

SIEMENS



Install the "Scan to HIT" app and scan the DMC code on the product to get product information.



# Plan and install in record time

New generation Acvatix valves and actuators for easy, fast and safe implementation of energy-efficient HVAC plants



## Simple and safe from planning through to service

Effective planning and installation of central HVAC plants: The new Acvatix™ generation offers you a consistent range of actuators and valves. New as well as optimized products simplify sizing, selection and installation. Acvatix offers everything you need to plan, equip and maintain HVAC plants quickly, easily and safely.

For example, the optimized product design lets you use 3-port valves as mixing or diverting valves, therefore enhancing your flexibility and making product selection easier. In addition, all new actuators are operated easily in the same way with a multifunctional manual adjuster. Optimized wiring ensures error-free electrical connections.

# Master hydronics with Acvatix

## Maximum energy savings in the area of valves and actuators

Acvatix enables you to satisfy the increasing demand for energy-efficient HVAC plants even more effectively. By using advanced technology, the new Acvatix generation achieves maximum energy savings when it comes to valves and actuators. With the finely graded  $k_{VS}$  values of these new valves, you can size your plant to fit the need exactly – and thus save energy.

## High protection of investment thanks to backward compatibility

To protect existing plants and ongoing projects, Acvatix offers unique hundred-percent backward compatibility extending over 40 years. You also benefit from the rugged design, high dependability and lower maintenance requirements of our actuators and valves, which are backed by decades of experience and intensive testing in Siemens' own laboratories.

## Intelligent comfort in every phase of a project

The convenient, position-independent manual operation of all actuators of the new Acvatix generation makes installation easier and faster. In case the instruction for a product was lost, you can simply use the "Scan to HIT" app from Siemens to scan the data matrix code on the product and receive complete product information. Operating status and position indicators are visible from a distance and ensure fast plant inspections and easier troubleshooting in the event of a malfunction.

## Support from a dependable partner

Benefit from useful tools for easy product selection and sizing: the HIT helps you select the right product, and supplies all available documents for that product, such as data sheets and installation instructions. A valve slide ruler, product replacement tools and data matrix codes also make work easier. Product training keeps you up to date on the latest developments. Should a fault in a plant occur, Siemens' global service network offers you quick support.

### Highlights

- Uniform operation concept – easy to understand, reliable, time-saving
- Ease of planning through well thought-out product design
- Unique backward compatibility
- High level of investment protection thanks to long life and maximum reliability
- Support and practice-oriented tools for every phase of a project

Easy product selection and handling from layout and invitations to tender, to installation and commissioning, to service.





# Fast, simple and safe in every project phase

## Worldwide usable actuators for short-stroke valves



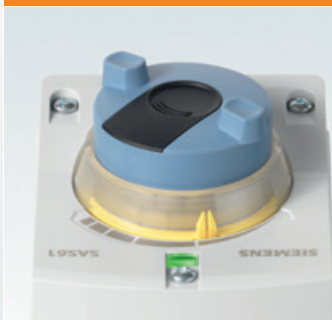
High positioning force and speed in compact dimensions: The new short-stroke actuators are ideal where space is limited. They fit in standard insulation shells for mounted components, saving you the effort of modifying the insulation. In addition, they can be used around the world, since they meet global and regional standards.

## Multifunctional manual adjuster for fast and safe operation



Simple operation in plant pressure test, hydronic balancing, emergency operation, or operation in the event of service: Turn the manual adjuster on all new large- and short-stroke actuators effortlessly to let the valve travel over its full stroke with no need for tools. The manual adjuster is easily accessible, irrespective of the actuator's mounting position. Overload protection prevents damage to the actuator.

## Valve travel and operating status at a glance



Time-saving commissioning and plant checks: Due to the well-designed position indication around the manual adjuster, the valve's travel is easy to see, even from a distance. The integral LED clearly indicates the operating status. The manual adjuster moves when the actuator operates in control mode, enabling you to check whether all large- and short-stroke actuators are working properly.

## Auxiliary modules for simple and exact positioning



Universal accessories for easy implementation of function extensions: Whether auxiliary switch or potentiometer – all auxiliary modules can be fitted to all new types of actuators for large- and short-stroke valves. The guide rails allow easy and exact positioning of the modules.



## Easy access to product information





**tion**

Simply scan the data matrix code on the products using the "Scan to HIT" app from Siemens, and you have immediate access to all available product information and documentation.

