

Smart Positioners YT-3400 / YT-3450

Torque motor technology with communications

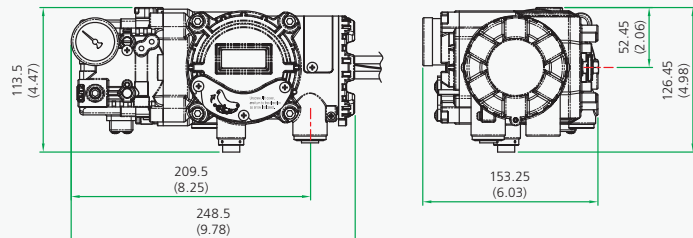
Design features

- **Explosionproof / Flameproof Housing.** Global certification for Zone 1 and Division 1 installations.
- **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.
- **Partial Stroke Test (PST).** Fully adjustable Partial Stroke Test, with single or double set positions, all functionality can be performed and selected locally, through push buttons, or remotely with communication protocol.
- **Feedback signal.** Analogue feedback signals with 4 to 20 mA, mechanical and transistor switch options.

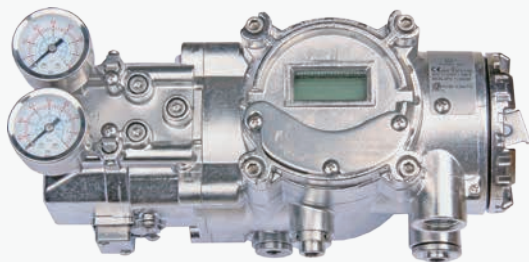
- **Auto / Manual switch.** Enables closed-loop automatic valve position control or manual positioning via the Open / Close buttons. The manual mode is useful for troubleshooting, calibration, system testing or as a manual bypass.
- **PID control.** Pre-calibrated and user configurable variables via 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-3400 Aluminium Enclosure



YT-3450 STS316 Enclosure



Dimensions: mm (Inches ")

Smart Positioners YT-3400 / YT-3450

Item Type	YT-3400	YT-3450
Input Signal	4 - 20 mA DC	
Supply Pressure	0.14 - 0.7 MPa (1.4 - 7 bar)	
Stroke	Linear Type	10 - 150 mm
	Rotary Type	0 - 90°
Impedance	Max. 450 Ω @ 20 mA DC	
Air Connection	PT(NPT,G)1/4	NPT1/4
Gauge Connection	PT(NPT)1/8	NPT1/8
Conduit	G(PF,NPT)1/2, M20	G(PF)1/2
Operating Temp.	Standard Type	-30 - 85 °C (-22 - 185 °F)
	Low Temp. Type	-40 - 85 °C (-40 - 185 °F)
	LCD Operating Temp.	-30 - 85 °C (-22 - 185 °F)
	Explosion Temp.	-40 - 80 °C (T5) / -40 - 70 °C (T6)
Linearity	±0.5% F.S.	
Hysteresis	±0.5% F.S.	
Sensitivity	±0.2% F.S.	
Repeatability	±0.3% F.S.	
Air Consumption	Below 2 LPM (sup = 0.14 MPa)	
Flow Capacity	70 LPM (sup = 0.14 MPa)	
Output Characteristics	Linear, EQ%, Quick Open user set (18 Point)	
Material	Aluminium Diecasting	Stainless Steel 316
Ingress Protection	IP66	
Explosion Protection Type	ATEX, IECEx Ex db IIC T5/T6, Ex tb IIIC T85°C/T100°C	
	NEPSI Ex db IIC T5/T6, DIP A21 TA, T5/T6	
	KCs Ex d IIC T5/T6 IP66	
	CSA Ex db IIC T5 or T6 Class I, Zone 1, AEx db IIC T5 or T6, Class II, Division 1, Groups E, F and G; Ex tb IIC T85°C/T100°C AEx tb IIIC T85°C/T100°C	
	FM XP/II/ABCD/T6 Ta= -40°C to +70°C, T5 Ta= -40°C to +80°C I/1/AEx db/IIC/T6 Ta= -40°C to +70°C, T5 Ta= -40°C to +80°C DIP/II, III/1/EF/G/T6 Ta= -40°C to +70°C, T5 Ta= -40°C to +80°C Z1/AEx tb/IIIC/T85°C Ta= -40°C to +70°C, T100°C Ta= -40°C to +80°C; IP66	
Communication (Option)	HART (ver.7)	
Weight	3.4 kg (7.5 lb)	7.0 kg (15.4 lb)

Product Code

YT-3400 - L - S - C - 2 - 4 - 2 - 3 - S

Model

YT-3400 = Aluminium housing
YT-3450 = Stainless steel housing

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection

C = ATEX, IECEx, NEPSI, KCs
E = EAC
A = CSA, FM

Lever Type

Linear	Rotary
1 = 10-40 mm	1 = M6 x 34L
2 = 20-70 mm	2 = M6 x 63L
3 = 50-100 mm	3 = M8 x 34L
4 = 100-150 mm	4 = M8 x 63L
	5 = NAMUR

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

Communication

0 = NONE
2 = HART protocol communication

Output Options

0 = NONE
1 = 4 - 20 mA feedback
2 = Limit switch
3 = 4 - 20 mA feedback + Limit switch

Operating Temp.

S = -30 to 85°C
L = -40 to 85°C