

Overpressure Protection Solutions Regulators, Valves, Actuators, Transmitter, Monitoring System & Services

# Tap to get started











Complex Safety System



Regulatory Compliance



### Personnel Upskilling

Safety will always be the number one priority for the natural gas industry. In addition, upskilling personnel, complying with changing regulations and selecting reliable partners are pressing challenges.

Click for more (···•)







## "Natural gas utilities spend \$22 billion annually to help enhance the safety of natural gas distribution and transmission systems."

– American Gas Association





(X)



Click for more (···•)







### (X)"Many large utilities now spend multiple billions of dollars each year on suppliers, amplifying traditional risks."

– BCG.com, How Utilities Can Manage Supplier Risk



Safety will always be the number one priority for the natural gas industry. In addition, upskilling personnel, complying with changing regulations and selecting reliable partners are pressing challenges.

Click for more (···•)







The Natural Gas distribution industry states 23% of the workforce is over (X)the age of 55.

– U.S. Bureau of Labor Statistics

Safety will always be the number one priority for the natural gas industry. In addition, upskilling personnel, complying with changing regulations and selecting reliable partners are pressing challenges.

Click for more (···•)









Complex Safety System



Regulatory Compliance



Personnel Upskilling















### **Reduce complexity without sacrificing flexibility**

- Extensive product portfolio to suit your network's OPP requirements
- Modular and customizable options to meet specific applications and operating conditions
- Eliminate supplier inefficiencies by partnering with a global leader that provides the complete solution

















### Minimize risk associated with regulatory compliance

- Knowledgeable industry experts to help you navigate impending regulations and ensure compliance
- Scalable solutions that can accommodate requirements as regulations evolve in the future
- A well-connected Impact Partner network providing global as well as localized expertise

















## **Upskill personnel through tailored training options & lifecycle services**

- Technical expertise to help aid your organization in the selection and implementation of OPP solutions
- Tailored learning opportunities available, and established robust training programs through Emerson and our partner network
- Network of support specialists available for product lifecycle management















## Discover how Emerson can help you protect, monitor and control your system through a complete portfolio of overpressure protection solutions.

### Which overpressure protection system solves your challenge?

Protect



**Regulator Monitor with Full Capacity Relief** 

Tap for more

**Regulator Monitor with Slam-Shut** (...)



(••••

**Regulator, Slam-Shut & Full Capacity Relief** 

### Monitor & Control



**General Monitoring and Recording** 





**SCADA Monitoring** 



Training and Lifecycle Services











Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.



Tap for

more

**Regulator Monitor Systems** ••••

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)



**HIGH PRESSURE INLET** 

LOW PRESSURE OUTLET











more

## **Regulator Monitor with Full Capacity Relief**

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.



**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Regulator Monitor Systems**





Provides stable and accurate downstream pressure control regardless of inlet pressure variations or demand changes

Can accurately control at pressure differentials as • low as 2.9 psid / 0.2 bar d







### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET



Tap for

(···) Fisher Type EZR



Fisher Type 299H











more

## **Regulator Monitor with Full Capacity Relief**

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.



**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Regulator Monitor Systems**





Provides smooth, quiet operation, tight shutoff and long life, even in dirty service

• The specially engineered flow path, along with the metal plug, allows flow through the regulator without seat impingement







### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

![](_page_12_Figure_18.jpeg)

Tap for more

Fisher Type EZL

(···) Fisher Type EZR

![](_page_12_Picture_22.jpeg)

Fisher Type 299H

![](_page_12_Picture_25.jpeg)

![](_page_12_Picture_26.jpeg)

![](_page_12_Figure_27.jpeg)

![](_page_12_Figure_28.jpeg)

![](_page_13_Picture_0.jpeg)

more

## **Regulator Monitor with Full Capacity Relief**

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_13_Picture_3.jpeg)

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves (···**►)

### **Regulator Monitor Systems**

![](_page_13_Picture_7.jpeg)

![](_page_13_Picture_8.jpeg)

Compact high-capacity regulator with unique no-bleed monitor system

• Flexible worker/monitor system setup that allows for bleed to be piped to the intermediate piping thus eliminating downstream bleed which reduces lost and unaccounted for gas

> Fisher Type 299H product webpage

![](_page_13_Picture_12.jpeg)

![](_page_13_Figure_15.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

![](_page_13_Figure_18.jpeg)

more

![](_page_13_Picture_21.jpeg)

Fisher Type 299H

![](_page_13_Picture_24.jpeg)

![](_page_13_Picture_25.jpeg)

![](_page_13_Figure_26.jpeg)

![](_page_13_Figure_27.jpeg)

![](_page_14_Picture_0.jpeg)

more

## **Regulator Monitor with Full Capacity Relief**

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_14_Picture_3.jpeg)

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves (···**►)

### **Regulator Monitor Systems**

![](_page_14_Picture_7.jpeg)

![](_page_14_Picture_8.jpeg)

Offers increased outlet setpoint capabilities and provides the True Monitor™ protection

• Combines the operation of a conventional tworegulator wide-open monitor set into one device without the need for a downstream control line

![](_page_14_Picture_12.jpeg)