### Safe service without having to disconnect power



For temporary manual operation, for example during installation, just press and turn the manual adjuster, driving the actuator to the required position. When the manual adjuster is released, the actuator returns to automatic operation. The slide switch lets you fix the actuator in the desired position as long as necessary.

### Straightforward installation, operation and maintenance






The new actuators, both linear and rotary, are uniform in structure, design and operation. Thanks to their universal design and ergonomic operating elements, you will quickly become familiar with the new generation of actuators.

### Fast and error-free wiring



Fast and error-free connection of power and positioning signal: The generous connection space allows you to connect the wires easily and securely. Push-in cage terminals enable the wires to be connected without tools and ensure reliable electrical connections.

### Valve and actuator overview

			DN											
			15	20	25	32	40	50	65	80	100	125	150	
Stroke actuators	SAX..		Threaded valve					Flanged valve						
	SAS..		Threaded valve											
Rotary actuators	SAL..												Flanged valve	





Benefit from the latest technology while saving time and money – with our unique hundred percent backward compatibility for over 40 years.

## More efficiency for central HVAC plants

Be it the scope of applications, energy savings or secure layout and operation – the new generation of Acvatix products meets all requirements.

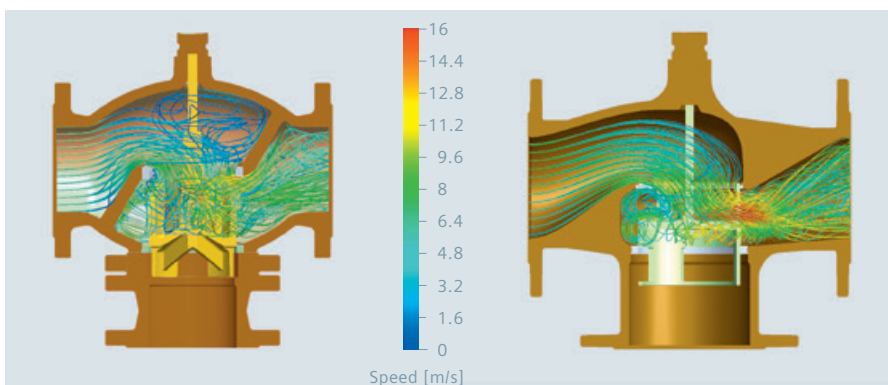
### Optimized actuators for more efficiency and flexibility

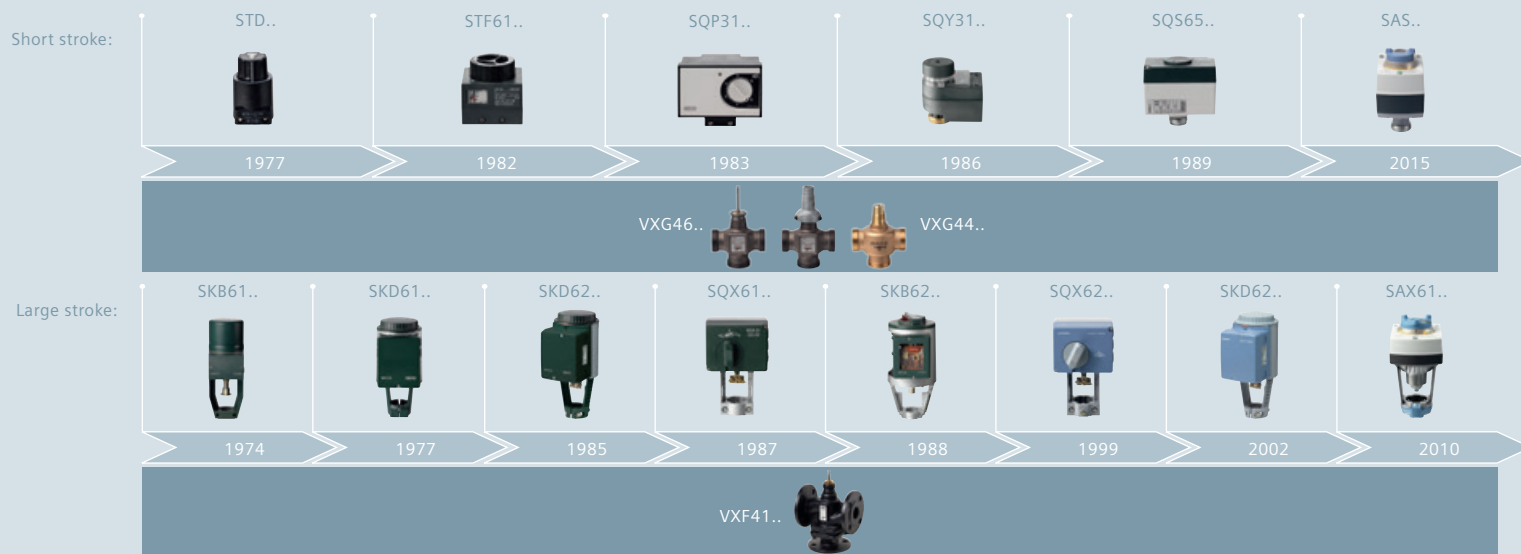
The new choice of positioning signals facilitates system layout and cuts planning costs: Now, rotary actuators can also be controlled by continuous signals. The stroke actuators, for example, can be controlled by DC 4...20 mA signals as an alternative to DC 0...10 V. The universal AC/DC 24 V power supply makes it easier to integrate HVAC field devices into automation and control systems.

