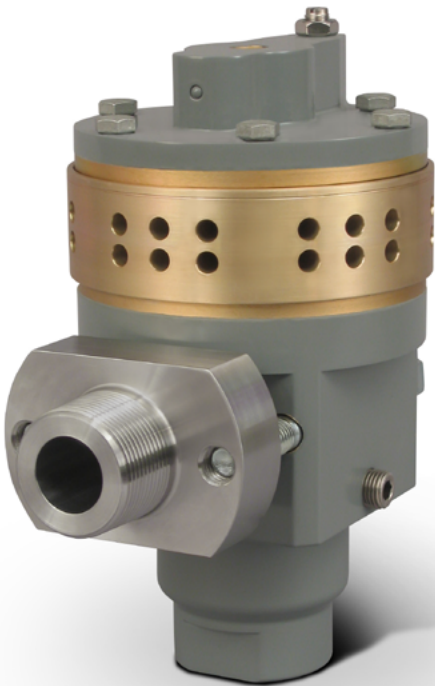


Replacement of Fisher™ 2625 Volume Boosters with Fisher SS-263 Volume Boosters

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Management of Change

Management of Change (MOC) is a procedure used to proactively manage changes that have the potential to impact safety or the process within a plant. Evaluating new techniques for improving MOC approval procedures can have an impact on plant efficiency. Historically, upgrading obsolete products or replacing existing process control equipment had been delayed or abandoned due to the extensive paperwork involved in completing a complex MOC approval sheet.

Background

Fisher™ 2625 volume boosters are found in almost every industry and have an extensive service history. Volume boosters are used to amplify the pneumatic positioner output to an actuator, thereby increasing the speed and responsiveness of a valve actuator. As many as three 2625 volume boosters can be replaced with just one Fisher SS-263 volume booster, reducing the size and complexity of the installation. The purpose of this guide is to simplify the transition from existing 2625 volume boosters to new SS-263 volume boosters.

Contained in this guide are two sections: the first contains questions and answers and the second compares the SS-263 to the 2625 volume booster. The first section helps users complete Management of Change (MOC) approval documents when upgrading to the SS-263. The second section helps users better understand the differences and similarities between the SS-263 and 2625.

Question & Answer Checklist

- 1** **Q:** Does the proposed modification cause any changes to the piping and instrumentation diagram (P&ID)?
A: No.

- 2** **Q:** Does the proposed modification change process chemistry, technology, or operating and control philosophies?
A: No.

- 3** **Q:** Does the proposed modification change how the existing plant is operated?
A: No.

- 4** **Q:** Does the proposed modification change process flows?
A: No.

- 5** Q: Does the proposed modification change existing pressure relief cases?
A: No.
- 6** Q: Does the proposed modification change the process description?
A: No.
- 7** Q: Have the codes and standards to which the new equipment was designed changed?
A: No.
- 8** Q: Does the proposed modification change the materials of construction, such as a change in material form (cast, forged, or alloy)?
A: No.
- 9** Q: Does the proposed modification introduce new equipment items that require periodic predictive maintenance?
A: No. These equipment items will require the same periodic predictive maintenance.
- 10** Q: Does the proposed modification change existing operator training requirements?
A: No.
- 11** Q: Does the proposed modification introduce new equipment items that require spare parts, training manuals, maintenance procedures or training to teach the maintenance department how to maintain them?
A: Yes. Emerson sales offices offer local training and support to help ensure operators, maintenance personnel, and instrument technicians are trained on SS-263 volume boosters.
- 12** Q: Does the proposed modification introduce new equipment items that require spares or obsolete spares for existing equipment?
A: Yes. Spares for old equipment items cannot be used with new equipment items due to differences in design between the old and new equipment items. Documentation on recommended spares can be obtained by contacting your local Emerson sales office.

13 Q: Does the proposed modification change the inspection scope or inspection interval?

A: No.

14 Q: Does the proposed modification change the Hazardous Electrical Area Classification?

A: No.

Comparison of 2625 to SS-263 Volume Boosters

The SS-263 is essentially a higher capacity 2625 volume booster allowing up to three 2625s to be replaced with just one SS-263. The theory of operation of the two products is identical with the only differences being in features and design specifications. The SS-263 includes special noise attenuating exhaust trim, which results in quieter operation than the 2625 as well as a special mounting flange adaptor for easy installation and maintenance. A 3-in-1 pressure connection on the SS-263 also provides a single connection point for either a pressure gauge, actuator bypass assembly, or other accessory hookup. Comparisons of other design specifications between the two products are given in Table 1 and cross sectional views of each product are given in Figures 1 and 2.

