

STRATE is a company of



**STRATE**

## STRATE AWALIFT 80 wastewater lifting unit



# Safe disposal of wastewater in smaller buildings too



*Thanks to their compact design, STRATE AWALIFT 80 wastewater lifting units can easily be installed in small rooms as well.*

Wastewater lifting units are always used when the discharge pipe is below the backwater level and drainage using natural gradient is not possible. They then ensure the wastewater is transported safely to the sewage system.

This also applies to single or two-family homes, in which the basement is used in a variety of ways today and is quite often fitted with a toilet, shower, sink, bath or washing machine.

In such cases, small wastewater lifting units for up to 12 residents are required, which can of course also be used in hotels, restaurants, offices, business, practices or small industrial companies.

## Versatile tasks ...

Particularly when these systems are used in residential buildings, owners and residents have special expectations:

- The system performs its tasks reliably and is designed for clog-proof and odourless operation.
- The system can be operated with clearly arranged control devices and is set up in an easily accessible spot. This is only guaranteed for a dry set-up in the building, which should always be preferred to a submersible pump in an open wet well installation outside.
- The system is quiet during operation.
- High material quality ensures a long service life which is significantly longer than that of submersible pumps or standard dry set-up systems made of PE.
- Servicing must be easy to perform and all parts should be easy to access, because DIN EN 12056-4 prescribes annual servicing for systems set up in private buildings, which should be seen as compulsory in order not to put insurance protection at risk.
- Economic and energy-efficient operation are decisive in the face of increasing energy costs. Coupled with the long service life and low servicing costs, this results in low operating costs for the entire life cycle.

## ... perfectly solved by STRATE

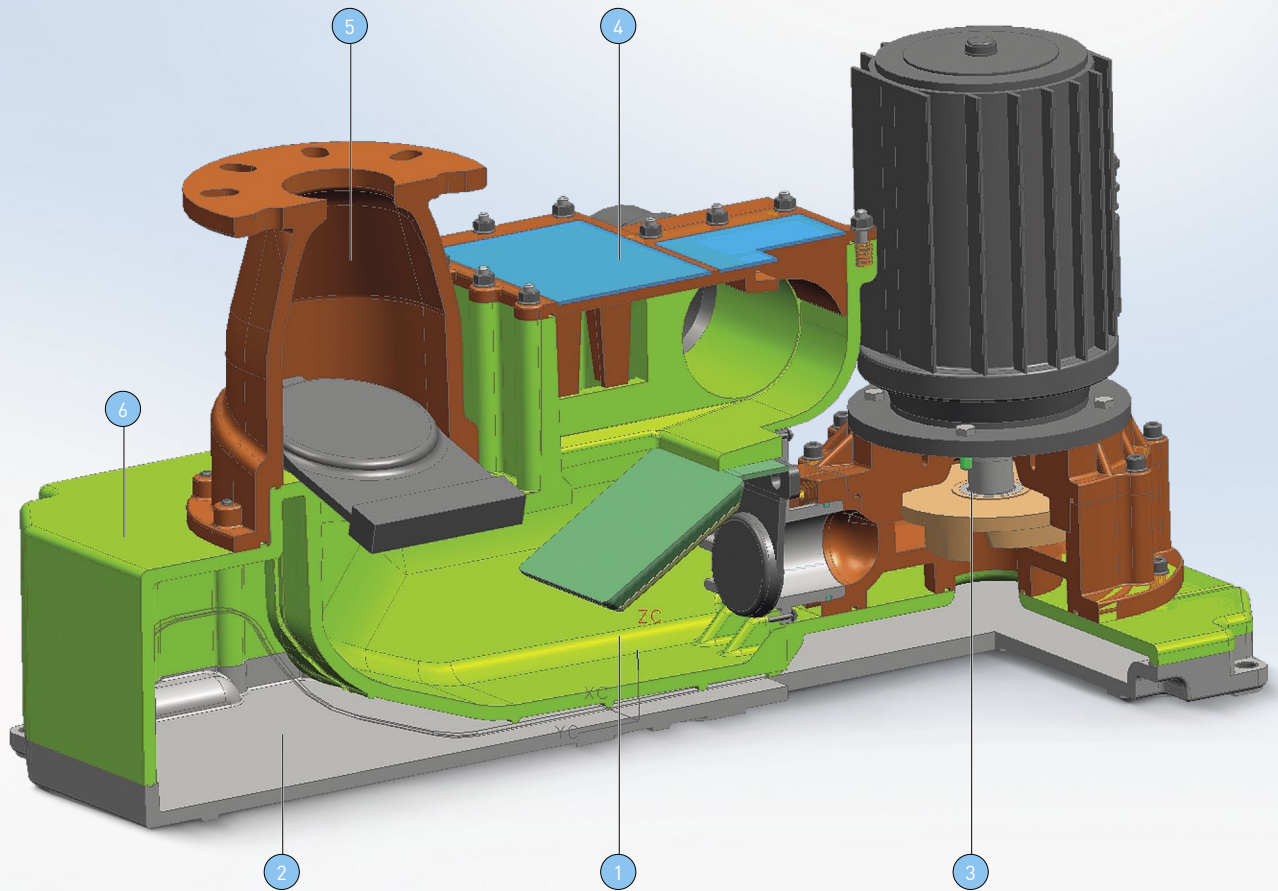
The STRATE AWALIFT 80 wastewater lifting station meets these requirements perfectly and benefits from decades of STRATE experience and from the many product details which have already proved their value in more than 30,000 installed large-scale STRATE AWALIFT sewage pumping stations.

