COMECTA Vacuum pump

ROTARY VANE PUMP WITH ANTI RETURN VALVE PREVENTS OIL FLOW BACK, SUITABLE FOR GENERAL LABORATORY APPLICATIONS. OVER TEMPERATURE MOTOR PROTECTION CUT-OUT AND MAIN ON/OFF SWITCH.

FEATURES

Asbestos veins and internal joints.
Aspiration connection 16 mm Ø in model 5900620 and 5900621, 25 mm in model 5900622.
Analogue vacuum gauge.
High oil volume and forced lubrication.
Oil reservoir charge capacity:
250 ml in model 5900620, 550 ml in model 5900621 and 1150 ml in model 5900622.
Exhaust filter and ballast.
Shock absorber mounted.
Low noise level (62db)
Maximum working temperature 60 °C.
Portable with lifting handle.



Part No. 5900620



Part No. 5900621



Part No. 5900622

MODELS

Part No.	Pump rate m³/hr	Vacuum limit mbar	Height / Width / Depth (exterior) cm	r.p.m.	Power W	Weight Kg
5900620	3,6	0,5	23 27 12	1400	120	6
5900621	3,6	0,05	27 35 14	1400	180	10
5900622	7,2	0,006	34 49 15	1400	370	21

ACCESSORY

High pressure **rubber tubes** of 18 x 26 mm Ø. Part No 5900624
High pressure **rubber tubes** of 8 x 15 mm Ø. For Vacuum oven connection "VACIOTEM". Part No 5900625
Pump oil for vacuum pumps, 1 litre bottle. Part No. 1000029
Filter-silencer for vacuum pumps.
Code 5515032 (see page 155)



(See pag 52)

SPARE Vacuum gauge (Fits both models). Part No. 5515031

Water recirculation vacuum pump



DESCRIPTION

Made from a centrifugal pump that pulses water at a high velocity through suction aspirators, creating a pump rate of 10 litres/min from each pump connection. The vacuum achieved, 5 to 40mbar is dependent on the water temperature in the reservoir. Aspirated gasses from both inputs mix in the 10 litre reservoir. Although the interior of the pump is made from stainless steel and polypropylene it is a requirement to change the water in the pump to limit any attack of any chemicals or vapours absorbed in the water. For better protection of equipment it is recommended to connect a "Scrubber" to wash and neutralise any corrosive gasses. The pump includes an exit valve that allows the water to be circulated externally. This can be used to empty and change the water in the reservoir to form an external re-circulation of water.

FEATURES

Reduced water consumption.
2 independent connections, aspiration pump vacuum rate 10 litres/min.
Vacuum limit: 5 and 40 mbar (dependent on water temperature).
Capacity: 10 litres.
Low noise level (<65dBA).
Valve connections for entrance and exit of vacuum and external water recirculation.

CONTROL PANEL

2 vacuum connections.
2 analogue vacuum gauges.
Illuminated mains switch.

ACCESSORY

Extraction system and neutralisation of vapours.
Made up of a "Scrubber" unit that blocks the passage of condensed acid vapours and neutralises the gas vapour in NaOH, and a recirculating water pump that provides an adequate pump rate to aspirate vapours.
It is supplied with 3 Kg. acid vapours neutralizer solution.

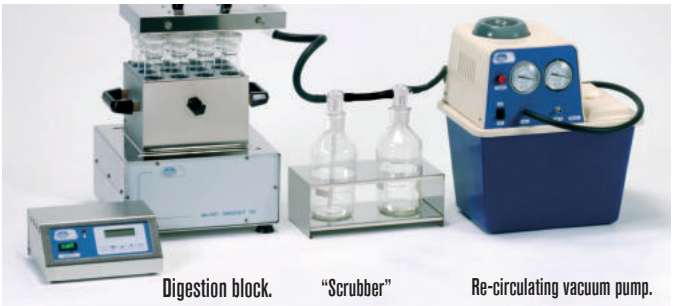
"Scrubber" unit

Part No.	Height / Width / Depth (exterior) cm	Weight Kg
4001611	32 31 16	2

Spare part:
3 Kg. acid vapours neutralizer solution. **Part No.** 4001610

MODEL

Part No.	Height / Width / Depth (exterior) cm	Vacuum limit mbar	Pump rate litre/minute	Power W	Weight Kg
4001612	44 39 28	betwen 5 and 40	10	280	10



Digestion block. "Scrubber" Re-circulating vacuum pump.

