

# BLDC ACTUATOR



## Rotary Actuator with Internal Gearbox

### **Description:**

A rotary actuator that is capable of up to 0.3 Nm (2.7 in-lbs) continuous at 15 rpm and 1.0 Nm (8.9 in-lbs) boost torque at 133 RPM. This actuator provides high speed adjustment of on-engine phasing. A physical internal rotary sensor provides absolute position feedback, which is especially desirable for applications where accurate real-time position data is important for critical system-level protection and fail-safe functionality.

The actuator includes a BLDC motor and gearbox to generate and transmit torque, and features an on-board controller which includes CAN communication, on-board rotary position sensing, position control, bootloader capability, and diagnostics. Flexible mounting and output options are available, and a fail-safe position of the output shaft can be communicated in the event of communication loss or component failure.

### **\*Technical Data:**

**Rotation Range:** 355°

**Torque (nominal):**  $\pm 0.33\text{Nm}$

**Torque (boost<sup>^</sup>):**  $\pm 1.0\text{Nm}$

**Speed:** 133RPM Max

**Current (continuous):** 1.25A rms

**Current (boost<sup>^</sup>):** 5.0A max

**NVH:** <50dbA

**CAN Communication:** CAN 2.0b

**Internal Rotary Sensor:**  $\pm 3\%$  accuracy

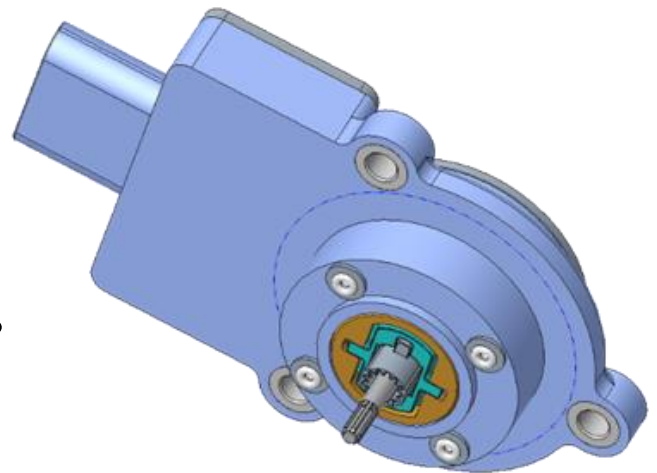
<sup>^</sup>Duty cycle at Boost Torque Level expected to be <20%

### **\*Operating Limits:**

**Supply voltage nominal:**  $12 \pm 1\text{VDC}$

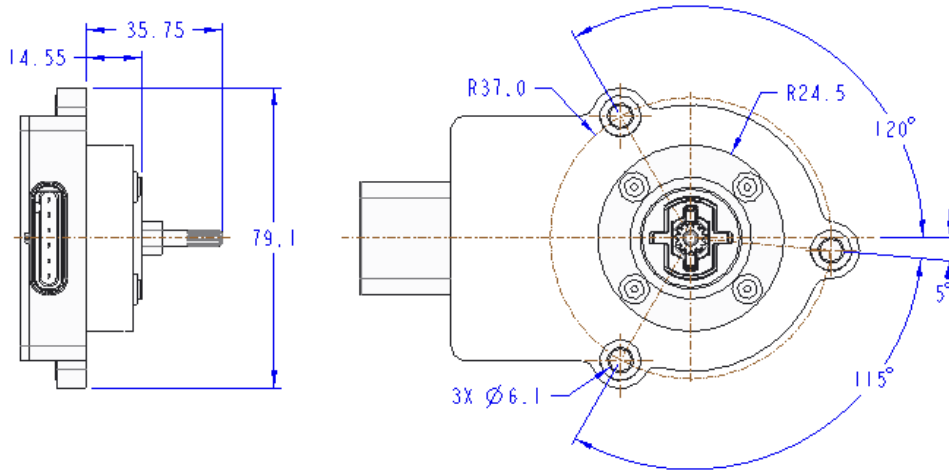
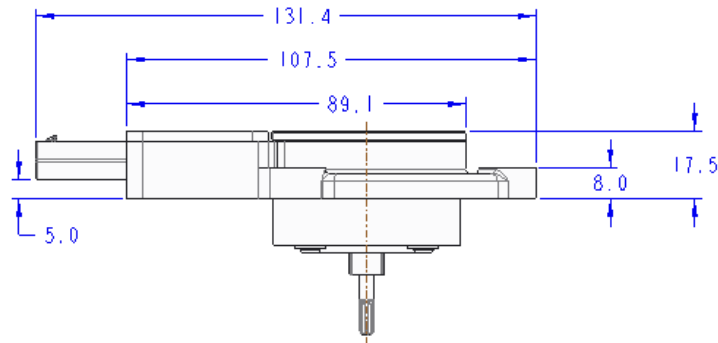
**Supply voltage range:** 9 to 16 VDC

**Temperature:** -40°C to 150°C



\*Contact Husco Engineering for customized performance, sensing, mounting, communication, diagnostics, ingress protection, or connectors.

# Packaging Size



# Manufacturing

Husco is a global company with facilities around the world. Options for manufacturing locations include North America, Europe, and Asia.

- USA
- Mexico
- China
- Eastern Europe

