English – April 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: Type 6365 and 6358 Series Instruction Manual, D102692X012.

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: <u>D103053X012</u>.

PRODUCT SIZE	CATEGORIES	FLUID TYPE
Type 6365, DN 6 / 1/4 in.	SEP	1
Type 6358, 1/4 NPT		

Specifications

Pilot Descriptions

Type 6365: Set pressure range from 35 mbar to 0.14 bar / 14 in. w.c. to 2 psig. This pilot has a high gain restriction standard.

Type 6358: Set pressure range from 0.21 to 8.6 bar / 3 to 125 psig. This pilot has a restriction plug. **Type 6358B:** Set pressure range from 0.14 to 8.6 bar / 2 to 125 psig. This pilot is available with a

high, medium or low gain restriction.

Type 6358EB: Set pressure range of 5.2 to 24.1 bar / 75 to 350 psig. This pilot is available with a high or low gain restriction.

Type 6358EBH: Set pressure range of 17.2 to 41.4 bar / 250 to 600 psig. This pilot is available with a high or low gain restriction.

Maximum Relief (Inlet) Pressure (Including Buildup)(1)

Depends upon maximum inlet pressure for complete relief valve as specified in appropriate main valve bulletin.

Pilot Set Pressure Ranges(1)(2)

See Table 1

Proof Test Pressure

All Pressure Retaining Components have been proof tested per Directive

Temperature Capability(1)

-29 to 66°C / -20 to 150°F

Pressure Connection

1/4 NPT (internal)

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.

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.





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

^{2.} Set pressure is defined as the pressure at which the pilot starts to discharge

SPRING RANGE(1) WIRE DIAMETER FREE LENGTH PILOT TYPE **SPRING COLOR** bar psig In. 6365 0.070 35 mbar to 0.14 bar 14 in. w.c. to 2 psia 1.78 54.1 2.13 Yellow 0.21 to 1.24 3 to 18 Green 3.05 0.120 57.2 2.25 6358 0.7 to 2.76 10 to 40 Yellow 3.76 0 148 50.8 2.00 1.4 to 8.62 0.187 55.6 2.19 20 to 125 Red 4.75 2.59 53.8 0.14 to 0.69 2 to 10 Black 0.102 2.12 0.21 to 1.24 3.05 54.1 3 to 18 Green 0.120 2.13 10 to 30 Silver 3.61 0.142 2.13 6358B 1.03 to 2.76 15 to 40 Yellow 3.76 0.148 50.8 2.00 2.07 to 4.14 4.62 0.182 49.3 1.94 30 to 60 Blue 4.75 0.187 55.6 2.19 0.7 to 8.62 10 to 125 Red 5.72 94.0 5.17 to 9.65 75 to 140 0.225 3.70 Green 6358EB 8.96 to 13.8 130 to 200 Blue 6.66 0.262 97.8 3.85 12.4 to 24.1 180 to 350 Red 7.47 0 294 107 4.22 0.262 17.2 to 31.0 250 to 450 Blue 6.66 97.8 3.85 6358EBH 0.294 107 27.6 to 41.4 400 to 600 Red 7.47 4.22

 Table 1. Pilot Set Pressure Ranges and Control Spring Information

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.

1. Main valve may limit advertised spring range. See individual main valve bulletin for additional information.

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

6358 Series Pilots

Kev	Description

- 1 Body
- 2 Spring Case
- 3 Body Plug
- 4 Valve Plug and Stem Assembly
- 5* Diaphragm Assembly
- 6 Connector Cap
- 7 Control Spring
- 8 Spring Seat
- 9 Stem Guide
- 10 Adjusting Screw
- 11 Locknut
- 12 Closing Cap
- 13* Body Plug O-ring
- 14 Valve Spring
- 15 O-ring, Type 6358EBH (not shown)
- 16* Vent Assembly
- 17 Machine Screw
- 18 O-ring, Type 6358EB (not shown)
- 19* Closing Cap Gasket, Types 6358 and 6358B
- 20 Restriction Plug, Type 6358
- 20 Restriction, Types 6358B, 6358EB and 6358EBH
- 21 Filter
- 29 Gauge
- 29 Pipe Plug
- 34 Pipe Nipple
- 36* Connector Cap Gasket
- 37* Stem O-ring
- 38 Lower Spring Seat, Types 6358EB and 6358EBH (not shown)
- 40 Diaphragm Limiter, Type 6358EB (not shown)
- 42 NACE Tag
- 43 Tag Wire

^{*}Recommended spare part.

