



# SUBMERSIBLE SLUDGE PUMPS

ENG 50 HZ

**motralec**

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**PUMPEX**

# PUMPEX LIGHTWEIGHT SLUDGE PUMPS FOR HEAVY DUTY

## Easy to move

Casted motorparts are made in lightweight aluminium alloy so the pump can easily be moved to the right location.

## High wear resistance

Impeller and pump housing are made in wear resistant ductile iron for maximum wear resistance and durability, extending the life of the pump.

For extreme conditions choose Pumpex stainless steel vortex impellers.

## Solids handling capability

The SP sludge pumps are fitted with free flow vortex impeller and pump housing that provides great flows without clogging.

## Trouble free and safe handling

Pumpex pumps are equipped for immediate use. The slim design, encapsulated motor and no external moving parts makes installation and operation easy and safe.

## Plug-in start with motor protection

Built-in contactor, capacitor (Single Phase) and thermal protectors in the stator windings protects the motor and features an automatic restart function.

## High reliability

Double mechanical shaft seal in oil bath (silicon carbide on silicon carbide in the primary seal) for long life even under the most demanding running conditions.

Rigid stainless steel shaft with lower double angular contact ball bearings for vibration-free operation and long pump life.

## High flexibility

The pump can operate in any position, vertical or horizontal.

The impellers are available in different sizes to meet your specific pumping requirements.

## Non overloading performance

Flexible curve selection offers (blue) curve when you expect dry or snore running conditions. When half the motor or more (pump can operate lying down) is submerged you may choose the maximum impeller diameter (red curve).

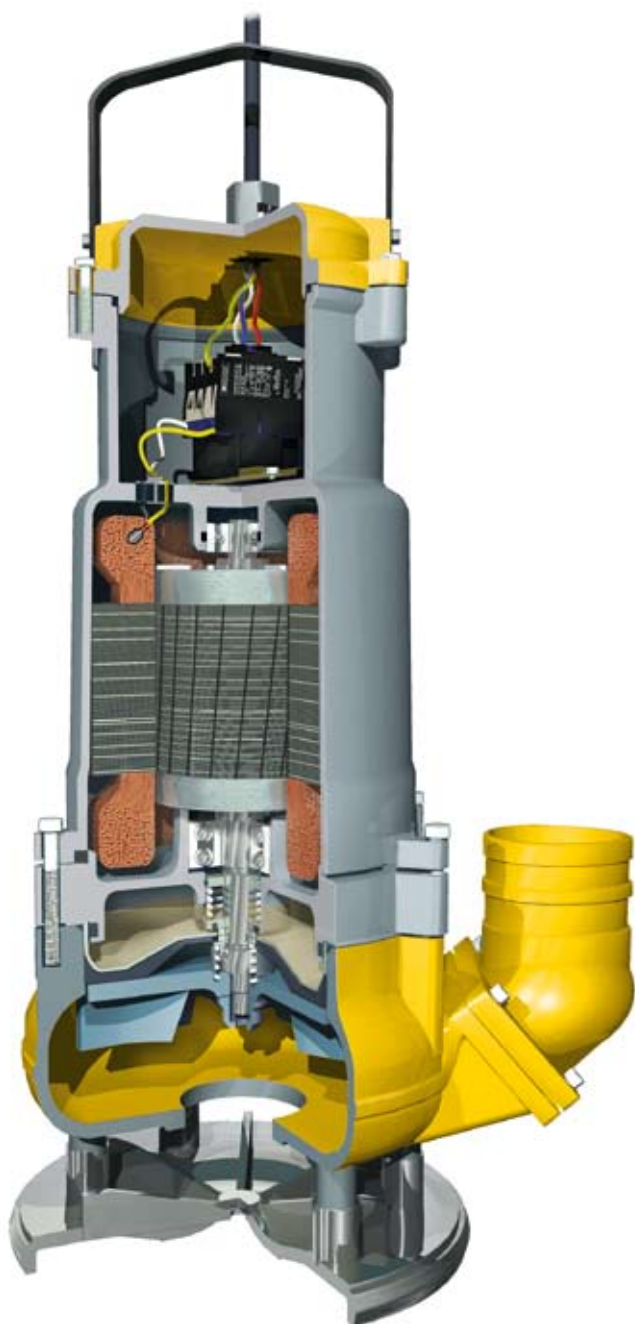
## Easy service and maintenance

Common philosophy through the complete range with modular design and interchangeable spare parts. (For example identical shaft seals and shaft end on SP20 to SP80)

- Easy access to separate sealed electrical junction box.
- Easy to replace hydraulic parts such as impeller and volute.

## Environmentally safe

The oil housing is filled with environmentally safe white oil. Non toxic coatings are used.



## PUMPEX SP 10 W

Pump types

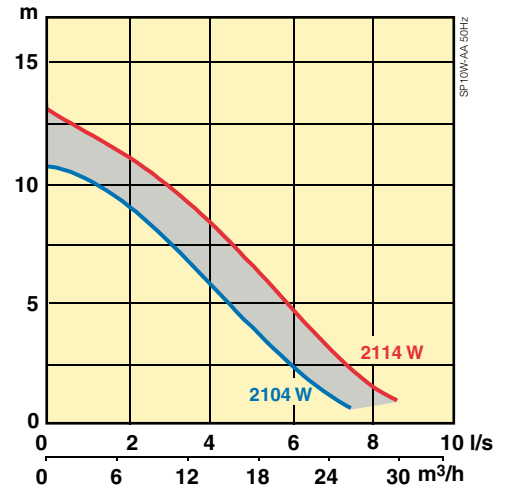
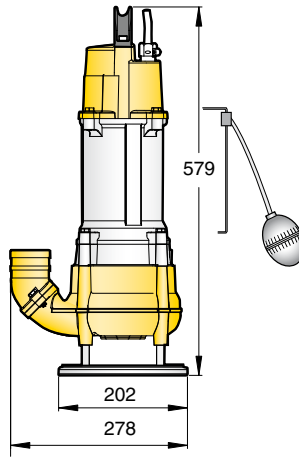
**SP 10 W-2104**  
**SP 10 W-2114**  
**SP 10 WA\*-2114**