*STRATE AWALIFT sewage pumping stations for larger installations have been in reliable use for many years all over the world.*

It's not for nothing that STRATE stands for more than 60 years of competence in the field of wastewater disposal and offers innovative solutions for a wide range of products from check valves and air valves through sewage pumping stations to control technology and ready-made chambers.



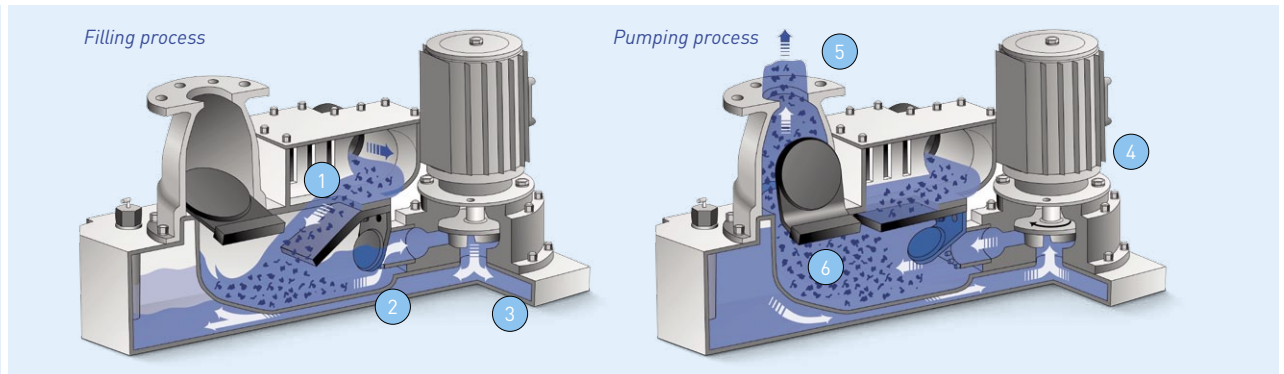
# Properties and advantages at a glance



No.	Advantage	Property
1	Clog-proof and economical operation	Patented solids collecting chamber design so that the pump only has to convey pre-cleaned wastewater
2	Compact, light and still sturdy	Made of PUR, small outer dimensions and only 42 kg in weight
3	Quiet and energy-efficient	Use of demand-oriented, compact and efficient centrifugal pumps, hydrodynamic solids collecting chamber and flow channels within the system
4	Simple servicing	All the components are easily accessible
5	High pumping capacity up to 30 m column of water	Optimum pump design, sturdy solids collecting chamber and container design
6	Simple operation	AWAmaster compact control unit with LCD plain text display

# Patented technology for maximum efficiency

Like all STRATE AWALIFT sewage pumping stations, the STRATE AWALIFT 80 has a special solids collecting chamber. In this chamber, the wastewater is separated into water with coarse material and „pre-cleaned“ wastewater. The pump then only pumps this pre-cleaned wastewater, which means optimum protection from soiling, clogging and wear.



