

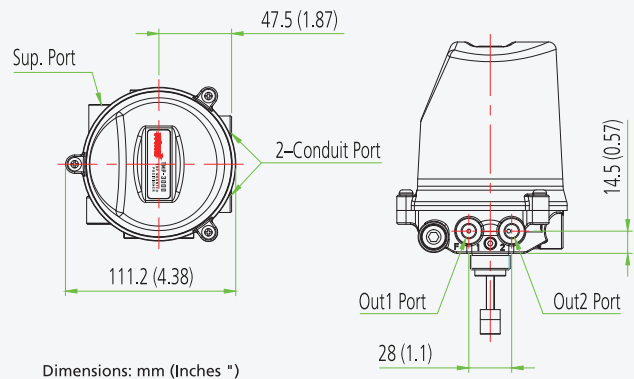
Smart Positioner TMP-3000

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.



Dimensions: mm (Inches ")

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 - O - 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

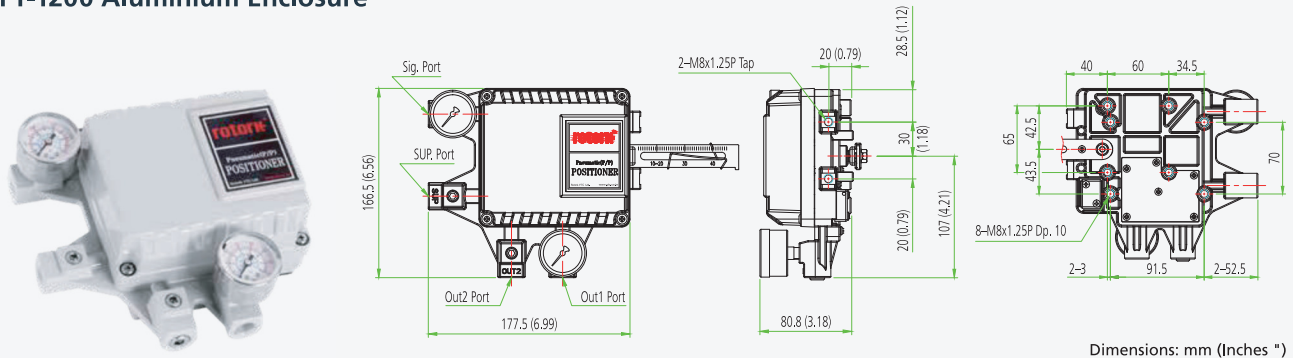
Pneumatic-Pneumatic Positioner YT-1200

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)	

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

Notes:

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

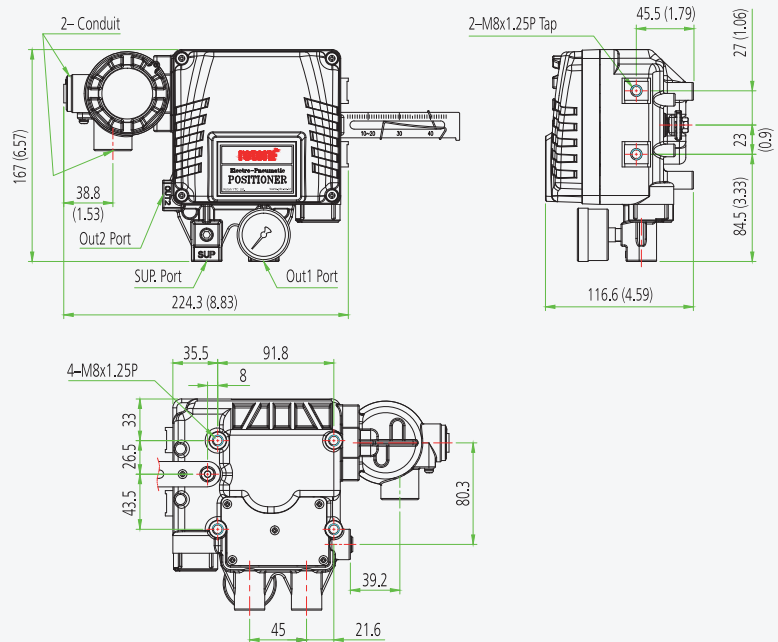
Electro-Pneumatic Positioners YT-1000 / YT-1050

