



Electro-pneumatic positioner



Doc: YT-I 300R/02

Mar 2009

YT I300R Series 4-20mA Electro-Pneumatic positioner

General:

The YT-I300R Series provides electro-pneumatic modulation for rotary (1/4 turn) pneumatic actuators. It has an electronic circuit and P&D control circuit to prevent hunting. Fed with a constant air supply to drive the unit (max 100 psi), the YT-I300R sets the position of the actuator relative to a 4-20mA DC input signal. Any change to the input signal results in a corresponding change to the actuator's position. The YT-I300R offers fast and accurate response with low air consumption. An output signal and end of travel confirmation can be provided as an option.

It is strongly recommended that the supply air is filtered to 5 microns or better to protect the fine internal orifices within the YT-I300R.

See our YT filter regulator for details.

Specifications:

Main air supply	1.4 ~ 7 bar, 20~100 psi
Control signal	4-20 mA DC
Air filtration required	5 Microns or better
Protection	IP 66
Linearity	± 0.5% Full Scale
Hysteresis	±0.5% Full Scale
Sensitivity	± 0.2% Full Scale
Repeatability	± 0.3% Full Scale
Impedance	Max 430 Ohm (10V/20mA DC)
Consumption	< 3 LPM at 1.4 bar supply
Ambient temp	-30C to +85C
Weight	1.5 kgs



Aluminium version



Stainless version

Features:

- It endures severe vibration and so it can be applied to almost any line.
- P, D controls are provided for accuracy and performance.
- An optional analog feedback signal may be used to stabilise the valve.
- Variable orifice can be adjusted to prevent hunting

Applications:

Suitable only for safe area installations.

Provides modulating control using control signals from 4-20mA controllers or control systems.

Stainless housed version for aggressive atmospheres

Installation:

The YT-I300R is quick and simple to mount to a Namur compliant drive shaft, using the robust universal mounting bracket provided with the positioner.

Air connections are 1/4" NPT.

Electrical connection is via a 1/2" conduit connection.

Options:

- 1) Internal position transmitter can be fitted to provide a 4-20mA output signal.
- 2) Limit switches (electronic) for end of travel confirmation are simple to fit.
- 3) Available for linear applications (YT-I300L)



Electro-pneumatic positioner

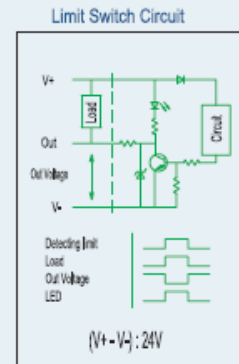
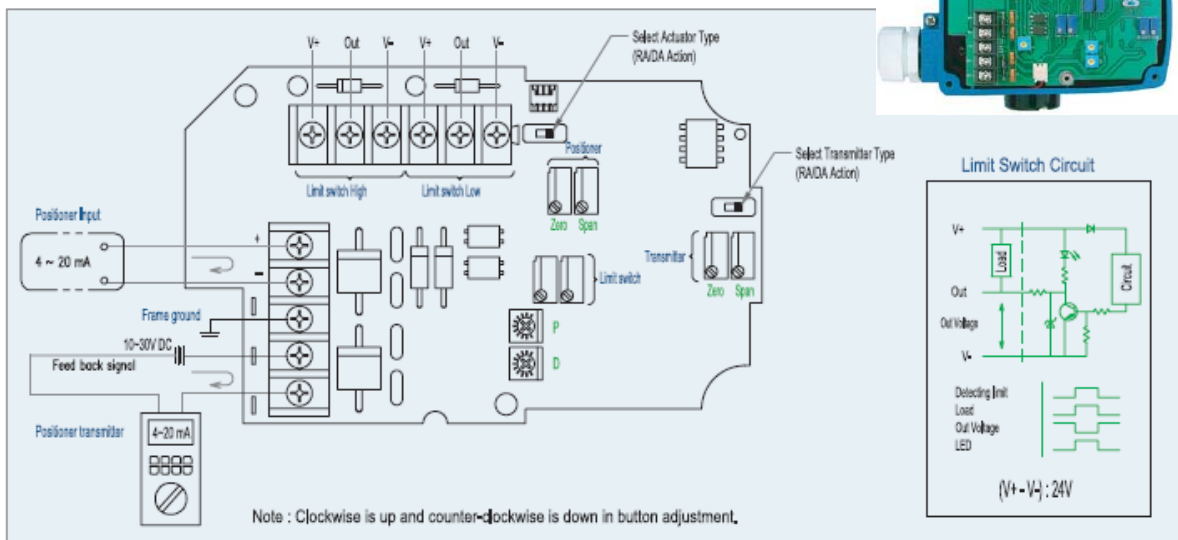


