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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: H200 Series Instruction Manual, DXXXXXXX012.

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	CATEGORIES	FLUID TYPE
3/4 and 1 NPT	SEP	1

Specifications

Available Configuration and End Connections

Type H202: 3/4 NPT connection

Type H203: 1 NPT connection

Maximum Allowable Relief (Inlet) Pressure(1)

27.6 bar / 400 psig

Relief Pressure Ranges(1)

See Tables 1 and 2

Flow Capacity

See Table 2

Construction Materials

Body, Poppet and Spring Retainer: Brass

Disk: Nitrile (NBR)

Spring: 302 Stainless steel

Temperature Capabilities⁽¹⁾

-29 to 71°C / -20 to 160°F

Approximate Weight

0.2 kg / 0.5 lbs /

Option

Type P145 raincap

Installation



WARNING

Fisher™ relief valves must be installed, operated and maintained in accordance with federal, state and local codes, rules and regulations and Emerson Process Management Regulator Technologies Inc. (Emerson) instructions.

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.

Call a qualified service person to service the unit. Installation, operation and maintenance procedures performed by unqualified person may result in improper adjustment and unsafe operation. Either condition may result in equipment damage or personal injury. Only a qualified person shall install or service the relief valve.

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 start-to-discharge and reseal pressures may be lower if the valve has fully opened (popped).

This relief valve may be installed in any position but must be oriented so that gas discharged from the valve does not create a fire, toxic or explosion hazard. The relief valve should be protected from material and conditions that could clog the outlet side of the valve and affect the venting of gas.

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.

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

H200 Series

Table 1. Relief Pressure Spring Ranges

RELIEF PRESSURE SETTINGS		SPRING PART NUMBER	SPRING COLOR	RELIEF SETTING TOLERANCE	
bar	psig			bar	psig
1.7 to 2.1	25 to 30	1H485637022	Pink	±0.34	±5
2.1 to 3.8	31 to 55	1J152137022	White		
3.9 to 4.8	56 to 70	1P391137022	Blue		
4.5 to 6.5	65 to 95	T1049037022	Plain	±0.55	±8
6.2 to 9.0	90 to 130	1F791337022	Purple		
9.0 to 11.0	131 to 160	1F7912T0012	Yellow		
11.1 to 13.1	161 to 190	T12699T0012	Green	±1.03	±15
13.2 to 16.2	191 to 235	1F790937022	Brown		
16.3 to 20.7	236 to 300	1E954637052	Plain		

Table 2. Relief Set Pressures and Capacities

RELIEF SET PRESSURE ⁽¹⁾		SET PRESSURE PLUS BUILD-UP		FLOW CAPACITY ⁽²⁾	
bar	psig	bar	psig	Nm³/h	SCFH
1.7	25	3.4	50	916	34,200
3.4	50	5.2	75	1270	47,400
5.2	75	6.9	100	1608	60,000
6.9	100	8.3	120	1865	69,600
8.6	125	10.3	150	2235	83,400
10.3	150	12.4	180	2693	100,500
12.1	175	14.5	210	3152	117,600
13.8	200	16.5	240	3538	132,000
15.5	225	18.6	270	4020	150,000
17.2	250	20.7	300	4422	165,000
19.0	275	22.7	330	4824	180,000
20.7	300	24.8	360	5226	195,000

1. This is the initial leak point, the point at which the relief valve begins to discharge.

2. 0.6 Specific Gravity Gas. To convert to equivalent capacities of other gases, multiply the table values by 0.775 for air or 0.789 for nitrogen. Multiply the flow obtained by 0.0268 to convert to (Nm³/h) at 0°C and 1.01 bar.

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

