

# Trusted Expertise in Domestic and Commercial Wastewater



# Any Project, Any Wastewater Application

*Wastewater poses a complex challenge, no matter whether it originates in a single house or a multi-family home, a commercial building or an industrial complex. Whatever the property, Sulzer is the ideal wastewater partner from the start of the project to its final sign-off.*



Hospital

Industry

Office

Hotel

Multi-family home

Gas station

Shopping mall



Sulzer has vast experience in the handling of domestic and commercial wastewater. We are dedicated to helping professionals design, select, install and service any type of wastewater system. At our disposal are all the solutions needed to keep a building running smoothly.

Our extensive range of products includes drainage pumps, sewage pumps with Contrablock and vortex hydraulics, prefabricated lifting stations for both internal and external installation, and solutions for monitoring and control. These are the result of advanced R&D, built on an engineering heritage comprising over 100 years of pump design and installation.

In total, Sulzer expertise means reliable and efficient pumping with minimized operating costs. Our solutions come with everything you need, ensuring easy, plug-and-play installation with a minimum of time and set-up.

## Domestic applications

Domestic properties pose wastewater challenges both large and small. In addition to waste disposal from toilets, there are diverse sources of drainage and grey wastewater including not only sinks and showers, but also drainage from yards and gardens. The high reliability of Sulzer pumps and lifting stations offers security for metropolitan and remote properties alike.

## Commercial applications

Commercial properties share many challenges with domestic properties when it comes to pumping and lifting, but their more diverse uses can also mean special demands. Sulzer pumps and lifting stations reliably move not only wastewater with a high proportion of solid or fibrous matter, but also aggressive and even chemically contaminated wastewater.

# Our Comprehensive Product Portfolio

Product technology	Product name	Application				Motor-related		Product facts on page
		Domestic	Commercial	Without toilet waste	Waste disposal from toilets	High-efficiency (IE3)	Explosion-proof as standard	
Light drainage pumps	Type ABS Robusta 200 & 300	✓	✓	✓				6
	Type ABS Coronada 250	✓	✓	✓				6
	Type ABS IP 900	✓	✓	✓				6
Light wastewater pumps	Type ABS MF 154 HW	✓	✓	✓				7
	Type ABS MF154-804	✓	✓	✓				7
Submersible wastewater pumps	Type ABS AS 0530-0841	✓	✓	✓	✓		●	7
Submersible grinder pumps	Type ABS Piranha 08-09	✓	✓	✓	✓			8
	Type Piranha S 12-26	✓	✓	✓	✓		●	8
	Type ABS Piranha PE	✓	✓	✓	✓	✓	✓	8
Submersible sewage pumps	Type XFP 1.3 - 30 kW	✓	✓	✓	✓	✓	✓	8
Lifting stationsw	Type ABS Piranhamat 100 & 120	✓		✓	✓			8
	Type ABS Sanimax	✓	✓	✓				8
	Type ABS Nirolift	✓	✓	✓				9
	Type ABS Sanisett 1&2	✓	✓	✓				9
	Type ABS Piranhamat 701-1002	✓	✓	✓	✓			9 and 10
	Type ABS Sanimat 1000-2002	✓	✓	✓	✓			10
	Type ABS Sanimat 4002	✓	✓	✓	✓	✓		10
	Type ABS Synconta 700 and 700L	✓	✓	✓	✓			11
	Type ABS Synconta 901B & 902B	✓	✓	✓	✓			11
Monitoring and control		✓	✓					11-13

✓ = Standard   ● = Optional

## Domestic wastewater without toilet waste

Domestic wastewater without toilet waste includes drainage and gray wastewater such as:

- Domestic household wastewater from dishwashers, washing machines, showers, bathtubs and saunas
- Rainwater, groundwater and other lightly polluted water
- Flood water from cellars and clay or concrete pits
- Collected wastewater from containers and drainage pits

## Domestic waste disposal from toilets

Domestic wastewater from toilets comprises all sewage water flushed from toilets on residential properties.

## Commercial wastewater without toilet waste

Commercial wastewater without toilet waste includes drainage and gray wastewater such as:

- Surface drainage water from underground railways and garages
- Wastewater from apartment complexes and other large residential buildings, hotels, industrial plants, cinemas, theaters, hospitals, pubs and other types of public buildings
- Rainwater, groundwater and other lightly polluted water
- Flood water from cellars and clay or concrete pits
- Collected wastewater from containers and drainage pits

## Commercial waste disposal from toilets

Commercial wastewater from toilets comprises all sewage water flushed from toilets on commercial, industrial or public properties.

