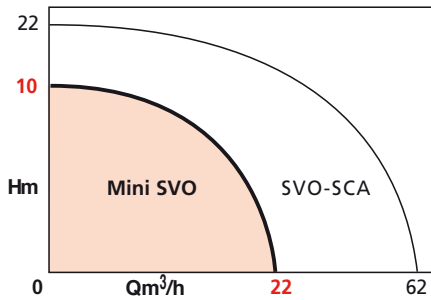


OPERATING LIMITS

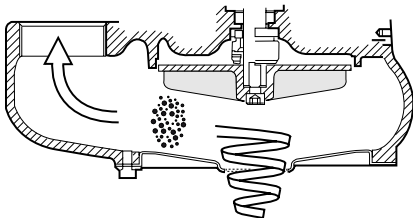
Flow rates up to:	22 m ³ /h
Head up to:	10 m CL
Temperature range:	0 to + 40°C*
Max immersion depth:	5 m
Max free passage:	Ø 40 mm
ND discharge port:	R1 ^{1/2}

* max 60°C during 10 min



ADVANTAGES

- Suited for small sumps: small size and vertical discharge port
- Reliable: double sealing (mechanical seal + lip seal) and vortex impeller
- Safety in case of motor out-of-water occasional operation.
- Long life: tough materials
- Automatic operation: integrated float switch (single-phase version) ; optional (three-phase version).
- No particular maintenance. Easy impeller cleaning thanks to fast disassembly. Low weight.
- Supplied ready for fitting (single-phase version)
- Quiet operation



VORTEX impeller

MINI SVO

SUBMERSIBLE PUMPS

Lifting of domestic waste and sewage water

2 pole - 50 Hz

APPLICATIONS

Lifting of domestic waste water:

- sewage water
- rain water loaded with mud and non rigid particles with traces of hydrocarbons or washing products.

For:

- Housing.
- Garages.
- Parking lots.
- Restaurants.
- Boiler rooms.



• MINI-SVO-204-0.6MF

MINI SVO

DESIGN

• Hydraulic part

- Single block, centrifugal single-stage impeller.
- Axial suction under pump casing.
- Vertical discharge.
- G1^{1/2} threaded port.
- Vortex impeller.
- Double sealing at shaft passage by mechanical and lip seals.

• Motor

- Submersible to semi-submersible
- Oil bath.

Single-phase version: automatic start and stop by float switch, thermal protection by automatic reset integrated probe, condenser integrated.

Three-phase version: mandatory thermal protection to be added.

Rotation speed:	2900 rpm
Windings, 1-phase:	230V
3-phase:	400V
Frequency:	50 Hz
Insulation category:	130(B)
Protection index:	IP 68

STANDARD CONSTRUCTION

Main parts	Material
Pump casing	Cast iron GJL200
Motor sleeve	Stainless Steel 304
Motor shaft	Stainless Steel 416
Suction lid	Stainless Steel 304
Vortex impeller	Composite
Mechanical seal	Carbon/alumin

