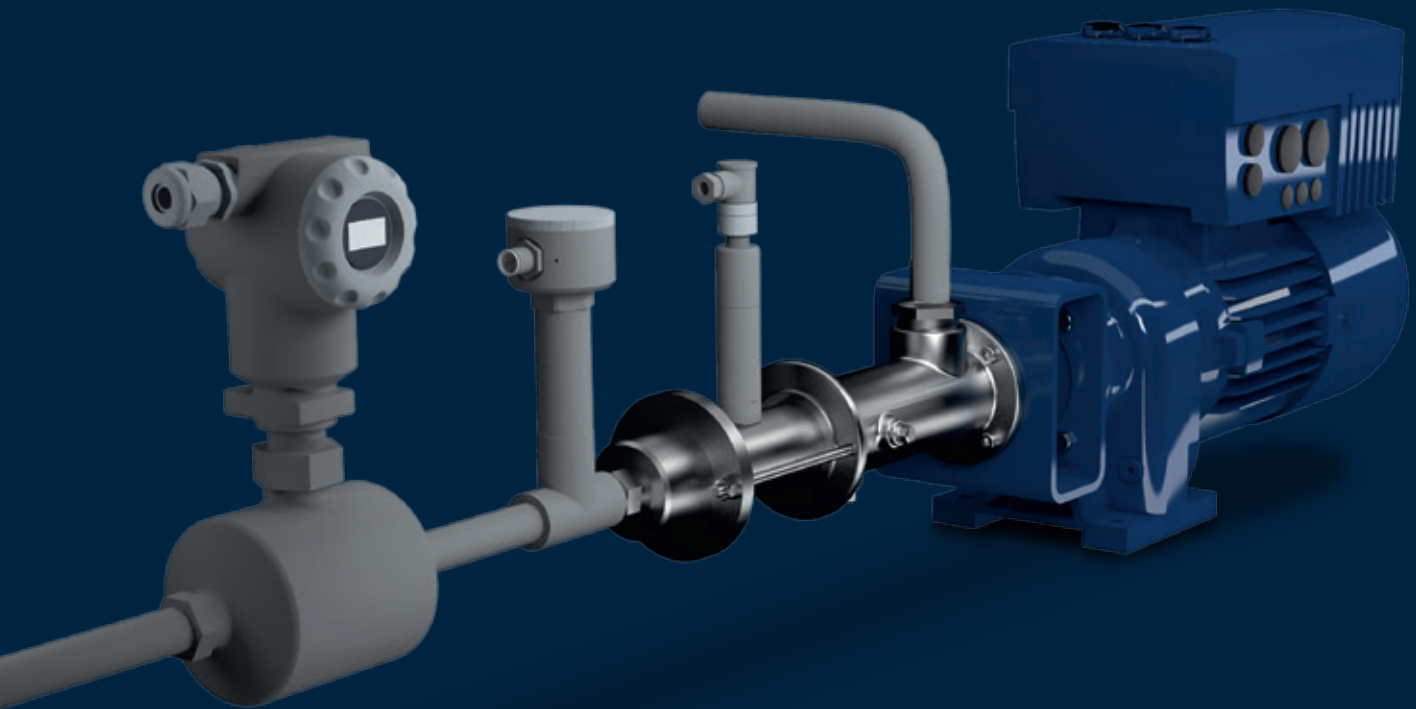


**SEEPEX.**  
ALL THINGS FLOW

# THE INTELLIGENT SOLUTION SMART DOSING PUMP



SDP

# EFFICIENT PUMPING, EASY SYSTEM INTEGRATION.

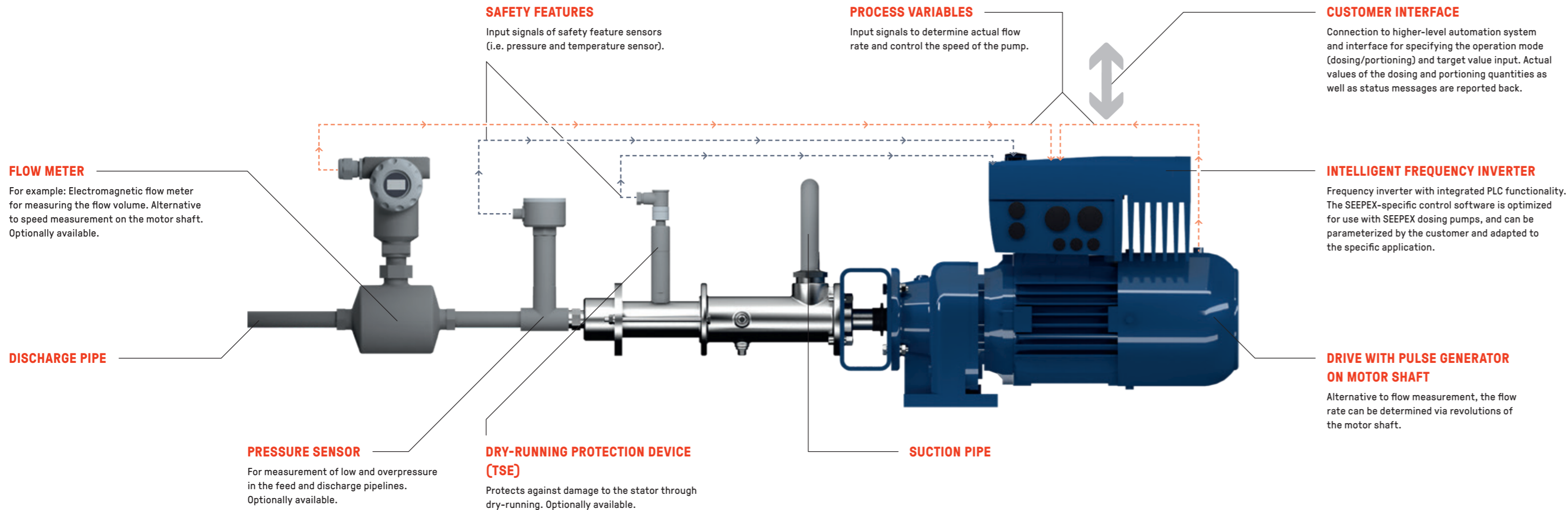
Plant operators and builders are under pressure to design their operations cost effectively, optimize process times and minimize downtime. Energy efficiency, the economical use of raw materials and the orderly scheduling of commissioning and maintenance work present additional challenges.

SEEPEX answers these challenges by offering the Smart Dosing Pump (SDP), an intelligent dosing pump for a wide range of applications. As a longstanding supplier of dosing technology, the SEEPEX solution provides a perfect, custom-made system, which covers the multiple requirements of complex dosing tasks, from industrial settings to laboratory applications.

The new Smart Dosing Pump combines the classic dosing benefits of a progressive cavity pump with up to date control concepts.

Progressive cavity pumps are the first choice for gentle pumping of media with minimal pulsation and high linear accuracy. They are used successfully in a wide range of applications and easily cover the spectrum of thin to highly viscous media, as well as solids and corrosive liquids.

The SDP features an integrated PLC to enable stand alone operation in, for example, distributed control systems (DCS). Set points are entered and sensors on the pump feed back operating conditions to the integrated PLC. Complex implementation into higher-level controllers is no longer required. This simplifies automation system integration and reduces the cost of installation and maintenance.



## OPERATION MODES

In continuous operation, the Smart Dosing Pump provides a constant flow. Batch operation is used for repeated filling of defined quantities.