# Product Overview

## Light drainage pumps

### LIGHT DRAINAGE PUMP TYPE ABS ROBUSTA 200 & 300

#### FEATURES AND BENEFITS

The Robusta has been designed for pumping clear and wastewater from house, garden or yard and can pump down to a very low water level. It is supplied with built-in level control and check valve and is suitable for manual or automatic operation.

#### KEY CHARACTERISTICS

Capacities	Up to 12 m <sup>3</sup> /h
Heads	8.5 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	G 1¼"
Maximum speed of rotation	2,900 min <sup>-1</sup>



### LIGHT DRAINAGE PUMP TYPE ABS CORONADA 250

#### FEATURES AND BENEFITS

The Coronada is a submersible stainless steel pump for removing clear and aggressive wastewater from areas such as drainage pits, gullies and flooded cellars. Also for drainage of swimming pools, circulation in ponds, and for emptying and filling of containers. Available with KS float switch for automatic level control. A special SX version for particularly aggressive liquids is also available.

#### KEY CHARACTERISTICS

Capacity	9 m <sup>3</sup> /h
Head	7.5 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	G 1¼"
Maximum speed of rotation	2,900 min <sup>-1</sup>



### LIGHT DRAINAGE PUMP TYPE ABS IP 900

#### FEATURES AND BENEFITS

The ABS light drainage pump IP is a stainless steel pump for corrosive media with vortex hydraulics. It is suitable for pumping aggressive media with a high proportion of solid or fibrous matter. The IP is also ideal for dewatering of chemically contaminated wastewater, industrial effluent, and for use in agriculture.

#### KEY CHARACTERISTICS

Capacity	18 m <sup>3</sup> /h
Head	11 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	G 2"
Maximum speed of rotation	2,900 min <sup>-1</sup>



## Light wastewater pumps

### LIGHT WASTEWATER PUMP TYPE ABS MF 154 HW

#### FEATURES AND BENEFITS

The MF 154HW is a compact submersible pump for the removal of domestic and commercial high temperature wastewater that can contain solids up to 20 mm. The pump has been designed to cover a wide range of internal and external dewatering applications, but primarily where the temperature of the medium exceeds the standard upper limit (40°C) to a maximum allowable temperature of 80°C.

#### KEY CHARACTERISTICS

Capacity	9 m <sup>3</sup> /h
Head	8 m
Temperatures	80°C
Discharge sizes	1 ½"
Maximum speed of rotation	2,900 min <sup>-1</sup>



### LIGHT WASTEWATER PUMP TYPE ABS MF154-804

#### FEATURES AND BENEFITS

The MF 154-804 is a compact submersible wastewater pump range with vortex impeller for trouble-free operation. The pumps are used for dewatering of buildings and for pumping fluids from low lying locations. Level control switch is an option.

#### KEY CHARACTERISTICS

Capacity	58 m <sup>3</sup> /h
Head	16 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	G 1¼"-G 2"/DN 65
Maximum speed of rotation	2,900 min <sup>-1</sup>



## Submersible wastewater pumps

### SUBMERSIBLE WASTEWATER PUMP TYPE ABS AS 0530-0841

#### FEATURES AND BENEFITS

The AS is a robust and reliable submersible pump for the removal of clear water, wastewater, and sewage from buildings and sites. The pump ranges from 1.0 to 3.0 kW, and is suitable for portable as well as stationary installations. Hydraulics with Contrablock or vortex impellers ensure blockage-free operation.

#### KEY CHARACTERISTICS

Capacity	100 m <sup>3</sup> /h
Head	28 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	DN 50, DN 65, DN 80
Maximum speed of rotation	1,450 min <sup>-1</sup> , 2,900 min <sup>-1</sup>



## Submersible grinder pumps

SUBMERSIBLE GRINDER PUMPS TYPE ABS PIRANHA 08-09 / PIRANHA S 12-26 / PIRANHA PE

### FEATURES AND BENEFITS

Piranha sewage pumps with shredding action provide reliable and economical discharge of effluent under pressure in private municipal and communal schemes. They offer an economical alternative to gravity sewers, and improve environmental protection for pressurized sewer systems.

