GO REGULATOR, INC.

HXR Series

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 pipelines

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 in ¾″ MNPT probe gland connection
- 70 micron filter
- Port sizes & configuration ¼″ FNPT: 3 low pressure ports situated 90° apart
- Optional probe lengths available
- Optional gauge

pressure regulators

HXR Series

To Order, contact your local Distributor Link below:
www.goreg.com/distributor/index.htm

Verify that your chosen part number is valid using the GO Wizards at
www.goreg.com/products/matrix/index.htm

How to Order

Standard items in bold

HXR – 1 1 1 C 1 D 1 6 1 1 _

BODY MATERIAL
- **1 316L stainless steel**

OPTIONAL PORTING TYPES
- **1 ¼″ FNPT**

SURFACE FINISH OF DIAPHRAGM CAVITY
- **1 < 25 Ra**

SEAT MATERIAL
- **A** Tefzel®
- **C** Polyimide

MOUNTING THREAD
- **1** ¾″ MNPT

OPTIONS (NOT REQUIRED)
- **B** EB5 cleaning
- **D** Helium leak test
- **E** Pressure test certificate
- **F** Certificate of Conformity
- **G** CMTR

INSERTION LENGTH
- **0** No extension (3.75″ ins. length)
- **1** Short extension (8.05″ ins. length)
- **2** Long extension (11.05″ ins. length)

CAP ASSEMBLY
- **1 Stainless steel**

DIAPHRAGM LINER / BACKING
- **6 Tefzel® ring / stainless steel**

DIAPHRAGM TYPE
- **1 Standard**

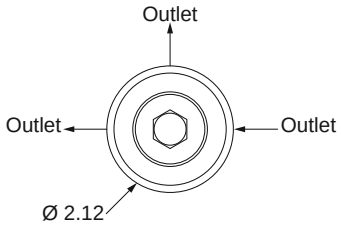
OUTLET RANGE
- **C** 0–10 psig
- **D** 0–25 psig
- **E** 0–50 psig
- **G** 0–100 psig
- **I** 0–250 psig
- **J** 0–500 psig

NOTE: Contact the factory for any additional requirements.

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″