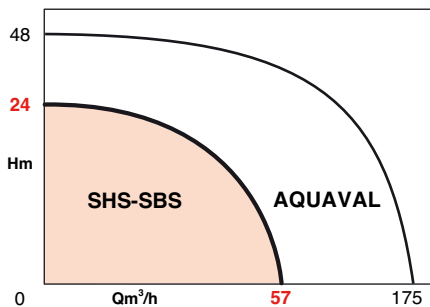


OPERATING LIMITS

Flow rates up to:	57 m ³ /h
Head up to:	24 m CL
Liquid temperature range:	+3° to +35°C*
Specific gravity of liquid:	1.05 max.
pH of liquid:	6-11
Max. immersion depth:	10 m
Max. particle size:	Ø 10 mm
ND of discharge port:	50-65

*+ 60°C for 5 minutes



ADVANTAGES

- **Explosion-proof motor, eliminates all accident risk in an explosive environment.**
- **Operating reliability: oil-filled intermediate chamber to ensure perfect seal to prevent infiltration of water into motor.**
- **304 stainless steel and composite material for corrosion resistance and greater pump reliability.**
- **Ring protecting mechanical seal.**
- **Pumps with high- and low-pressure semi-open impellers.**

SHS-SBS

SUBMERSIBLE PUMPS For clear water 2 pole serie, 50 Hz

APPLICATIONS

Lifting of clear water or water containing a little particulate matter:

- seepage water
- rainwater
- parking-lot runoff water
- ornamental pool water
- cellar pump
- emptying of boiler-plant sump.



SHS-SBS

DESIGN

• Hydraulic part

- Centrifugal, single-stage.
- Axial suction under casing, vertical discharge through tapped port.
- Oil-filled intermediate chamber between pump and motor.
- Two versions according to type of impeller:
 - SHS: high pressure, for large discharge head.
 - SBS: low pressure, for large flow.

• Motor - ATEX (94/9/CE)*

- Submersible, direct starting.
- Explosion-proofing certified EEx d IIB T4, some versions.
- Shaft guid bearing lubricated for life.
- HO 7RN-F power cable 10 m long, 4 conductors.
- Single-phase motor with thermal protection by built-in probe, automatic reset, with capacitor built into junction box (not explosion-proof) supplied with the pump.

Rotation speed: 2900 rpm
 Windings, 3-phase: 400 V (T4)
 1-phase: 230 V (M)
 Frequency: 50 Hz
 (60 Hz optional)
 Insulating category: 155 (F)
 Protection index: IP 68 (up to 10 m)

