



Ex II 2G EEx md IIB T5

Electro-pneumatic positioner



Doc: YT-1000R/02

Aug 2207

YT1000R ATEX approved Zone I Electro-Pneumatic positioner

General:

The YT-1000R provides electro-pneumatic modulation for rotary (1/4 turn) pneumatic actuators. Fed with a constant air supply to drive the unit (max 100 psi), the YT-1000R 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-1000R offers fast and accurate response with low air consumption. An inlet air supply gauge is provided. No output signal is provided.

ATEX:

This explosion proof positioner is ATEX II 2G approved for use in Zone I applications (EEx md IIB T5).

ATEX Certificate: KEMA 03ATEX 1195

Specifications:

Main air supply	1.4 ~ 7 bar, 20~100 psi
Control signal	4-20 mA DC
Impedance	Max 460 Ohm/ 20mA
Protection	IP 66
Linearity	± 2% Full Scale
Hysteresis	1% Full Scale
Sensitivity	± 0.5% Full Scale
Repeatability	± 0.5% Full Scale
Air consumption	3 l/min @ 1.4 b supply
Flow capacity	80 l/min @ 1.4 b supply
Housing	Aluminium



Applications:

Ideal for hazardous areas but also suitable for safe area installations. Provides modulating control receiving control signals from 4-20mA controllers or control systems. 4-20mA input only-no output transmission is supplied.

It is strongly recommended that the supply air is filtered to 5 microns or better to protect the fine internal orifices within the YT-1000R. See our YT filter regulator data sheet(s) for details.

Installation:

The YT-1000R is quick and simple to mount to a Namur compliant drive shaft, using the universal mounting bracket provided with the positioner.

Air connections are 1/4" NPT.

Electrical connection is via a 1/2" cable gland in the EExd junction box.

Fits the **CH-air** A Type
Pneumatic actuator ~
Actuator features:

*Robust rack and pinion
construction*

*High accuracy machining
of components*

*ATEX Ex II 2 GD ap-
proved for use in haz-
ardous areas*

CE Approved

*Guaranteed for
1,000,000 cycles*

*Balanced air & spring
strokes in spring return
version*

*Safe to dismantle for
routine maintenance*

*Compliant with all ac-
tuator standards*

*Accessories are easy to
mount*

*Hard anodised alumin-
ium body*

*ENP coated option
(Extra cost)*

*Teflon® coated option
(Extra cost)*

*Stainless steel version
(Extra cost)*

Electro-pneumatic positioner



Doc: YT-I300R/01

Nov 2006

YT I300R Series 4-20mA Electro-Pneumatic positioner

General:

The analog 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. No output signal is provided.

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 (20mA)
Weight	1.5 kgs
Housing	YT-I300R Aluminium YT-I305R Stainless Steel



Fits the **CH-air** A Type Pneumatic actuator ~
Actuator features:

Robust rack and pinion construction

High accuracy machining of components

ATEX Ex II 2 GD approved for use in hazardous areas

CE Approved

Guaranteed for 1,000,000 cycles

Balanced air & spring strokes in spring return version

Safe to dismantle for routine maintenance

Compliant with all actuator standards

Accessories are easy to mount

Hard anodised aluminium body

ENP coated option (Extra cost)

Teflon® coated option (Extra cost)

Stainless steel version (Extra cost)

Applications:

Suitable only for safe area installations. Provides modulating control receiving control signals from 4-20mA controllers or control systems. 4-20mA input only-no output transmission is supplied.

Installation:

The YT-I300R is quick and simple to mount to a Namur compliant drive shaft, using the 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 for end of travel confirmation are simple to fit.

Electro-pneumatic positioner



Doc: YT-2300R/01

Nov 2006



YT2300R SMART Electro-Pneumatic positioner

General:

The YT-2300 Series is our high end 'smart' positioner. Using a highly efficient internal microprocessor and performs various and powerful functions such as auto-calibration, PID control, alarms, and HART protocol.

An LED display gives a continuous status indication and is used for many other functions.

It is strongly recommended that the supply air is filtered to 5 microns or better to protect the fine internal orifices within the YT-1000R. See our YT filter regulator for details.

Specifications:

Main air supply	1.4 ~ 7 bar, 20~100 psi
Control signal	4-20 mA DC
Impedance	Max 460 Ohm/ 20mA
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 460 Ohms / 20mA
Operating temp	-30 to +85C
Housing	Aluminium Stainless steel
Output Characteristics	Linear Equal percentage Quick opening User defined



YT-2300 Aluminium



YT-2350 Stainless steel

Applications:

In Europe, only safe area applications as this range does not yet have ATEX approval.

Outside Europe, the YT-2300 range is suitable for Zone 0 applications (EExia IIC T6)

Installation:

The YT-1000R is quick and simple to mount to a Namur compliant drive shaft, using the universal mounting bracket provided with the positioner.

Air connections are 1/4" NPT.

Fits the **CH-air** A Type Pneumatic actuator ~
Actuator features:

Robust rack and pinion construction

High accuracy machining of components

ATEX Ex II 2 GD approved for use in hazardous areas

CE Approved

Guaranteed for 1,000,000 cycles

Balanced air & spring strokes in spring return version

Safe to dismantle for routine maintenance

Compliant with all actuator standards

Accessories are easy to mount

Hard anodised aluminium body

ENP coated option (Extra cost)

Teflon® coated option (Extra cost)

Stainless steel version (Extra cost)