



*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



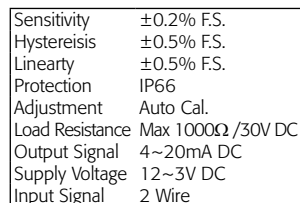
- "Fail Freeze" function helps the valve to stay at the last position in the event of an electrical power supply or pneumatic supply air loss
- Wide operating temperature range -22° F to 176° F (-40°C on request)
- IP66 (Intrinsically Safe option)



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

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

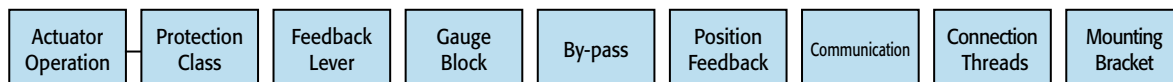
SS2R Rotary Type Dimensions



How To Order SS2

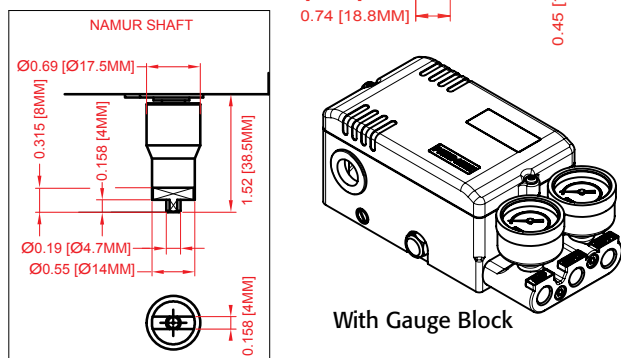
DESCRIPTION	CODE	
Actuator Operation	R*	Rotary Type
Protection Class	I*	Intrinsically safe (IECEx Ex ia IIC T5 / ATEX Eex ia IIC T5)
	K	Intrinsically safe (KC Ex ia IIC T5)
	W	Weatherproof to IP66
Feedback Lever	N*	NAMUR shaft (direct mounting)
Gauge Block	0	Not mounted
	1	6 bar (90 psi)
	2*	10 bar (150 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	NO	None
	RO*	VDI/VDE 3845

*Denotes the typically stocked units

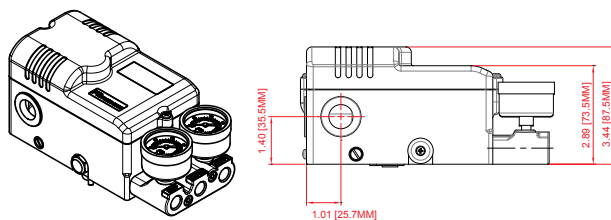


Example: SS2R-IN2NQH4R0

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



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

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.

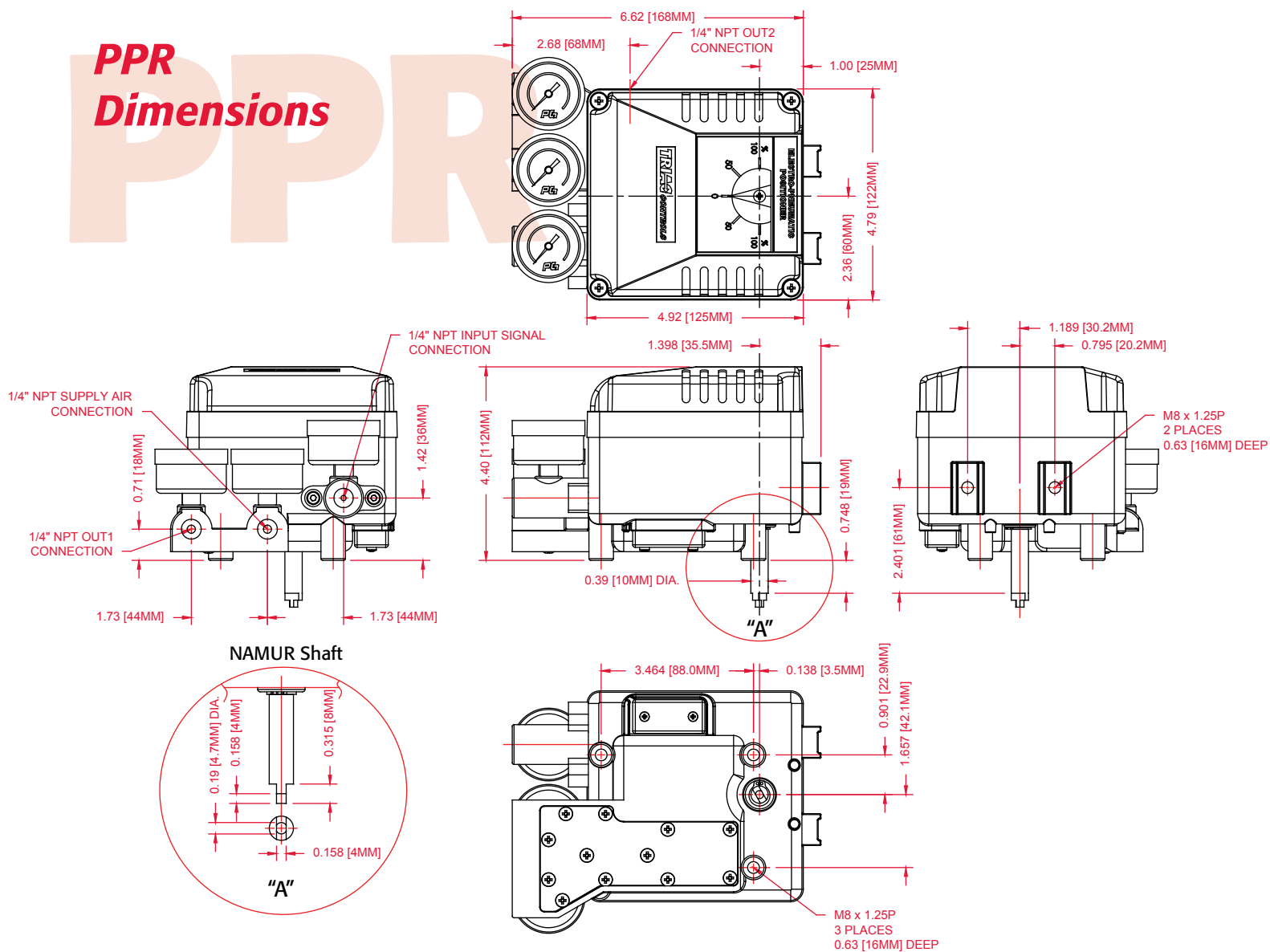
Specifications

Type Item	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.

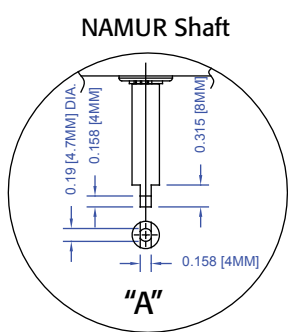
Specifications

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/cm²)			
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 ±0.5% F.S.		Within ±2.0% 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® 4-20mAdc Electro-Pneumatic Positioner, IP66
EPR-1000 LS	TRIAC® 4-20mAdc Electro-Pneumatic Positioner with (2) spdt Limit Switches, IP66
EPR-1000 TR	TRIAC® 4-20mAdc Electro-Pneumatic Positioner with 4-20mA Transmitter, IP66
EPR-1000 LSTR	TRIAC® 4-20mAdc 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.