

TRIAQTM
CONTROLS
A Division of AT Controls

Pneumatic & Electro-Pneumatic POSITIONERS

*and Controls for
Complete Valve
Automation*



SS
SERIES

SS Smart Valve Positioners



Features

- Easy and quick auto-calibration
- Detecting RA (reverse acting) or DA (direct acting) automatically
- Available to use with single or double acting actuators
- Compact design allows installation on small actuators
- Provides error messages against performance failures
- Ability to test the actuator assembly with a fixed input signal
- Programmable characteristic curve with 17 points
- Includes logic to eliminate overshooting and hunting, which improves the control of v-port, segment, and quarter-turn ball valves as well as high performance butterfly valves.
- Low air consumption (0.07 SCFM)
- Includes a NAMUR mounting bracket (VDI/VDE 3845, IEC 60534-6-2) that provides mounting to multiple sized rotary actuators

SS2 Rotary Smart Valve Positioner

Smart performance with innovative and ever-strong coil drive even under harsh working environments

- Wide operating temperature range -22° F to 176° F (-40°C on request)
- Remote Type option available
- 316 Stainless Steel body option available
- IP66 (Intrinsically Safe option)



SS3 Rotary Smart Valve Positioner

Sturdy **flame proof** housing and **smart** performance with innovative and ever-strong coil drive even under harsh working environments



- Flameproof IECEx / ATEX / KC Ex d IIC T6 / IP66
- Wide operating temperature range -22°F ~ +167°F

SS5 Rotary Smart Valve Positioner

Perfect combination with reliable fail freeze function and **smart** performance with innovative durable coil drive



- "Fail Freeze" function helps the valve to stay at the last position in the event of an electrical power supply or pneumatic supply air loss
- Wide operating temperature range -22° F to 176° F (-40°C on request)
- IP66 (Intrinsically Safe option)

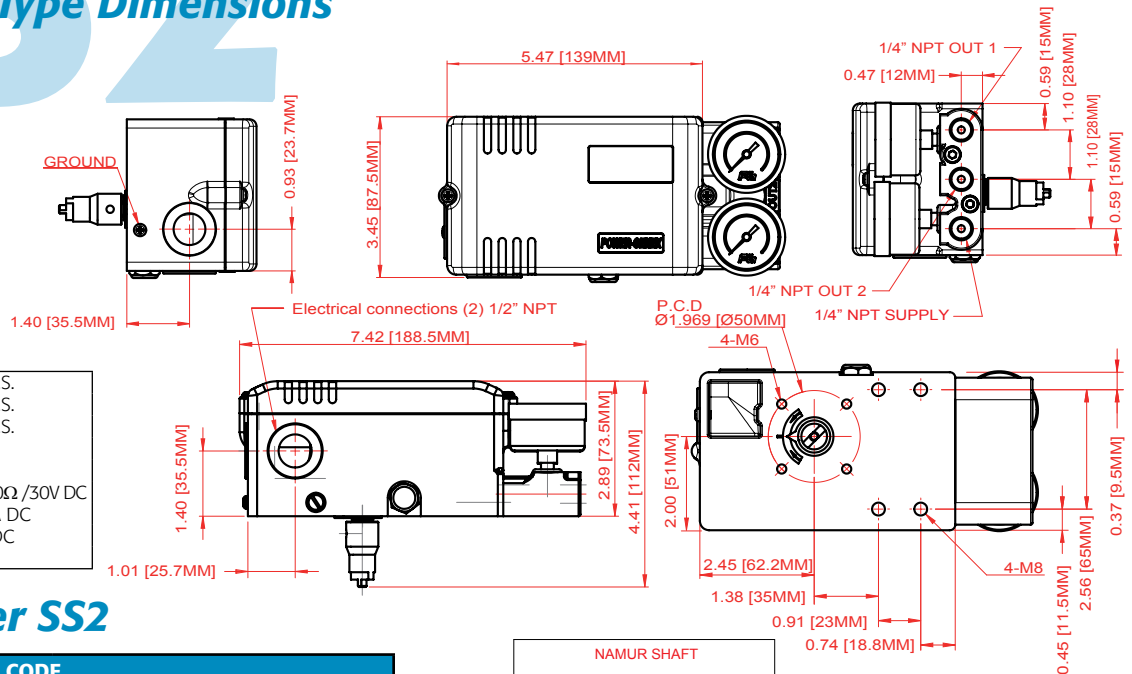


See our website for detailed SS3 & SS5 product information. Call for linear options.

