SECTION 13 - LAB TOOLS

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GRADUATED BEAKERS Glass low-form beakers

50 ml	V27
100 ml	V28
150 ml	V29
250 ml	V30
400 ml	V31
600 ml	V32
1000 ml	V34
2000 ml	V35



Glass tall-form beakers

100 ml	V41
150 ml	V42
250 ml	V43
400 ml	V44
600 ml	V45
1000 ml	V47



Trasparent plastic beakers

25 ml	K1541
50 ml	K1542
100 ml	K1543
250 ml	K1545
500 ml	K1546
1000 ml	K1548



Opaque plastic beakers

25 ml	K1801
50 ml	K1802
100 ml	K1803
250 ml	K1805
500 ml	K1806
1000 ml	K1808



CONICAL ERLENMEYERS FLASKS

Glass Erlenmeyer flask - narrow neck

50 ml	V71
100 ml	V72
250 ml	V75
500 ml	V77
1000 ml	V79



Glass Erlenmeyer flask - neck NS 29/32

250 ml	V95
500 ml	V97



Filtering flask

100 ml	V100
250 ml	V101
500 ml	V102
1000 ml	V103



ROUND FLASK

Flask with flat base and narrow neck

50 ml	V217
100 ml	V218
250 ml	V219
500 ml	V220
1000 ml	V221



Flask for distillation

250 ml	V911
500 ml	V912



EVAPORATING DISHES Made of glass - wiht spout

Ø 50x40h mm	V428
Ø 95x45h mm	V432
Ø 125x65h mm	V433
Ø 140x80h mm	V434



FUNNEL Separating funnel with neck NS 29/32

250 ml	V312
500 ml	V313
1000 ml	V314



FUNNEL Made of glass - short stem

V276 Ø 55 mm Ø 80 mm V278 V279 Ø 100 mm V280 Ø 120 mm



Made of glass - long stem

Ø 45 mm	V283
Ø 80 mm	V286
Ø 100 mm	V287



Made of plastic - short stem

Ø 45 mm	K146
Ø 65 mm	K148
Ø 80 mm	K150
Ø 100 mm	K152
Ø 120 mm	K153



Dessicator V356

Dessicator with knob provided with plate for drying up Ø 210 mm.



V356

Plastic bottles with a narrow neck

100 ml	K319
250 ml	K323
500 ml	K324
1000 ml	K325



BASINS Made of antacid plastic material

200x150x50h mm	K280
320x260x70h mm	K282
550x430x190h mm	K288



Plastic bottles - rectangular shape

50 ml	K609
100 ml	K610
250 ml	K611
500 ml	K612
1000 ml	K613



Narrow-neck bottles

10 lt	K1646
10 It with stopcock	K1662





TEST TUBES Glass (pack of 100 pcs)

Ø 12x100h mm	V610
Ø 16x150h mm	V613
Ø 18x180h mm	V614
Ø 21x180h mm	V615



Plastic (pack of 100 pcs)

Ø 10x100h mm, 7 ml	K302
Ø 16x100h mm, 16 ml	K303
Ø 22x90h mm, 31 ml	K305



TEST TUBES RACK

12 positions: 6 positions for test-tubes diameter up to 16 mm and 6 positions for drying	SM1106
50 positions for test-tubes (diameter up to 16 mm)	NA432
18 positions for test-tubes (diameter up to 20 mm)	NA434

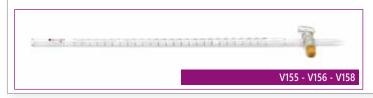






GRADUATED BURETTES AND CLAMPS FOR BURETTES Mohr graduated glass burette

10 ml, div. 1/20	V155
25 ml, div. 1/10	V156
50 ml, div. 1/10	V158



Burette pliers to be mounted on a rod

2 positions, metal	F400
2 positions, plastic	K140



PIPETTES

Glass made - graduated up to tip

1 ml, div. 1/100	V498	2 ml, div. 1/10	V501	10 ml, div. 1/10	V504
1 ml, div. 1/10	V499	5 ml, div. 1/20	V502	25 ml, div. 1/10	V507
2 ml div 1/50	V500	5 ml div 1/10	V503		



Glass made - graduated with syringe

1 ml, div. 1/100	V900	10 ml, div. 1/10	V903
5 ml, div. 1/10	V902	25 ml, div. 1/10	V904