Complete unit image for a Kjeldahl distillation block.

Bank of circular hotplates "Uniplac"

ADJUSTABLE TEMPERATURE HOTPLATE UP TO 400 °C. SUITABLE FOR KJELDAHL DIGESTION ASSAYS AND SOXHLET EXTRACTION.



FEATURES

Independent hotplate control using pulsed energy regulators.
Cast steel hotplates with embedded heating elements distributed throughout the hotplate's surface.
Adjustable height and angle stand bars for supporting condensers and other glassware etc.
External case made of AISI 304 stainless steel.

CONTROL PANEL

Independent temperature control for each position.
- Temperature control by pulsed energy regulators.
- Indicator lamps showing when the hotplate is on.

MODELS

Part No.	No. of places	Plate Ø cm	Height / Width / Depth (exterior) cm			Power W	Weight Kg
6002314	4	12	23	77	27	2200	15
6002316	6	12	23	105	27	3300	22

ACCESSORIES

Bath of AISI 304 stainless steel of 140 mm Ø x 75mm high, with concentric reduction ring lid, Suitable for water, oil or sand.
Part No. 7002510



Round bottom flask adapter made of aluminium and suitable for Kjeldahl flasks of 50 to 100 ml and 50 to 100 ml round bottom flasks.
Part No. 1002290



Round bottom flask adapter made of aluminium and suitable for Kjeldahl flasks of 300 to 800 ml and round bottom flasks of 250 to 500 ml.
Part No. 1002280

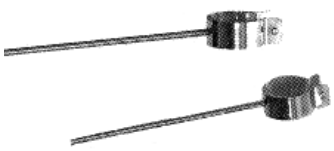


ACCESSORIES FOR KJELDAHL DIGESTION

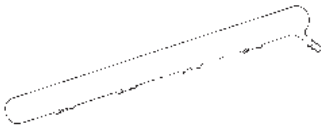
Kjeldahl support Bar for Kjeldahl flasks, made of AISI 304 stainless steel.
Part No. 6023141 4 places
Part No. 6023161 6 places



Clamp for Kjeldahl condenser tubes made of AISI 304 stainless steel.
Part No. 6000008



Borosilicate glass fume tube.
Part No. 1000104 4 place
Part No. 1000106 6 place



EXTRACTION AND NEUTRALIZING SYSTEM FOR GASSES AND VAPOURS.

Prevents water wastage.



"Scrubber" **Recirculating pump.**

Features (see page 253).

Models

Unit "Scrubber"

Part No.	Height / Width / Depth (exterior) cm			Weight Kg
4001611	32	31	16	2

It is supplied with 3 Kg. acid vapours neutralizer solution.

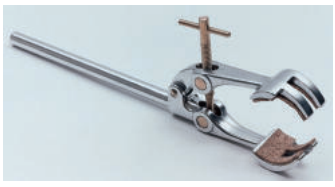
Water recirculating vacuum pump

Part No.	Height / Width / Depth (exterior) cm			Vacuum level bar	Vacuum pump rate litres/minute	Weight Kg
4001612	44	39	28	0.98	10	10

ACCESSORIES SOXHLET EXTRACTION



Boss head for supporting clamps.
Part No. 1000069



Clamp for flasks or condenser tubes.
Part No. 7000403

Dry block for Determination of Organic Nitrogen by the Kjeldahl method

Models Macro and Micro

THE EQUIPMENT FOR THE DETERMINATION OF ORGANIC NITROGEN IS MADE OF TWO BASIC ELEMENTS:
- **BLOCK DIGESTER (MINERALISATION) WITH PROGRAMMABLE TEMPERATURE CONTROL AND GLASSWARE (MACRO 250 ml AND MICRO 100 ml).**
- **DISTILLATION UNIT "PRO-NITRO M", "PRO-NITRO S" (SEMIAUTOMATIC) AND "PRO-NITRO A" (AUTOMATIC).**