Speed  
 Motor  
 Motor rating  $P_2$   
 Power input  $P_1$   
 Motor protection  
 Electric cable  
 Free passage  
 Discharge connection

2850 rpm  
 single-phase  
 0.9 kW  
 max 1.2 kW  
 built-in  
 20 m type H07RN-F  
 $\varnothing$  40 mm  
 hose 2", 2½", 3"  
 G 2", 2½", 3"

Weight (excl. cable)

18 kg



\*) Built in float switch available as option.

## PUMPEX SP 10

Pump types

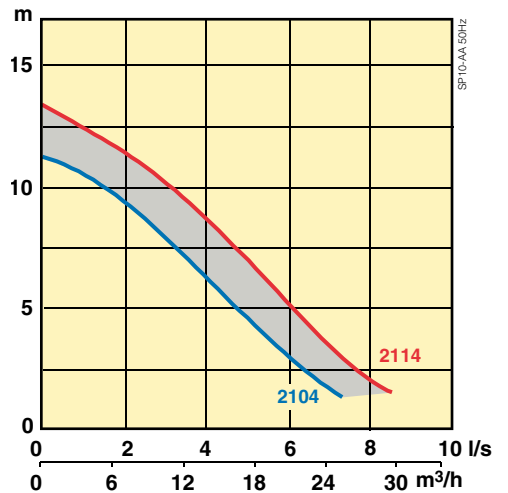
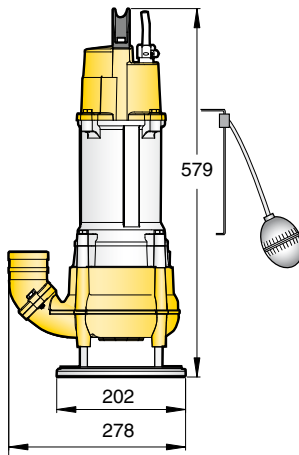
**SP 10-2104**  
**SP 10-2114**  
**SP 10A\*-2114**

Speed  
 Motor  
 Motor rating  $P_2$   
 Power input  $P_1$   
 Motor protection  
 Electric cable  
 Free passage  
 Discharge connection

2850 rpm  
 3-phase  
 0.9 kW  
 max 1.2 kW  
 built-in  
 20 m type H07RN-F  
 $\varnothing$  40 mm  
 hose 2", 2½", 3"  
 G 2", 2½", 3"

Weight (excl. cable)

18 kg



\*) Built in float switch available as option, excl. 500V.

## PUMPEX SP 14

Pump types

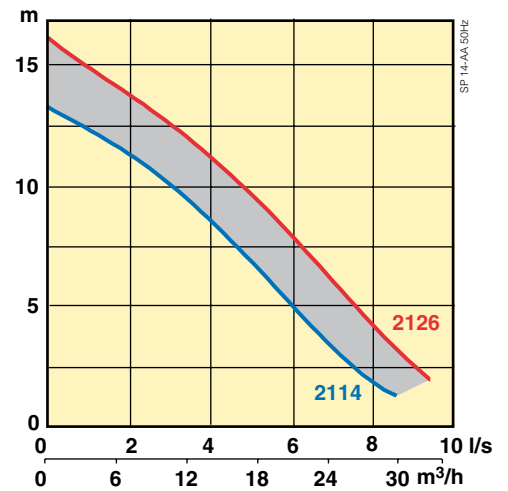
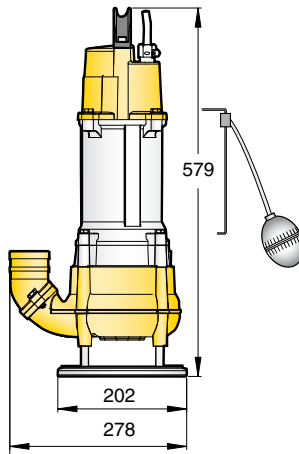
**SP 14-2114**  
**SP 14-2126**  
**SP 14A\*-2126**

Speed  
 Motor  
 Motor rating  $P_2$   
 Power input  $P_1$   
 Motor protection  
 Electric cable  
 Free passage  
 Discharge connection

2850 rpm  
 3-phase  
 1.3 kW  
 max 1.6 kW  
 built-in  
 20 m type H07RN-F  
 $\varnothing$  40 mm  
 hose 2", 2½", 3"  
 G 2", 2½", 3"

Weight (excl. cable)

18 kg



\*) Built in float switch available as option, excl. 500V.

## PUMPEX SP 20

Pump types

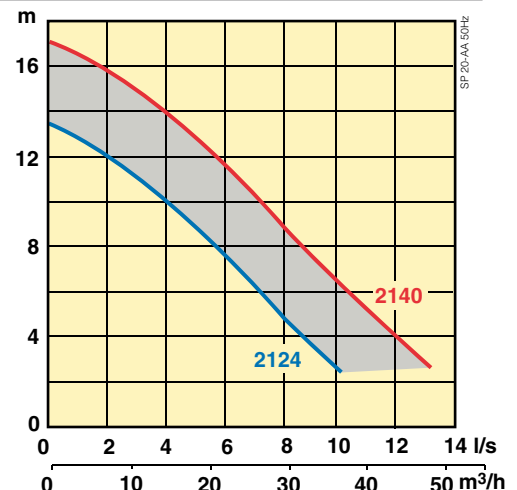
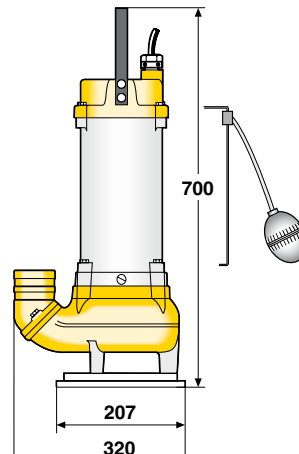
**SP 20-2124**  
**SP 20A\*-2124**  
**SP 20-2140**  
**SP 20A\*-2140**

