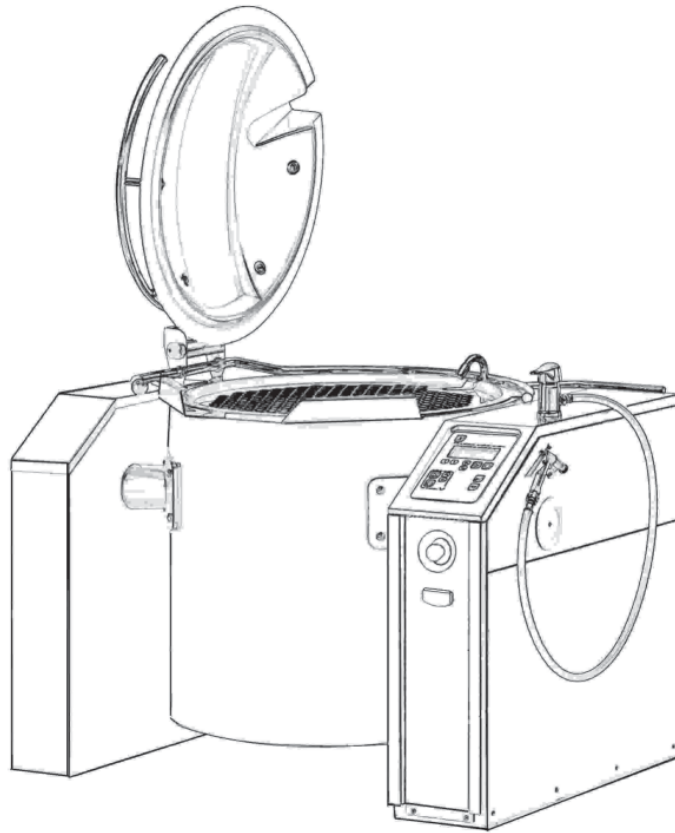


Installation instructions



Boiling pan

Smart, Smart Variomix, Smart Promix®

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DOC. NO. **ST0 47 50-02**
EDITION **10** 2010.01

General instructions

If the instructions in this and other documentation for the equipment are not followed, it could endanger the safety of the product and void the supplier's guarantee and liability for the product.

- Read the instructions in this document carefully, since they contain important safety information about installation, operating reliability, use and maintenance of the product. Keep these documents so that they are accessible to all users.
- Installation and testing must be carried out by technicians who are trained for such work, and in accordance with the manufacturer's instructions.
- The product must be installed and connected to the necessary services in accordance with the relevant standards and directives.
- All servicing, maintenance and repairs must be carried out by technicians who are trained for such work. Use only original spare parts. See the Service Instructions* and Spare Parts Catalogue*.
- This product may only be operated and maintained by trained personnel (operators).

* Not supplied. May be ordered from the supplier or the supplier's representative.



CE directives

Boiling pans are manufactured in compliance with directives MD 2006/42/EG (AFS 2008:3), LVD 2006/95/EG, EMC 2004/108/EG, PED 97/23/EG (AFS 1994:4). The machine is regarded as an appliance. The appliance consists of a CE approved safety valve (Category IV) and a CE approved pressure vessel (Category II). Procedures for assessing compliance of the appliance are drawn up in accordance with Module A. (Standards: EN13886, EN13445-1-5) and are CE labelled.



WEEE

The symbol on the products indicate that this product may **not** be treated as normal household waste, but must be disposed of the correct manner to prevent potential, negative impacts on our environment and our health. For information on recycling of this product, please contact the distributor of the product, our customer service or the garbage disposal service in the region.

Safety instructions

Switch off the power before attempting to rectify faults or operating problems.

- Press **Control switch On/Off** ①. (see Fig. 17)
- Switch off the **Main switch** (on the rear of the right column.)
- In the case of a double connection, check that both incoming cables are without current.



Warning! Electricity!

This symbol indicates the pans electrical cabinet. The door of the electrical cabinet and other cover panels may only be opened by technicians who are trained for such work.



Warning! High temperatures

This symbol warns of heat and steam. Take care during operation when high temperatures can occur.



Warning:

- Do not spray water straight at the columns or the outside of the pan.
- If water comes into contact with live components it could be fatal. Always take care when cleaning, especially when close to electrical components.
- Use a damp cloth for cleaning.

Warning! Overheating

See Operating Instructions

Installation instructions

Technical data



The rating plate

The pan's product number can be found on the rating plate, which is located on the side of the pan column and in the switching room, as well as on the Manufacturers Declaration that accompanies the machine on delivery.

Noise level: < 70 dB
Enclosure class: IP 45

Installation

Delivery

The pan is supplied as a unit comprising a right column and a pressure vessel. Accessories are supplied to order.

Incoming transport

Check that the pan can pass freely during incoming transport. When the pan is standing on the bottom of the packaging, the length measurement is **X mm**, the width measurement is **Y mm** and the height measurement is **Z mm***. The pan should be transported to the location where it is to be set up, and be lifted from the bottom of the packaging there. See instructions later in these Installation instructions.

* A supplement for any transport lift must be added

	X	Y	Z	Weight (kg)
50 L	1000	950	1110	180
100 L	1290	1180	1270	280
150 L	1590	1405	1295	340
200 L	1590	1405	1295	400
300 L	1590/1690*	1405	1295	480

* Steam heated boiling pans including left column.

Electrical connection

Electrical connection work must be carried out in accordance with all relevant standards and regulations.

Warning:

Take care during installation with consideration for any leakage current.

On installation, the pan must be connected via a main circuit breaker to keep it separate from the mains, with a break length of at least 3 mm. This can be found on the rear of the right column.

- Check the rating plate to ensure that the pan's operating voltage matches the mains voltage.
- Check that the distribution box is capable of carrying the required current and that it is adequately earthed.

- Power line(s) should be fused. The fuse(s) should have the required rated current in order to deliver the required power to the machine.
- The machine should also be connected to earth in a potential equalisation system. The connection screw is located at the bottom on the rear of the right column and is marked with a symbol.
- If you are in any doubt about the effectiveness of the earthing provisions then the installation must be checked by a qualified electrician.
- Connect the electrical cables as indicated by the cable markings and wiring diagram.
- The connection cable ought to be of oil resistant type and fulfil EEC 73/23 recommendations. The manufacturer recommends type HO7RN-F.
- Once the machine has been connected and the function switched on, you should check that the mains voltage does not fluctuate more than 10% from the rated voltage.
- Pans with agitators contain frequency converters with interference elimination filters. When starting up the machine, a brief leakage current can result in earth leakage circuit breakers connected to the machine being tripped. If the pan is connected to an earth leakage circuit breaker, this should be of type class A for optimum operational reliability.

For other questions concerning the frequency converter, please refer to the Operating Manual enclosed with it.

Phase sequence

When connecting electrical cable(s) check that the tilting motor is moving in the right direction.

Tilting function:

Follow the symbols on the panel for the tilting function. (See Operating Instructions.)

Testing the tilting function:

Press the button **Control switch On/Off** ① (see Fig. 17). Control current to the pan is now switched on. Press the button briefly to tip the pan and check that the movement corresponds with the symbol. If this is not the case, turn two phases on the incoming cable (switch Q2).

Warning:

The tilting device and other vital parts of the machine can be damaged if the machine's movement does not correspond with the symbols.

Technical specification

Type	Voltage	Model	
9F23217200	400V 3N ~ 50	SM	50 L
97 67 00 01-x1 Steam	230V 1N ~ 50	S	50 L
97 67 00 02-x1	230V 3 ~ 50	S	50 L
9F232117700	400V 3N ~ 50	SV	50 L
97 67 00 11-x1 Steam	230V 1N ~ 50	V	50 L
97 67 00 12-x1	230V 3 ~ 50	V	50 L
9F23217300	400V 3N ~ 50	SM	100 L
97 67 02 01-x1 Steam	230V 1N ~ 50	S	100 L
97 67 02 02-x1	230V 3 ~ 50	S	100 L
9F23217800	400V 3N ~ 50	SV	100 L
97 67 02 11-x1 Steam	230V 1N ~ 50	V	100 L
97 67 02 12-x1	230V 3 ~ 50	V	100 L
9F23218200	400V 3N ~ 50	SP	100 L
97 67 02 21-x1 Steam	400V 3N ~ 50	P	100 L
97 67 02 22-x1	230V 3 ~ 50	P	100 L
9F23217400	400V 3N ~ 50	SM	150 L
97 67 03 01-x1 Steam	400V 3N ~ 50	S	150 L
97 67 03 02-x1	230V 3 ~ 50	S	150 L
9F23217900	400V 3N ~ 50	SV	150 L
97 67 03 11-x1 Steam	400V 3N ~ 50	V	150 L
97 67 03 12-x1	230V 3 ~ 50	V	150 L
9F23218300	400V 3N ~ 50	SP	150 L
97 67 03 21-x1 Steam	400V 3N ~ 50	P	150 L
97 67 03 22-x1	230V 3 ~ 50	P	150 L
9F23217500	400V 3N ~ 50	SM	200 L
97 67 04 01-x1 Steam	400V 3N ~ 50	S	200 L
97 67 04 02-x1	230V 3 ~ 50	S	200 L
9F23218000	400V 3N ~ 50	SV	200 L
97 67 04 11-x1 Steam	400V 3N ~ 50	V	200 L
97 67 04 12-x1	230V 3 ~ 50	V	200 L
9F23218400	400V 3N ~ 50	SP	200 L
97 67 04 21-x1 Steam	400V 3N ~ 50	P	200 L
9F23217600	400V 3N ~ 50	SM	300 L
97 67 05 01-x1 Steam	400V 3N ~ 50	S	300 L
97 67 05 02-x1	230V 3 ~ 50	S	300 L
9F23218100	400V 3N ~ 50	SV	300 L
97 67 05 11-x1 Steam	400V 3N ~ 50	V	300 L
97 67 05 12-x1	230V 3 ~ 50	V	300 L
9F23218500	400V 3N ~ 50	SP	300 L
97 67 05 21-x1 Steam	400V 3N ~ 50	P	300 L
97 67 05 22-x1	230V 3 ~ 50	P	300 L

See also Page 21.