During the filling process, the wastewater enters the container [1]. Any solid matters in the water are held back reliably by the separating flap in the solids collecting chamber [2], while the rest of the wastewater, now free of coarse material, continues to fill the whole container [3]. As soon as a defined filling level has been reached, the pump [4] switches on and pumps the pre-cleaned wastewater back through the solids collecting chamber into the pressure pipe [5] connected. This has the effect of picking up all the coarse material retained in the solids collecting chamber and flushing this together with the pump flow into the pressure pipe [6]. At the same time, the solids collecting chamber is cleaned residue-free.

## Top properties thanks to innovative materials and components

The most important material for the STRATE AWALIFT 80 is polyurethane (PUR) which is used for the container, the solids collecting chamber, the non-return valve and the pump. The use of PUR instead of the polyethylene (PE) otherwise used and the special RIM casting method (Reaction Injection Molding) with a wall thickness of up to 15 mm makes the system stronger and more rigid than conventional PE systems without solids collecting chamber. In addition, PUR has the best abrasion resistance which is demonstrated by low wear and thus a significantly longer service life.

The noise level is also very important for use in residential buildings. STRATE AWALIFT 80 permits extremely quiet operation both day and night. This is due in part to the extremely low sound emission of the polyurethane construction used, which reduces noises to fridge level.



*The RIM method guarantees an extremely stable yet still light design.*



The STRATE AWALIFT 80 is always able to pump wastewater reliably over larger distances and up to a pump head of 30 mWC. This is not least on account of the demand-oriented, hydraulically optimised pump design, the STRATE construction which has been proving itself for many years and the sturdy execution of all the components.

The STRATE AWALIFT 80 weighs only 42 kg and can be installed even in confined installation conditions thanks to its compact dimensions. It is set up dry, which makes servicing easier compared to servicing a submersible pump in the wet chamber, and increases service life. The station has two DN 100 inlets on the left and right, with a sealing cap for the inlet not used included in the scope of supply, as well as a DN 80/100 outlet for straightforward connection to the pressure pipe. Every system is hermetically sealed so that no unpleasant odours can escape.

#### Good for the wallet and for the environment

A wastewater lifting unit has to be affordable and must not cause high operating costs. In addition to its interesting buying price, the STRATE AWALIFT 80 offers the best conditions, because a highly efficient pump selected to match requirements and an optimum flow channel design within the system considerably reduce energy costs.

However, all other cost components also favour the STRATE AWALIFT 80 wastewater lifting unit:

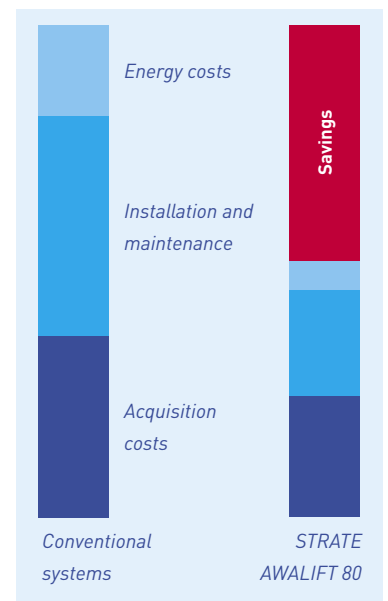
- The number of components is reduced by 35 % compared to a submersible pump which reduces the requirements for spare parts.
- The system is delivered ready to connect, which means installation costs are low.
- Thanks to the solids collecting chamber system, the unit has a high availability and insensitivity to clogging.
- Easy access to the components minimises servicing expenditure.
- And, finally, the high product quality in PUR and the dry set-up guarantee a significant increase in service life compared to submersible pumps in the wet chamber on site or conventional wastewater lifting units.

