



Registered ISO 9001:2008



PRODUCTS CATALOG (2016)

- Electro Pneumatic Positioner
- Volume Booster
- Lock Up Valve

Solutions For Control Valve Accessories!

Tissin is a professional brand of control valve accessories.

We provide excellent quality products through experience with long-term field use and manufacturing. It is designed to be user-friendly and extremely durable with various optional built-in accessories (Position Transmitters, Limit Switches etc).

Company Overview

Company Name : Tissin Co.,Ltd.

Address : 202-801, No 397, Seokcheon-ro, Ojeong-gu, Bucheon-Si, Gyeonggi-do, Korea

Established : May.2015

President : An Sun Ho

Main Products : Valve Positioner, Volume Booster, Lock Up Valve, Control Valve Accessories.

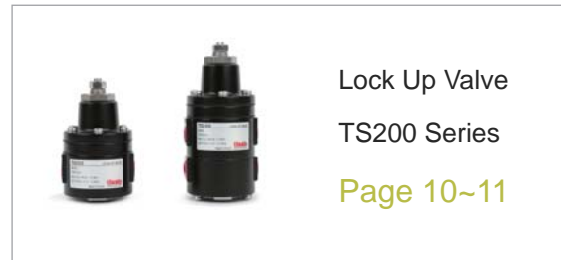
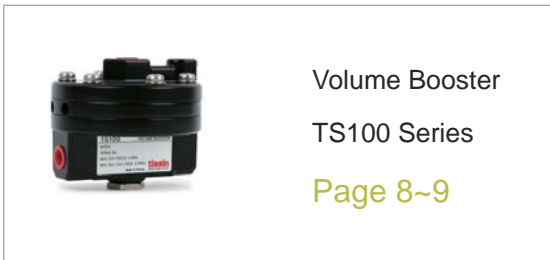
Homepage : www.tissin.co.kr

History

- 2016-07 TS600 Certified KC certification
- 2016-02 TS600 Certified NEPSI certification
- 2016-01 Produced the Lock Up Valve TS200 series
- 2016-01 Produced the Volume Booster TS100 series
- 2015-12 TS600 certified CE
- 2015-09 TS600 certified IP66
- 2015-09 Produced the E-P Positioner TS600 series
- 2015-04 Established Tissin Co.,Ltd.



Contents



Certification



ISO9001:2008



CE



KC
Ex dmb IIB T5/T6



KC
Ex dmb IIC T5/T6



NEPSI
Ex dmb IIC T5/T6



NEPSI
Ex ia IIC T5/T6



IP66



EMC

Electro Pneumatic Positioner TS600L (Linear Type)

Discription

TS600 electro-pneumatic positioner controls the valve stroke in response to an input signal of 4-20mA from the control panel, DCS, or calibrator.



Features



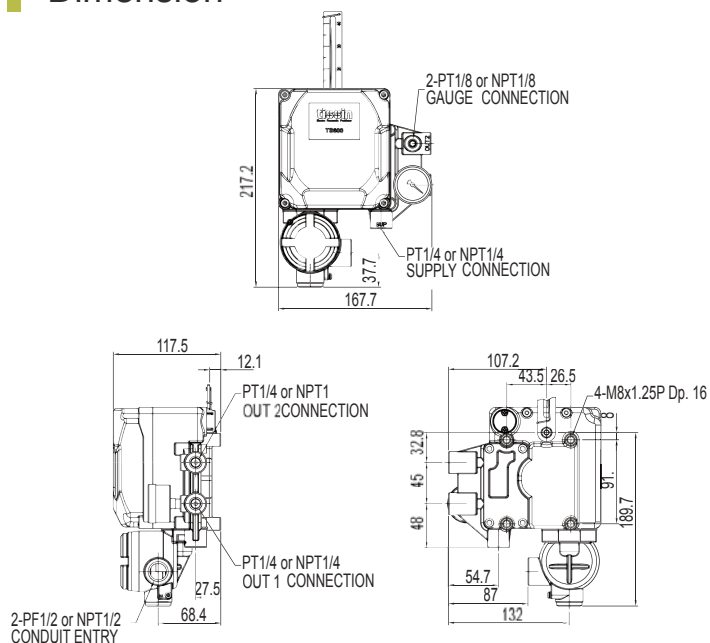
- + Fast response time, durability, and excellent stability
- + Simple zero and span adjustment
- + IP 66 enclosure
- + Strong to vibrations and No resonance between 5 - 200Hz
- + By-pass valve (A/M switch) installed
- + Air connection part is designed for detachability and it can be changed PT/NPT tapping threads in the field easily

