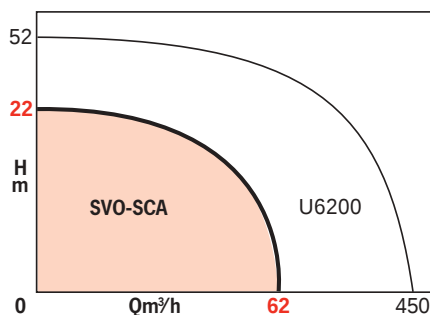


PLACES D'UTILISATION

Flow up to:	62 m ³ /h
Head up to:	22 m w.g.
Liquid temperature range:	+3° to 35°C*
Specific gravity of liquid:	1.05 max.
pH of liquid:	6-11
Max. immersion depth:	10 m
Free passage:	Ø 48 mm
ND of discharge port:	50 and 65**

* + 60°C for 5 minutes

** SVO-SCA 205 and 206, respectively



• Single-channel impellers (SCA)



• VORTEX impellers (SVO)



• SVO-SCA single-phase motor with capacitor box



• SVO-SCA 205

• SVO-SCA 206



SVO-SCA

Motor Mob

ASESORANDO INDUSTRIAS

- Motores Eléctricos - Motorreductores
- Bombas Centrífugas y Autocebantes
- Bombas para Presurización y Calefacción
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Av. 101 (Ruta 8) N° 1882 - San Martín - Pcia. de Bs. As. - Argentina

PAGINA WEB: www.electromecanicamm.com.ar

E-MAIL: electromecanicamm@hotmail.com

APPLICATIONS

Lifting of water containing particulate matter, in single and multiple dwellings and in industry:

- waste and drainage water,
- foul water,
- sewage,
- emptying of septic tanks, etc.

TWO LINES:

- **304 stainless steel line:**
 - non-corrosive liquids.
- **316 L stainless steel line:**
 - corrosive liquids (condensates, seawater, brackish water, de-ionized water, etc.).

SVO-SCA

ADVANTAGES

- **Explosion-proof motor, eliminates all accident risk in an explosive environment.**
- **Operating reliability: oil-filled intermediate chamber assures complete tightness to prevent infiltration of water into motor.**
- **1304 and 316 L stainless steel and composite material for corrosion resistance and greater pump reliability.**
- **Class "F" winding can withstand temperatures up to 155 °C.**
- **Pumps with Vortex impeller or singlechannel impeller with unobstructed passage, practically impossible to clog.**
- **Protecting ring on mechanical seal.**

DESIGN

• Pump - ATEX (94/9/CE)*

Centrifugal, single-stage.

Axial suction under casing, horizontal discharge through flange.

Double sealing of shaft by mechanical seal (pumped liquid side) and lip sealing ring (motor side).

Oil-filled intermediate chamber between pump and motor.

Two versions according to type of impeller:

- **SVO: with vortex impeller**, for liquids containing solid particles, sludge, and gas;
- **SCA: with single-channel impeller**, for waste water containing solid particles and fibers.

• Motor - ATEX (94/9/CE)*

– Submersible, direct starting.

– **With explosion-proofing** certified EEx d IIB T4.

– Shaft guide bearings lubricated for life.

– Type HO 7RN-F power cord, 10 m long, 4 conductors, bare end.

– Single-phase motor has built-in thermal protection, automatic reset, with capacitor built into the junction box supplied with the pump.

Speed of rotation : 2900 rpm

Power supply 3-phase : 400 V (T4)

single-phase : 230 V (M)

3-phase : 230 V (T2)**

Frequency : 50 Hz
(60 Hz optional)

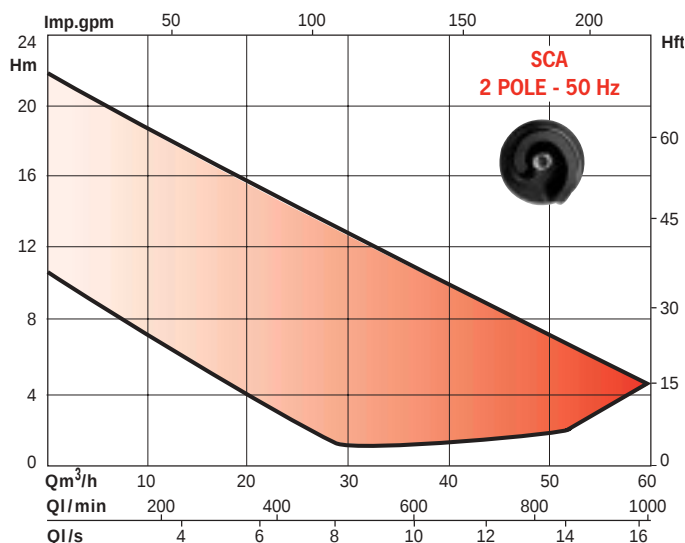
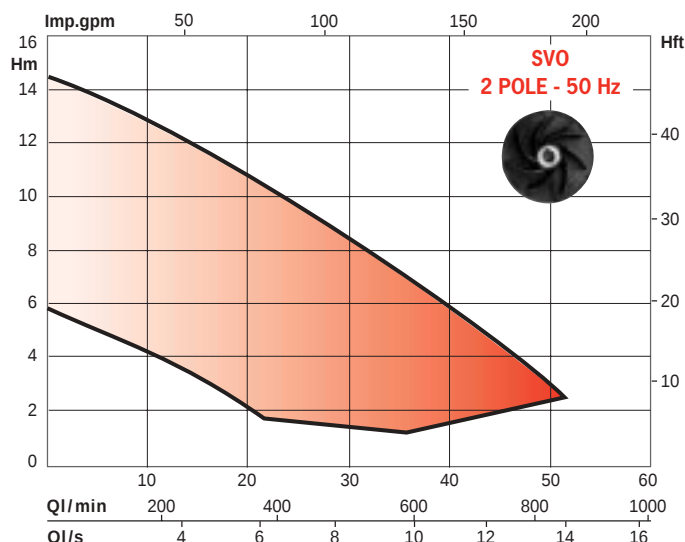
Insulation class : F (+155°C)

