

- Compact design
- High sensitivity
- Enhanced reliability
- Various options
- Vibration-Proof





Electro - Pneumatic Positioner YT-1300 Series (Intrinsically Safe Type)

Product Description

YT-1300 E/P Positioner controls valve stroke accurately by 4-20mA current signal being input from controller. It has built-in electronic circuit and P, D control circuit to prevent hunting. And Position transmitter and Limit switch are easily added optionally, which is time and cost-effective when it is applied in the field.

Features

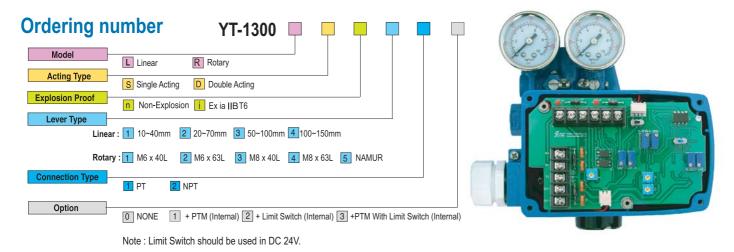
- It endures severe vibration and so it can be applied to almost every lines.
- Most suitable accuracy and dynamic characteristics are available by PD control.
- Valve system is stabilized by outputting analog feedback with option.
- The variable orifice makes to settle the problems easily which can be solved by attaching speed control valve.
- Limit switch is added with ease.

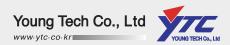


Specification

Model	YT-1300L		YT-1300R		
Acting Type	Single	Double	Single	Double	
Input Signal	4~20 mA DC				
Supply Pressure	1.4~7kgf/cm² (0.14~0.7 MPa)				
Stroke	10 - 150 mm		0 - 90°		
Impedance	Max.10V / 20mA DC				
Air Connection	PT 1/4, NPT 1/4				
Gauge Connection	PT 1/8, NPT 1/8				
Conduit Entry	PF 1/2(Standard), NPT1/2(Option)				
Explosion-Proof	Ex ia IIB T6				
Protection	IP66				
Ambient Temperature	Operating	Temp: -30~85°C	Explosion to	emp: -20~60 °C	
Linearity	± 0.5% F.S.				
Hysteresis	± 0.5% F.S.				
Sensitivity	± 0.2% F.S.				
Repeatability	± 0.3% F.S.				
Flow Capacity	70 LPM				
Air Consumption	Below 3 LPM (sup=1.4K)				
Vibration Effect	6G `				
Humidity	5-95% RH at 40				
Feedback Signal (Option)	4-20mA (DC 10 - 30V, DC 10~28V at Intrinsically Safe Type)				
Limit Switch(Option)	DC 24V				
Material	Aluminum Diecasting				
Weight	1.5 kg (3.3 lb)				
Painting	Epoxy Polyester Powder Coating				
Color	Blue or Black				

Based on temperature $20\,^\circ\text{C}$, absolute pressure 760mmHg and relative humidity 65%





Electro-Pneumatic Positioner YT-1300 / YT-1350 series (analog type)

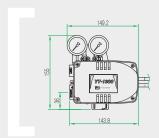
Model	Motion Type	Acting Type	Explosion Proof	Lever Typ	pe —— Rotary	Connection Type	Option
YT-1300	L Linear	S Single	n Non-Explosion	1 10~40mm	1 M6×34L	1 PT	0 NONE
YT-1350	R Rotary	D Double	Ex ia IIC T6/T5	20~70mm	2 M6×63L	2 NPT	1 +PTM
				3 50~100mm	3 M8×34L		2 +L/S
				4 100~150mm	4 M8×63L		3 +PTM+L/S
					5 NAMUR		

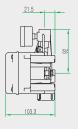


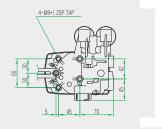




YT-1350R



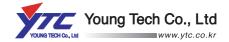




Item · Ty	/ре	YT-1300	YT-1350	
Input Signal		4-20mA DC		
Supply Pressure		1.4 ~ 7 kgf /c㎡ (20~100psi)		
Stroke	Linear Type	10 ~ 150mm		
	Rotary Type	0 ~ 90°		
Impedance		Max.430Ω / 20mA DC		
Air Connection		PT(NPT)1/4		
Gauge Connection		PT(NPT)1/8		
Conduit		PF1/2 (G1/2)		
Repeatability		±0.3% F.S.		
Ambient Temp.	Operating Temp.	-30°C ~ 85°C (-22~185° F)		
	Explosion Temp.	-40~60°C(T5)/	/-40~40°C(T6)	
Linearity		±0.5% F.S.		
Hysteresis		±0.5% F.S.		
Sensitivity		±0.2% F.S.		
Air Consumption		2 LPM (Sup=1.4kgf /տք, 20psi)		
		70 LPM (Sup=1.4kgf /cril, 20psi)		
Material		Aluminum Diecasting	Stainless steel 316	
Explosion-Proof		Ex ia IIC T6/T5		
Protection		IP66		
Weight		1.5kg (3.3lb)	3.7kg(8.16lb)	

