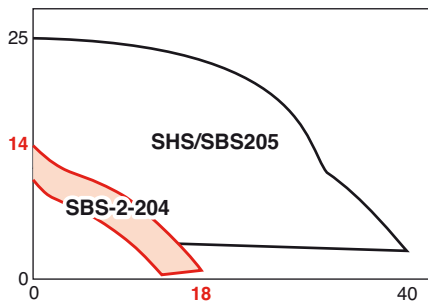


OPERATING LIMITS

Flows rates up to :	18 m ³ /h
Heads up to :	14 m
Temperature range :	+ 3° to 35°C
Free passage :	10 mm
ND of discharge orifice	R1 ^{1/2}



ADVANTAGES

- **Stainless materials.**
- **Body and impeller in glass fibre reinforced composite for resistance optimized to abrasion**
- **304 stainless steel motor.**
- **Supply with grooved connexion.**
- **Max. particle size : 10 mm.**
- **Double tightness through mechanical seals.**
- **Motor protection by two-metal probe in single-phase as in 3-phase.**

SBS-2-204

SUBMERSIBLE PUMPS

Lifting of wastewater containing little pollution

50 Hz

APPLICATIONS

Domestic or small-scale commercial use
Maximum chlorine content: 150 mg/litre

- Lifting of domestic wastewater, valve water, water containing sludges and particles, etc
- For housing, garages, car parks, etc
- Draining of boiler room sumps.
- Emptying of cellars and pools.

- Whenever the total head is high (geometric height and distance).
- Drying of cellars and land.
- Discontinuous operation – pump completely submerged.

• **SBS-2-204** -
Pumps for fixed
and mobile
installations



SBS-2-204

DESIGN

•Hydraulic part

- Single-piece, common pump-motor shaft.
- Single-stage, vertical axis.
- Semi-open impeller.
- Vertical discharge.
- Supplementary chamber filled with oil.

•Motor

- Motor protected from overloads by thermal protection.

Cable : type H07 RN-F 3G1,5
for 230V
type H07 RN-F 4G1,5
for 400V

Speed : 2900 rpm

winding 1~ : 230 V

3~ : 400 V

Frequency : 50 Hz

Insulation class : B (125°C)

