Fisher[®] easy-e[™] Sliding-Stem Control Valves

For easy application and unmatched performance











Fisher easy-e Control **Valves**

For easy application and unmatched performance

r merson's Fisher® easy-e™ control valve is found in every industry where fluid flow must be controlled, providing users with improved process performance and reliability. Whether the application involves refining, oil and gas production, power generation, paper manufacturing, or chemical processing, you will find the easy-e hard at work.

It is offered in a broad range of body styles and end connections, in sizes NPS ½ thru 36. You can easily select the configuration that best meets your process requirements. With interchangeable parts, inventory costs can be kept to a minimum, resulting in savings that go right to your bottom line.

> The easy-e control valve gives you a high return on your investment thanks to its long operating life and enhanced control performance. No matter where in the world you get your easy-e control valve, dimensions and parts are uniform. What's more, support is available anywhere, anytime.

The rugged, field-proven easy-e control valve continues to set the industry standard for dependability and longevity. To-date, over one million easy-e control valves have been installed worldwide.



easy-e Control Valve

The Fisher easy-e control valve is available with a FIELDVUE™ digital valve controller, bringing precise control and even greater reliability to your application.

Solving your application needs from big to small, general to severe, the easy-e control valve is available with a choice of trim styles and sizes from NPS ½ thru 36. You can specify just the right amount of capacity and control for your application.

Unmatched Capacity

Due to its proven cage-guided design, the easy-e delivers a broad range of flow capacities. This allows you the freedom of applying the easy-e in a wide range of service conditions, maximizing your control options. With flow capacities ranging from 0.001 $\rm C_V$ up to 12,000 $\rm C_V$, the easy-e truly is the epitome of versatility.

Control Flexibility

The flow cage within the easy-e control valve with balanced trim not only guides the valve plug and retains the seat ring, it also determines the flow characteristic of the valve. With these cage options, the flow characteristic can be changed quickly with minimum downtime. Special cage configurations are also available to meet severe service demands.





228 MAN TCC+/100+ 36-300

NPS 1/2=36

Severe Service

If you want answers to your severe service applications, there's only one automation supplier to choose. Emerson offers the application experience, technology, and responsive service you need. This means you can get the right easy-e control valve solution for the right application.

The easy-e control valve features interchangeable trim sets for not only general service applications, but also for a wide range of severe service applications. This means that one easy-e control valve body can be used in many different applications with a simple switch of the trim set. These severe service trim sets utilize proven-in-use Fisher technology to reduce noise and eliminate cavitation.

Cavitation Control

Cavitation is a concern for plant operators and maintenance personnel because it can reduce plant availability and profitability. Cavitation not only decreases flow capability through control valves, but may also cause material damage, excessive noise, and excessive vibration. A wide range of Fisher cavitation-control technologies are available for both clean and dirty services.

Dirty Service

NotchFlo™ DST Control Valve

A complete easy-e control valve solution that is specially designed for dirty, cavitating services. The trim in this valve utilizes a series of flow restrictions and expansions to eliminate cavitation while allowing up to 12.7 mm (½ inch) diameter particulate to pass through without plugging.

Dirty Service Trim (DST)

Provides cavitation control for dirty service applications where the process fluid may contain particulate. The design of this trim not only eliminates cavitation, but also allows up to 19.05 mm (¾ inch) diameter particulate to pass through without plugging.

Clean Service

Cavitrol™ III Trim

Effectively eliminates cavitation in clean service applications. The cage in this trim contains a multitude of specially shaped, radially aligned holes that reduce fluid turbulence and stage the system pressure drop, both of which control or eliminate the damaging effects of cavitation.







Noise Abatement

Control valve noise is a concern for plant operators and maintenance personnel because it can affect plant availability and profitability. High noise levels can cause health concerns for plant personnel and cause equipment damage, vibration, and control issues. There is no single technology or treatment that can solve all noise issues cost effectively or efficiency. For that reason, a wide range of Fisher noise-attenuating trims are available for vapor, gas, or steam applications.

Whisper Trim[™] I

Provides an economical, yet proven, means of control valve noise reduction in a slottedcage guided trim design. Noise can be effectively reduced by up to 18 dBA through specially designed flow passages that break up turbulent streams and ensure exit jet independence.

Whisper Trim™ III

Offers a highly flexible means of noise reduction in a drilledhole, cage-guided trim design. Up to 30 dBA of attenuation is possible through the use of specially designed passages that shift frequencies to higher, less problematic levels and ensure exit jet independence.

WhisperFlo[™] Trim

This multi-path, multi-stage trim reduces noise by as much as 40 dBA across five areas. The cage in this trim design is composed of specially designed, laser cut flow discs that deliver a breakthrough combination of high capacity and noise abatement performance.



Cost and Time-Saving Benefits



Quick-Change Trim Means Fast Service The easy-e control valve's quick-change, cage-style trim reduces the maintenance challenge, which increases operating time and reduces operating expense.

Incorporating the Fisher easy-e control valve into your process can have significant cost and time-saving benefits:

Reduce Downtime - The rugged easy-e control valve results from extensive flow testing and evaluation, yielding a robust control valve that is the industry standard for dependability and longevity.