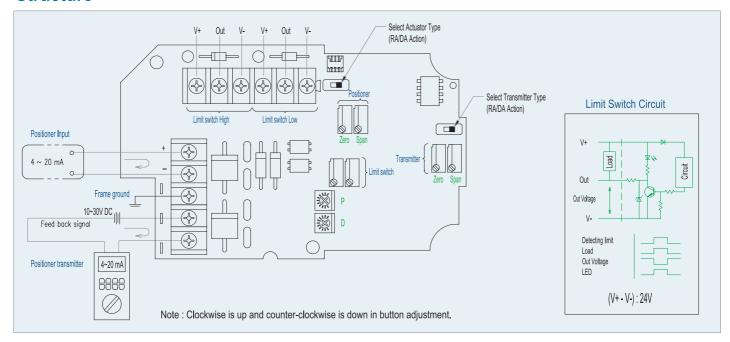
YT-1300/1350 E/P Positioner accurately controls valve stroke, according to input signal of 4-20mA being delivered from controller.

- PCB and P/D control circuit for accurate control
- Feedback signal
- Limit switches (option)

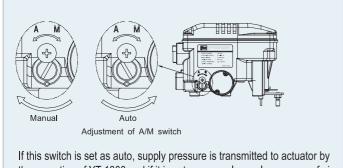


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Structure

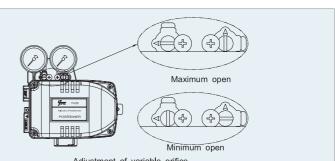


A/M Switch



the operation of YT-1300 and if it is set as manual, supply pressure of air filter regulator is transmitted to actuator regardless of YT-1300.

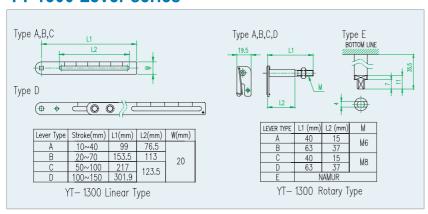
Variable orifice



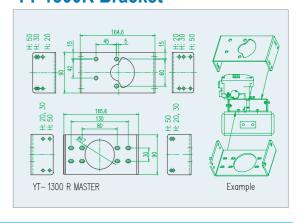
Adjustment of variable orifice

The actuator volume is too small, hunting can be occurred. In this case, adjust variable orifice with using (-) driver, then hunting is prevented by reducing flow rate of supply pressure transmitting to actuator.

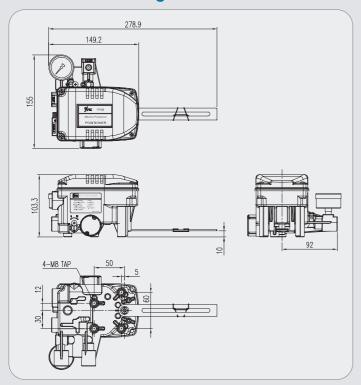
YT-1300 Lever series



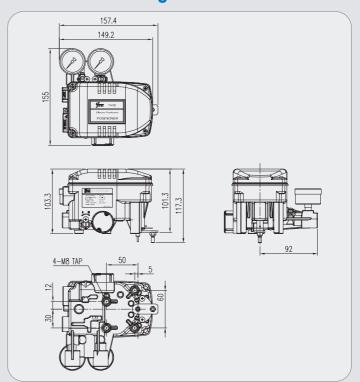
YT-1300R Bracket



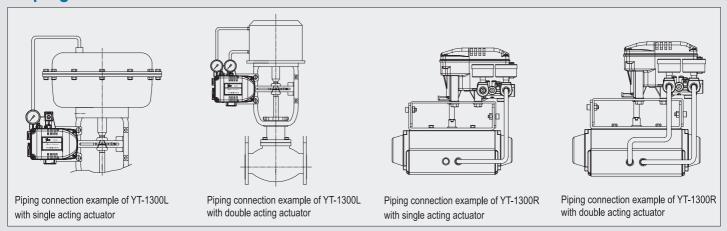
YT-1300L Drawing



YT-1300R Drawing



Piping connection with actuator





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