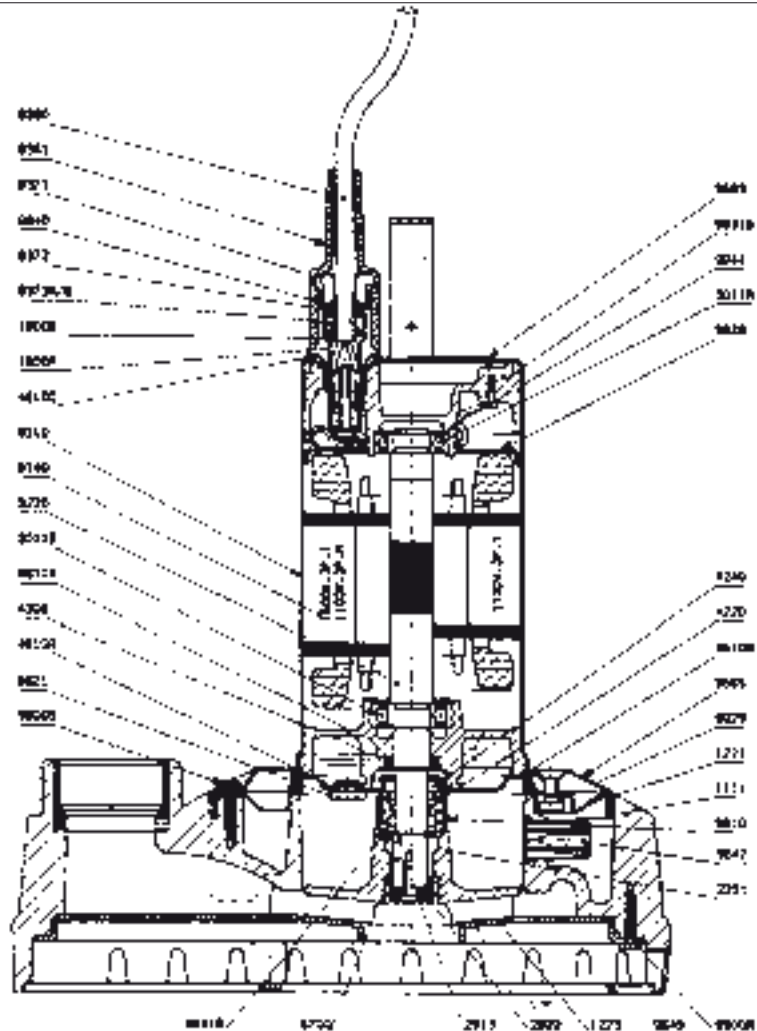
* ATEX: SBS 205-T4 / SHS 205-T4 / SBS 206-T4

STANDARD CONSTRUCTION

Main parts	Material
Suction end	304 stainless steel
Impeller	composite material
Shaft	316 L stainless steel
Pump casing	composite material
Motor casing	304 stainless steel
Mechanical seal	Si carbide/Si carbide/nitrile
Motor flange	304 stainless steel
Bolting	304 stainless steel
Degassing check valve	Nitrile