Protection index : IP 68 (up to 10 m)

* **ATEX : SVO 206-T4 and SCA 206-T4** (Protection against explosive atmospheres compliant with directive 94/9/CE)

** For EXPORT only (outside Europe).

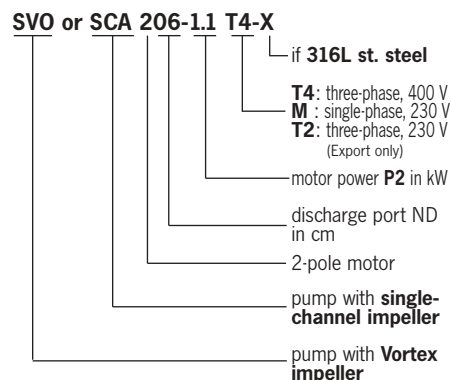
SELECTION CHARTS



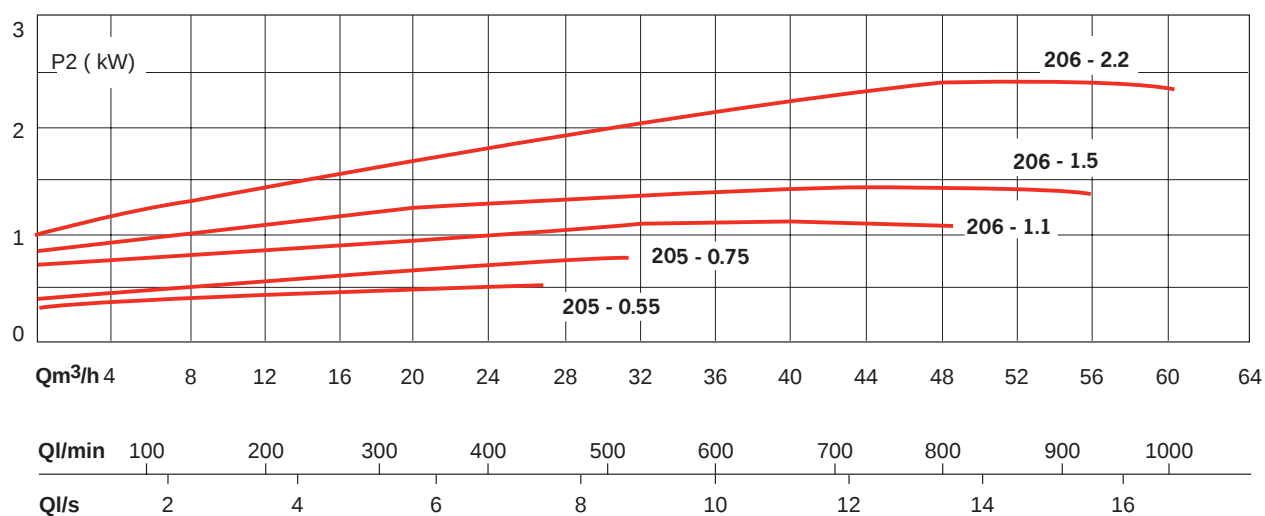
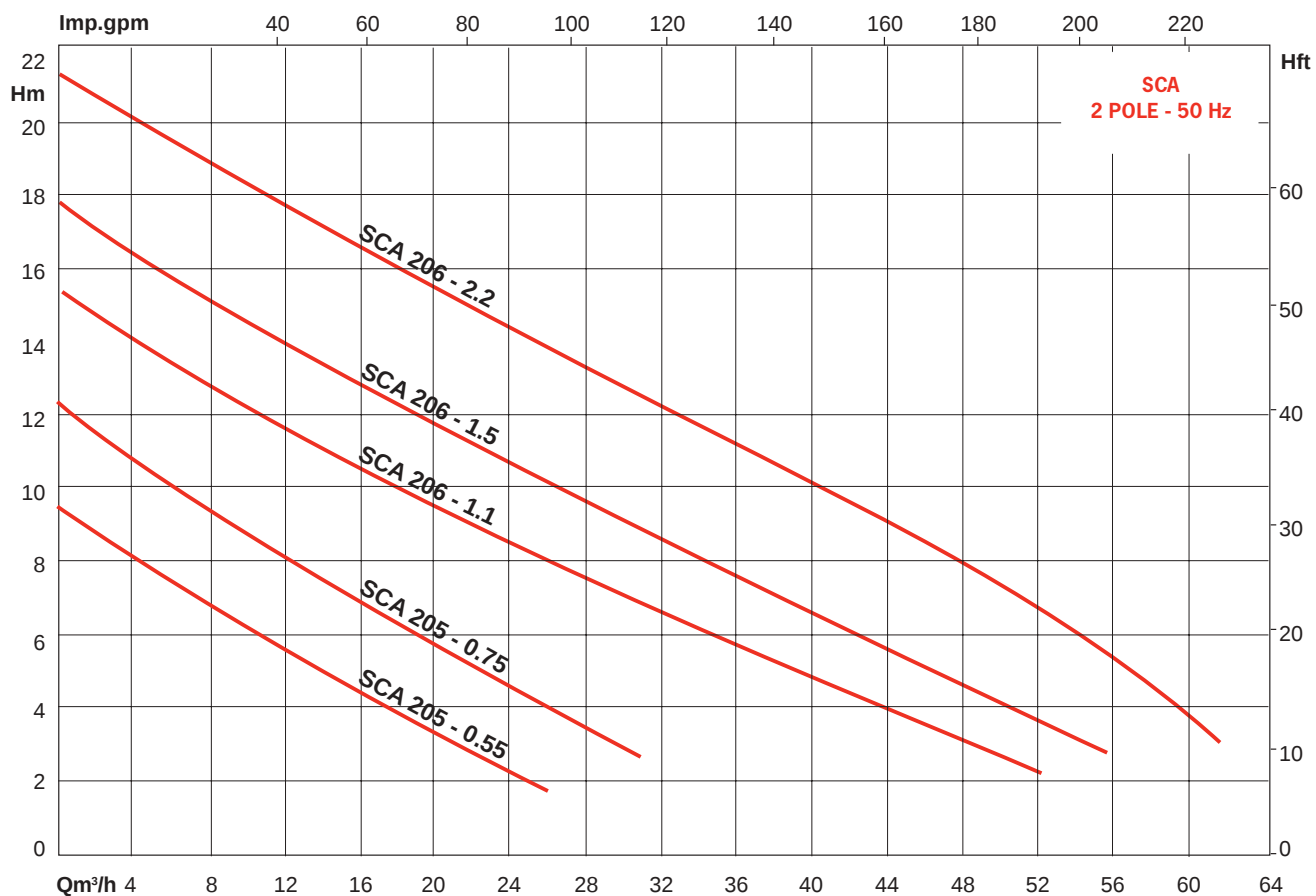
STANDARD CONSTRUCTION