![](_page_14_Figure_15.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

![](_page_14_Figure_18.jpeg)

Tap for more

(···) Fisher Type EZR

(···) Fisher Type 299H

![](_page_14_Picture_24.jpeg)

![](_page_14_Picture_25.jpeg)

![](_page_14_Figure_26.jpeg)

![](_page_14_Figure_27.jpeg)

![](_page_15_Picture_0.jpeg)

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_15_Picture_3.jpeg)

more

**Regulator Monitor Systems** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Section VIII Pressure Relief Valves**

![](_page_15_Picture_8.jpeg)

![](_page_15_Picture_9.jpeg)

Provides overpressure protection from 25 to 6170 psig (1.72 to over 425.5 barg) with a snap action achieving full lift with 0% accumulation

• Designed for use in gas and vapor service, a snap action pilot opens fully at set pressure minimizing required overpressure and accumulation

> 200 Series Pilots product webpage

![](_page_15_Picture_13.jpeg)

![](_page_15_Figure_16.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

![](_page_15_Figure_19.jpeg)

![](_page_15_Picture_20.jpeg)

![](_page_15_Picture_21.jpeg)

![](_page_15_Figure_22.jpeg)

![](_page_15_Figure_23.jpeg)

![](_page_16_Picture_0.jpeg)

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_16_Picture_3.jpeg)

more

**Regulator Monitor Systems** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Section VIII Pressure Relief Valves**

![](_page_16_Picture_8.jpeg)

![](_page_16_Picture_9.jpeg)

Provides system overpressure protection from 15 to 1480 psig (1.04 to 102.04 barg) with a modulating action and seat tightness up to 98% of set pressure

• Modulating action eliminates destructive effects of cycling or chatter and the main valve lifts proportionally to demand minimizing fluid loss

> 400 Series Pilots product webpage

![](_page_16_Picture_13.jpeg)

![](_page_16_Figure_16.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

Anderson Greenwood 200 Series Pilots Tap for Anderson Greenwood 400 Series Pilots (···•) more Anderson Greenwood Series 9300 Pilots (...)

![](_page_16_Picture_20.jpeg)

![](_page_16_Picture_21.jpeg)

![](_page_16_Figure_22.jpeg)

![](_page_16_Figure_23.jpeg)

![](_page_17_Picture_0.jpeg)

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_17_Picture_3.jpeg)

more

**Regulator Monitor Systems** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Section VIII Pressure Relief Valves**

![](_page_17_Picture_8.jpeg)

![](_page_17_Picture_9.jpeg)

Provides overpressure protection from 10 inches of water column to 15 psig with a robust self-guiding seat design that ensures repeatable seat tightness

• Can be adjusted for both snap action and modulating action to fit challenging overpressure protection applications

> Series 9300 Pilots product webpage

![](_page_17_Picture_13.jpeg)

![](_page_17_Figure_16.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

nderson Greenwood 200 Series Pilots Tap for Anderson Greenwood 400 Series Pilots **(····)** more (···) Anderson Greenwood Series 9300 Pilots

![](_page_17_Picture_20.jpeg)

![](_page_17_Picture_21.jpeg)

![](_page_17_Figure_22.jpeg)

![](_page_17_Figure_23.jpeg)

![](_page_18_Picture_0.jpeg)

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_18_Picture_3.jpeg)

Tap for

more

- **Regulator Monitor Systems**
- **Section VIII Pressure Relief Valves** (…)
- **Non-Section VIII Relief Valves** (...)

### **Non-Section VIII Relief Valves**

![](_page_18_Picture_8.jpeg)

![](_page_18_Picture_9.jpeg)

Provides smooth, quiet operation, tight shutoff and long life, even in dirty service

• The specially engineered flow path, along with the metal plug, allow flow through the body without seat impingement

![](_page_18_Picture_13.jpeg)

![](_page_18_Figure_16.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

![](_page_18_Figure_19.jpeg)

![](_page_18_Picture_20.jpeg)

![](_page_18_Picture_21.jpeg)

![](_page_18_Figure_22.jpeg)

![](_page_18_Figure_23.jpeg)

![](_page_18_Picture_24.jpeg)

![](_page_19_Picture_0.jpeg)

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_19_Picture_3.jpeg)

Tap for

more

**Regulator Monitor Systems** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Non-Section VIII Relief Valves**

![](_page_19_Picture_8.jpeg)

![](_page_19_Picture_9.jpeg)

Excellent performance in a wide range of overpressure and backpressure applications such as natural gas transmission and distribution stations

• Especially engineered for high-pressure applications where sonic gas velocities are often encountered at relief valve outlets

> Fisher 63EG Relief product webpage

![](_page_19_Picture_13.jpeg)

![](_page_19_Figure_16.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

![](_page_19_Figure_19.jpeg)

![](_page_19_Picture_20.jpeg)

![](_page_19_Picture_21.jpeg)

![](_page_19_Figure_22.jpeg)

![](_page_19_Picture_23.jpeg)

![](_page_20_Picture_0.jpeg)

Any two regulators in series and a pressure relief valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the relief valve provides the second level.

