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.FISHERregulators.com. For further information refer to:

Type 92C Instruction Manual, form 5135, D100255X012.

P.E.D. Categories

This product may be used as a safety 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 15, 20, and 25 (1/2, 3/4, and 1-inch) NPT	SEP	1

Specifications

Body Sizes and End Connection Style

DN 15, 20, and 25 (1/2, 3/4, and 1-inch) NPT screwed

Maximum Allowable Inlet and Pilot Supply Pressures(1)

Cast Iron: 17,2 bar (250 psig)
Steel: 20,7 bar (300 psig)

Regulator Pressure Drops(1)

Minimum: 1,0 bar (15 psig)
Maximum Operating: 10,3 bar (150 psig) for outlet pressure settings equal to or below 3,4 bar (50 psig); 13,8 bar (200 psig) for outlet pressure settings above 3,4 bar (50 psig)
Maximum Emergency: Cast Iron construction, 17,2 bar (250 psig); Steel construction, 20,7 bar (300 psig)

Outlet Control Pressure Range(1)

0,3 to 4,8 bar (5 to 70 psig) with green pilot control spring, or 1,4 to 10,3 bar (20 to 150 psig) with red pilot control spring

Maximum Outlet Pressures(1)

Maximum Operating Outlet Pressure: 10,3 bar (150 psig)
Maximum Emergency Outlet (Casing) Pressure: Cast Iron construction, 17,2 bar (250 psig); Steel construction, 20,7 bar (300 psig)

Loading Pressure For Pressure-Loaded Regulator(1)

Maximum allowable loading pressure is 17,2 bar (250 psig) for cast iron construction and 20,7 bar (300 psig) for steel construction; the maximum allowable diaphragm differential pressure of 10,3 bar (150 psig) for cast iron and steel constructions must not be exceeded.

Proof Test Pressure

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

Maximum Temperature Capabilities(1)

Cast Iron: 208°C (406°F)
Steel: 260°C (500°F)

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 Fisher 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.

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 male 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.

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.

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

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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.

Regulator 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 outlet pressure, remove the 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 the 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 regulator from all pressure before attempting disassembly.

Parts List

Regulator

Key	Description
1	Regulator Body Assembly with bushing
2	Diaphragm Flange
3	Seat Ring
4	Valve Plug
5	Valve Plug Guide
6	Stem Guide Bushing
7	Valve Plug Spring
8	Diaphragm
9	Diaphragm Gasket
10	Pitot Tube
11	Stem Assembly
12	Cap Screw
13	Nameplate
14	Drive Screw
15	Diaphragm Ring

Type 6392 Pilot

Key	Description
1	Pilot Body
2	Spring Case
3	Seat Ring
4	Valve Plug
5	Valve Plug Guide
6	Stem Assembly
7	Diaphragm
8	Diaphragm Gasket
9	Lower Spring Seat
10	Stem Guide Bushing
11	Valve Plug Spring
12	Strainer Screen
13	Control Spring
14	Upper Spring Seat
15	Jam Nut
16	Adjusting Screw
17	Cap Screw
18	Nameplate
19	Drive Screw
26	Valve Plug Cap

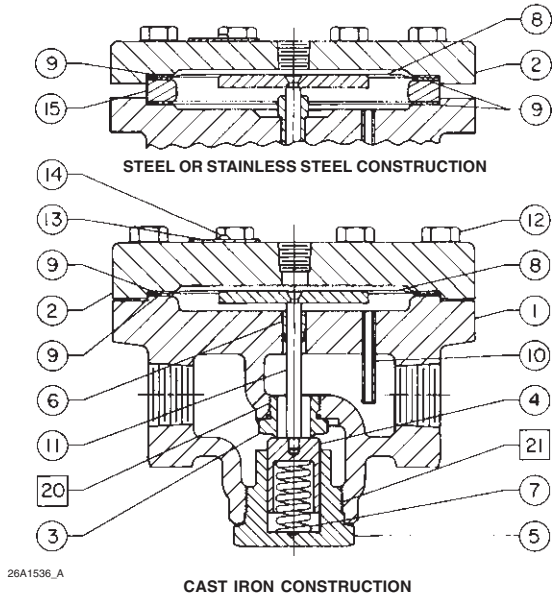

Figure 1. Type 92C Regulator

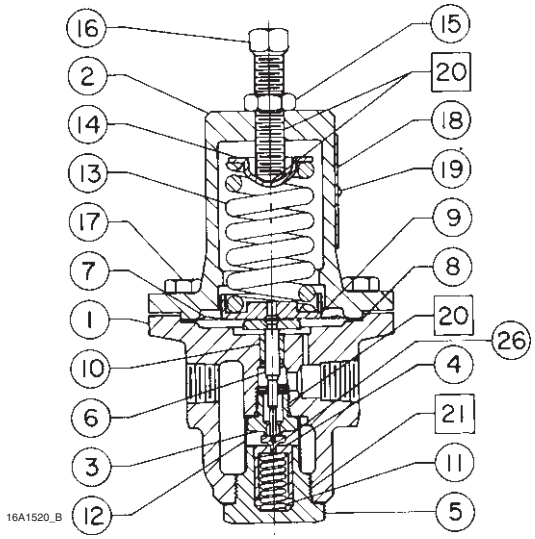

Figure 2. Type 6392 Pilot

For information, contact Fisher Controls, International:
Within USA (800) 588-5853 – Outside USA (972) 542-0132
France – (33) 23-733-4700
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