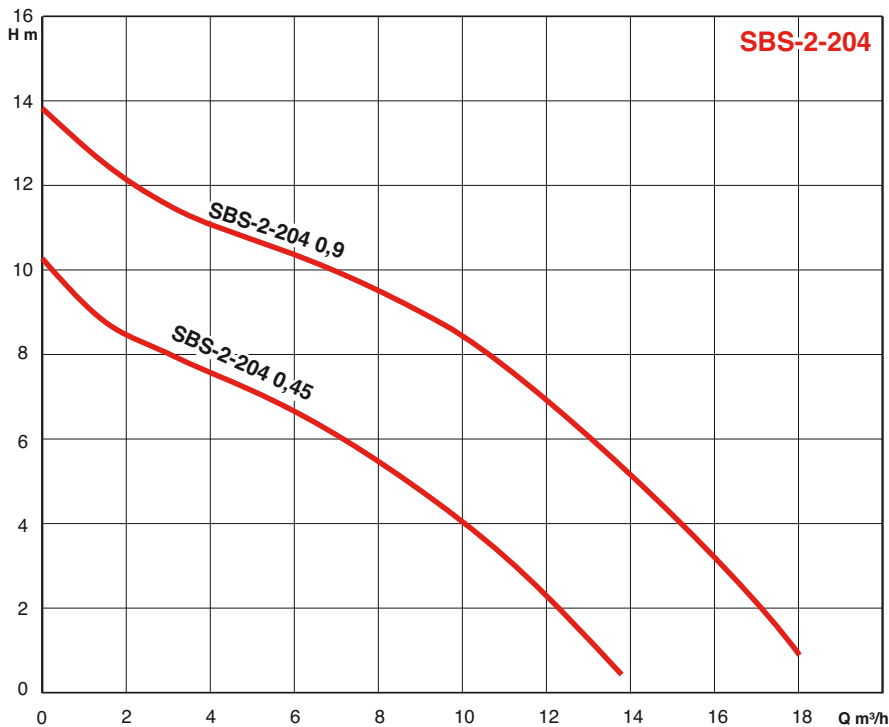
Protection index : IP68 at 10 m

Outside temperature: 3° to + 40°C

•Nominal diameter of the discharge coupling : R1^{1/2}

•Immersion depth : 5 m

HYDRAULIC PERFORMANCES AT 2900 RPM



CONSTRUCTION STANDARD

Pièces principales	Matériau
Corps de pompe	Composite chargé en fibre de verre
Fond	Composite chargé en fibre de verre
Roue	Composite
Arbre	Acier/Inox 316L
Chemise moteur	Inox 304
Joint d'étanchéité	NBR

IDENTIFICATION

SBS 2 - 2 04 0.45 M F

S: submersible	_____
B: low pressure	_____
S: semi-open impeller	_____
2 pole motor	_____
New range	_____
DN of discharge, in cm	_____
Motor power (P1), in kW	_____
M = single-phase / T = three-phase	_____
Float switch version	_____