- (SM)** Smart = Boiling pan without agitator
- (SV)** Smart Variomix = Boiling pan with Variomix agitator
- (SP)** Smart Promix® = Boiling pan with Promix® agitator
- (S)** Standard Line = Boiling pan without agitator
- (V)** Variomix = Boiling pan with Variomix agitator
- (P)** Promix® = Boiling pan with Promix® agitator

Electrically heated boiling pans

Model	Volume L	Heating kW	Tilting motor kW	Agitator motor kW	Total power kW	
					Q1	Q2
SM	50	15,0	0,19	-	15,0	-
SV	50	15,0	0,19	0,75	15,8	-
SM	100	22,5	0,19	-	22,5	-
SV	100	22,5	0,19	1,5	24,0	-
SP	100	22,5	0,19	2,2	24,7	-
SM	150	30,0	0,37	-	30,0	-
SV	150	30,0	0,37	1,5	31,5	-
SP	150	30,0	0,37	2,2	32,2	-
SM	200	37,5	0,37	-	37,5	-
SV	200	37,5	0,37	2,2	25,0	14,7
SP	200	37,5	0,37	3,0	25,0	15,5
SM	300	50,0	0,37	-	25,0	25,0
SV	300	50,0	0,37	2,2	25,0	27,2
SP	300	50,0	0,37	3,0	25,0	28,0

Model	Volume L	230V 3 ~ 50 **				400V 3N ~ 50/60 *			
		Max phase current		Max fuse		Max phase current		Max fuse	
		Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
SM	50	38	-	50	-	22	-	25	-
SV	50	48	-	63	-	32	-	35	-
SM	100	56	-	63	-	33	-	35	-
SV	100	72	-	80	-	48	-	63	-
SP	100	76	-	80	-	39	-	50	-
SM	150	75	-	80	-	44	-	50	-
SV	150	38	54	50	63	59	-	63	-
SP	150	38	58	50	63	50	-	63	-
SM	200	63	31	80	50	55	-	63	-
SV	200	63	51	80	63	36	25	50	35
SP	200	63	57	80	63	36	27	50	35
SM	300	63	63	80	80	36	36	50	50
SV	300	63	83	80	100	36	43	50	63
SP	300	63	89	80	100	36	45	50	63

* The connection lead may be at most 16 mm² to have room in the connection switch (Q1 and Q2).

** The connection lead may be at most 32 mm² (over 80A) to have room in the connection switch (Q1 and Q2).

Steam-heated boiling pans

Model	Volume L	Heating kg/h	Tilting motor kW	Agitator motor kW	Total power kW	
					Q1	Q2
SM	50	24	0.19	-	0.2	-
SV	50	24	0.19	0.75	1.0	-
SM	100	36	0.19	-	0.2	-
SV	100	36	0.19	1.5	1.7	-
SP	100	36	0.19	2.2	2.5	-
SM	150	47	0.37	-	0.5	-
SV	150	47	0.37	1.5	2.0	-
SP	150	47	0.37	2.2	3.0	-
SM	200	59	0.37	-	0.5	-
SV	200	59	0.37	2.2	3.0	-
SP	200	59	0.37	3,0	3.5	-
SM	300	78	0.37	-	0.5	-
SV	300	78	0.37	2.2	3.0	-
SP	300	78	0.37	3,0	3.5	-

Model	Volume L	230V 1N ~ 50 *				400V 3N ~ 50/60 *			
		Max phase current		Max fuse		Max phase current		Max fuse	
		Q1	Q2	Q1	Q2	Q1	Q2	Q1	Q2
SM	50	2.0	-	16	-	-	-	-	-
SV	50	11	-	20	-	-	-	-	-
SM	100	2.0	-	16	-	-	-	-	-
SV	100	11	-	20	-	-	-	-	-
SP	100	-	-	-	-	9	-	16	-
SM	150	-	-	-	-	3	-	16	-
SV	150	-	-	-	-	14	-	20	-
SP	150	-	-	-	-	9	-	16	-
SM	200	-	-	-	-	3	-	16	-
SV	200	-	-	-	-	10	-	16	-
SP	200	-	-	-	-	12	-	20	-
SM	300	-	-	-	-	3	-	16	-
SV	300	-	-	-	-	10	-	16	-
SP	300	-	-	-	-	12	-	20	-

* The connection lead may be at most 10 mm² to have room in the connection switch (Q1).

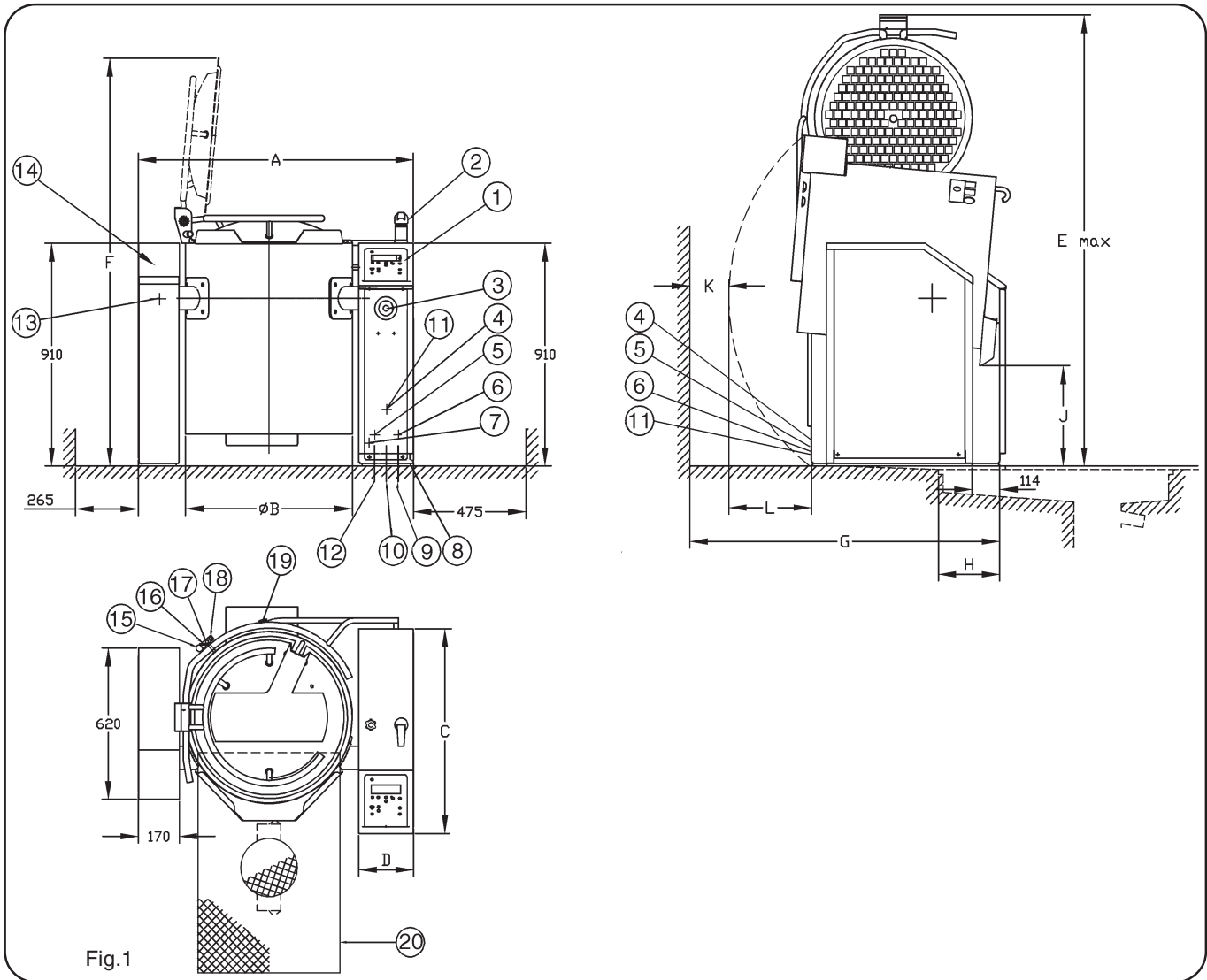


Fig.1

Dimensions and connection points, (see Fig 1)

Model	Volume	Dimensions										
		L	A	ØB	C	D	E	F	G	H	J	K
Pan	50	990	538	840	230	1665	-	1170	250	430	200	175
Accessories grille	50	990	538	840	230	1665	1580	1170	250	430	200	175
Pan	100	1160	705	840	230	1830	-	1345	305	410	200	350
Accessories grille	100	1160	705	840	230	1830	1740	1345	305	410	200	350
Pan	150	1300	816	990	250	1940	-	1410	305	410	200	265
Accessories grille	150	1300	816	990	250	1940	1850	1410	305	410	200	265
Pan	200	1345	867	990	250	1990	-	1480	305	410	200	335
Accessories grille	200	1345	867	990	250	1990	1910	1480	305	410	200	335
Pan	300	1495	1018	990	250	2140	-	1530	305	410	200	385
Accessories grille	300	1495	1018	990	250	2140	2030	1530	305	410	200	385

1. Control panel
2. Hand shower (accessory)
3. Emergency stop
4. Electrical connection from rear
5. Water connection, hot water from rear DN15(G1/2") Internal thread
6. Water connection, cold water from rear:
SM, SV, SP DN15(G1/2") Int.thread
With jacket cooling or flow meter:
DN20(G3/4") Int.thread
7. Equipotential screw
8. Foundation frame or mounting frame (accessory)
9. Water connection, cold water from floor:
SM, SV, SP DN15(G1/2") Int.thread
With jacket cooling or flow meter:
DN20(G3/4") Int.thread
10. Water connection, hot water from floor DN15(G1/2") Int.thread
11. Steam connection from rear 110-170 kPa (1,1-1,7 bar) DN20(G3/4") Int.thread
12. Electrical connection from floor
13. Condensation connection DN20(G3/4") Internal thread
14. Left column (accessory)
15. Steam trap
16. Manometer
17. Safety valve
18. Hydrostatic testing tap
19. Water connection, filling pressure vessel DN15(G1/2") Internal thread
20. Floor drain (accessory)

Frames and fixtures

Foundation or mounting frames and fixtures are supplied disassembled. These should be assembled according to the following instructions.

- Check that the dimensions of the supplied frames and number marking on the various fixtures agree with the information in this installation instruction.

- Frames (D/E) and fixtures (B) are screwed together with the enclosed screws M6S 12x20 (see Fig. 3A-B).
- **NOTE:** Check that: Measure R, between the wall and the mounting frames, is correct to an accuracy of +/- 2 mm. (See Fig. 4, 6 and 9)
- Angle between fixtures and frames is 90° (check with set square), (see Fig. 2).

