GO Regulator

HXR Series

IRCOR

ENERGY

Insitu Temperature Compensating Pressure Regulator

Introduction

The HXR Series Insitu pressure regulator was designed to offset the Joules-Thompson temperature effect. This effect is the cooling that occurs during a pressure drop as a gas passes through an orifice. With HXR Series, the cooling is offset by placing the pressure regulating orifice at the tip of the probe assembly in the process line. As a result, the pressure reduced sample gas passes through a section of the probe that has heat exchange fins. As the cooled sample gas flows through this section of the probe assembly, it is reheated by heat picked up from the warmer high pressure process gas flowing around the outside of the probe assembly, thus returning the sample to the original process line working temperature and also preventing the condensation of liquids in the sample.



Typical Applications

Analytical process sample conditioning systems:

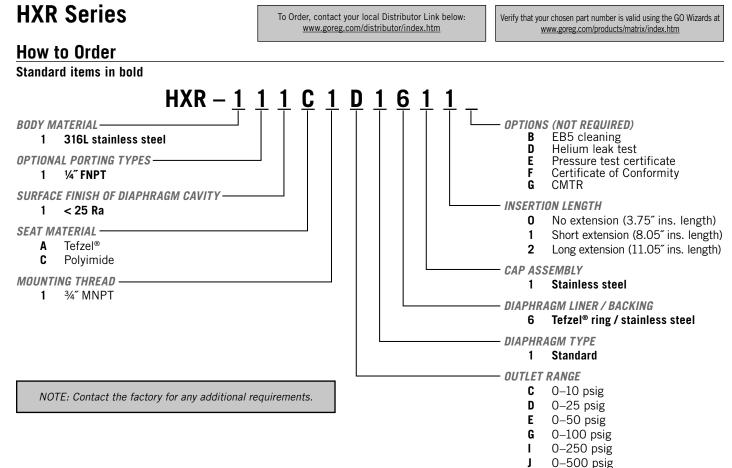
•	Gas	pipe	lines

Technical Data				
CONSTRUCTION	316L stainless steel			
OUTLET PRESSURES	0–10, 0–25, 0–50, 0–100, 0–250, and 0–500 psig			
MAX. INLET WORKING PRESSURE AT MAX. TEMP.	3600 psig			
C _V COEFFICIENTS	0.025			

Features & Benefits

- Prevents liquid carry over
- Insitu design allows for easy installation directly into process line
- Ensures a more representative and accurate sample analysis of process streams
- Electropolished body with better than 25 Ra finish in diaphragm cavity
- Bubble-tight shutoff
- Available with ³/₄" MNPT probe gland connection
- 70 micron filter
- Port sizes & configuration ¹/₄" FNPT: 3 low pressure ports situated 90° apart
- Optional probe lengths available
- Optional gauge and relief valve

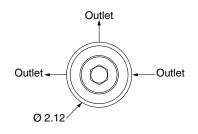
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Maximum Temperature & Operating Inlet Pressures

SEAT MATERIAL	MAXIMUM TEMPERATURE	@	MAXIMUM OPERATING INLET PRESSURE
Tefzel®	150° F (66° C)	@	3600 psig (20.68 MPa)
Polyimide	500° F (260° C)	@	3600 psig (20.68 MPa)

Outline and Mounting Dimensions



EXTENDER	INSERTION LENGTH	OVERALL LENGTH
None (-0)	3.7″	8.45″
Short (-1)	7.8″	12.45″
Long (-2)	11.0″	15.75″