SECTIONAL VIEW

•SHS-SBS 205



IDENTIFICATION

SHS 205-1.1 T4

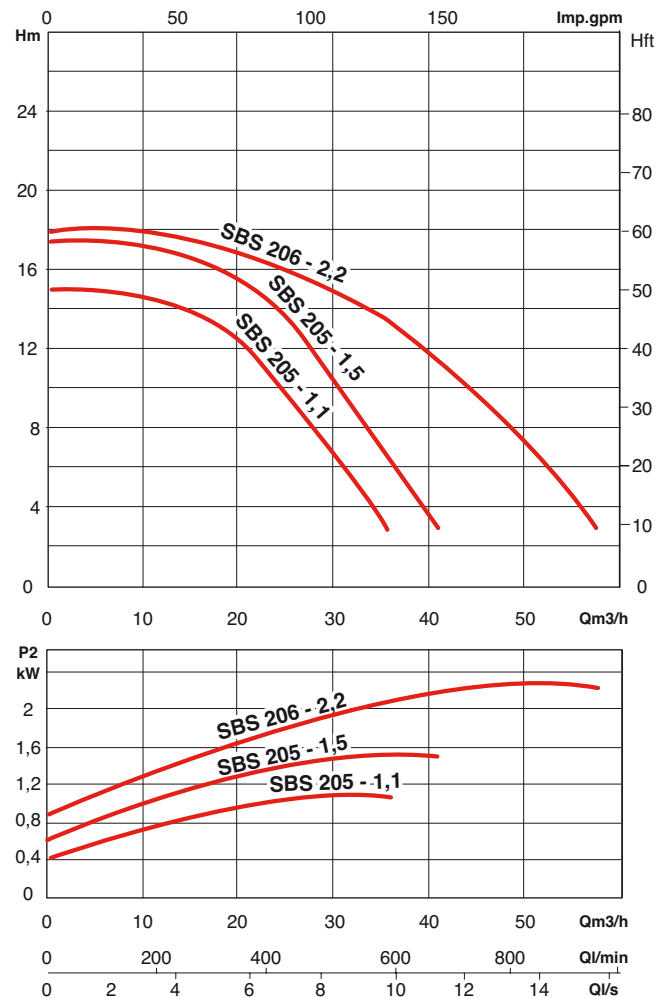
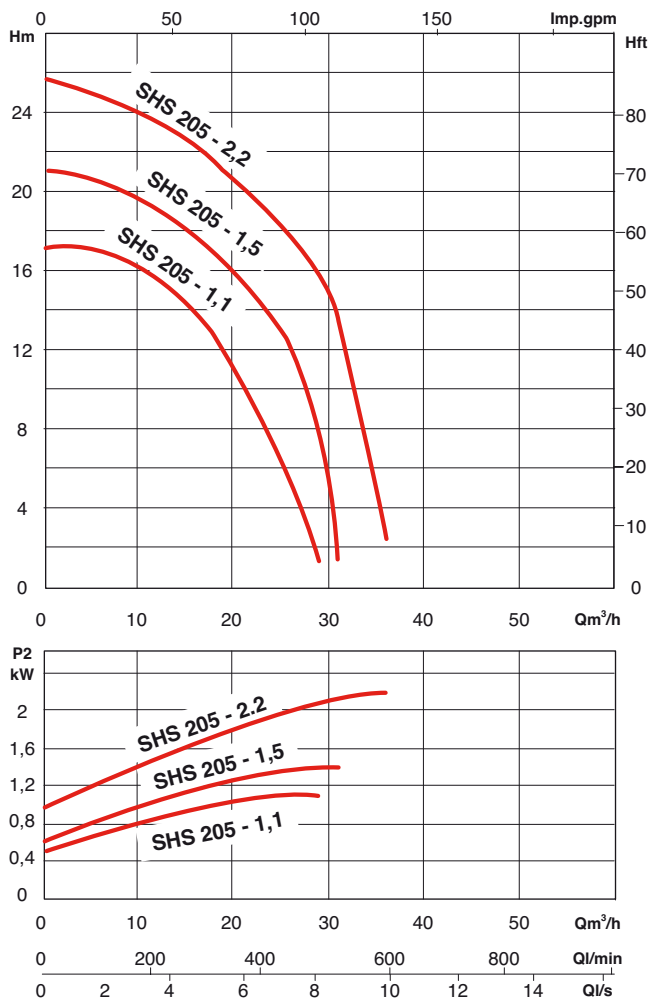
- Submersible pump code
- impeller codes:
 - H : high-pressure
 - B : low-pressure
 - S : semi-open
- 2-pole motor
- disch. port DN in cm
- motor power P2 in kW
- T4 : 3-phase 400 V
- M : 1-phase 230 V
- T2 : 3-phase 230 V (Export only)



PARTS LIST

- | | | |
|----------------------------------|-----------------------------------|--|
| 1111 - Pump casing | • 6545A - Impeller thrust circlip | 9649 - Strainer plate |
| 1221 - Motor end | • 6700 - Key | 9665 - Motor flange |
| 1223 - Suction end | • 8140 - Stator | 9683 - Motor plate |
| 1600A - Packing box socket | 8310 - Motor casing | 9828 - Stator cup |
| 1600B - Contact holder | • 8360 - Power cord, H07RNF | 9831A - Lower bearing |
| • 2251 - Semi-open impeller | 8361 - Cable sleeve | 9831B - Upper bearing |
| 2913 - Impeller attachment screw | 8371 - Packing-box nut | 9900A - Screw |
| 2920 - Adjustment screw | 8372 - Packing-box seal | /B/C - Screw |
| • 3011A - Upper ball bearing | 8373A - Cord clamping cone | 9929 - Nylstop nut under motor end |
| • 3011B - Lower ball bearing | 8373B - Anchor ring | 9940 - Packing-box nut |
| • 4220 - Rotating part | • 9220 - Shaft-rotor | 9941A - Thrust washer, mechanical seal |
| - Fixed part | 9610 - Mechanical seal protector | 9942 - Toothed cup washer |
| } Mechanical seal | 9621 - Oil chamber plug | 9944 - Spring washer |
| | 9629 - Coupling | |
| • 4300 - Lip sealing ring | 9646 - Check valve | |
| • 4610A - O-ring under plug 9621 | • 9647 - Degassing check valve | |
| • 4610B - O-ring, casing | | • Recommended spare parts |
| • 4610C - O-ring, sleeve 8361 | | |

