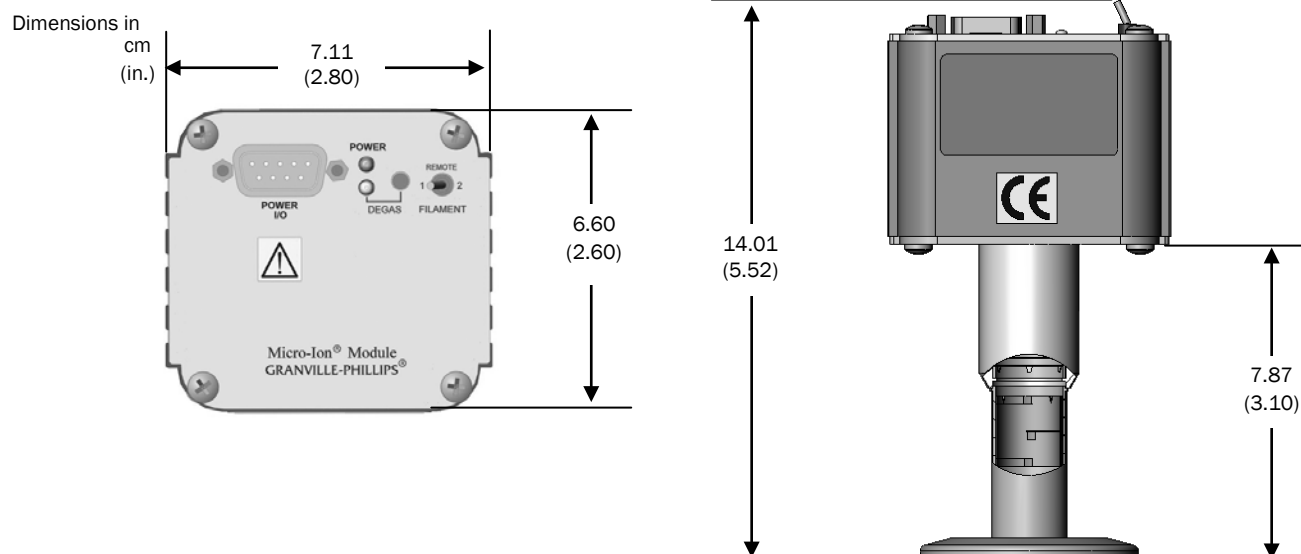


Micro-Ion® Module: Extended Gauge Tube with Baffle, 354075-TD-T, 354075-TE-T, and 354075-TK-T



NOTICE

Use this addendum along with Micro-Ion Module Instruction Manual (354004) for the proper installation, operation and maintenance of this module.

This document is not meant to be a substitute for product safety instructions. Consult the Instruction Manual for complete safety instructions.

Introduction

The 354075-##-# module duplicates the functionality of a 354019-TD-T, but the 354075 degas status I/O indicates fault conditions. Module and connector panel features are also different from the 354019. The 354075 module has a permanent baffle and requires the applicable replacement Micro-Ion Gauge 354076-TD, 354076-TE, or 354076-TK.

Specifications

Pin 5 of the I/O connector indicates a fault condition whenever emission control is out of limits, gauge pressure is too high, or a high voltage failure occurs. A fault can be momentary, but the fault line remains ON for at least 0.5 seconds. If a fault causes the gauge to turn OFF, the fault line stays ON for 0.5 seconds, then floats high. When power is applied to the module, this pin floats high.

Connector Pin Descriptions

Pin	Description	Function
Pin 1	Gauge ON/OFF input	A continuous ground is required for an "ON" condition Removal of ground turns gauge OFF
Pin 2	Power supply ground	Input power return, gauge ON/OFF, degas ON/OFF, and status outputs
Pin 3	Analog output	Used with pin 7, analog output ground, pressure = 10(Volts - 11)
Pin 4	Power supply input	+24 VDC +/- 15%, 12 watts maximum, protected against reversal and over-voltage
Pin 5	Fault signal output	Open collector transistor (grounded emitter) rated at 40V maximum VCE, 50mA maximum Transistor OFF = no fault Transistor ON = fault
Pin 6	Degas ON/OFF input	Application of continuous ground initiates degas cycle
Pin 7	Analog output ground	Used with analog output
Pin 8	Emission current input	Application of ground increases emission current from a low setting to a high setting
Pin 9	Filament selection input	Allow pin to float high to select filament 1 Application of ground selects filament 2

How much Water Vapor is “Too Much” for a Tungsten Filament IG?

This graph displays the probable time to failure of Tungsten filaments relative to operation at elevated pressures of water vapor. The partial pressure of water vapor at a given total pressure in a chamber is typically an estimate using only a total pressure gauge but is nearest to the total pressure upon pump down from room air. The water vapor content of room air will vary with the relative humidity of the room air. However, the results shown are a good rule of thumb for use of Tungsten filaments and have been substantiated by empirical information.

