



## Smart Valve Positioner TS800 Series

- Quick and easy auto calibration
- Flapper / Nozzle type Torque motor
- By-pass valve (A/M switch) installed
- PST & Alarm & Diagnostic function
- Advanced diagnostics

# Smart Valve Positioner TS800/TS805 Series

## ■ Description

TS800 Smart Valve Positioner controls the valve stroke in response to an input signal of 4-20mA from the control panel, DCS, or calibrator.

## ■ Certified



CE IP<sub>66</sub> HART SIL2



## ■ Features



TS800 Standard type



TS805 Stainless steel 316 type



TS800 with Limit switch type

- ✚ Quick and easy auto calibration
- ✚ Flapper / Nozzle type Torque motor
- ✚ By-pass valve (A/M switch) installed
- ✚ HART communication (HART 7)
- ✚ Limit switch (Mechanical or Proximity type)
- ✚ Partial stroke test (PST) function
- ✚ Alarm function
- ✚ Advanced diagnostics (Option)
- ✚ Copper minimized (Option)

## ■ TS820 (Remote type)

TS820 Body



TS820 Sensor

## ■ Interface structure



1. LCD	6. Position transmitter (Option)
2. Button (4)	- 2 Wire
3. Alarm modules	- 4~20mA DC feedback signal
4. Input signal (4~20mA DC)	7. Limit switch (Option)
5. Ground	- Mechanical type
	- Proximity type

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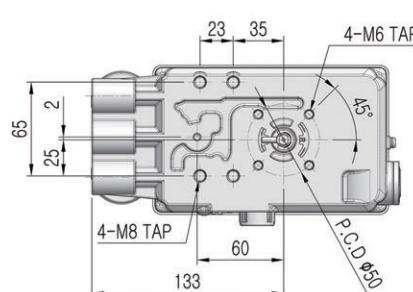
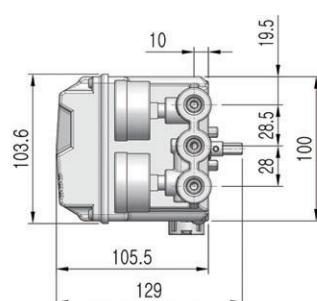
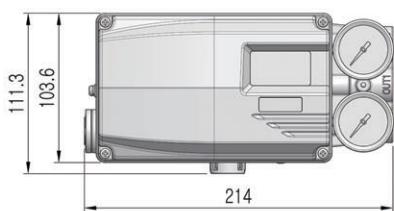
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## ■ Specifications

Model	TS800/TS820	TS805
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, PF(G)1/4	
Gauge connection	PT1/8, NPT1/8	
Conduit	PF(G)1/2, NPT1/2, M20	
Explosion proof type	ATEX, IECEx	Ex ia IIC T5/T6 Ga Ex ia IIIC T112°C/92°C Da
	CCC, NEPSI, KCS	Ex ia IIC T5/T6 Gb Ex ia IIIC T85°C/100°C Db
	EAC	1 Ex ia IIC T5/T6 Ga
	CSA/US	See certificate
Enclosure	EN60529	IP66
	NEMA	Type 4      Type 4X
Surge protection	Max.16KV	
Ambient Temp.	Standard type	-30°C~85°C
	Low temp type	-40°C~85°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 2.3LPM (Sup=0.14MPa)	
Required air quality	Class 3 (ISO 8573-1)	
Flow capacity	Over 100LPM (Sup=0.14MPa)	
Material	Aluminum die cast	Stainless steel 316
Weight	2.6kg	4.2kg
HART version*	HART 7	
Position transmitter*	Connection type	2 Wire
	Supply voltage	9~28V DC
Limit switch rating*	Mechanical type	AC 125V, 3A DC30V, 2A
	Proximity type	DC8.2V 8.2A

\* Options

## ■ Dimension [Unit:mm]



## ■ Product code

Model	TS8						
Option	Standard type 0 Remote type 2 Non-Contact 6 Sensor(NCS) type*						
Body material	Aluminum 0 Stainless steel 316 5 Aluminum (Copper minimized) 1						
Acting type	Linear type L Rotary type R						
Explosion proof type	Non-explosion proof N ATEX, IECEx, KCS, CCC, EAC A CSA/US S						
Connection type*	Conduit entry PF(G)1/2 PF(G)1/2 NPT1/2 M20 M20	Air connection PT1/4 NPT1/4 NPT1/4 NPT1/4 PF(G)1/4	1 2 3 4 5				
Lever (Linear type)	10 ~ 70mm 70 ~ 150mm For tubeless actuator (30mm) For tubeless actuator (70mm)		1 2 3 4				
Lever (Rotary type)	M6 x 39L NAMUR		1 5				
Ambient Temp.	-30°C~85°C -40°C~85°C -60°C~85°C (For EAC)		S L U				
Communication	None 0 Position transmitter(4~20mA) 1 HART communication 2 HART with Position transmitter(4~20mA) 3 HART with Advanced diagnostics 4 HART with Advanced diagnostics and Position transmitter(4~20mA) 5						
Limit switch*	None Mechanical type Proximity type(P&F) With dome cover (Without Limit switch)		M P D				
Cable length (For TS820)	5m 10m User define (Less than 20 meters)		1 2 X				

\*Connection type for CSA is only available with No.3~4.

\*Ambient Temp. for CSA is only available with L type.

\*Limit switch options are not available with Non-contact sensor type.



Solutions for control valve system

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## Tissin Co.,Ltd. (주)티씬

16-5, Hagunsandan 5-ro da-gil, Yangchon-eup,

Gimpo-si, Korea 10049

Tel : +82-31-997-0311, Fax : +82-31-997-4573

[www.tissin.co.kr](http://www.tissin.co.kr)



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