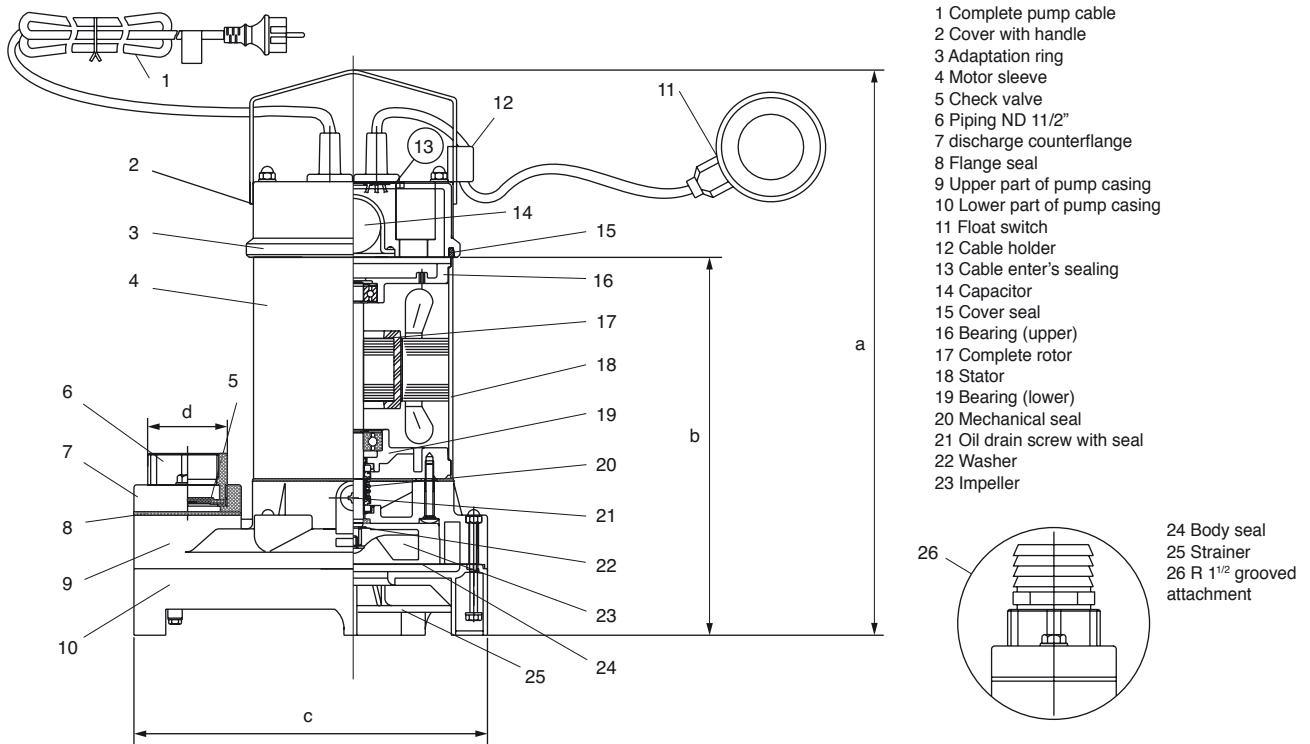
PRINCIPLE OF OPERATION

S1 Continuous	wet sump
S2 Intermittent	10 min
S3 Periodic	25%

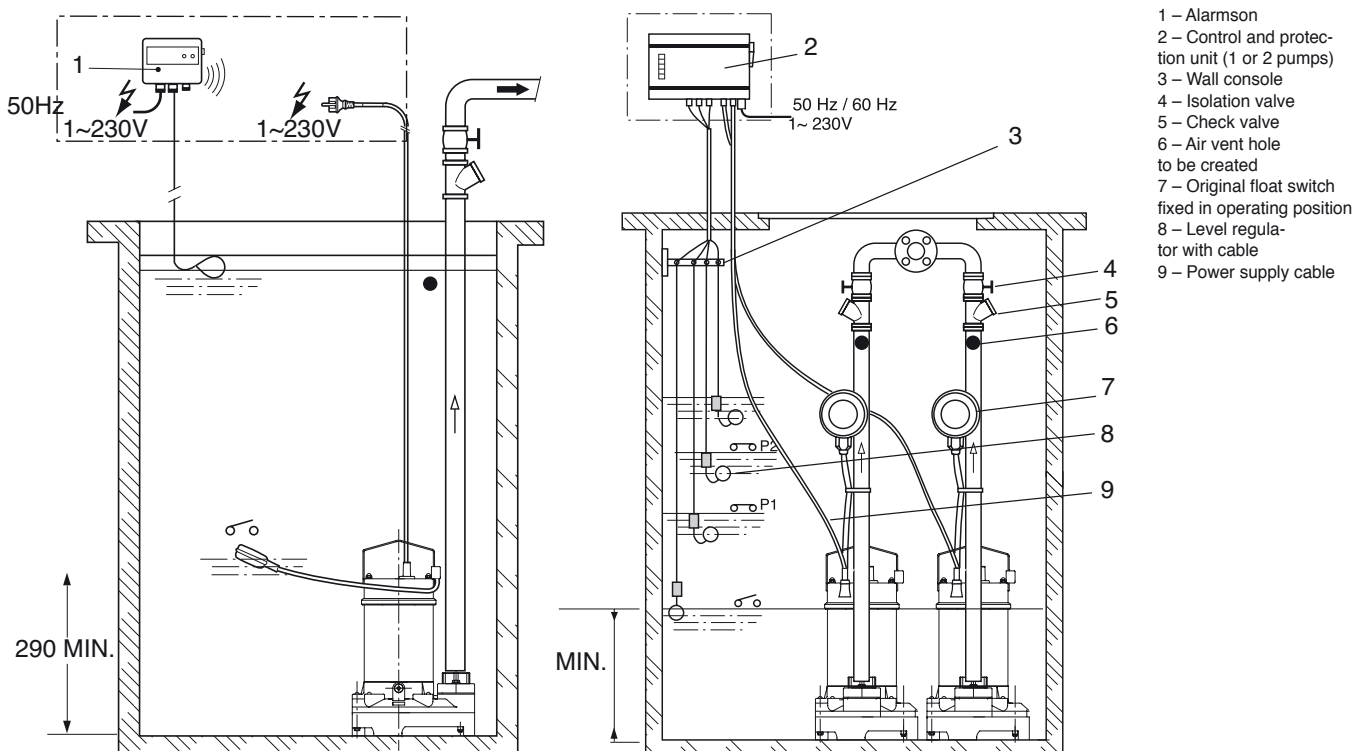
Frequency of restarts :

