



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)

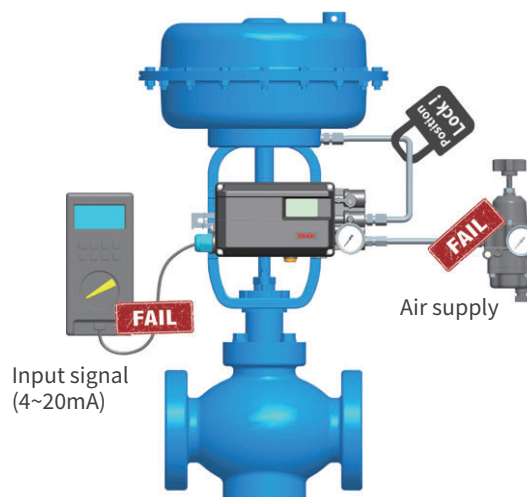
TS720 Body

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



Smart Valve Positioner TS700 Series (Fail Freeze Type)

Specifications

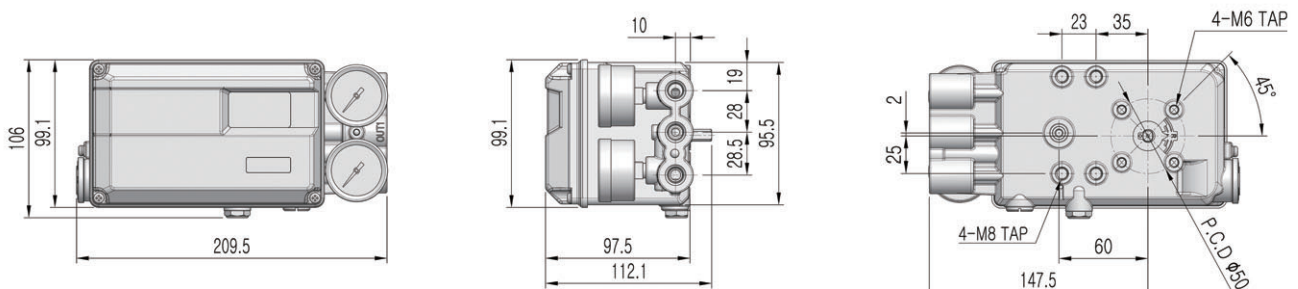
Model		TS700
Input signal		4~20mA DC
Impedance		500Ω at 20mA DC
Supply pressure		0.14~0.8MPa
Stroke		10~150mm (Linear), 0~90° (Rotary)
Air connection		PT1/4, NPT1/4, G1/4
Gauge connection		PT1/8, NPT1/8
Conduit		G1/2, NPT1/2, M20
Explosion proof type		Ex ia IIC T5/T6 Gb Ex ia IIIC T100°C/85°C Db
Enclosure		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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