HYDRAULIC PERFORMANCES AT 2900 RPM

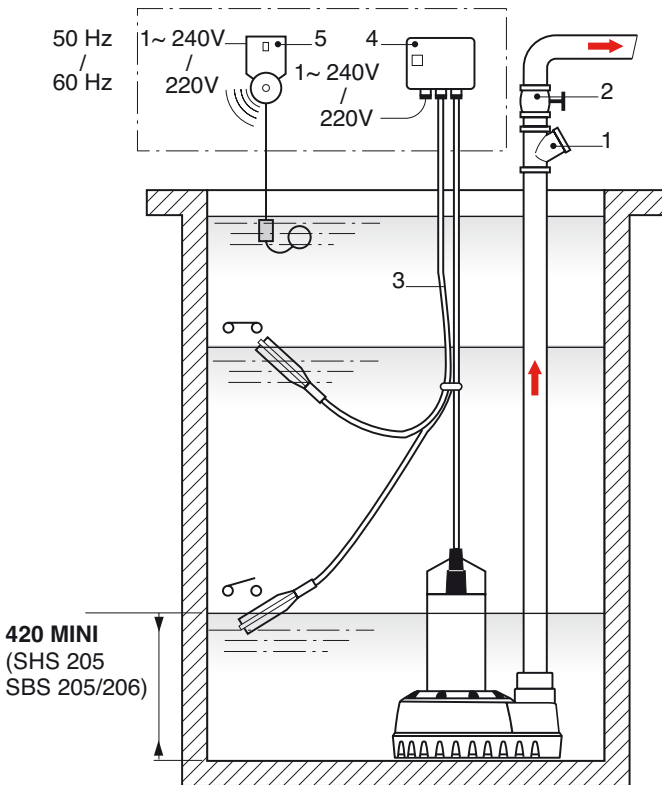


SHS-SBS

INSTALLATION DIAGRAMS

• Simplified installation

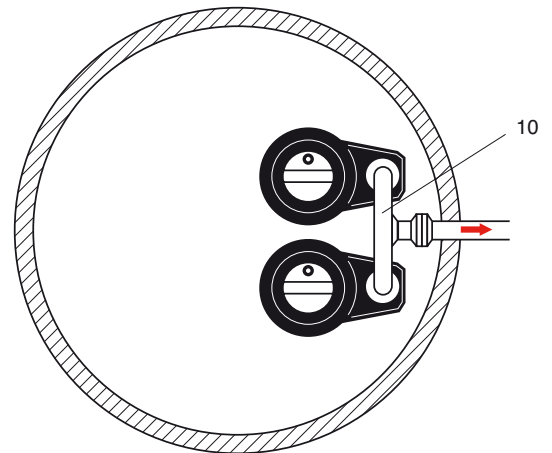
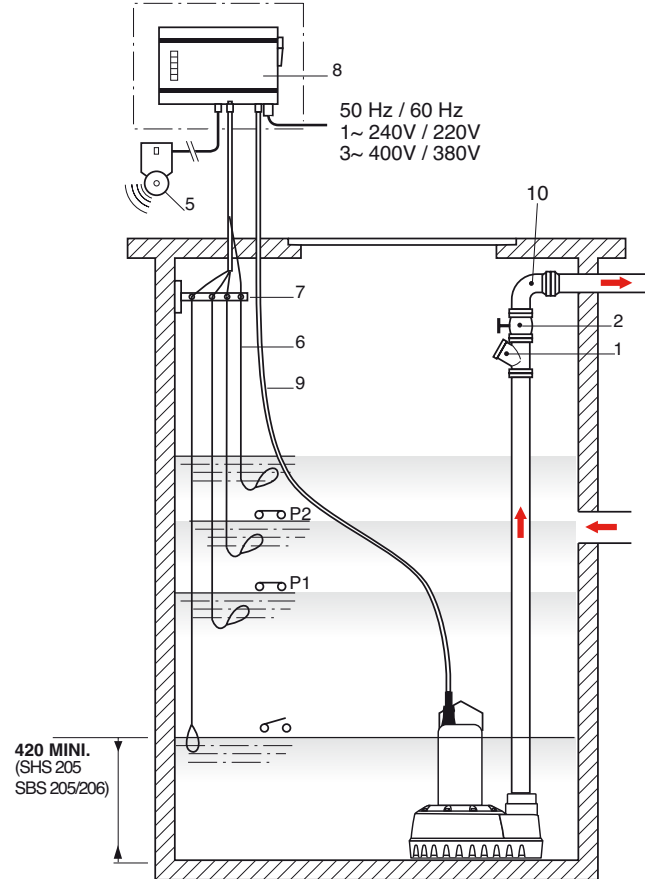
One pump with single-phase motor, in sump, with float switch, Junction box, and audible overflow alarm.