![](_page_20_Picture_3.jpeg)

Tap for

more

**Regulator Monitor Systems** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (....)

### **Non-Section VIII Relief Valves**

![](_page_20_Picture_8.jpeg)

Tap for

![](_page_20_Picture_9.jpeg)

Economical, compact device used for pressure relief applications in gas distribution systems

• Upstream control line construction is available to provide wide-open relief flow capacity with less buildup regardless of set pressure

![](_page_20_Picture_13.jpeg)

![](_page_20_Figure_16.jpeg)

### **HIGH PRESSURE INLET**

LOW PRESSURE OUTLET

Fisher Type EZR Relief Valve

(···) Fisher Type 63EG Relief Valve

Fisher Type 1808 Relief Valve

![](_page_20_Picture_22.jpeg)

![](_page_20_Picture_23.jpeg)

![](_page_20_Figure_24.jpeg)

![](_page_20_Figure_25.jpeg)

![](_page_20_Picture_26.jpeg)

![](_page_21_Picture_0.jpeg)

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_21_Picture_3.jpeg)

Tap for

more

- **Regulator Monitor Systems** ••••
- **Regulator Monitor with Slam-Shut** (···•)
- **Slam-Shut Devices** (....)

![](_page_21_Picture_7.jpeg)

![](_page_21_Figure_10.jpeg)

![](_page_21_Picture_11.jpeg)

![](_page_21_Picture_12.jpeg)

![](_page_22_Picture_0.jpeg)

more

## **Regulator Monitor with Slam-Shut**

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_22_Picture_3.jpeg)

**Regulator Monitor with Slam-Shut** (...)

![](_page_22_Picture_5.jpeg)

![](_page_22_Picture_6.jpeg)

### **Regulator Monitor Systems**

![](_page_22_Picture_8.jpeg)

![](_page_22_Picture_9.jpeg)

Provides stable and accurate downstream pressure control regardless of inlet pressure variations or demand changes

Can accurately control at pressure differentials as • low as 2.9 psid / 0.2 bar d

![](_page_22_Picture_12.jpeg)

![](_page_22_Picture_13.jpeg)

![](_page_22_Figure_16.jpeg)

![](_page_22_Figure_17.jpeg)

![](_page_22_Picture_20.jpeg)

Fisher Type 299H

![](_page_22_Picture_23.jpeg)

![](_page_22_Picture_24.jpeg)

![](_page_23_Picture_0.jpeg)

more

## **Regulator Monitor with Slam-Shut**

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_23_Picture_3.jpeg)

**Regulator Monitor with Slam-Shut** (...)

![](_page_23_Picture_5.jpeg)

![](_page_23_Picture_6.jpeg)

### **Regulator Monitor Systems**

![](_page_23_Picture_8.jpeg)

![](_page_23_Picture_9.jpeg)

Provides smooth, quiet operation, tight shutoff and long life, even in dirty service

• The specially engineered flow path, along with the metal plug, allows flow through the regulator without seat impingement

![](_page_23_Picture_12.jpeg)

![](_page_23_Picture_13.jpeg)

![](_page_23_Figure_16.jpeg)

![](_page_23_Figure_17.jpeg)

Tap for more

(···) Fisher Type EZR

![](_page_23_Picture_21.jpeg)

Fisher Type 299H

![](_page_23_Picture_24.jpeg)

![](_page_23_Picture_25.jpeg)

![](_page_24_Picture_0.jpeg)

more

## **Regulator Monitor with Slam-Shut**

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_24_Picture_3.jpeg)

**Regulator Monitor with Slam-Shut** (...)

![](_page_24_Picture_5.jpeg)

![](_page_24_Picture_6.jpeg)

### **Regulator Monitor Systems**

![](_page_24_Picture_8.jpeg)

![](_page_24_Picture_9.jpeg)

Compact high-capacity regulator with unique no-bleed monitor system

• Flexible worker/monitor system setup that allows for bleed to be piped to the intermediate piping thus eliminating downstream bleed which reduces lost and unaccounted for gas

> Fisher Type 299H product webpage

![](_page_24_Picture_13.jpeg)

![](_page_24_Figure_16.jpeg)

![](_page_24_Figure_17.jpeg)

Tap for more

(···) Fisher Type EZR

![](_page_24_Picture_21.jpeg)

Fisher Type 299H

![](_page_24_Picture_24.jpeg)

![](_page_24_Picture_25.jpeg)

![](_page_25_Picture_0.jpeg)

more

## **Regulator Monitor with Slam-Shut**

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_25_Picture_3.jpeg)

**Regulator Monitor with Slam-Shut (···**▶)

![](_page_25_Picture_5.jpeg)

![](_page_25_Picture_6.jpeg)

### **Regulator Monitor Systems**

![](_page_25_Picture_8.jpeg)

![](_page_25_Picture_9.jpeg)

Offers increased outlet setpoint capabilities and provides the True Monitor™ protection

• Combines the operation of a conventional tworegulator wide-open monitor set into one device without the need for a downstream control line

![](_page_25_Picture_13.jpeg)

![](_page_25_Figure_16.jpeg)

![](_page_25_Figure_17.jpeg)

Tap for more

(···) Fisher Type EZR

![](_page_25_Picture_21.jpeg)

(···) Fisher Type 299H

![](_page_25_Picture_24.jpeg)

![](_page_25_Picture_25.jpeg)

![](_page_26_Picture_0.jpeg)

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_26_Picture_3.jpeg)

more

- **Regulator Monitor Systems**
- **Regulator Monitor with Slam-Shut** (...)
- **Slam-Shut Devices** (…)
- **Token Relief Valve** (...)