Electro Pneumatic Positioner TS600L (Linear Type)

Specifications

Item Type	TS600L(Single)	TS600L(Double)
Input Signal	4~20mA DC	
Impedance	250 ±15Ω	
Supply Pressure	0.14~0.7MPa	
Stroke	10~100mm	
Air Connection	PT(NPT)1/4	
Gauge Connection	PT(NPT)1/8	
Conduit	G(PF)1/2 or NPT1/2	
Explosion Proof	Non-Explosion Ex dmb IIB T5/T6, Ex dmb IIC T5/T6 Ex ia IIC T6	
Enclosure	IP66	
Ambient Temp	Operating Temp	-20°C~70°C (Standard) -40°C~70°C(Low Temp) -20°C~120°C(High Temp)
	Explosion Temp	-40°C~60°C(T5) / -40°C~40°C(T6)
Linearity	±1.0% F.S	±2.0% F.S
Sensitivity	±0.2% F.S	±0.5% F.S
Hysteresis	±1.0% F.S	
Repeatability	±0.5% F.S	
Air Consumption	Below 2.5LPM (Sup=0.14MPa)	
Flow Capacity	Over 80LPM (Sup=0.14MPa)	
Material	Aluminum Die Casting	
Weight	2.8kg	

Dimension



Product Number

Model	TS600	L				
Acting Type	Linear Type	L				
Explosion Proof Type	Non-Explosion	N				
	Ex dmb IIB T5/T6	B				
	Ex dmb IIC T5/T6	C				
	Ex ia IIC T5/T6	A				
Connection	Conduit Entry	Air Connection				
	G1/2	PT1/4	1			
	G1/2	NPT1/4	2			
	NPT1/2	NPT1/4	3			
Lever Type	10 ~ 40mm					1
	40 ~ 70mm					2
	70 ~ 100mm					3
	100~ 150mm					4
Ambient Temp	-20°C~70°C					S
	-20°C~120°C*					H
	-40°C~70°C					L
Option	None (Standard type)					0
	4~20mA Feedback signal					1

* With high temp positioner must be Non-Explosion type.

Smart Position Transmitter (Option)



Electro Pneumatic Positioner TS600R (Rotary Type)

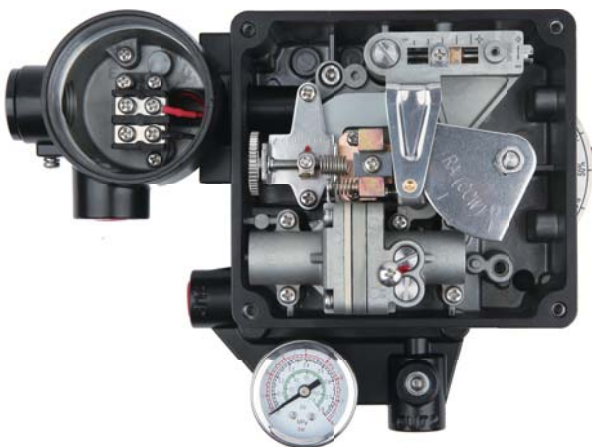
Discription

TS600 electro-pneumatic positioner controls the valve stroke in response to an input signal of 4-20mA from the control panel, DCS, or calibrator.