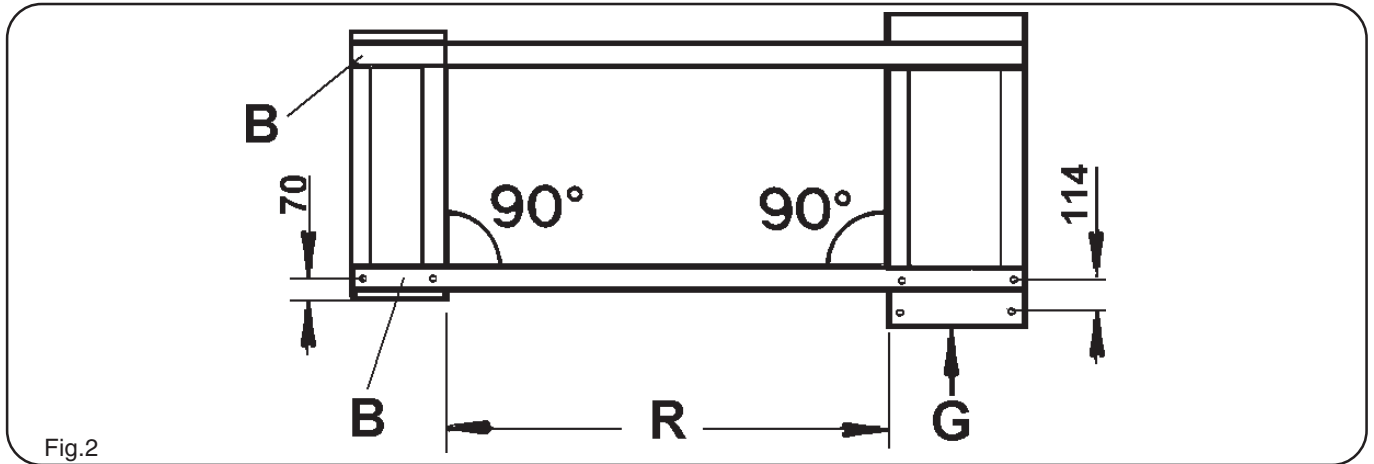


Fig.2

Measure R see subsequent pages

G: Front edge of frame.

Model	Foundation frame Product number	Mounting frame Product number
Left	9F92803100	9F92803400
Right 50-100L	9F92803200	9F92803500
Right 150-300L	9F92803300	9F92803600

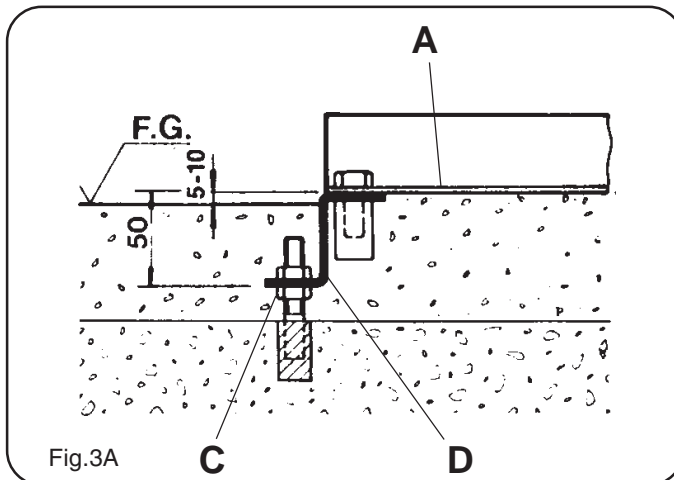


Fig.3A

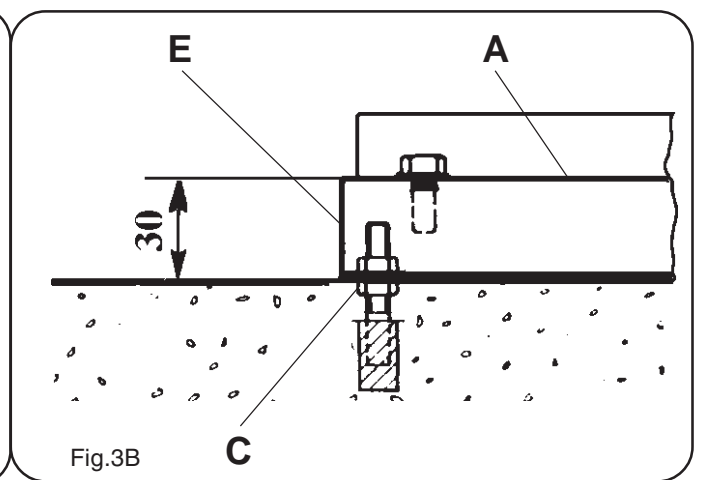


Fig.3B

Foundation frames (see Fig.3A)

The foundation frames (D) are cast:

- So that level A is 5-10 mm above the highest point of the finished floor
- Horizontal in all directions
- The last part of the frame must be filled with compound or similar up to Level A
- Expander bolt (C), chemical anchor or equivalent **M 10**, (not supplied)
Min. extraction force 500 kp = 4900 N

Mounting frames (see Fig.3B)

The mounting frames (E) are secured:

- With expander bolt (C), chemical anchor or equivalent **M 10**, (not supplied)
Min. extraction force 500 kp = 4900 N
- **NOTE:** The frames are at the same level
- Horizontal in all directions
- The frame must be filled with compound or similar up to Level A

Single stand 50 L and 100 L

1. Fixtures:
Product number: 9F92802900
2. Alternative direction of drainage

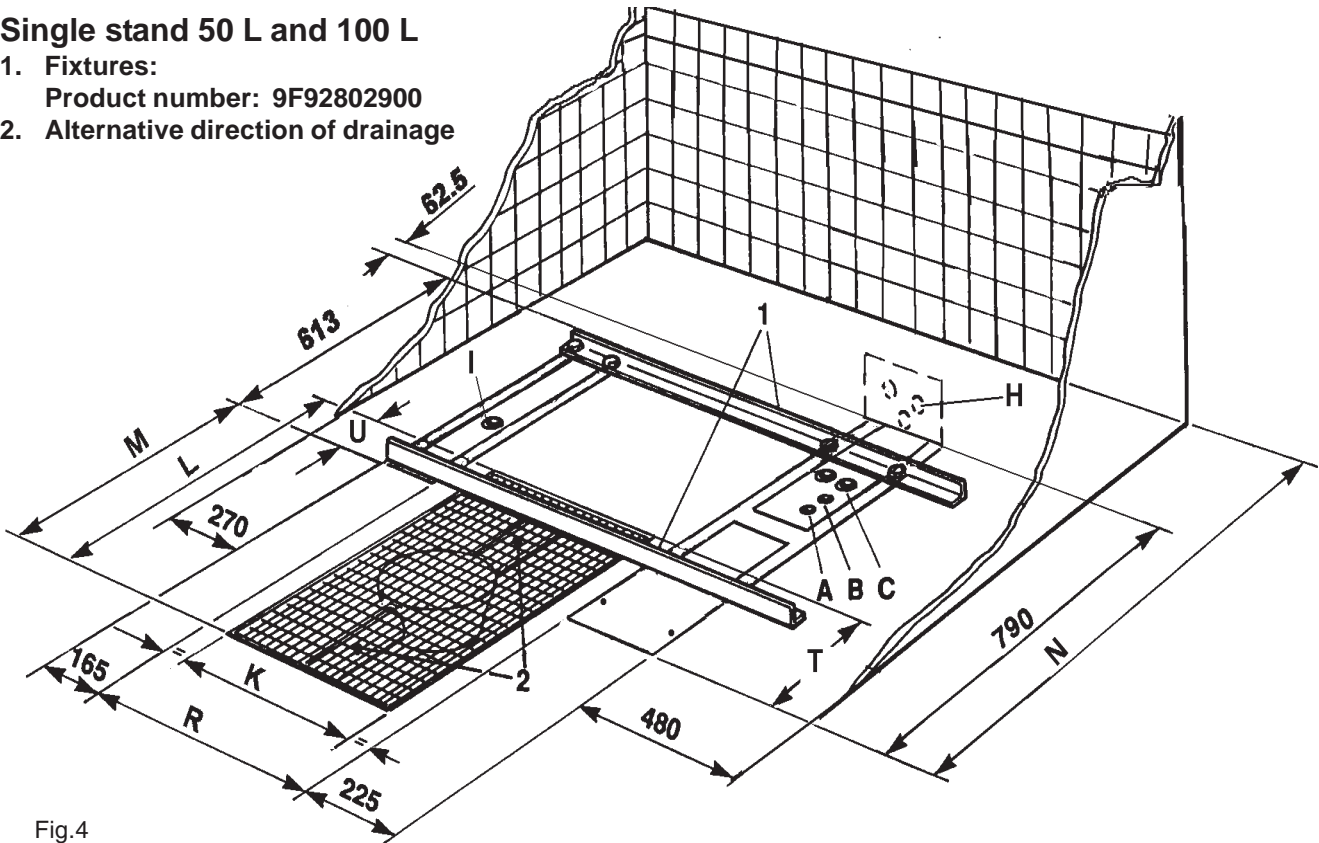


Fig.4

Right column 50 L and 100 L

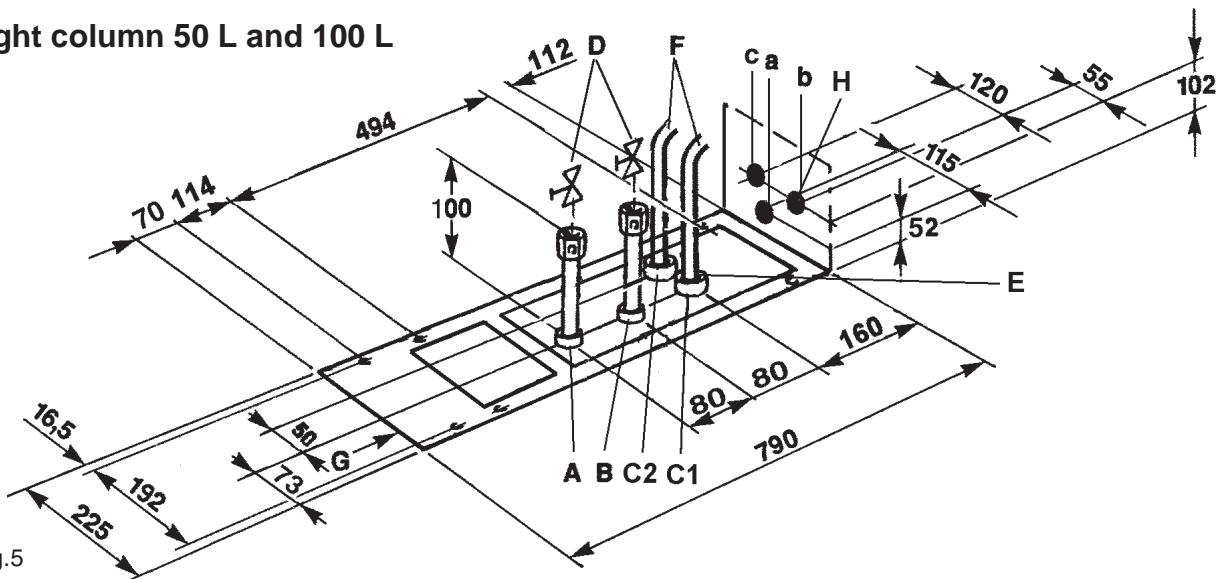


Fig.5

Single stand 50 L, 100 L (see Fig. 4-5 and Fig.8)

Connections:

- A Hot water DN15 (G 1/2") internal thread
- B Cold water
- SM, SV, SP DN15(G1/2") internal thread
- With jacket cooling or flow meter:
DN20(G3/4") Internal thread