Main part	Material	
	non-corrosive liquids	corrosive liquids
Suction end 205	304	stainless steel 316 L
206		composite material
Impeller		composite material
Shaft 205		316 L
206		motor side steel/pumped fluid side 316 L
Pump casing		composite material
Motor casing	304	Stainless steel 316 L
Mechanical seal	Si carbide/nitrile/Si carbide	
Motor flange	304	Stainless steel 316 L
Bolting	304	Stainless steel 316 L
Degassing check valve of 205		Nitrile

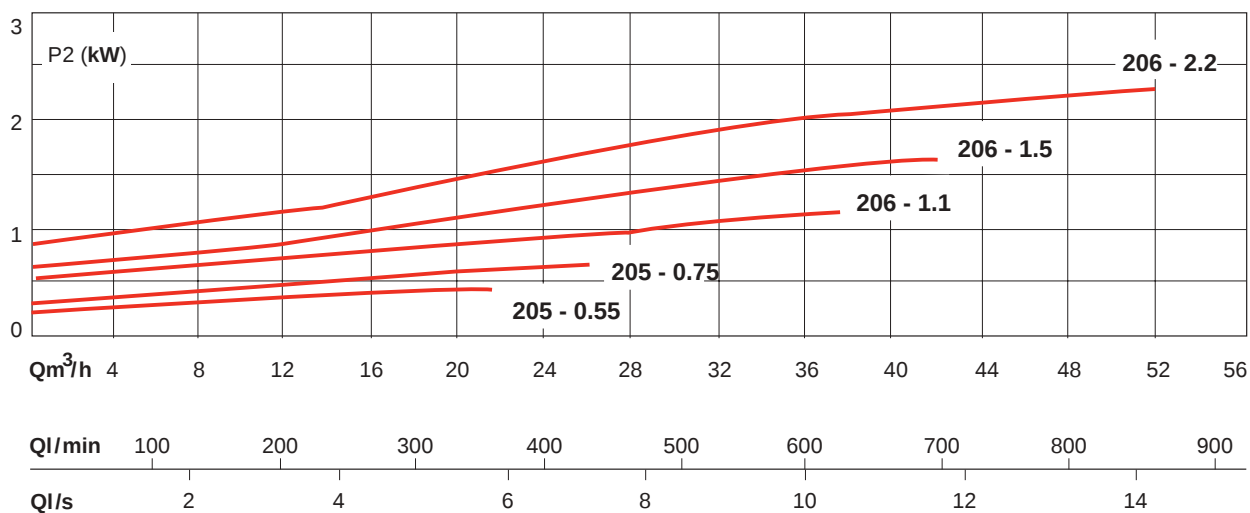
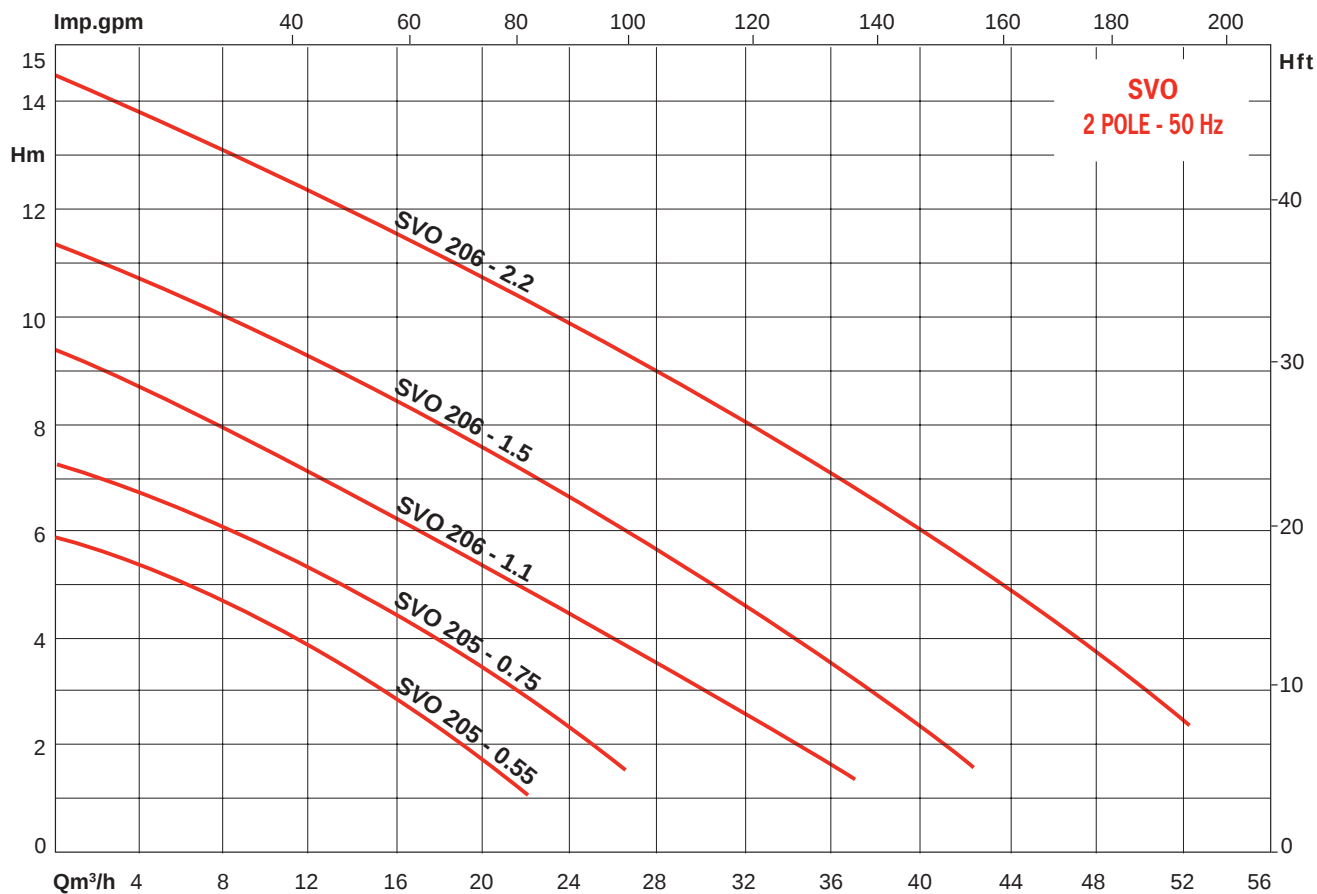
PUMP IDENTIFICATION



