

# BI-TORQ PN-SERIES PNEUMATIC ACTUATOR FEATURES

## ROTATION ADJUSTMENT

**BI-52 through BI-125 Models**  
Standard adjustment is  $\pm 5^\circ$  in both the open and closed positions through easily accessible external adjustment screws.

**BI-160 through BI-270 Models**  
Standard adjustment is  $\pm 5^\circ$  in the open position. An adapter kit is available for  $\pm 5^\circ$  adjustment in the closed position.

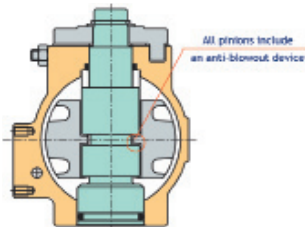
## END CAPS

Epoxy coated die cast aluminum end caps provide maximum resistance against potentially corrosive elements.

## HEAVY DUTY SPRINGS

True-rated spring sets create absolute confidence in all of the fail safe spring return models. The high tensile steel springs are coated with zinc phosphate for corrosion resistance. Springs can be safely and quickly modified into sets ranging from 40 pounds to 80 pounds (through 120 pounds on 200/270 models). Full length end cap bolts allow for easy and safe disassembly.

## ANTI-BLOWOUT SYSTEM



## INDICATOR

A disc indicator is standard on the BI-52 through BI-125 models. A high visibility open-closed dome indicator is available on all BI-TORQ actuators.

## PINION

The hardened steel pinion is precision ground and then nickel plated in order to reduce friction, provide maximum wear resistance, and protect against corrosion under severe conditions. An optional stainless steel pinion is available for corrosive environments.



## ACTUATOR BODY

The aluminum extrusion is hard anodized to 45-50 microns to protect against wear and corrosion while reducing piston friction to the absolute minimum.

## PISTON GUIDES

Large contact areas and self-lubricating, highly-durable materials provide high thrust stability with minimum friction.

## PISTON SEALS

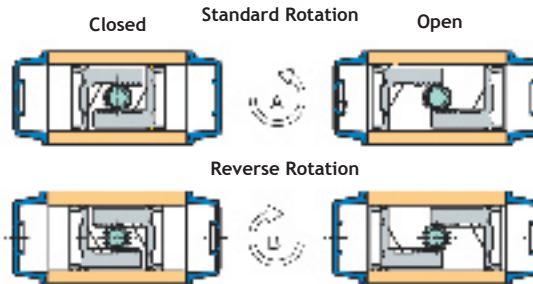
NBR-70 rubber pinion seals provide trouble-free operation at standard temperature ranges. Viton® and HNBR seals are available to high or low temperature extremes.

## PISTONS

The precisely-balanced die cast aluminum pistons are fitted with high-quality rings and guides, resulting in high ratios of output torque vs. input air pressure. The twin rack and piston design creates a constant torque output on all models.

## ROTATION VARIATIONS

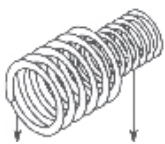
All BI-TORQ® actuators use a counterclockwise rotation to open and a clockwise rotation to close. The piston racks also can be rotated to achieve a fail open (counterclockwise to close) rotation.



## OPTIONS FOR CORROSIVE ENVIRONMENTS

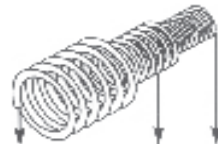
**BODY:** nickel plated or double epoxy coated bodies available upon request  
**PINION:** stainless steel  
**END CAPS:** nickel plated  
ALL 316 STAINLESS STEEL ACTUATORS ALSO AVAILABLE. PLEASE CONTACT OUR SALES STAFF FOR INFORMATION.

## SPRING COMBINATION OPTIONS



### PN-52SR TO PN-140SR

EXTERNAL SPRING	INTERNAL SPRING	AIR SUPPLY	SET #
1	1	40PSI	01
2	X	50PSI	02
1	2	60PSI	03
2	1	70PSI	04
2	2	80PSI	05



### PN-160SR AND PN-200SR

EXTERNAL SPRING	CENTRAL SPRING	INTERNAL SPRING	AIR SUPPLY	SET #
X	2	X	40PSI	01
2	X	X	50PSI	02
1	2	X	60PSI	03
2	X	2	70PSI	04
2	2	X	80PSI	05
2	2	2	100PSI	06



### PN-270SR

SPRINGS PER SIDE	AIR SUPPLY	SET #	SPRINGS PER SIDE	AIR SUPPLY	SET #
2/3	40PSI	01	4/5	80PSI	05
3/3	50PSI	02	5/5	100PSI	06
3/4	60PSI	03	5/6	110PSI	07
4/4	70PSI	04	6/6	120PSI	08