- C Electrical cable
- D Shut-off valves (not supplied)
- E Joints between electrical cables and pipes are sealed
- F Min. cable length 0.75 m
- G Front edge of frame
- H Steam connection, 110-170 kPa (1,1-1,7 bar)
DN20(G3/4") Internal thread (Steam-heated pans)
- I Condensation connection (Steam-heated pans)
DN20(G3/4") Internal thread

In case of alternative connection from the rear:

- a Hot water DN15 (G 1/2") internal thread
- b Cold water
- SM, SV, SP DN15(G1/2") internal thread
- With jacket cooling or flow meter:
DN20(G3/4") Internal thread
- c Electrical cable

	50 L	100 L
R	595	763
K	400	600
L	700	900
M	565	710
N	1170	1345
T	250	305
U	135	190

Single stand 150 L, 200 L and 300 L

1. Fixtures:
Product number: 9F92803000
2. Alternative direction of drainage

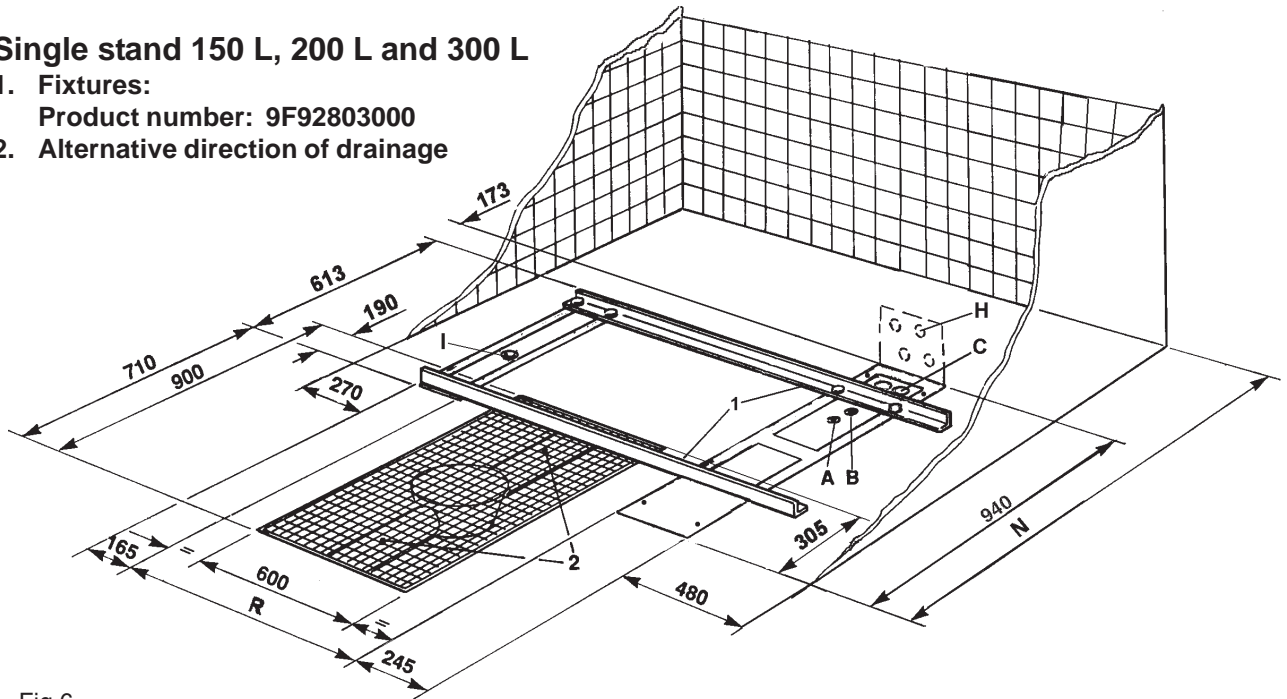


Fig.6

Right column 150 L, 200 L and 300 L

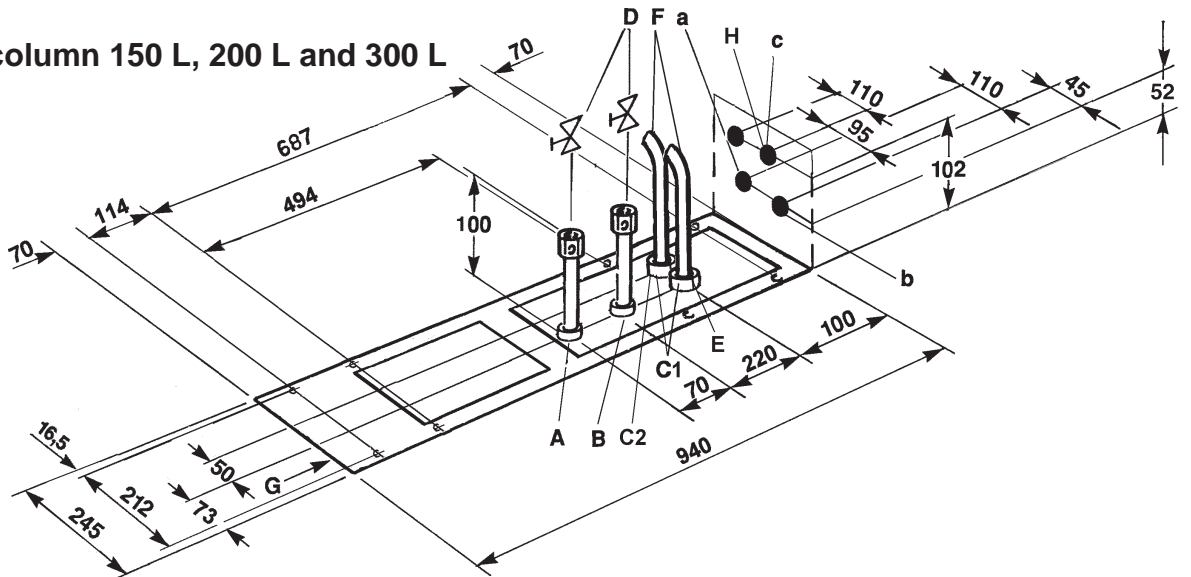


Fig.7

Single stand 150 L, 200 L and 300 L (see Fig.6-8)

Connections:

A Hot water DN15 (G 1/2") internal thread

B Cold water

SM, SV, SP DN15(G1/2") Int.thread

With jacket cooling or flow meter:

DN20(G3/4") Internal thread

C Electrical cable

D Shut-off valves (not supplied)

E Joints between electrical cables and pipes are sealed

F Min. cable length 0.75 m

G Front edge of frame

H Steam connection, 110-170 kPa (1,1-1,7 bar)

DN20(G3/4") Internal thread (Steam-heated pans)

I Condensation connection (Steam-heated pans)

DN20(G3/4") Internal thread

In case of alternative connection from the rear:

a Hot water DN15 (G 1/2") internal thread

b Cold water

SM, SV, SP DN15(G1/2") Int.thread

With jacket cooling or flow meter:

DN20(G3/4") Internal thread

c Electrical cable

	150 L	200 L	300 L
R	883	927	1079
N	1410	1480	1530

Left column for all sizes

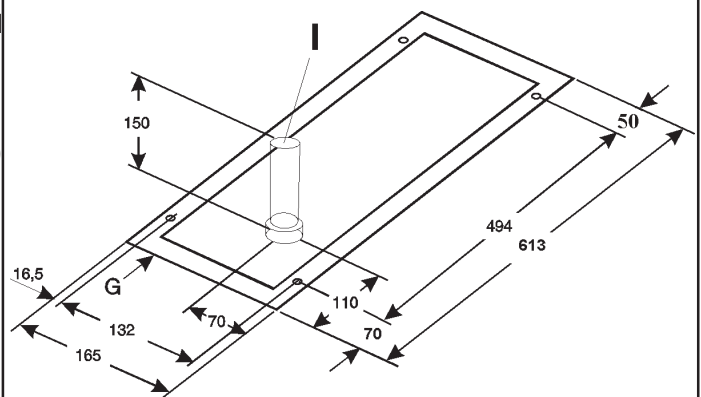


Fig.8

Multi-stand

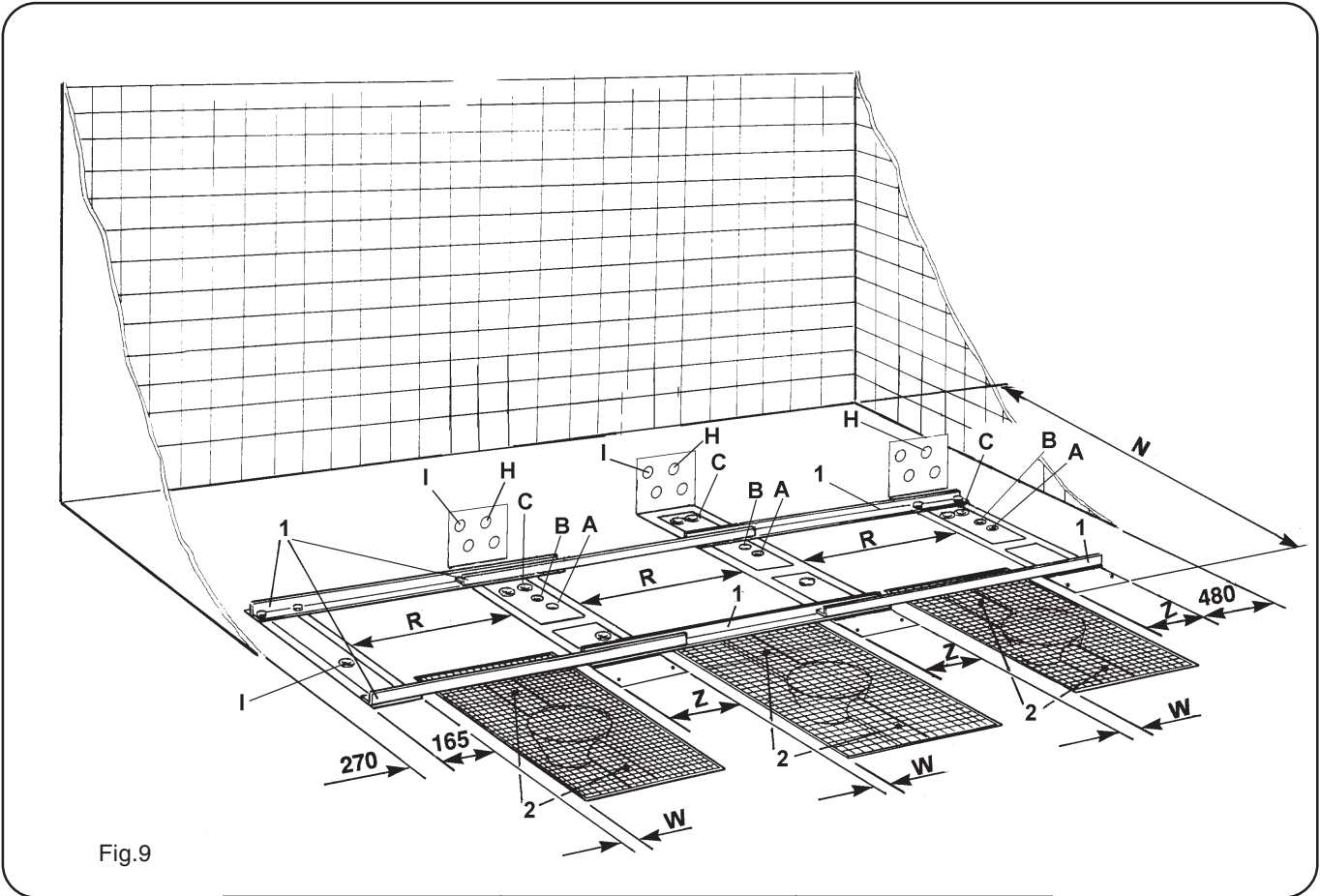


Fig.9

	50L	100L	150L	200L	300L
N	1170	1345	1410	1480	1530
R	595	763	883	927	1079
Z	225		245		
W	98	82	142	164	240
1	Prod.no: 9F92802900		Prod.no: 9F92803000		
2	Alternative direction for waste				

Measure **(N)** is selected according to the largest pan in the multi-stand.