If the overall Life Cycle Costs (LLC) are considered, in other words the total costs over the planned service life including the buying price and the costs for installation, servicing, care and energy, savings of up to 50% can be achieved with the STRATE AWALIFT 80 if a service life of 15 years is taken into consideration.

The lower energy consumption has a positive effect on the environment, of course, since CO<sub>2</sub> emission is reduced at the same time. For one life cycle, the value drops from around 383 kg CO<sub>2</sub> for submersible pumps to only around 36 kg. The STRATE AWALIFT 80 is also CFC-free and can be completely recycled. Together with the longer service life, this leads to a good eco-balance for the system.



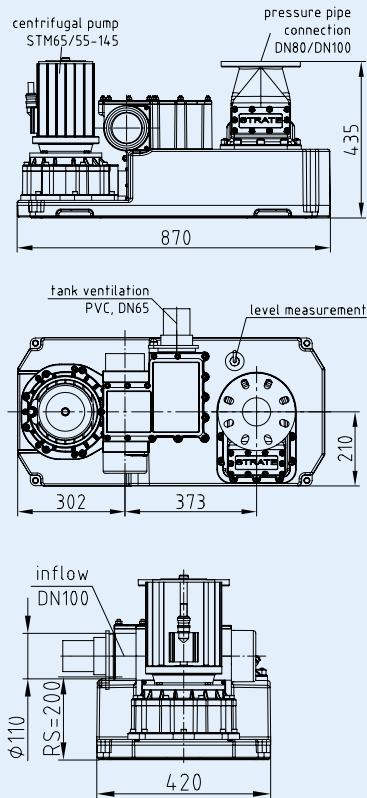
*The STRATE AWALIFT 80 has a DN 80/100 flange connection to the pressure line which can be used without an adapter for both sizes, as well as two DN 100 inlets.*



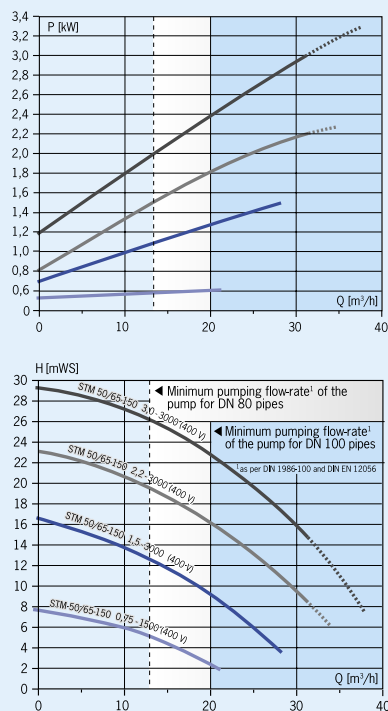
*When considering overall Life Cycle Costs for 15 years, savings of up to 50% are possible for the STRATE AWALIFT 80.*

# STRATE AWALIFT 80

## overview



### Pump curves



Version	KW	0,75	1,5	2,2	3
Head	Hmax	see curve			
Flow	Qmax	see curve			
Media temperature	°C	20			
max. briefly	°C	40			
Inlet height	mm	200			
Inlets	DN	DN 100 either on the left or right, seal for 2nd connection included			
Pressure connection	DN	DN 80/ 100 PN 10 (adapter unnecessary)			
Vent pipe		Connecting muff DN 70 for insertion sleeve with sealing ring e. g. according to EN 1401			
Sound level DIN ISO	dB(A)	52			
Motor data					
Voltage	V	3-400 V			
Speed	1/min	1500	3000		
Rated power	kW	0,75	1,5	2,2	3
Rated current	A	2,8	3,9	4,6	6,4
Mode of operation		S3 - 15%			
Protective rating	IP	67 (complete contact protection and flooding resistance)			
Motor protection and rotation control		included			
Motor connection cable	m	3,5			
Coating / corrosion protection		2K acrylic resin, colour RAL 9005 - deep black, matt			
Control unit					
Compact control unit		AWAmaster 1			
Mains plug		CEE plug (16 A)			
Weights and dimensions					
Weights net, overall	kg	42	46,3	49,2	51,5
Dimensions: W/H/D	mm	870/190/420			
Holding tank volume (gross)	L	32			
Chamber size	mm	1000 x 700 bzw. Ø 1200			
Installation opening	mm	450 x450			
Material					
Housing / pump		Polyurethane (PUR)			
Colour of housing		RAL 7021 (black-grey)			