Speed  
 Motor  
 Motor rating  $P_2$   
 Power input  $P_1$   
 Motor protection  
 Electric cable  
 Free passage  
 Discharge connection

2870 rpm  
 3-phase  
 2.0 kW  
 max 2.4 kW  
 built-in  
 20 m type H07RN-F  
 $\varnothing$  60 mm  
 hose 2½", 3", 4"  
 G 2½", 3", 4"

Weight (excl. cable)

29 kg



\*) Built in float switch available as option, excl. 500V.

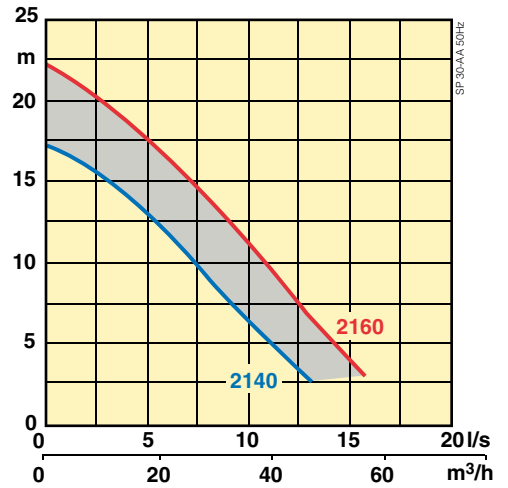
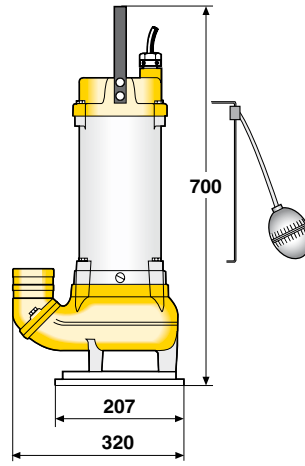
# PUMPEX SP 30

Pump types

**SP 30-2140**  
**SP 30A\*-2140**  
**SP 30-2160**  
**SP 30A\*-2160**

Speed 2870 rpm  
 Motor 3-phase  
 Motor rating P<sub>2</sub> 3.3 kW  
 Power input P<sub>1</sub> max 3.9 kW  
 Motor protection built-in  
 Electric cable 20 m type H07RN-F  
 Free passage Ø 60 mm  
 Discharge connection hose 2½", 3", 4"  
 G 2½", 3", 4"

Weight (excl. cable) 31 kg



\*) Built in float switch available as option, excl. 500V.

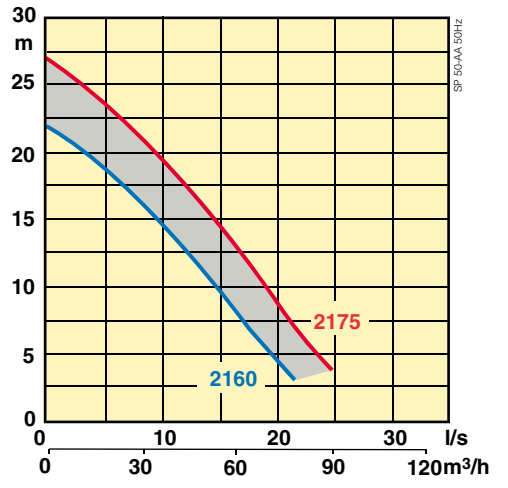
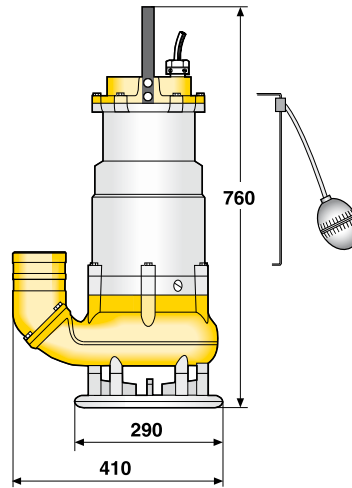
# PUMPEX SP 50

Pump types

**SP 50-2160**  
**SP 50A\*-2160**  
**SP 50-2175**  
**SP 50A\*-2175**

Speed 2850 rpm  
 Motor 3-phase  
 Motor rating P<sub>2</sub> 5.2 kW  
 Power input P<sub>1</sub> max 6.2 kW  
 Motor protection built-in  
 Electric cable 20 m type H07RN-F  
 Free passage Ø 65 mm  
 Discharge connection hose 3", 4"  
 G 3", 4"

Weight (excl. cable) 54 kg



\*) Built in float switch available as option, excl. 500V.

