



## Smart Valve Positioner TS700 Series (Fail Freeze type)

- Fail freeze function
- Zero air consumption when standby signal
- Prevents circuit board corrosion by external air exhaust design
- Built in air filter(5 micron)
- PST & diagnostic function

# Smart Valve Positioner TS700 Series (Fail Freeze Type)

## Description

TS700 Smart Valve Positioner controls the valve stroke in response to an input signal of 4-20mA from the control panel, DCS, or calibrator.

## Certified



## Features



- + Fail freeze function
- + Zero air consumption when standby signal
- + Prevents circuit board corrosion by external air exhaust design
- + Quick and easy auto calibration
- + Built in air filter(5 micron)
- + HART communication (HART 7)
- + Limit switch (Mechanical or Proximity type)
- + Partial stroke test (PST) function
- + Self diagnostic

## TS720 (Remote type)

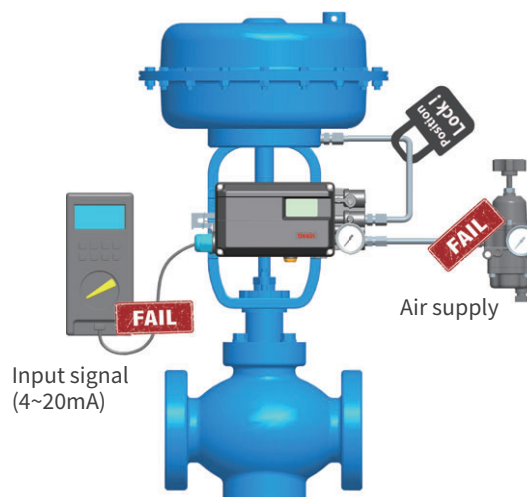
TS720 Body

TS720 Sensor



## Fail freeze function diagram

When the 4~20mA input signal or air supply signal is fail, cut off the air pressure to the actuator to hold the current valve position



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## Specifications

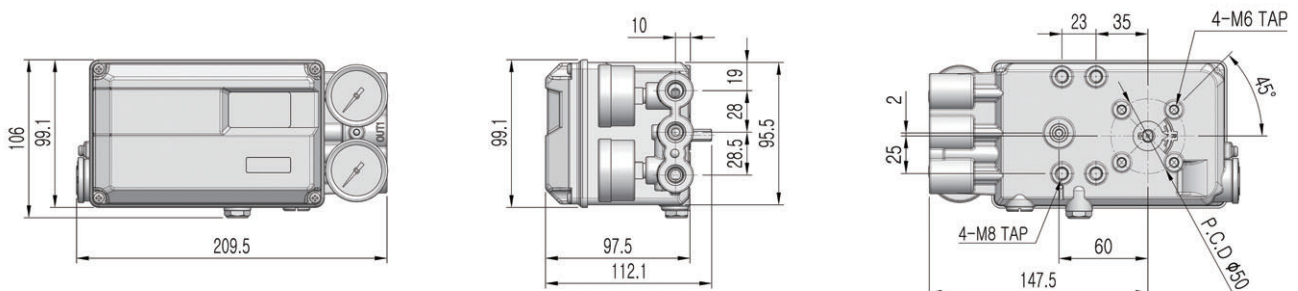
Model		TS700
Input signal		4~20mA DC
Impedance		500Ω at 20mA DC
Supply pressure		0.14~0.8MPa
Stroke		10~150mm (Linear), 0~90° (Rotary)
Air connection		PT1/4, NPT1/4, G1/4
Gauge connection		PT1/8, NPT1/8
Conduit		G1/2, NPT1/2, M20
Explosion proof type		Ex ia IIC T5/T6 Gb Ex ia IIIC T100°C/85°C Db
Enclosure		IP66 (EN60529)
Ambient Temp.	Standard type	-25°C~80°C
	Low temp type	-40°C~80°C
	Explosion proof	-40°C~60°C(T5) / -40°C~40°C(T6)
	LCD operating	-30°C~85°C
Linearity		±0.5% F.S.
Sensitivity		±0.2% F.S.
Hysteresis		±0.5% F.S.
Repeatability		±0.3% F.S.
Air consumption		Below 0.01LPM (Sup=0.14MPa)
Required air quality		Class 4 (ISO 8573-1)
Flow capacity		Over 75LPM (Sup=0.14MPa)
Material		Aluminum die cast
Weight		1.5kg
HART version*		HART 7
Position transmitter*	Connection type	2 Wire
	Supply voltage	10~30V DC
Limit switch rating*	Mechanical type	AC 125V, 3A DC30V, 2A
	Proximity type	DC8.2V 8.2A

\* Options

## Product code

Model	TS700								
Standard type	TS700								
Remote type	TS720								
Motion type	Linear	L							
	Rotary	R							
Acting type	Single acting	S							
	Double acting	D							
Explosion proof type	Non-explosion proof	N							
	ATEX&IECEX	A							
	CCC&NEPSI	C							
	KCS	K							
	EAC	E							
Connection type	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 (Linear type)	10 ~ 70mm		1						
	70 ~ 150mm		2						
	For tubeless actuator (30mm)		3						
	For tubeless actuator (70mm)		4						
Lever (Rotary type)	M6 x 39L		1						
	NAMUR		5						
Ambient Temp.	-25°C~80°C						S		
	-40°C~80°C						L		
Communication	None							0	
	Position transmitter(4~20mA)							1	
	HART communication							2	
	HART with Position transmitter(4~20mA)							3	
Limit switch (For TS700)	None								0
	Mechanical type								M
	Proximity type								P
	With dome cover (Without Limit switch)								D
Cable length (For TS720)	5m								1
	10m								2
	User define (Less than 20 meters)								x

## Dimension [Unit:mm]





Solutions for control valve system

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