



Combustion

Explore our Technologies

CBA3 (Compact Brushless Actuator)

for Heavy and Medium Duty Combustion Vehicles

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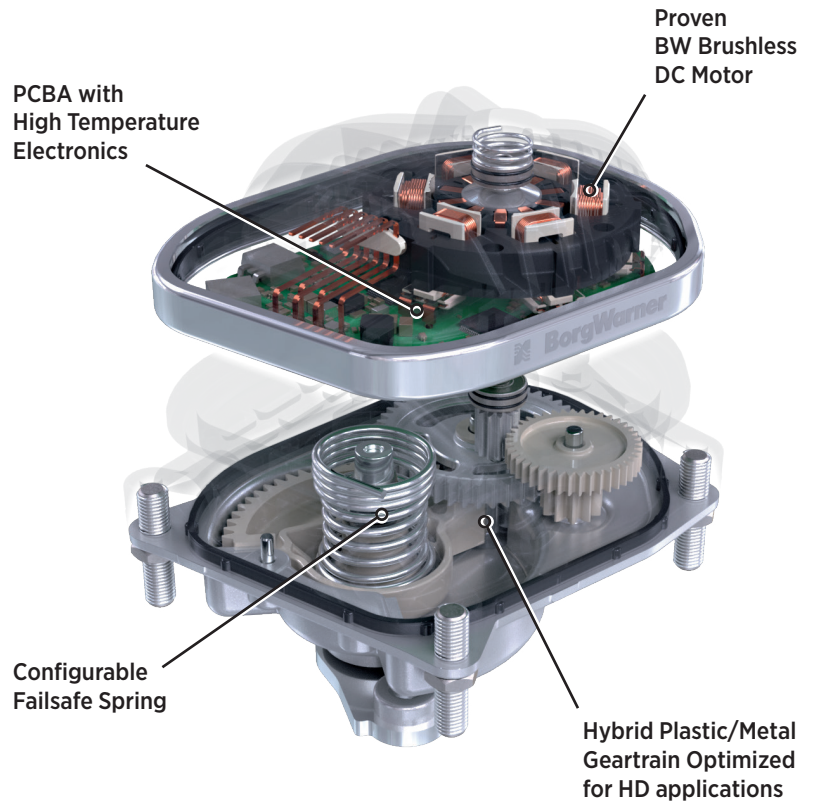
THE CBA3 (COMPACT BRUSHLESS ACTUATOR 3RD GENERATION) IS A HIGH PERFORMANCE AND HIGH TORQUE BLDC ACTUATOR FOR HEAVY DUTY APPLICATIONS.

Features

- Compact, BLDC Actuator
- CAN communication with integrated controls – calibrateable for multiple applications
- Smart electronics validated for use up to 145°C (without cooling), higher temperatures achievable using the integrated water cooling option
- Automatic 12/24V System Operation
- Absolute position sensing
- Multiple connector configurations

Benefits

- Robust motor/gear system for medium and heavy duty applications
- Calibrations developed for VTG and Wastegate Turbo Chargers, Exhaust Throttles, EGR Valves, and Air Intake Throttles
- One part number covers the entire voltage range for 12/24V systems
- Highly accurate positioning, based on feedback from the absolute sensor at the output shaft
- Connector can be integrated or a pigtail harness, wake-up function and CAN IN/OUT available



Specifications

Operating Voltage	12/24 V (1 PCBA P/N)
Rotation Angle	110°
Position Resolution	0.2°
Position Sensing	Absolute at Output Shaft
Peak Torque	up to 12 Nm (can be limited by SW)
Cont. Torque	4.2 Nm @ 110°C, 3.0 Nm @ 140°C
Gear Ratio	60:1
Response Time	~250 ms
Water Cooling Ports	Various Configurations
Connector	Integrated (w/Pigtail Option)
Durability Cycles	24 Million
Operating Temperature	-40 to +140°C Continuous (Smart) 145°C Peak for Max 100 hrs (Smart) -55°C to 160°C Storage Temperatures -40 to +150°C Continuous (non-Smart) 160°C Peak for Max 100 hrs (non-Smart)

Next Step:
Start of
production
2021

For Additional BorgWarner Information:
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