

# JUNG PUMPEN OXYPERL 3 + 5 SUBMERSIBLE AERATOR

## APPLICATION

Oxyperl submersible aerators are ideal for aeration and mixing in activated sludge tanks in small sewage treatment plants. The fact that they were specially developed for gentle handling of the activated sludge plus high energy efficiency and the very fine air bubbles produced make these aerators the ideal selection for SBR treatment systems.

The specially shaped protection ring and the optimised propeller design avoid unnecessary disintegration of the sensitive activated sludge and ensure ultra fine air bubbles. Good settling properties and the retention of the developed sludge structure leads to ideal conditions for nitrification and by this means ensure an excellent treatment performance by the biological process.

The new design with mechanical seal achieves maximum service life in comparison with other sealing systems. A new standard for this category of aerators.

A novel labyrinth seal attached to the propeller and a particularly for problematic cases developed optional air reflux valve prevents a pressure compensation when switching off the aggregate. This also ensures that no solids get into the propeller and largely avoids the danger of blockage.

The detachable cable gland fitted on the pump head enables the free choice between different cable lengths and avoids troublesome cable repair works.

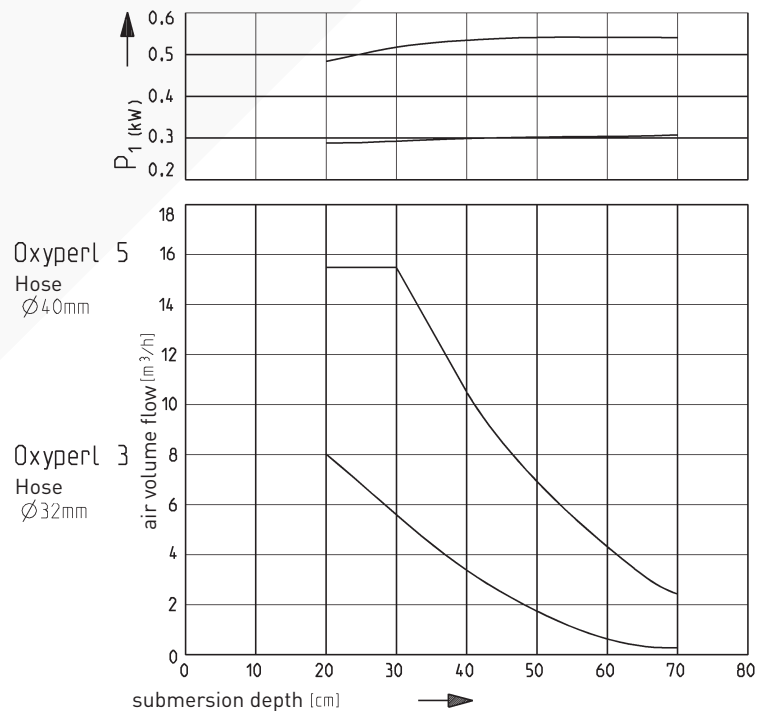
Depending on chemical resistance and usage limits the submersible aerator is also suitable for other applications (pond aeration, stirring and mixing of liquids with no solids present).



Oxyperl 5

- High air input with ultra air fine bubbles
- Replaceable moisture sealed cable inlet
- 1 : 1 exchangeability with other common units on the market
- Air reflux valve
- Oxyperl 3 and Oxyperl 5: Both versions with mechanical seal for long service life and a labyrinth seal that reduces the danger of blockage

## PERFORMANCE



45210-00

We reserve the right to specifications without notice

Pump performance is subject to ISO 9906 tolerances

# JUNG PUMPEN OXYPERL

## SUBMERSIBLE AERATOR

### OXYPERL

Type	Cable quality H07RN	Max. Height x Width	Intake connection	Weight approx.	Code No.
Oxyperl 3	without cable gland	318 x 150 mm	1"	3.0 kg	<b>JP44431</b>
Oxyperl 3	with 10 m cable gland	318 x 150 mm	1"	4.2 kg	<b>JP44432</b>
Oxyperl 5	without cable gland	347 x 156 mm	1¼"	4.0 kg	<b>JP45228</b>

### ELECTRICAL DATA

Type	Type of current	Voltage Volt	Motor rating kW		RPM min <sup>-1</sup>	Current Ampere	Motor protection
			P <sub>1</sub>	P <sub>2</sub>			
Oxyperl 3	1-phase	1/N/PE~230	0.31	0.21	2765	1.37	integrated
Oxyperl 5	1-phase	1/N/PE~230	0.54	0.39	2700	2.36	integrated

### ACCESSORIES

			Cable quality	Code No.
Cable gland	1.5 m	For all aggregats without cable gland	H07RN-F3G1.0	<b>JP46925</b>
Cable gland	4.0 m		H07RN-F3G1.0	<b>JP46926</b>
Cable gland	10.0 m		H07RN-F3G1.0	<b>JP45084</b>
Cable gland	20.0 m		H07RN-F3G1.0	<b>JP46927</b>
Air reflux valve		For all aggregats		<b>JP44074</b>

### TECHNICAL DATA

#### Aerator

Vertical, submersible, aerator housing with diffuser and intake socket 1" male thread (Oxyperl 3) and 1¼" male thread (Oxyperl 5), propeller with flow optimised air channels and labyrinth seal.