IDENTIFICATION

MINI-SVO 2 04 - 0.6 M F

Domestic pump _____
Submersible
with vortex impeller

2 : 2 pole _____

ND discharge in cm _____

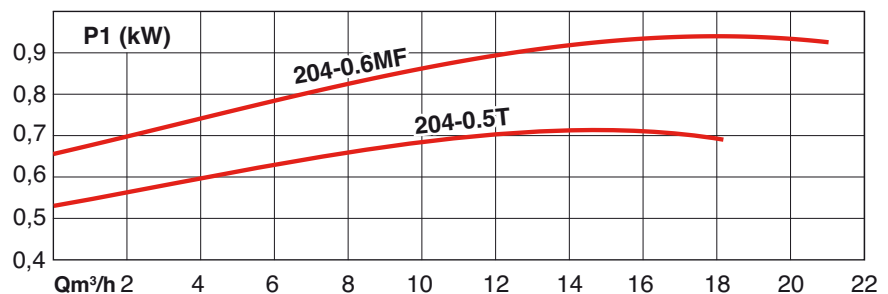
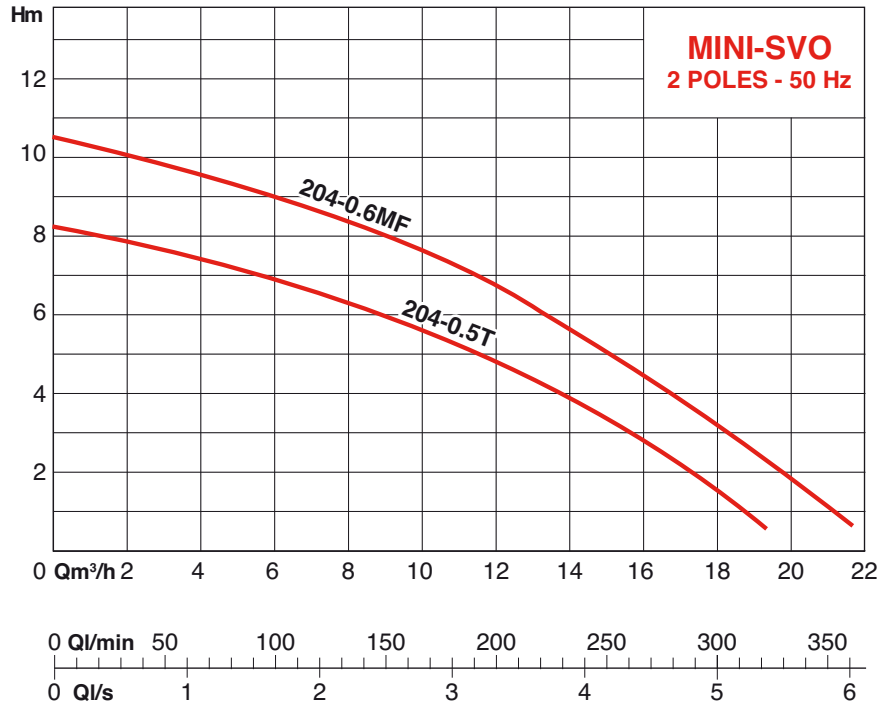
P2n motor power in kW _____