- recommended: 20 starts/h,
- maximum : 50 starts/h

SECTIONAL DRAWING

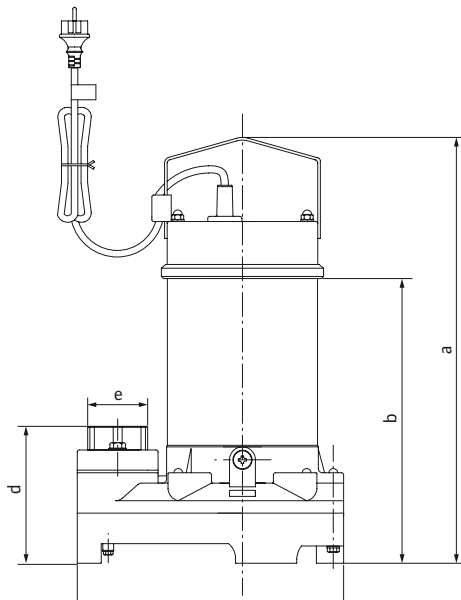


DRAWING OF INSTALLATION



SBS-2-204

ELECTRICAL DATA AND DIMENSIONS



Order reference	Power supply		Intensity	Insulating class	Dimension						
	P1	P2			a	b	c	d	e		
	1~230V	3~400V	1~230V	3~400V	mm	mm	mm	mm	mm		
	kW	kW	A	A							
SBS 2 204-0,45	0,48	0,55	0,40	2,20	1,1	B	407	273	245	145	R1"1/2
SBS 2 204-0,90	1,0	0,92	0,75	4,40	2,0	B	424	290	245	145	R1"1/2

FEATURES

a) Electrical

Single-phase 230 V - 50 Hz.
3-phase 400 V - 50 Hz.
Built-in thermal protection protects the pump against abnormal operation owing to use without water or too frequent start-ups.
Envisage into 1~ as in 3~ a control box against the lack of water.

b) Assembly

- Flooded sump installation :
 - fixed with rigid piping,
 - mobile with quick coupling and flexible pipe.
- Connection to the system either R1"^{1/2} threaded coupling or socket coupling.

c) Packaging

- Pump supplied in recyclable cardboard packaging with a 4 conductor electric cable 10 m long and a mains earth connection.

accessories :

- built-in check valve and float switch,
- 1"^{1/2} threaded connection coupling ,
- 1"^{1/2} socket coupling for flexible pipe.

ACCESSORIES SUPPLY WITH PUMP



• 1"^{1/2} threaded connection coupling for flexible pipe



• 1"^{1/2} socket coupling for flexible pipe



RECOMMENDED ACCESSORIES

- Protection disconnector
- R1"^{1/2} check valve (if the pump valve is replaced) Ref.: 4013153
- Full flow isolation valve Ref.: 4015489
- Control and protection unit for 2 pumps: Yn 4200 type
- Euroflot 423 switch (for system with Yn 4200)

- R1"^{1/2} flexible discharge pipe Ref.: 018826
- Quick coupling kit Ref.: 4027322








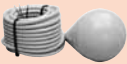

- Raceway wall bracket Ref.: 4013188
- Lifting chain for systems using flexible pipes Ref.: 4031693
- Alarmson - Ref.: 4051111



CONTROL BOXES

Boxes to control and protect

Models	YN 3000	YN 7000	EC-DRAIN
			
Application	Control based on level sensor (IPAE) in sump (not supplied)	Control of any type of pump (borehole, submersible, or booster)	Control Level for a fixed installation (in wet or dry pit)
Number of pumps			
1 pump	YN3100	YN7100	EC-DRAIN 1x4,0
2 pumps	YN3200	-	EC-DRAIN 2x4,0
Characteristics			
1x230V	yes	yes	yes
3x230V	no	yes	yes
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
IP	IP65	IP54	IP54
Level Controllers			
Float switch	yes	yes	yes
1 pump	3	1 or 2	2
2 pumps	4	no	3
IPAE piezometric sensor	yes	-	-
Level electrode	-	2 included	-

Level controllers		INSTALLATION			cable length
		Deep sump installation	Mobile installation	Fixed installation	in meters
Regulation by level electrodes		recommended	not possible	possible	sold by meter
Clear water : float EUROFLOT 423		not possible	recommended	possible	10 or 20
Waste water : float NIVO 430		not possible	possible	possible	10 or 20
IPAE piezometric sensor		possible	possible	recommended	10 or 30