Larger actuators may require volume boosters. Call factory for details.

SS2

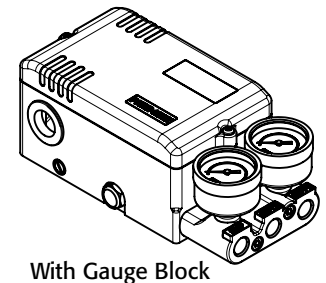
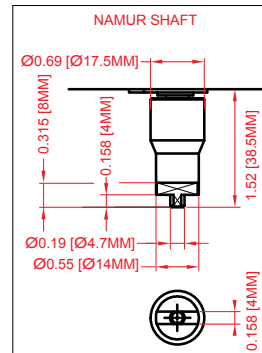
SS2R Rotary Type Dimensions



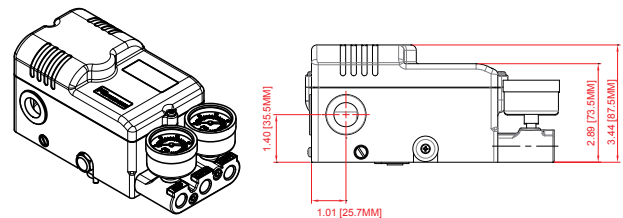
Sensitivity	±0.2% F.S.
Hysteresis	±0.5% F.S.
Linearity	±0.5% F.S.
Protection	IP66
Adjustment	Auto Cal.
Load Resistance	Max 1000Ω /30V DC
Output Signal	4~20mA DC
Supply Voltage	12~3V DC
Input Signal	2 Wire

How To Order SS2

DESCRIPTION	CODE
Actuator Operation	R* Rotary Type
Protection Class	I* Intrinsically safe (IECEx Ex ia IIC T5 / ATEX Eex ia IIC T5)
	K Intrinsically safe (KC Ex ia IIC T5)
	W Weatherproof to IP66
Feedback Lever	N* NAMUR shaft (direct mounting)
Gauge Block	0 Not mounted
	1 6 bar (90 psi)
	2* 10 bar (150 psi)
By-pass	N* None (standard)
	Y Yes (auto/manual screw)
Position Feedback	N None
	O Position transmitter (4~20mA output signal)
	L 2 x alarm limit
	S 2 x micro switch (SPDT)
	M O + L
	Q* O + S
Communication	N* None
	H* Hart
	P Profibus PA
	F Foundation Fieldbus
Connection Threads (pneumatic - electrical)	4* NPT 1/4 - NPT 1/2
Mounting Bracket	N0 None
	R0* VDI/VDE 3845



OPTIONAL: SS2 with 2 x SPDT Micro S/W



Available Models

SS2	Rotary Digital Smart Valve Positioner
SS3	Flame Proof Digital Smart Positioner
SS5	Fail Freeze Digital Smart Positioner

*Denotes the typically stocked units



Example: **SS2R-IN2NQH4R0**

See www.atcontrols.com or call for How to Order SS3 or SS5

PPR SERIES

PPR Pneumatic Positioners



Features

- Available in rotary (PPR) or linear (PPL)
- Precise calibration with simple span and zero adjustments
- Direct or reverse action
- Split range available
- Rugged aluminum enclosure with epoxy coating
- Vibration resistant
- Stainless steel gauges standard
- Various orifices available to increase/decrease flow

NOTE: A Filter Regulator is REQUIRED for reliable service.