Specification	SS-263	2625
Maximum Flow Capacity	9.50 C _v Exhaust 9.50 C _v Supply	2.72 Cv Exhaust 4.98 Cv Supply
Input Signal	Positioner Output	
Maximum Input Signal Pressure	10.3 bar (150 psig)	
Maximum Supply Pressure	10.3 (150 psig)	
Input-to-Output Pressure Ratio	Fixed at 1:1	
Operative Temperature Limits	-40 to 71 °C (-40 to 160 °F)	
Hazardous Area Classification	ATEX Group II Category 2 Gas and Dust	
Input Signal Connection	1/4 NPT	
Supply Connection	1 NPT	3/4 NPT
Output Connection	1 NPT 1-1/4 NPT	3/4 NPT
Approximate Weight	No change	5"
<p>1. When used on a piston actuator, installation of the SS-263 is not available on a spring-and-diaphragm actuator. 2. The Fisher 2625NS volume booster can be used up to 93°C (200°F).</p>		

Table 1. Design Specifications Comparison

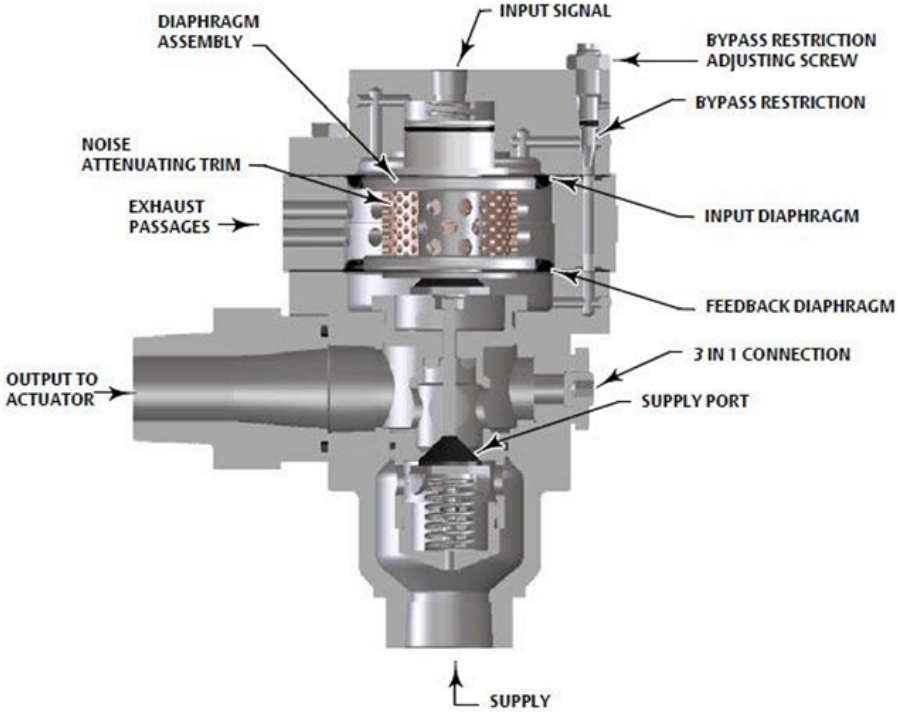


Figure 1. SS-263 Volume Booster (Cross Sectional View)

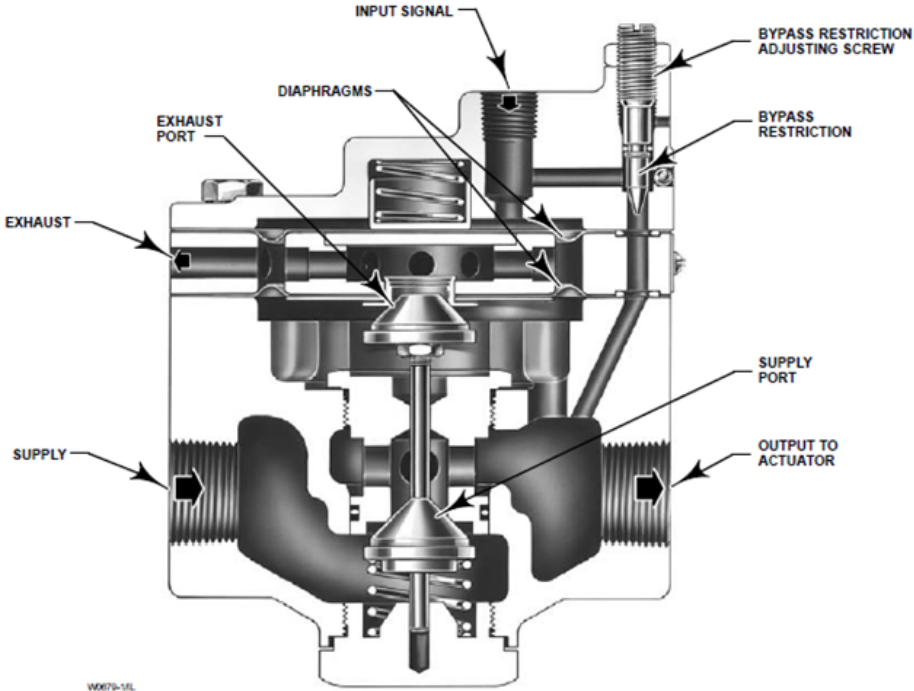


Figure 2. 2625 Volume Booster (Cross Sectional View)

Conclusion

The SS-263 is a higher capacity 2625 volume booster. The only differing areas between these two products affecting a valve assembly retrofit in a process plant are maintenance procedures, training of maintenance department craftsmen, and spare parts. Since the theory of operation is the same between these two products, the maintenance procedures are also very similar; however, due to differences in design, spare parts for the 2625 cannot be used in the SS-263 booster.

Additional Resources

Contact your local Emerson sales office for more information about SS-263 volume boosters or view the materials below.

[Instruction Manual](#)

[Product Bulletin](#)



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Emerson Automation Solutions

Marshalltown, Iowa 50158 USA
Sorocaba, 18087 Brazil
Cernay, 68700 France
Dubai, United Arab Emirates
Singapore 128461 Singapore