Tubing Connection Markings for Pneumatic Instruments
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The Measurement, Control & Automation Association
P.O. Box 3698, Williamsburg, VA 23187
Voice and Fax: (757) 258-3100 – mcaa@measure.org
Visit our Website at http://www.measure.org
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TUBING CONNECTION MARKINGS FOR 
PNEUMATIC INSTRUMENTS

1 Scope and Purpose

1.1 This standard applies to the marking of tubing connections to pneumatic transmitters, pneumatic receivers (indicating and/or recording), pneumatic controllers, pneumatic relays, pneumatic valve actuators, and pneumatic positioners.

1.2 The purpose of this standard is to establish a uniform system of marking tubing connections to simplify the inter-connection of pneumatic instruments in their application to industrial processes.

Note: The term "Air" is used in this standard with the understanding that other suitable gases may be substituted as the operating medium.

2 Terminology and 
General Definitions

2.1 Pneumatic Transmitter. A Pneumatic Transmitter is a device which senses a measured variable and transmits a pneumatic signal which is a function of said measured variable.

2.2 Pneumatic Receiver. A Pneumatic Receiver is a device which receives a pneumatic signal and presents an indication and/or record which is a function of the signal received.

2.3 Pneumatic Controller. A Pneumatic Controller is a device which operates to correct or limit the deviation of a measured variable from a selected reference by pneumatic means. (See definition Para. 2.3 - "Markings for Adjustment Means in Automatic Controllers")

2.4 Pneumatic Relay. A Pneumatic Relay is a device which receives a pneumatic signal and emits a pneumatic output which is a function of the input signal.

2.5 Pneumatic Positioner. A Pneumatic Positioner is a pneumatic relay which receives a pneumatic signal and a motion feedback signal and emits a pneumatic signal which is a function of both signals above.

2.6 Pneumatic Valve Actuator. A Pneumatic Valve Actuator is a pneumatic device which produces a motion output which is a function of the pneumatic input signal received.

2.7 Tubing Connection. A Tubing Connection is the internal or external termination provided on the pneumatic instrument for connecting the instrument to the pneumatic transmission or control system.

2.8 Air Supply. Air Supply is a pneumatic pressure source to energize the pneumatic instrument supplied at a standard pressure in accordance with "Air Pressures for Pneumatic Controllers and Transmission Systems".

2.9 Air Input Signals. Air Input Signals are the signals received by a pneumatic device.

2.10 Air Output Signals. Air Output Signals are the signals emitted by a pneumatic device to its dependent element.

2.11 Set Point. Set Point is the value of the controlled variable the controller is set to maintain. A set point signal is a signal received by a controller as a measure of the set point value. (See definition Para. 2.13, "Markings for Adjustment Means in Automatic Controllers").

3 Tubing Connection Markings

3.1 The standard tubing connection markings for pneumatic instruments shall be as designated below.

3.2 All Pneumatic Instruments Covered by this Standard:

Air Supply - S or SUPPLY

Air Output - O or OUT

Air Input Signals - EI, E2, E3, etc.

For Set Point use one of the "E" designations or "SET".