#### Bearings

Common shaft for pump and motor, mounted in ball bearings, maintenance free with permanent grease lubrication.

#### Seal

Medium side mechanical seal, intermediate oil chamber, rotary shaft seal towards the motor section, safe to run dry.

#### Motor

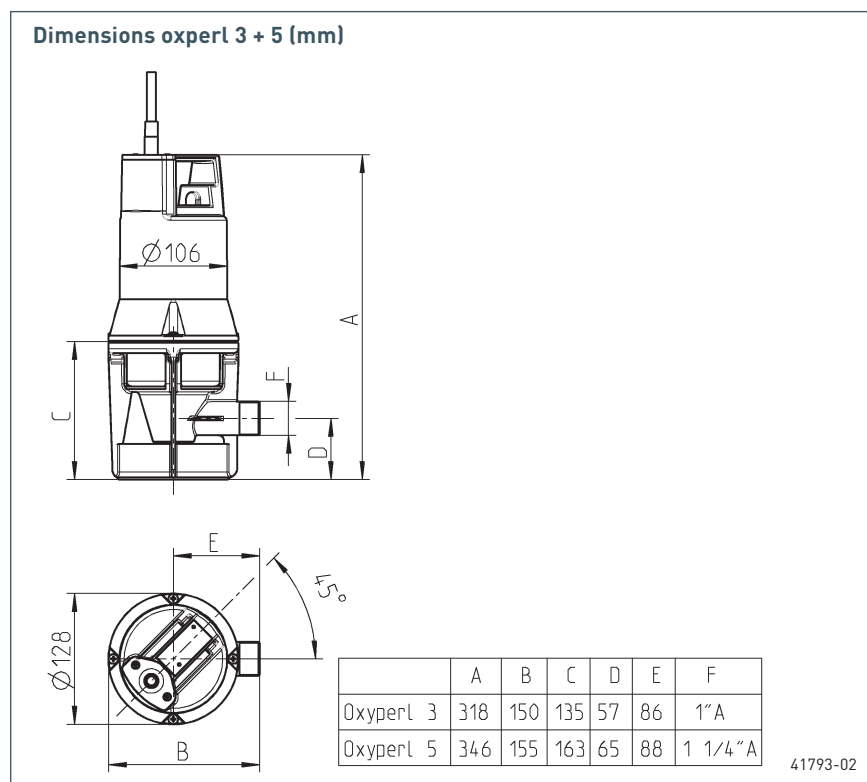
Submersible, type of enclosure IP68, insulation class F (Oxyperl 3), insulation class B (Oxyperl 5), large cooling surface, motor thermostat for safety switch-off on overheating with automatic switch-on after sufficient cooling, replaceable moisture sealed cable inlet.

#### Materials

Motor housing Oxyperl 3 (1.4571), Oxyperl 5 (1.4301), encapsulated shaft and screws in stainless steel, aerator, intake housing and propeller in plastic (GRP), rubber insulated cable.

#### Scope of supply

Submersible aerator alternatively with 10 m or without cable gland. Further cable lengths see above under accessories.



## JUNG PUMPEN OXYLIFT 2 SUBMERSIBLE PUMP

### APPLICATION

Many of the biological small sewage treatment plants on the market need a pump to transport the sewage. oxylift submersible pumps with their special optimised hydraulics and housing shape were specifically developed to take care of this task. They are particularly suited for the transport of activated sludge mixtures in SBR treatment systems or for the pumping of mechanically pre-screened as well as treated domestic sewage. The combination of pump impeller designed specifically to minimise the danger of blockage together with its large solids passage and tangentially located pump discharge branch ensure reliable operation.

Oxylift pumps are available with or without level control and can be combined with the submersible aerators of the oxyperl series to provide a powerful and easy to maintain SBR system. The shape and construction of both the oxylift and the oxyperl units have been selected to ensure conformity with other common units on the market made by other manufacturers. This gives a maximum of comfort when carrying out repairs on existing SBR systems supplied by different manufacturers.

