

Valve Positioner Features Summary



Type	Top Mounted	P/P	E/P		Smart		
Model	TMP-3000	YT-1200	YT-1000	YT-1050	YT-2500	YT-2550	
Page	8	9	10	10	20	20	
Certification	Explosion proof	-	-	✓	✓	-	-
	Intrinsically safe	-	-	✓	-	✓	✓
	ATEX/IECEX	-	-	✓	✓	✓	✓
	FM/CSA	-	-	✓	-	-	-
	KCs	-	-	✓	✓	✓	✓
	EAC	-	-	✓	✓	✓	✓
	NEPSI	-	-	✓	-	✓	-
	TIIS	-	-	✓	-	-	-
	TS	-	-	✓	-	-	-
	EMC	✓	-	✓	-	✓	-
	SIL Certified	-	-	-	-	-	-
Hardware	Technology	Solenoid	Bellows	Torque Motor	Torque Motor	Piezo	Piezo
	Local Buttons	✓	-	-	-	✓	✓
	LCD Display	✓	-	-	-	✓	✓
	Single / Double	✓	✓	✓	✓	✓	✓
	Linear / Rotary	Linear Only	✓	✓	✓	✓	✓
	Feedback	NCS	Spring Return	Spring Return	Spring Return	Potentiometer	Potentiometer
	Fail-safe	✓	✓	✓	✓	✓	✓
	Fail-freeze	✓	-	-	-	✓	✓
	Natural Gas capability	-	-	-	-	-	-
	IP Rating	IP67	IP66	IP66	IP66	IP66	IP66
NEMA rating	-	-	NEMA 4X	-	-	-	
Enclosure Material	PPS	Aluminium	Aluminium	STS316	Aluminium	STS316	
Diagnostics	Mounting Error	-	-	-	-	✓	✓
	Supply Air Check	-	-	-	-	✓	✓
	Range Error	-	-	-	-	✓	✓
	Partial Stroke Test	-	-	-	-	-	-
Feedback Option	Analogue 4 - 20 mA	-	✓ ¹	✓	-	✓	✓
	Mechanical switches	-	✓ ¹	✓ ¹	-	✓	✓
	Proximity sensors	-	✓ ¹	✓ ¹	-	✓	✓
	Transistor switches (soft. type)	-	-	-	-	-	-
Comm.	HART	-	-	-	-	Ver. 5	Ver. 5

Notes:

1. Available for rotary version only. In case of hazardous Ex installation area external mount through limit switch box is required.
2. NEPSI and EMC only for YT-3300, not for YT-3303.



Smart							
YT-2600	YT-3300/3	YT-3301	YT-3350	YT3700	YT3750	YT-3400	YT-3450
22	12	12	12	14	14	18	18
✓	-	-	-	-	-	✓	✓
-	✓	✓	✓	✓	✓	-	-
✓	✓	✓	✓	✓	✓	✓	✓
-	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
-	✓ ²	-	✓	-	✓	✓	✓
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
✓	✓ ²	✓	✓	✓	✓	✓	✓
-	✓	✓	✓	✓	✓	✓	✓
Piezo	Torque Motor	Torque Motor	Torque Motor	Torque Motor	Torque Motor	Torque Motor	Torque Motor
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
Potentiometer	Potentiometer	Potentiometer	Potentiometer	NCS Potentiometer	NCS Potentiometer	Potentiometer	Potentiometer
✓	✓	✓	✓	✓	✓	✓	✓
✓	-	-	-	-	-	-	-
-	-	-	-	-	-	✓	✓
IP66	IP66	IP66	IP66	IP66	IP66	IP66	IP66
-	NEMA 4X	-	NEMA 4X	NEMA 4X	NEMA 4X	NEMA 4X	NEMA 4X
Aluminium	Aluminium	Aluminium	STS316	Aluminium	STS316	Aluminium	STS316
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
-	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓
-	✓	✓	✓	✓	✓	-	-
-	✓	✓	✓	✓	✓	-	-
✓	-	-	-	-	-	✓	✓
Ver. 5	Ver. 7	Ver. 7	Ver. 7	Ver. 7	Ver. 7	Ver. 7	Ver. 7

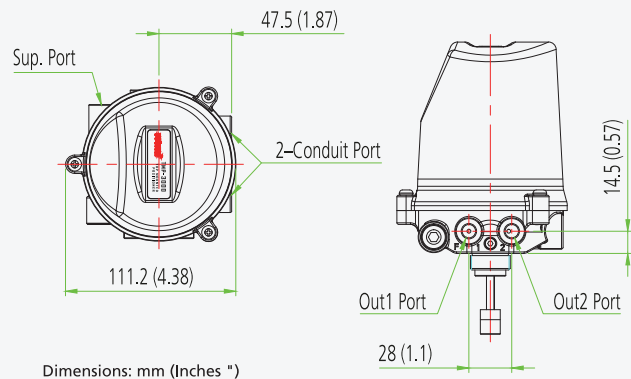
Smart Positioner TMP-3000

Solenoid Technology

Design features

- **Vertical mounting.** Easy to mount installation.
- **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.
- **LCD display.** Backlit alphanumeric digital display for process values and calibration.