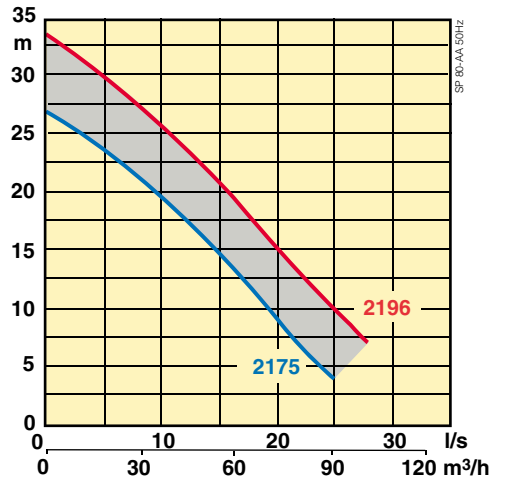
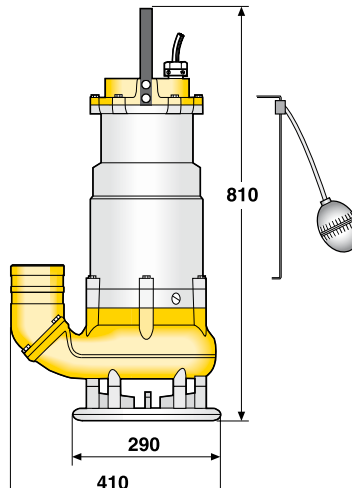
# PUMPEX SP 80

Pump types

**SP 80-2175**  
**SP 80A\*-2175**  
**SP 80-2196**  
**SP 80A\*-2196**

Speed 2850 rpm  
 Motor 3-phase  
 Motor rating P<sub>2</sub> 8.0 kW  
 Power input P<sub>1</sub> max 9.4 kW  
 Motor protection built-in  
 Electric cable 20 m type H07RN-F  
 Free passage Ø 65 mm  
 Discharge connection hose 3", 4"  
 G 3", 4"

Weight (excl. cable) 67 kg



\*) Built in float switch available as option, excl. 500V.

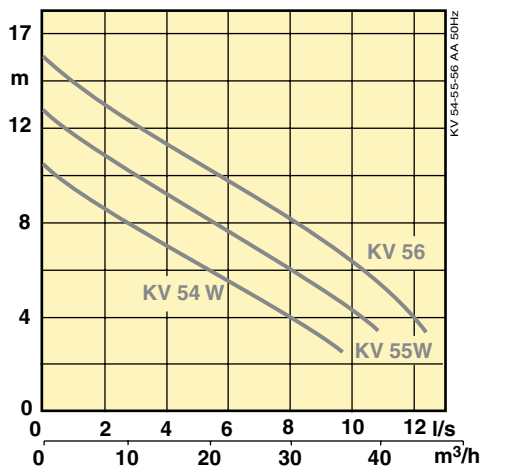
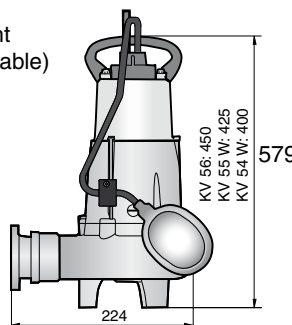
Light duty pump

# PUMPEX KV 54-56

Pump Types

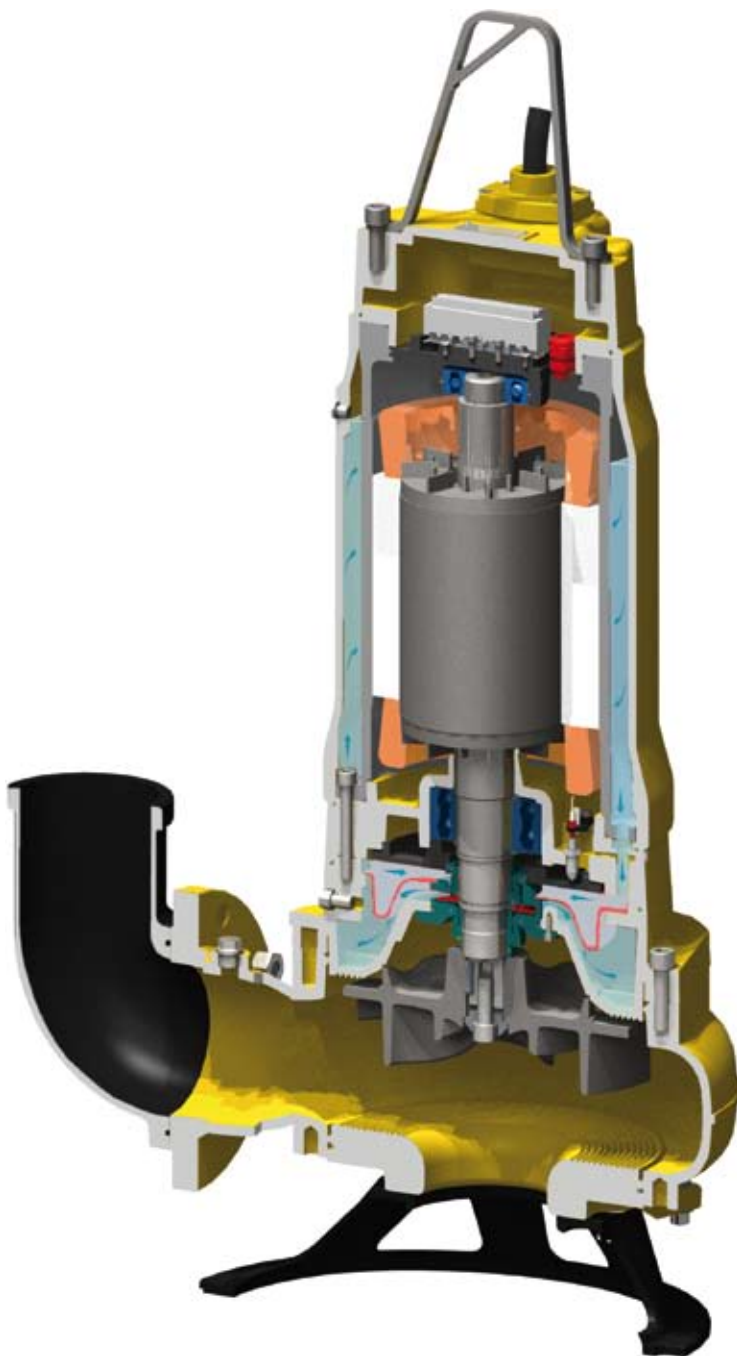
Pump Types	Motor P 2 kW	Power input P1 max kW	Weight (incl cable)
<b>KV 54 W / KV 54 WA*</b>	1.0	1.5	15 kg
<b>KV 55 W / KV 55 WA*</b>	1.5	2.0	17 kg
<b>KV 56 / KV 56A*</b>	2.0	2.6	20 kg