Features

- + Fast response time, durability, and excellent stability
- + Simple zero and span adjustment
- + IP 66 enclosure
- + Strong to vibrations and No resonance between 5 - 200Hz
- + By-pass valve (A/M switch) installed
- + Air connection part is designed for detachability and it can be changed PT/NPT tapping threads in the field easily

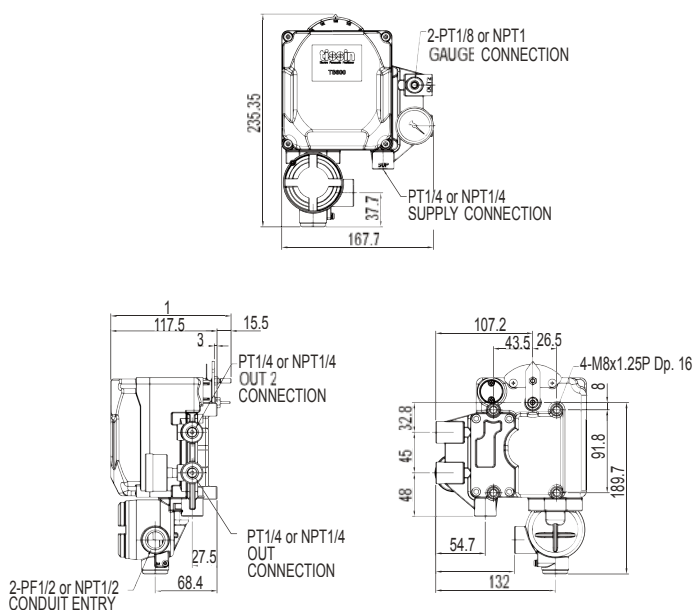


Electro Pneumatic Positioner TS600R (Rotary Type)

Specifications

Item Type	TS600R(Single)	TS600R(Double)
Input Signal	4~20mA DC	
Impedance	250 ±15Ω	
Supply Pressure	0.14~0.7MPa	
Stroke	0~90°	
Air Connection	PT(NPT)1/4	
Gauge Connection	PT(NPT)1/8	
Conduit	G(PF)1/2 or NPT1/2	
Explosion Proof	Non-Explosion Ex dmb IIB T5/T6, Ex dmb IIC T5/T6 Ex ia IIC T6	
Enclosure	IP66	
Ambient Temp	Operating Temp	-20°C~70°C (Standard) -40°C~70°C(Low Temp) -20°C~120°C(High Temp)
	Explosion Temp	-40°C~60°C(T5) / -40°C~40°C(T6)
Linearity	±1.0% F.S	±2.0% F.S
Sensitivity	±0.2% F.S	±0.5% F.S
Hysteresis	±1.0% F.S	
Repeatability	±0.5% F.S	
Air Consumption	Below 2.5LPM (Sup=0.14MPa)	
Flow Capacity	Over 80LPM (Sup=0.14MPa)	
Material	Aluminum Die Casting	
Weight	2.8kg	