HYDRAULIC PERFORMANCES AT 2900 RPM

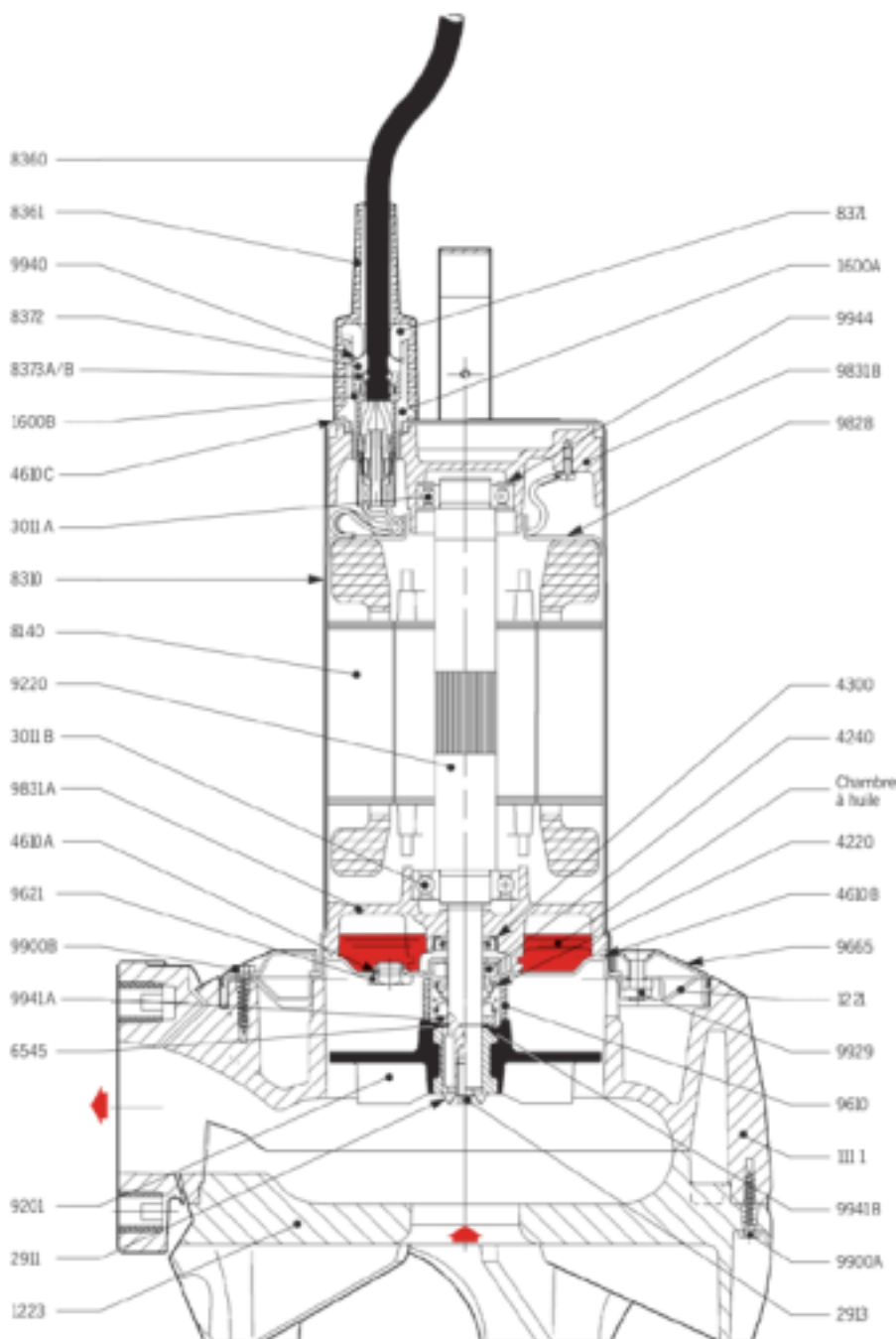


HYDRAULIC PERFORMANCES AT 2900 RPM



SECTIONAL DRAWING

WITH VORTEX IMPELLER (ND 65)



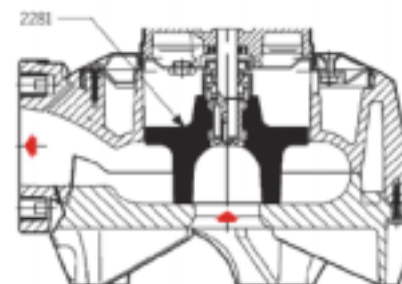
PARTS LIST

- 1111 - Pump casing
- 1221 - Motor end
- 1223 - Suction end
- 1600A - Packing box socket
- 1600B - Contact holder
- 2281 - Single-channel impeller
- 2911 - Cup washer
- 2913 - Impeller attachment screw
- 3011A - Upper ball bearing
- 3011B - Lower ball bearing
- 4220 - Rotating part
- 4240 - Fixed part
- 4300 - Lip sealing ring
- 4610A - O-ring under plug 9621
- 4610B - O-ring, casing
- 4610C - O-ring, sleeve 8361
- 6545 - Impeller thrust circlip
- 8140 - Stator
- 8310 - Motor casing
- 8360 - Power cord, 10 m long
- 8361 - Cable sleeve
- 8371 - Packing-box nut
- 8372 - Packing-box seal
- 8373A - Cord clamping cone
- 8373B - Anchor ring
- 9201 - «Vortex» impeller
- 9220 - Shaft-rotor
- 9610 - Mechanical seal protector
- 9621 - Oil chamber plug
- 9665 - Motor flange
- 9828 - Stator cup
- 9831A - Lower bearing
- 9831B - Upper bearing
- 9900A - Attachment screw, suction end casing
- 9900B - Attachment screw, motor flange
- 9929 - Nylstop nut under motor end
- 9940 - Packing box nut
- 9941A - Thrust washer, mechanical seal
- 9941B - Thrust washer
- 9944 - Spring washer

ND 50 pumps also have a degassing check valve.