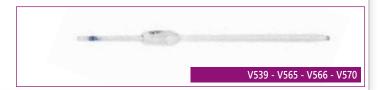
Plastic made, graduated

10 ml, div. 1/10 **K313**



Glass made, graduated

10 ml, 1 step	V539	10 ml, 2 steps	V566
5 ml. 2 steps	V565	25 ml, 2 steps	V570



DISPENSERS FOR PIPETTES

Through these dispensers, you can load the pipette until filling and then dose the specific quantity of solution desired.

from 0 to 2 ml	AF01
from 0 to 10 ml	AF02
from 0 to 25 ml	AF03



Vacuum pipette with 3 valves (Peleo's ball) Made of rubber, suitable for every kind of pipette 100 ml. K200













10 ml V1e 25 ml V1e 50 ml V1e 100 ml V1e 250 ml V1 500 ml V1	DERS
50 ml V10 100 ml V10 250 ml V1 500 ml V1)6
100 ml V1 0 250 ml V1 1 500 ml V1 1)7
250 ml V1 500 ml V1)8
500 ml V1)9
300 1111	0
1000 1	1
1000 ml V1	2
2000 ml V1	3



Glass made - tall form with stopper

25 ml	V115
50 ml	V116
100 ml	V117
250 ml	V118
500 ml	V119
1000 ml	V120



Plastic made - tall form

25 ml	K1077
50 ml	K1078
100 ml	K1079
250 ml	K1080
500 ml	K1081
1000 ml	K1082



V106 - V107 - V108 - V109 - V110 - V111 - V112 - V113

V115 - V116 - V117 - V118 - V119 - V120









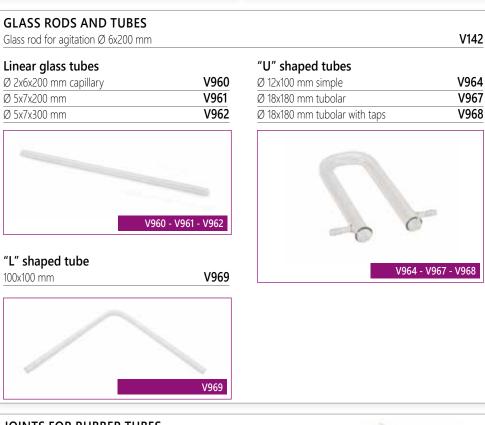


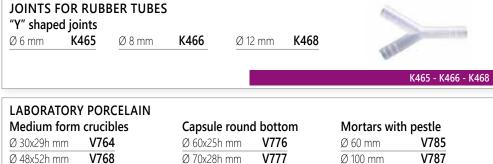




Plastic	
Ø 60 mm (pack of 10 pcs)	K357
Ø 80 mm (pack of 10 pcs)	K358
Ø 100 mm (pack of 10 pcs)	K359

K357 - K358 - K359









V785 - V787 - V789

AUXILIARY ITEMS Wall strainer

72 positions with rungs.



K213

Glass hacksaw 6011

Carborundum made, medium-grained.



Superimposable basket K87009

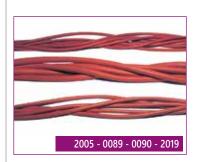
Handy basket for transport and storage of laboratory equipment. You can overlap more baskets through a joint device .4 wheels can be applied for easy moving. Basket 355x520 mm, height 190 mm.

G3



RUBBER ITEMS Rubber tubes

7x10x500 mm	2005
7x10x1000 mm	0089
7x17x1000 mm for vacuum	0090
7x10x500 mm transparent	2019



Rubber gloves G1

Pair of antacid gloves.



Latex gloves G2

100 pieces pack



Parafilm

Cling film to seal. 38 meters long roll, width 10cm.



Mixed stopper pack 0091

20 matched plugs: solid, 1 hole and 2 holes.



NICKEL-PLATED STEEL RODS

Ø 6 mm with hook top. Length 13 cm.



0005

0005

Modular threaded rod Ø10 x 350 mm 1463















Double bosshead, for rods Ø up to 13mm

CLAMPS FOR RODS





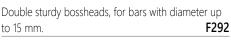






up to 16 mm.

0159





Clamp with hook.	0097

Double and jointed bossheads, for bars with diameter

F297









UNIVERSAL CLAMPS With bosshead

Opening 10-20 mm, length 120 mm. Opening 20-30 mm, length 120 mm. F445 F446

Free stem

Opening 30-50 mm, stem 12x200 mm.

F439

F356

F408

3 branches with bosshead

Opening 10-25 mm, length 85 mm.

