

# Delivering Solutions

**SIPOS**  
AKTORIK

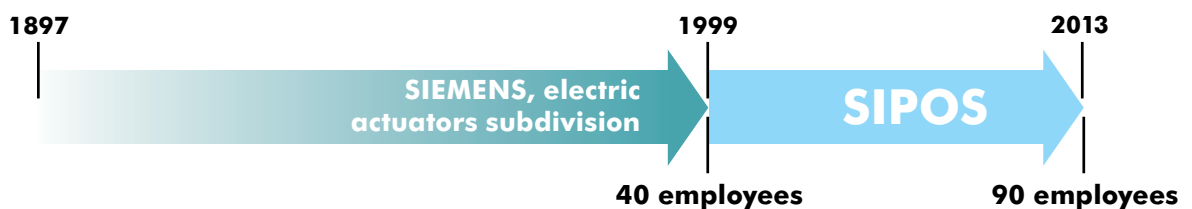
# An independent company with extensive experience

Innovation at the heart of actuation



SIPOS Aktorik GmbH was established as an independent company in 1999. The company draws on 100 years of experience with roots based in SIEMENS AG's electric actuators subdivision. Quality, product performance and a customer focussed mind-set have enabled the company to continue to grow – from 40 employees in 1999 to over 90 employees in 2013. With a production output of 12,000 units per annum, SIPOS Aktorik is one of the world's leading manufacturers of variable speed actuators.

## Established in the development, design and construction of electric actuators.



## Experienced employees: SIPOS' staff – our most valuable resource

Employees are a company's most valuable resource. This guiding principle applies in particular to SIPOS' approach to human resources and staff development. Major investment in staff encourages innovation. This proactive approach ensures that we anticipate trends and continue to provide value for our customers.



# Customer-focus

## Satisfaction determines success

With regard to our products, services and processes everything we do is focussed on our customers' individual requirements

Central to our philosophy is that 'the customer is king'. But that doesn't mean we only focus on product features. For us, customer-orientation is as individual as each of our clients. By applying these principles on a daily basis, we ensure that each customer, and their specific needs, is our central focus.

### Our principles:

- Highest product quality
- Solutions that meet requirements
- Delivering on our commitments
- Always meeting deadlines
- Providing targeted information
- Rapid quote production



**It's not the number of customers that counts -  
it's the number of satisfied customers!**

# Solving problems and providing service not just selling standard devices

Customers' needs are the foundation of all our activities

Rather than simply shipping actuators, at SIPOS we deliver solutions tailored to meet individual requirements. We are never complacent. Each customer's request is treated individually to address precise needs and provide the most effective solution. We don't rest on our laurels, even though the intelligent functionality

of our actuation technology is widely considered the most advanced on the market. Our experienced employees identify individual requirements and develop solutions – ensuring optimum performance at new schemes, retrofits and modified plants.

**Special function: Change of speed**

**Example of variable speed during operation**

**Special function: Cyclic operation**

**Example showing SIPOS' special cyclic operation function**

**Special function: Remote selection of the control source**

**Example for selecting the control source (LOCAL or REMOTE) from the control centre**

# Customised and practical solutions for the most varied applications

Demanding applications  
require exceptional solutions

## Actuation examples

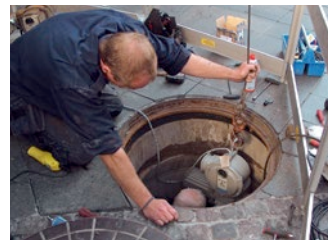
### Software solutions:

Adaptation of the actuator functions to address specific local applications and requirements: from configuring variable speed for a stand-alone application to prevent water hammer to integrating multiple actuators into the complex environment of a power station incorporating latest BUS communication technology with the control system.



### Customised underground installation:

Actuators are installed in standard man-holes or directly in the ground, without structural modification. The electronics unit can be installed separately above ground in a switch cabinet, where it is easily accessible.



### Solar operation:

For applications in remote locations, complete systems are sized and supplied. Service includes provision of the requisite components including solar panels and batteries, calculated according to location and the actuator application.

### Synchronisation:

Parallel operation of multiple actuators, without spatial restrictions.