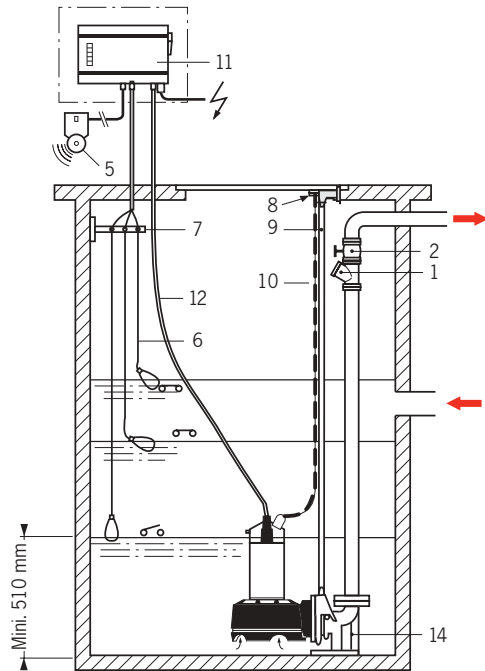
● Recommended spare parts

WITH SINGLE CHANNEL IMPELLER



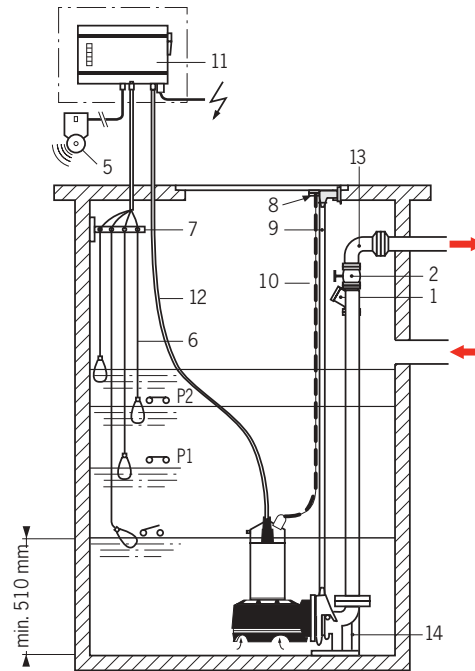
INSTALLATION DIAGRAMS

RECOMMENDED PERMANENT INSTALLATION*

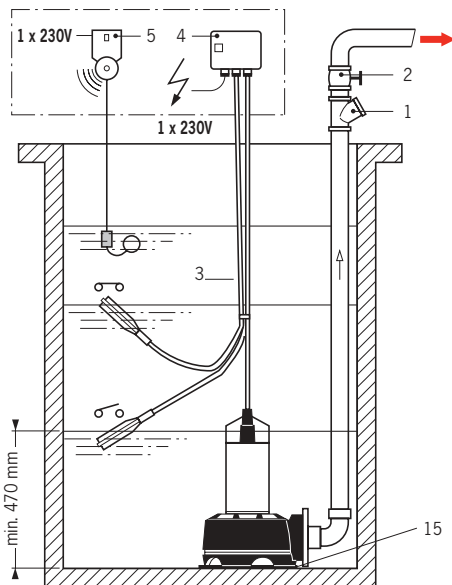


* Pump with mounting base, complete lifting system, control and protection panel with 3 level regulators.

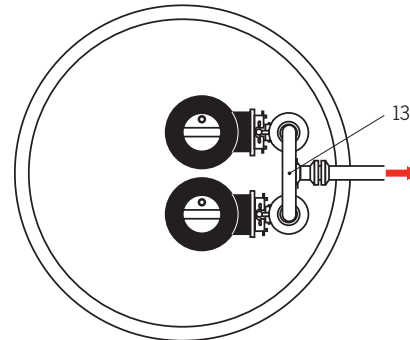
DOUBLE PERMANENT INSTALLATION***



SIMPLIFIED INSTALLATION **



** Pump with single-phase motor on bottom plate, with float switch, junction box, and audible overflow alarm.



*** Two pumps in parallel, joined by pairing pipe, with mounting base, complete lifting system, control and protection panel with 4 level regulators.