## **Regulator Monitor with Slam-Shut**

![](_page_26_Picture_9.jpeg)

![](_page_26_Picture_10.jpeg)

Can be equipped for OverPressure ShutOff (OPSO), UnderPressure ShutOff (UPSO), Overpressure and UnderPressure ShutOff (OPSO/UPSO)

• Maintains up to ±1% accuracy regardless of inlet pressure, flow rate and the size of the slam-shut

![](_page_26_Picture_14.jpeg)

![](_page_26_Figure_17.jpeg)

![](_page_26_Figure_18.jpeg)

![](_page_26_Picture_19.jpeg)

![](_page_26_Picture_20.jpeg)

![](_page_27_Picture_0.jpeg)

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_27_Picture_3.jpeg)

more

- **Regulator Monitor Systems**
- **Regulator Monitor with Slam-Shut** (...)
- **Slam-Shut Devices** (…)
- **Token Relief Valve** (…)

## **Regulator Monitor with Slam-Shut**

![](_page_27_Picture_9.jpeg)

![](_page_27_Picture_10.jpeg)

Offers multiple overpressure protection options to meet your application requirements

• Engineered to fit a multitude of pressure reducing applications including commercial and industrial installations

![](_page_27_Picture_14.jpeg)

![](_page_27_Figure_17.jpeg)

![](_page_27_Figure_18.jpeg)

![](_page_27_Picture_19.jpeg)

![](_page_27_Picture_20.jpeg)

![](_page_28_Picture_0.jpeg)

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_28_Picture_3.jpeg)

more

- **Regulator Monitor Systems** ••••
- **Regulator Monitor with Slam-Shut** (···•)

![](_page_28_Picture_6.jpeg)

**Token Relief Valve** (...)

## **Slam-Shut Devices**

![](_page_28_Picture_9.jpeg)

![](_page_28_Picture_10.jpeg)

Can be equipped for OverPressure ShutOff (OPSO), UnderPressure ShutOff (UPSO), Overpressure and UnderPressure ShutOff (OPSO/UPSO)

• Maintains up to ±1% accuracy regardless of inlet pressure, flow rate and the size of the slam-shut

![](_page_28_Picture_14.jpeg)

![](_page_28_Figure_17.jpeg)

![](_page_28_Figure_18.jpeg)

![](_page_28_Picture_19.jpeg)

![](_page_28_Picture_20.jpeg)

![](_page_29_Picture_0.jpeg)

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_29_Picture_3.jpeg)

more

- **Regulator Monitor Systems** ••••
- **Regulator Monitor with Slam-Shut** (···•)

![](_page_29_Picture_6.jpeg)

**Token Relief Valve** (...)

### **Slam-Shut Devices**

![](_page_29_Picture_9.jpeg)

![](_page_29_Picture_10.jpeg)

Provides Overpressure Shut-off and Underpressure Shut-off capability

• Modular Body Construction allows for adding regulator module in the future with no pipe charges

![](_page_29_Picture_14.jpeg)

![](_page_29_Figure_17.jpeg)

![](_page_29_Figure_18.jpeg)

![](_page_29_Picture_19.jpeg)

![](_page_29_Picture_20.jpeg)

![](_page_30_Picture_0.jpeg)

Any two regulators in series and a slam-shut valve, all sensing the same downstream pressure. The monitor regulator provides the first level of protection and the slam-shut provides the second level.

![](_page_30_Picture_3.jpeg)

more

- **Regulator Monitor Systems** ••••
- **Regulator Monitor with Slam-Shut** (···•)
- **Slam-Shut Devices** (....)

![](_page_30_Picture_8.jpeg)

**Token Relief Valve** 

## **Token Relief Valve**

![](_page_30_Picture_11.jpeg)

![](_page_30_Picture_12.jpeg)

Provides an increase in relief performance through high-capacity internal relief

• Offers a significant improvement in the level of overpressure protection to the downstream system in the event of an overpressure occurrence

![](_page_30_Picture_15.jpeg)

![](_page_30_Picture_16.jpeg)

![](_page_30_Figure_19.jpeg)

![](_page_30_Picture_20.jpeg)

![](_page_31_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief valve provides the first level of protection and the slamshut provides the second level.

![](_page_31_Picture_3.jpeg)

Tap for

more

**Regulator with Slam-Shut** ••••

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (....)

![](_page_31_Figure_9.jpeg)

![](_page_31_Picture_10.jpeg)

![](_page_31_Picture_11.jpeg)

![](_page_32_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief valve provides the first level of protection and the slamshut provides the second level.

