Type 289P

English – July 2017

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: Type 289P Instruction Manual, D102680X012.

PED Categories

This product may be used as a pressure accessory with pressure equipment in the following Pressure Equipment Directive categories. It may also be used outside of the Pressure Equipment Directive using sound engineering practice (SEP) per table below. For information on the current PED revision see Bulletin: *D103053X012*.

PRODUCT SIZE	CATEGORIES	FLUID TYPE
DN 25 / NPS 1	SEP	1

Specifications

Maximum Relief (Inlet) Pressure(1)(2)

1 NPT: 3.4 bar / 50 psig over relief set pressure or 7.6 bar / 110 psig whichever is lower
2 NPT: 1.0 bar / 15 psig

Relief Set Pressure Ranges

1 NPT
Type 6358B Pilot: 0.69 to 6.9 bar / 10 to 100 psig
2 NPT
Type 6365 Pilot: 35 mbar to 0.14 bar / 14 in. w.c. to 2 psig
Type 6368B Pilot: 0.14 to 0.69 bar / 2 to 10 psig

Proof Test Pressure

All Pressure Retaining Components have been proof tested per Directive

Temperature Capabilities(1)

Nitrile (NBR): -29 to 82°C / -20 to 180°F
Fluorocarbon (FKM): -18 to 149°C / 0 to 300°F

Installation

WARNING

Only qualified personnel shall install or service a relief valve. Relief valves should be installed, operated and maintained in accordance with international and applicable codes and regulations and Emerson Process Management Regulator Technologies, Inc. instructions.

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

Clean out all pipelines before installation of the relief valve and check to be sure the relief valve 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 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.

1. The pressure/temperature limits in this Installation Guide and any applicable standard or code limitation should not be exceeded.
2. Relief pressure plus maximum allowable build-up over setting.

Note

It is important that the relief valve be installed so that the vent hole in the spring case is unobstructed at all times. For outdoor installations, the relief valve 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 relief valve beneath eaves or downspouts and be sure it is above the probable snow level.

Note

Do not adjust main valve spring.

Overpressure Protection

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 are NOT ASME safety relief valves.**

Startup

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

Taking Out of Service (Shutdown)

WARNING

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

If pressure is introduced first to the main valve before the pilot, the main valve may go wide-open and subject the downstream system to full inlet pressure.

Parts List

1 NPT Type 289P Main Valve

Key	Description
1	Body
2	Spring Case
3	Diaphragm Head
4	Spring Seat (1 NPT only)
5*	Diaphragm
6	Adjusting Screw
7	Spring
8	Machine Screw / Cap Screw
9*	Screen
10*	Seat Ring (2 NPT only)
11*	Gasket / Hex Nut
13	Snap Ring
14	Closing Cap (2 NPT only)
15*	Gasket
16	Nameplate (1 NPT only)
17	Lower Spring Guide
18	Pitot tube or Stem
19*	Gasket / Hex Nut
20*	O-ring
21	O-ring Holder (1 NPT only)
22	O-ring Washer
23	Spacer
24	Hex Nut (1 NPT only)
26	Lower Diaphragm Head (for 2 NPT only)
27	Washer
28	Pipe Plug
29	Machine Screw
30*	O-ring (1 NPT only)
31	Stem Guide Assembly
36	Pitot Tube Plug
37	O-ring (1 NPT only)
38*	Gasket (2 NPT only)
50	Label

Type 6358B Pilot

Key	Description
1	Pilot Body
2	Spring Case
3	Body Plug
4*	Valve Plug and Stem Assembly
5*	Diaphragm Assembly
6	Connector Cap
7	Spring
8	Spring Seat
9	Stem Guide
10	Adjusting Screw
11	Locknut
12	Closing Cap
13*	Body Plug Gasket or O-ring
14	Valve Spring
16	Vent Assembly
17	Machine Screw
19*	Closing Cap Gasket
20	Restriction
36*	Stem Guide Gasket
37*	Stem O-ring