Multi-stand (see Fig.9-11)

Connections:

A Hot water DN15 (G 1/2") internal thread

B Cold water

SM, SV, SP DN15(G1/2") Int.thread

With jacket cooling or flow meter:

DN20(G3/4") Internal thread

C Electrical cable

H Steam connection, 110-170 kPa (1,1-1,7 bar)

DN20(G3/4") Internal thread (Steam-heated pans)

I Condensation connection (Steam-heated pans)

DN20(G3/4") Internal thread

NOTE: Connections for appropriate pan in the right column.

Condensation connection always in the column to the left of the pan.

Right column 50-100 L in multi-stand

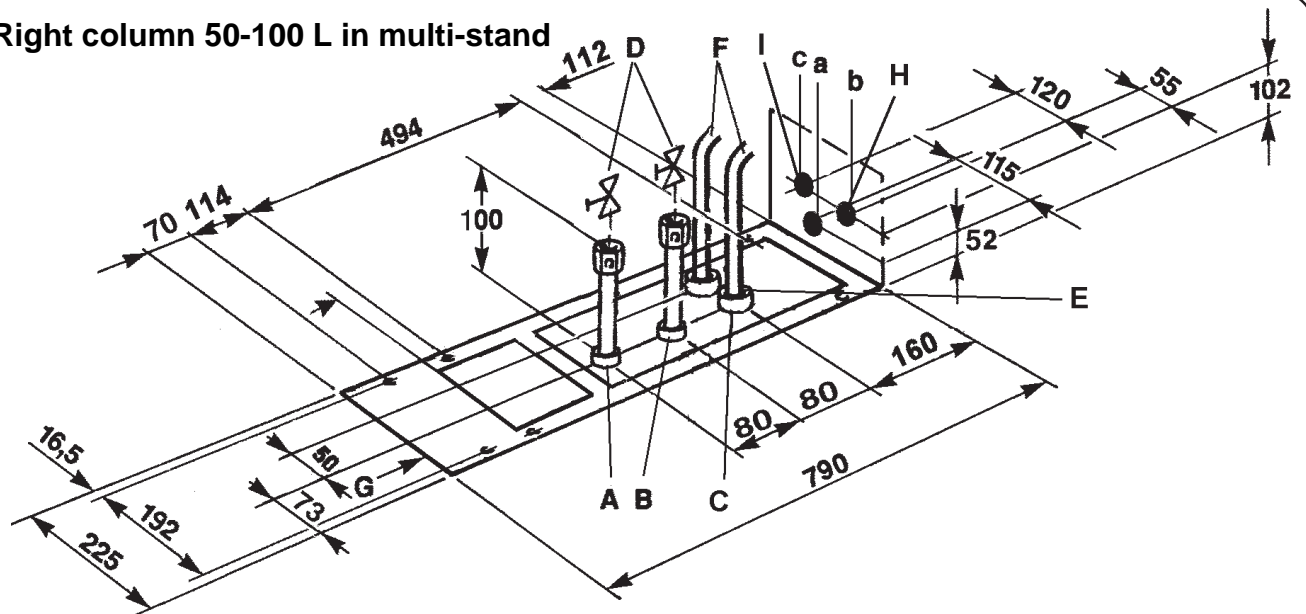


Fig.10

Right column 150-300 L in multi-stand

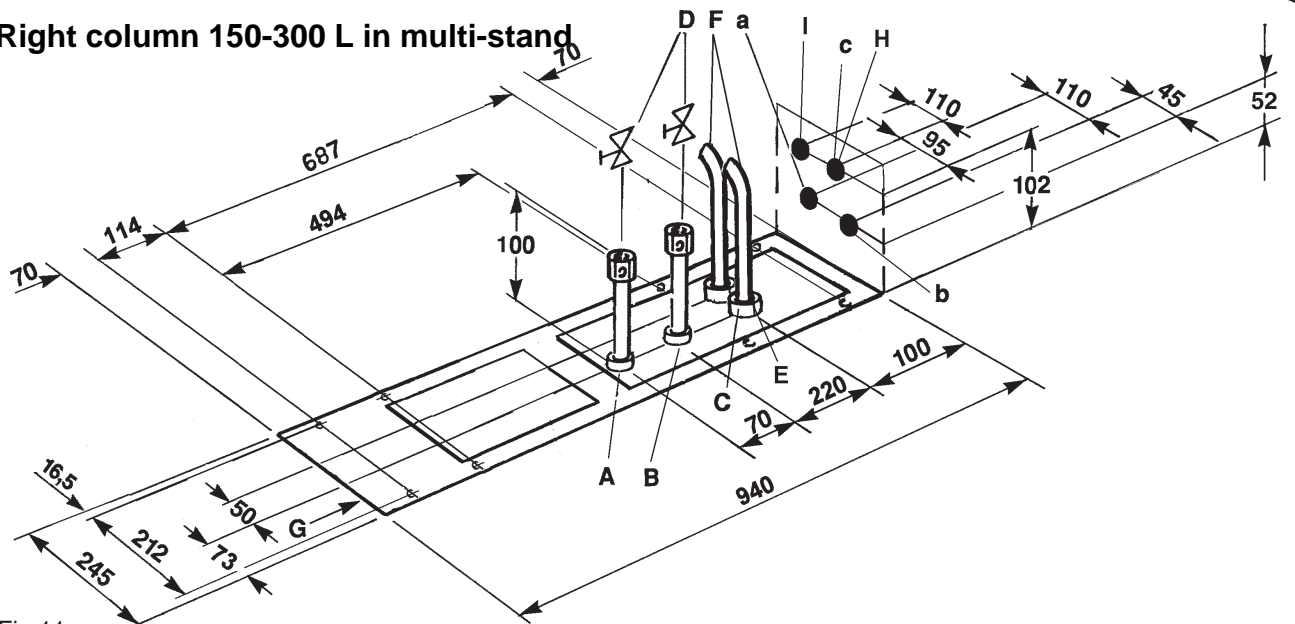


Fig.11

Multi-stand (see Fig.9-11)

Connections:

A Hot water DN15 (G 1/2") internal thread

B Cold water

SM, SV, SP DN15(G1/2") Int.thread

With jacket cooling or flow meter:

DN20(G3/4") Internal thread

C Electrical cable

D Shut-off valves (not supplied)

E Joints between electrical cables and pipes are sealed

F Min. cable length 0.75 m

G Front edge of frame

H Steam connection, 110-170 kPa (1,1-1,7 bar)

DN20(G3/4") Internal thread (Steam-heated pans)

I Condensation connection (Steam-heated pans)

DN20(G3/4") Internal thread

In case of alternative connection from the rear:

a Hot water DN15 (G 1/2") internal thread

b Cold water

SM, SV, SP DN15(G1/2") Int.thread

With jacket cooling or flow meter:

DN20(G3/4") Internal thread

c Electrical cable

Installation of new* and old** pans in multi-stand

* Old pans refers to pans with product numbers in the following ranges:

9F23210300 to 9F23216400
9F23217200 to 9F23218500

** Old pans refers to pans with product numbers in the following ranges:

97 66 46 XX-X1 to 97 66 49 XX-X1
97 66 82 XX-X1 to 97 66 90 XX-X1

Old pan to left:

Order new pan with specially adapted, factory-installed left shaft, with product numbers as set out below:

Size	Product number
50L	16 10 36 00-05
100L	16 10 37 00-05
150L	16 10 38 00-05
200L	16 10 39 00-05
300L	16 10 40 00-05

or replace the left shaft on a new pan:

Size	Product number
50L	16 10 36 00-01
100L	16 10 37 00-01
150L	16 10 38 00-01
200L	16 10 39 00-01
300L	16 10 40 00-01

Also order cover panel **9F92800400** to cover shaft hole to the right.

Old pan to right:

Order adapter **9F92804900** so that the old pan's shaft will fit.

Frames

Order foundation frame as described below:

Size	Product number
Left	9F92803100
Right 50-100L	9F92803200
Right 150-300L	9F92803300

or mounting frame according to the table below:

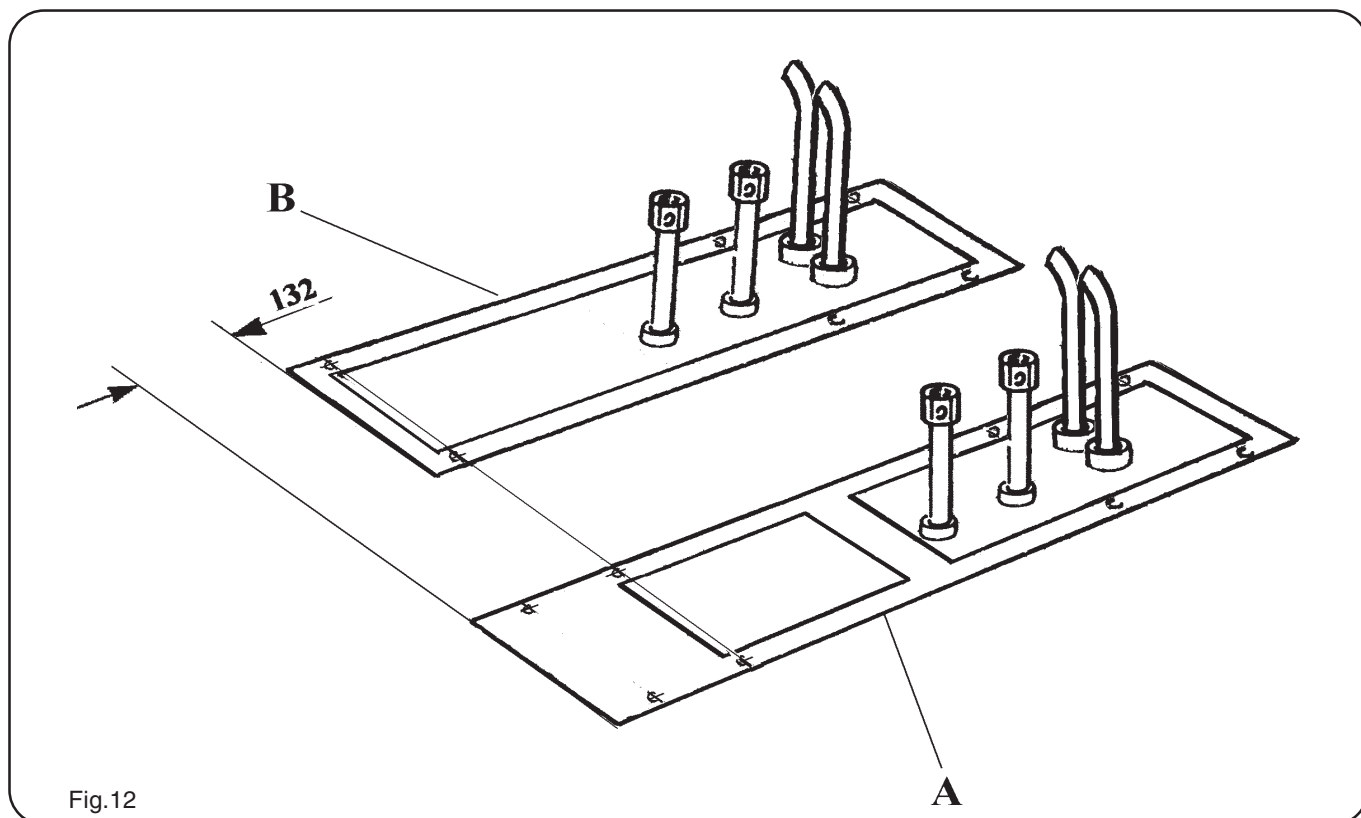
Size	Product number
Left	9F92803400
Right 50-100L	9F92803500
Right 150-300L	9F92803600

NOTE:

The front edge of the new wall or mounting frames should be **132 mm** in front of the old wall or mounting frames (See Fig. 12).

A= New frame

B= Old frame



Installation of pans back to back

To avoid a collision between pans when tilting, check the distance between frames according to the table below (see Fig. 13)

Size		Dimensions
X	+ Y	L
50	+ 50	2030
50	+ 100	2200
50	+ 150	2265
50	+ 200	2335
50	+ 300	2385
100	+ 100	2375
100	+ 150	2440
100	+ 200	2510
100	+ 300	2560
150	+ 150	2505
150	+ 200	2575
150	+ 300	2625
200	+ 200	2645
200	+ 300	2695
300	+ 300	2745

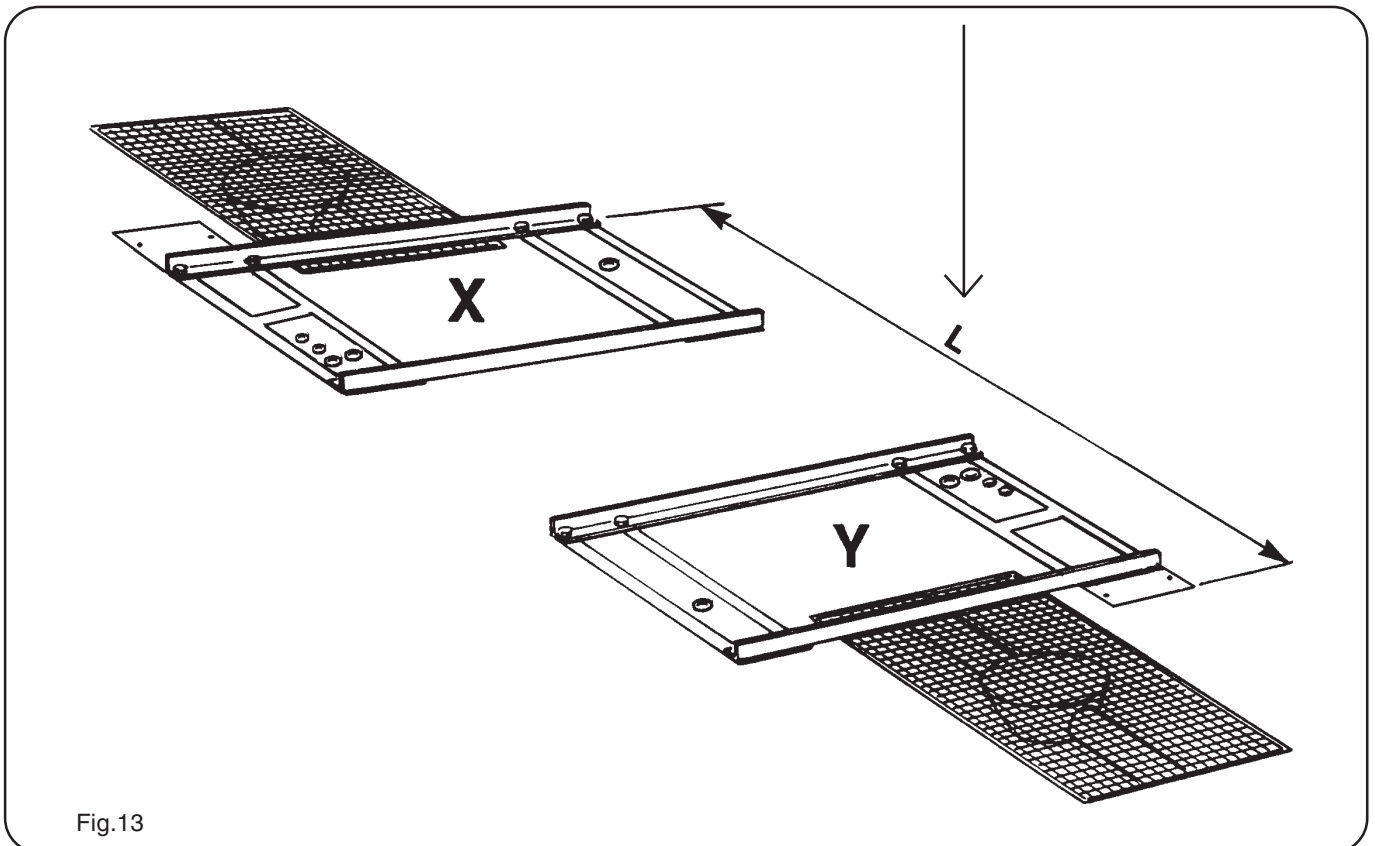


Fig.13

Installation of boiling pan

- Dismantle right columns front, side plate and rear
- Disconnect the transport protection from the support leg
- Remove the right column from the bottom of the packaging
- Disconnect the vessels transport leg
- Lift the pan at the appropriate lifting points (e.g. the shaft between vessel and column and at the vessel's transport leg (M) see Fig. 14)

NOTE: The centre of gravity is pushed forwards. For supplementary weight data, See page 4.

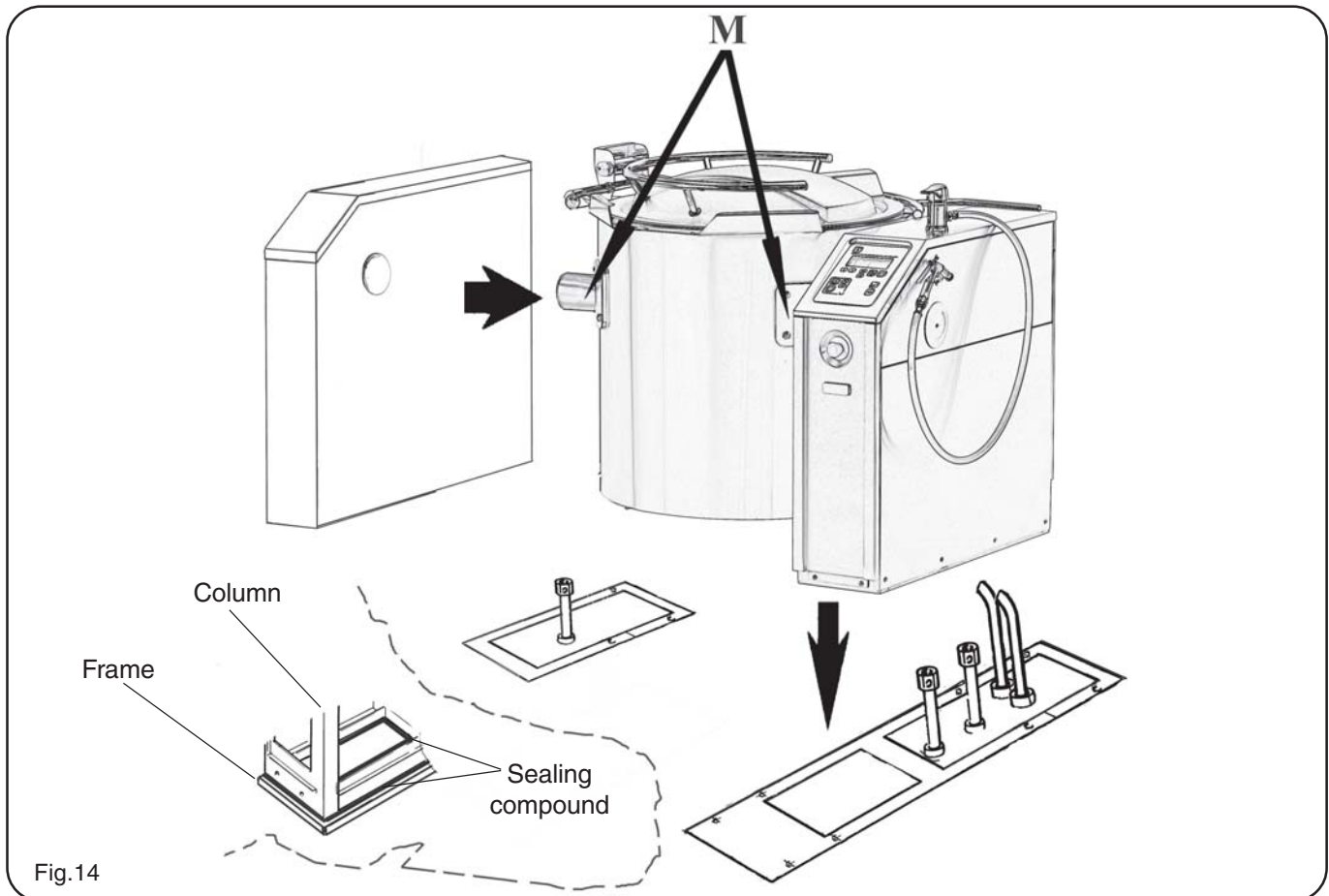
- Take care with the cables and the front of the right column when dismantling and transporting.
- Lift the pan into position
- Screw the right column and the left column onto the wall or mounting frames

- Lift the next pan into place and screw in
- Connect the electrical cables and **Check** that the tip motor is running in the right direction
- Connect the cold and hot water lines

NOTE: If the pan has a flow meter, the maximum flow will be 45 l/minute.