## PARAMETERIZATION

Target value input takes place according to the requirements for system integration via:

- A handheld control panel (HMI)
- Analog and digital inputs
- Various fieldbus interfaces (e. g. PROFIBUS DP, CANopen, EtherCAT, DeviceNet, PROFINET, Ethernet POWERLINK, EtherNet/IP)

## INTELLIGENT CONTROL

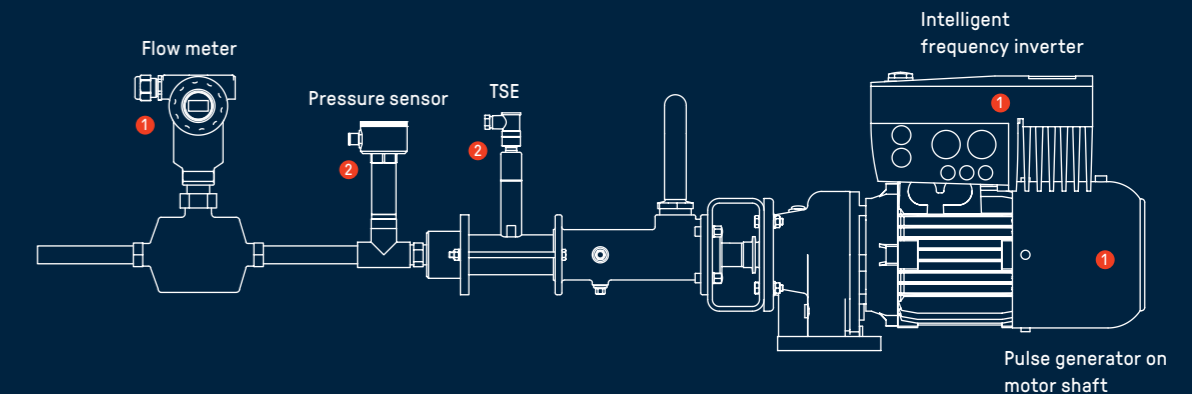
The pump can be configured with various measurement technology options.

### 1 MEASUREMENT OF PROCESS VARIABLES (ACTUAL VALUE)

The precise measurement of pump capacity is required to control the speed of the pump. The pump independently corrects even the smallest deviations from the target value. Choose between two alternatives: a flow meter (e. g. EMF) for direct measurement or a high precision encoder on the motor shaft for inferred measurement of the volume flow rate and portion quantity.

### 2 SAFETY FEATURES

Safety features are realized by integrating further sensors. For example, pressure sensors detect an over or under pressure while dry-running of the pump can be prevented by integrating the SEEPEX dry-running protection device TSE.



# APPLICATIONS

The Smart Dosing Pump with its integrated control merges seamlessly into our ranges of pump and control solutions. The modular design of our control system makes them individually adaptable to the customer's process.

With a control solution by SEEPEX, our customers can be sure that their pump is protected even in critical situations and that their process will be optimally supported. Our dosing pumps can be applied in practically every industry sector for constant dosing and portioning of exact quantities. They are particularly well suited for minimal pulsation conveying of thin to highly viscous media with or without solids, as well as for corrosive media.

SEEPEX dosing pumps are used in the following areas: agriculture, vehicle construction, bakeries, construction industry, ceramics industry, chemical and biochemical industry, coating kitchens, material preparation, deinking in paper mills, confectionary industry, dairy industry, spirits industry, paint and varnish industry, fruit and vegetable processing, pharmaceutical and cosmetics industry, poultry, fish and meat processing, oil, gas and petrochemicals, ship building, sludge dewatering, waste water treatment, water conditioning, wine industry, as well as wood processing.

## FEATURES

- Easy implementation of complex dosing in continuous and batch mode
- Realization of short filling times and resource-efficient media pumping
- Cost reduction due to minimal pulsation and high repeatability
- Easy integration into higher-level controls and automation systems
- Operation via handheld panel or various fieldbus systems
- Broad pumping performance range through our modular system

## KEY FACTS

- Conveying capacity:  
3–2,000 l/h (0.01–8.81 USGPM)
- Pressure:  
up to 48 bar (700 psi)

**SEEPEX GmbH**  
[www.seepex.com](http://www.seepex.com)