

Smart Positioners YT-2500 / YT-2501 / YT2550

Piezo technology with communications

Design features

- **Fail Freeze and Fail Safe function.** Enables the valve maintain the last position (Fail Freeze) or move to a pre-determined position (Fail Safe) on the loss of electrical power supply or the pneumatic supply air.
- **Auto calibration.** Simple menu structure with options to auto calibrate all parameters or zero and end points only.
- **LCD display.** Alphanumeric digital display for process values and calibration.
- **Low air consumption level.** Almost zero air leakage.
- **Feedback signal.** Analogue feedback signals with 4 to 20 mA, mechanical and proximity switch options.
- **PD control.** Pre-calibrated and user configurable variables via front panel pushbutton menu.
- **HART® communication.** Allows commands, position feedback and diagnostics to be sent digitally over the current loop.
- **Front panel pushbuttons for configuration.** 4 robust and positive acting pushbuttons for field configuration.



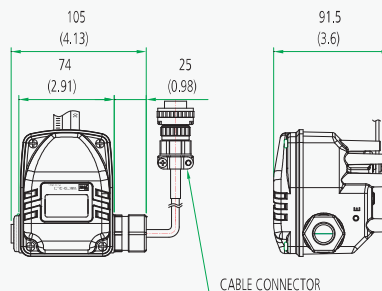
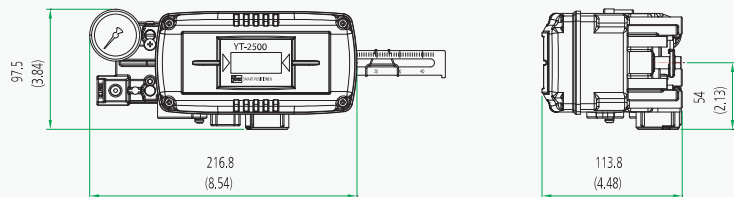
YT-2500 Aluminium Enclosure



YT-2550 Stainless Steel Enclosure



YT-2501 Remote Mounting Option



Dimensions: mm (Inches ")

Smart Positioners YT-2500 / YT-2501 / YT2550

Item Type	YT-2500	YT-2550	YT-2501	
Input Signal	4 to 20 mA DC			
Supply Pressure	0.14 to 0.7 MPa (1.4 to 7 bar)			
Stroke	Linear Type	10 to 150 mm		
	Rotary Type	0 to 90°		
Impedance	Max. 500 Ω @ 20 mA DC			
Air Connection	PT(NPT,G)1/4	NPT1/4	PT(NPT,G)1/4	
Gauge Connection	PT(NPT)1/8	NPT1/8	PT(NPT)1/8	
Conduit	G(PF,NPT)1/2, M20	G(PF)1/2	G(PF,NPT)1/2, M20	
Operating Temp.	Standard Type	-30 to 80 °C (-22 to 176 °F)		
	LCD	-30 to 85 °C (-22 to 185 °F)		
	Explosion Temp.	-40 to 60 °C (T5) -40 to 40 °C (T6)		
	Remote Sensor	-	-40 to 120 °C (-40 to 248 °F)	
Linearity	±0.5% F.S.			
Hysteresis	±0.5% F.S.			
Sensitivity	±0.2% F.S.			
Repeatability	±0.3% F.S.			
Air	Fail Freeze	0.01 LPM (sup = 0.14 MPa)		
Consumption	Fail Safe	6 LPM (sup = 0.14 MPa)		
Flow	Fail Freeze	60 LPM (sup = 0.14 MPa)		
Capacity	Fail Safe	40 LPM (sup = 0.14 MPa)		
Output Characteristics	Linear, EQ%, Quick Open user set (18 Point)			
Material	Aluminium Diecasting	Stainless Steel 316	Aluminium Diecasting	
Ingress Protection	IP66			
Explosion Protection Type	ATEX, IECEx Ex ia IIC T5/T6 Gb, Ex iaD IIC T85°C/T100°C IP6X			
	NEPSI Ex ia IIC T5/T6		-	
	KCs Ex ia IIC T5/T6, EX iaD IIC T100°C/T85°C			
Communication (Option)	HART (ver.5)			
L/S Rating	Mechanical Type (Omron)	AC 125 V, 3 A DC 30 V, 2 A	-	
	Proximity Type (P&F)	DC 8.2 V 8.2 mA	-	
Weight	Body	1.5 kg (3.3 lb)	2.9 kg (6.4 lb)	1.5 kg (3.3 lb)
	Linear Remote sensor	-	-	0.6 kg (1.3 lb)
	Rotary Remote sensor	-	-	0.9 kg (2.0 lb)

Product Code

YT-2501 - L - S - N - 2 - 4 - 2 - 3 - S - (1)

Model

YT-2500 = Aluminium housing
YT-2550 = Stainless steel house
YT-2501 = Aluminium housing with remote sensor

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection

YT-2500, YT-2550
N = Non-Explosion
I = ATEX, IECEx, NEPSI, KCs

YT2501
N = Non-Explosion
I = ATEX, IECEx, KCs

Lever Type

Linear
1 = 10 to 40 mm
2 = 20 to 70 mm
3 = 50 to 100 mm
4 = 100 to 150 mm

Rotary
1 = M6 x 34L
2 = M6 x 63L
3 = M8 x 34L
4 = M8 x 63L
5 = NAMUR (YT-2501)

Conduit & Air Connection

1 = G1/2 - PT1/4
2 = G1/2 - NPT1/4
3 = G1/2 - G1/4
4 = M20 - NPT1/4
5 = NPT1/2 - NPT1/4

Communications

0 = NONE
2 = HART protocol communication

Output Options

0 = NONE
1 = 4 to 20 mA feedback
2 = Limit switch - Mechanical Type (YT-2500 and YT-2550 only)
3 = Limit switch - Proximity Type (YT-2500 and YT-2550 only)
4 = 4 to 20 mA feedback + Limit switch - Mechanical Type (YT-2500 and YT-2550 only)
5 = 4 to 20 mA feedback + Limit switch - Proximity Type (YT-2500 and YT-2550 only)

Fail Option

F = Fail Freeze
S = Fail Safe

Cable Length (YT-2501 only)

Option for YT-2501 only. Standard cable length is 5 m.
1 = 5 m
2 = 10 m
3 = 15 m
4 = 20 m