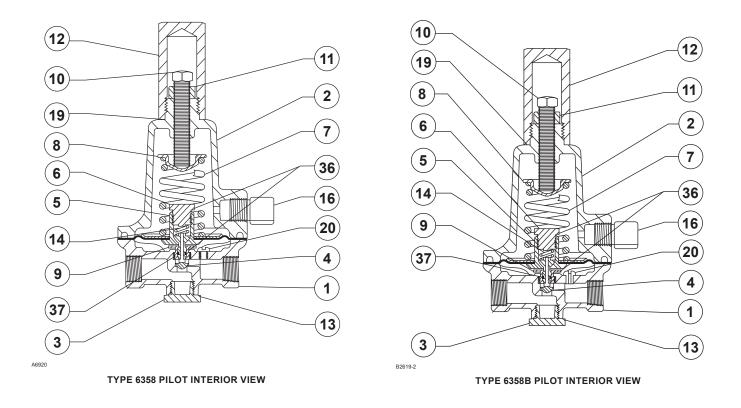
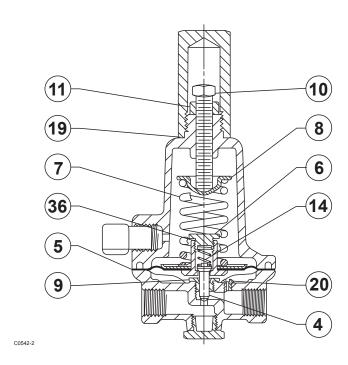


Figure 1. Type 6358 and 6358B Pilots

Type 6365 Pilot

Key Description

- **Body Assembly**
- 2 Spring Case
- Body Plug 3
- Plug/Stem Assembly 4*
- 5* Diaphragm Assembly
- Connector Cap 6
- Control Spring
- 8 Spring Seat
- 9 Plug/Stem Guide
- 10 Adjusting Screw
- 11 Locknut
- Closing Cap 12
- 13* Body Plug Gasket
- 14* Plug/Stem Spring
- 16 Vent Assembly
- Machine Screw 17
- 19* Closing Cap Gasket
- Restriction 20
- Connector Cap Gasket 36*

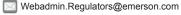


TYPE 6365 PILOT INTERIOR VIEW

Figure 2. Type 6365 Pilot Assembly

^{*}Recommended spare part.

Type 6365 and 6358 Series



G Fisher.com

Facebook.com/EmersonAutomationSolutions

in LinkedIn.com/company/emerson-automation-solutions

Twitter.com/emr_automation

Emerson Automation Solutions

Americas

McKinney, Texas 75070 USA T +1 800 558 5853 +1 972 548 3574

Europe

Bologna 40013, Italy T +39 051 419 0611

Asia Pacific

Singapore 128461, Singapore T +65 6777 8211

Middle East and Africa

Dubai, United Arab Emirates T +971 4 811 8100



For further information on the current PED revision see Bulletin: <u>D103053X012</u> or scan the QR code.

D102692X014 © 2004, 2018 Emerson Process Management Regulator Technologies, Inc. All rights reserved. 09/18. The Emerson logo is a trademark and service mark of Emerson

The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their prospective owners. Fisher Mis a mark owned by Fisher Controls International LLC, a business of Emerson Automation Solutions.

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

Emerson Process Management Regulator Technologies, Inc does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any Emerson Process Management Regulator Technologies, Inc. product remains solely with the purchaser.

