

# B3W RODLESS BELT-DRIVE ACTUATOR

## ENDURANCE TECHNOLOGY<sup>SM</sup>

Endurance Technology features are designed for maximum durability to provide extended service life.

A Tolomatic Design Principle

The B3W rodless belt-drive electric actuator is designed for carrying moderate to heavy loads at moderate to high speeds with large bending moment capacity. The B3W utilizes an integral recirculating ball bearing guidance system that provides durable performance and extremely long life. The B3W belt-driven actuator features speeds up to 5.1 m/sec [200 in/sec]. Built-to-order in stroke lengths up to 5.3 m [207 inches].

**YOUR MOTOR HERE**

**YOU CAN CHOOSE:**

- Specify the device to be installed and actuator ships with proper mounting hardware
- Specify and ship your device to Tolomatic for factory installation
- Motor or gearbox supplied and installed by Tolomatic

**STAINLESS STEEL SEALING BAND**

- Prevents contaminants from entering the screw and nut area for extended performance
- Fatigue resistant stainless steel bands are specifically made to offer long life and will not elongate
- Provides IP44 protection for bearings and screw nut

**RECIRCULATING BALL BEARING SYSTEM**

- Unique design incorporates hardened steel raceways integral to the aluminum extrusion
- Bearing surfaces are adjusted at the factory for optimum preload and smooth performance
- Recirculating ball bearing system provides guidance, high efficiency and durability

**FORMED END CAP WIPERS**

Prevent contaminants from entering the sealing band area to protect internal components

**BELT TENSIONING SYSTEM**

- Full access to the idle pulley allows ease of adjustment for alignment and tensioning
- Dual adjustment screws and field tensioning kit provide simple maintenance

**MOTOR ORIENTATION**

**YOU CAN CHOOSE:**

- Direct drive option directly couples the driving shaft and is typically a one-piece housing construction for optimum alignment and support of the motor
- Reduction drive option minimizes the overall length and offers a belt reduction drive with a 1:1 or 2:1 ratio

**LIGHTWEIGHT ALUMINUM DESIGN**

- Black anodized extrusion design is optimized for rigidity and strength
- External switch channels on both sides allow easy placement and adjustment of position indicating switches

**OVERSIZED PULLEY BEARINGS**

Drive shaft assembly incorporates sealed ball bearings for complete support of the increased belt tension at high speeds

**INTERNAL BUMPERS**

Bumpers protect the screw and nut assembly from damage at end of stroke

**MULTIPLE BELT TECHNOLOGIES**

**YOU CAN CHOOSE:**

- Polyurethane steel-cord reinforced HTD style belt (standard)
- Polyurethane Kevlar reinforced HTD style belt

**LOAD-BEARING CARRIER DESIGN**

Load and moments are transmitted directly to the actuator body

**OPTIONS**

**CARRIER OPTIONS**

- **AUXILIARY CARRIER** doubles the load capacity and increases pitch and yaw bending moment capacities
- **DUAL 180° CARRIER** doubles the load capacity, increases roll and yaw bending moment capacities and offers a wide mounting platform

**MOUNTING OPTIONS**

- **SURFACE MOUNT** two t-slots are integral on the entire underside of the actuator body for direct mounting
- **TUBE SUPPORTS** provide intermediate support of the actuator body throughout long stroke lengths
- **MOUNTING PLATES** provide intermediate support of the actuator body throughout long stroke lengths
- **METRIC OPTION** Provides metric tapped holes for mounting of load to carrier and of actuator to mating surfaces
- **SWITCHES** Styles include: reed, hall-effect or triac. Select either 5 m potted cable with flying leads or 150 mm to quick-disconnect coupler with mating 5 m cable