Dimension

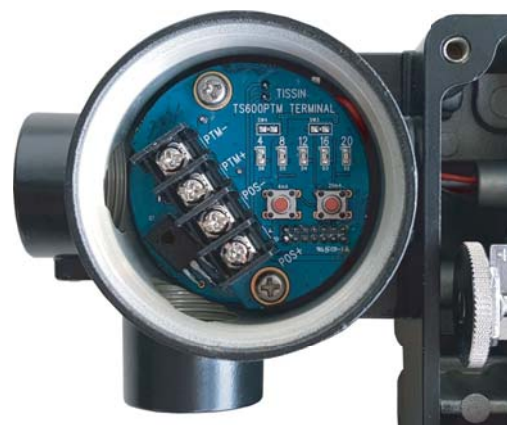


Product Number

Model	TS600	R				
Acting Type	Rotary Type	R				
Explosion Proof Type	Non-Explosion	N				
	Ex dmb IIB T5/T6	B				
	Ex dmb IIC T5/T6	C				
	Ex ia IIC T5/T6	A				
Connection	Conduit Entry	Air Connection				
	G1/2	PT1/4	1			
	G1/2	NPT1/4	2			
	NPT1/2	NPT1/4	3			
Lever Type	M6 x 34L					1
	NAMUR					5
Ambient Temp	-20°C~70°C					S
	-20°C~120°C*					H
	-40°C~70°C					L
Option	None (Standard type)					0
	4~20mA Feedback signal					1

* With high temp positioner must be Non-Explosion type.

Smart Position Transmitter (Option)



Volume Booster TS100 Series

Description

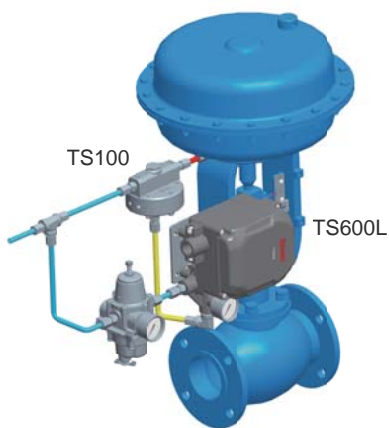
Volume Booster TS100 is one-to-one Signal to output Supply Air, when used with a positioner/actuator, it is a control device to increase the stroking speed of control valves.



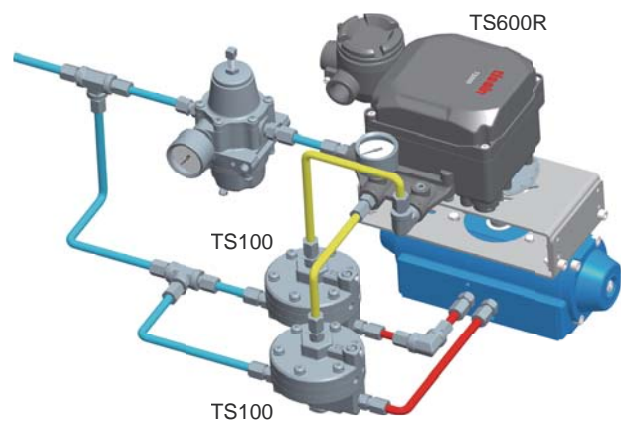
Features

- + Precise and fast response
- + Soft seats provide tight shut off
- + Adjustable Sensitivity
- + Options available (High and Low temperature)
- + Small size and light weight

Installation



Single Actuator



Double Actuator

Volume Booster TS100 Series

Specifications

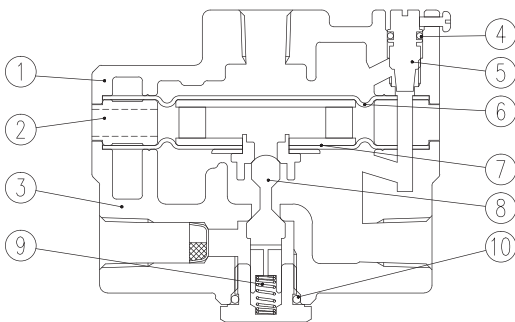
Model	TS100	
Max Supply Pressure	1MPa	
Signal and Output Pressure	0.4~0.7MPa	
Signal to Output Ratio	1:1	
Linearity	1%	
Flow Capacity (CV)	Exhaust	1.3
	Output	1.2
Signal Port	NPT(PT)1/4	
Supply / Output Port	NPT(PT)1/4	
Ambient Temp	-20°C ~70°C (Standard Type)	
Material	Aluminum Die Casting	
Weight	0.55kg	

Product Number

Model	TS100		
Air Connection	NPT PT	N P	
Ambient Temp	-20°C~70°C -20°C~120°C -40°C~70°C		S H L

