



Electro-Pneumatic Positioner TS600 Series

- Fast response time and excellent stability
- Simple zero and span adjustment
- IP 66 enclosure
- Strong anti vibration performance
- By-pass valve (A/M switch) installed

Electro-Pneumatic Positioner TS600L (Linear type)

1

Description

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

Certified



CE

IP₆₆

Features

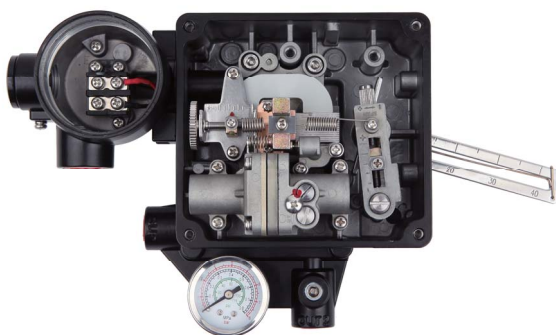


- + Fast response time and excellent stability
- + Simple zero and span adjustment
- + IP 66 enclosure
- + Strong anti vibration performance
- + By-pass valve (A/M switch) installed
- + Air connection part is designed for detachability and it can be changed PT/NPT tapping threads in the field easily
- + Integrated Flameproof and Intrinsically safe protection (ATEX&IECEX version)

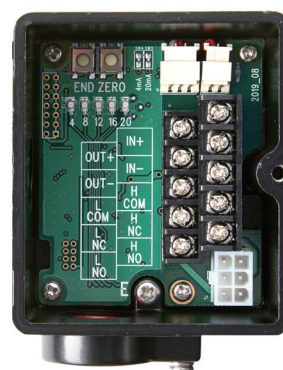
Installation example



Internal structure



Position transmitter PCB



Specifications

Model	TS600L(Single)	TS600L(Double)
Input signal	4~20mA DC	
Impedance	250 ±15Ω	
Supply pressure	0.14~0.7MPa	
Stroke	10~150mm	
Air connection	PT1/4, NPT1/4, G1/4	
Gauge connection	PT1/8, NPT1/8	
Conduit	G(PF)1/2, NPT1/2, M20	
Explosion proof type	Ex db mb IIC T6/T5 Gb Ex ia IIC T6/T5 Gb	
Intrinsically safe parameters	Ui=28V, Ii=101mA, Pi=707mV	
Enclosure	IP66 (EN60529)	
Ambient Temp.	-20°C~70°C (Standard type)	
Explosion proof	-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 cast	
Weight	2.8kg	

Product code

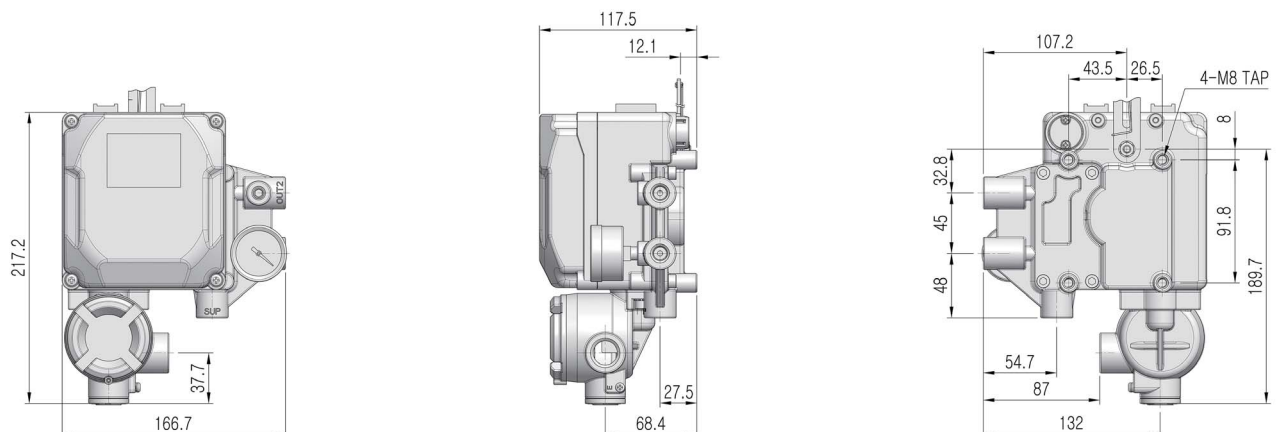
Model	TS600	L					
Acting type	Linear type	L					
Explosion proof type	Non-explosion proof	N					
	Ex dmb IIB T5/T6	B					
	Ex dmb IIC T5/T6	C					
	Ex ia IIC T5/T6	A					
	ATEX&IECEX version	X					
	Ex db mb IIB/IIC T5/T6 Gb						
	Ex ia IIC T5/T6 Gb						
Connection	Conduit entry	Air connection					
	G1/2	PT1/4	1				
	G1/2	NPT1/4	2				
	NPT1/2	NPT1/4	3				
	M20	NPT1/4	4				
	M20	G1/4	5				
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	
	-50°C~70°C(For Russia EAC)					U	
Option	None (Standard type)						0
	With 4~20mA Position transmitter (Positioner is RA type) *						1
	With 4~20mA Position transmitter (Positioner is DA type) *						2

Notes:

1. * Must be Non-explosion proof type.