RS232

Digestion Block "Bloc-digest"

FEATURES

Minimal sample manipulation
Uniform heating.
Capacity to store 20 programs of 4 steps for temperature and time.
RS-232 port for temperature register and digestion programation from a PC.
Gas collection system that does not require special water jet pumps.
Supplied complete with:
1 metal heater block.
1 programmer for time and temperature
1 tube support rack
1 gas collector
Digestion tubes.



Complete unit with: Dry-block connected to a programmable process unit, (time and temperature) rack support for tubes and fume extractor.

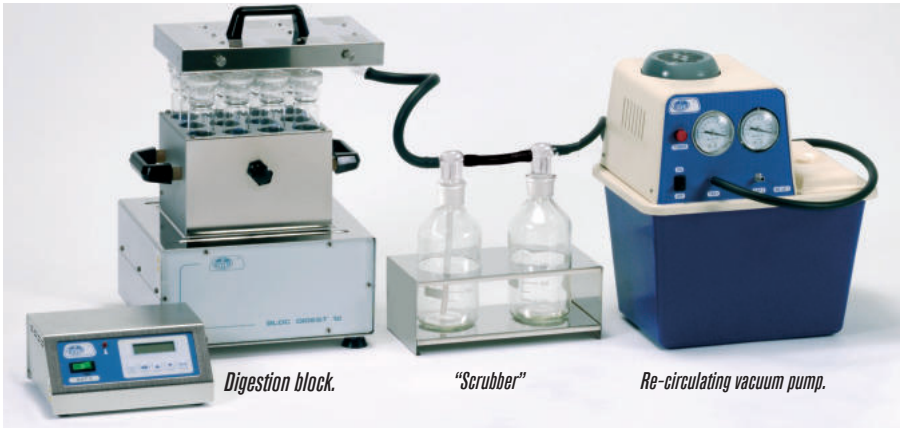
MODELS - COMPLETE UNIT MACRO

MACRO	Part No.	No. of positions
Bloc Digest 6	4000629	6
Bloc Digest 12	4000630	12
Bloc Digest 20	4000631	20

MODELS - COMPLETE UNIT MICRO

MICRO	Part No.	No. of positions
Bloc Digest m 12	4001047	12
Bloc Digest m 24	4001048	24
Bloc Digest m 40	4001049	40

ACCESSORIES: EXTRACTION SYSTEM AND NEUTRALIZATION OF ACID VAPOURS



Specially designed to absorb and neutralize vapours generated in the Kjedahl digestion processes.
Composed of a "Scrubber unit" that blocks the passage and neutralizes the condensed acids, and a re-circulating water pump that produces sufficient vacuum to aspirate the vapours.
It is essential to put the " Scrubber" unit together with the neutralizer solution between the digestion block and the re-circulating pump. Digester "Bloc Digest 20" requires 2 "Scrubber" units for a proper neutralization of fumes. Note: Pump with part number 4001612 has 2 suction inlets.

Reduces water consumption, no requirement for a constant connection for mains water.
Prevents emission of gas vapours and acidic water to waste.
Low noise level (<65dBA)
Re circulating pump made from chemically resistant materials

"Scrubber" unit

Part No.	Height / Width / Depth (exterior) cm	Weight Kg
4001611	32 31 16	2

It is supplied with 3 Kg. acid vapours neutralizer solution.
Spare part:
3 Kg. acid vapours neutralizer solution.
Part No. 4001610

Water recirculation vacuum pump

Part No.	Height / Width / Depth (exterior) cm	Vacuum level bar	Pump rate Litres/minute	Weight Kg
4001612	44 39 28	0.98	10	10

Laboratory fume hood "VG-BS"

FOR STEAM, ACIDS, BASES AND SOLVENTS EXTRACTING.