**Customised solutions – a practical example:  
two actuators raise and lower a bridge synchronously.**

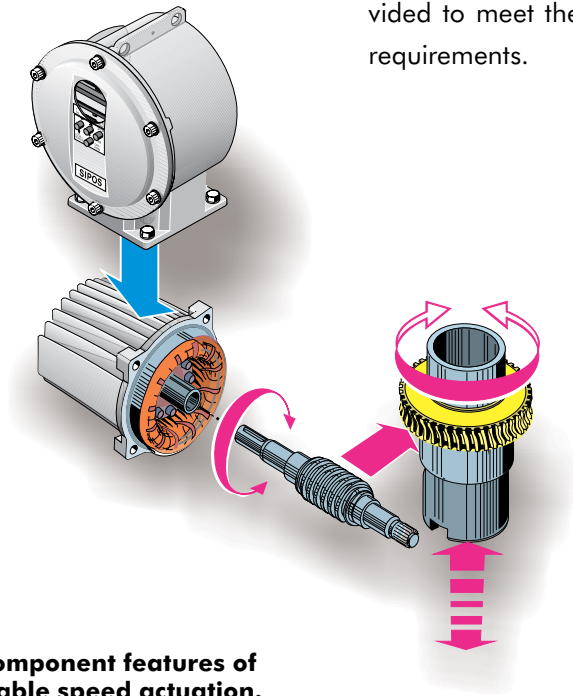
# SIPOS 5 Flash

## A unique actuator

We shape state-of-the-art innovation to benefit our customers

Intelligence can save a great deal of effort. With 'conventional' electric actuators, criteria – such as the required actuating speed and critical supply voltages – are achieved via different motor/gear configurations. This results in a multitude of actuators of varying mechanical design. With SIPOS 5 Flash actuators, this problem no longer arises. A frequency converter controls the actuator motor. This reduces the number of components and reduces product diversity, as one motor covers a much broader speed range. Additionally, voltage fluctuations do not impact torque,

which considerably increases operational reliability. Smart actuator electronics are not subject to wear and extend the life of the motor. We also ensure custom-configurability and a wide range of intelligent software solutions are provided to meet the most diverse process requirements.



**The main component features of SIPOS' variable speed actuation.**

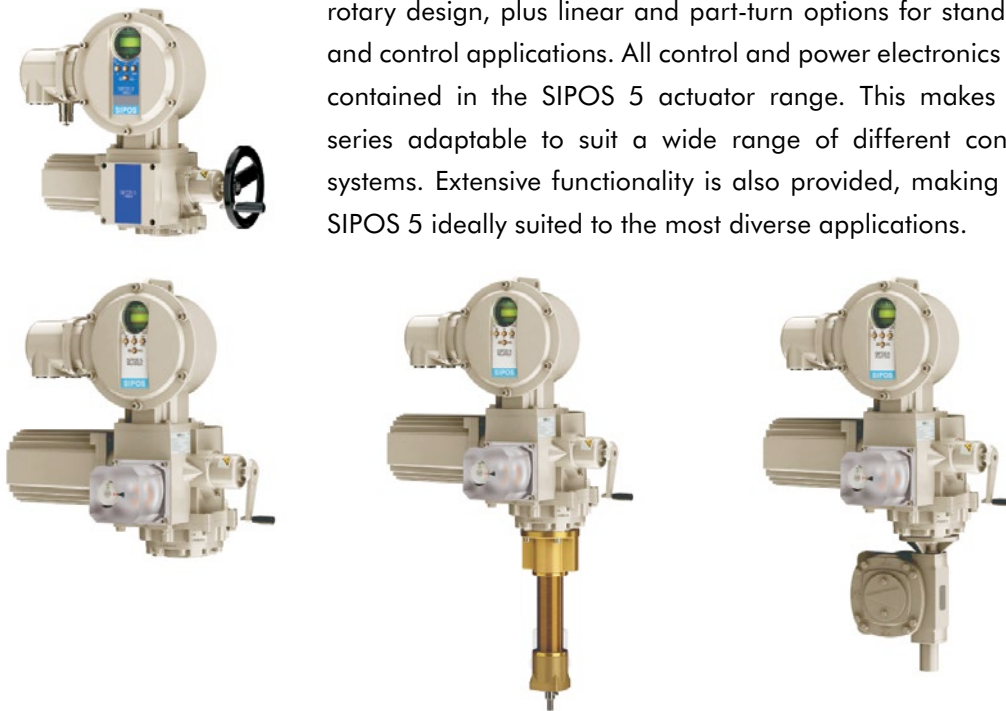
# SIPOS' product spectrum

## - unlimited versatility

Electric actuators and solutions are supplied to the energy sector, industrial plants and for water / wastewater management

Pre-empting the expectations of our customers through our products and services determines our product range. We always aim to innovate, but we also incorporate proven technology. By following this principle, we maintain our leading position in the field of actuator technology.

