Type H800

Introduction

This installation guide provides instructions for installation, startup, and adjustment. To receive a copy of the instruction manual, contact your local Fisher Sales Office or Sales Representative or view a copy at www.emersonprocess.com/regulators. For further information refer to: Type H800 Instruction Manual, form 5187, D100405X012.

P.E.D. Categories

This product may be used as a pressure accessory with pressure equipment in the following Pressure Equipment Directive 97/23/EC categories. It may also be used outside of the Pressure Equipment Directive using sound engineering practice (SEP) per table below.

PRODUCT SIZE	CATEGORIES	FLUID TYPE
DN 6 (1/4-inch)	SEP	1

Specifications

End Connections
DN 6 (1/4-inch) NPT female

Vent Connection
DN 15 (1/2-inch) NPT female

Maximum Allowable Control Pressure(1)
17,2 bar (250 psig)

Pressure Range(1)
Non-adjustable, start to discharge between 2,7 and 3,0 bar (39 and 44 psig)

Reseat Pressure(1)
2,4 bar (35 psig) or higher

Proof Test Pressure
All Pressure Retaining Components have been proof tested per Directive 97/23/EC - Annex 1, Section 7.4

Material Temperature Capabilities(1)
-20 to 150°F (-29 to 66°C)

Installation

WARNING

Only qualified personnel should install or service a backpressure regulator. Backpressure regulators should be installed, operated, and maintained in accordance with international and applicable codes and regulations, and Fisher instructions.

If using a backpressure regulator on a hazardous or flammable fluid service, personal injury and property damage could occur due to fire or explosion of vented fluid that may have accumulated. To prevent such injury or damage, provide piping or tubing to vent the fluid to a safe, well-ventilated area or containment vessel. Also, when venting a hazardous fluid, the piping or tubing should be located far enough away from any buildings or windows so to not create a further hazard, and the vent opening should be protected against anything that could clog it.

Personal injury, equipment damage, or leakage due to escaping fluid or bursting of pressure-containing parts may result if this backpressure regulator is overpressured or is installed where service conditions could exceed the limits given in the Specifications section, or where conditions exceed any ratings of the adjacent piping or piping connections.

To avoid such injury or damage, provide pressure-relieving or pressure-limiting devices (as required by the appropriate code, regulation, or standard) to prevent service conditions from exceeding limits.

Additionally, physical damage to the backpressure regulator could result in personal injury and property damage due to escaping fluid. To avoid such injury and damage, install the backpressure regulator in a safe location.

Clean out all pipelines before installation of the backpressure regulator and check to be sure the backpressure regulator has not been damaged or has collected foreign material during shipping. For NPT bodies, apply pipe compound to the male pipe threads. For flanged bodies, use suitable line gaskets and approved piping and bolting practices. Install the backpressure regulator in any position desired, unless otherwise specified, but be sure flow through the body is in the direction indicated by the arrow on the body.

Note

It is important that the backpressure regulator be installed so that the vent hole in the spring case is unobstructed at all times. For outdoor installations, the backpressure regulator should be located away from vehicular traffic and positioned so that water, ice, and other foreign materials cannot enter the spring case through the vent. Avoid placing the backpressure regulator beneath eaves or downspouts, and be sure it is above the probable snow level.

Overpressure

Maximum inlet pressures depend upon body materials and temperatures. Refer to the nameplate for the maximum inlet pressure of the valve. The valve should be inspected for damage after any overpressure condition. **Fisher backpressure regulators are NOT ASME safety relief valves.**

Startup

The backpressure regulator is factory set at approximately the midpoint of the spring range or the pressure requested, so an initial adjustment may be required to give the desired results. With proper installation completed and relief valves properly adjusted, slowly open the upstream and downstream shutoff valves (if applicable).

Adjustment

To change the outlet pressure, remove closing cap or loosen the locknut and turn the adjusting screw clockwise to increase outlet pressure or counterclockwise to decrease pressure. Monitor the outlet pressure with a test gauge during the adjustment. Replace closing cap or tighten the locknut to maintain the desired setting.

1. The pressure/temperature limits in this installation guide and any applicable standard or code limitation should not be exceeded.

D100405XENG

Table 1. *Maximum Allowable Inlet Pressure to 67 Series Regulators (with Type H800 Backpressure Regulator) to prevent Instrument Supply Pressure From Exceeding 50 psig (3,4 bar)*

TYPE H800 INSTALLATIONS	SUPPLY PRESSURE REGULATOR TYPES	REMOTE VENT PIPING(1)	MAXIMUM ALLOWABLE INLET PRESSURE TO SUPPLY PRESSURE REGULATOR	
			Psig	Bar
A	67, 67R, 67F, 67FR, 67AF, or 67AFR	Yes	250	17,2
		No		
B	67, 67R, 67AF, or 67AFR	Yes	100	6,9
		No	250	17,2
	67FR or 67F	Yes	100	6,9
		No	200	13,8

1. Limit vent piping to 30 equivalent feet (9 equivalent meters) of 1/2-inch piping. Lower vent piping may reduce the maximum allowable inlet pressure to supply pressure regulator.

Taking Out of Service (Shutdown)

WARNING

To avoid personal injury resulting from sudden release of pressure, isolate the backpressure regulator from all pressure before attempting disassembly.

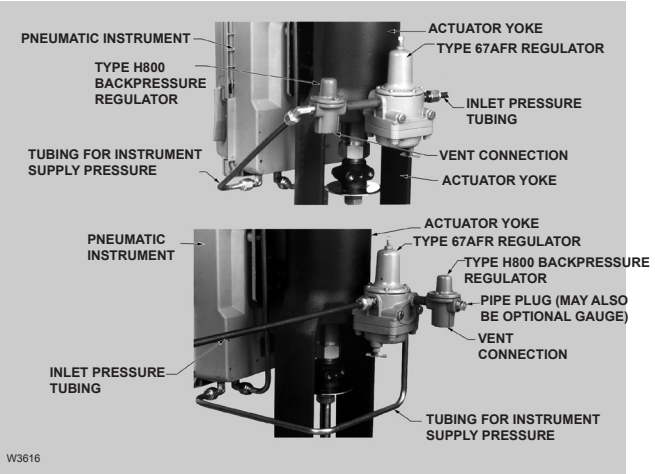

Figure 1. *Typical Installation Orientations*

Parts List

Key	Description
1	Relief Valve Body
2	Spring Case
3	Spring
4	Spring Cap
5	Diaphragm
6	Disc Restriction
7	Screen
8	Internal Retaining Ring
9	Machine Screw
11	Diaphragm Disc

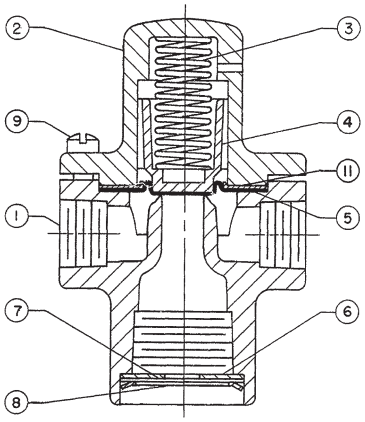

Figure 2. *Type H800 Backpressure Regulator*

Industrial

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For further information visit www.emersonprocess.com/regulators