M: single-phase _____

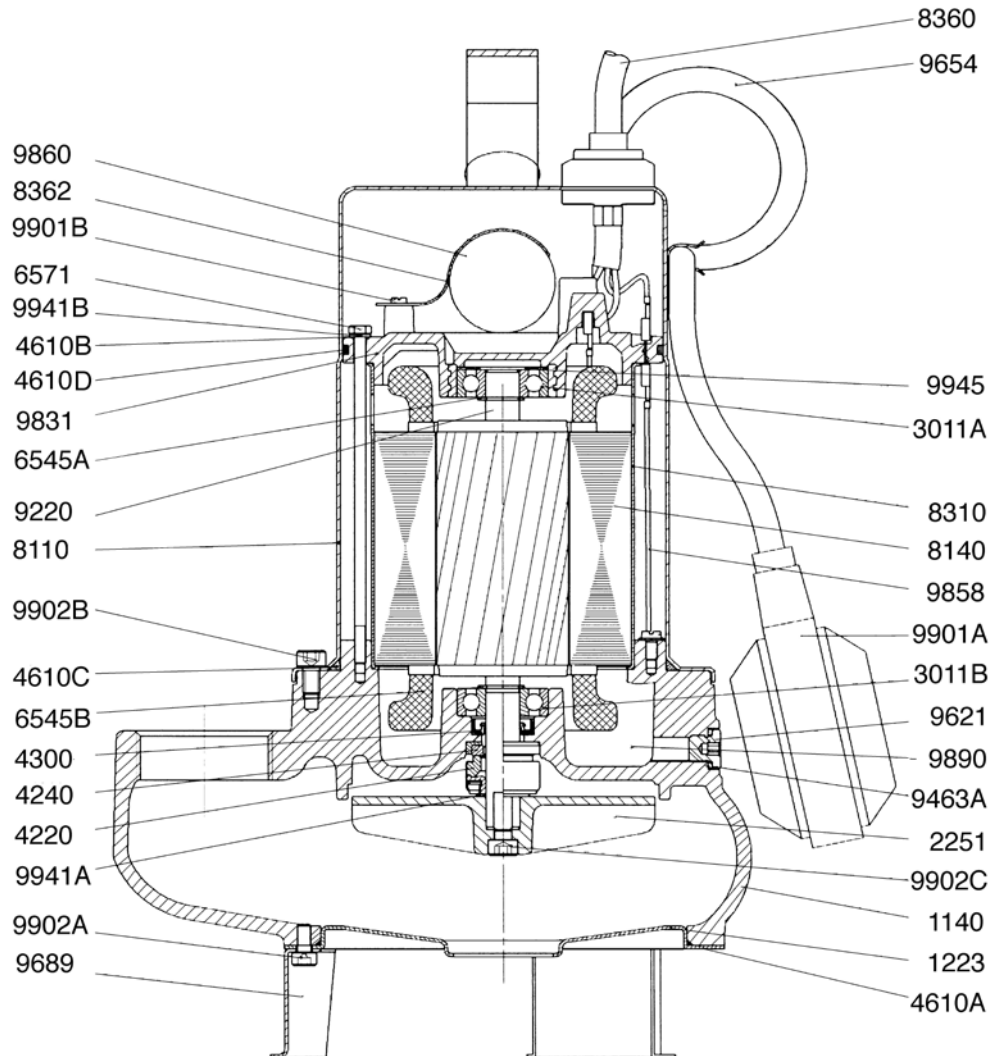
T: three-phase _____

F: supplied with a float _____

HYDRAULIC PERFORMANCES



SECTIONAL VIEW (MINI-SVO-204 0.6MF)



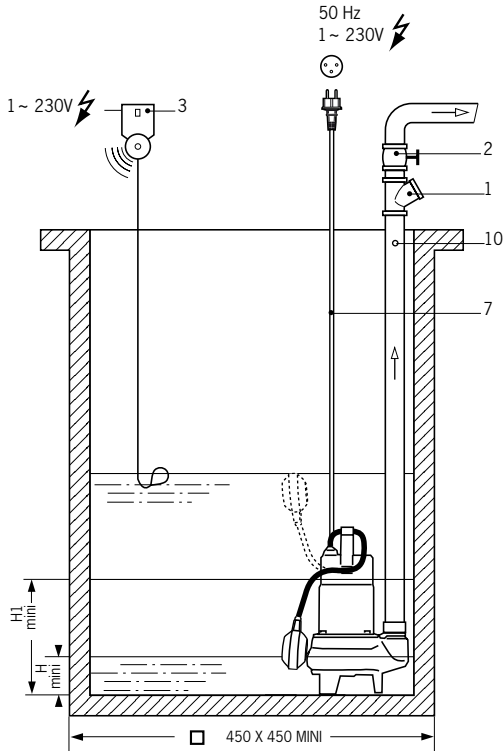
- | | | |
|--|---|--|
| 1140 - Discharge casing | 6571 - Assembly strut | • 9901A - Ground screw |
| 1223 - Suction lid | 8110 - Motor sleeve | 9901B - Jumper fitting screw |
| • 2251 - Vortex impeller | 8140 - Stator | 9902A - Bracket foot fitting screw |
| 3011A - Upper bearing | 8310 - Stator sleeve | 9902B - Motor sleeve fitting screw |
| 3011B - Lower bearing | • 8360 - Supply cable with plug and connector | 9902C - Wheel fitting screw |
| • 4220 - Mechanical seal rotating part | 8362 - Jumper | 9941A - Mechanical seal support washer |
| • 4240 - Mechanical seal fixed part | 9220 - Rotor shaft | 9941B - Washer under strut 6571 |
| • 4300 - Sealing lip ring | • 9463A - Sealing ring under 9621 | 9945 - Elastic washer |
| • 4610A - O-ring (between 1140 and 1223) | 9621 - Oil chamber cap | |
| 4610B - O-ring (under 9941B) | • 9654 - Float cable | |
| • 4610C - O-ring (between 1140 and 8110) | • 9689 - Support foot | |
| • 4610D - O-ring (between 9831 and 8110) | 9831 - Rear bearing flask | |
| 6545A - Upper clip | 9858 - Ground wire | |
| 6545B - Lower clip | • 9860 - Condenser | |
| | 9890 - Oil | |