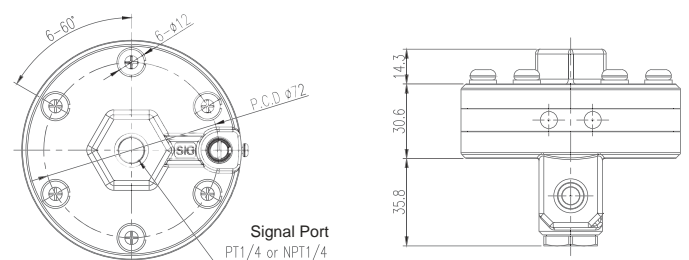
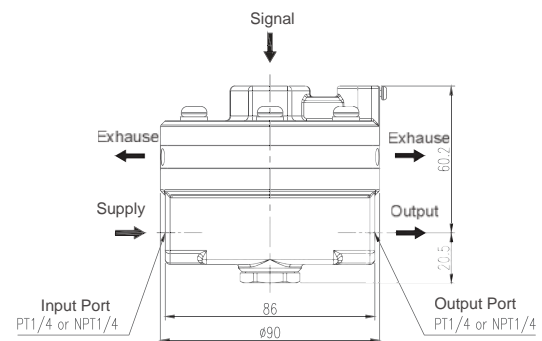


Materials of Construction



No.	Title	Material	No.	Title	Material
1	Cover	ALDC12	6	Diaphragm Upper	NBR
2	Ring Exhaust	ALDC12	7	Ass'y Diaphragm	AL/NBR
3	Body	ALDC12	8	Poppet	STS
4	O-Ring	NBR	9	Spring Seat	STS
5	Adjust Screw	STS	10	O-Ring	NBR

Dimension



Lock Up Valve TS200 Series

Description

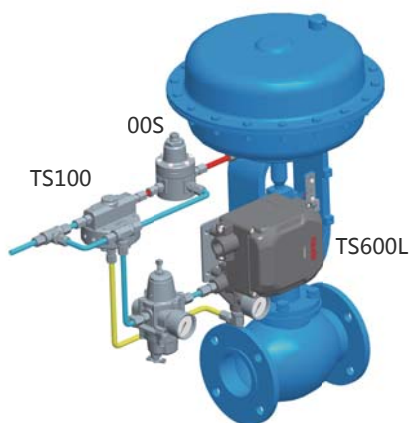
The pneumatic lock up valve TS200 Series shuts off the signal pressure line either when the air supply falls below an adjusted value or upon complete air supply failure. This causes the actuator to remain in its last position.



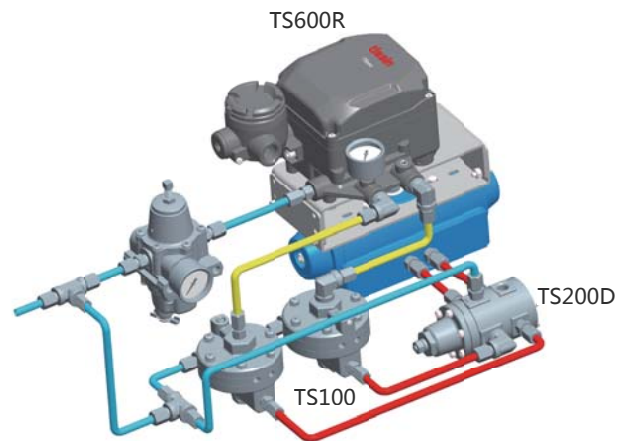
Features

- + Quick Response and high precision
- + Easy set-up of lock up air pressure
- + Small size and light weight
- + Options available (High & Low Temperature)