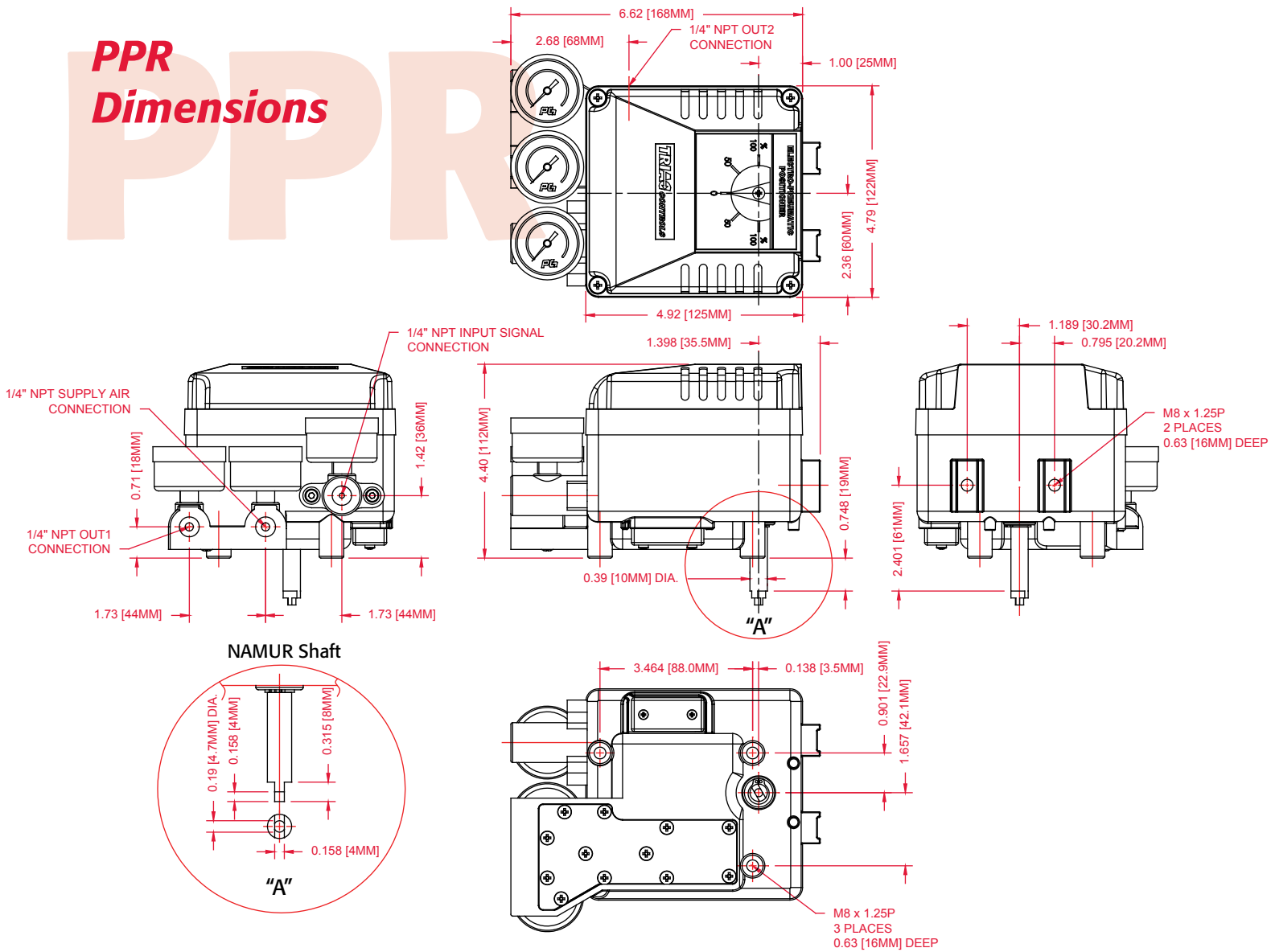
Specifications

Item	Type	PPL		PPR	
		Linear Type (lever feedback)		Rotary Type (cam feedback)	
		Single	Double	Single	Double
Input Signal	3-15 psi (0.2 - 1.0 kgf/cm ²) (NOTE 1)				
Supply Air Pressure	100 psi Max. (7.0 kgf/cm ²)				
Standard Stroke	10 - 80 mm (NOTE 2)		60 - 100° (NOTE 3)		
Air Piping Connection	1/4" NPT				
Ambient Temperature	-4°F - 158°F (-20° - 70°C)				
Pressure Gauge	Stainless Steel				
Output Characteristics	Linear				
Linearity	Within ±1.0% F.S.		Within ±1.5% F.S.		
Sensitivity	Within ±0.1% F.S.		Within ±0.5% F.S.		
Hysteresis	Within ±0.5% F.S.		Within ±1.0% F.S.		
Repeatability	Within ±0.5% F.S.				
Air Consumption	0.18 scfm @ 20 psi				
Flow Capacity	2.83 scfm @ 20 psi				
Material	Aluminum Diecast Body				
Weight	4.63 lbs				

NOTE:

- 1) Split range is available.
- 2) Feedback lever for stroke 80 - 150mm is available (PPL)
- 3) Stroke can be adjusted to 0° - 60° or 0° - 100° (PPL)

PPR Dimensions



Call for PPL (Linear) dimensional info.

