HR Heated

WHERE TO USE

- Natural Gas Sampling: Upstream of an analyzer as a standalone pressure control device or part of a conditioning system
  ATEX/IECEx Option: Places where flammable gases

Standard HR

A Hotline To Your Analyzer

The Welker HR Heated Instrument Regulator is a single-stage, spring-loaded, electrically heated pressure reducing valve designed to provide an analytical system with a conditioned gas sample stream at a safe output pressure and temperature. The HR's controlled heating compensates for the cooling brought on by the Joule-Thomson effect to prevent condensation and maintain sample integrity.

Standard HR IOM IOM-078
Bolted HR IOM-151
Data Sheet ATEX/IECEx HR
Certificate of Conformity IECEx SIR 16.0072X
EU-Type Examination Certificate Sira 16ATEX1221X
Share
THERMOSTATICALLY CONTROLLED HEATING

TURN UP THE HEAT

Energized by a direct power connection, the thermostatically controlled heating element ensures efficient heat transfer to prevent condensation. The wide temperature control range means you can set the thermostat above the hydrocarbon dew point of the gas in accordance with industry standards. With the heating element installed to the side of the HR, it's well-suited to installations with height restrictions.

PRESSURE CONTROL OPTIONS

HAVE IT YOUR WAY

Multiple pressure control ranges let you adapt the HR to your instrument and application. The threaded HR is diaphragm-sensing for greater sensitivity, giving you more control when setting the outlet pressure. With a bolted spring housing and body, the piston-sensing HR can handle higher inlet and outlet pressures. The threaded body style comes with an ergonomic 4-point hand knob, making field adjustments quick, easy, and comfortable. A locknut prevents the spring setting from changing due to vibration to help maintain a constant outlet pressure and flow.

EX OUT HAZARDS

ATEX/IECEX

Is there something in the air? You may be in an explosive atmosphere. Knowing these hazardous locations require specially designed equipment, Welker updated its patented HR-4SS Heated Instrument Regulator specifically for this purpose. Our ATEX/IECEx HR is certified to international standards and the European ATEX Directive, making it safe for global use in Ex areas.

COMPLIANT WITH INTERNATIONALLY RECOGNIZED STANDARDS

- Rigorously tested and evaluated by an IECEx-approved certification body
- Regular audits of our manufacturing facilities to ensure compliance with existing international standards
- Safety, reliability, performance, and durability in Ex areas

THERMOSTATICALLY CONTROLLED HEATING ELEMENT

- Efficient heat transfer to prevent condensation
- 2 temperature control ranges*
- Thermostat housed inside a certified explosion-proof housing

(*For your protection, the thermostat should only be adjusted when de-energized or in a non-hazardous location.)

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PRESSURE CONTROL OPTIONS

- Threaded body style with diaphragm-sensing regulator for greater sensitivity and control Cartridge-style option provides

SPECIFICATIONS

HR HEATED REGULATOR

	HR
Materials of Construction	**Regulator Base and Body:** 316/316L Stainless Steel (Standard), Others Available **Seals:** Varies Based on Customer Specifications and the MAOP of the Unit
Connections	¼" FNPT

	HR
	Others Available
Pressure Control Ranges	0–25 psig
	0–50 psig
	20–100 psig
	75–200 psig
Operation	Diaphragm-Sensing
	Piston-Sensing
Feature	Thermostatically Controlled Heating Element
Maximum Allowable Operating Pressure	**Bolted:** 5000 psig @ -20 °F to 120 °F **Threaded:** 2160 psig @ -20 °F to 120 °F
Electrical Area Classification	NEC Class I, Div. 1, Groups C &D
Options	Mounting Bracket Relief Valve and Pressure Gauge

Note: A downstream relief is required.

Heating Element Option

Electrical Connection	Power	Temperature Range	Current	Resistance
AC1 120 V	150 W	68 °F to 212 °F	1.25 A	144 Ω
	200 W	68 °F to 212 °F	1.67 A	72 Ω
AC 240 V	200 W	68 °F to 212 °F	0.833 A	288 Ω