

# BI-TORQ BI-SS SERIES PNEUMATIC ACTUATOR FEATURES

## STAINLESS STEEL BODY

The all-SS housing is ideal for sanitary, pulp and paper, marine and a variety of other applications where corrosion-resistance is crucial.

## HEAVY-DUTY PINION

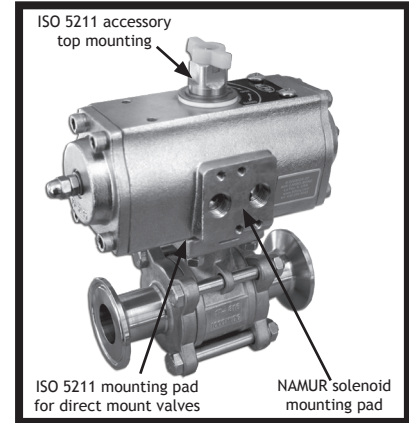
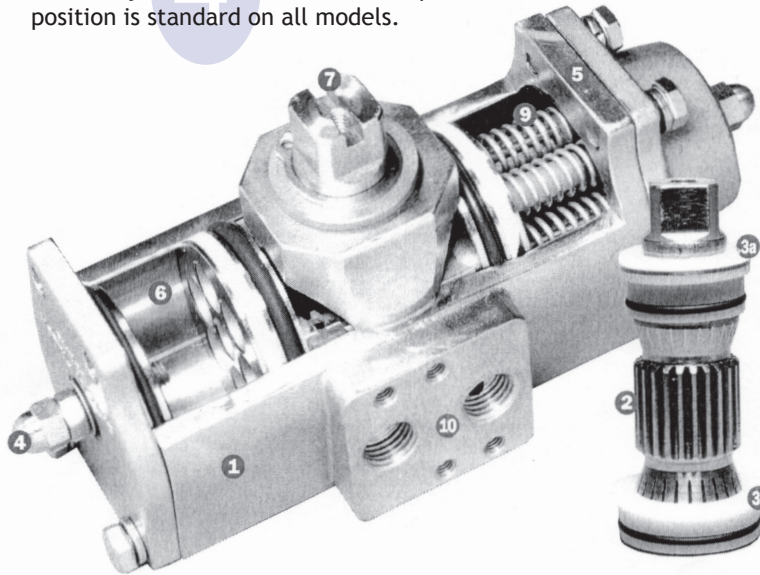
The one-piece stainless steel alloy shaft has precision machined gear teeth for precise operations.

## BEARINGS

Replacable top and bottom TFE pinion bearings ensure low friction, stability up to 400° F and corrosion resistance.

## TRAVEL STOPS

Travel adjustment of +/- 4° in the open position is standard on all models.



## ACCESSORY MOUNTING

NAMUR and ISO mounting allows for the easy factory or field installation of solenoids, switches and positioners.

## STAINLESS STEEL PISTONS

Durable, precision cast pistons provide full engagement with the pinion. Quality seals and guides provide high thrust stability with minimal friction.

## NAMUR SHAFT

The slotted shaft, along with the NAMUR bolt pattern, allows for direct mounting of NAMUR standard switches and positioners.

## ACTUATOR MOUNTING

ISO 5211 standard design provides direct mounting of most ISO pad valves, including BI-TORQ® InstruPak ball and butterfly valves.

## SPRING CARTRIDGES

The heavy duty spring cartridges allow for easy conversion of a double acting actuator to a spring return actuator, or to modify the torque output depending on air pressure.

## SOLENOID MOUNTING

The BI-SS series actuator is designed for direct mounting of NAMUR solenoid valves without additional piping.

## SPRING COMBINATION OPTIONS



SPRING SET 02  
(4 SPRINGS TOTAL)



SPRING SET 03  
(6 SPRINGS TOTAL)



SPRING SET 04  
(8 SPRINGS TOTAL)



SPRING SET 05  
(10 SPRINGS TOTAL)



SPRING SET 06  
(12 SPRINGS TOTAL)

### SPRING SETS

All BI-TORQ® SS series (stainless) pneumatic actuators come standard with a complete cartridge spring set (6 springs per side) sized for 80 PSI supply pressure unless otherwise specified. Actuators can be configured for different air supplies by removing springs from the end caps.

**IMPORTANT:** Springs must be arranged in a symmetrical manner (see arrangements to the left) so that side load does not occur between the pistons and the actuator body.

### REVERSE OPERATION

All BI-TORQ® actuators are set for a standard CW to close, CCW to open rotation. The action may be reversed by rotating the pistons 180°.

**CAUTION:** Refer to BI-TORQ® operation and maintenance instructions before disassembly and removal of springs.