### Scope of supply

The STRATE AWALIFT 80 wastewater lifting unit is delivered ready for operation, including PUR container with solids collecting chamber, PUR centrifugal pump and motor according to performance characteristic and duty point, PUR non-return valve STRATE AWASTOP DN 80 / 100 with connection flange DN 80 / DN 100 for the discharge pipe (no adapter required), level measurement, pump control unit STRATE AWAmaster 1 and a connection cable with CEE plug.

### Accessories

In addition there is a comprehensive range of accessories available which makes installation of the STRATE AWALIFT 80 easier, such as a plastic shut-off valve DN 100 with integrated sleeve and sealing ring for pushing directly onto the inlet connecting muff on the unit for pressureless installation, a pressure pipe shut-off valve for the outlet, a sump pump, a monitoring system or a text message alert transmitter.

# Assembly, control and servicing

The assembly and installation of the STRATE AWALIFT 80 wastewater lifting unit is extremely easy. Thanks to the compact design and low weight, the STRATE AWALIFT 80 can even be transported through narrow accesses e. g. room doors to its installation location. In addition, it only requires very little space. The system is ready to operate and can be connected with very little work required. The inlet connection can be either on the left or right, the annoying sawing and sealing of connections is not necessary. Special connections sets are optionally available.

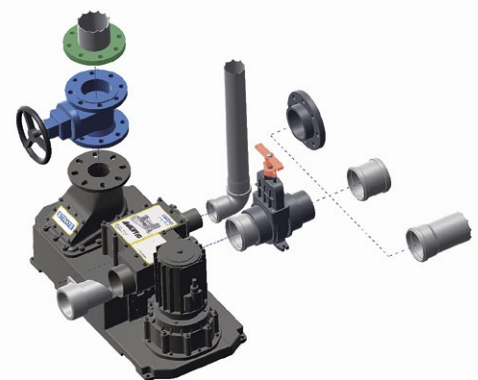
## All functions under control all the time

For control purposes, every STRATE AWALIFT 80 is equipped with the compact control unit STRATE AWAmaster 1, which contains the pump control module as well as all the important operating elements and displays for process control. It stands out on account of its outstanding user friendliness and functionality, and has a clear LCD plain text display which shows details of the filling level, running times as well as numerous operating parameters. The integrated alarm kicks in if there is a malfunction. All the settings and fault messages are retained even after a power failure. In addition, it can be used for the setting of switching points, times and motor current restrictions. Control takes place depending on the filling level in conjunction with the level measuring system of the STRATE AWALIFT 80.