* Recommended spare part

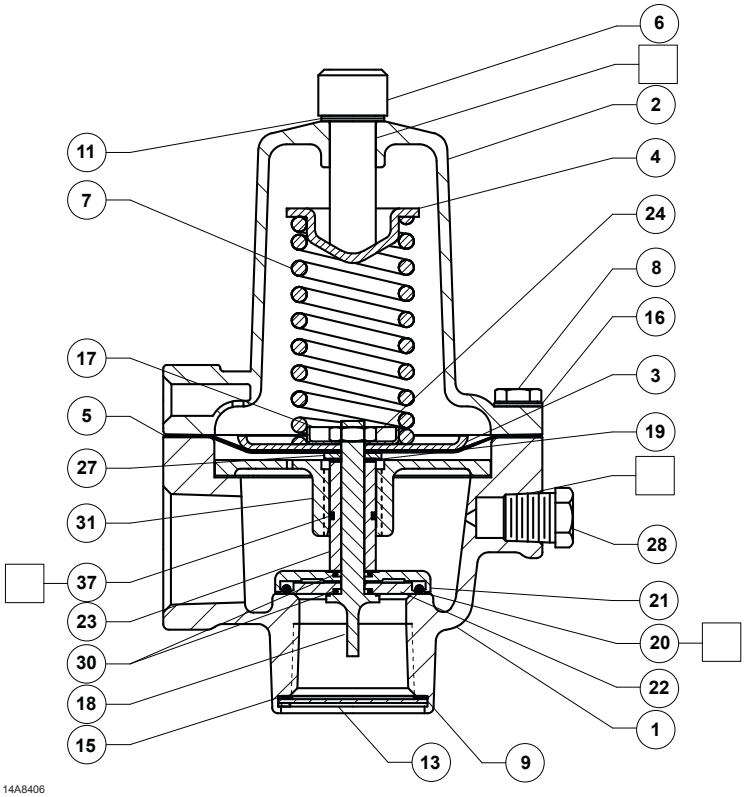
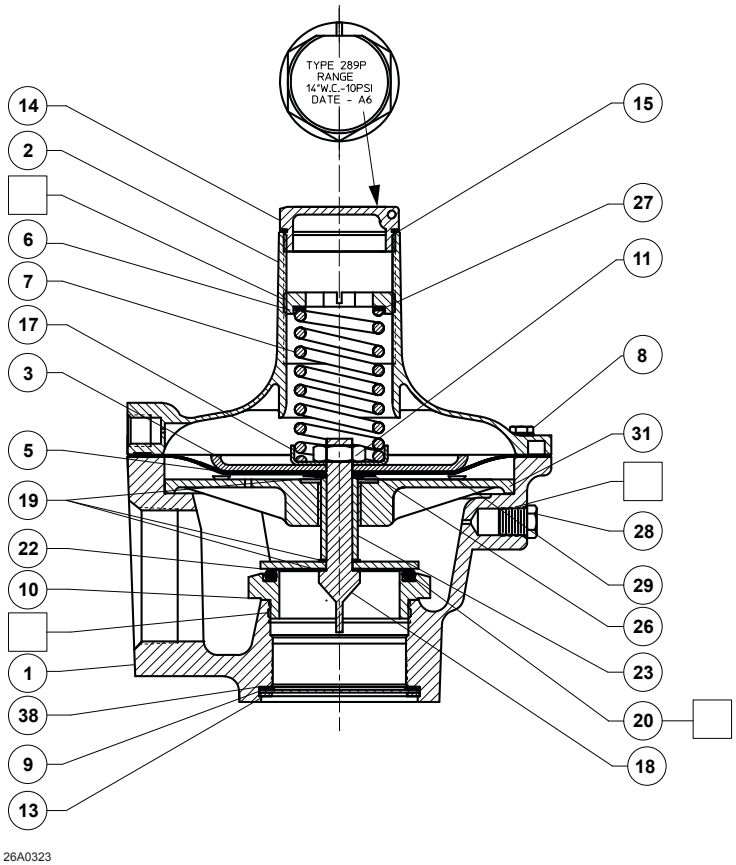