Speed 2900 rpm  
 Motor 3-phase, W=single-phase  
 Motor protection built-in  
 Electric cable 10 m type H07RN-F  
 Free passage 40 mm  
 Discharge connection hose 2", G 2"



\*) Built in float switch available as option.

# PUMPEX TRANSPORTABLE SLUDGE PUMPS FOR VERSATILE APPLICATIONS



## Trouble free and safe handling

PUMPEX sludge pump SK is a portable pump and features a sturdy stainless steel handle and a robust ductile iron stand. It can easily be lifted and moved to where it is needed without suction hoses or any concern about suction lifts. This makes installation and operation easy and safe.

## Non overloading performance

All SK sludge pumps can operate over the entire performance curve without overloading the motor.

## Easy service and maintenance

Modular design through the complete range with interchangeable spare parts makes maintenance and service easier. The sealed cable entry is easy to access and the hydraulic parts, such as impeller, seal cartridge and volute are easy to replace.

## Dry running capability

A closed cooling system enables the PUMPEX SK 83-155 to run dry, with no damage to the mechanical seals or the motor.

PUMPEX SK 65-80 needs to be submerged for continuous duty.

## Solids handling capability

The SK sludge pumps are fitted with free flow vortex impeller and pump housing that provides excellent non clogging performance.

## High reliability

PUMPEX SK 83-155 have cartridge seal unit with double mechanical seals, cooled by the closed cooling system, (silicon carbide on silicon carbide in the primary seal) for long life even under the most demanding operating conditions.

PUMPEX SK 65-80 have double mechanical seals in oil bath with individual primary and secondary seals.

Rigid stainless steel shaft combined with double row angular contact ball bearings provide vibration-free operation and long pump life.

## Environmentally safe

The oil housing on the SK 65-80 is filled with environmentally safe white oil. The oil housing on the SK 83-155 is filled with environmentally safe glycol coolant.

Environmental friendly protection coatings are used on all the surfaces.

## Explosion proof option

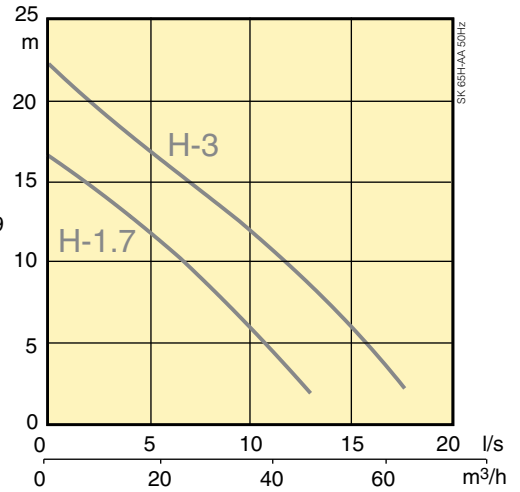
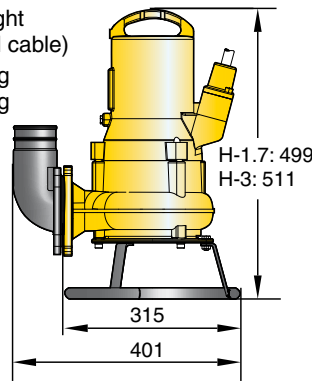
All SK sludge pumps are available in explosion proof versions EExd IIB T4 and ATEX.

## High flexibility

The pump can operate in any position, vertical or horizontal.

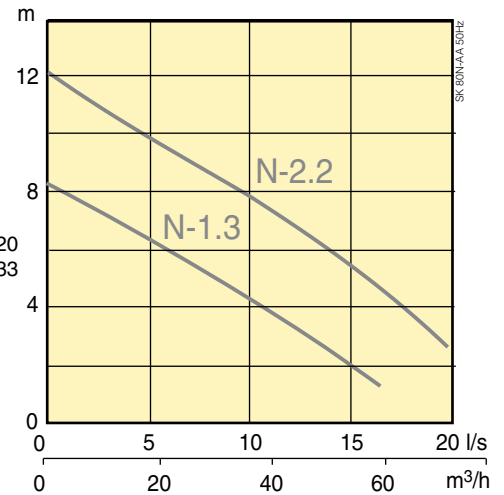
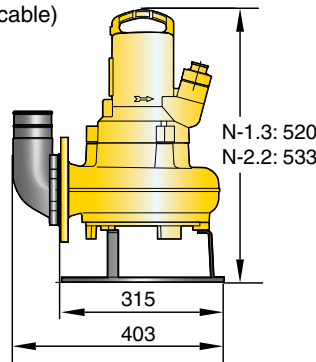
## PUMPEX SK 65

Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 65H-1.7</b>	1.7	2.31	41 kg
<b>SK 65H-3</b>	3.0	3.74	48 kg
Speed	2800 rpm (H-1.7) 2835 rpm (H-3)		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	40 mm		
Discharge connection	hose 3" ,G 3" flanged DN 65		