- **Feedback signal.** 4 to 20 mA output option.
- **Auto calibration.** Simple menu structure with options to auto calibrate all parameters or zero and end points only.
- **Low air consumption level.** Almost zero air leakage.
- **Front panel pushbuttons for configuration.** Positive acting pushbuttons for field configuration.



Item Type	TMP-3000
Power Supply	24 VDC ± 10%, DC 260mA(@21.6VDC)
Input Signal	0 to 20 mA, 4 to 20 mA, 0 to 5 V, 0 to 10 V
Power Consumption	< 5.8 W
Output	4 to 20 mA
Output Characteristics	Linear, EQ%, Quick Open, User Set(5 or 21 Points)
Operating Temp.	-10 to +50 °C (+14 to +122 °F)
Supply Pressure	0 to 0.7 MPa = 0 to 7 bar = 0 to 102 psi
Air Consumption	0 LPM (0 psi)
Flow Capacity	20 / 50 LPM (0.7 / 1.77 CFM)
Filtering Size	5 micron
Acting Type	Single 2 solenoid valves Double 4 solenoid valves
Stroke	5 to 40 mm (0.2 to 1.6")
Air Connection	G1/8 (Ø6 mm tube)
Conduit	2-M16 x 1.5P (with screw terminals)
Ingress Protection	IP67
Body Material	PPS
Cover Material	PC
Weight	750 g (1.7 lb)

Product Code

TMP-3000 - S - N - G - 1 - 0 - F

Model
TMP-3000 = Smart Positioner

Acting Type
S = Single
D = Double

Explosion Protection
N = Non-Explosion

Conduit & Air Connection
G = M16 x 1.5 - G1/8

Flow Capacity
1 = 20 LPM
2 = 50 LPM

Output Options
0 = None
1 = 4 to 20 mA feedback

Fail Option
F = Fail-freeze
S = Fail-safe

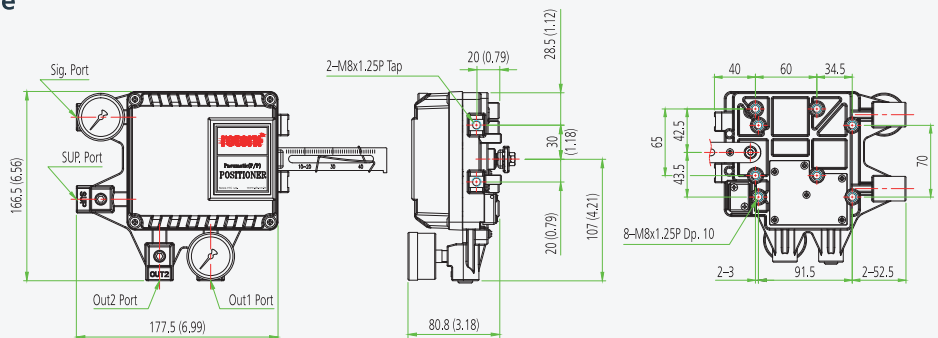
Pneumatic-Pneumatic Positioner YT-1200

Design features

- **Simple zero and span adjustment.** Internal hand dials and locking screws for 0.1 to 1 MPa range adjustments.
- **Reverse and direct acting settings.** Full and 1/2 split range setting by simple adjustment.
- **High vibration resistant.** No resonance between 5 to 200 Hz.
- **Auto / manual switch.** Internal adjustment with lock screw safety.



YT-1200 Aluminium Enclosure



Dimensions: mm (Inches *)

Item Type	YT-1200L & YT-1200R	
	Single	Double
Input Signal	0.02 to 0.1 MPa=0.2 to 1 bar=3 to 14.5 psi	
Supply Pressure	0.14 to 0.7 MPa=1.4 to 7 bar=20 to 102 psi	
Stroke	Linear Type	10 to 150 mm (0.4 to 6")
	Rotary Type	55 to 100°
Air Connection	Rc 1/4, 1/4 NPT	
Gauge Connection	Rc 1/8, 1/8 NPT	
Ingress Protection	IP66	
Linearity	Linear Type	± 1% F.S.
	Rotary Type	± 2% F.S.
Hysteresis	±1% F.S.	
Sensitivity	Linear Type	± 0.2% F.S.
	Rotary Type	± 0.5% F.S.
Repeatability	± 0.5% F.S.	
Air Consumption	2.5 LPM (sup = 0.14 MPa) 0.08 CFM (sup = 20 psi)	
Flow Capacity	80 LPM (sup = 0.14 MPa) 2.83 CFM (sup = 20 psi)	
Material	Aluminium Diecasting	
Weight	1.7 kg (3.1 lb)	