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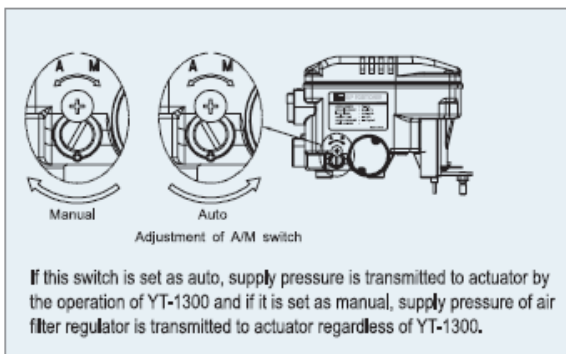
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YT1300R Series 4-20mA Electro-Pneumatic positioner

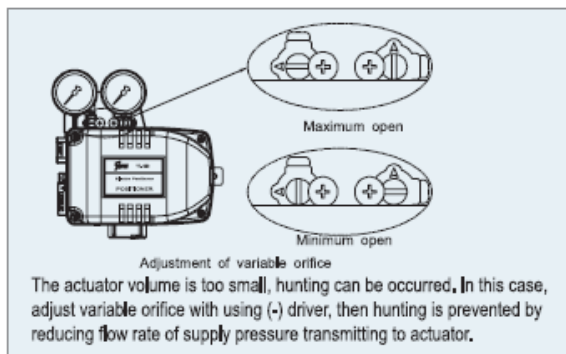
Structure



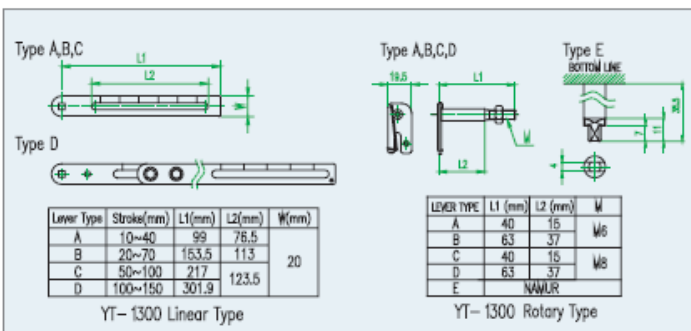
A/M Switch



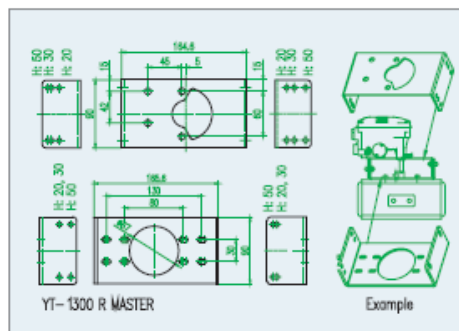
Variable orifice



YT-1300 Lever series



YT-1300R Bracket





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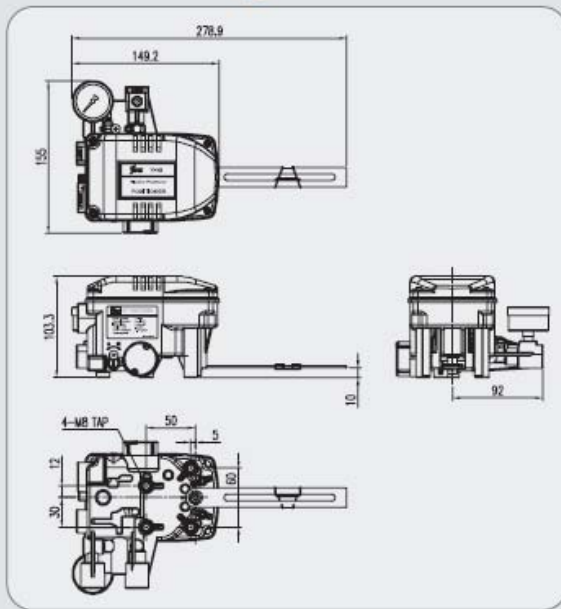


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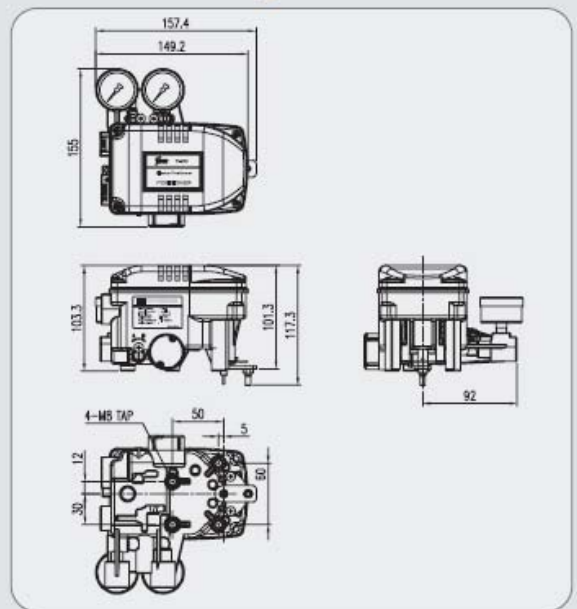
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YT1300R Series 4-20mA Electro-Pneumatic positioner

YT-1300L Drawing



YT-1300R Drawing



Piping connection with actuator