(*): recommended spare parts

MINI SVO

INSTALLATION DIAGRAMS

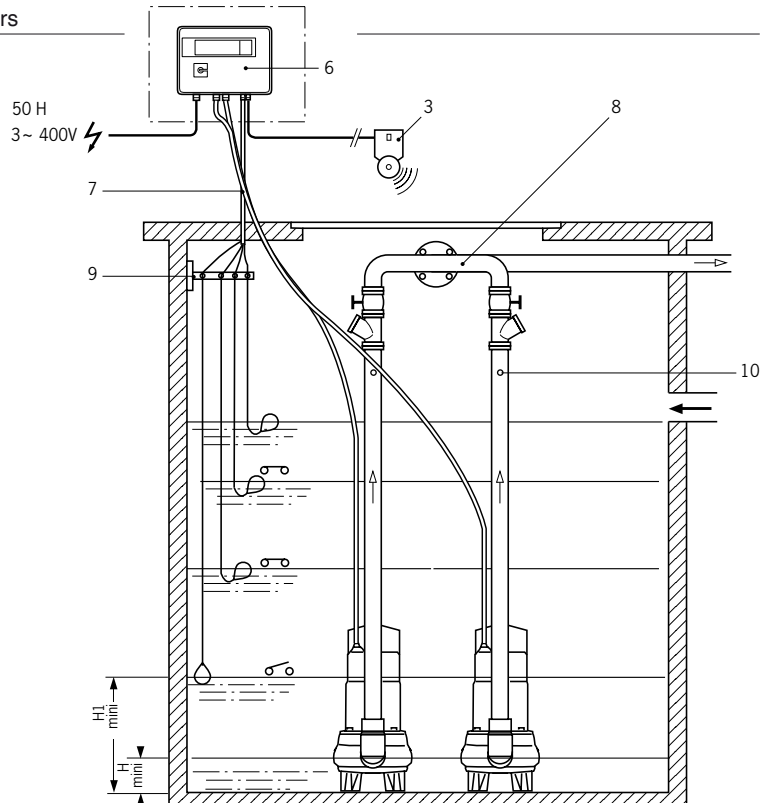
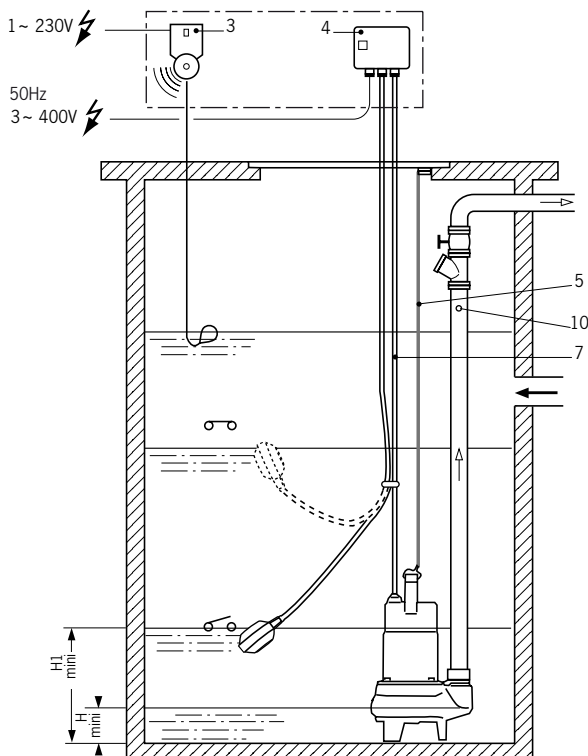
• Simplified installation MINI-SVO with single phase motor with its float.