Design features

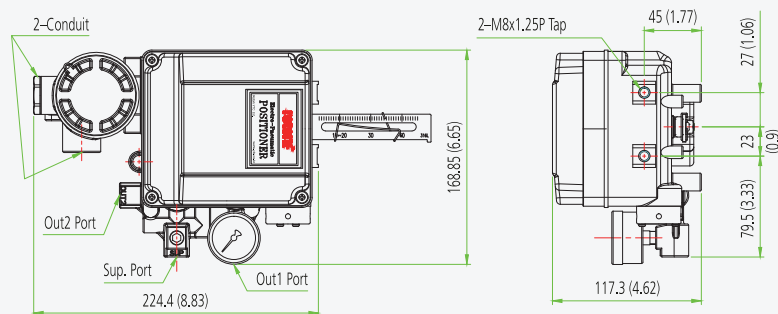
- **Simple zero and span adjustment.** Internal hand dials and locking screws for 4 to 20 mA range adjustments.
- **Reverse and direct acting settings.** Full and 1/2 split range setting by simple adjustment.
- **High vibration resistant.** No resonance between 5 to 200 Hz.
- **Internal feedback option.** 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 *)

Electro-Pneumatic Positioners YT-1000 / YT-1050

Item Type	YT-1000	YT-1050
Input Signal	4 to 20 mA DC	
Impedance	250 ± 15 Ω	
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, G 1/4	1/4 NPT
Gauge Connection	Rc 1/8, 1/8 NPT	1/8 NPT
Conduit	G(NPT)1/2, M20	G 1/2
Explosion Protection Type	ATEX, EAC, IECEx, INMETRO (II 2 G) Ex dmb IIB T5	
	KCs Ex dmb IIB T5/T4 / Ex d IIC T5 IP66 /	KCs Ex dmb IIB T5
	TS Ex db mb IIB T5 Gb X	-
	CSA (Class I, Zone 1) Ex dm IIB T5	-
	FM XP-S/1/CD/T5 Ta = +60 °C; DIP/II,III/1/EF/G/T5 Ta = +60 °C; Type 4X	-
	CCC Ex d mb IIB T5 Gb Ex d mb IIC T6 Gb Ex ia IIC T6 Ga	CCC Ex d mb IIB T5 Gb
	TIIS Ex dmb IIB T5	
Ingress Protection	YT-1000: IP66, TYPE 4X (FM) YT-1050: IP66	
Linearity	Single	± 1% F.S.
	Double	± 2% F.S.
Hysteresis	±1% F.S.	
Sensitivity	Single	± 0.2% F.S.
	Double	± 0.5% F.S.
Repeatability	± 0.5% F.S.	
Air Consumption	2.5 LPM (sup = 0.14 MPa) 0.8 CFM (sup = 20 psi)	
Flow Capacity	80 LPM (sup = 0.14 MPa) 2.83 CFM (sup = 20 psi)	
Material	Aluminium Diecasting	Stainless steel 316
Weight	YT-1000L: 2.7 kg (6.1 lb) YT-1000R: 2.8 kg (6.2 lb) YT-1050: 5.71 kg (12.6 lb)	

Product Code

YT-1000 - R - S - N - 1 - 1 - 4 - S - 0 - (0)

Model

YT-1000 = Aluminium
YT-1050 = STS316

Motion Type

L = Linear
R = Rotary

Acting Type

S = Single
D = Double

Explosion Protection¹

N = Non-Explosion
M² = Ex d m IIB, ATEX, IECEx, TS (YT-1000 only), KCs
A = CSA (YT-1000 only)
C = Ex d m IIC KCs (YT-1000 only)
E = Ex d EAC
X = TIIS (YT-1000 only)

T = Ex dm IIB INMETRO
Z = Ex dmb IIB T5 Gb:CCC
B = Ex dmb IIC T6 Gb:CCC (YT-1000 only)
G = Ex ia IIC T6 Ga:CCC (YT-1000 only)
F = FM (YT-1000 only)

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

Conduit & Air Connection

YT-1000	YT-1050
1 = G1/2 - Rc1/4	2 = G1/2 - 1/4 NPT (N/A for CCC)
2 = G1/2 - 1/4 NPT	5 = 1/2 NPT - 1/4 NPT (only CCC)
3 = G1/2 - G1/4	
4 = M20 - 1/4 NPT	
5 = 1/2 NPT - 1/4 NPT	

Operating Temp. (Non-explosionproof)³

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 1

YT-1000L	YT-1000R
0 = None	0 = None (St'd)
2 ⁴ = 4 to 20 mA feedback (Internal)	1 = Dome Cover
3 ⁴ = 4 to 20 mA feedback with LCD (Internal)	

