

Smart Valve Positioner TS800/TS805 Series

05

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



Features



TS800 Standard type



TS805 Stainless steel 316 type



TS800 with Limit switch type

- + Quick and easy auto calibration
- + Large flow pilot valve (Over than 100LPM)
- + 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
- + Self diagnostic

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 |

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, CCC, KC	Ex ia IIC T5/T6 Gb Ex ia IIIC T100°C/85°C Db	
	EAC	1 Ex ia IIC T5/T6 Ga	
	CSA/US	Class I, Div2, Groups A,B,C,D; T5...T6 Class I, Zone 1 AEx ib IIC T5...T6 Gb Class II, Div2, Groups E,F,G; T100°C...T85°C Db Zone 21 AEx ib IIIC T100°C...T85°C Db	
Enclosure	EN60529	IP66	
	NEMA	Type 4	Type4X
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	TS800								
Standard type	TS800								
Remote type	TS820								
STS 316 type	TS805								
Acting type	Linear type	L							
	Rotary type	R							
Explosion proof type	Non-explosion proof	N							
	ATEX&IECEX	A							
	CCC&NEPSI KCS, EAC								
	CSA/US	S							
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 ~ 80mm		1						
	70 ~ 150mm		2						
	Adapter type (30mm)		3						
	Adapter type (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 Russia EAC)						U		
Communication	None							0	
	4~20mA Position transmitter							1	
	HART							2	
	HART with 4~20mA Position transmitter							3	
Limit switch (For TS800) & TS805)	None								0
	Mechanical type								M
	Proximity type								P
	With dome cover (Without Limit switch)								D
Cable length (For TS820)	5m								1
	10m								2
	User define (Less than 20 meters)								x

Dimension [Unit:mm]

