

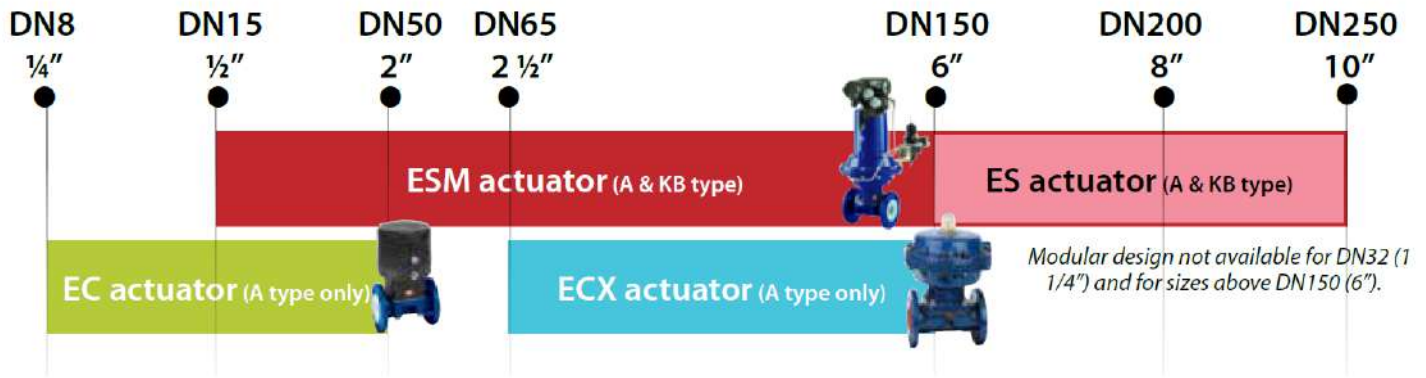
**Wide range of actuators that provide reliable remote control**



# ACTUATION

## MODEL RANGE AND MODES OF OPERATION

When manual operation is inadequate or inconvenient, Saunders® offer a variety of actuators covering valve sizes up to DN250 (10"), for different line and operating pressure options. We offer three different actuators, designed for various characteristic performances.



### EC:

- » Compact piston style actuator
- » Spring packs to suit pressure requirements
- » Polyethersulfone (PES) bonnet
- » Versatile and robust design
- » Temperature range of -10 to 100°C (14 to 212°F) ambient (autoclave maximum 150°C/302°F)

### ECX:

- » Diaphragm operated actuator, a compact extension to the EC size range
- » Comprehensive spring packs for a wide range of pressures
- » Full range of accessories
- » Light weight silicon aluminium housings
- » Durable paint coating for environmental protection

### ES MODULAR:

- » Diaphragm operated actuator, modular design for flexibility
- » Adjustable spring tension to optimize closure force and maximize diaphragm life
- » Full range of accessories
- » Light weight silicon aluminium housings
- » Durable paint coating for environmental protection

	Spring Close (SC)	Spring Open (SO)	Double Acting (DA)
<b>Mode of operation</b>	Closes the valve against line pressure in the event of failure (or intended shutoff) of operating pressure to the actuator.	Opens the valve to allow line fluid to flow in the event of failure (or intended shutoff) of operating pressure to the actuator.	Operating pressure opens and closes the valve. Requires a lock up valve to retain the position preceding the failure.
<b>Normal use</b>	When valve is usually in the closed position (to avoid using a constant supply of operating pressure).	When valve is usually in the open position (to avoid using a constant supply of operating pressure).	When a failsafe mode is not required.



Accessories								
Model	Size Range	Valve type	Material	Solenoid	Switchbox	Positioner	Air Filter	Handwheel
ES	DN15-DN250 1/2" - 10"	A, KB	SiAl <sup>1</sup>	✓	✓	✓	✓	✓
EC	DN8-DN50 1/4" - 2"	A	PES <sup>2</sup>	✓	✓	✓	✗	✗
ECX	DN65-DN150 2 1/2" - 6"	A	SiAl <sup>1</sup>	✓	✓	✗	✓	✗

<sup>1</sup> SiAl – Silicon-Aluminium    <sup>2</sup> PES –Polyethersulfone    ✓ Available    ✗ Unavailable



### 007 SWITCHBOX:

Modular switch-boxes are available for the ES Modular actuator range.

Offering a wide range of both mechanical and proximity switches as well as other options, i.e. ASi-interface.



### ES POSITIONER:

Provides precise control of the flow through the valve. This long life corrosion resistant range suits a wide variety of applications with reliability and accuracy. Available as pneumatic, electro-pneumatic, intrinsically safe and explosion proof, together with a variety of feedback options. A digital option is also available.



### OPTI-SET:

Economical, compact and lightweight switchbox suitable for the EC actuator. Self setting, which minimizes validation/set-up time, it is available with mechanical or proximity switches including an intrinsically safe option.



### MINI POSITIONER:

For control application using an EC actuated valve, Saunders® offers pneumatic, electropneumatic and digital inputs with sensor feedback option and linear mounting design providing a compact control solution.



### SAUNDERS® I-VUE:

The Saunders® I-VUE is a compact intelligent valve sensor that provides accurate and reliable valve position feedback. It is suitable for EC or ECX actuated valves. Key Features and benefits:

- » Available as Point-to-Point or with network capabilities (ASi and DeviceNet)
- » Highly accurate electronic sensing technology to continuously monitor valve position.
- » Self Setting (without entry) feature that facilitates setting and programming of switch without opening the enclosure.



### MODULE SWITCHBOX:

This module switchbox option is available for EC and ECX actuator ranges. The switchbox offers a wide range of mechanical and proximity sensors with space for up to 4 switches, integral solenoid valve and ASi interface (which can be retrofitted).



### SOLENOID VALVES:

A wide range of locally mounted banjo solenoid valves can be fitted to the Saunders® actuator range with a manual override position and various hazardous area classifications. The solenoid range is designed to cover all requirements.

Other control options available upon request. Please, contact us for more information.

