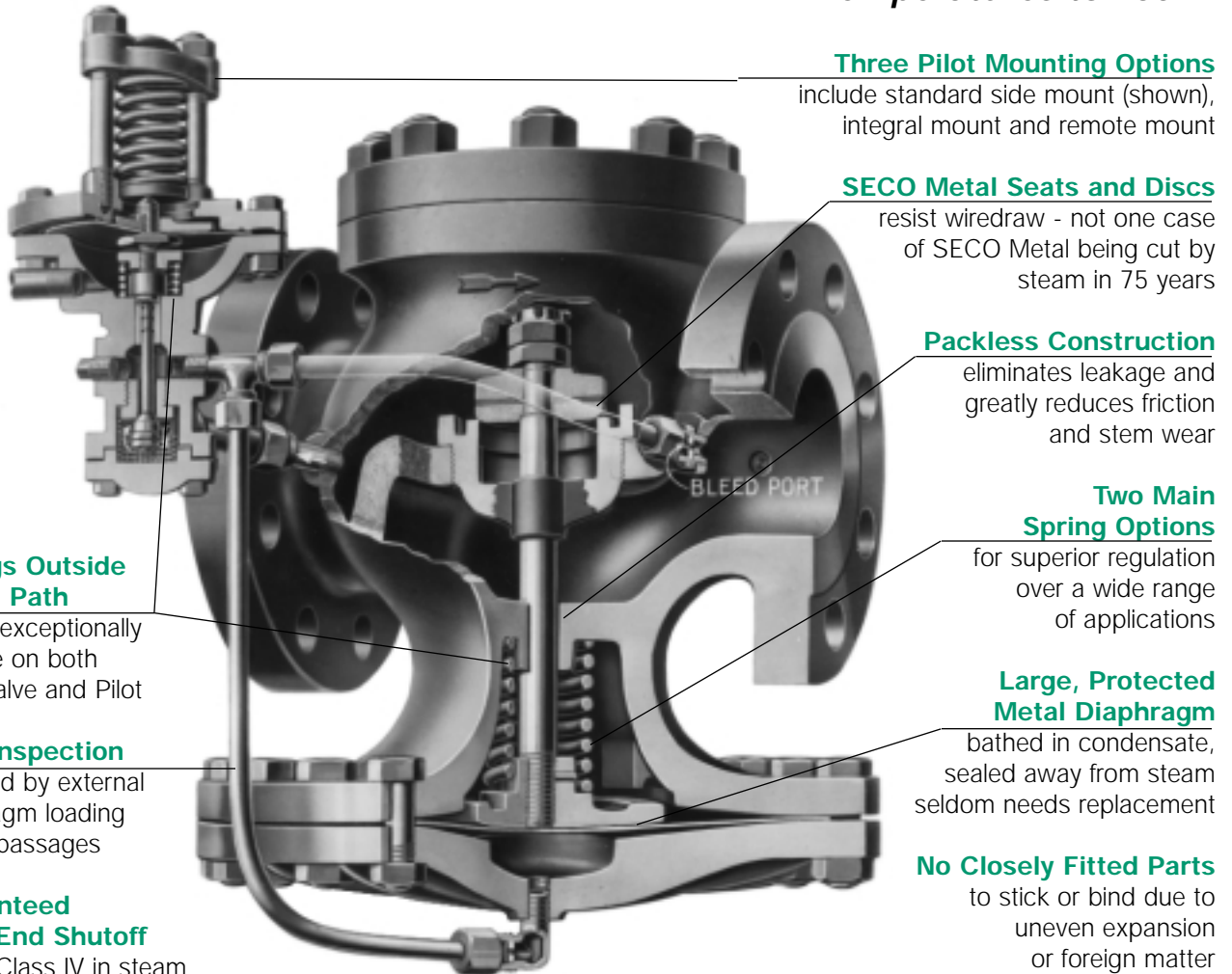


Applications

- Pressure Regulation for Steam Distribution
- Single Point or Multiple Use Applications
- Pressure Control for Steam Plants
- District Heating Systems
- Single Stage Reduction Stations
- Two Stage Reduction Stations
- Parallel Reduction Stations

Iron Horse ED Series Pressure Regulator

**Pressures To 600 PSIG
Temperatures to 750°F**



Three Pilot Mounting Options

include standard side mount (shown), integral mount and remote mount

SECO Metal Seats and Discs

resist wire draw - not one case of SECO Metal being cut by steam in 75 years

Packless Construction

eliminates leakage and greatly reduces friction and stem wear

Two Main Spring Options

for superior regulation over a wide range of applications

Large, Protected Metal Diaphragm

bathed in condensate, sealed away from steam seldom needs replacement

No Closely Fitted Parts

to stick or bind due to uneven expansion or foreign matter

Few Moving Parts

mean long service life

Springs Outside Steam Path

assure exceptionally long life on both Main Valve and Pilot

Easy Inspection

provided by external diaphragm loading steam passages

Guaranteed Dead End Shutoff

meets Class IV in steam service, even on large sizes

Patented SECOWELD Option

allows easy repair of seat ring threads damaged by high pressure applications

HOW TO CHOOSE A REGULATOR

If you already know the product that you want information on, find the product page in the Table of Contents. Pages showing popular combinations of Pilot and Regulators are found in the Combination Regulators Chapter. Detailed product information on materials, ratings, dimensions, weights and applications are found in the Products Chapters. All sizing information is contained in the Regulator Sizing Chapter.

If you are not sure of what you need, collect all the following information. You will need it to select the right product for your needs.

Inlet Pressure

Flow Rate

Flow Media (i.e.: Steam, Water, etc.)

Desired Delivery Pressure

Noise Restrictions, if any

Type of Pilot Control (i.e.: Self Contained, Pneumatic, Electronic, etc.)

Application (i.e.: Temperature Regulation, Single Stage Pressure Regulation, etc.)

Application data is listed on each Product Page. If you identify the nature of the installation, it will assist you selecting the proper equipment.

DIRECT ACTING OR PILOT OPERATED REGULATOR?

You may be able to use a Direct Operated Regulator for your application. They are generally less expensive than Pilot Operated Regulators. However, they do not provide the same level of accuracy or rangeability.

If a Direct Acting Regulator is an option, consult the Direct Operated Valves Chapter to determine which best fits your specific needs. Then, consult the appropriate pages in the Regulator Sizing Chapter to select the exact size you need.

If a Pilot Operated Regulator is required, go to Page 14 (for Pressure Regulators) or Page 15 (for Temperature Regulators). These selection charts will help you to quickly determine the type of product that you need. The Pilot can be self contained, pneumatically or electronically actuated. Consult the appropriate pages in the Regulator Sizing Chapter to select the exact size Regulator and Pilot you need. Overall dimensions of the most popular combinations are provided in the Combination Regulators Chapter.

ECONOMICAL, ENGINEERED OR ENGINEERED WITH NOISE SUPPRESSION?

The choice of how to size a regulator for an application is up to you. The most economical choice does not necessarily take into consideration the optimum loading of the Regulator, which could affect its service life. Properly engineered Spence Regulators have been in continuous service for as much as 50 years. In high pressure reduction stations, noise can be a serious environmental problem. Spence offers a number of Noise Suppression products to reduce this problem. You will find comprehensive noise reduction sizing and selection information in the Noise Reduction Chapter.

THE OPERATING CYCLE OF A SPENCE PRESSURE REGULATOR

The basic Type ED has been selected to illustrate the operation of a SPENCE Pilot Operated Pressure Regulator. This presentation describes the successive steps in the mechanical cycle of the Regulator.