F474





F474

CLAMP

For beakers Stainless steel, length 310 mm.

For crucible and capsules

Nickel iron, length 220 mm



F355

F365

F365

F622



Wood clamp for test-tubes

For flasks

Stainless steel, length 250 mm.

Wood, length 180 mm.



LABORATORY SPATULAS

Spatula with 2 wide and rigide paddles F800

Stainless steel, paddles width 20 mm, total length 150



Spatula with spoon

Double flexible spatulas

Stainless steel, dimension 6x120 mm

Stainless steel, dimension 6x210 mm

F792

F760

F759

F364

F760 - F759

As F800 but with a spoon paddle, length 120 mm.



BRUSHES

F601 Brush for test-tubes, 15 mm diameter.



Brush for beakers, length 380 mm.



F622

F624 Brush for flasks and glass balls.



Brush for burettes, 12 mm diameter. F621



CUTTING AND HANDLING TOOLS





Disposable scalpel

With plastic handle.



Stainless steel blade-holder handle F370 Blade for scalpel, potbellied-shape F370-10 For code F370.



Laboratory clamps

FILTER PAPER

100 sheets pack.

Round points tweezers. 120 mm, stainless steel	F329
Straight points tweezers. 120 mm, stainless steel	F340
Laboratory clamp, length 200 mm	F333







Kolle handle and stainless steel handle holder F348 Kolle handle holder, with clamp for handles F348-20 Stainless wire for handles, dim. 0,5x100 mm



SAFETY AND CLEANING IN THE LABORATORY

Paper holder

CF1

Fire-painted steel.	F2810
Cellulose wadding roll. 2 rolls pack.	F2800



Anti-toxic vapours mask Y001

Made from filtering material.



F010

Protective glasses F2021

With side protections.



Ocular first aid

Bottle for eyes washing, 500 ml	K383
Eyes washing bottle holder	K2384

Instructions printed on the cover



Diameter 80 mm, 100 sheets pack CF3 CF4 Diameter 100 mm, 100 sheets pack CF5 Diameter 120 mm, 100 sheets pack Diameter 150 mm, 100 sheets pack CF6 Diameter 180 mm, 100 sheets pack CF7

Quick filter paper, square sheets 50x50 cm

Quick filter paper, flat disks



CF1 - CF3 - CF4 - CF5 -	CF6 - CF7
Alcohol burner	2072
100 ml, made from stainless steel.	
	2072

Bunsen gas burner with tap

"BUNSEKUR" with safety valve which stops gas flow within 15 seconds if the flames accidentaly extinguish. For every kind of gas.



Autonomous Bunsen burner Laborgaz

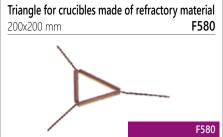
F284 Portable, for laboratories without gas bungs.

Provided without recharge, to be used with the tripod cod. F566.



Gas tube (CEI, UNI-CIG) Length 2 m, Ø 8x13 mm FC2





Tripod support for burner For alcohol burners. Adjustable height. Diameter 100 mm, height 180 mm F564 Diameter 120 mm, height 210 mm F565 Diameter 150 mm, height 210 mm F566







Heating plate	6149
Plate diameter 120 mm, max temperature 500°C, power 650 W.	
	6149











Small laboratory oven

F720.10

Thermostat made from baked painted steel with acid-resistant epoxy powder , thermostat inner part in anodized aluminum with two shelves. A transparent plexiglas door allows inspection of the inner part without affecting the thermal balance. Natural movement of air, temperature electronic settings thanks to a microprocessor and a digital display. Capacity 5.4 litres, size of the inner part 190x190x150h mm, max. temperature 70 ° C, 200W power.



F720.10

Small laboratory oven

F720.04

Aluminium inner chamber for better heat diffusion. Bimetalic thermoregulator with fluid expansion probe. Timer 0-120 minutes + infinity.

Capacity: 5,4 lt +150°C Temperature +5 amb: 70°C ±3 Accuracy: 360 W Heating power: 2 Standard shelves: Max number of shelves:

190x150x190 mm Internal dimensions: External dimensions: 380x240x300 mm

Weight: 10 kg



Laboratory natural ventilation oven

DAS42000 52 liters 80 liters DAS42010

External structure in steel painted with acid-proof epoxy powder. Stainless steel inner chamber.

Double door locking for a perfect seal (upper and lower part). Ø45 mm hole on the rear side for smoke discharge with device for regulation of opening/closing of the passage of cables, probes, etc. Ø10 mm hole on the upper side for thermometer or probe insertion Temperature control with microprocessor.

