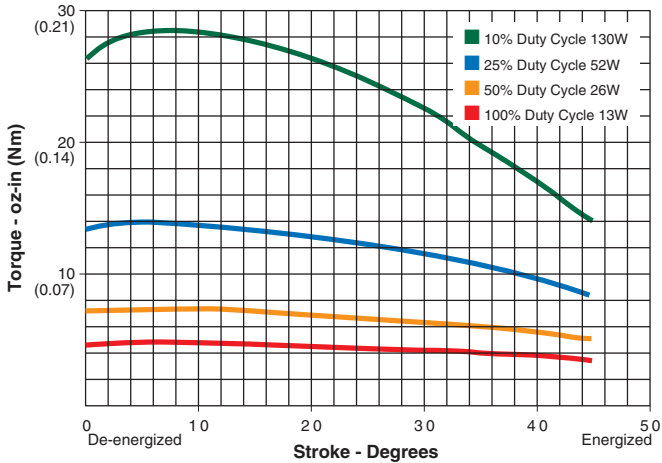
- <sup>1</sup> Continuously pulsed at stated watts and duty cycle
- <sup>2</sup> Single pulse at stated watts (with coil at ambient room temperature 20°C)
- <sup>3</sup> Typical energize time based on a 0.8 oz-in torque load including 14 gm-cm<sup>2</sup> of inertia
- <sup>4</sup> Other coil awg sizes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

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 1.9 oz-in.  
 Torque values are for reference only.

## Dimensions (in)

