

Replacement of Fisher™ D2 FloPro Control Valves with Fisher D2T FloPro Control Valves

Table of Contents

- Management of Change2
- Background2
- Question & Answer Checklist2
- D2 FloPro and D2T FloPro Control Valve Comparison4
 - Configurable Body 4
 - Capacities (C_v) 4
 - Dimensions 5
 - Approximate Control Valve Assembly Weights 5
- Conclusion5
- Additional Resources6



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

The Fisher D2 FloPro control valve is a compact, rugged valve designed for on/off control. This valve is ideal for use as a dump valve on gas separators and scrubbers. It is also well-suited for other high pressure applications in natural gas production, compression, and processing. The D2 FloPro valve has threaded end connections and is available in an NPS 1 globe style valve body specified for ASME B16.34 CL900 service. Fisher D2 FloPro valves are obsolete, effective September 2014, and have transitioned to D2T FloPro valves.

The Fisher D2T FloPro control valve is an end user-configurable globe or angle valve that offers additional installation flexibility over the D2 FloPro control valve. This flexibility, paired with the design features of the D2 FloPro, creates a control valve that can be utilized in a variety of applications in the oil and gas industry.

For more information regarding other Fisher oil & gas products, please contact your local Emerson sales office.

Question & Answer Checklist

- 1** **Q:** Does the proposed modification cause any changes to the piping and instrumentation diagram (P&ID)?
A: Possibly, depending on valve configuration—angle or globe. Globe valve configuration would not change P&ID, but an angle configuration would require modification to the P&ID.

- 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, valve capacity does not change.

- 4** Q: Does the proposed modification change process flows?
A: No, valve capacity does not change.
- 5** Q: Does the proposed modification change existing pressure relief cases?
A: No. The D2 FloPro and D2T FloPro valve share the same maximum rated Cv and should not require review. Pressure relief valve sizing is not considered when sizing and selecting Fisher control valves for end-user applications. If the control valve is determined to affect upstream or downstream safety relief cases, review by the end user or third party is recommended.
- 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, although they may have been updated since the Fisher D2 FloPro control valve was installed.
- 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 maintenance as required by the old equipment items.
- 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 local business partners and sales offices offer local training and support to help ensure operators, maintenance personnel, and instrument technicians are trained on Fisher D2T FloPro valves.

- 12** Q: Does the proposed modification introduce new equipment items that require spares or obsolete spares for existing equipment?
A: No.
- 13** Q: Does the proposed modification permanently remove the spares for existing pieces of equipment?
A: No. Spare parts are unchanged between the D2 FloPro and D2T FloPro valve. The valve body and outlet plug, which are not spare parts, are the only changed components.
- 14** Q: Does the proposed modification change the inspection scope or inspection interval?
A: No.
- 15** Q: Does the proposed modification require welding work to be performed?
A: No.
- 16** Q: Have the materials of construction been reviewed to ensure that the metallurgy is correct?
A: Yes.

D2 FloPro and D2T FloPro Control Valve Comparison

The following sections are intended to provide a nominal comparison between Fisher D2 FloPro and Fisher D2T FloPro control valves.

Configurable Body

Unlike the globe body style of the D2 FloPro, the D2T FloPro includes a pipe plug that allows for the D2T body to be configured as a globe valve or angle valve. This plug is attached and shipped in the bottom port, but can be moved to the side port for the angle valve configuration.

Capacities (C_v)

D2 FloPro and D2T FloPro have the same capacity. Sizing review should be completed using current Fisher sizing software. For more information on control valve sizing, please contact your Emerson local business partner or sales office.

Dimensions

Dimensions of the D2 FloPro and D2T FloPro are the same with the exception of the height of the control valve body (specifically the valve center to bottom measurement) as illustrated below. Please reference Figures 1 and 2 for dimensional differences.

Approximate Control Valve Assembly Weights

Exact weight of a specific assembly is dependent upon trim material, end connections, etc. Table 1 provides a general sense of the weight differences. For more specific information, please contact your local Emerson sales office.

NPS	Fisher D2 FloPro	Fisher D2T FloPro
	kg (lb)	
1	7.7 (17)	7.7 (1.7)

Table 1. Approximate Assembly Weights

Conclusion

Emerson offers the Fisher D2T FloPro control valve as a replacement for the obsolete Fisher D2 FloPro control valve. The Fisher D2T FloPro control valve offers additional installation flexibility for customers by allowing globe and angle configurations while maintaining the current flow capabilities of the obsolete D2 FloPro control valve product line.

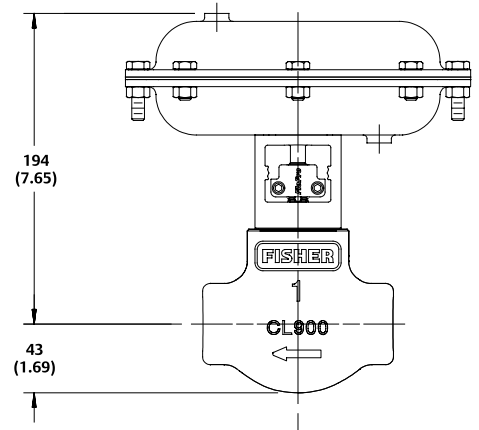


Figure 1. Fisher D2 FloPro Valve Dimensions

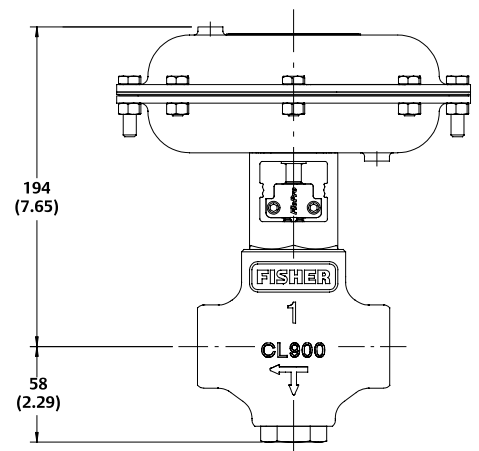


Figure 2. Fisher D2T FloPro Valve Dimensions

Additional Resources

Contact your local Emerson sales office for additional details or questions regarding the Fisher D2T FloPro control valve or see the resources below.

[D2T Product Bulletin \(D10xxxxX012\)](#)

[D2T Instruction Manual \(D10xxxxX012\)](#)



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