



# **General Catalog**

**Clinical Electrophoresis** 

and

Liquid Handling

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#### MAESTRO 101 Semi automated electrophoresis system for clinical routine tests

The automated electrophoresis system MAESTRO 101 is a new development from BIOTEC-FISCHER, utilising the most modern technology. The MAESTRO 101 is designed for a long operational life and safe, reliable, problem-free use during hard, continuous operation. The MAESTRO 101 operates with a compact, robust and extremely reliable mechanism, which is confined to a minimum of moving parts. This makes the MAESTRO 101 compact in its dimensions. Maintenance costs for the user are minimised. All relevant components are easily accessible and easy to clean. The MAESTRO 101 can be easily and safely operated.



313001 MAESTRO 101 semiautomated electrophoresis system

313010 Migration tank insert

313011 Gel bridge 313013-002 Reagent tray 313015 Universal gel holder 313021 Lid for reagent trays

313946 Reagent tray holder with base plate

#### TurboScan electrophoresis densitometer



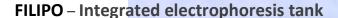
In terms of flexibility, TurboScan puts all previous systems in the shade. It allows you to create as many individually generated scan masks as you wish. You can also select as many analysis methods as you wish. No other system offers so many options. In clinical work, for example, you can use TurboScan for analysis in the following applications: serum protein electrophoresis, lipo-protein electrophoresis, haemoglobin electrophoresis, Hb-A1c electrophoresis, urine electrophoresis, CSF electrophoresis, Bence-Jones, isoenzymes, immunofixation, isoelectric focusing, multifractional

electrophoresis, blots and lots more. It does not matter wether you carry out your methods on dry or wet cellulose acetate strips, on agarose and on other gels or you work with micro, semi-micro or macro application. TurboScan uses the latest digital image analysis technology.

331010 TurboScan Densitometer software (CD ROM + Dongle )

331021 TurboScan Scanner

The migration tank FILIPO is a new development from BIOTEC-FISCHER utilising the most modern technology. The migration tank FILIPO with included power supply is designed for a long operational life and safe, reliable problem-free use during hard continous operation. The migration tank FILIPO operates with a compact, robust and extremely reliable electronics. This makes the FILIPO compact in its dimensions. Maintenance costs for the user are minimised. All relevant components are easily accessible and easy to clean. The most commonly used electrophoresis methods can be carried out with the FILIPO ( Serum proteins, Lipoproteins, Hb-A1c, Haemoglobin and Urins ). With 20 cm width and 25 cm depth the FILIPO only uses a minimum space on a





laboratory table. This is an advantage in any laboratory where only a minimum space is available.

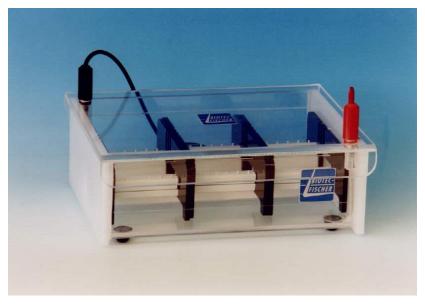
321101 Integrated electrophoresis tank Filipo

313010 Migration tank insert

313011 Gel bridge

313012 CA membrane bridge

#### Manual electrophoresis tank model 1000



The electrophoresis chamber model 1000 is an universal system for serum protein, lipoprotein, Hb-A1 and haemoglobinelectrophoresis as well as electro-phoresis of concentrated urine and CSF. Up to 24 samples can be electrophoretically separated simultaneously. It can accommodate all the strip bridges for commercially available application systems (e.g. Biotec-Fischer, PRA and CEL, Bender & Hobein, Boskamp, Paragon etc.). As a safety precaution, lifting the lid immediately stops the supply of electric current. This guarantees a high degree of safety for the user. The two connecting cables are permanently fitted to the cover of the chamber, ensuring that they are never mixed up and the user cannot touch live parts.

321001 Manual electrophoresis tank model 1000 341110 Agarose gel bridge for tank model 1000 322210 CA membrane bridge

#### PHERO-stab 0305-E - Electrophoresis power supply

The PHERO-stab 0305 E is a development from BIOTEC-FISCHER utilising the most modern technology. It works with constant voltage. If the maximum current from 50 mA is reached, the power supply changes to constant current. This is shown with LED's. It is possible to work with or without the timer. After the adjusted time, 10% of the choiced voltage rested, till it was switched off. In this way the samples could not diffuse.



