

Thermistor Tube CVC/GT-034 Part No. 277289

APPLICATIONS

The type CVC/ GT-034 Tube is a thermistor-type vacuum gauge tube designed for use with Myers Vacuum and CVC Type GT-340A, AVC-485, GT-345 and GT-350 vacuum gauges. The tube has a pressure-sensing range of full atmosphere to 10^{-3} Torr. The tubes are interchangeable when new and require no calibration when replacements are made or when additional stations are added to a multi-station gauge.

DESCRIPTION

The CVC/ GT-034 Tube uses a bead thermistor as the sensing element. The bead is normally heated to approximately 190°C . Changes in pressure at the sensing element cause the temperature and resistance to change, creating an unbalance in a Wheatstone-Bridge circuit. A meter calibrated in pressure units responds to the bridge unbalance. The sensing element is housed in a welded nickel-plated, mild-steel envelope.

SPECIFICATIONS

Pressure Range	760 to 10^{-3} Torr
Readable Pressure Range	500 to 10^{-3} Torr
Response Time	6 seconds to a 100 milli-Torr change from 10^{-3} Torr
Envelope Outer Diameter	1 1/4 inches
Maximum Bakeout Temperature	100°C
Maximum Envelope Pressure	60 psig
Electrical Connections	5 pins on tube base
Connection	3/8" O.D. Tubing with 1/8" pipe thread

INSTALLATION AND OPERATION

The CVC/ GT-034 Tube has a very fine thermistor bead. Handle it carefully to avoid damage. For accurate response and freedom from zero drift, the elements must remain clean. Locate the tube to minimize the entrance of oil vapor and process contaminants. Install the CVC/GT-034 Tube vertically with the plug connector at top for best results at pressures above 10 Torr. Use the following installation methods:

A. Screw the tubulation into a 1/8-inch female-pipe-threaded opening in the vacuum system*. Seal the threads with Teflon tape, Celvaseal Leak Sealant (Part No. 271375), or other low-vapor-pressure sealing material.

***Apply torque to hexagonal part of tubulation only.**

B. Use a standard 3/8" O.D. vacuum compression connector to make an easy-to-open vacuum seal. This connection uses an elastomer o-ring in a metal envelope.

C. Put the end of the tubulation tightly against a similar size tube installed in the vacuum system. Apply a thin coat of vacuum grease, such as Celvacene Medium, (available from Myers) to the metal tubulations to lubricate them and to provide a vacuum seal. Enclose the butt joint in a piece of heavy-wall rubber tubing.

MAINTENANCE

Use the following procedure to clean the CVC/ GT-034 Tube:

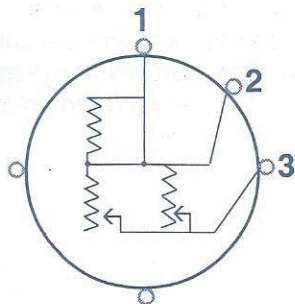
1. Disconnect and remove tube from vacuum system.
2. Wash tube interior with solution of hot water and detergent (Joy or Alconox). Agitate gently.
3. Rinse thoroughly with hot water.
4. Rinse with isopropyl alcohol.
5. Dry tube by heating moderately for several hours and/or by evacuating on a water aspirator.

DO NOT USE COMPRESSED AIR

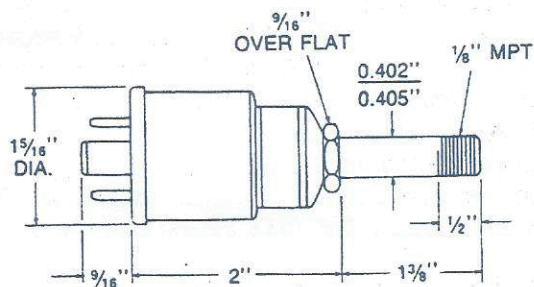
ADJUSTING THE ZERO POT

The zero pot in the base is factory set and should not need adjusting. Refer to the GT-340 GT-345 manual for adjustment.

DIAGRAMS



Base Diagram



Dimensions



HEADQUARTERS:

1155 Myers Lane

Kittanning, PA 16201

(724) 545-8331 - Fax (724) 545-8332

e-mail: myersvacuum@myers-vacuum.com

ROCHESTER, NY OFFICE:

3721 Scottsville Rd.

Scottsville, NY 14546

(585) 889-8990 - Fax (585) 889-7637

e-mail: dcasilio@myers-vacuum.com

TOLL FREE - 888-780-8331

www.myers-vacuum.com