Timer from 0 to 12 hours + infinity

Safety class 3.1

	DAS42000	DAS42010
Capacity	52 lt	80 lt
Temperature + 5 amb.	+300°C	+300°C
	70°C ±1,5	70°C ±1,5
Accuracy	150°C ±2,5	150°C ±2,5
	300°C ±3,0	300°C ±3,0
Risoluzione	0,1 °C	0,1 °C
Heating power	1200 W	1400 W
Internal dimensions LxPxH	390x350x390 mm	450x400x450 mm
Grid shelves as standard	2	2
Max number of shelves	6	7
Power supply	230/50-60 V/Hz	230/50-60 V/Hz
Weight	55 kg	60 kg

DAS42000 - DAS42010



Muffle furnace MZ-1

For heat treatments with temperature up to 1100°C, with electronic safety thermoregulator provided with digital display. Chamber

size: 100x200x65 mm. Mitt with protective garment, made in only one block, door opening thanks to a thermo isolated lever. Insulation thanks to ceramic fibre. Fumes discharge on the back.



5543 Glass spare part for code 5544



Electric glass distiller

IC23000

It is provided with a vertical coolant with a double coil that assures high efficiency. Electric heating thanks to plug covered with quarz to avoid metals contamination. Provided with safety system for possible break or lack of water pressure. Distilled water production: 3-4 litres/hour. Electric power: 230V 50 Hz. Consume: 2600 W. Size: 600 x 175 x 460 mm.



Glass distiller

5544

This glass distiller for teaching is particularly helpful because it allows a clear and complete view of the distillation process. The heat source and the cooling circuit (code 5545) set are sold separately.

Fauinment supplied

1 Glass distiller	2 Clamp
1 Beaker 600ml	1 Burner's tripod
2 Base with rod	1 Wire gauze

Optional accessories

5545 Cooling circuit set	F285 Calor gas recharge
F284 Bunsen burner	5011 Power supply



Cooling circuit set 5545

If the laboratory does not have a water tap with draining basin, the cooling circuit can be realized with the optional set including a electric pump, a water collection basin and a flexible tube for the circuit.

The power supply is sold separately.



Small distiller

5542

It is fitted with a burner, supports and rubber tubes. Useful to perform experiments on distillation process. The cooling circuit (code 5545) set is sold separately.

Equipment supplied

- Steel pliers with clamp
- Support with rod
- Rubber tubes
- Tripod support
- Alcohol burner
- Wire gauze
- Cooling with latex junctions
- Distilled water Sodium sulfate Barium chloride Methylene blue

Rubber cover

250ml beaker

Filtration flask



Glassware kit and laboratory accessories

Equipment supplied

- 1 Metallic rod
- 1 Metal clip with clamp
- 300mm glass tube with bung
- 1 Bent glass tube with bung 1 Curved glass tube with cap
- Double clamp
- 2 Base for rods 1 Rubber stopper with hole
- 2 Tripod support
- 1 Pencil droppers
- 1 Alchol burner
- Ring support
- 100 Nickel-chrome wire
- 1 Filter paper disks
- Wood clamp
- 1 Mohr clamp
- 1 Wire gauzė
- Refractory triangle
- 6 Spatula with spoon 3 Rubber stoppers
- 2 Rubber stoppers with 1 holes
- 2 Rubber stoppers with 2 holes
- 1 Funnel
- 1 100ml wash battle
- 1 Plastic pipette

- 2 Plastic bottles
- 3 Rectangular plastic bottles 50ml
- 1 Rectangular plastic bottles 250ml
- 1 Graduated cylinder 100 ml 1 Plastic spatula 1 Universal litmus paper pH 1-10
- 1 Test tubes holder for 12 tubes 1 Thermometer -10 +110
- 1 Beaker, 100 ml
- 1 Beaker, 250 ml 1 Beaker, 400 ml
- 2 Graduated cylinders 50 ml
- 1 Stirrer 6x200mm
- 1 Glass pipette 1 step, 5 ml
- 6 Glass pipette 1 step, 10 ml
- 6 Test-tubes, glass 16x150 mm 1 Test-tubes 20x180 mm
- 1 Conical flask 100ml
- 1 Conical flask 250 ml
- 1 Crucible medium form
- 1 Round bottom capsule 60x25 mm
- 2 Glass tube 2x6x200 2 Glass tube 5x7x200
- Glass tube5x7x300
- 1 Box



7029

7029

VACUUM FILTRATION

Water vacuum pump

K1395

It works thanks to water fall, with rubber junction. It enables depressions up to 30 mm of mercury. Plastic made.