### KEY CHARACTERISTICS

Capacity	21 m <sup>3</sup> /h
Head	71 m
Discharge sizes	G 1 1/4" / DN 32-DN 50



## Submersible sewage pumps

SUBMERSIBLE SEWAGE PUMPS TYPE ABS XFP 1.3-30 KW

### FEATURES AND BENEFITS

Designed for use in standard and network pumping stations. Suitable for both wet and dry installation submersible sewage pump type ABS XFP models PE1 to PE3 using premium-efficiency IE3 motors. The XFP pumps offer significant energy saving using IE3 motors, excellent rag handling, long-term reliability and a future proof design.

### KEY CHARACTERISTICS

Capacity	792 m <sup>3</sup> /h
Head	70 m
Discharge sizes	DN 100-DN 200



## Lifting stations

LIFTING STATIONS TYPE ABS PIRANHAMAT 100 & 120

### FEATURES AND BENEFITS

The Piranhamat 100-120 is designed for domestic wastewater removal from one WC located below the sewer backwash level. It is also possible to connect one wash-hand basin, one shower and one bidet to the unit. The Piranhamat 100-120 is gas- and odour-tight, plug-in-ready, and fitted with a Piranha grinder pump.

### KEY CHARACTERISTICS

Capacity	5.5 m <sup>3</sup> /h
Head	9 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	DN 25, DN 32



LIFTING STATION TYPE ABS SANIMAX

### FEATURES AND BENEFITS

The Sanimax is a compact lifting station suitable for installation at floor level near the wastewater source below the sewer backwash level. Flood-proof, with an odour-preventing vent system, Sanimax removes wastewater from wash-hand basins, washing machines and showers. Fitted with Robusta or MF pump.

### KEY CHARACTERISTICS

Capacity	14 m <sup>3</sup> /h
Head	11 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	DN 40
Maximum speed of rotation	2,900 min <sup>-1</sup>



## LIFTING STATION TYPE ABS NIROLIFT

### FEATURES AND BENEFITS

The Nirolift is a synthetic, single pumping station for the pumping of faecal-free wastewater such as the discharge from washing machines, sinks, dishwashers, showers and bathtubs. For below-ground installation in buildings below the sewer level. Fitted with a Robusta, Coronada or MF pump.

### KEY CHARACTERISTICS

Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	DN 40 with 50 mm Plasson adaptor



## LIFTING STATIONS TYPE ABS SANISETT 1&2

### FEATURES AND BENEFITS

The Saniset is a synthetic, single or twin pumping station for the pumping of faecal-free wastewater such as the discharge from washing machines, sinks, dishwashers, showers and bathtubs. For above- or below-ground installation in buildings and areas below the sewer level. Fitted with Robusta, Coronada, IP, Piranha or MF pumps. For applications where pumping must not be interrupted the twin pumping station unit should be installed.

### KEY CHARACTERISTICS

Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	DN 50 with 63 mm Plasson adaptor



## LIFTING STATION TYPE ABS PIRANHAMAT 701

### FEATURES AND BENEFITS

The Piranhamat 701 is a flood-proof lifting station for automatic sewage removal from areas below the backwash level. This unit is fitted with one ABS Piranha submersible grinder pump suitable for pumping domestic wastewater. This lifting station is ideal for locations where the diameter of the discharge line is restricted.

### KEY CHARACTERISTICS

Capacity	9 m <sup>3</sup> /h
Head	30 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	G 1¼"
Maximum speed of rotation	2,900 min <sup>-1</sup>



## LIFTING STATION TYPE ABS PIRANHAMAT 1002

### FEATURES AND BENEFITS

The Piranhamat 1002 is a two-pump version of the Piranhamat 701 for applications where the additional security of a second pump is required. This unit is fitted with two ABS Piranha submersible grinder pumps.

### KEY CHARACTERISTICS

Capacity	9 m <sup>3</sup> /h
Head	30 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	G 1¼"
Maximum speed of rotation	2,900 min <sup>-1</sup>



## LIFTING STATIONS TYPE ABS SANIMAT 1000-2002

### FEATURES AND BENEFITS

The Sanimat 1000-2002 is a single pump flood-proof lifting station for automatic removal of domestic wastewater from areas below the backwash level. Robust, synthetic (PE), easy to transport, 70 litre collection tank of compact design.