- 1 - Check valve suited for the fluid pumped.
- 2 - Isolating valve
- 3 - Overflow sound alarm
- 4 - Discontactor to a float switch: pump ON/OFF
- 5 - Cable (not supplied)
- 6 - Control and protection box
Yn 4100 (1 pump with 3 level regulators) or
Yn 4200 (2 pumps with 4 level regulators).
- 7 - Electric cable 5m
- 8 - Dual pump manifold
- 9 - Regulator cable wall support
- 10 - Purging hole to be performed

In discontinuous operation $H_{min} = 90$ mm
In constant operation $H_{min} = 230$ mm

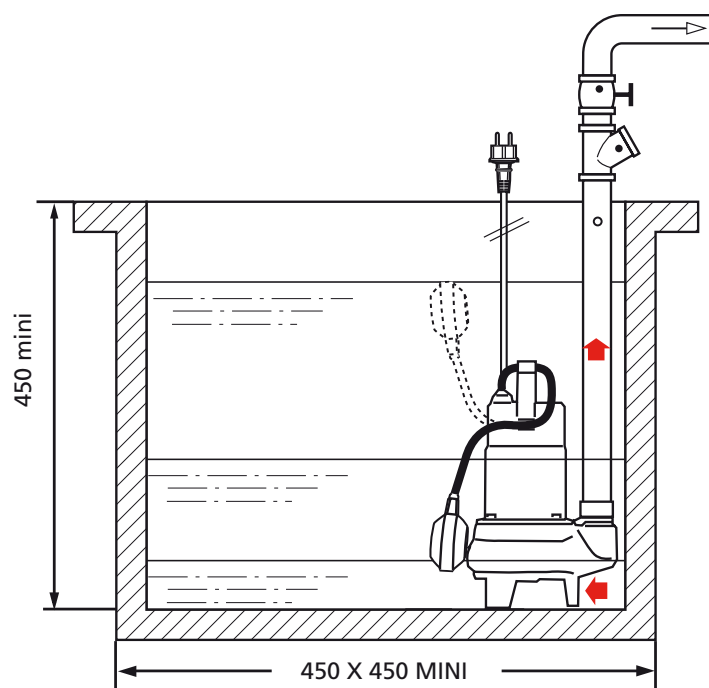
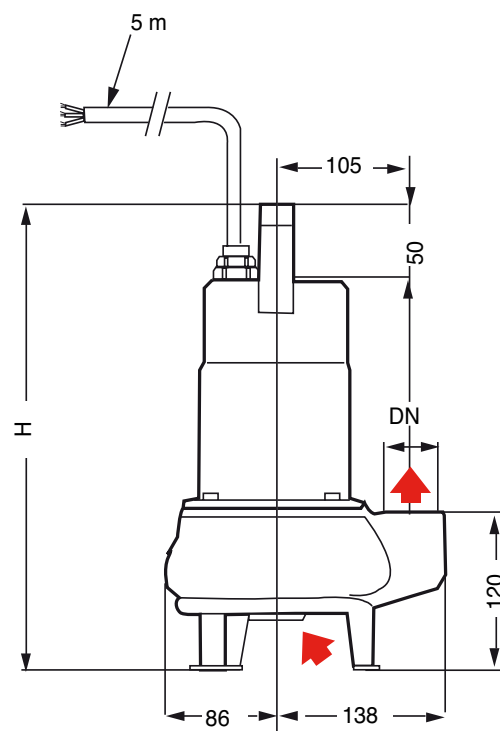
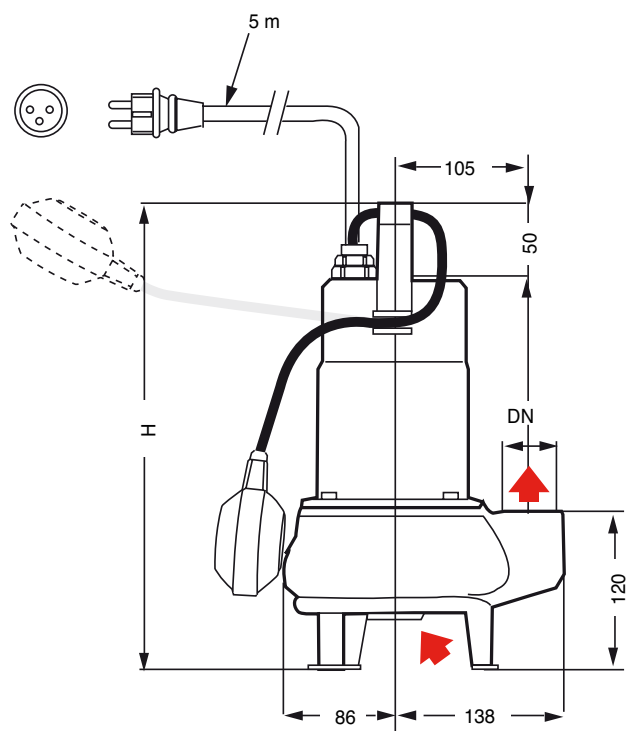
• Fixed installations with 1 or 2 MINI-SVO three phase motors