![](_page_32_Picture_3.jpeg)

Tap for

more

### **Regulator with Slam-Shut**

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Regulator Monitor with Slam-Shut**

![](_page_32_Picture_8.jpeg)

![](_page_32_Picture_9.jpeg)

Can be equipped for OverPressure ShutOff (OPSO), UnderPressure ShutOff (UPSO), Overpressure and UnderPressure ShutOff (OPSO/UPSO)

• Maintains up to ±1% accuracy regardless of inlet pressure, flow rate and the size of the slam-shut

![](_page_32_Picture_13.jpeg)

![](_page_32_Figure_16.jpeg)

![](_page_32_Figure_17.jpeg)

![](_page_32_Picture_18.jpeg)

![](_page_32_Picture_19.jpeg)

![](_page_33_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief valve provides the first level of protection and the slamshut provides the second level.

![](_page_33_Picture_3.jpeg)

Tap for

more

### **Regulator with Slam-Shut**

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves (···**►)

### **Regulator Monitor with Slam-Shut**

![](_page_33_Picture_8.jpeg)

![](_page_33_Picture_9.jpeg)

Offers multiple overpressure protection options to meet your application requirements

• Engineered to fit a multitude of pressure reducing applications including commercial and industrial installations

![](_page_33_Picture_13.jpeg)

![](_page_33_Figure_16.jpeg)

![](_page_33_Figure_17.jpeg)

![](_page_33_Picture_18.jpeg)

![](_page_33_Picture_19.jpeg)

![](_page_34_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief value provides the first level of protection and the slamshut provides the second level.

![](_page_34_Picture_3.jpeg)

more

**Regulator with Slam-Shut** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Section VIII Pressure Relief Valves**

![](_page_34_Picture_8.jpeg)

![](_page_34_Picture_9.jpeg)

Provides overpressure protection from 25 to 6170 psig (1.72 to over 425.5 barg) with a snap action achieving full lift with 0% accumulation

• Designed for use in gas and vapor service, a snap action pilot opens fully at set pressure minimizing required overpressure and accumulation

> 200 Series Pilots product webpage

![](_page_34_Picture_13.jpeg)

![](_page_34_Figure_16.jpeg)

![](_page_34_Figure_17.jpeg)

![](_page_34_Picture_18.jpeg)

![](_page_34_Picture_19.jpeg)

![](_page_35_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief valve provides the first level of protection and the slamshut provides the second level.

![](_page_35_Picture_3.jpeg)

more

**Regulator with Slam-Shut** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Section VIII Pressure Relief Valves**

![](_page_35_Picture_8.jpeg)

![](_page_35_Picture_9.jpeg)

Provides system overpressure protection from 15 to 1480 psig (1.04 to 102.04 barg) with a modulating action and seat tightness up to 98% of set pressure

• Modulating action eliminates destructive effects of cycling or chatter and the main valve lifts proportionally to demand minimizing fluid loss

> 400 Series Pilots product webpage

![](_page_35_Picture_13.jpeg)

![](_page_35_Figure_16.jpeg)

![](_page_35_Picture_17.jpeg)

![](_page_35_Picture_18.jpeg)

![](_page_35_Picture_19.jpeg)

![](_page_36_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief value provides the first level of protection and the slamshut provides the second level.

![](_page_36_Picture_3.jpeg)

more

**Regulator with Slam-Shut** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (...)

### **Section VIII Pressure Relief Valves**

![](_page_36_Picture_8.jpeg)

![](_page_36_Picture_9.jpeg)

Provides overpressure protection from 10 inches of water column to 15 psig with a robust self-guiding seat design that ensures repeatable seat tightness

• Can be adjusted for both snap action and modulating action to fit challenging overpressure protection applications

> Series 9300 Pilots product webpage

![](_page_36_Picture_13.jpeg)

![](_page_36_Figure_16.jpeg)

![](_page_36_Figure_17.jpeg)

![](_page_36_Picture_18.jpeg)

![](_page_36_Picture_19.jpeg)

![](_page_37_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief valve provides the first level of protection and the slamshut provides the second level.

![](_page_37_Picture_3.jpeg)

Tap for

more

**Regulator with Slam-Shut** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (....)

### **Non-Section VIII Relief Valves**

![](_page_37_Picture_8.jpeg)

![](_page_37_Picture_9.jpeg)

Provides smooth, quiet operation, tight shutoff and long life, even in dirty service

• The specially engineered flow path, along with the metal plug, allow flow through the body without seat impingement

![](_page_37_Picture_13.jpeg)

![](_page_37_Figure_16.jpeg)

![](_page_37_Figure_17.jpeg)

![](_page_37_Picture_18.jpeg)

![](_page_37_Picture_19.jpeg)

![](_page_38_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief value provides the first level of protection and the slamshut provides the second level.