Reduce Maintenance Costs - The drop-in easy-e cage, valve plug, and seat ring are designed to be removed from the top for quick inspection and easy service. This gives you the ability to leave the valve body installed, resulting in greater savings in maintenance time and reduced downtime costs.

Gain Application Versatility - Since trim parts are interchangeable across the easy-e line, you maximize your control options as you minimize your control valve investment.

Reduce Parts Inventory - Seat rings, cages, gaskets, stems, bonnets, packing seals, and many other parts on the easy-e control valve are interchangeable. Trim inventory costs can be kept to a minimum, resulting in savings that go right to your bottom line.

Reduce Training Costs - Your staff can quickly apply the flexibility of the easy-e control valve to many different applications within your operation.

Achieve Worldwide Consistency - No matter where you obtain or use your easy-e control valve, the dimensions and parts will be uniform, eliminating problems that arise from non-interchangeability.

Improve Total Cost of Ownership - Quality Fisher product construction provides long life with minimum service requirements. The standard flow cage, valve plug, and seat ring are constructed of hardened stainless steel. Trim parts are precision manufactured to provide smooth operation for years to come.

Third Party Certification - The Lloyd's Register's Marine Type Approval is available for the easy-e control valve when used within the offshore oil and gas production industry. The easy-e control valve is also certified for use in Safety Instrumented System (SIS) applications by exida Consulting LLC.

In addition to providing top quality, expertly engineered control valves, Emerson is committed to providing you with exceptional customer service. Emerson's application assistance, responsive replacement parts service, control valve repair, and training add even more value to the Fisher easy-e control valve.

Low-Emission (Low-E) Packing Meets Environmental Requirements

ENVIRO-SEAL™ is Your Low-E Packing Solution

Packing selection is increasingly being driven by governmental regulations and customers' concern for the environment. ENVIRO-SEAL is an advanced packing system that provides the measure of emission control security that you require.

Using a compact, live-loaded design and a variety of material options, the ENVIRO-SEAL packing system provides excellent sealing performance for almost any application. The ENVIRO-SEAL system provides a constant load over the life of the packing material, greatly reducing the need for packing box adjustment and maintenance.

Packing Certifications

TÜV has certified the stem sealing capabilities of ENVIRO-SEAL PTFE and graphite packing systems for sliding-stem control valves with TA Luft emission control requirements. Emission control packing compliance to FCI/ANSI 91-1 has been certified by Yarmouth Research and Technology.



Proven Performance

Design Verification Through Lab Testing

Emerson engineers conduct tests that analyze cavitation, materials, fatique, wear, high and low temperatures, valve actuators, loop variability, leakage, hydrostatic forces, gaskets, seals, and control system compatibility. In the controlled lab environment, special tests are also commonly performed to solve customers' toughest challenges.

Results from flow variability testing, hydrostatic pressure testing, capacity verification, metallurgical development, and cycle life testing all lead to one conclusion—the easy-e control valve meets or exceeds the demanding requirements established by the process control industry.

Emerson Innovation Center

The Emerson Innovation Center for Fisher Technology in Marshalltown, Iowa, USA, is home to the world's largest flow lab used to evaluate control valves. It incorporates flow testing capabilities up to NPS 36 and 240 bar (3,500 psig). Final control elements are tested in conformance to IEC and ISA standards in real-world plant conditions to ensure production reliability, efficiency, environmental compliance, and safety.



You Get More Than a Piece of Hardware

In the battle for performance and production, you need every advantage you can get. From application expertise to training to quick replacement parts to valve repairs, you can always count on Emerson for quality, service, and expertise.

Expert Application Assistance From the Application Experts

The next time you need to specify a control valve for your system, whether for general service or severe service, consider the easy-e control valve. Your



local Emerson Process Management sales office can assist you in this selection process. Scan the QR code or go to www.Fisher.com and click

on Fisher Sales Contacts to find the sales office nearest to you. Highly skilled and experienced applications personnel are ready to help you take advantage of the many benefits of the easy-e control valve.

FAST Service Keeps You Up and Running

FAST parts distribution offers express delivery of replacement parts. Now you can fine-tune your plant's maintenance inventory with the knowledge that control valve needs for plant turnarounds, scheduled maintenance programs, as well as unplanned valve repair can be met quickly with genuine Fisher parts and control valves.

Local Service and Repair

Emerson can provide immediate answers and world-class service through a vast network of factory-trained and factory-certified technicians. Service Centers are factory supported to provide instant access to Emerson product manufacturing records and engineering drawings. Service locations house stateof-the-art equipment to address control valve problems in a plant or process. Emerson technicians are factory qualified with in-depth, hands-on training, safety awareness, and ongoing education throughout their service career.

Fisher Control Valve Training Puts You in the Know

Emerson offers comprehensive customer training and education programs that cover a wide range of process topics. The programs consist of structured courses that are geared to real-world situations. Customer training is provided at our educational facilities located near you. In addition to standard programs,



tailored courses designed for the specific needs of an organization can be conducted on-site. Prepackaged Fisher training courses are

available in video format, making selftraining convenient and cost-effective. www.EmersonProcess.com/Education

Software

Designed for engineers, Fisher Specification Manager software offers a powerful set of tools for sizing, selecting, and specifying Fisher control valves. Download the software for free at www.FisherSpecificationManager.com

















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