- 1 - Check valve.
- 2 - Isolating valve.
- 3 - Pump On/Off float switch.
- 4 - Junction-capacitor box (single-phase motor).
- 5 - Audible overflow alarm (single-phase motor).
- 6 - Level regulators with counterweights and cable 10 m long (or IPAE).
- 7 - Wall bracket for regulator cables.
- 8 - Yn4000 control and protection panel (or Yn5000E for explosionproof installation, with IPAE switch).
- 9 - Motor power cord, 10 m long.
- 10 - Two-pump pairing pipe.

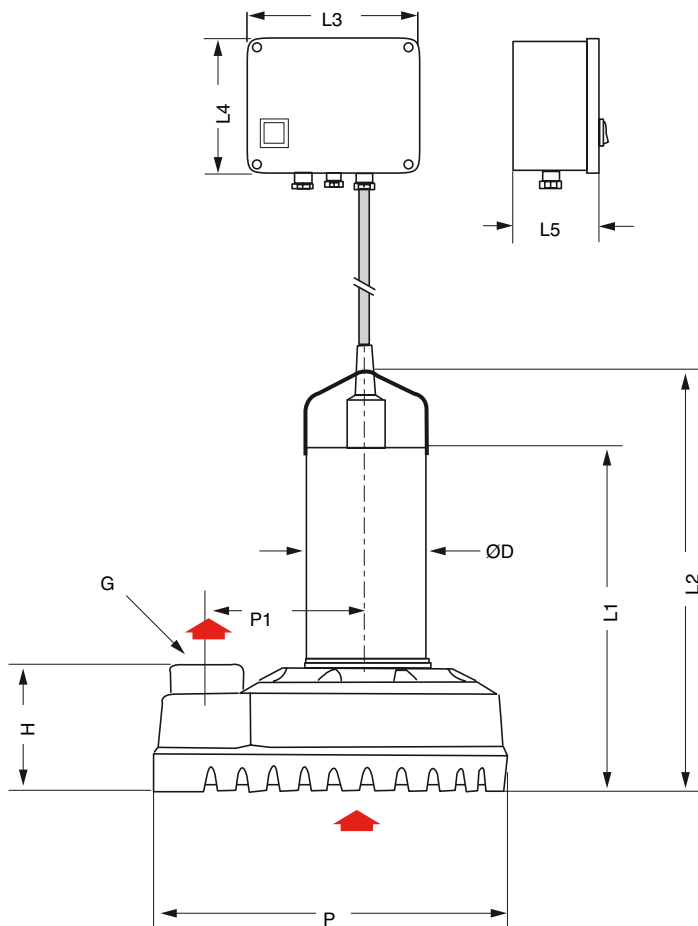
• Standard installation

One or two pumps (single- or three-phase) in parallel, joined by Pairing pipe, with control and protection box and 3 or 4 level Regulators (for one or two pumps, respectively).