ELECTRICAL DATA AND DIMENSIONS

• MINI-SVO-204-0.6MF

• MINI-SVO-204-0.5T4




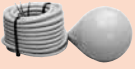

ORDER REFERENCE	P1	I(A)		Cond.	DND	DNS	H maxi	L. cable	Weight
	kW	1~230V	3~400V	μ F		\varnothing mm	mm	m	kg
MINI-SVO-204-0.5T4	0.68	-	1,9	-	G11/2	40	352	5	11
MINI-SVO-204-0.6MF	0.94	4,7	-	14	G11/2	40	367	5	12

MINI SVO

CONTROL SYSTEMS

Electronic control and protection boxes

Models	YN 3000	YN 7000	MS Lift
Application	For controlling levels in a sump by an IPAE sensor (not provided)	For running a submersible pump, lift-pump or pressure booster.	For controlling levels in a fixed installation, dry sump or dry pit type
Number of pumps			
1 pump	YN3100	YN7100	1x4kW
2 pumps	YN3200	-	2x4kW
Characteristics			
1x230V	yes	yes	yes
3x230V	no	yes	no
3x400V	yes	yes	yes
Max. power per pump	4Kw	11Kw	4Kw
Intensity			
Single phase	0,3 to 12A	1 to 23A	1,5 to 12A
Three-phase	0,3 to 10A	1 to 23A	1,5 to 12A
Frequency	50/60Hz	50/60Hz	50/60Hz
Protection class	IP65	IP54	IP54
Level detectors			
Float switch	yes	yes	yes
1 pump	3	1 ou 2	2
2 pumps	4	no	3
IPAE Sensor	yes	-	-
Level electrode	-	2 provided	-

Level detectors	TYPE OF INSTALLATION			Length of cable in metre
	Deep sump installation	Transportable installation	Fixed installation	
Governed by level electrodes 	Recommended	Incompatible	Possible	solde in mètre
Muddy water: Float switch Euroflot 430 	Incompatible	Possible	Possible	10 ou 20
Governed by IPAE piezometric sensor 	Possible	Possible	Recommended	10 ou 30

FEATURES

a) Electrical

- **single phase 230V – 50 Hz.**

Permanent capacitor and thermal protection by sensor built into the pump.

Connection to mains supply by standard male plug, 2 pin + earth.

- **Three-phase 400V – 50 Hz.**

Thermal protection against excess current essential, using circuit-breaker switch or control and protection box.

b) Fitting

- Fixed installation in sump.

- Motor axis always vertical.

- Rigid pipework.

c) Packaging

- Single phase and three-phase pumps delivered wrapped inside recyclable cardboard box, with 5 m of cable and handle.

- Single phase pump delivered with float switch and electric plug.

d) Maintenance

- See recommended spare parts (*) or the following kits:

- "Water-tightness" kit: mechanical seal + lip seal and gaskets. (All versions). Ref.: 4051807

- "Cable and float" kit: power cable with plug + float cable and connector, the whole factory-assembled. (3~ Version). Ref.: 4051816

- "Electrical supply cable kit": electrical power supply cable without plug + connector, factory-assembled (3~ version). Ref.: 4051820

ACCESSORIES

Single phase and three-phase motors

• Cord (not supplied by Salmson).

• Non-return ball valve

Ref. : PRC-4004712.

• Shut-off valves **Ref. : 4015489**

• Linking pipe for two-pump installation (not supplied by Salmson).

• Bracket kit for float-switch cables **Ref. : 4013188**

• Alarmson overflow or low water audible alarm control box for clean water and muddy water, **Ref. : 2529590.**

• ALARMSON