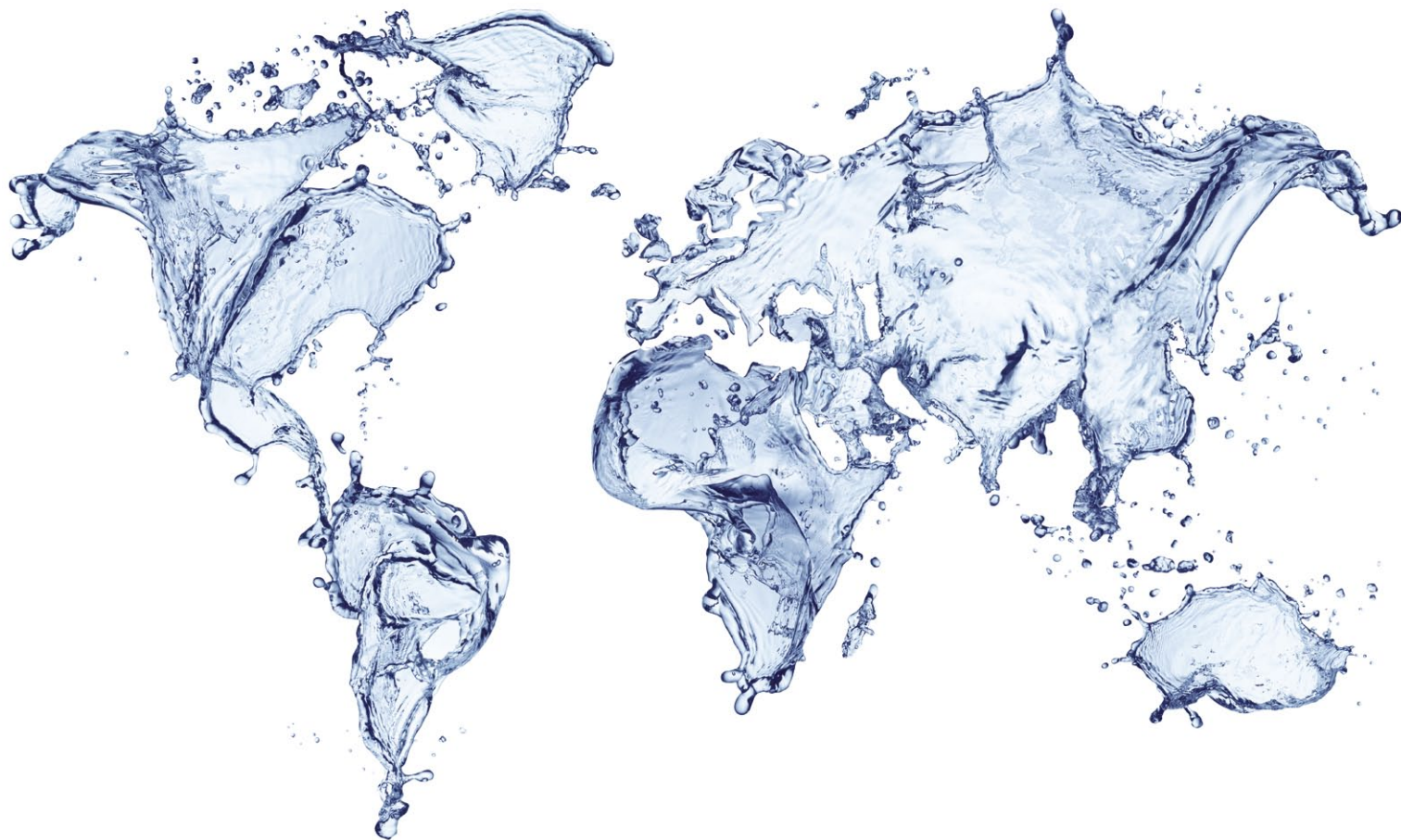
## Servicing fast and easy

Thanks to the well thought-out design, servicing the STRATE AWALIFT 80 can be carried out extremely easily by a specialist company with little time and material expenditure required. In order to maintain insurance protection in accordance with DIN EN 12056-4, servicing is mandatory and should be carried out at least once a year in single-family homes; it includes inspection and maintenance of the system.

The inspection covers can be loosened in a few fast and easy steps and are easily accessible from the outside. Servicing is made easier by the hygienic dry set-up and the closed system. All these factors result in a reduction of the time required by 30 % compared to the use of submersible pumps.



# Your Choice in Waterflow Control



TALIS is the undisputed Number One for water transport and water flow control. TALIS has the best solutions available in the fields of water and energy management as well as for industrial and communal applications. We have numerous products for comprehensive solutions for the whole water cycle – from hydrants, butterfly valves and knife gate valves through to needle valves. Our experience, innovative technology, global expertise and individual consultation processes form the basis for developing long-term solutions for the efficient treatment of the vitally important resource “water”.



## STRATE

### Technologie für Abwasser GmbH

Im Kirchenfelde 9

D-31157 Sarstedt

Phone: +49 05066 988-0

Fax: +49 05066 988-225

E-mail: [strate-info@talis-group.com](mailto:strate-info@talis-group.com)

Internet: [www.strate.com](http://www.strate.com)

Note: Specifications may be changed without notification at any time.  
Copyright: No copying without express written permission of STRATE.  
STRATE is a Registered Trademark. 998946 EN (04/12)

