



Keeping the World Flowing for Future Generations

Features and Benefits

- Low Droop under flow conditions allows improved control of downstream pressure.
- Immunity to Supply Pressure Change permits use of normal plant air.
- Minimal Air Use in dead end service (.05 SCFM) reduces air consumption.
- High Forward and Exhaust Capacity permits increased process speed.
- Transducer can be configured to deliver an output which is directly or inversely proportional to the input.
- Split Range Operation permits two or more functions to be controlled from a common signal source
- Wall or Pipe Mounting allows convenient installation

Operating Principles

The Model T5701 is an electro-pneumatic device that converts a current or voltage signal to a pneumatic pressure. This device uses a force balance system in which a built-in supply regulator also functions as a pneumatic amplifier. Together the flapper and the nozzle work to control the pressure in the intermediate housing. This pressure acts on a diaphragm assembly which in turns controls the output pressure.

Specifications

Output Range

- 3-15 psig, [0.2-1.0 BAR], (20-100 kPa)

Supply Pressure

- 18-150 psig, [1.2-10.0 BAR], (120-1000 kPa)

Flow Capacity (SCFM)

- 17 (28.9 m³/HR) for 20 psig, [1.4 BAR], (140 kPa)
- 47 (79.9 m³/HR) for 120 psig, [8.0 BAR], (800 kPa)

Exhaust Capacity (SCFM)

- over 9 (15.3 m³/HR) for downstream pressure 5 psig, [0.35 BAR], (.35 kPa) above setpoint



Model T5701

Electro-Pneumatic I/P, E/P Transducer

Maximum Air Consumption

- 0.08 (.14 m³/HR) with 20-120 psig, [1.5-8.0 BAR], (150-800 kPa) supply

Independent Linearity

- +0.5% full scale

Supply Pressure Effect

- +0.2% Full Scale for 130 psig, [9 BAR], (900 kPa) change

Terminal Base Linearity

- +1.0% full scale

Hysteresis & Repeatability

- Within 0.1% full scale

Input Impedence

- Input Range OHMS
4-20 mA 222
0-10 VDC 700

Temperature Range

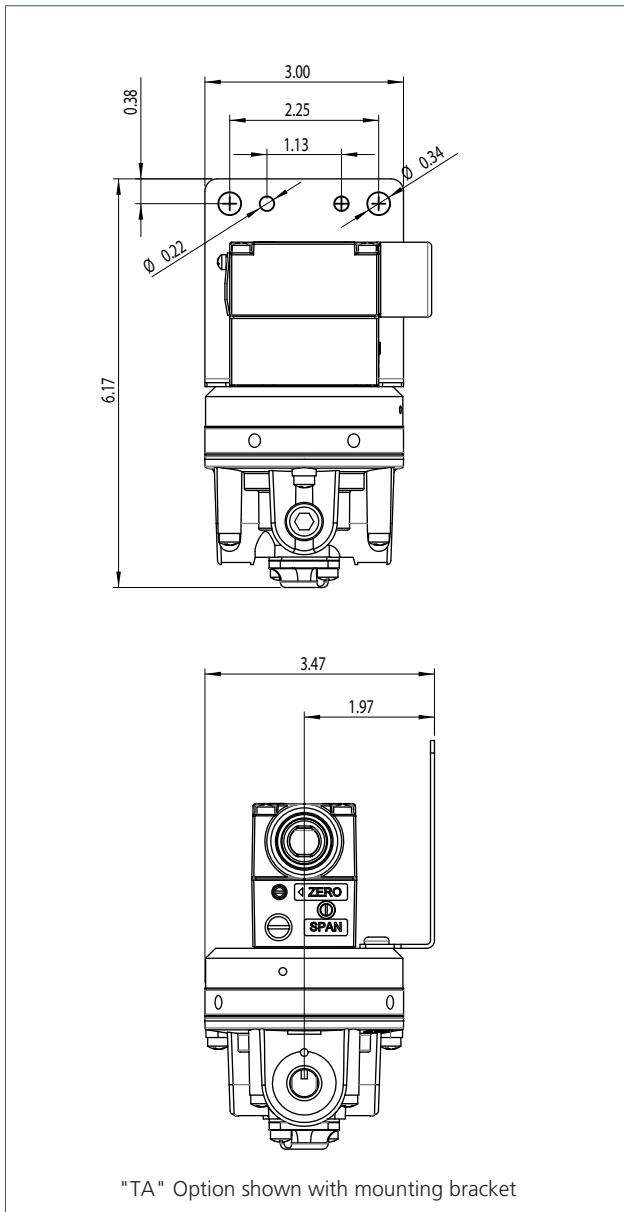
- -40 to +150 °F (-40 to +65 °C)

Materials of Construction

- Housing: Aluminum
Orifice: Sapphire
Diaphragm: Buna N Dacron Fabric



Dimensions



Product Code

T A 5701- 4 01 U S

Electrical Connections

A = 1/2 NPT Conduit Fitting
D = DIN 43650 Connector
T = Terminal strip

Input

0 = 0-10 VDC
4 = 4-20 mA

Output

01 = 3-15 psig
11 = 0.2-1.0 bar
21 = 20-100 kPa

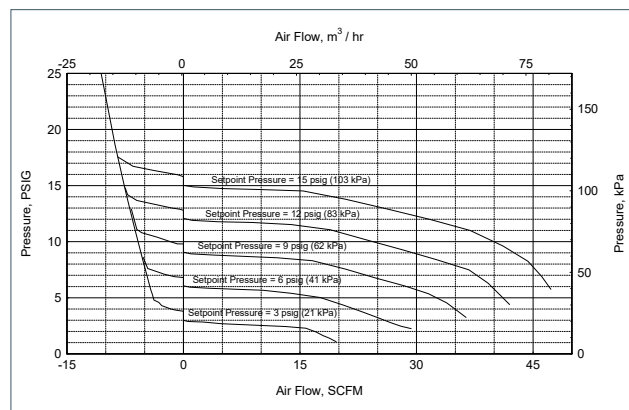
Thread Options

U = 1/4" BSPT Thread
N = 1/4" NPT Thread

Ingress Protection

W = IP65 and NEMA 4
S = NEMA 3R (in the vertical position)

Flow Characteristics (Model TA5701-401NS)



For Installation Instructions, refer to the Fairchild Model T5701 Electro-Pneumatic I/P, E/P Transducer Installation, Operation and Maintenance Instructions, IS-500T5701.

A full listing of the Rotork sales and service network is available on our website.

www.rotork.com

Rotork plc, Bath, UK
tel +44 (0)1225 733200
email mail@rotork.com

Fairchild Industrial Products
3920 West Point Blvd
Winston-Salem, NC 27103
tel +1 (336) 659-3400
email US-WS-CS@Rotork.com

rotork®

Electric Actuators and Control Systems
Fluid Power Actuators and Control Systems
Gearboxes and Gear Operators
Precision Control and Indication
Projects, Services and Retrofit