Notes:
1. Only S, L of Operating Temperature is available
2. Only S of Operating Temperature is available

Product Code

YT-1200R - S - 1 - 1 - 2 - S - (0)

Model

YT-1200L = Linear Positioner
YT-1200R = Rotary Positioner

Acting Type

S = Single
D = Double

Lever Type

Linear	Rotary
1 = 10 to 40 mm	1 = M6 x 34L
2 = 30 to 70 mm	2 = M6 x 63L
3 = 60 to 100 mm	3 = M8 x 34L
4 = 100 to 150 mm	4 = M8 x 63L
	5 = NAMUR

Orifice Type

1 = Φ1
2 = Φ2
3 = None

Air Connection

1 = Rc 1/4
2 = 1/4 NPT

Operating Temp.

S = -20 to +70 °C (-4 to +158 °F)
H = -20 to +120 °C (-4 to +248 °F)
L = -40 to +70 °C (-40 to +158 °F)

Option (Rotary only)

0 = None
1 = Dome Cover
2 = 4 to 20 mA feedback - SPTM-5V (Non-explosion)¹
3 = 4 to 20 mA feedback - SPTM-6V (Flameproof enclosure)¹
4 = Limit switch - YT-850 (Non-explosion)²
5 = Limit switch - YT-870 (Flameproof enclosure)²
6 = 4 to 20 mA feedback + Limit Switch - YT-870 (Flameproof enclosure)²

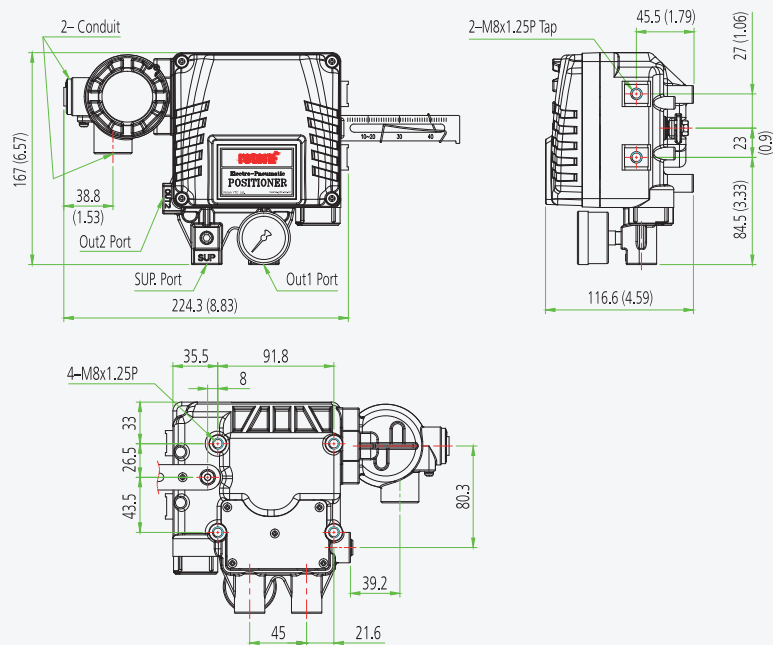
Electro-Pneumatic Positioners YT-1000 / YT-1050

Design features

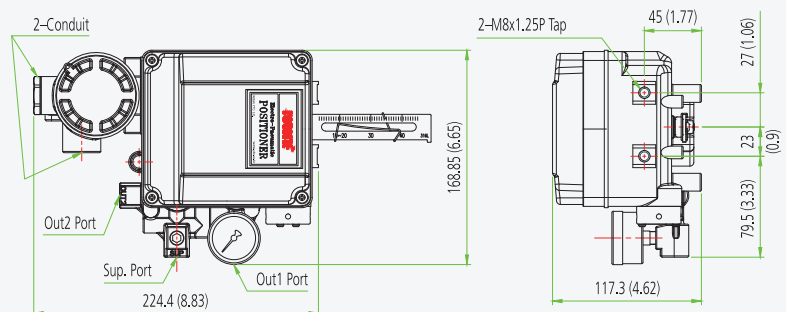
- **Simple zero and span adjustment.** Internal hand dials and locking screws for 4 to 20 mA range adjustments.
- **Reverse and direct acting settings.** Full and 1/2 split range setting by simple adjustment.
- **High vibration resistant.** No resonance between 5 to 200 Hz.
- **Internal feedback option.** Available on weatherproof model only.
- **Auto / manual switch.** Internal adjustment with lock screw safety.



YT-1000 Aluminium Enclosure



YT-1050 STS316 Enclosure



Dimensions: mm (Inches ")