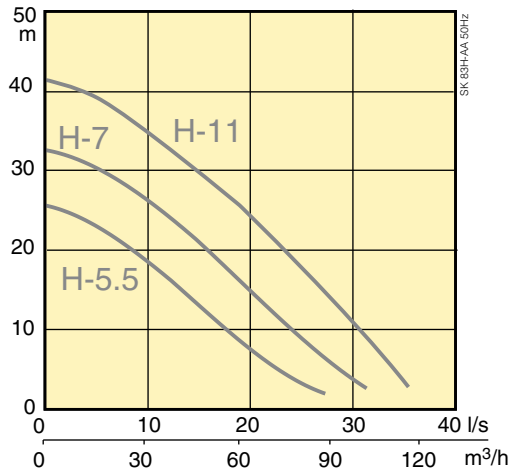
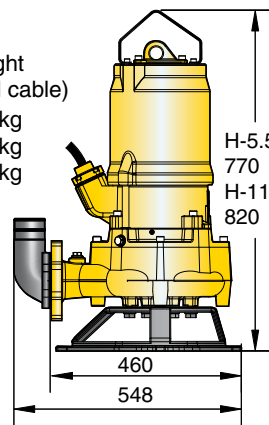
## PUMPEX SK 80

Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 80N-1.3</b>	1.3	1.93	47 kg
<b>SK 80N-2.2</b>	2.2	2.88	47 kg
Speed	1330 rpm (N-1.3) 1380 rpm (N-2.2)		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	60 mm		
Discharge connection	hose 3" ,G 3" flanged DN 80		



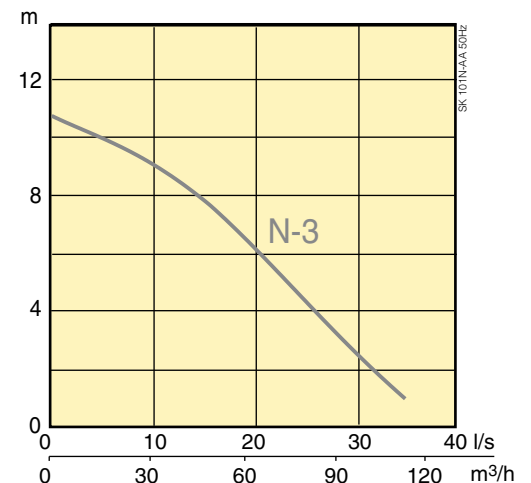
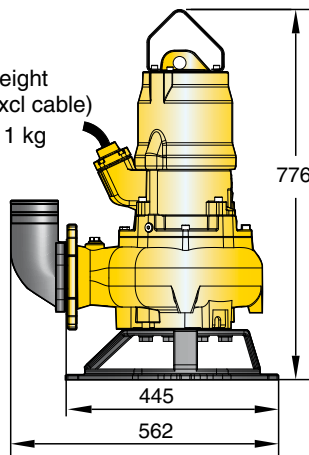
## PUMPEX SK 83

Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 83H-5.5</b>	5.5	6.49	153 kg
<b>SK 83H-7</b>	7.0	8.37	153 kg
<b>SK 83H-11</b>	11.0	13.3	165 kg
Speed	2885 rpm (H-5.5) 2875 rpm (H-7) 2900 rpm (H-11)		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	65 mm		
Discharge connection	hose 3", G3" (H-5.5) hose 4", G 4" (H-7, H-11) flanged DN 80		



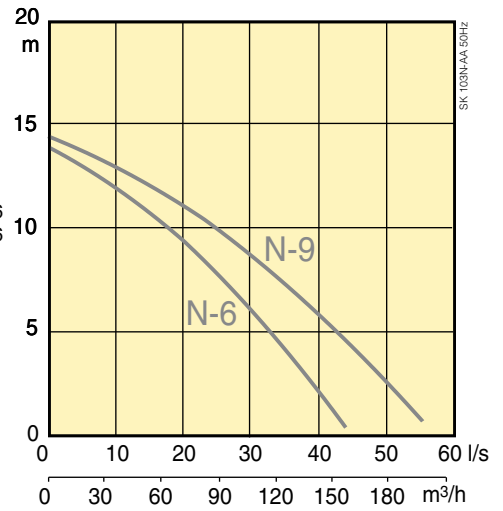
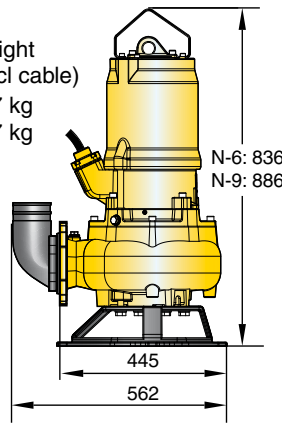
## PUMPEX SK 101

Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 101N-3</b>	3.0	3.95	111 kg
Speed	1370 rpm		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	100 mm		
Discharge connection	hose 4" ,G 4" flanged DN 100		



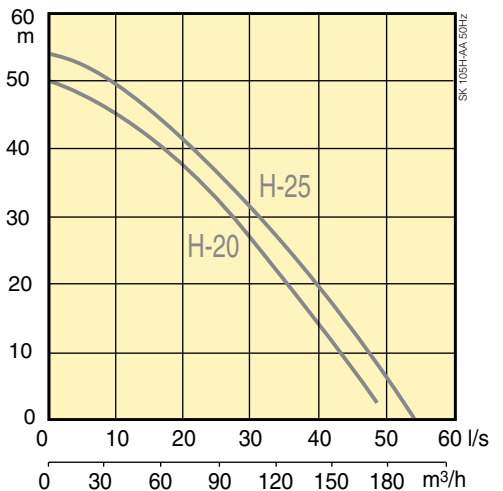
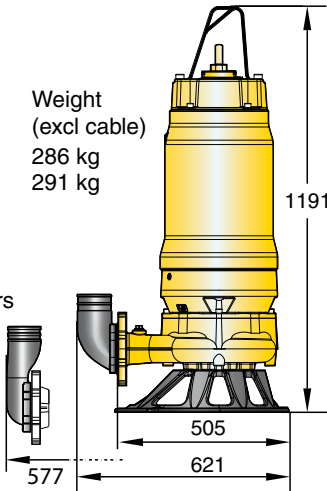
# PUMPEX SK 103

Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 103N-6</b>	6.0	7.22	147 kg
<b>SK 103N-9</b>	9.0	10.8	157 kg
Speed	1430 rpm (N-6) 1425 rpm (N-9)		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	100 mm		
Discharge connection	hose 4" ,G 4" flanged DN 100		



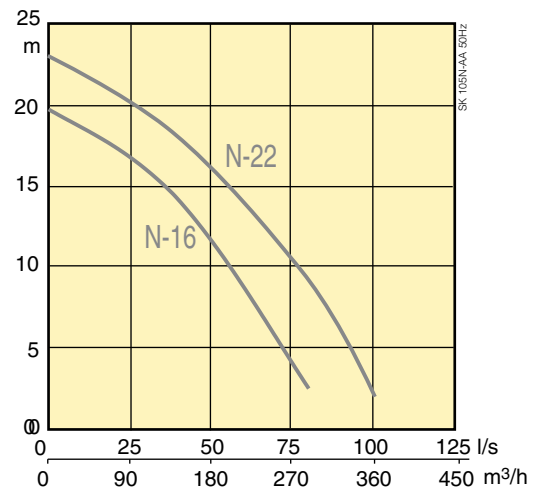
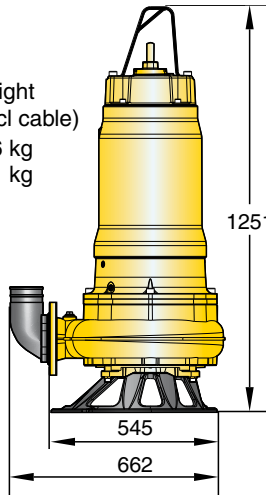
# PUMPEX SK 105H

Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 105H-20</b>	20.0	22.1	286 kg
<b>SK 105H-25</b>	25.0	27.5	291 kg
Speed	2945 rpm (H-20) 2950 rpm (H-25)		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	64 mm		
Discharge connection	hose 4" ,G 4" flanged DN 100		



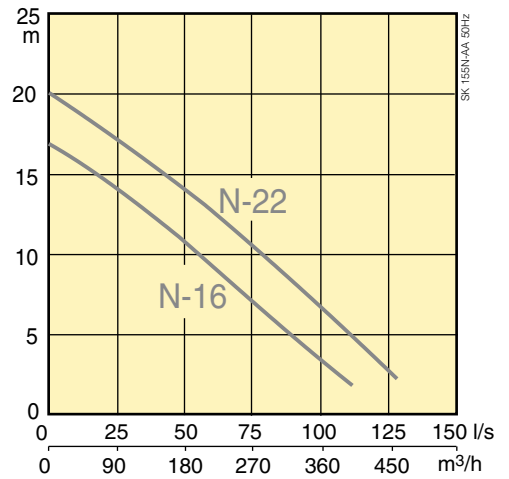
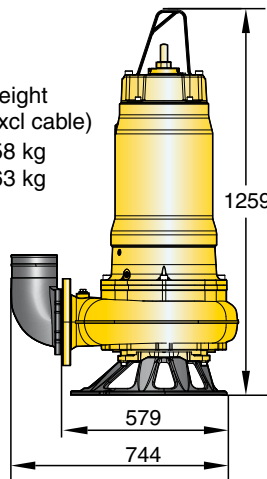
# PUMPEX SK 105N

Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 105N-16</b>	16.0	17.8	346 kg
<b>SK 105N-22</b>	22.0	24.3	351 kg
Speed	1460 rpm (N-16) 1455 rpm (N-22)		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	80 mm		
Discharge connection	hose 4" ,G 4" flanged DN 100		



# PUMPEX SK 155

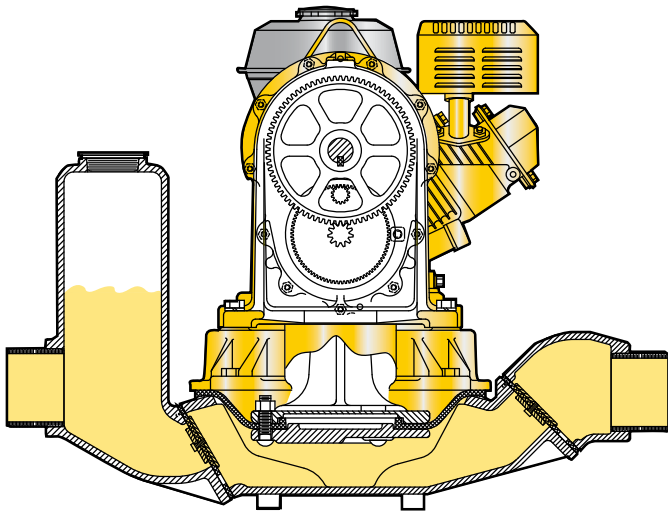
Pump Types	Motor P2 kW	Power input P1 max kW	Weight (excl cable)
<b>SK 155N-16</b>	16.0	17.8	358 kg
<b>SK 155N-22</b>	22.0	24.3	363 kg
Speed	1460 rpm (N-16) 1455 rpm (N-22)		
Motor	3-phase		
Motor protection	thermal overload sensors		
Electric cable	20 m type H07RN-F		
Free passage	80 mm		
Discharge connection	hose 6" ,G 6" flanged DN 150		



# PUMPEX DIAPHRAGM PUMP

## Trouble free and easy handling

PUMPEX diaphragm pumps are hard working pumps perfect for muddy water, sludge or any water with a high percentage of solids. They are ideal for slow seepage applications or cleaning up the bottom (of sumps or tanks). The pump and engine are mounted together. It has handle and wheels so it can easily be moved to where it is needed, making installation and operation easy.



