

## 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](http://www.fisher.com). For further information refer to: 67C Series Instruction Manual, D102601X012.

## PED Categories

This product may be used as a safety 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
1/4 NPT	SEP	1

## Specifications

### Body Size and End Connection Style

1/4 NPT

### Maximum Inlet Pressure (Body Rating)<sup>(1)</sup>

**67CFS Series:** 17.2 bar / 250 psig

**67CS Series:** 27.6 bar / 400 psig

### Maximum Emergency Outlet Pressure<sup>(1)</sup>

3.4 bar / 50 psig over outlet pressure setting

### Proof Test Pressure

All Pressure Retaining Components have been proof tested per Directive.

### Outlet Pressure Ranges<sup>(1)</sup>

0 to 1.4 bar / 0 to 20 psig

0 to 2.4 bar / 0 to 35 psig

0 to 4.1 bar / 0 to 60 psig

0 to 8.6 bar / 0 to 125 psig

0 to 10.3 bar / 0 to 150 psig

### Temperature Capabilities<sup>(1)</sup>

#### With Nitrile (NBR)

*Standard Bolting:* -29 to 82°C / -20 to 180°F

*Stainless Steel Bolting:* -40 to 82°C / -40 to 180°F

#### With Fluorocarbon (FKM)

*Polyethylene Filter<sup>(3)</sup> (standard):* -18 to 82°C / 0 to 180°F

*Polyvinylidene (PVDF), Stainless steel or Glass Filter (Optional):* -18 to 149°C / 0 to 300°F

**With Silicone (VMQ)<sup>(2)</sup> Diaphragm and Low Temperature bolting:** -51 to 82°C / -60 to 180°F

**With Gauges:** -40 to 82°C / -40 to 180°F

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

2. Silicone (VMQ) is not compatible with hydrocarbon gas.

3. Do not use in high aromatic hydrocarbon service.

## Installation



### WARNING

**Only qualified personnel should install or service a regulator. Regulators should be installed, operated and maintained in accordance with international and applicable codes and regulations and Emerson Process Management Regulator Technologies, Inc. instructions.**

**If the regulator vents fluid or a leak develops in the system, it indicates that service is required. Failure to take the regulator out of service immediately may create a hazardous condition.**

**Personal injury, equipment damage or leakage due to escaping fluid or bursting of pressure-containing parts may result if this 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 regulator could result in personal injury and property damage due to escaping fluid. To avoid such injury and damage, install the regulator in a safe location.**

**The internal relief valve in the 67CFSR Series regulators does not provide full overpressure protection. The internal relief valve is designed for minor seat leakage only.**

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

# 67CS and 67CFS Series

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## Note

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

## Overpressure Protection

The recommended pressure limitations are stamped on the regulator nameplate. Some type of overpressure protection is needed if the actual inlet pressure exceeds the maximum operating outlet pressure rating. Overpressure protection should also be provided if the regulator inlet pressure is greater than the safe working pressure of the downstream equipment.

Regular operation below the maximum pressure limitations does not preclude the possibility of damage from external sources or debris in the line. The regulator should be inspected for damage after any overpressure condition.

## Startup

The 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.

## Adjustment

To change the set pressure, remove the 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 the closing cap or tighten the locknut to maintain the desired setting.

## Taking Out of Service (Shutdown)



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

## Parts List

### Types 67CS and 67CSR

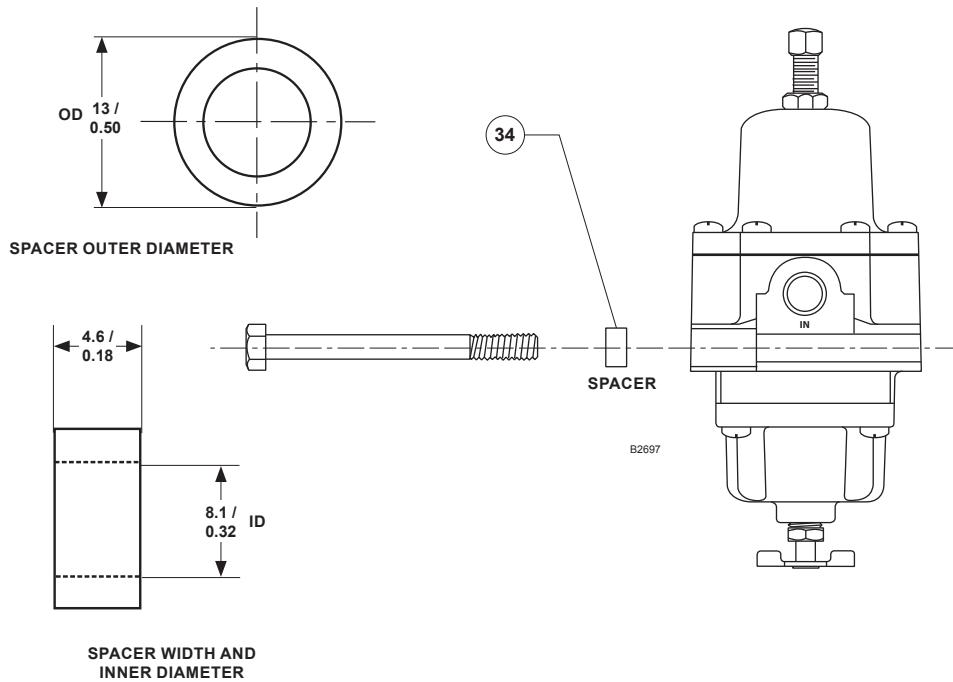
Key	Description
1	Body
3	Flange Screw
4*	O-ring
7	Spring Case Assembly
10*	Valve Cartridge <sup>(1)</sup>
11*	Valve Plug <sup>(1)</sup>
12*	Valve Spring <sup>(1)</sup>
13*	Valve Retainer <sup>(1)</sup>
14*	O-ring <sup>(1)</sup>
15*	Soft Seat <sup>(1)</sup>
16*	Diaphragm Assembly
17	Spring
18	Adjusting Screw
19	Lock Nut
20	Upper Spring Seat
22	Pressure Gauge (not shown)
23	Pipe Plug (not shown)
30	NACE Tag (not shown)
31	Panel Mounting Nut
33	Closing Cap
39	Bottom Plate
45	Vent Screen