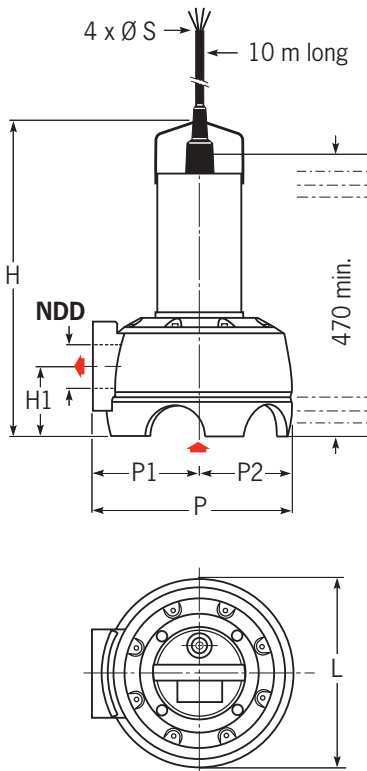
KEY

- 1 – Ball check valve.
- 2 – Gate valve.
- 3 – Pump On/Off float switch.
- 4 – Junction-capacitor box (single-phase motor).
- 5 – Audible overflow alarm.
- 6 – Level regulators with cable 10 m long (or air-pressure switch).
- 7 – Wall bracket for regulator cables.

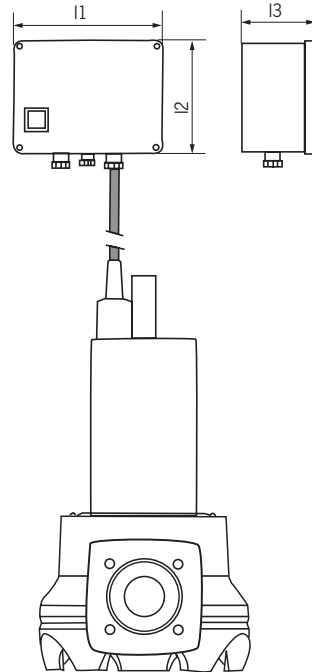
- 8 – Top guide bar bracket.
- 9 – Guide bar.
- 10 – Pump lifting chain.
- 11 – Y4000 control and protection box (or Y5000 for explosion-proof installation, with IPAE and zener barrier).
- 12 – Cable, 10 m long.
- 13 – Two-pump pairing pipe.
- 14 – Base elbow.
- 15 – Bottom plate, increases pump support area on silty bottom.

ELECTRICAL DATA AND DIMENSIONS

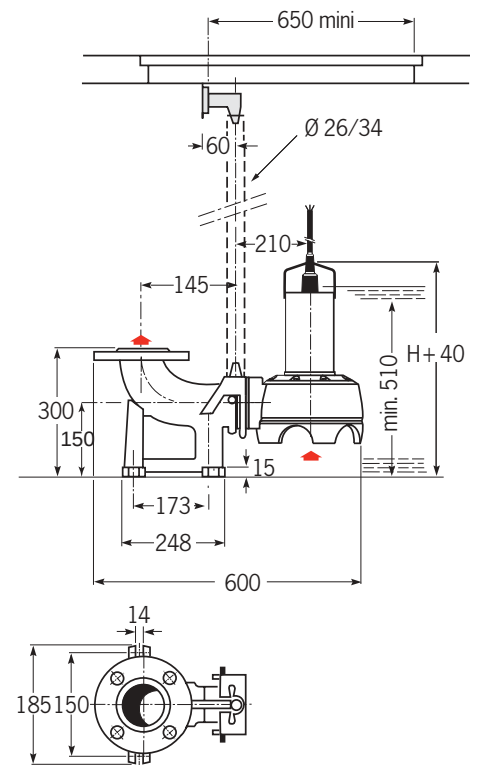
MOBILE INSTALLATION



SINGLE-PHASE VERSION WITH JUNCTION BOX



PERMANENT INSTALLATION WITH LIFTING SYSTEM



ORDER REFERENCE	M O T O R						P U M P												
	P2	I(A) 1x	I(A) 3x	I(A) 3x	capa- citor	cable dia. S	ports	M	H	L	P	H1	P1	P2	I1	I2	I3	mass	
	kW	230V	400V	230V	µF	mm²	Dis.ND	Suc.ND	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	
SVO 205-0.55 M	0.55	4.6	----	----	12	1	50	50	481	246	273	96	150	123	150	120	80	14	
SVO 205-0.55 T4 (ou T2)	0.55	----	2	3.4	----	1	50	50	481	246	273	96	150	123	-	-	-	13.5	
SVO 205-0.75 M	0.75	5.84	----	----	16	1	50	50	481	246	273	96	150	123	150	120	80	15	
