



# HIGH TORQUE ACTUATOR

## Rotary Actuator with Internal Gearbox

A rotary actuator that is capable of up to 2 Nm (17.7 in-lbs) continuous and 3.3 Nm (29.2 in-lbs) boost torque at 2.5 RPM. This actuator provides higher torque and longer life than comparable actuators on the market allowing for actuation of valves, dampers, mechanisms, or other automotive applications. 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 either a stepper or BLDC motor depending on application requirements. A gearbox is paired with the motor to generate and transmit torque. The actuator features an on-board controller which includes LIN communication, on-board rotary position sensing, position control, bootloader capability, and diagnostics. Gear drive is designed to minimize hold power. Flexible mounting and output options are available. Fail-safe position of the output shaft can be communicated in the event of communication loss or component failure.

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

**Rotation Range:** 355° standard

**Torque (nominal):**  $\pm 2\text{Nm}$

**Torque (boost<sup>^</sup>):**  $\pm 3.3\text{Nm}$

**Speed:** 4RPM

**Current (continuous):** <1A

**Current (boost<sup>^</sup>):** <1.5A

**NVH:** <50dbA

**LIN Communication:** LIN protocol 2.1 version, Baud rate 19.2 kbs

**Internal Rotary Sensor:**  $\pm 1.5\%$  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 85°C

**Ingress Protection:** IP6K7

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

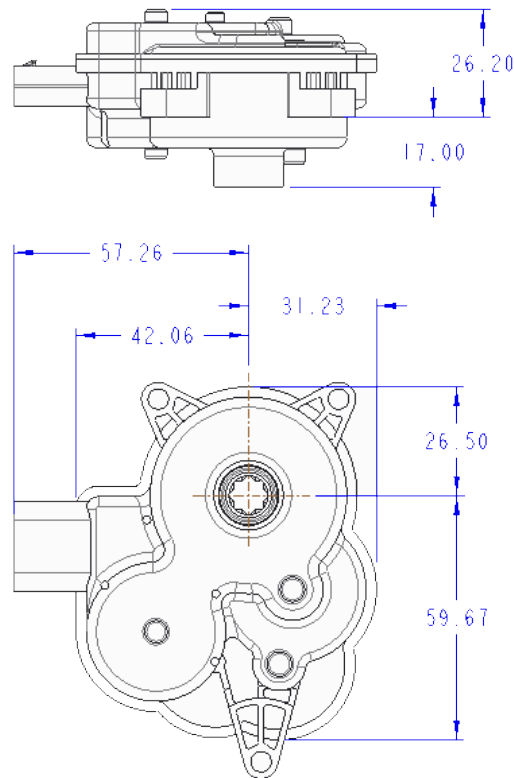


Husco's Automotive team specializes in collaborative development of customized performance solutions. Contact the engineering team for your custom solution.

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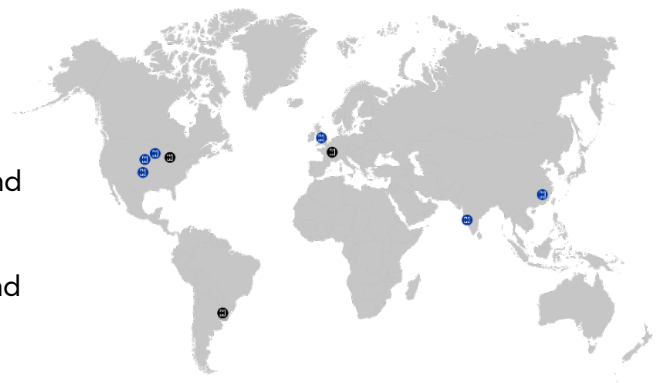
# Packaging Size



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