Available Models

PPR-1200	TRIAC® 3-15psi Pneumatic Positioner
PPR-1200 LS	TRIAC® 3-15psi Pneumatic Positioner with (2) spdt limit switches

EPR
SERIES

EPR Electro-Pneumatic Positioners



Features

- Available in rotary (EPR) or linear (EPL)
- Precise calibration with simple span and zero adjustments
- Direct or reverse action
- Split range available
- Rugged aluminum enclosure with epoxy coating
- Vibration resistant
- Stainless steel gauges standard
- Various orifices available to increase/decrease flow
- Certified for ATEX, EEx md IIB T5 (05 ATEX 1076X) by NEMKO in conformance with EN 50014:1997 + A1:1999 + A2:1999, EN 50018:2000, EN 50028:1987

NOTE: A Filter Regulator is REQUIRED for reliable service.

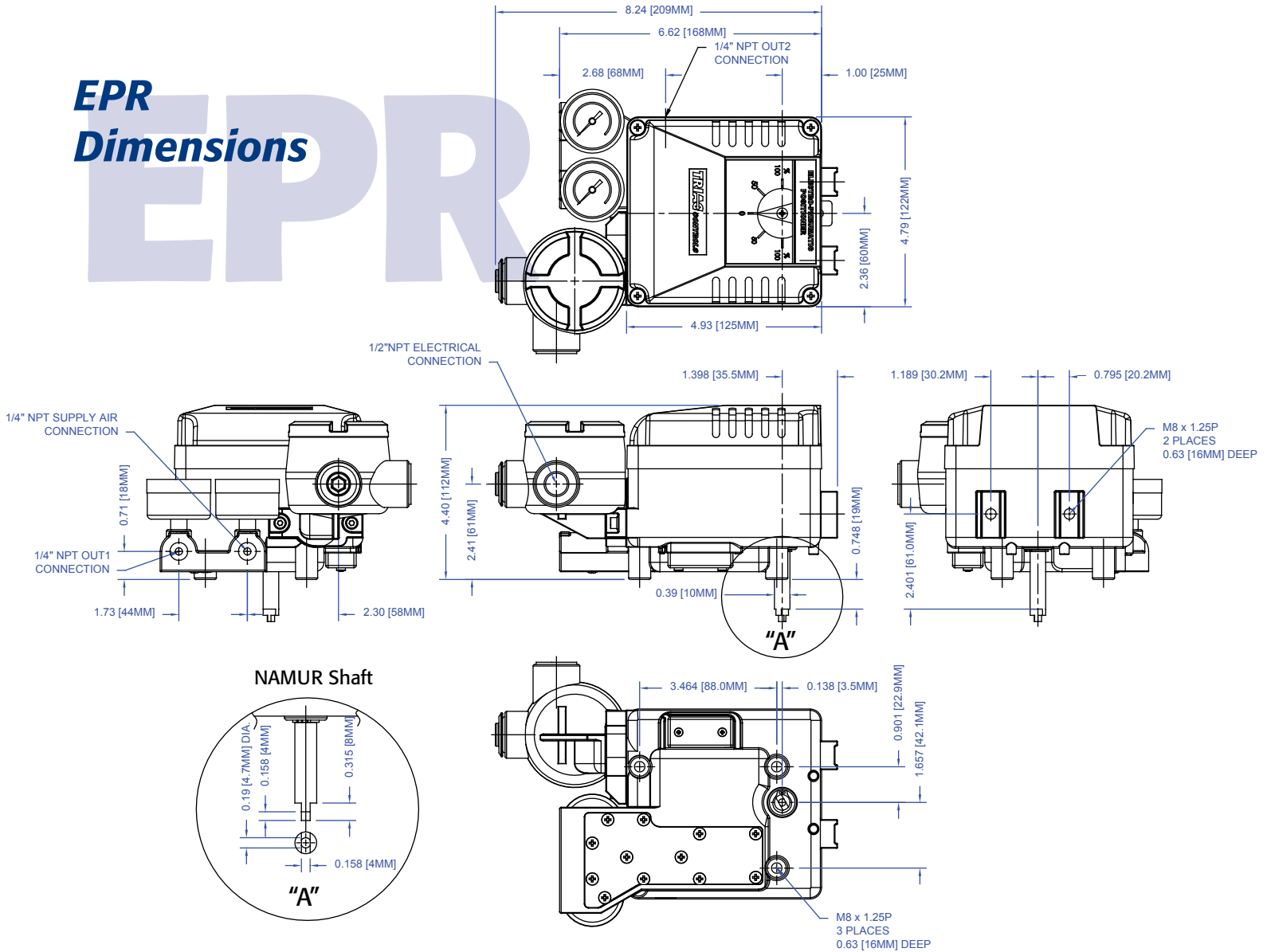
Specifications

Item	Type	EPL		EPR	
		Linear Type (lever feedback)		Rotary Type (cam feedback)	
		Single	Double	Single	Double
Input Signal	4...20 mA DC (NOTE 1)				
Input Resistance	235±15Ω				
Supply Air Pressure	100 psi Max. (7.0 kgf/cm ²)				
Standard Stroke	10 - 80 mm (NOTE 2)		60 - 100° (NOTE 3)		
Air Piping Connection	1/4" NPT				
Conduit Connection	1/2" NPT				
Explosion-Proof Classification	EEx md IIB T5, IP66 (standard) Exia II BT6 (optional)				
Ambient Temperature	-4°F - 158°F (-20° - 70°C)				
Pressure Gauge	Stainless Steel				
Output Characteristics	Linear				
Linearity	Within ±1.0% F.S.		Within ±1.5% F.S.		
Sensitivity	Within ±0.1% F.S.		Within ±0.5% F.S.		
Hysteresis	Within ±0.5% F.S.		Within ±1.0% F.S.		
Repeatability	Within ±0.5% F.S.				
Air Consumption	0.18 scfm @ 20 psi				
Flow Capacity	2.83 scfm @ 20 psi				
Material	Aluminum Diecast Body				