Installation



Single Actuator



Double Actuator

Lock Up Valve TS200 Series

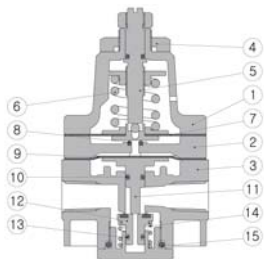
Specifications

Model	TS200S	TS200D
Signal Pressure	0.14~0.7MPa	
Max Supply Pressure	1MPa	
Max Lock Up Pressure	0.7MPa	
Differential Pressure	Below 0.01MPa	
Flow Capacity(CV)	0.9	
Signal Connection	NPT(PT)1/4	
In/Out Connection	NPT(PT)1/4	
Operating Temp	-20°C~70°C (Standard Type)	
Material	Alumium Die Casting	
Weight	0.45kg	0.63kg

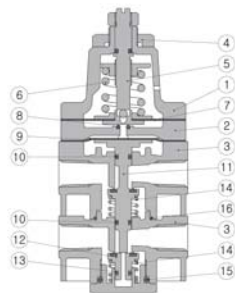
Product Number

Model	TS200			
Acting Type	Single	S		
	Double	D		
Air Connection	NPT		N	
	PT		P	
Ambient Temp	-20°C~70°C			S
	-20°C~120°C			H
	-40°C~70°C			L

Material of Construction

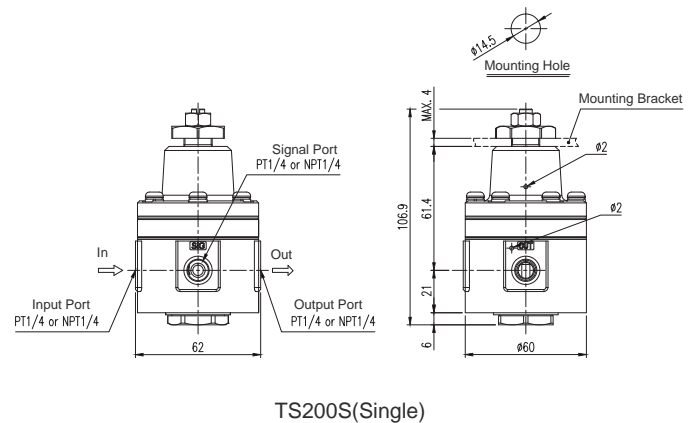


TS200S(Single)

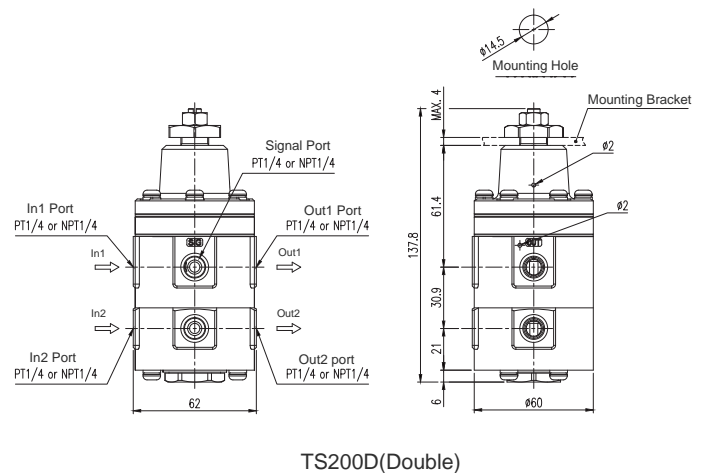


TS200D(Double)

No.	Title	Material	No.	Title	Material
1	Cover	ALDC12	9	Diaphragm Lower	NBR
2	Ring	ALDC12	10	O-Ring	NBR
3	Body	ALDC12	11	Shaft Push	C3604BD
4	Mounting Nut	STS	12	Seat	STS
5	Shaft Adjust	STS	13	O-Ring	NBR
6	Spring Adjust	HSW3	14	Spring Seat	STS
7	Ass'y Diaphragm	STS/NBR	15	O-Ring	NBR
8	O-Ring	NBR	16	O-Ring	NBR



TS200S(Single)



TS200D(Double)