### KEY CHARACTERISTICS

Capacity	55 m <sup>3</sup> /h
Head	9.5-18 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	Discharge flange DN 80, plus flanged socket with 4" sleeve and clips (for discharge pipe DN 80/100)
Maximum speed of rotation	1,450 min <sup>-1</sup> , 2,900 min <sup>-1</sup>



## LIFTING STATION TYPE ABS SANIMAT 4002

### FEATURES AND BENEFITS

The Sanimat 4002 is a flood-proof lifting station for automatic removal of domestic and commercial wastewater from areas below the backwash level. Designed for large buildings, multi-family housing units, hotels, hospitals, etc. Compact design but large storage capacity. Fitted with XFP sewage pumps up to 6 kW.

### KEY CHARACTERISTICS

Capacity	45 m <sup>3</sup> /h
Head	18 m
Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	Discharge flange DN 80 and DN 100
Maximum speed of rotation	980 min <sup>-1</sup> , 1,450 min <sup>-1</sup>



## LIFTING STATIONS TYPE ABS SYNCONTA 700 AND 700L

### FEATURES AND BENEFITS

The Synconta is a synthetic prefabricated sump. Designed as a single pumping station for the effective dewatering of buildings, and pumping of sewage containing faecal matter from areas below the sewer level.

### KEY CHARACTERISTICS

Temperatures	40°C, max. 60°C for 5 min
Discharge sizes	DN 32



## LIFTING STATIONS TYPE ABS SYNCONTA 901B AND 902B

### FEATURES AND BENEFITS

Synthetic prefabricated sump, designed as a single or double pumping station for the automatic pumping of wastewater and sewage from locations and areas below the backwash level in accordance with EN 12050-1. Designed as a complete wastewater sump for below-ground installation and for fitting with pumps from the Piranha, AS and MF ranges.

### KEY CHARACTERISTICS

Temperatures	40°C, max. 60°C for 5 min
Inflow ports	DN 100, DN 150, DN 200



## Monitoring

### LEAKAGE RELAY TYPE ABS CA 461

#### FEATURES AND BENEFITS

CA 461 is designed to detect leakage in pumps and mixers. The amplifier is housed in a norm enclosure fitted for DIN-rail mounting. The unit is available in two executions, 24 VDC or 110-230 VAC supply.



### TEMPERATURE & LEAKAGE RELAY TYPE ABS CA 462

#### FEATURES AND BENEFITS

CA 462 is designed to detect temperature and leakage in pumps and mixers. The amplifier is housed in a norm enclosure fitted for DIN-rail mounting. The unit is available in two executions, 24 VDC or 110-230 VAC supply.



## Controllers

### PUMP CONTROLLER TYPE ABS PC 211

#### FEATURES AND BENEFITS

The PC 211 is an easy-to-use dual-pump controller designed mainly for use in either gravitation or pressurized municipal wastewater pumping stations. Its numerous features improve pumping station functionality and reliability throughout its life-cycle.



### PUMP CONTROLLER TYPE ABS PC 242

#### FEATURES AND BENEFITS

The PC 242 is a two-pump controller designed mainly for use in either gravitation or pressurized municipal wastewater pumping stations. It has many advanced features to minimize costs in the pumping station throughout its entire life cycle. The graphic color display enables intuitive menu navigation with arrow buttons. It has an 8-channel analog data logger (2 weeks capacity), and provides a one-week history on counters and accumulators (run time, start count and flow), as well as a time stamp on up to 4,000 pump and alarm events.



### PUMP CONTROLLER TYPE ABS PC 441

#### FEATURES AND BENEFITS

The PC 441 is a monitor and controller for one to four pumps, designed mainly for use in municipal wastewater pumping stations. The PC 441 has many advanced features to minimize operating costs and increase the availability of the pumping station throughout its life cycle. The graphic color display enables intuitive menu navigation with arrow buttons. It has an 16-channel analog data logger (2 weeks capacity), and provides a one-week history on counters and accumulators (run time, start count and flow), as well as a time stamp on up to 4,000 pump and alarm events.



