



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.

Features



TS800 Standard type



TS805 Stainless steel 316 type



TS800 with Limit switch type

Certified



- + 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



- | | |
|---|--|
| <ol style="list-style-type: none"> 1. LCD 2. Button (4) 3. Alarm modules 4. Input signal (4~20mA DC) 5. Ground | <ol style="list-style-type: none"> 6. Position transmitter (Option) <ul style="list-style-type: none"> - 2 Wire - 4~20mA DC feedback signal 7. Limit switch (Option) <ul style="list-style-type: none"> - Mechanical type - Proximity type |
|---|--|



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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, G1/4	
Gauge connection	PT1/8, NPT1/8	
Conduit	G1/2, 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
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	10~30V DC
Limit switch rating*	Mechanical type	AC 125V, 3A DC30V, 2A
	Proximity type	DC8.2V 8.2A

* Options

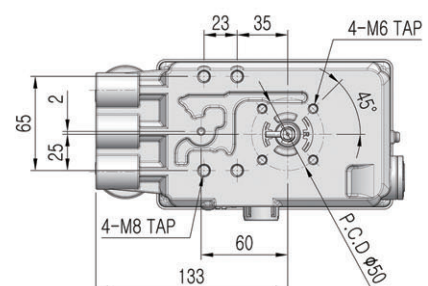
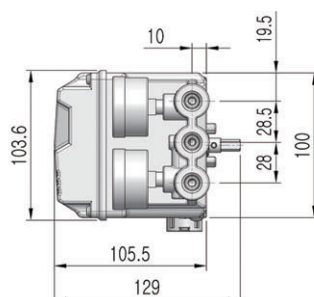
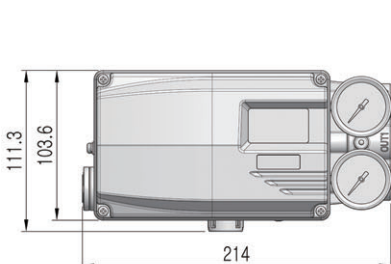
Product code

Model	TS8																					
Option	Standard type	0																				
	Remote type	2																				
Body material	Aluminum	0																				
	Stainless steel 316	5																				
	Aluminum	1																				
	(Copper minimized)																					
Acting type	Linear (Potentiometer type)	L																				
	Rotary (Potentiometer type)	R																				
	Linear (Non-Contact Sensor)	S																				
	Rotary (Non-Contact Sensor)	Q																				
Explosion proof type	Non-explosion proof	N																				
	ATEX, IECEx, KCS, CCC, EAC	A																				
	CSA/US	S																				
Connection type*	<u>Conduit entry</u>		<u>Air connection</u>																			
	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.	-30°C~85°C																				S	
	-40°C~85°C																				L	
	-60°C~85°C (For EAC)																				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																					0
	Mechanical type																					M
	Proximity type(P&F)																					P
	With dome cover (Without Limit switch)																					D
Cable length (For TS820)	5m																					1
	10m																					2
	User define (Less than 20 meters)																					x

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

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

Dimension [Unit:mm]



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Solutions for control valve system

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