Fix low voltage range

50 / 70 / 80 / 90 / 100 / 110 / 120

Timer setup 1

1...99 Minutes

131112 PHERO – stab 0305-E

Fix high voltage range 125 / 175 / 200 / 225 / 250 / 275 / 300

Timer setup 2

Permanent run

#### EV 243 Electrophoresis power supply



The manual mode permits to set voltage, current, power and time for a routine electrophoresis run. Parameters can be changed temporarily without interrupting the run. Up to 9 different programs, each with 9 steps, of frequently used parameters can be stored in the non-volatile memory for future recall. Reads voltage in 1 V steps, current in 1 mA steps and power in 1 W steps. Each step is able to recall a next one, providing a flexible multiple step function for special techniques. Parameters of the running step can be changed temporarily without interrupting the run. The method mode also permits to program a linear voltage gradient for any step provided the limiting current or power is not attained. Timer or volt-hour controlled operation is a useful standard feature on all models. The microcomputer will automatically terminate the run when the count down of the selected value is achieved.

131200-001 EV-243 electrophoresis power supply ( 400 V / 300 mA / 50 W )

The BFA application system from BIOTEC-FISCHER is a complete and universal system. It comprises 3 BFA bridges, a BFA applicator, a BFA sample plate and a strip roller. The BFA system is intended for use with dry cellulose acetate strips ATX micro-solid as well as with wet cellulose acetate strips PHERO-cel.

## **BFA Application systems for CA membranes**



322220	BFA Applicator for 8-samples ( micro )
322230	BFA Serum plate for 8 samples
322222	BFA Applicator for 4 Samples ( semimicro )
322232	BFA Serum plate for 4 samples
322210	BFA foil bridge for CA membranes (Biotec perforation)
341101	Foil roller

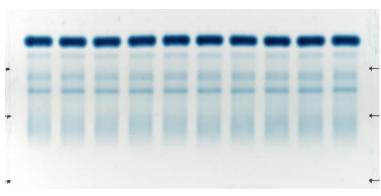
#### **Accessories**



341100	Drying rack for glass plates ( solid plastic )
341101	Foil roller, wide
341201	Foil Forcep, fine steel, self holding
341225	Staining vessel kit for agarose gels ( solid plastic )
341223	Plastic staining vessel with lid ( white vessel with transparent lid )
341224	Plastic staining vessel kit ( 5 x 341223 )

#### Consumable kits with agarose gel

All offered consumable kits are in-house made at Biotec-Fischer facilities. BIOTEC-FISCHER has more than 30 years experience in electrophoresis and offers electrophoresis consumables since beginning of foundation in 1972. In 2005 BIOTEC-FISCHER started to sell agarose gel kits for diagnostic purposes as a distribution partner of well known European manufacturer. In 2010 BIOTEC-FISCHER started to develop an own production of agarose



gels to have direct influence to the quality of the products. Furthermore all kits are suitable for BIOTEC-FISCHER equipment for manual electrophoresis as well as in Beckman Paragon System or Helena electrophoresis tank. Finally the kits are suitable for MAESTRO 101, the automated electrophoresis system from BIOTEC-FISCHER.

370601	Agarose gel kit for Serum protein electrophoresis ( standard 5 fractions )
370602	Agarose gel kit for Serum protein electrophoresis (enhanced with ß1 and ß2 fraction splitting)
371601	Agarose gel kit for Lipoprotein electrophoresis
373601	Agarose gel kit for alcalic Hemoglobin electrophoresis
374602	Agarose gel kit for Urine protein electrophoresis
376601	Agarose gel kit for Immunofixation of serum proteins ( IgG, IgA, IgM, K, λ )
355070	PHERO-trol control sera kit for Serum protein electrophoresis (1 ml normal + 1 ml pathological)
355100	PHERO-trol AFSC for alc.Hb electrophoresis
355101	PHERO-trol AF for alc.Hb electrophoresis
355102	PHERO-trol AS for alc.Hb electrophoresis
355103	PHERO-trol AC for alc.Hb electrophoresis

#### Consumable kits with PHERO-cel CA membranes



All offered consumable kits are in-house made at BIOTEC-FISCHER facilities. BIOTEC-FISCHER has more than 30 years experience in electrophoresis and offers consumable since beginning of foundation in 1972. All kits are suitable for BIOTEC-FISCHER equipment for manual electrophoresis for CA membrane as well as for Pratiga system or Helena electrophoresis tank.