## Control panels

### CONTROL PANEL TYPE ABS CP 112 AND 212

#### FEATURES AND BENEFITS

This compact control panel is used with either one (CP 112) or two pumps (CP 212) conforming to ATEX. The panel is connected directly to pumps up to 5.5 kW (10 A), 3-phase and single-phase versions, and provides LED indication of power, pump run and alarm. The choice of water level control includes float switches, an analog (4-20 mA) sensor and built-in pressure sensor for closed or open air systems.



### CONTROL PANEL TYPE ABS CP 114

#### FEATURES AND BENEFITS

The CP 114 is a compact control panel for single pumping stations. It is suitable for use in applications such as tanks, small pits, or standard commercial applications with a single-phase 1/230/N/PE power supply.



## CONTROL PANEL TYPE ABS CP 116 AND 216

### FEATURES AND BENEFITS

This compact control panel is used with either one (CP 116) or two pumps (CP 216) conforming to ATEX. An optional GSM/GPRS modem allows communication with an AquaWeb or SCADA system using Comli or Modbus protocol. The graphic color display enables intuitive menu navigation with arrow buttons. It has an 8-channel analog data logger (2 weeks capacity), and provides a one-week history on counters and accumulators (run time, start count and flow), as well as a time stamp on up to 4,000 pump and alarm events. The choice of water level control includes float switches, analog (4-20 mA) sensor and built-in pressure sensor for closed or open air systems.



## CONTROL PANEL TYPE ABS CP 221

### FEATURES AND BENEFITS

The CP 221 control panel provides a complete solution for two-pump sewage pumping stations. It is built around the PC 242 controller with advanced control and monitoring features to ensure optimum performance and reliability over the whole life cycle of the station.



## Sensors

### PRESSURE SENSOR TYPE ABS MD 124

#### FEATURES AND BENEFITS

The MD 124 is a 4-20 mA loop-powered pressure sensor. It has a robust construction and is easily mounted on a standard 35 mm DIN rail. MD 124 is ideal for measuring liquid levels using the "bubble tube" principle.



### SUBMERSIBLE PRESSURE SENSOR TYPE ABS MD 126

#### FEATURES AND BENEFITS

The MD 126 is a high-accuracy submersible hydrostatic level sensor. Encapsulated in stainless steel and resistant to sewage water, it is designed to measure levels in liquids such as storm water and wastewater in sump pumps. When connecting the 2-wire loop powered sensor in series with a DC power supply, the MD 126 gives a 4 to 20 mA output signal which is proportional to the level of the liquid.