![](_page_38_Picture_3.jpeg)

Tap for

more

**Regulator with Slam-Shut** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (....)

### **Non-Section VIII Relief Valves**

![](_page_38_Picture_8.jpeg)

![](_page_38_Picture_9.jpeg)

Excellent performance in a wide range of overpressure and backpressure applications such as natural gas transmission and distribution stations

• Especially engineered for high-pressure applications where sonic gas velocities are often encountered at relief valve outlets

> Fisher 63EG Relief product webpage

![](_page_38_Picture_13.jpeg)

![](_page_38_Figure_16.jpeg)

![](_page_38_Picture_17.jpeg)

![](_page_38_Picture_18.jpeg)

![](_page_38_Picture_19.jpeg)

![](_page_39_Picture_0.jpeg)

A regulator, slam-shut and relief valve, all sensing the same downstream pressure. The relief value provides the first level of protection and the slamshut provides the second level.

![](_page_39_Picture_3.jpeg)

Tap for

more

**Regulator with Slam-Shut** 

**Section VIII Pressure Relief Valves** (…)

**Non-Section VIII Relief Valves** (....)

### **Non-Section VIII Relief Valves**

![](_page_39_Picture_8.jpeg)

![](_page_39_Picture_9.jpeg)

Economical, compact device used for pressure relief applications in gas distribution systems

• Upstream control line construction is available to provide wide-open relief flow capacity with less buildup regardless of set pressure

![](_page_39_Picture_13.jpeg)

![](_page_39_Figure_16.jpeg)

![](_page_39_Picture_17.jpeg)

Fisher Type 1808 Relief Valve

![](_page_39_Picture_19.jpeg)

![](_page_39_Picture_20.jpeg)

![](_page_40_Picture_0.jpeg)

Combine FB Series flow computers with Rosemount<sup>™</sup> pressure transmitters to achieve real-time capture, storage and communication of overpressure events.

![](_page_40_Picture_3.jpeg)

Flow Computer and Remote Terminal Unit ••••

Tap for more

**Pressure Transmitter (···**▶)

![](_page_40_Figure_9.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

![](_page_40_Picture_11.jpeg)

![](_page_40_Picture_12.jpeg)

![](_page_41_Picture_0.jpeg)

Combine FB Series flow computers with Rosemount<sup>™</sup> pressure transmitters to achieve real-time capture, storage and communication of overpressure events.

![](_page_41_Picture_3.jpeg)

### **Flow Computers**

![](_page_41_Picture_5.jpeg)

![](_page_41_Picture_6.jpeg)

A gathering point for all data being communicated to the central SCADA control room. FB Series flow computers maximize uptime and enable operators to manage multiple device connections.

![](_page_41_Picture_9.jpeg)

![](_page_41_Figure_11.jpeg)

![](_page_41_Figure_12.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

.000 and FB2000 Series Flow Computers Tap for FB3000 Remote Terminal Unit **(····)** more

![](_page_41_Picture_15.jpeg)

![](_page_41_Picture_16.jpeg)

![](_page_42_Picture_0.jpeg)

Combine FB Series flow computers with Rosemount<sup>™</sup> pressure transmitters to achieve real-time capture, storage and communication of overpressure events.

![](_page_42_Picture_3.jpeg)

### **Remote Terminal Unit**

![](_page_42_Picture_5.jpeg)

![](_page_42_Picture_6.jpeg)

Offers industry-leading configurability and programmability in one easy-to-use controller. The FB3000 RTU is scalable, allowing your operation to evolve with your changing site requirements.

![](_page_42_Picture_9.jpeg)

![](_page_42_Figure_11.jpeg)

![](_page_42_Figure_12.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

.000 and FB2000 Series Flow Computers Tap for FB3000 Remote Terminal Unit **(····)** more

![](_page_42_Picture_15.jpeg)

![](_page_42_Picture_16.jpeg)

![](_page_43_Picture_0.jpeg)

Combine FB Series flow computers with Rosemount<sup>™</sup> pressure transmitters to achieve real-time capture, storage and communication of overpressure events.

![](_page_43_Picture_3.jpeg)

### **Pressure Transmitter**

![](_page_43_Picture_5.jpeg)

The industry standard for differential, gage, and absolute pressure measurement

• Engineered with power advisory diagnostics, which detect electrical loop integrity issues to reduce downtime

![](_page_43_Picture_9.jpeg)

X

![](_page_43_Figure_12.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

![](_page_43_Picture_14.jpeg)

![](_page_43_Picture_15.jpeg)

![](_page_44_Picture_0.jpeg)

Maximize the functionality of FB Series flow computers by integrating valves and primary flow meters from Emerson's product range for a single-source solution.

![](_page_44_Picture_3.jpeg)

![](_page_44_Picture_4.jpeg)

Tap for more

••• Pressure Transmitter

Motor Operated Valve

![](_page_44_Figure_9.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

![](_page_44_Picture_11.jpeg)

![](_page_45_Picture_0.jpeg)

Maximize the functionality of FB Series flow computers by integrating valves and primary flow meters from Emerson's product range for a single-source solution.

### Flow Computer and Remote Terminal Unit

![](_page_45_Picture_4.jpeg)

••• Pressure Transmitter

••• Motor Operated Valve

### **Flow Computers**

![](_page_45_Picture_8.jpeg)

![](_page_45_Picture_9.jpeg)

A gathering point for all data being communicated to the central SCADA control room. FB Series flow computers maximize uptime and enable operators to manage multiple device connections.