ELECTRICAL DATA AND DIMENSIONS

• Single-phase version with junction box

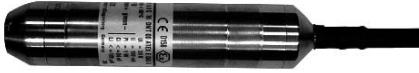


ORDER REFERENCE	MOTOR							PUMP									
	P2	I(A)	I(A)	I(A)	capacitor	cable	ports	H	L1	L2	P	P1	L3	L4	L5	mass	
	kW	230V	400V	230V	μF	mm ²	G	$\varnothing D$	mm	mm	mm	mm	mm	mm	mm	kg	
SBS 205-1,1 M	1,1	7,7	-----	-----	20	1	2"	128	132	360	440	375	170	150	120	80	21
SBS 205-1,1 T4	1,1	-----	3,2	-----	-----	1	2"	128	132	360	440	375	170	---	---	---	20
SBS 205-1,5 M	1,5	10,6	-----	-----	30	1,5	2"	138	132	387	472	375	170	200	150	80	22
SBS 205-1,5 T4	1,5	-----	3,6	-----	-----	1	2"	128	132	360	440	375	170	---	---	---	21
SBS 206-2,2 T4 (ou T2)	2,2	-----	5,1	8,8	-----	1,5	2"1/2	138	149	398	483	375	170	---	---	---	24
SHS 205-1,1 M	1,1	7,7	-----	-----	20	1	2"	128	132	360	440	375	170	150	120	80	21
SHS 205-1,1 T4	1,1	-----	3,2	-----	-----	1	2"	128	132	360	440	375	170	---	---	---	20
SHS 205-1,5 M	1,5	10,6	-----	-----	30	1,5	2"	138	132	387	472	375	170	200	150	80	22
SHS 205-1,5 T4	1,5	-----	3,6	-----	-----	1	2"	128	132	360	440	375	170	---	---	---	21
SHS 205-2,2 T4 (ou T2)	2,2	-----	5,1	8,8	-----	1,5	2"	138	132	387	472	375	170	---	---	---	23

SHS-SBS

OPTIONS & ACCESSORIES

• Air pressure switch - IPAE



• Three-phase motor protection circuit breaker with 24V transformer (type 439)



• Control box YN4000



• ALARMSON audible overflow alarm



• EUROFLOT 423 Float switch



• Yn4000 control and protection panel for one or two pumps in non-explosive atmosphere. with three or four level regulators, respectively.

• Yn5000E control and protection box for one or two pumps in explosive atmosphere, with level regulator (IPAE - Ref.: 2519921/22/23).

• Protection circuit-breaker with 24V transformer (439-E24).

• EUROFLOT423 float switch.
Ref.: 4 013 307 (10m)
4 020 853 (20m).

• Isolating valve.

• Check valve.

• Lifting chain.

• Wall bracket for electric cables of level regulators.

• Box to monitor direction of rotation.

• ALARMSON audible overflow alarm.

• CDE-SECU control and protection panel for three-phase versions,

	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 circuit-breaker (439-E24) or by Yn4000, Yn5000E, or COFSANIT box, with level regulators.

b) Installation

- Simplified standard installation in sump.

- Connection to installation by threaded element.

These pumps must be installed in wet sumps.

c) Packaging

- Pumps delivered packed in recyclable cardboard boxes with 4-conductor power cable 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 ≤ 0.75 kW: 115 ml.

• Single-phase motors ≤ 1.1 kW: 150 ml.
above: 190 ml.

• Three-phase motors ≤ 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

Consult us.