SVO 205-0.75 T4 (ou T2)	0.75	----	2	3.4	----	1	50	50	481	246	273	96	150	123	-	-	-	14.5	
SCA 205-0.55 M	0.55	4.6	----	----	12	1	50	50	481	246	273	96	150	123	150	120	80	14	
SCA 205-0.55 T4 (ou T2)	0.55	----	2	3.4	----	1	50	50	481	246	273	96	150	123	-	-	-	13.5	
SCA 205-0.75 M	0.75	5.84	----	----	16	1	50	50	481	246	273	96	150	123	150	120	80	15	
SCA 205-0.75 T4 (ou T2)	0.75	----	2	3.4	----	1	50	50	481	246	273	96	150	123	-	-	-	14.5	
SVO 206-1.1 M	1.1	6.9	----	----	20	1	65	53	505	300	320	110	170	150	150	120	80	20	
SVO 206-1.1 T4 (ou T2)	1.1	----	3.2	4.5	----	1	65	53	505	300	320	110	170	150	-	-	-	21	
SVO 206-1.5 M	1.5	9.5	----	----	30	1	65	53	535	300	320	110	170	150	200	150	80	21	
SVO 206-1.5 T4 (ou T2)	1.5	----	3.6	6.1	----	1.5	65	53	505	300	320	110	170	150	-	-	-	22	
SVO 206-2.2 T4 (ou T2)	2.2	----	4.9	8.5	----	1.5	65	53	535	300	320	110	170	150	-	-	-	23	
SCA 206-1.1 M	1.1	6.9	----	----	20	1	65	53	505	300	320	110	170	150	150	120	80	20	
SCA 206-1.1 T4 (ou T2)	1.1	----	3.2	4.5	----	1	65	53	505	300	320	110	170	150	-	-	-	21	
SCA 206-1.5 M	1.5	9.5	----	----	30	1	65	53	535	300	320	110	170	150	200	150	80	21	
SCA 206-1.5 T4 (ou T2)	1.5	----	3.6	6.1	----	1.5	65	53	505	300	320	110	170	150	-	-	-	22	
SCA 206-2.2 T4 (ou T2)	2.2	----	4.9	8.5	----	1.5	65	53	535	300	320	110	170	150	-	-	-	23	