Weight	6.5 lbs. with a terminal box				

NOTE:

- 1) Split range is available.
- 2) Feedback lever for stroke 80-150mm is available (EPL)
- 3) Stroke can be adjusted to 0°-60° or 0°-100° (EPL)

EPR Dimensions



Call for EPL (Linear) dimensional info.

Available Models

EPR-1000	TRIAC® 4-20mA dc Electro-Pneumatic Positioner, IP66
EPR-1000 LS	TRIAC® 4-20mA dc Electro-Pneumatic Positioner with (2) spdt Limit Switches, IP66
EPR-1000 TR	TRIAC® 4-20mA dc Electro-Pneumatic Positioner with 4-20mA Transmitter, IP66
EPR-1000 LSTR	TRIAC® 4-20mA dc Electro-Pneumatic Positioner with (2) spdt Limit Switches and 4-20mA Transmitter, IP66

Other Positioner Options

Siemens



Series PS-2 (Call for complete part numbers) Digital Electro-Pneumatic with Hart Protocol

Profibus PA
Foundation Fieldbus
FM & CSA Approved

- Explosion Proof
 - Class I, Division 1, Groups A, B, C & D
- ATEX Approved
- II 2 G Ex d IIC, T4, T5, T6 Gb

-
- Series 760** FM & CSA Approved
(not pictured)
- Explosion Proof
 - Class I, Division 2
 - Group A, B, C & D

ABB



ABB TZID (Call for complete part numbers) Digital Electro-Pneumatic with Hart Protocol

Profibus PA
Foundation Fieldbus
FM & CSA Approved

- Explosion Proof
 - Class I, Division 1, Groups A, B, C & D
- ATEX Approved
- Ex d IIC, T4, T5, T6

YT Series



FM Class I, Div 1 Grps C & D
(20°C to 60°C)

YT-1000R-FM



FM Class I, Div 1 Grps A, B, C & D T5/T6
(-40°C to 80°C)

YT-3400 FM Approved Explosion Proof Electro-Pneumatic

Other Control Accessories

- Single and Dual Lockup Valves
- Filter Regulators (required with all positioners)
- Flow Controls and Speed Controls
- Volume Boosters

 **A-T Controls, Inc.**