### Optimized valves for lower costs and less effort

Thanks to large-stroke valves that cover all applications, you can select the most suitable valve regardless of the medium temperature. The expanded spectrum of nominal sizes and an optimized flow path allow you to use smaller valve sizes without reducing the volumetric flow. This makes plants more compact. Uniform bypass dimensions for all 3-port flange valves simplify planning. The valve weight is reduced by up to 15 percent, helping reduce the strain on your back during installation.

Flow path-optimized valve design – less turbulence and dead space plus lower noise level, yet up to 15 percent lighter.





### Your basis for an energy-efficient layout

With Acvatix, you can plan and install HVAC plants that are more energy-efficient. The new actuators consume less power, and the valves have finer graded  $k_{VS}$  values, so you can design the hydronic circuit very precisely. This ensures optimum system operation as well as top efficiency factors for chillers and hot water generation. In addition, any fault source can be quickly detected thanks to the fault status indication on the actuators, accelerating the return to energy-optimized plant operation.

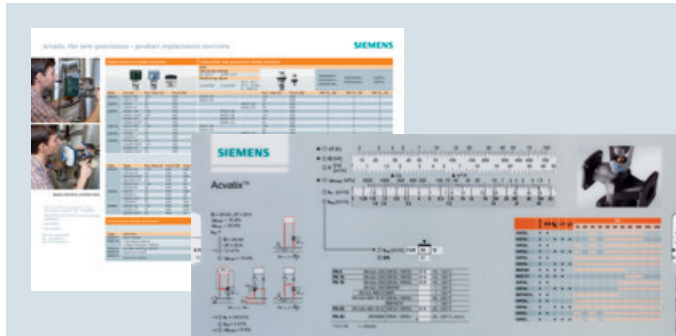
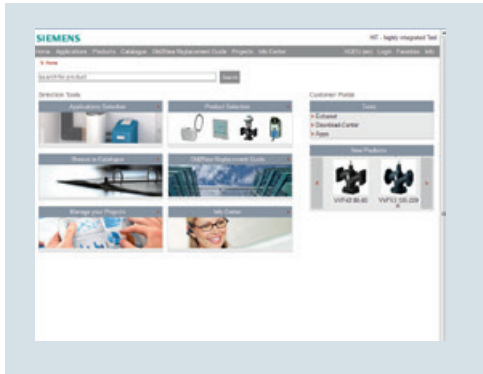
### Certainty from layout to operation

The simplified product selection helps you plan very efficiently. The uniform operation of the actuators, a fault-proof installation concept and improved wiring ensure correct installation and commissioning. The rugged design and high failure resistance of Acvatix products guarantee reliable operation.

### Highlights

- Faster, simpler planning thanks to a well-rounded actuator range and a streamlined, optimized valve range
- Well-designed product range for expanded application spectrum
- Higher energy efficiency due to optimized power consumption and finely graded  $k_{VS}$  values
- Planning security and easy exchange of products thanks to full backward compatibility

Practical aids like a valve slide ruler, product replacement overview and HIT ([www.siemens.com/hit](http://www.siemens.com/hit)) facilitate planning, sizing and product and accessory selection.



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Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

**“We are the trusted technology partner for energy-efficient, safe and secure buildings and infrastructure.”**