SVO-SCA

RECOMMENDED ACCESSORIES



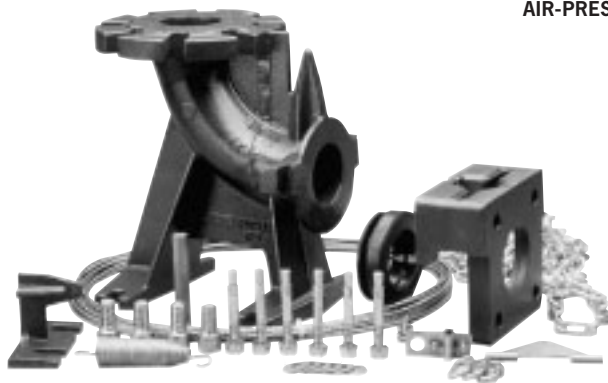
• Yn 4200



• NIVO 430 mercury-free float switch



• KIT
AIR-PRESSURE SWITCH



• BASE ELBOW SET



• BOTTOM PLATE KIT

- Y4000 control and protection box for one or two pumps in non-explosive atmosphere, with three or four level regulators, respectively.
- Yn5000 control and protection box for one or two pumps in explosive atmosphere, with level regulator and IPAE (ref.: 2 016 424).
- Protection circuit-breaker with 24V transformer.
- Two float switches for water containing particulate matter, for operation with circuit-breaker, NIVOSTABLE 430 (ref.: 4 027 584).
- One independent pump On/Off switch.
- Mounting base kits, ND 50 for SVO-SCA 205 and ND 65 for SVO-SCA 206, complete with lifting chain 5 m long and wall bracket for guide bars.
- Round screw-on counter-flange, ND 2", PN10 or ND 2 1/2", PN10.
- "A" upstand kit for 206 pump, raises pump from bottom of sump.
- Bottom plate: increases pump support area on silty bottom.
- Ball check valve, ND 2 1/2" or ND 2", special for water containing particulate matter.
- Wall bracket for electric cables of level regulators.
- KIT ADAPT/C65 (ref.: 4 013 146).
- Control and protection box for three-phase versions, CDE-SECU, ref.:

0.55	:	4 027 522
0.75	:	4 029 560
1.1	:	4 027 763
1.5	:	4 027 764
2.2	:	4 027 765

FEATURES

a) Electrical

- "M" : single-phase, 230-V, 50-Hz, permanent capacitor built into box supplied with pump.
- "T4" : three-phase 400 V-50 Hz, or
- "T2" : three-phase 230 V-50 Hz *,
- * for EXPORT only (outside Europe)
- Motor protection required, by circuitbreaker (439-E24) or by Yn4000, Yn5000, or COFSANIT box, with level regulators.

b) Installation

- Mobile installation or permanent installation with complete lifting system.
- Connection to installation by screw-on counter-flanges (not supplied) for flexible or rigid pipe.

- These pumps must be installed in **wet** sumps.

c) Packaging

- Pumps delivered packed in recyclable cardboard boxes with 4-conductor power cord 10 m long, without accessories.
- Single-phase model with permanent capacitor box (0.55 and 0.75 kW single-phase, with float).
- The intermediate chamber is filled with oil:
- Single- and three-phase motors up to 0.75 kW : 115 ml.
- Single-phase motors up to 1,1 kW : 150 ml. above : 190 ml.
- Three-phase motors up to 1.5 kW : 150 ml. above : 190 ml.

d) Maintenance

- Replacement of recommended spare parts (•), or KITS grouping several spare parts:
- Seals kit.
- Casing-stator kit.
- Electric motor kit.

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