Single stage rotary pump (oil included)

The rotary vane vacuum pump is designed to create vacuum in a sealed container. single-stage; recycled lubrication, tank, fan, silencer. Voltage: 220V 50Hz, flow rate: 2.55 m³/h, ultimate pressure: 0.05 mbar, power: 1/4 hp, oil tank capacity: 170 ml, dimensions: 243x114x207 mm weight: 6.5 kg.



Double stage rotary pump

Hand vacuum pump

AV-12

1130

Nominal displacement: 3,6 m³/h @50Hz Ultimate pressure: 0,01 hPa(mbar) Electric supply: 1ph ~ 220/240V 50/60Hz

1238

Provided with analogic vacuum gauge, light weight,

portable and with a great capacity of suction. In few

turns it is possible to get vacuum up to 135 mm of mercury. Equipped with an athmospheric pressure reinstatement valve, no need for unplugging. It can produce a positive pressure for liquid transfer.

Weight: 6,5 Kg Oil filling: 0,3 Lt

Plastic made.

Pumping speed: 3,1 m³/h @50Hz Motor power: 0,12 Kw Noise: 57 dB(A) Inlet dimension: 1/4"G

1130



Kit for vacuum pump faucet 1413 Small metallic manual pump

1413



0090 Rubber tube for vacuum pumps



Aspiring and pressing provided with tube.

Oil for pumps 500ml

0069

Buchner porcelain funnel

AV-12 V290

External diameter 125 mm. To be used with filter paper flat disks (diameter 120 mm) cod. CF5, any flask for filtration and a rubber bung with hole.



MAGNETIC STIRRER

Mini-magnetic stirrer

HI180W Mini-magnetic stirrer with electrode holder stand

HI181W

This mini-magnetic stirrer is compact and light, ideal for all types of laboratories.

Coated in plastic resistant to aggressive chemicals, allows precise regulation of the

stirring speed.

Maximum mixing volume: 1 liter Minimum speed: 100 rpm

Maximum speed: 1000 rpm

Power supply: 230/240 V ac, 50/60 Hz

Coating: ABS plastic

The stirrer is supplied complete with PTFE-coated magnetic anchor and instructions.



Electromagnetic stirrer with heating plate

6134

Plate power 400W. Stainless steel plate surface, 150 mm diameter. Electronic adjustment of temperature.



Reliable, lightweight and economical magnetic mini-motor, made of ABS plastic

material and equipped with electrode

holder with adjustable arm.

The vibrations are reduced to a minimum and the rotating parts are perfectly balanced.

Maximum mixing volume: 1 liter Minimum speed: 100 rpm Maximum speed: 1000 rpm

Power supply: 230/240 Vac, 50/60 Hz Coating: ABS plastic

The stirrer is supplied complete with

PTFE-coated magnetic anchor and instructions.



Magnetic anchors

Ø 6 x 20 mm	K756
Ø 6 x 30 mm	K758



LABORATORY CENTRIFUGES

Small centrifuge

CS-1

Lid-block device.

Constantly adjustable speed.

Sturdy metallic structure.

Electronic timer with stop switch (HOLD button).

Microprocessor for working control.

Supplied with test tubes.

Technical data

Angular rotor for 6 test-tubes of 12 (15) ml	Speed (turns/min) from 500 to 3500
Voltage (Volt/Hertz) 230/50, 115/60	Timer 0-30 min with suspended position (key HOLD)
Power (VA) 100	Environment temperature from 2 to 40°C
Size (A x L x P) mm 340x290x225	Weight (Kg) 11,0



Professional centrifuge

TN23.8

Digital and compact table-centrifuge, cooling plug system, silent.

All the functions are adjustable thanks to a microprocessor which includes a device to prevent the imbalance of the rotor and the locking of the lid.

It is provided with a 8-port rotor, with a 12ml test-tubes holder (the testtubes are not provided), with spare fuses and tools for the rotor and the lid.