### Types 67CFS and 67CFSR

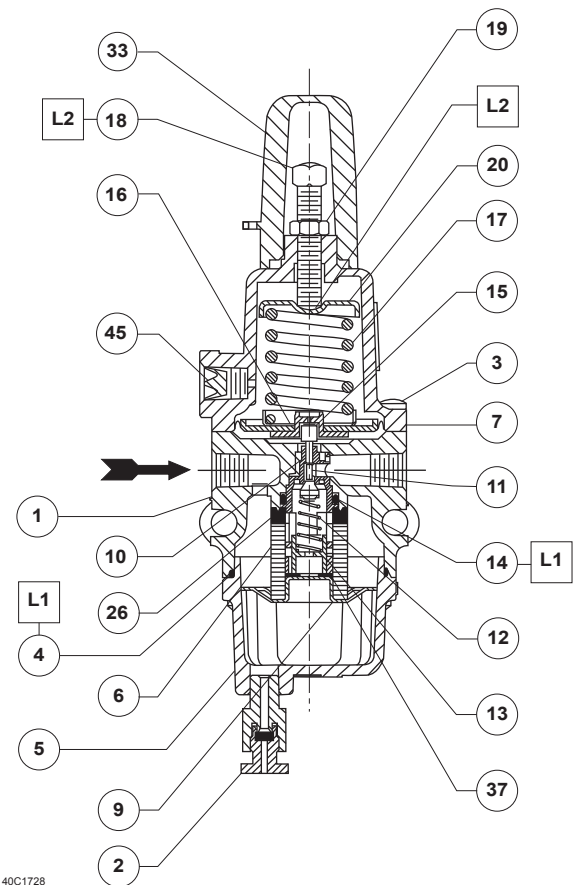
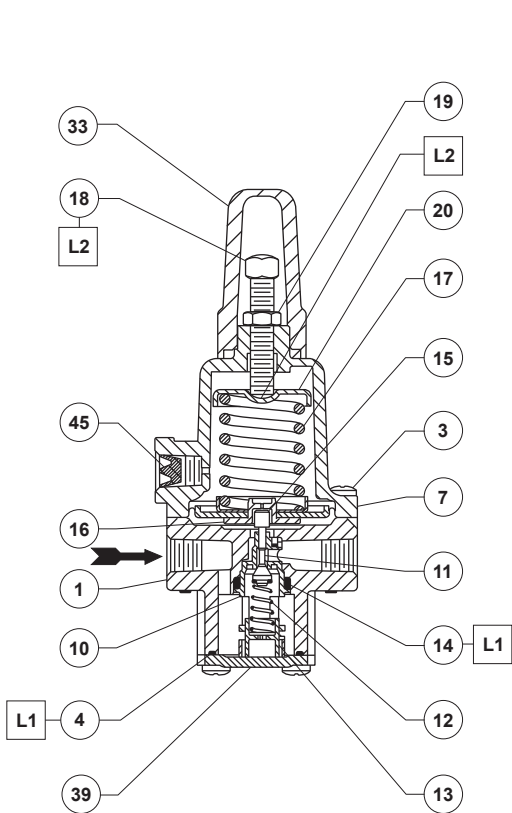
Key	Description
1	Body
2	Drain Valve
3	Flange Screw
4*	O-ring
5	Dripwell
6*	Filter Element
7	Spring Case Assembly
9	Filter Retainer
10*	Valve Cartridge <sup>(1)</sup>
11*	Valve Plug <sup>(1)</sup>
12*	Valve Spring <sup>(1)</sup>
13*	Valve Retainer <sup>(1)</sup>
14*	O-ring <sup>(1)</sup>
15*	Soft Seat <sup>(1)</sup>
16*	Diaphragm Assembly
17	Spring
18	Adjusting Screw
19	Locknut
20	Upper Spring Seat
22	Pressure Gauge (not shown)
23	Pipe Plug (not shown)
26*	Filter Gasket
30	NACE Tag (not shown)
31	Panel Mounting Nut
33	Closing Cap
34	Spacer
37	Thrust Washer
45	Vent Screen

\*Recommended spare part.

1. Valve Cartridge Assembly includes keys 10, 11, 12, 13, 14 and 15.



**Figure 1. Spacer Diameter and Assembly**  
 (For Installing in an Existing Installation if the Mounting Bolts are Too Long)



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□ APPLY LUBRICANT<sup>(1)</sup>:  
 L1 = MULTI-PURPOSE POLY TETRAFLUOROETHYLENE (PTFE) LUBRICANT  
 L2 = ANTI-SEIZE COMPOUND

40C1728

1. Lubricants must be selected such that they meet the temperature requirements.

**Figure 2. Types 67CS and 67CSR Assembly**

**Figure 3. Types 67CFS and 67CFSR Assembly**

# 67CS and 67CFS Series

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