![](_page_45_Picture_12.jpeg)

![](_page_45_Figure_14.jpeg)

FB1000 and FB2000 Series Flow ComputersTap for<br/>moreFB3000 Remote Terminal Unit

![](_page_45_Picture_16.jpeg)

![](_page_46_Picture_0.jpeg)

Maximize the functionality of FB Series flow computers by integrating valves and primary flow meters from Emerson's product range for a single-source solution.

### **Flow Computer and Remote Terminal Unit**

![](_page_46_Picture_4.jpeg)

••• Pressure Transmitter

Motor Operated Valve

### **Remote Terminal Unit**

![](_page_46_Picture_8.jpeg)

![](_page_46_Picture_9.jpeg)

Offers industry-leading configurability and programmability in one easy-to-use controller. The FB3000 RTU is scalable, allowing your operation to evolve with your changing site requirements.

![](_page_46_Picture_11.jpeg)

![](_page_46_Figure_13.jpeg)

FB1000 and FB2000 Series Flow ComputersTap for<br/>moreFB3000 Remote Terminal Unit

![](_page_46_Picture_15.jpeg)

![](_page_47_Picture_0.jpeg)

Maximize the functionality of FB Series flow computers by integrating valves and primary flow meters from Emerson's product range for a single-source solution.

![](_page_47_Picture_3.jpeg)

Pressure Transmitter

Flow Computer and Remote Terminal Unit

••• Motor Operated Valve

### **Pressure Transmitter**

![](_page_47_Picture_7.jpeg)

![](_page_47_Picture_8.jpeg)

The industry standard for differential, gage, and absolute pressure measurement

• Engineered with power advisory diagnostics, which detect electrical loop integrity issues to reduce downtime

![](_page_47_Picture_12.jpeg)

![](_page_47_Figure_14.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

![](_page_47_Picture_16.jpeg)

![](_page_48_Picture_0.jpeg)

Maximize the functionality of FB Series flow computers by integrating valves and primary flow meters from Emerson's product range for a single-source solution.

![](_page_48_Picture_3.jpeg)

Flow Computer and Remote Terminal Unit

![](_page_48_Picture_5.jpeg)

**Pressure Transmitter** (…)

![](_page_48_Picture_7.jpeg)

### **Motor Operated Valve**

![](_page_48_Picture_9.jpeg)

![](_page_48_Picture_10.jpeg)

Ensure positive shut-off with KTM E-Seat<sup>®</sup>. Fugitive emissions control for flammable and non-flammable applications.

• A new generation of ball valves with LOW-E fugitive emission certification, cavity relieving seats and ease of automation

> KTM Ball Valve product webpage

![](_page_48_Picture_14.jpeg)

![](_page_48_Figure_16.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

![](_page_48_Picture_18.jpeg)

![](_page_48_Picture_19.jpeg)

![](_page_48_Picture_20.jpeg)

![](_page_49_Picture_0.jpeg)

Maximize the functionality of FB Series flow computers by integrating valves and primary flow meters from Emerson's product range for a single-source solution.

![](_page_49_Picture_3.jpeg)

![](_page_49_Picture_4.jpeg)

Tap for more

**Pressure Transmitter** (…)

![](_page_49_Picture_7.jpeg)

### **Motor Operated Valve**

![](_page_49_Picture_9.jpeg)

![](_page_49_Picture_10.jpeg)

Robust, easy to service, quarter-turn electric actuator

• Employs a unique modular design to allow for simple retrofits using over 200 different accessory kits

![](_page_49_Picture_13.jpeg)

![](_page_49_Picture_14.jpeg)

![](_page_49_Figure_16.jpeg)

**REGULATOR + MONITOR + SLAM-SHUT** 

M Ball Valves Tap for **BETTIS TorqPlus Electric Valve Actuator (····)** more

![](_page_49_Picture_19.jpeg)

![](_page_49_Picture_20.jpeg)

![](_page_50_Picture_0.jpeg)

## **SCADA Monitoring**

SCADA systems provide scalable system monitoring, from single sites to thousands of monitoring points, with easy integration of remote field devices. Emerson provides a wide range of SCADA solutions.

![](_page_50_Picture_3.jpeg)

Tap for

more

**On-Premise Host solutions** 

**Off-Premise Cloud Based Host solutions** (...)

![](_page_50_Figure_8.jpeg)

![](_page_50_Picture_9.jpeg)

![](_page_50_Picture_10.jpeg)

![](_page_51_Picture_0.jpeg)

## **SCADA Monitoring**

SCADA systems provide scalable system monitoring, from single sites to thousands of monitoring points, with easy integration of remote field devices. Emerson provides a wide range of SCADA solutions.

### **On-Premise Host solutions** Tap for **Off-Premise Cloud Based Host solutions** more (…)

### **OpenEnterprise™ On-Premise Host Solution**

![](_page_51_Picture_5.jpeg)

![](_page_51_Picture_6.jpeg)

- Our robust SCADA offering, OpenEnterprise<sup>™</sup> collects, stores and visualizes your infrastructure
- •Internal asset tools, comprehensive trending and workflow modeling compliments control room activity

![](_page_51_Picture_10.jpeg)

![](_page_51_Figure_13.jpeg)

![](_page_51_Picture_14.jpeg)

![](_page_51_Picture_15.jpeg)

![](_page_52_Picture_0.jpeg)

more

## **SCADA Monitoring**

SCADA systems provide scalable system monitoring, from single sites to thousands of monitoring points, with easy integration of remote field devices. Emerson provides a wide range of SCADA solutions.