- Incoming water lines are supplied with shut-off valves, which are installed at the bottom of the column as close to the floor as possible; these are not supplied.

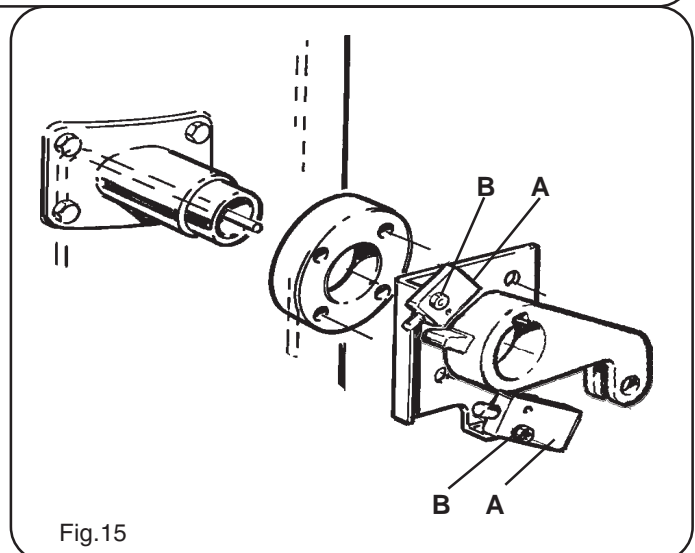
NOTE: Ensure that there is a tight fit between the column and the wall or mounting frame. Seal with soft compound, for example, on the inside of the column facing the frame. If necessary, the outside of the column can also be sealed to the frame. (see Fig. 14)



Adjustment of the boiler pans position

(See Fig.15)

The pan's position is adjusted with the aid of the two limit position switches (A). Adjust by undoing nuts (B) and tightening again. Check that the pan stops in the horizontal position, which is performed most easily with a spirit level. Check the pans tilting position so that all of the pans content can run out.



Lid and Grille adjustment (see Fig.16)

Lid adjustment

The lid is supplied loose from the factory. The lid is to be fitted and properly adjusted on installation. You can adjust vertically, laterally and in depth. Undo the screw (C) and adjust the lid vertically. Lock the screw (C) using Loctite type 275. Adjust the lid laterally using the screws (D). Use the locking ring (E) to adjust the lid in depth.

In order to open the lid with a gentler or firmer movement, adjust the position of the gas spring (G) in mount (F).

Grille adjustment

The agitator should stop when the lid/grille is opened. It should stop when the gap between the pan vessel and the grille exceeds **40 mm**.

1. Close the pan lid.
2. Connect a buzzer to the circuit breaker (N).
3. Screw on the cam (J) to ensure the circuit breaker's roller is positioned in the centre of the cam.
4. Adjust the circuit breaker to ensure it is in the groove and breaks exactly when you open the lid (the buzzer stops).

Adjust the lid spring with protective grille

To close the lid properly and with a gentle movement, adjust the tension of the lid spring by undoing screws (K) and turning mount (L) to the next hole on the spring holder (M).

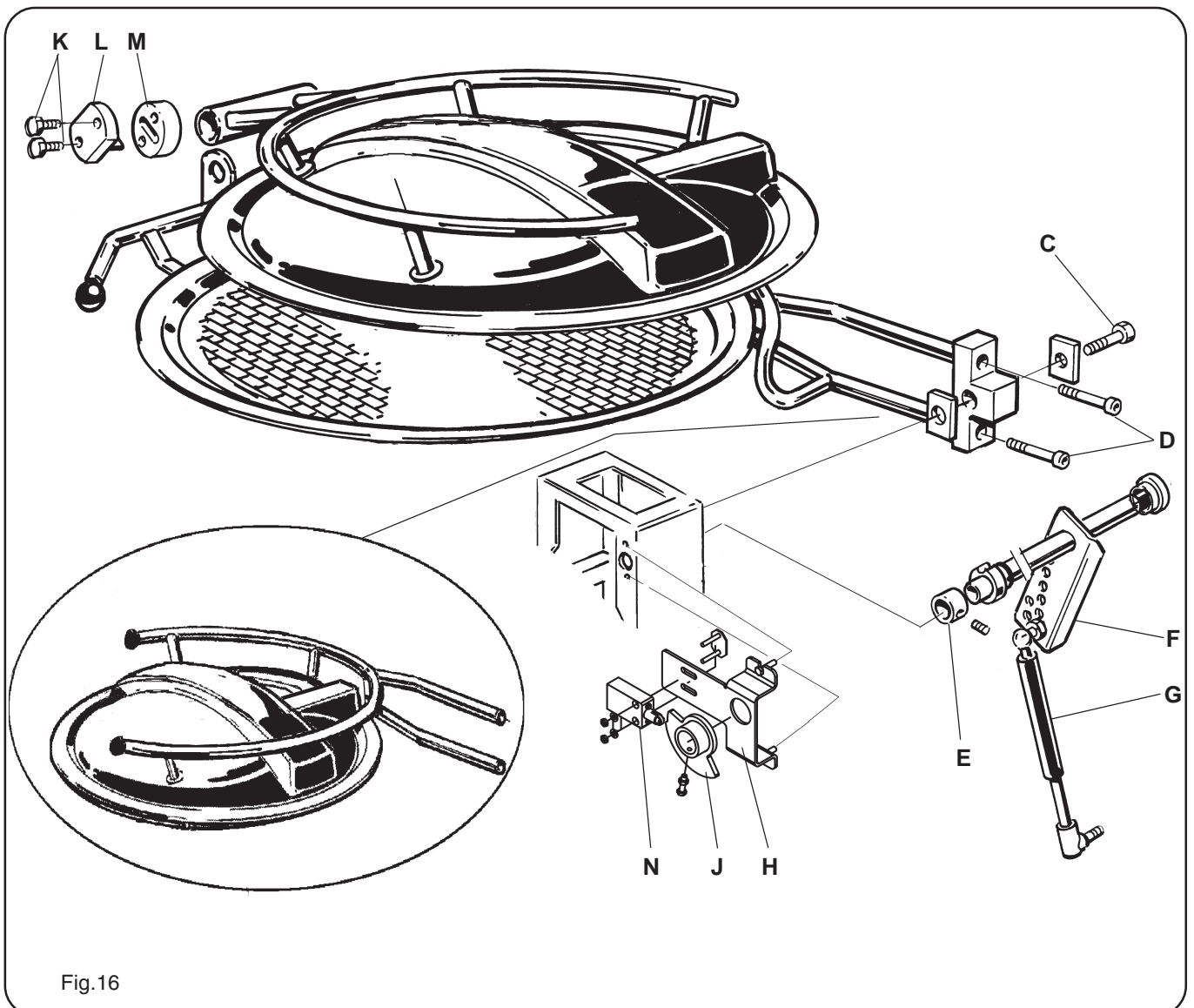


Fig.16

Water connection

Incoming water must be drinking water with the following properties:

- Degree of hardness 0.5-3.5° dH or 0.5-5° fH to reduce the risk of liming inside the steam generator (vessel).
- A high concentration of chloride ions must be avoided (acceptable level -10ppm). Chloride ions may cause damage to stainless steel surfaces inside the appliance.

Pan with hand shower connected to hot and cold water. Pan without hand shower connected to cold water.

Shut-off valve and **check valve** should be installed on incoming water lines (not supplied with the pan).

Cold water connection:

150-900 kPa(1.5-9bar) at 45 l/min. DN15(G1/2")
Accessory jacket cooling/flow sensor: DN 20(G3/4").

Hot water connection:

150-900 kPa (1.5-9 bar) at 18 l/min. DN 15(G1/2").

Filling pressure vessel with water (see Fig.17)

Should be performed by trained personnel.

Before the pan is started up, the **pressure vessel** must be filled with water (see also Operating Instructions).

- Press **Tilting** (13) and set the pan at an incline of approximately 45°.
- Remove **the plug** on the rear of the pan and turn the knob 90°, See Fig. 1 (pos.20).
- Fill water through the nipple up to the hole.
- Press **Tip return** (14) and return the pan to the working position. Surplus water will run out until the correct water level is achieved in the pan.
- Turn back the knob (See Fig. 1 pos. 20) and reinstall the plug.
Ensure that the gasket is still in the plug.
Check that water or steam leakage does **not occur**, when the pan has reached working pressure.

Accessory jacket cooling

If the pan is equipped with Automatic jacket cooling, the water is filled automatically by going into a hidden menu:

- Press **Menu forwards** (3) and **Menu back** (4) simultaneously for 5 seconds.
- Enter code **1122** by pressing **Increase value** (5) or **Decrease value** (6) for number, and **Menu forwards** (3) or **Menu back** (4) for location.
- Confirm by pressing **Start** (7).
- Select **SERVICE** with **Decrease value** (6) and press **Menu forwards** (3).
- Fill the pressure vessel with water by pressing **Increase value** (5).
- Switch off the water with **Decrease value** (6) when it starts to run out of the tube under the pan.
- Exit the hidden menu by pressing **Control switch On/Off** (1).

Alternatively, the pressure vessel can be filled with water by starting the **COOLING program**, see Operating Instructions

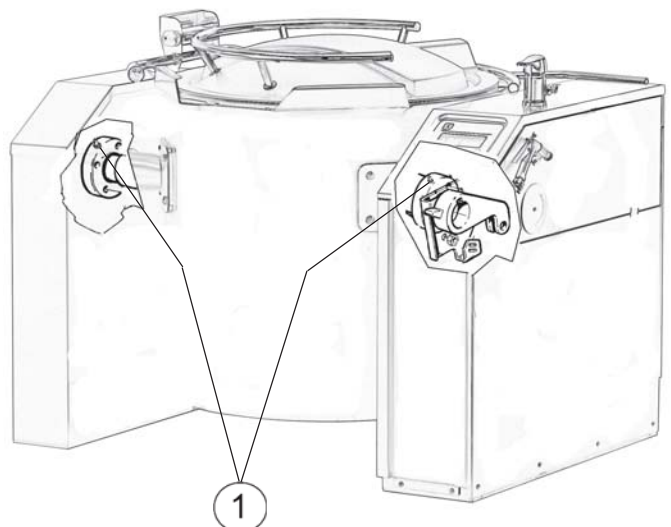
The water level in the vessel **should be checked at least once/quarter**.