### SUBMERSIBLE PRESSURE SENSOR TYPE ABS MD 127

#### FEATURES AND BENEFITS

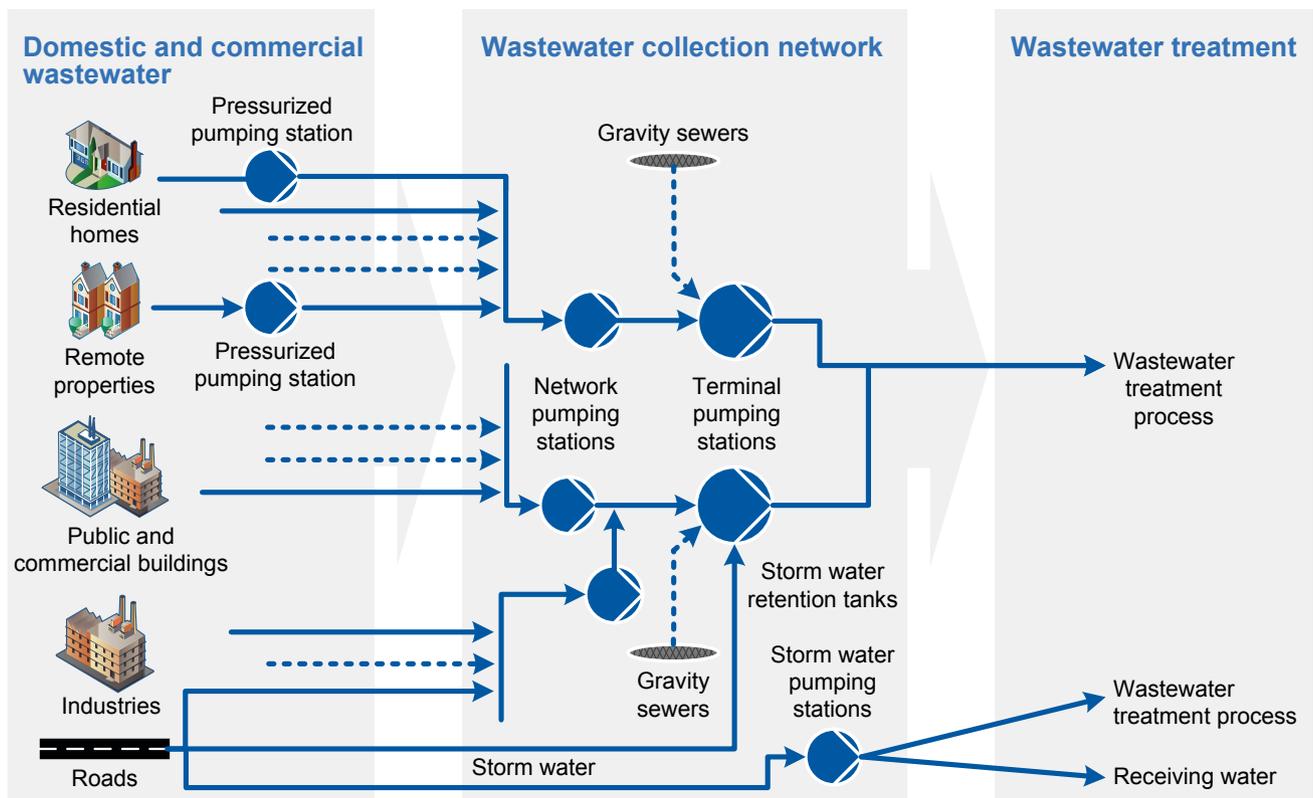
MD 127 is a sewage water resistant, stainless steel encapsulated, submersible, hydrostatic level sensor of very high accuracy and over pressure capability. It is designed for level measurement in liquids like stormwater and wastewater in pump sumps. When connecting the 2-wire loop powered sensor in series with a DC power supply, the MD 127 gives a 4 to 20 mA output signal which is proportional to the level of the liquid.



# Trusted Expertise in Domestic and Commercial Wastewater

Sulzer offers solutions for quick and effective collection of wastewater from residential and public properties, and for transferring it to the municipal wastewater network. Small wastewater pumps, lifting stations, prefabricated pumping stations and equipment for monitoring and control are all a part of the process.

## Wastewater collection process



### ABSEL – Sulzer’s Wastewater Pump Selection Program

With ABSEL, you can select specific pumps by configuring the application area, pump series and duty point using the “Hydraulic Selection” function. Alternatively, you can navigate through our pump offering by using the “Pump Browser”.

Once you have selected a pump, you have the option to download complete product information in PDF format with pump and motor performance curves, a product description, dimensional drawings, operational cost calculations and data sheets.

You can also run a friction loss calculation on dry or wet well applications using the “PipeCalc” function. The “PipeCalc” database contains a wide variety of predefined pipes and fittings such as elbows, valves, transition pieces, inlets and outlets. To provide a first calculation in seconds, the “PipeCalc” function offers you a predefined piping arrangement in a pumping station.



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## FLOAT SWITCH TYPE ABS KS

### FEATURES AND BENEFITS

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The KS float switch, used in liquids for control or signal activation, operates in response to the liquid level. It is also suitable for use in sewage and for automatic level control. The KS float switch is impact- and shock-resistant, mercury-free, and environmentally friendly.



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## Accessories

### ABS AQUAAPP

#### FEATURES AND BENEFITS

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Local Wi-Fi, Bluetooth or Internet based connection to ABS Control & Monitoring equipment. Graphical pump and pit status indication for 1-4 pumps. View Events and Alarms including acknowledgement. Visual representation of electrical properties.



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### ABS AQUAPROG

#### FEATURES AND BENEFITS

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ABS AquaProg is a Windows based software specially developed for configuration and software upgrade of Sulzer substations. Communication with the controllers are established via RS 232, USB, Modem (Analog, GPRS / 3G) or Ethernet.



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### ABS AQUAWEB

#### FEATURES AND BENEFITS

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ABS AquaWeb is a web based Monitoring and Surveillance system with as well remote control and Alarm handling capabilities. It's a whole range of services including pump controllers, modems, communication server with a web interface.



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