**On-Premise Host solutions** •••• Tap for

> **Off-Premise Cloud Based Host solutions** (…)

### Zedi Access<sup>™</sup> Cloud Based Host Solution

![](_page_52_Picture_6.jpeg)

- •Cloud based hosting offers an option to replace on-premise SCADA for reduced total cost of ownership
- Standard SCADA functionality is enhanced by a cloud based network with simplified maintenance and improved networkability

![](_page_52_Picture_10.jpeg)

X

more

![](_page_52_Figure_13.jpeg)

Tap for Construction Zedi Go App for Mobility

![](_page_52_Picture_15.jpeg)

![](_page_52_Picture_16.jpeg)

![](_page_53_Picture_0.jpeg)

more

## **SCADA Monitoring**

SCADA systems provide scalable system monitoring, from single sites to thousands of monitoring points, with easy integration of remote field devices. Emerson provides a wide range of SCADA solutions.

![](_page_53_Picture_3.jpeg)

**Off-Premise Cloud Based Host solutions** (…)

## Zedi Go App for Mobility

![](_page_53_Picture_6.jpeg)

![](_page_53_Picture_7.jpeg)

- Access via smart phones and tablets. Easily view trend graphs of recent performance
- Prioritize work in the field based on current alarm information. Automatically push data to other systems or to custom reports

![](_page_53_Picture_10.jpeg)

![](_page_53_Figure_13.jpeg)

![](_page_53_Picture_14.jpeg)

![](_page_53_Picture_15.jpeg)

![](_page_54_Picture_0.jpeg)

## **Continuous support in the face of changing regulations**

Our partnership does not end with an extensive portfolio of solutions. Emerson helps to maximize your investment with industry-defining end-to-end support for education, training and lifecycle services. Improve your workforce with a full range of training options from Emerson's Educational Services. Need some help with startup on a complex project, or maintenance to keep your gas network operating safely, reliably and economically? Our Lifecycle Services can provide support and expertise.

![](_page_54_Figure_3.jpeg)

![](_page_54_Picture_5.jpeg)

![](_page_54_Picture_6.jpeg)

![](_page_54_Picture_7.jpeg)

![](_page_55_Picture_0.jpeg)

## **Continuous support in the face of changing regulations**

Our partnership does not end with an extensive portfolio of solutions. Emerson helps to maximize your investment with industry-defining end-to-end support for education, training and lifecycle services. Improve your workforce with a full range of training options from Emerson's Educational Services. Need some help with startup on a complex project, or maintenance to keep your gas network operating safely, reliably and economically? Our Lifecycle Services can provide support and expertise.

![](_page_55_Figure_3.jpeg)

## Leverage our educational offerings to train new hires, upskill your current workforce or help your team adapt to new technology or products.

- Courses are a blend of onsite, e-learning and virtual classroom modules
- Engage with industry experts at a location and time that works best for you
- Our virtual classroom delivers real-time, value-based instructor led training to your desktops, no traveling required
- We also offer courses at Emerson training centers located strategically around the world

![](_page_55_Picture_9.jpeg)

Educational Services & Training Webpage

( X )

![](_page_55_Picture_17.jpeg)

![](_page_55_Picture_18.jpeg)

![](_page_55_Picture_19.jpeg)

![](_page_56_Picture_0.jpeg)

## **Continuous support in the face of changing regulations**

Our partnership does not end with an extensive portfolio of solutions. Emerson helps to maximize your investment with industry-defining end-to-end support for education, training and lifecycle services. Improve your workforce with a full range of training options from Emerson's Educational Services. Need some help with startup on a complex project, or maintenance to keep your gas network operating safely, reliably and economically? Our Lifecycle Services can provide support and expertise.

![](_page_56_Figure_3.jpeg)

## Emerson Lifecycle Services provides customers with (X) the expertise, technology and processes that can help you operate safely, improve asset reliability and optimize gas distribution.

- Service support to execute the maintenance strategy that best suits your operation and budget
- Emerson's local service centers and global network offer a wide inventory of factorycertified parts
- Startup and commissioning services to aid in a safe, timely startup of your process
- Assess the reliability, security and performance of your assets using our site walkdown and evaluation services

![](_page_56_Picture_9.jpeg)

![](_page_56_Picture_14.jpeg)

![](_page_56_Picture_15.jpeg)

![](_page_56_Picture_16.jpeg)

![](_page_57_Picture_0.jpeg)

Overpressure Protection Solutions Regulators, Valves, Actuators, Transmitter, Monitoring System & Services

## Learn more about OPP (••••

![](_page_57_Picture_4.jpeg)

![](_page_57_Picture_5.jpeg)

![](_page_57_Figure_6.jpeg)

![](_page_57_Picture_7.jpeg)