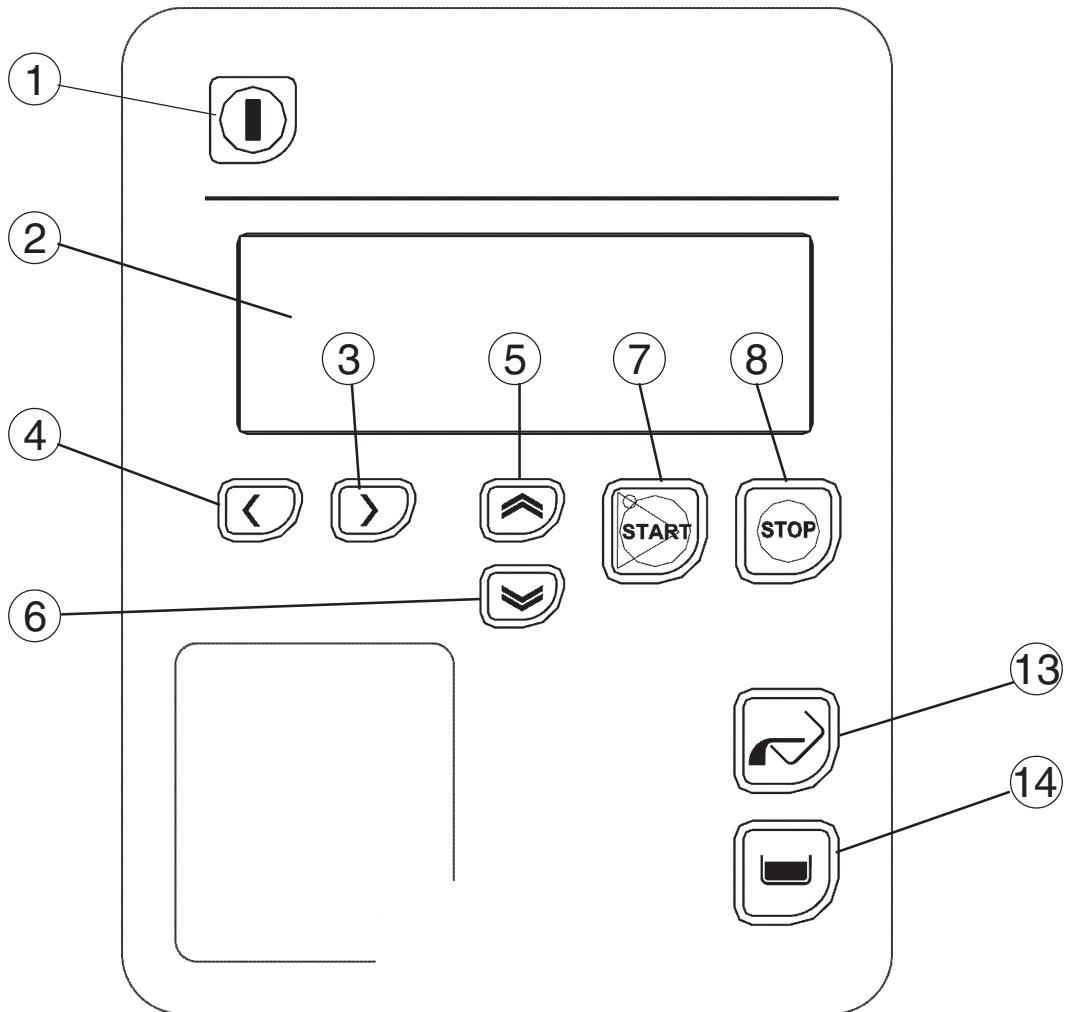
NOTE: To choose language, see Operating Instructions.

Maintenance of vessel bearings

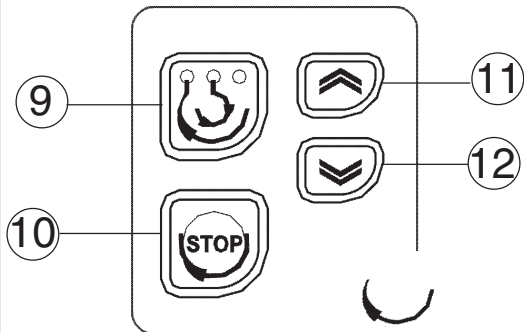
The vessel bearings must be inspected and greased **once annually**.

1 Grease nipple

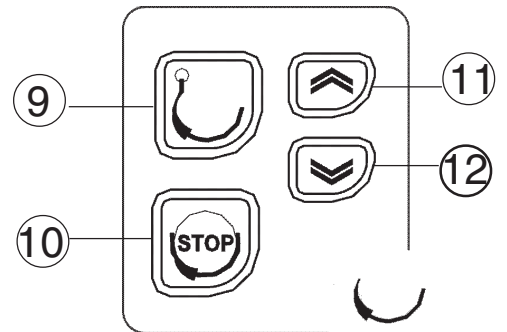




Variomix agitator



Promix agitator



- 1. On/Off
- 2. Display
- 3. Menu forwards
- 4. Menu back
- 5. Increase value
- 6. Decrease value
- 7. Start
- 8. Stop
- 9. Agitator start
- 10. Agitator stop
- 11. Increase speed
- 12. Decrease speed
- 13. Tilting
- 14. Tip return
- 15. Emergency stop
- 16. Main switch

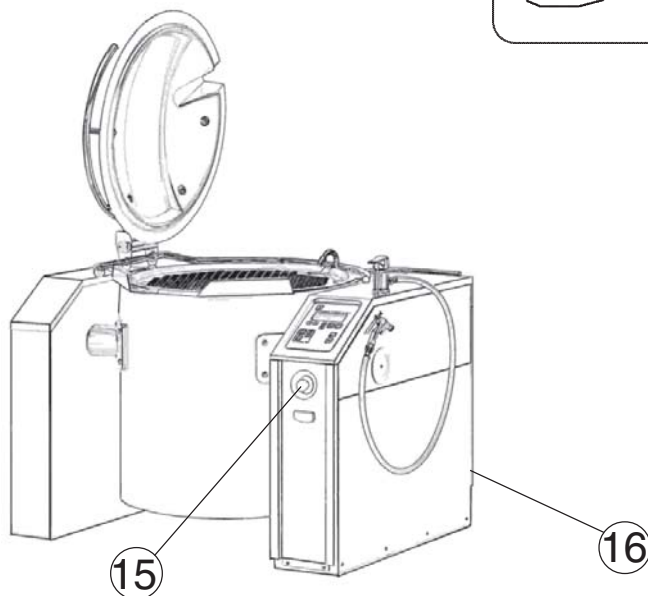


Fig. 17

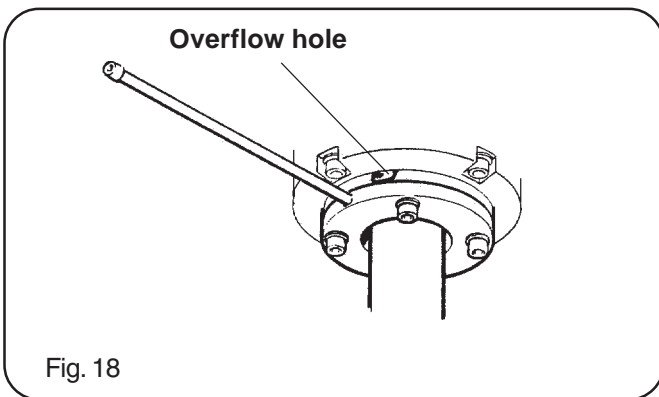
Agitator

Filling with grease (see Fig.18)

The agitator bearing is filled with grease from the factory. Refilling grease should take place **during installation** and then **at least twice per year**.

Should be performed by trained personnel.

- Use grease with high temperature properties, e.g. SKF LGHP 2/18.
- Grease should be pumped in so that it is forced out through the overflow hole on the bearing housing.
- Check the grease that is forced out. If it shows signs of being mixed with water, the agitator's bearing and seal should be removed for inspection and if necessary replacement.



Inspection

According to national legislation, the **owner** must register ownership of the pan to an accredited body, so that inspections can be carried out. During contact with the inspector, the pan's volume and permitted pressure should be stated. Plate on the rear of the pan vessel states these values.

Control testing of safety valve(see Fig.17)

During inspection of pressure vessels, a check is performed to ensure the safety valve opens at the correct pressure **150 kpa (1.5 bar)**. In order to check this, the pans safety functions must be disabled.

To bring the pressure in the pan to above 110 kpa (1.1 bar), **you have to go into a hidden menu in the electronics:**

- Press **Menu forwards** (3) and **Menu back** (4) simultaneously for **5 seconds**.
- Enter code **1122** by pressing **Increase value** (5) or **Decrease value** (6) for *number*, and **Menu forwards** (3) or **Menu back** (4) for *location*.
- Confirm the code by pressing **Start** (7).
- Select **SAFETY TESTING** with **Decrease value** (6) and press **Menu forwards** (3).
- Confirm by pressing **Start** (7).
- When the safety valve has been **opened (blown)**, switch off the current with **Control switch On/Off** (1).

Testing

- Warning of high leakage current when starting the machine.
- Connection to ground must always be in place when starting the machine.

For other information, see Operating Instructions.

Supplementary equipment and accessories

Smart

Equipment

Measuring stick

Accessories

Hand shower
Strainer plate
Cleaning brush, short
Cleaning brush, long

Variomix

Equipment

Gate agitator
Measuring stick
Bottom scraper
Side scraper

Accessories

Hand shower
Strainer plate
Cleaning tool
Bottom agitator
Whip tool
Cleaning brush, short
Cleaning brush, long

Promix

Equipment

Propeller agitator
Bottom agitator
Baffle plate
Measuring stick

Accessories

Hand shower
Strainer plate
Cleaning tool
Cleaning brush, short
Cleaning brush, long

Product number

Smart	
Product number	Designation
9F23217200	Smart 50 L
9F23217300	Smart 100 L
9F23217400	Smart 150 L
9F23217500	Smart 200 L
9F23217600	Smart 300 L
9F23217700	Smart Variomix 50 L
9F23217800	Smart Variomix 100 L
9F23217900	Smart Variomix 150 L
9F23218000	Smart Variomix 200 L
9F23218100	Smart Variomix 300 L
9F23218200	Smart Promix 100 L
9F23218300	Smart Promix 150 L
9F23218400	Smart Promix 200 L
9F23218500	Smart Promix 300 L

Factory assembled Accessories

Product number	Designation	Pan size
9F92809500	Protective grille	50 L
9F92809600	Protective grille	100 L
9F92809700	Protective grille	150 L
9F92809800	Protective grille	200 L
9F92809900	Protective grille	300 L
9F92810000	Mat temperature & HACCP	50-150 L
9F92810100	Mat temperature & HACCP	200-300 L
9F92810200	Automatic water filling	50-300 L
9F92810300	Automatic jacket cooling	50 L
9F92810400	Automatic jacket cooling	100 L
9F92810500	Automatic jacket cooling	150 L
9F92810600	Automatic jacket cooling	200 L
9F92810700	Automatic jacket cooling	300 L
9F92810800	Hand shower	50-300L

Other documentation

Manufacturer's Declaration
 Operating instructions
 Pressure vessel document
 User instructions, frequency transformer
 Service Instructions*
 Spare Parts Catalogue*
 Handbook Food preparation*

* Not supplied. May be ordered from the supplier or the supplier's representative.