Figure 1. *1 NPT Type 289P Main Valve Assembly*

Type 6365 Pilot

Key	Description
1	Body Assembly
2	Spring Case
3	Body Plug
4*	Plug/Stem Assembly
5*	Diaphragm Assembly (includes heat-treated 416 Stainless steel diaphragm plate)
6	Connector Cap
7	Control Spring
8	Spring Seat
9	Plug/Stem Guide
10	Adjusting Screw
11	Locknut
12	Closing Cap
13*	Body Plug Gasket
14*	Plug/Stem Spring
16	Type Y602-12 Vent Assembly
17	Machine Screw
19*	Closing Cap Gasket
20	Restriction, Plated carbon steel No. 70 drill size or 0.71 mm / 0.028 in. diameter, standard (indicated by H for high gain stamped on pilot body and yellow color code)
36*	Connector Cap Gasket



☐ **APPLY LUBRICANT (L) / SEALANT (S)(1)**

* Recommended spare part

1. Lubricant and sealant must be selected such that they meet the temperature requirements.

Figure 2. *2 NPT Type 289P Main Valve Assembly*

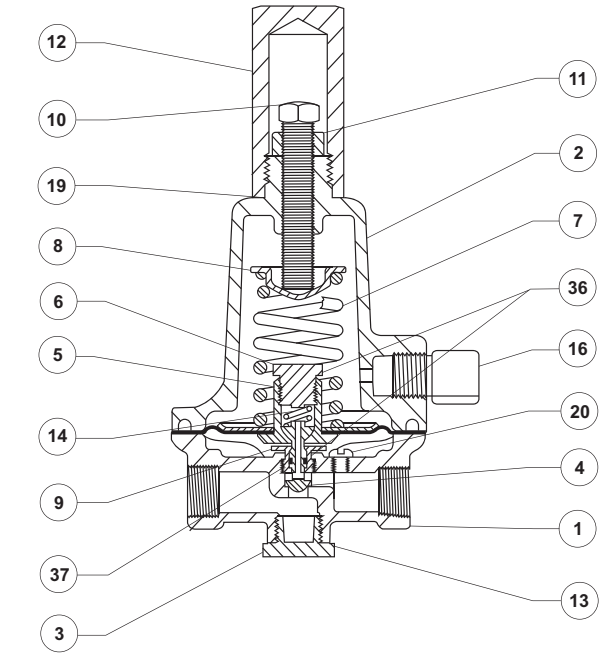


Figure 3. *Type 6358B Assembly*

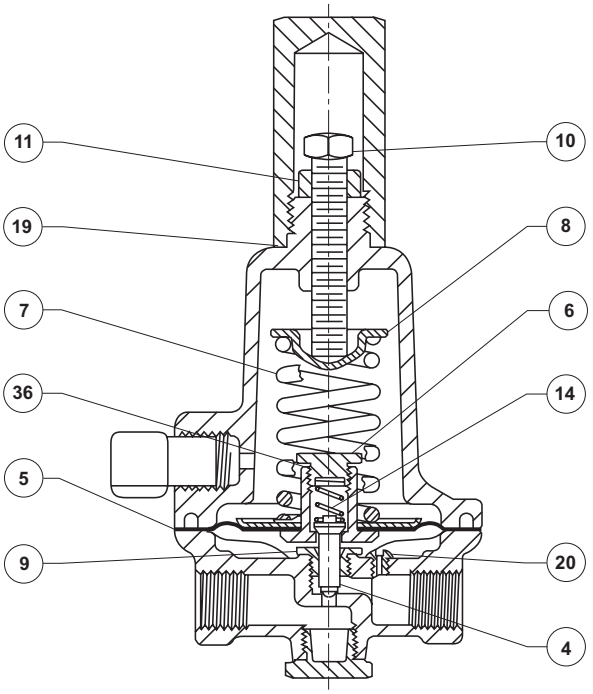


Figure 4. *Type 6365 Pilot Assembly*

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For further information on the current PED revision see Bulletin: *D103053X012* or scan the QR code.

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