370101	Kit for 800 Serum protein electrophoresis on PHERO-cel CA membrane, BIOTEC perforation
370102	Kit for 200 Serum protein electrophoresis on PHERO-cel CA membrane, BIOTEC perforation
370103	Kit for 800 Serum protein electrophoresis on PHERO-cel CA membrane, unperforated
370104	Kit for 200 Serum protein electrophoresis on PHERO-cel CA membrane, unperforated
373101	Kit for 800 alcalic Hemoglobin electrophoresis on PHERO-cel CA membrane, BIOTEC perforation
373102	Kit for 200 alcalic Hemoglobin electrophoresis on PHERO-cel CA membrane, BIOTEC perforation
373103	Kit for 800 alcalic Hemoglobin electrophoresis on PHERO-cel CA membrane, unperforated
373104	Kit for 200 alcalic Hemoglobin electrophoresis on PHERO-cel CA membrane, unperforated
	Other kits upon request

#### **Workstation I for CA membranes**



This workstation contains all equipment to run electrophoresis on CA membrane based on manual electrophoresis tank modell 1000

321001	1 x Electrophoresis tank model 1000
322210	3 x Foil bridge for CA membrane (Biotec perforation)
322220	1 x BFA applicator for 8 samples per membrane (micro
322230	1 x Sample plate for BFA applicator for 8 samples
131112	1 x PHERO-stab 0305-E, electrophoresis power supply
332010	1 x KB19 drying oven
341201	1 x Foil forceps, fine steel, self holding
341100	1 x Drying rack, solid plastic
341224	1 x Staining vessel kit ( 5 vessels, plastic )
341101	1 x Foil roller
331010	1 x TurboScan densitometer software

#### **Workstation II for CA membranes**

This workstation is based on manual electrophoresis tank modell Filipo and contains all equipment to run electrophoresis on CA membrane

321101	1 x Electrophoresis tank model FILIPO
313012	1 x Foil bridge for FILIPO
322220	1 x BFA applicator for 8 samples per membrane (micro)
322230	1 x Sample plate for BFA applicator for 8 samples
332010	1 x KB19 drying oven
341201	1 x Foil forceps, fine steel, self holding
341100	1 x Drying rack, solid plastic
341224	1 x Staining vessel kit ( 5 vessels, plastic )
341101	1 x Foil roller
331010	1 x TurboScan densitometer software

## Workstation I for agarose gel



This workstation is based on manual electrophoresis tank modell 1000 and contains all equipment to run electrophoresis on agarose gel

321001	1 x Electrophoresis tank model 1000
3211210	1 x Agarose gel bridge for tank model 1000
131112	1 x PHERO-stab 0305-E, electrophoresis power supply
332010	1 x KB19 drying oven
341225	1 x Staining vessel kit for agarose gel, plastic
331010	1 x TurboScan densitometer software

## Workstation II for agarose gel

This workstation is based on manual electrophoresis tank modell FILIPO and contains all equipment to run electrophoresis on agarose gel

321101	1 x Electrophoresis tank model FILIPO
313011	1 x Agarose gel bridge for tank model FILIPO
332010	1 x KB19 drying oven
341225	1 x Staining vessel kit for agarose gel, plastic
331010	1 x TurboScan densitometer software

**DNA electrophoresis tank** 

The PHERO-sub 0710-E submerse electrophoresis tank is specially designed to run agarose DNA gels. It includes gel casting dams for comfortable gel casting outside the tank. This tank is injection moulded and ensures a leakage-free working. The PHERO-sub 0710 E is the smallest unit in the range, designed for low to medium numbers of samples. The small gel size maximises run economy but does not compromise versatility as two tray options are available – 7 x 7cm and 7 x 10cm, and combs ranging from preparative up to 16 samples. Simply by altering the gel tray or comb, this compact unit is capable of resolving up to 64

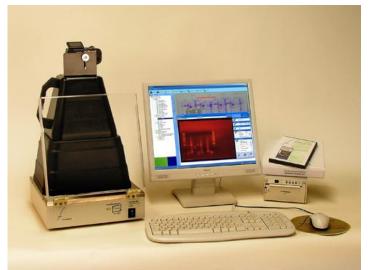


different samples, prepping 1ml of sample or separating sample bands over a distance of 9cm.

