

### 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

In progress

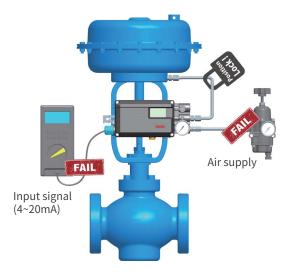
#### Features



- + 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

#### 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



#### Built in air filter

Protect the internal Piezo valve by the secondary air filter and the filter can be easily replaced by the user



# Smart Valve Positioner TS700 Series (Fail Freeze Type)

#### Specifications

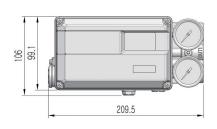
Model		TS700	TS705					
Input signal		4~20mA DC						
Impedance		500Ω at 20mA DC						
Supply pressure		0.14~0.7MPa						
Stroke		10~150mm (Linear), 0~90° (Rotary)						
Air connection		PT1/4, NPT1/4, G1/4						
Gauge connection		PT1/8, NPT1/8						
Conduit		G1/2, NPT1/2, M20						
Explosion proof type		In progress						
Enclosure		IP66 (EN60529)						
	Standard type	-25°C~80°C						
Ambient	Low temp type	-40°C~80°C						
Temp.	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	Stainless steel 316					
Weight		1.5kg	4.0kg					
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						
* Ontions								

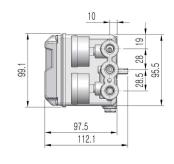
<sup>\*</sup> Options

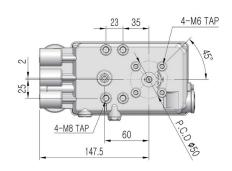
#### **■** Product code

Model	TS700									
Stantard type Remote type Stainless steel 31	TS700 TS720 6 TS705									
Motion type	Linear Rotary	L R								
Acting type	Single acting Double acting		S D							
Explosion proof type	Non-explosion ATEX&IECEX CCC&NEPSI KCS	proo	f	N A C K						
Connection	Conduit entry	Conduit entry Air connection								
type	G1/2 G1/2 NPT1/2 M20	PT1, NPT NPT NPT	1/4 1/4 1/4		1 2 3 4					
Lever (Linear type)	M20     G1/4     5       10 ~ 80mm     1       70 ~ 150mm     2       Adapter type (30mm)     3       Adapter type (70mm)     4									
Lever (Rotary type)	M6 x 39L NAMUR					1 5				
Ambient Temp.	-25°C~80°C -40°C~80°C						S L			
Communication	None 4~20mA Position transmitter HART HART with 4~20mA Position transmitter									
Limit switch (For TS700) &TS705)	None Mechanical type Proximity type With dome cover (Without Limit switch)								0 M P D	
Cable length (For TS720)	5m 10m User define (Le	ss tha	an 20	0 me	eters	5)			1 2 x	
Fail Position	Fail freeze type Fail safe type	9								F S

#### Dimension [Unit:mm]









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Version: PC-700EN\_01/2022