



Actuation & Control

An Introduction to Saunders ES Actuators

The Saunders ES actuators are used as remote operation equipment for valves. Either as a straightforward alternative to manual bonnet assemblies or as an integral part of a control system.

Compatibility

The ES actuators are suitable for use with the sanitary (AFP), weir (A type), and straight through (KB type) valves as well as the complete range of rubber diaphragms and PTFE faced diaphragms.

Operation

The ES actuators can be operated using either compressed air, water or oil.

Range

There are 20 'A' and 19 'KB' type models in the ES range, split into three modes of operation Failsafe Close, Failsafe Open and Double Acting, available in the size ranges listed in the table, below.

Control

Used in conjunction with valve positioners ES actuators prove to be ideally suited as control valves for the regulation of pipeline flows. For further information on flow characteristics and sizing control valves please refer to the control data sheets in section 6/ACT/CTL.

Installation & Maintenance

Saunders ES actuators are quick and easy to install and maintain. Installation can even be carried out with the valve body in the pipeline. Manual bonnet assemblies can be retrofitted with ES actuators to convert to remote operation. For further information please refer to the Installation & Maintenance data sheets, section 6/ACT/I&M.

Accessories

The following accessories can be supplied with ES actuators:

- Manual override
- Limit travel stops
- Solenoid valves
- Air filter pressure regulators
- Limitswitch units
- Positioners
- ViaScan - Saunders fieldbus system
- Stayput relays

For further details regarding accessories please refer to the ES accessories data sheets in section 6/ACT/ES-AC.

Modes of Operation/Size ranges available

Failsafe Closing	Failsafe Opening	Double Acting
Failsafe closing actuators close the valve against line pressure in the event of failure (or intended shutoff) of the operating pressure to the actuator.	Failsafe opening actuators open the valve to allow line fluid to flow in the event of failure (or intended shutoff) of the operating pressure to the actuator.	Operating pressure opens and closes the valve.
Normal use: when the valve is usually in the closed position (to avoid using a constant supply of operating pressure).	Normal use: when the valve is usually in the open position (to avoid using a constant operating pressure).	Normal use: when a failsafe mode is undesirable.
Model Range: ES60-ES66 for valve sizes DN8 to DN250.	Model Range: ES67 to ES73 for valve sizes DN8 to DN250.	Model Range: ES53 to ES58 for valve sizes DN8 to DN200.

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