





# The Original and the Best

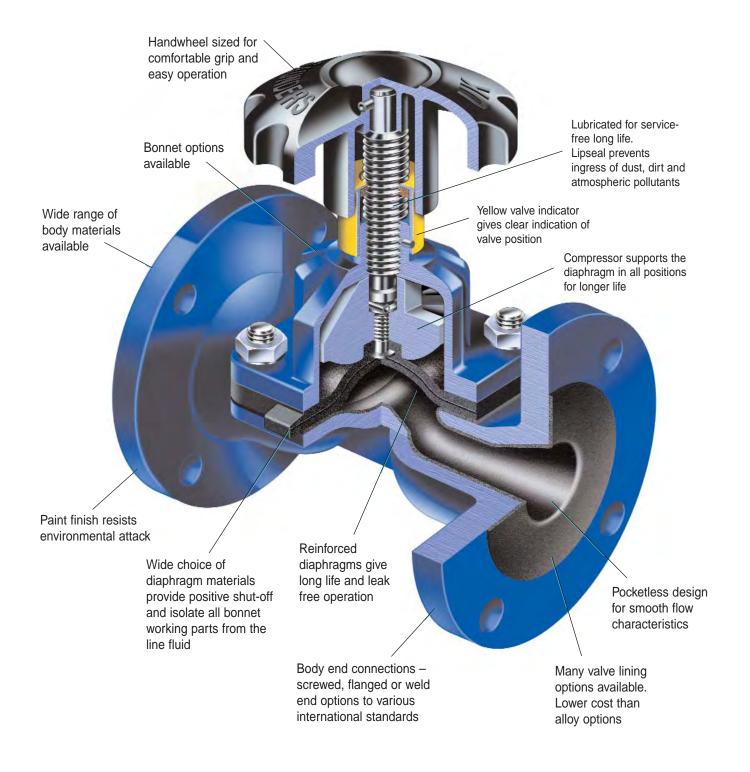
Saunders diaphragm valve features and benefits for corrosive and abrasive applications with 100% leaktight closure operation

Extended life, reliability, safety and ease of use, combined with an essentially simple design, results in low maintenance and cost-effective operation.

On pressure and vacuum, Saunders diaphragm valves operate and close 100% leaktight even after thousands of operations. This feature reduces processing and handling costs, by eliminating emissions normally associated with conventional valve designs.

All working parts of the valves are isolated from the line media and positive closure is obtained even on frequent cycling or with entrained particulates in the line unlike other valve types.

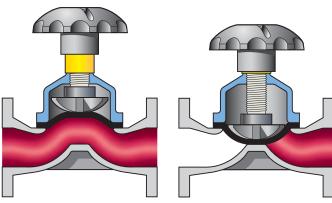
Throttling and control characteristics are enhanced by a streamlined flow path that is cavity free and provides excellent flow control capabilities.



## Saunders A Type Diaphragm Valves

## Valve Benefits for Corrosive and Abrasive Applications

Our Saunders A Type diaphragm valves have been developed to handle a wide range of fluids and gases. Choose from a broad range of materials, methods of operation, and body end connections – to satisfy the needs of your most corrosive and abrasive applications.



### Valve flow

Pocketless design for contamination free performance and smooth flow characteristics. Linear operation ensures valve does not induce damaging pressure surges or static charges.

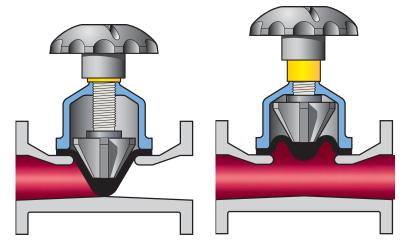


Three part design allows maintenance and actuator retrofitting without removing the valve from the pipeline. Overall, this results in lower long-term cost of ownership compared to other valve types.

# Saunders K/KB Type Diaphragm Valves

K: High Flow / KB: Straight Through

Saunders full bore K/KB type diaphragm valves, with their smooth non-turbulent body design have proved to be outstanding in corrosive and abrasive applications. The full bore concept is designed for minimum flow resistance while allowing rodding out and easy cleaning.



Features	Benefits
Straight through body, high flow	No obstruction, low pressure drop
Flexible closure even with solids present	Leaktight by design
Only two wetted parts	Better resistance to corrosion/abrasion and longer life
Specially developed linings and diaphragms available	Minimal maintenance

## Saunders Diaphragm Valves . . . for a broad range of processing applications

### **ABRASIVE**

Gold Mining

Cement

Copper Mining

Ceramics

**FGD** 

Sugar

Coal Slurry

Phosphate

Sand

**Fertilizers** 

Titanium dioxide

Sewage

- Minerals processing, chemicals, fertilizers, china clay, paper, power generation are some of the industries that rely on Saunders KB Type diaphragm valves to withstand a wide variety of abrasive service conditions.
- Ores phosphate rock or bauxite in aggregate form, slurries such as gypsum in power plant desulphurization, powders – titanium dioxide in pigment application are typical service examples.
- Applications requiring a combination of corrosion and abrasion resistance, such as phosphate rock/sulphuric acid, together with reliability and long service life are ideal applications for Saunders KB Valves.

### **CORROSIVE**

Chlor-Alkali

Iron and Steel

Sulphuric Acid

**Effluent Treatment** 

Potable Water

Pulp & Paper

**Basic Chemicals** 

Acids and Alkalis

**Organics** 

Toxic Fluids

Nitric Acid

- Corrosion is estimated to cost worldwide industry more than 300 billion dollars every year. Every process industry sector handles corrosive fluids to a smaller or greater extent.
- Saunders personnel offer expertise and unrivaled experience in corrosive applications.
- Innovative materials technology has resulted in the current extensive range of valve options including elastomer and fluoropolymer linings, designed to combat corrosion.

## INDUSTRIAL

Marine

Vegetable Oil

**Paints** 

Fire Fighting

**Tanning** 

Oil Production

Automobile

Air

Effluent

Gases, Fuels

Dye Liquors

- Saunders valves are widely used on utility (air, water, and gas) service lines.
  In effluent treatment systems there are many applications where Saunders valves are used successfully.
- In the Food Industry Saunders valves are widely used in margarine, yogurt and corn processing plants.
- Saunders are widely used in the marine applications and in the automobile sector on service lines, paint coating systems and on road and rail tankers.

#### **ASEPTIC**

Biotechnology

Pharmaceuticals

WFI

Fine Chemicals

Chromatography

Cosmetics

Ultra Filtration

Clean Water

CIP

Yeast

Food & Beverage

Soap

- Saunders pioneered high purity valve technology.
- The top ten pharmaceutical companies in the world head our international customer base.
- Saunders extensive range of valves designed for the pharmaceutical industry are detailed in other literature.

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Industrial Diaphragm Valves



Saunders Valves are marketed in North and South America by Xomox Corporation