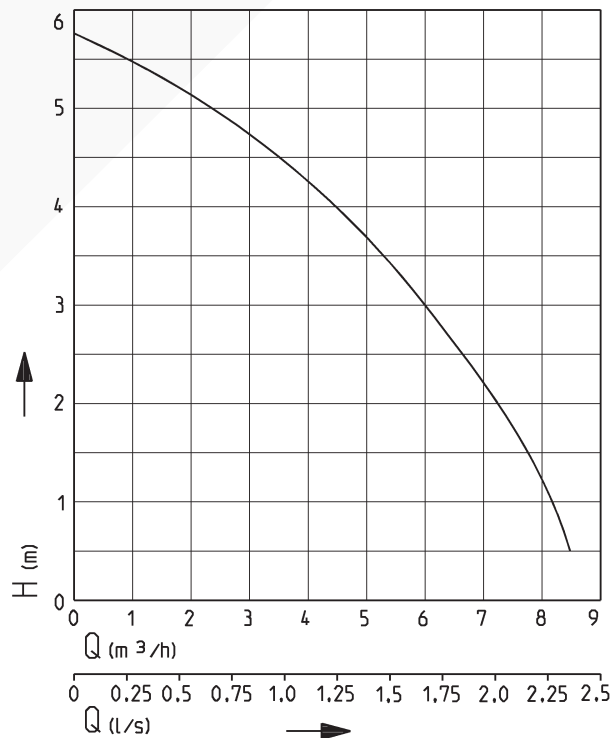
The detachable cable gland fitted on the pump head enables the free choice between different cable lengths and avoids troublesome cable repair works.

- High reliability due to large free passage
- Available with and without level control
- Replaceable moisture sealed cable inlet
- 1 : 1 exchangeability with other common units on the market



Oxylift 2 without level control

### PERFORMANCE



41880-01

We reserve the right to specifications without notice

Pump performance is subject to ISO 9906 tolerances

# JUNG PUMPEN OXYLIFT 2

## SUBMERSIBLE PUMP

### OXYLIFT

Type	Max. Height x Width	Discharge branch	Free passage	Cable quality	Cable length	Weight approx.	Code No.
Oxylift 2 without level control	293 x 153 mm	1 1/4"	10/15 mm*	H07RN-F-3G1.0	10 m	4.2 kg	<b>JP09469</b>
Oxylift 2S with built-in level control	293 x 276 mm	1 1/4"	10/15 mm*	H07RN-F-3G1.0	10 m	4.4 kg	<b>JP09470</b>
Oxylift 2 without level control	293 x 153 mm	1 1/4"	10/15 mm*		without cable	3.0 kg	<b>JP09471</b>
Oxylift 2S with built-in level control	293 x 276 mm	1 1/4"	10/15 mm*		without cable	3.2 kg	<b>JP09472</b>

### PERFORMANCE

Type	Delivery head [m]	1	2	3	4	5
Oxylift 2 (S)	Flow rate Q [m³/h]	8	7.3	6	4.2	2.2

### ELEKTRICAL DATA

Type	Type of current	Voltage Volt	Motor rating kW		RPM min <sup>-1</sup>	Current Ampere	Motor-protection
			P <sub>1</sub>	P <sub>2</sub>			
Oxylift 2 (S)	1-phase	1/N/PE-230	0.3	0.2	2720	1.3	integrated

### ACCESSORIES

			Cable quality	Code No.
Cable gland	1.5 m	For all aggregats without cable gland	H07RN-F3G1.0	<b>JP46925</b>
Cable gland	4.0 m		H07RN-F3G1.0	<b>JP46926</b>
Cable gland	10.0 m		H07RN-F3G1.0	<b>JP45084</b>
Cable gland	20.0 m		H07RN-F3G1.0	<b>JP46927</b>

### TECHNICAL DATA

#### Pump

Vertical, single-stage, submersible, strainer base with 10 mm free passage, volute casing with 1 1/4" female thread discharge branch, hydraulics with EIP technology and open 5-blade impeller.

#### Bearings

Common shaft for pump and motor, mounted in ball bearings, maintenance free with permanent grease lubrication.

#### Seal

Shaft seal with three-fold radial shaft seal ring and intermediate oil chamber, safe to run dry.

#### Motor

Submersible, type of enclosure IP68, insulation class B, motor thermostat for safety switch-off on overheating with automatic switch-on after sufficient cooling, replaceable moisture sealed cable inlet.

#### Material

Motor housing, shaft and screws in stainless steel, volute casing, impeller and pump head with level control made of plastic [GRP], rubber insulated power cable.

#### Scope of supply

Pump alternatively with 10 m or without cable gland. Type S with built-in level control.