Option 2 (YT-1000R only)

0 = None
1 = 4 to 20 mA feedback (Internal - only for non-explosion area protection)
2 = 4 to 20 mA feedback (External, SPTM-6V, Explosionproof)
3 = Limit Switch (Internal - only for non-explosion area protection)
4⁵ = Limit Switch (External, YT-850 (Non-explosion) or YT-870 (Explosionproof))
5 = 4 to 20 mA feedback + Limit Switch (Internal - only for non-explosion area protection)
6 = SPTM + Limit Switch (External, YT-870, Explosionproof)

Notes:

- Only S of Operating Temperature is available for M (except KCs of YT-1000), T, F, P, X, Z, B, G
Only S, H of Operating Temperature are available for M (only KCs of YT-1000)
Only S, L of Operating Temperature are available for A
Only L of Operating Temperature is available for E.
- Please put the name of the certificate in a purchase order.
- This option is just the normal operating temperature of the product and is not related to explosion protection temperature. See certificates for explosion protection temperature.
- Non-explosionproof.
- Please select one of between YT-850 and YT-870 and then put the name in a purchase order.

Smart Positioners YT-3300 / YT-3350 / YT-3301 / YT-3303

Torque motor technology with communications

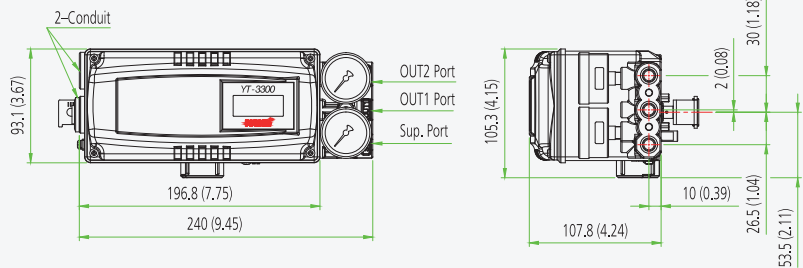
Design features

- **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. All functionality can be performed and selected locally, through push buttons, or remotely with communication protocol.
- **Feedback signal.** Analogue and digital feedback signals with 4 to 20 mA, mechanical and proximity switch options (Limit switch options for YT-3300 and YT-3350 models).
- **PID control.** Pre-calibrated and user configurable variables via front panel pushbutton menu.

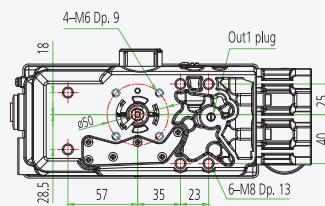
- **Auto / Manual switch.** Enables closed-loop automatic valve position control or manual positioning via the A/M switch. The manual mode is useful for troubleshooting, calibration, system testing or as a manual bypass.
- **HART® communication.** Allows commands, position feedback and diagnostics to be sent digitally over the current loop.
- **Front panel pushbuttons for configuration.** Four robust and positive acting pushbuttons for field configuration.
- **Remote Mounting Option (YT-3301 model).** Remote sensor via cable to enable the positioner to be mounted away from extreme temperature.



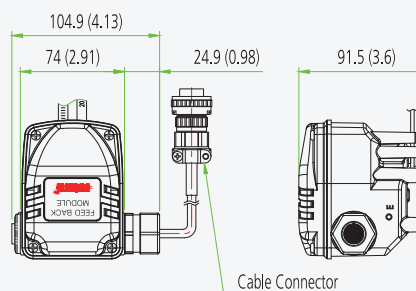
YT-3300 Aluminium Enclosure



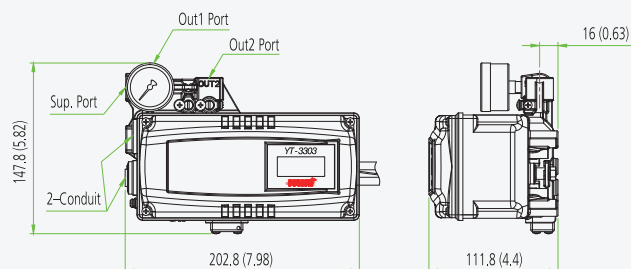
YT-3350 STS316 Enclosure



YT-3301 Remote Mounting Option



YT-3303 Left Side Mounting Option



Dimensions: mm (Inches *)