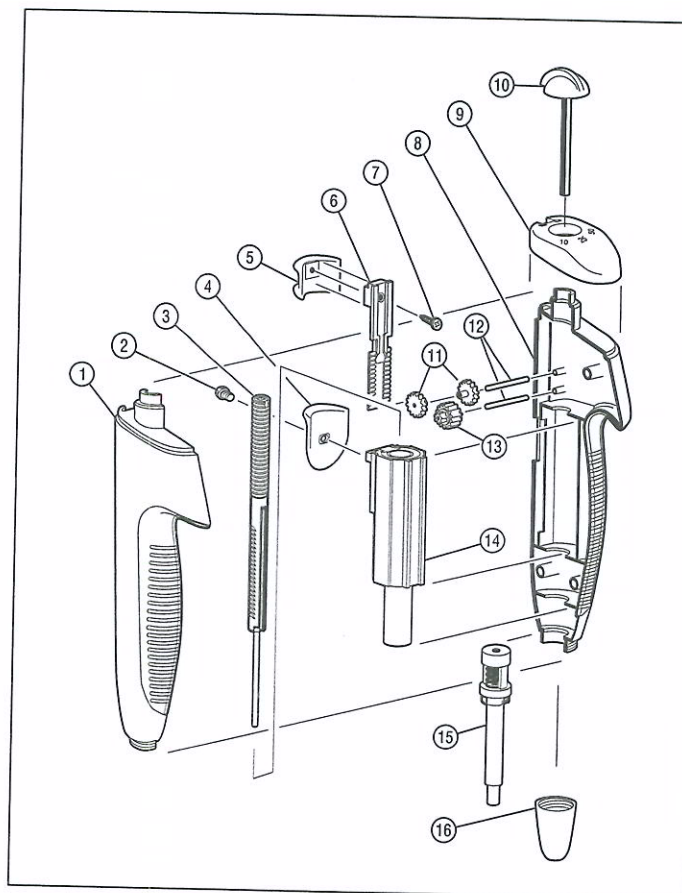


## ID-Micro Typing System

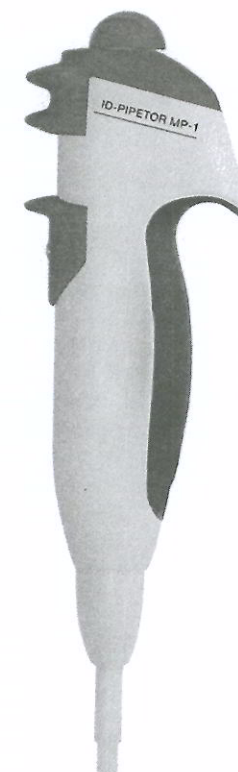
### ID-Pipettor MP-1

Instructions for use  
Gebrauchsanweisung  
Mode d'emploi



#### TECHNICAL CHARACTERISTICS / TECHNISCHE DATEN / DONNEES TECHNIQUES

|  |  |
|--|--|
| Weight / Gewicht / Poids:                                    | 80 g   |
| Volume / Volumen / Volume:                                   | 400 µl (maximum)                                   |
| Dispensing volume / Abgabevolumen<br>Volume de distribution: | 32 x 10 µl<br>12 x 25 µl<br>6 x 50 µl              |
| Tolerances / Genauigkeit / Tolérances:                       | 10 µl: ± 2%<br>25 µl: ± 2%<br>50 µl: ± 2%          |
| Accuracy / Präzision / Précision:                            | 10 µl: CV = 4%<br>25 µl: CV = 3%<br>50 µl: CV = 2% |



## INTRODUCTION

ENGLISH

Read this manual before using the ID-Pipetor for the first time. The ID-Pipetor MP-1 is a hand-held dispenser based on the air displacement principle for the accurate dispensing of liquids. This instrument is especially designed for the DiaMed-ID Micro Typing System. With a single loading of the ID-Pipetor, the operator can dispense 32 x 10 µl, 12 x 25 µl and 6 x 50 µl. The tip ejector system allows a fast and safe removal of the tip after use. The ID-Pipetor is designed for both right handers and lefties.

## OPERATION

### Sample uptake

For an accurate pipetting without blisters there must be available a sufficient quantity of reagent, serum or blood in the sample receptacle.

### Pipette tip

Fix the specially designed pipette tip firmly on the cone of the ID-Pipetor. **ATTENTION:** The use of other tips bears the risk that the liquids touch the cone (danger of contamination!).

## ADJUSTING THE DELIVERY VOLUME

The volume can be selected by turning the knob (fig. 1). Turn the knob into the desired position of 10, 25 or 50 µl. Make sure that the knob exactly snaps in one of these three positions.

## LOADING

The ID-Pipetor is delivered with the lifting rod pushed down. Push the lifting rod once up and down before charging (fig. 2).

**ATTENTION:** If the instrument is not permanently in use, the lifting rod may be rough-running. Dip the pipette tip into the reagent, serum or blood. Push the lifting rod slowly up. In doing so, the pipette tip is filled with the liquid. After the filling, please wipe off the pipette tip at the receptacle to remove excessive liquid.

By pushing up and down the lifting rod, you can also mix up suspensions.

**ATTENTION:** If the lifting rod is pushed up and down too fast, the liquid can penetrate the ID-Pipetor and cause contamination. This provokes inaccuracies, possible corrosion and malfunctions.

## DISPENSING

First of all, verify the volume adjustment. In order to assure an optimal exactitude, always discard the first pipetting.