111100-001 PHERO-sub 0710-E, sub merse electrophoresis tank for DNA electrophoresis, (cpl set)

131200-001 EV243 electrophoresis power supply

#### **Gel documentation for DNA gels**



The PC-controlled gel documentation systems Felix 1010 and Felix 2010 are based on a digital camera. They are user-friendly and distinguish by their high resolution. The complete control of the camera and the motorzoom objective is realised via the biostep PC-software argusX1®. The program contains many functions for the image processing. An integrated data base serves for the clear administration of large data amounts. Two digital camera models are available which differ in their resolution, sensitivity and equipment. In addition to the transportable set-top dark hood a UV-transilluminator is optional available. In dependence on their application, they can also be

place over any other transilluminator with a maximum filter size of 23 x 30 cm. Felix 1010 and 2010 are optionally upgradable, e. g. with a PC, thermal printer P93DW and analysis software.

141211-001 Felix 1010 gel documentation system

## **Liquid Handling**

#### **Variable volume Pipettes**

923210-001	Standard pipette <b>0.2 – 2 μl</b>
923210-002	Standard pipette <b>0.5 – 10 μl</b>
923210-003	Standard pipette 2.0 – 20 μl
923210-004	Standard pipette 10 – 100 μl
923210-005	Standard pipette 20 – 200 μl
923210-006	Standard pipette 100 – 1000 μl
923210-007	Standard pipette 1000 – 5000 μl
923210-101	ECO pipette 0.2 – 2 μl
923210-102	ECO pipette <b>0.5</b> – <b>10</b> μl
923210-103	ECO pipette <b>2.0 – 20 μl</b>
923210-104	ECO pipette <b>10 – 100 μl</b>
923210-105	ECO pipette <b>20</b> – <b>200</b> μl
923210-106	ECO pipette <b>100 – 1000 μl</b>
923210-107	ECO pipette 1000 – 5000 ul



#### **Fix volume Pipettes**



923110-001 923110-002 923110-003 923110-005 923110-006 923110-007 923110-008 923110-009 923110-010 923110-011 Microliter pipette, 5µl fix, tip ejector, Conformity certified Microliter pipette, 10µl fix, tip ejector, Conformity certified Microliter pipette, 20µl fix, tip ejector, Conformity certified Microliter pipette, 25µl fix, tip ejector, Conformity certified Microliter pipette, 50µl fix, tip ejector, Conformity certified Microliter pipette, 100µl fix, tip ejector, Conformity certified Microliter pipette, 200µl fix, tip ejector, Conformity certified Microliter pipette, 250µl fix, tip ejector, Conformity certified Microliter pipette, 500µl fix, tip ejector, Conformity certified Microliter pipette, 1000µl fix, tip ejector, Conformity certified Microliter pipette, 5000µl fix, tip ejector, Conformity certified Microliter pipette, 5000µl fix, tip ejector, Conformity certified

#### Pipette tips

923511-001	Pipette tips, PP, Neutral, 0.5 – 10 μl, 1000 pcs./bag, universal
923511-002	Pipette tips, PP, Yellow, 2.0 – 200 μl, 1000 pcs./bag, universal
923511-003	Pipette tips, PP, Blue, 100 – 1000 μl, 1000 pcs./bag, universal
923511-004	Pipette tips, PP, Neutral, 1000 – 5000 μl, 100 pcs./bag, Gilson, KB
923511-901	Pipette tip box, 0.5 – 20 μl, Neutral, 96 tips/box, autoclavable box
923511-902	Pipette tip box, 2.0 – 200 μl, Yellow, 96 tips/box, autoclavable box
923511-903	Pipette tip box, 100 – 1000 μl, Blue, 96 tips/box, autoclavable box



Your Partner for electrophoresis

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