



Smart Valve Positioner TS900 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 TS900/TS905 Series (Flame proof type)

Description

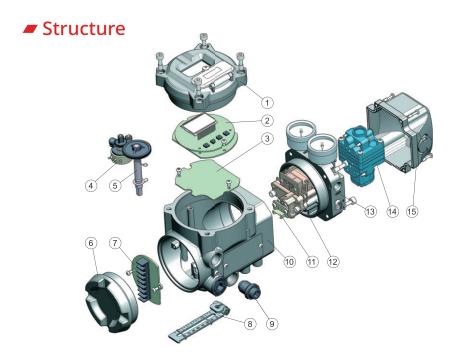
TS900 Smart Valve Positioner controls the valve stroke in response to an input signal of 4-20mA from the control panel, DCS, or calibrator.

Features





- + 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)
- + Partial stroke test (PST) function
- + Alarm function (Option)
- + Advanced diagnostics (Option)



Body cover
Main PCB
PCB guide
Potentiometer
Main shaft
Junction box cover
Terminal PCB
Feedback lever
Plug drain
Base body
Pressure sensor(Option)
Torque motor
Air connection block
Pilot valve
Pilot valve cover

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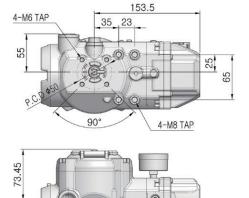
Specifications

| Model | | TS900 | TS905 | | | | | | |
|--------------------------|-----------------|-----------------------------------|---------------------|--|--|--|--|--|--|
| 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 | | NPT1/4, G1/4 | | | | | | | |
| Gauge connection | | NPT1/8 | | | | | | | |
| Conduit | | NPT1/2, M20 | | | | | | | |
| Explosion proof type | | II 2G Ex db IIC T5/T6 Gb | | | | | | | |
| | | II 2D Ex tb IIIC T85°C/T100 °C Db | | | | | | | |
| Enclosure | | IP66 (EN60529) | | | | | | | |
| | Standard type | -30°C~80°C | | | | | | | |
| Ambient | Low temp type | -40°C~80°C | | | | | | | |
| Temp. | Explosion proof | -40°C~80°C(T5) / -40°C~70°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 | | 3.5kg | 7.0kg | | | | | | |
| HART version* | | HART 7 | | | | | | | |
| Position transmitter* | Connection type | 2 Wire | | | | | | | |
| | Supply voltage | 9~30V DC | | | | | | | |
| Alarm switch* | | 9~30V DC | | | | | | | |
| * Options | | | | | | | | | |

Product code

| Model | | TS9 | | | | | | | | | |
|-------------------------|--|-------|--------|------------|-----|------------------|-------------|----------------------------|---|--|--|
| Option | Standard Natural g | | 0 9 | | | | | | | | |
| Body material | Aluminum 0 Stainless steel 316 5 | | | | | | | | | | |
| Acting type | Linear (Potentiometer type) L Rotary (Potentiometer type) R Linear (Non-Contact Sensor) S Rotary (Non-Contact Sensor) Q | | | | | | | | | | |
| Explosion proof type | ATEX & IE KCS CCC, EAC CSA/US | CEx | | | | A K C S | | | | | |
| Connection type | Conduit NPT1/2 M20 M20 | entry | NPT | 1/4 1/4 | nec | tion | 3 4 5 | | | | |
| Lever (Linear type) | 10 ~ 70mm170 ~ 150mm2For tubeless actuator (30mm)3For tubeless actuator (70mm)4 | | | | | | | | | | |
| Lever (Rotary type) | M6 x 39L NAMUR | | | | | | | 1 5 | | | |
| Ambient Temp. | -30°C~80°C S -40°C~80°C L -60°C~80°C (For EAC) U | | | | | | | | | | |
| Communication | None Position transmitter(4~20mA) HART communication HART with Position transmitter(4~20mA) HART with Advanced diagnostics HART with Advanced diagnostics and Position transmitter(4~20mA) | | | | | | | 0 1 2 3 4 5 | | | |
| Alarm switch | None Included | | | | | | | | (| | |

* Natural gas type is only available with CSA and EAC.



87.5

74.5

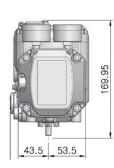
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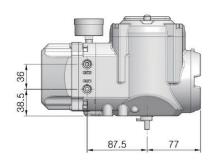
Dimension [Unit:mm]

46

27

40 37





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