Technical data

Voltage: 230V /60Hz	Centrifugal process duration: 0.1 – 60 min
Power 400VA - Fuse: 2 da 5A	Acceleration and stop power: 9 steps
Insulation class: I - Working temperature: 2 – 40°C	Protection against interferences in radio frequence: VDE 0875
Relative humidity: 85% max	
Rotation speed: 500 – 5000 RPM	Size (H x L x W): 275x330x240mm
Variation of rotation speed: 100 RPM steps	Weight: 14.5Kg



DC power supply unit

5011

230V input voltage; direct current output with adjustable voltage in steps: 3-6-9-12V. Max current 2A



5011

Power Supply AC and DC low voltage max 5A with protection 522

Voltage 2, 4, 6, 9, 12 or 14 V ca/cc at 4 A, or up to 5A for periods of 1 hour; Voltage ranges are selected and locked by means of a removable key.

Electrical Supply: 220-240 V a.c. 50-60 Hz Dimensions: 179x190x85 mm; Weight: 2.8 kg.



5229

Dual power supply unit balanced from 5 +5 A

5361

This is a dual power supply unit, with independent adjustments of current and voltage as for power supply unit cod. 5360.

Two buttons allow to connect the two power supply units in series, resulting in a maximum voltage of 60V, or in parallel, achieving a maximum current of 10A. Equipped with four digital instruments.

Voltage outputs continuously adjustable from 0 to 30V DC.

Current outputs continuously adjustable from 0 to 5A DC.

Dimensions: 255x300x155 mm; Weight: 9 Kg.



5361

Power supply DC and AC

5228

Voltage 2, 4, 6, 9, 12 o 14 V ca/cc at 4A, or up to 5A for periods of 1 hour Electrical Supply: 220-240 V a.c. 50-60 Hz.

Dimensions: 179x190x85 mm; Weight: 2.8 kg



5228

Power supply unit balanced from 3A

5248

Suitable for the study of electrical phenomena in which you don't need high voltage. This power supply unit is equpped with two independent outputs: 1st output: balanced voltage continuously adjustable from 0 to 20V DC. Its value is mentioned on a digital voltmeter.

Max. current 3A.

2nd output: tension 6V AC.

Max. current 5A, suitable for optical projectors.

Size 240x130x160h mm.vvv



5248

Power supply unit balanced 5A

5360

Equipped with regulator of supplied current and tension.

It is possible to perform tests in which the current must remain constant during a change of voltage.

Output voltage continuously adjustable from 0 to 0V DC.

Current output continuously adjustable from 0 to 5A DC.

Equipped with two digital devices.

Dimensions: 280x130x155h mm, weight: 5.5 Kg.



5360

DC 5 KV Generator

5324

This generator is indispensable for performing quantitative experiments of electrostatics. Its use does not constitute any danger to the operator since, even in case of short circuit, the maximum output current is limited to the value of 3 mA by the presence of a high output resistance. It comes with two high insulation safety cables.

Adjustable output voltage up to 5 kV DC continuously.

2-digit digital voltmeter built-in.

Fixed output 6,3V AC / 2A.



5324

DC Power supply

5292

Suitable for powering electronic tubes.

Powering voltage: 230V.

Output voltage: 0 - 300V DC adjustable 0 - 30 V DC adjustable 6,3V AC fixed.



5292

Power supply 0-12V AC/DC

5230

Adjustable voltage output continuously from 0 to 12 V DC. Adjustable voltage output continuously from 0 to 12 V AC. Max current 8A (for short periods); rated current 6A. Dimensions: 255x220x110h mm; weight: 4.75 Kg.



5230

Low frequency signal generator & amplifier

5718

It is a generator of precision signals, amplified in power. It is able to generate sine waves, square waves and triangular waves. The frequency of the main generator varies from 0.1 Hz to 100 KHz. The maximum output power is 4W. Equipped with LED display showing the frequency. The output is taken from either 4Ω or 600Ω 4mm white socket. This instrument is particularly suitable for teaching and for scientific research.

Technical data

4Ω and 600Ω output	Output width: 11V peak to peak
Auxiliary input for the amplifier stage	Frequency range: 0.1 Hz - 100 kHz
Output attenuator 1x / 0.1X / 0.01X (on the 600ohm output)	Electrical Supply: 220-240V AC 50-60Hz
Wave shape: sine, square and triangular	Dimensions: 255x220x110mm overall
Output power: 4W (into 4Ω load)	weight: 3,2 Kg



5718

Digital timer

1427

This timer is useful for the study of time and motion concepts.

Technical data

Ranges: 0 - 9.999s; 10 - 99.99s; 100 - 999.9s; 1000 - 9999s.	Weight: 1.6 kg
Power supply: 220-240 V a.c. 50-60 Hz	Accuracy: ±0.01%
Dimensions: 179x190x85 mm	



1427