SAFETY: DESIGNED AND BUILT MEETING EUROPEAN STANDARD UNE-EN 14175-2

COMMON FEATURES

Antiacid continuous ceramic worktop with anti-dumping peripheral rim and evacuation sink. Polypropylene basin for lateral evacuation.
Inner working chamber built in thermo stable compact resins, antiacids and anti-moisture. M1 fire resistance.
Extraction system with perfectly balanced injected polypropylene turbine. Coupled and protected engine outside the fumes way.
Vertical guillotine door with adjustable height in any position and three sections of 3 + 3mm laminated glass slide which creates a high resistance protection shield.
Self-supporting structure, made of structural elements with 2 mm steel tube, degreased, phosphated and coated with a 70 µ layer of epoxy paint vitrified in the oven. This structure is completely isolated from the working cabin and from the gases contact.
External cover in white melamine board or thermo stable resins in high humidity environments.

ASSEMBLY SYSTEM INTO TWO BODIES

Upper body with cabinet and embedded extractor.
Lower body with a structure, ceramic worktop and remote control panel for fluids and gases in an horizontal housing.
Optional: working system (Walking) at ground level for the input and working with machinery, reactors and organic synthesis appliances. (Request information).

TECHNICAL FEATURES

Lighting level: More than 500 Lux in working area IP 55 or ATEX*.
Extraction volume: from 420 to 4.500 m3/h.
Engines: from 0,37 to 2,2 CV - IP55 or ATEX*.
Voltage: 220V/50Hz. Single phase / three phase.
***ATEX:** if we work with flammable, solvents or hydrocarbons.
On request: Automatic control unit for variable flow (motor) depending on door's opening. Failure alarm.
On request: Perimeter and ceiling in continuous tiles, for working with sulfuric acid.
On request: Perimeter and ceiling in continuous tiles, for working with perchloric acid. It comes with gas washing.



Can be supplied with custom measurements on demand.
*G = Antacid stoneware throughout the interior of the upper cabin

CONTROL PANEL

ON / OFF push button with green LED and electrical sockets 230V/16A. Fuel regulator knob (Yellow). Nitrogen regulator knob (Blue/ green button). Vacuum regulator knob (Grey/ black button). Air regulator knob (Blue/ yellow button). Water regulator knob (Green/ blue button). Safety locking pin on door for recommended working position.

MODELS	Part No.	Height / Width/ Depth Upper body (exterior) cm	Height / Width/ Depth Lower body (exterior) cm	Height / Width/ Depth Upper body (inner) cm	Height / Width/ Depth Lower body (inner) cm	Upper Weight Kg	Lower Weight Kg
VG-BS-1220	5001613	180 120 90	90 120 90	130 95 69	72 95 55,5	104	64
VG-BS-1420	5001614	180 150 90	90 150 90	130 125 69	72 125 55,5	102	96
VG-BS-1720	5001615	180 180 90	90 180 90	130 155 69	72 155 55,5	180	128
VG-BS-2020	5001616	180 200 90	90 200 90	130 175 69	72 175 55,5	208	160
VG-BS-1220	5001631 Atex+G*	180 120 90	90 120 90	130 95 69	72 95 55,5	124	64
VG-BS-1420	5001632 Atex+G*	180 150 90	90 150 90	130 125 69	72 125 55,5	162	96
VG-BS-1720	5001633 Atex+G*	180 180 90	90 180 90	130 155 69	72 155 55,5	200	128
VG-BS-2020	5001634 Atex+G*	180 200 90	90 200 90	130 175 69	72 175 55,5	248	160

ACCESSORIES

Mounting kit

2 PVC pipes Ø200 x 200 cm. Code 5001617
2 PVC elbows Ø200 of 90º. Code 5001623
1 PVC elbow Ø200 of 45º. Code 5001621
1 anti-bird outlet Ø200. Code 5001629
1 PVC elbow Ø200 of 45º. Code 5001621
2 flexible Ø200 (25 cm per tube). Code 5001619

Safety cabinets

Part No.	Acids & base	Flammables	Doors
5001625	Yes	No	1
5001626	Yes	No	2
5001627	No	Yes	1
5001628	No	Yes	2