2. Conduit entry for ATEX/IECEX/CCC/NEPSI should be "NPT1/2" or "M20".

Dimension [Unit:mm]



Description

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

Certified



Features



- + Fast response time and excellent stability
- + Simple zero and span adjustment
- + IP 66 enclosure
- + Strong anti vibration performance
- + 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
- + Integrated Flameproof and Intrinsically safe protection (ATEX&IECEx version)

Options



Option code No.1
TS600R with Position transmitter
(Non-explosion proof type)



Option code No.2 or No.4
TS600R with Limit switch
(Non-explosion proof type)



Option code No.3 or No.5
TS600R with Limit switch
(Explosion proof type)



Option code No.6 or No.7
With external Limit switch
mounting device



For KCS certificate type



Position transmitter PCB



Specifications

Model	TS600R(Single)	TS600R(Double)
Input signal	4~20mA DC	
Impedance	250 \pm 15 Ω	
Supply pressure	0.14~0.7MPa	
Stroke	0~90°	
Air connection	PT1/4, NPT1/4, G1/4	
Gauge connection	PT1/8, NPT1/8	
Conduit	G(PF)1/2, NPT1/2, M20	
Explosion proof type	Ex db mb IIC T6/T5 Gb Ex ia IIC T6/T5 Gb	
Intrinsically safe parameters	Ui=28V, Ii=101mA, Pi=707mV	
Enclosure	IP66 (EN60529)	
Ambient Temp.	Operating Temp.	-20°C~70°C (Standard type)
	Explosion proof	-40°C~60°C(T5) / -40°C~40°C(T6)
Linearity	\pm 1.0% F.S.	\pm 2.0% F.S.
Sensitivity	\pm 0.2% F.S.	\pm 0.5% F.S.
Hysteresis	\pm 1.0% F.S.	
Repeatability	\pm 0.5% F.S.	
Air consumption	Below 2.5LPM (Sup=0.14MPa)	
Flow capacity	Over 80LPM (Sup=0.14MPa)	
Material	Aluminum die cast	
Weight	2.8kg	

Product code

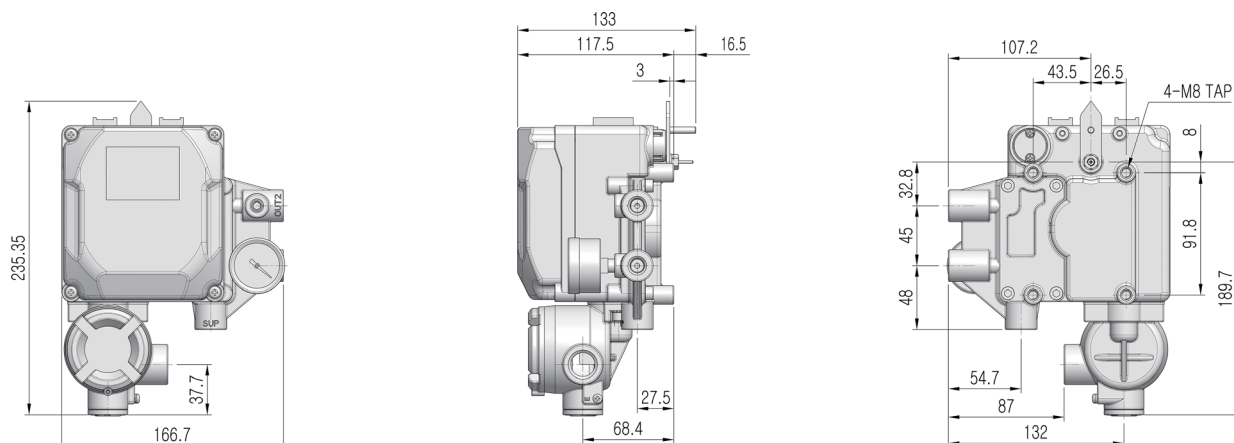
Model	TS600	R					
Acting type	Rotary type	R					
Explosion proof type	Non-explosion proof	N					
	Ex dmb IIB T5/T6	B					
	Ex dmb IIC T5/T6	C					
	Ex ia IIC T5/T6	A					
	ATEX&IECEX version Ex db mb IIC T6/T5 Gb Ex ia IIC T6/T5 Gb	X					
Connection	Conduit entry	Air connection					
	G1/2	PT1/4	1				
	G1/2	NPT1/4	2				
	NPT1/2	NPT1/4	3				
	M20	NPT1/4	4				
	M20	G1/4	5				
Lever type	M6 x 39L			1			
	NAMUR			5			
Ambient Temp.	-20°C~70°C				S		
	-20°C~120°C *				H		
	-40°C~70°C				L		
	-50°C~70°C(For Russia EAC)				U		
Option	None					0	
	With Position transmitter(4~20mA)					1	
	Internal Limit switch*					2	
	External Limit switch(Explosion proof type)					3	
	Internal Position transmitter and Limit switch*					4	
	External Position transmitter and Limit switch (Explosion proof type)					5	
	With external Limit switch mounting device					6	
	With Position transmitter and external Limit switch mounting device*					7	

Notes:

1. * Must be Non-explosion proof type.

2. Conduit entry for ATEX/IECEX/CCC/NEPSI should be "NPT1/2" or "M20".

Dimension [Unit:mm]





Solutions for control valve system

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