



**GENIE**<sup>®</sup>  
heated regulator  
Model GHR<sup>™</sup>



## Quick Study

**The GHR<sup>™</sup>** is designed to bring a gas sample to a customer specified temperature and pressure set point. It provides two-stages of heating with single-stage pressure control. Gas is pre-heated to prevent condensation from occurring during the subsequent pressure reduction. After the pressure is reduced, proportionally controlled post-heating brings the sample to the temperature set point. The heating chambers have an innovative design, which provides a long, spiral flow path without the use of a heating coil. Extremely efficient heat transfer occurs without the maintenance required of coils. Maintenance is further reduced since both chambers are heated with a single cartridge that is isolated from the flow path.

The GHR<sup>™</sup> contains two standout safety features that prevent overheating. First, the temperature controller has a built-in open sensor (thermistor) protection that prevents temperature increases should the thermistor fail. Also, a thermal cutoff stops electrical current to the heat controller if the temperature limit is exceeded. Conduit connections are provided in two locations that are 180° apart to offer installation ease and versatility. Since the thermistor and heating cartridge are accessible from both locations, they can be quickly and easily removed for servicing.

## Applications

- ▶ Continuous gas sample conditioning in any process industry including natural gas, petrochemical, and oil refining
- ▶ Analyzer protection against liquid
  - ▶ On-line analyzers
  - ▶ GC's, Mass Specs, O<sub>2</sub>, H<sub>2</sub>S, Moisture, and others
- ▶ Two-stage heating
- ▶ Single stage pressure regulation
- ▶ Multi-stage pressure regulation when used with a GPR<sup>™</sup>, GPRi<sup>™</sup>, or similar model

## Benefits

- ▶ Protects analyzers
- ▶ Helps preserve sample integrity
- ▶ Efficient heat transfer
- ▶ Precise temperature control
- ▶ Quick and easy installation
- ▶ Very low maintenance
- ▶ Easy to service
- ▶ Fail-safe
- ▶ Economical

## Features

- ▶ Long heat exchange path
- ▶ Proportional temperature control
- ▶ Dual heat exchangers
- ▶ Single heating cartridge for both exchangers
- ▶ Open sensor protection
- ▶ Thermal cutoff
- ▶ Versatile conduit connections

## Technical Specifications

<b>Maximum allowable working pressure</b>	2,000 psig
<b>Proportional temperature control range</b>	95 - 165 °F (35 - 73 °C)
<b>Outlet pressure range</b>	0-25, 0-50, 0-100, 0-250, or 0-500 psig <small>*Specify outlet range when ordering</small>
<b>Thermal cut-off</b>	Opens at 230 °F
<b>Internal volume</b>	5 cc
<b>Port sizes</b>	1/4" female NPT
<b>Conduit connection</b>	3/4" female NPT
<b>Electrical enclosure classification</b>	Class 1 Div 1 & 2 Groups B, C, D
<b>Power rating options</b>	<b>Option 1:</b> 115 VAC, 200 watts, 60 Hz <b>Option 2:</b> 220 VAC, 200 watts, 50 Hz <b>Option 3:</b> 24 VDC, 140 watts
<b>Wetted materials</b>	Machined parts : 316 stainless steel / NACE compliant All other metal parts: stainless steel / NACE compliant Seat material: Teflon <sup>®</sup> (other materials available upon request)

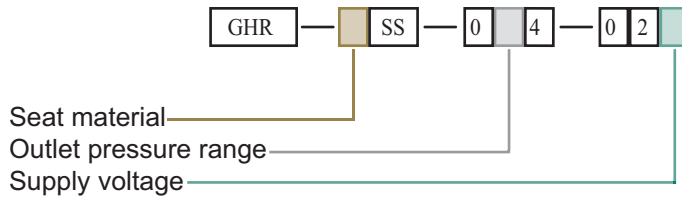


# Model Numbering & Additional Part Numbers

Your model number is determined by your specific needs. Choose options below.

<b>Seat material</b>	0 = Teflon® (other materials available upon request)
<b>Outlet pressure range</b>	0 = 0-25 psig 1 = 0-50 psig 2 = 0-100 psig 3 = 0-250 psig P = 0-500 psig
<b>Supply voltage</b>	1 = 115 VAC 2 = 220 VAC 3 = 24 VDC
<b>Replacement part identification</b>	H = Heating cartridge C = Heat controller A = Cartridge, controller, & Thermistor
<b>Thermistor replacement</b>	Part# = GHR-5T works with any supply voltage
<b>Humidisorb Plus X-Corrode™ replacement</b>	Part# = 107-HXC2X2

How to build the model number:

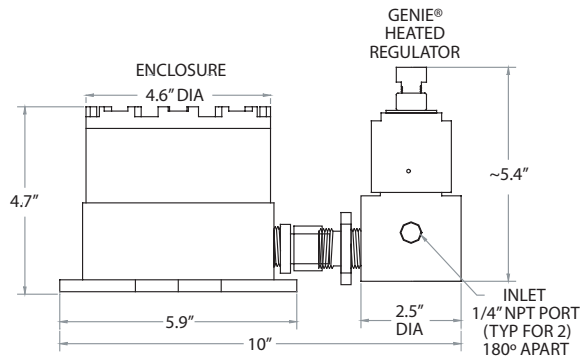


How to build the replacement part number:

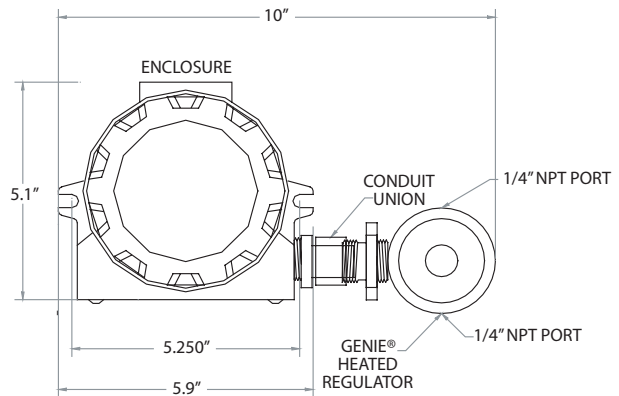


## Dimensions

### Side View



### Top View



### Local Distributor:

### Manufacturer

**A+ Corporation, LLC**

41041 Black Bayou Rd.

Gonzales, LA 70737

Call for expert product application assistance:

Phone: (225)-644-5255 Website: [www.geniefilters.com](http://www.geniefilters.com)

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