## Self priming capability

As soon as the diaphragm pump is started it automatically starts to prime the suction hose with its mounted strainer. When it starts to pump it keeps pumping and pumping.

## High reliability

The pump has a large free passage and flexible thermoplastic elastomer diaphragm with a pull and push functionality. Check valves on suction and discharge side ensures reliable duty even in shallow applications, under seepage conditions.

## High wear resistance

The wear parts are made in rubber TPE for high wear resistance and durability, extending the life of the pump. Cast parts are made in aluminium.

## Dry running capability

PUMPEX diaphragm pumps can run dry without any harm to the pump.

## Solids handling capability

PUMPEX diaphragm pump is outstanding when large amounts of solids need to be pumped.

## High flexibility

The pump is equipped with BSP-threaded suction and discharge connections. This makes installation easy where various quick connections (for example Storz) can be used to mount suction and discharge hose.

## Easy service and maintenance

Heavy duty construction with easy access to the robust wear parts makes maintenance and service easy.

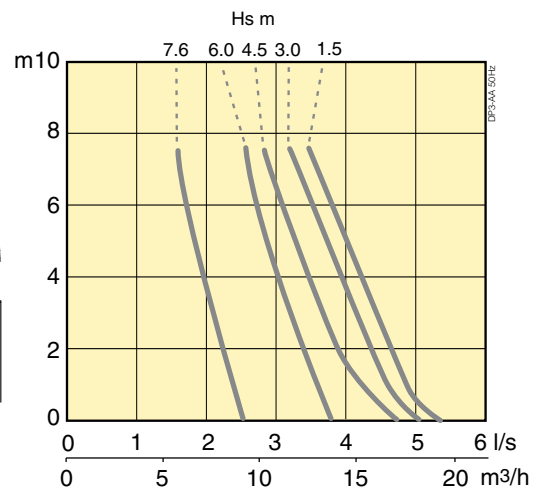
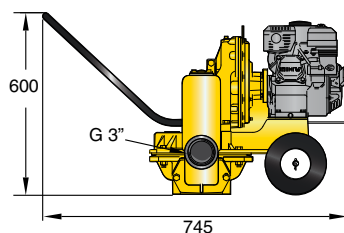
## Engine

PUMPEX Diaphragm pumps are powered by a well known standard gasoline engine.

Diaphragm pump

## PUMPEX DP3

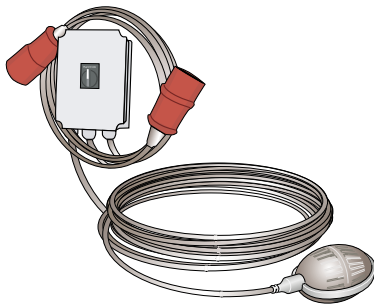
Pump types	DP3
Speed	3600 rpm
Max. suction lift	7.6 m
Max. discharge head	7.6 m
Power	3 kW (4 Hp) Honda GX 120
Full tank capacity	2.5 l
Continuous run time/tank	3 Hr
Starting method	Recoil
Free passage	44 mm
Discharge connection	G 3"
Weight	59 kg



# OPTIONS AND ACCESSORIES

## Starter box with float switch

When automatic start and stop operation is required this can be provided with a separate starter box or with a float switch built-in to the top of the pump.



## Starter box for D.O.L & Star-Delta start

Pumpex supplies control panels for all kind of operations, as per international standard or specially designed to meet various local requirements and specifications. If a start and stop level is required float switches can be added to the boxes.

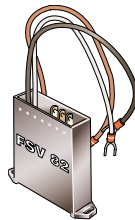


For more detailed information contact Pumpex.

## Electronic motor supervision

FSV 82, electronic motor protector. The motor protector prevents the pump from starting in the wrong direction of rotation. This protection device will also trip the pump in event of phase failure.

The FSV 82 features protection against automatic restart in event that the pump has tripped due to over heating.



## Hose, jointing pipe, clamp

Flexible reinforced discharge hose.

Available with inner diameter 1", 1 1/2", 2", 2 1/2", 3", 4", 6", 8".

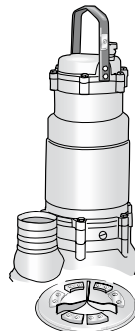


Hose clamp and jointing pipe for flexible hose are available with same diameter.

## Zinc anodes

The pumps can be equipped with zinc anodes for protection of the aluminium parts against galvanic corrosion, e.g. when pumping saline or brackish water.

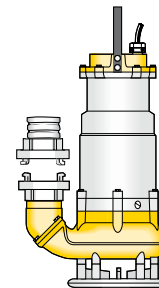
The zinc anodes are fitted on the bottom plate and the main cover of the pump.



## Storz couplings

Storz aluminium couplings are available for fast connection of the delivery hose. The couplings can be supplied in the sizes:

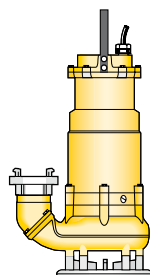
3" (B)    4" (A)    6" (F)



## Surface protection coating

For improved corrosion resistance, Pumpex offers a special surface protection with an extra layer of Pumpex environmental friendly 2-component epoxy coating on all casted parts.

For extreme conditions zinc anodes can be added to the 2-component epoxy coating.



## Stainless steel impellers

Pumpex also offers stainless steel vortex impellers for extreme conditions.



# motralec

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