

## Dispenser and Diluter, Zefa

Hamilton semiautomatic diluters and dispensers can replace volumetric glassware during production of solutions. All Microlab 500 series instruments have four common features. They can all be used to aspirate, dispense, refill and prime. The units are suitable for accurate, high-precision dispensing and automatic dilution up to a ratio of 1 : 25.000. They can also dispense up to 25 ml per stroke. All of the necessary accessories are provided with the Microlab 500 instruments, and microliter syringes are included in the price.

### ① Series Microlab 500 A

Microlab 500 A series instruments meet the needs of any laboratory which requires a high-precision diluter or dispenser. The units aspirate fluids with very high precision and dispense them again at the press of a button on the hand probe or the touch of a footswitch. The method, which is easy to program, is retained until the Microlab 500 A is turned off. The **Microlab 501 A** is a single-syringe dispenser for high-precision pipetting without method memory.

The **Microlab 503 A** is a dual-syringe diluter for serial diluting without method memory. The **Microlab 504 A** is a dual-syringe dispenser which is designed for simultaneous high-precision dispensing of two fluids without method memory.

| Article        | Order No.   |
|----------------|-------------|
| Microlab 501 A | 14 83 10501 |
| Microlab 503 A | 14 83 10503 |
| Microlab 504 A | 14 83 10504 |

### ② Series Microlab 500 B

The Microlab 500 B series is easy to program and is the ideal solution for labs which use a number of different methods to dilute and dispense fluids. The memory holds up to 21 methods. Operators enter alphanumeric characters on a user-friendly LCD menu display to call up the programs. Programmed methods can include simple protocols, diluting and dispensing of fluids, methods with several diluting and dispensing steps, time delays and automatic aspiration and dispensing operations. These methods are retained when the units are turned off.

The Microlab **510 B** is a single-syringe dispenser with method memory for high-precision pipetting.

The Microlab **530 B** is a dual-syringe diluter with method memory for serial diluting.

The Microlab **540 B** is dual-syringe dispenser with method memory which is designed for simultaneous high-precision dispensing of two fluids.

| Article        | Order No.   |
|----------------|-------------|
| Microlab 510 B | 14 83 12510 |
| Microlab 530 B | 14 83 12530 |
| Microlab 540 B | 14 83 12540 |

### Accessories

| Article                                                                                    | Order No.   |
|--------------------------------------------------------------------------------------------|-------------|
| ③ <b>Diluter handle Concorde</b>                                                           | 14 83 20542 |
| Handy design for index-finger actuation, suitable for gauge 12 or gauge 18 tube connection |             |
| ④ <b>Double dispenser handle</b>                                                           | 14 83 20544 |
| With pistol grip for thumb actuation, suitable for gauge 12 or gauge 18 tube connection    |             |
| <b>Foot switch</b>                                                                         | 14 83 20546 |
| For actuating the diluter or dispenser by foot control instead of by hand                  |             |
| Suction tube FEP, non-tapered, length 650 mm, Ø 2 × 1 mm                                   | 14 83 65020 |
| Suction tube FEP, non-tapered, length 650 mm, Ø 2.9 × 2 mm                                 | 14 83 65029 |
| Delivery tube FEP, tapered, length 900 mm, Ø 2 × 1 mm                                      | 14 83 90020 |
| Delivery tube FEP, tapered, length 900 mm, Ø 2,9 × 2 mm                                    | 14 83 90029 |

### ⑤ Microliter syringes DX

Axial TTL connector and an M6 connector on the side for use in diluters 503 A and 530 B on the sample end.

| Type    | Vol..  | Order No.   | Type    | Vol..  | Order No.   |
|---------|--------|-------------|---------|--------|-------------|
| 1702 DX | 25 µl  | 14 83 17025 | 1725 DX | 250 µl | 14 83 17250 |
| 1705 DX | 50 µl  | 14 83 17050 | 1750 DX | 500 µl | 14 83 17500 |
| 1710 DX | 100 µl | 14 83 17100 | 1001 DX | 1 ml   | 14 83 21001 |



### **Microliter syringes TLL/TLL-X**

Conical Teflon Luer connector and double-threaded bushing (Luer lock) for use in dispensers 503 A and 530 B at the dilutant end and in dispensers 501 A/510 B and 504 A/540 B at the sample and dilutant end.

| Type      | Vol..  | Order No.          |
|-----------|--------|--------------------|
| 1702 TLLX | 25 µl  | <b>14 83 77025</b> |
| 1705 TLLX | 50 µl  | <b>14 83 77050</b> |
| 1710 TLLX | 100 µl | <b>14 83 77100</b> |
| 1725 TLLX | 250 µl | <b>14 83 77250</b> |
| 1750 TLLX | 500 µl | <b>14 83 77500</b> |

| Type     | Vol.. | Order No.          |
|----------|-------|--------------------|
| 1001 TLL | 1 ml  | <b>14 83 31001</b> |
| 1002 TLL | 2 ml  | <b>14 83 31002</b> |
| 1005 TLL | 5 ml  | <b>14 83 31005</b> |
| 1010 TLL | 10 ml | <b>14 83 31010</b> |
| 1025 TLL | 25 ml | <b>14 83 31025</b> |