Then align the tip exactly with the first well of the ID-card to be filled. Press the dispensing lever down as far as it will go in order to dispense the pre-selected volume (fig.3).

Let the dispensing lever return to its original position. Then align the pipette tip with the next well and repeat the described procedure.

The pipette tip has to be changed before a new charging and dispensing of liquid. Press the tip ejector (fig.4).

## QUICK TIP UNLOADING

The filled pipette tip can be evacuated in one step by pushing down the lifting rod.

## PARTIAL TIP FILLING

For a partial filling of the tip, push up the lifting rod only partially.

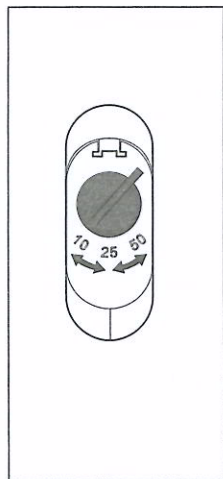
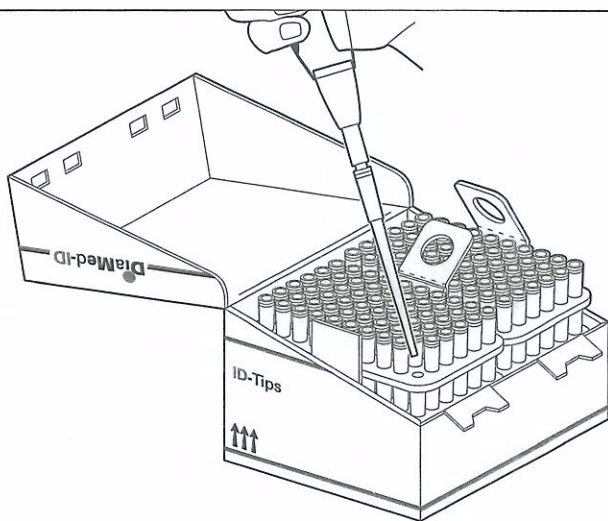


Fig. 1

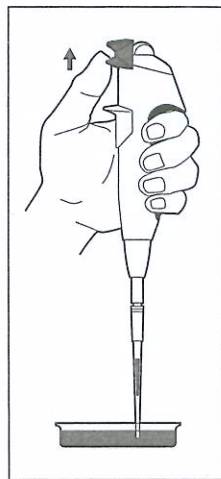


Fig. 2

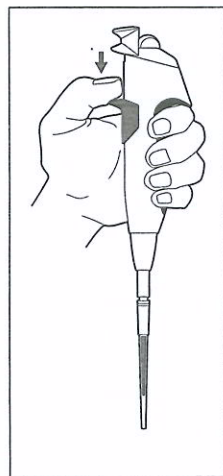


Fig. 3

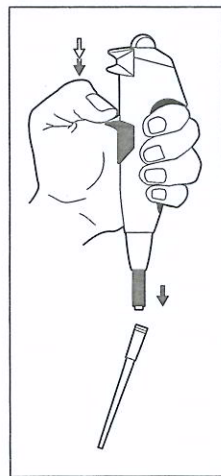


Fig. 4

## SERVICE

A re-calibration of the Pipetor is not necessary. In the case of a function, please return the ID-Pipetor to the nearest DiaMed subsidiary. **ATTENTION:** Carefully clean and decontaminate the ID-Pipetor by sending. Please respect the laws and regulations concerning biological and chemical substances.

## GREASING OF THE PISTON AND O-RING

In the case of excessive friction when moving the lifting rod, the piston and the seal ring should be re-greased. If the ID-Pipetor is regularly used, we recommend to re-grease the piston and the seal ring with silicone grease every 6 months.

## DISASSEMBLY OF THE ID-PIPETOR MP-1

1. Turn the ejector sleeve anticlockwise.
2. Remove the ejector sleeve downward.
3. Pull down the cylinder until you can see the piston and the seal ring.
4. Carefully clean the dirty pieces.
5. Grease the piston and the seal ring with silicon grease.

## Assembly

1. The assembly is made in reverse order.
2. Put the cylinder into the enclosure.
3. Join the ejector sleeve to the enclosure and turn it clockwise. The ID-Pipetor is now ready for use.

## SAFETY INSTRUCTIONS

- Read this manual before using the ID-Pipetor for the first time.
- All repairs must be performed by authorised DiaMed subsidiary.
- Do not apply the ID-Pipetor for other purposes.
- Do not make technical modifications at the ID-Pipetor.
- Use only the specially designed DiaMed ID-tips.
- Always discard the first pipetting.
- Use the tip ejector to remove the tip from the ID-Pipetor.
- Do not touch the tip when removing it.
- Empty the liquid into designated receptacles.
- Treat the liquids as bio-chemical substances.
- Use 70% ethanol for cleaning the ID-Pipetor.

**ATTENTION:** The ID-Pipetor operates pursuant to the air displacement principle. Variations in temperature between the liquid and the pipette tip may cause errors. Avoid pipetting cooled liquids in rooms with a warm pipette tip.

The tolerances and accuracies specified in the technical characteristics are based on constant environmental conditions in the laboratory. The pipette tip and the distilled water must have a temperature of 20°C. DiaMed reserves the right to change specifications without prior notice as part of our continuous program of product improvement.

## Materials

The ID-Pipetor is made of durable plastic material. All parts, except the cylinder and piston, are made of POM.

## PACKAGE

The ID-Pipetor is delivered in an especially designed cardboard box containing the following items:

– ID-Pipetor MP-1, – Pipette tip, – Instructions for use, – Calibration certificate