SIPOS 5 is an intelligent electric actuation solution available in single-phase and three-phase rotary design, plus linear and part-turn options for standard and control applications. All control and power electronics are contained in the SIPOS 5 actuator range. This makes the series adaptable to suit a wide range of different control systems. Extensive functionality is also provided, making the SIPOS 5 ideally suited to the most diverse applications.



As part of our quality without compromise ethos, we provide devices for nuclear power plants including rotary actuators. Safety is top priority in nuclear plants and we are acutely aware of this responsibility. Absolute reliability, even in extreme conditions, sets our actuators for nuclear plants apart. And that is why five of the world's top ten nuclear power plants have trusted SIPOS' quality for decades.





# SIPOS' product spectrum (continued)

## - unlimited versatility

Electric actuators and solutions are supplied to the energy sector, industrial plants and for water / wastewater management

Powerful control centres are managed economically with SIPOS' SIMA Master Station. The system is able to control plants with up to 247 actuators distributed over a cable length of almost 300 km. This inexpensive system offers operational reliability and high performance, as well as providing simplicity in operation.



Complete solutions are provided e.g. Uninterruptible Power Supply (UPS) or solar power installations. If our actuators are to be used in a critical environment we can provide the required support. This may involve installing the actuator electronics separately, providing a UPS or setting up autonomous operation with solar power supply and remote control e.g. via a mobile phone.





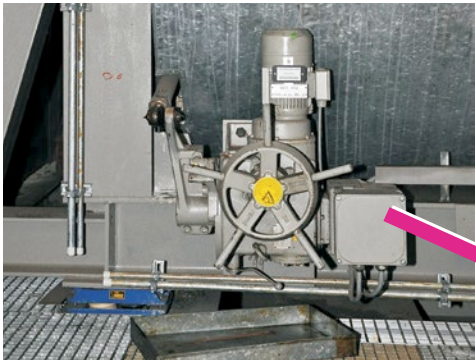
# Service

## for all aspects of the actuator

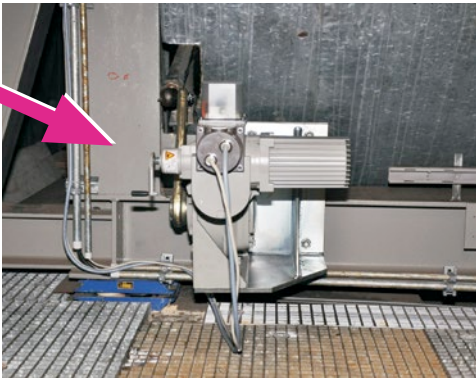
Wide knowledge and experience benefits our customers: consultation, planning, project design, implementation and support is provided

At SIPOS we ensure the correct actuators are supplied to meet the needs of the application. To fulfil this service we provide a full service from planning advice to design solutions to meet the individual needs of our customers. From a single actuator in a solar application to the provision of

hundreds of actuators and associated valves for a new installation or upgrade, we take pride in every commission. We provide problem solving expertise to ensure low operating costs and energy efficiency for all applications.



**As part of a complete retrofit service we can exchange and adapt actuators with the required support structures and, if required, supply actuators and valves from a single source (see installation below).**



# Modern production

Committed to quality -  
Made in Germany

At SIPOS, we maintain close control of production activities. Components and modules designed and delivered by SIPOS are manufactured by qualified suppliers, preferably from our surrounding regions. The focus is on assembly and quality assurance. The products are labelled 'Made in Germany' and this reflects our commitment to quality. In particular, our attention is centred on preserving environmental resources – from the choice of materials to the use of re-usable packaging.

Our workplaces are configured according to the latest commercial and occupational health recommendations with plenty of light and ergonomic work processes with plenty of light and ergonomic work processes. Staff are empowered and employees involved in assembly processes are encouraged to identify with the end product.



# Technical

## after-sales support

Customer service –  
we go the extra mile!

Supplying the correct actuators is just the first step. SIPOS recognises that actuation technology needs to be installed, commissioned and fully supported. Additionally, operating personnel need to be trained before the project can become an optimised solution.



We work in partnership with our customers and the primary focus of SIPOS' after-sales support is to meet specific project requirements. Working as a team with the end user, a primary objective is minimising down-time to guarantee economical operation. An after-sales support package from SIPOS reduces risk to a minimum to ensure smooth operation of your plant.



# SIPOS

## AKTORIK

### SIPOS world-wide

Global business – local service

