

English - August 2016

Introduction

This installation guide provides instructions for installation, startup and adjustment. To receive a copy of the Instruction Manual, contact your local Sales Office or view a copy at www.fisher.com. For further information refer to: H100 Series Instruction Manual, D450383T012.

PED/PE(S)R Categories

This product may be used as a safety accessory with pressure equipment in the following categories. It may also be used outside of these Directives using Sound Engineering Practice (SEP) per table below. For information on the current PED/PE(S)R revision, see Bulletin: [D103053X012](#)

PRODUCT SIZE	CATEGORY	FLUID TYPE
DN 8 / 1/4 NPT	SEP	1

Specifications

Inlet Connection Size

DN 8 / 1/4 NPT

Maximum Allowable Control Pressure⁽¹⁾

29 bar / 420 psig

Start to Discharge Pressure⁽¹⁾

FIXED PRESSURE ⁽²⁾		RELIEF PRESSURE PLUS BUILDUP	
bar	psig	bar	psig
2.4	35	4.1	60
4.1	60	5.9	85
8.3	120	10	145
10	150	12	180
12	175	14	210
14	200	17	240
16	225	19	270
19	275	23	330
24	350	29	420

Proof Test Pressure

All Pressure Retaining Components have been proof tested per Pressure Equipment Directive and Pressure Equipment (Safety) Regulation.

Temperature Capabilities⁽¹⁾

-29 to 71°C / -20 to 160°F

Installation



Only qualified personnel should install or service a relief valve/backpressure regulator. Relief valves and backpressure regulators should be installed, operated and maintained in accordance with international and applicable codes and regulations and Fisher™ instructions.

If using a relief valve or 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 relief valve or 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 relief valve or backpressure regulator could result in personal injury and property damage due to escaping fluid. To avoid such injury and damage, install the relief valve or backpressure regulator in a safe location.

1. The pressure/temperature limits in this Installation Guide and any applicable standard or code limitation should not be exceeded.
2. This is the initial leak point, the point at which the relief valve begins to discharge.

H120 Series

A person should NEVER stand directly over or in front of or look directly into a relief valve when the tank is pressurized. The relief valve could suddenly “pop” open blowing gas, dirt and other debris into the person’s face and eyes.

Any valve that has fully opened “popped” should be tested to see if it is within the allowable start-to-discharge pressure setting. If it is not within the correct range, it must be replaced. Relief valve or backpressure regulator start-to-discharge and reseal pressures may be lower if the valve has fully opened “popped”.

Clean out all pipelines before installation of the relief valve or backpressure regulator and check to be sure the relief valve or backpressure regulator has not been damaged or has collected foreign material during shipping. For NPT bodies, apply pipe compound to the external pipe threads. For flanged bodies, use suitable line gaskets and approved piping and bolting practices. Install the relief valve or 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 relief valve or backpressure regulator be located away from vehicular traffic and positioned so that water, ice and other foreign materials cannot enter the discharge side of the valve. Avoid placing the relief valve or backpressure regulator beneath eaves

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For further information on the current PED/PE(S)R revision see Bulletin: [D103053X012](#) or scan the QR code.

or downspouts and be sure it is above the probable snow level. Raincaps are required on all relief valves and should be kept in place. An out-of-place raincap indicates the valve may have opened to relieve overpressure.

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™ relief valves and backpressure regulators are NOT ASME safety relief valves.**

Startup

The relief valve is precisely set by the manufacturer for the correct start-to-discharge setting based on the customer order. With proper installation completed, slowly open the upstream and downstream shutoff valves (if applicable).

Adjustment

Relief valves are set by the factory during assembly and cannot be adjusted in the field.

Taking Out of Service (Shutdown)



WARNING

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

