

### CONNECTED VARIABLE VOLUME ELECTRONIC PIPETTES



#### PIPETMAN M SINGLE CHANNEL — VARIABLE VOLUME MODELS

| Model  | PIPETMAN DIAMOND Tips |                        | Part Number   | Gilson Specifications |                           |  |  | ISO 8655-2             |                                      |                                      |
|--------|-----------------------|------------------------|---------------|-----------------------|---------------------------|--|--|------------------------|--------------------------------------|--------------------------------------|
|        |                       |                        |               | Standard PIPET mode   |                           |  |  | REPETITIVE mode volume | Systematic error (µL)                | Random error (µL)                    |
|        |                       |                        |               | Volume Range          | Volume (µL)               | Systematic error (µL)                    | Random error (µL)                        |                        |                                      |                                      |
| P10M   | D10*<br>DL10*         | DF10ST<br>DFL10ST      | <b>F81022</b> | 0.5-10 µL             | 0.5<br>1<br>5<br>10       | ± 0.040<br>± 0.025<br>± 0.060<br>± 0.080 | ≤ 0.013<br>≤ 0.012<br>≤ 0.020<br>≤ 0.025 | 0.5-10 µL              | ± 0.12<br>± 0.12<br>± 0.12<br>± 0.12 | ≤ 0.08<br>≤ 0.08<br>≤ 0.08<br>≤ 0.08 |
| P20M   | D200                  | DF30ST                 | <b>F81023</b> | 2-20 µL               | 2<br>10<br>20             | ± 0.075<br>± 0.100<br>± 0.150            | ≤ 0.025<br>≤ 0.035<br>≤ 0.050            | 2-20 µL                | ± 0.2<br>± 0.2<br>± 0.2              | ≤ 0.1<br>≤ 0.1<br>≤ 0.1              |
| P100M  | D200                  | DF100ST                | <b>F81013</b> | 5-100 µL              | 5<br>10<br>50<br>100      | ± 0.35<br>± 0.30<br>± 0.38<br>± 0.40     | ≤ 0.10<br>≤ 0.10<br>≤ 0.12<br>≤ 0.15     | 5-100 µL               | ± 0.8<br>± 0.8<br>± 0.8<br>± 0.8     | ≤ 0.3<br>≤ 0.3<br>≤ 0.3<br>≤ 0.3     |
| P200M  | D200<br>D300          | DF200ST<br>DF300ST     | <b>F81024</b> | 20-200 µL             | 20<br>100<br>200          | ± 0.40<br>± 0.80<br>± 1.00               | ≤ 0.15<br>≤ 0.22<br>≤ 0.26               | 5 - 200 µL             | ± 1.6<br>± 1.6<br>± 1.6              | ≤ 0.6<br>≤ 0.6<br>≤ 0.6              |
| P300M  | D200**<br>D300        | DF200ST**<br>DF300ST   | <b>F81014</b> | 20-300 µL             | 20<br>30<br>150<br>300    | ± 0.80<br>± 0.70<br>± 0.90<br>± 1.05     | ≤ 0.16<br>≤ 0.20<br>≤ 0.23<br>≤ 0.30     | 10-300 µL              | ± 4.0<br>± 4.0<br>± 4.0<br>± 4.0     | ≤ 1.5<br>≤ 1.5<br>≤ 1.5<br>≤ 1.5     |
| P1200M | D1000**<br>D1200      | DF1000ST**<br>DF1200ST | <b>F81015</b> | 100-1200 µL           | 100<br>120<br>600<br>1200 | ± 2.5<br>± 2.4<br>± 3.6<br>± 6.0         | ≤ 0.4<br>≤ 0.4<br>≤ 0.8<br>≤ 1.2         | 20-1200 µL             | ± 16<br>± 16<br>± 16<br>± 16         | ≤ 6.0<br>≤ 6.0<br>≤ 6.0<br>≤ 6.0     |
| P5000M | D5000                 |                        | <b>F81016</b> | 500-5000 µL           | 500<br>2500<br>5000       | ± 10<br>± 15<br>± 25                     | ≤ 2<br>≤ 4<br>≤ 7                        | 100-5000 µL            | ± 40<br>± 40<br>± 40                 | ≤ 15.0<br>≤ 15.0<br>≤ 15.0           |
| P10mLM | D10mL                 |                        | <b>F81017</b> | 1-10 mL               | 1 mL<br>5 mL<br>10 mL     | ± 25<br>± 30<br>± 50                     | ≤ 4<br>≤ 8<br>≤ 12                       | 200 µL-10 mL           | ± 60<br>± 60<br>± 60                 | ≤ 30.0<br>≤ 30.0<br>≤ 30.0           |

#### PIPETMAN M MULTICHANNEL

|           |                |                                 |               |            |                          |                                      |                                       |            |                                      |                                      |
|-----------|----------------|---------------------------------|---------------|------------|--------------------------|--------------------------------------|---------------------------------------|------------|--------------------------------------|--------------------------------------|
| P8x10M    | D10<br>DL10    | DF10ST<br>DFL10ST               | <b>F81025</b> | 0.5-10 µL  | 0.5<br>1<br>5<br>10      | ± 0.05<br>± 0.04<br>± 0.08<br>± 0.10 | ≤ 0.02<br>≤ 0.02<br>≤ 0.04<br>≤ 0.06  | 0.5-10 µL  | ± 0.24<br>± 0.24<br>± 0.24<br>± 0.24 | ≤ 0.16<br>≤ 0.16<br>≤ 0.16<br>≤ 0.16 |
| P12x10M   |                |                                 | <b>F81026</b> |            |                          |                                      |                                       |            |                                      |                                      |
| P8x20M    | DL10<br>D200   | DFL10ST<br>DF30ST               | <b>F81027</b> | 1-20 µL    | 1<br>2<br>10<br>20       | ± 0.08<br>± 0.09<br>± 0.15<br>± 0.25 | ≤ 0.05<br>≤ 0.06<br>≤ 0.10<br>≤ 0.12  | 1-20 µL    | ± 0.4<br>± 0.4<br>± 0.4<br>± 0.4     | ≤ 0.2<br>≤ 0.2<br>≤ 0.2<br>≤ 0.2     |
| P12x20M   |                |                                 | <b>F81028</b> |            |                          |                                      |                                       |            |                                      |                                      |
| P8x100M   | D200           | DF100ST                         | <b>F81018</b> | 10-100 µL  | 10<br>50<br>100          | ± 0.25<br>± 0.50<br>± 0.80           | ≤ 0.14<br>≤ 0.20<br>≤ 0.25            | 5-100 µL   | ± 1.6<br>± 1.6<br>± 1.6              | ≤ 0.6<br>≤ 0.6<br>≤ 0.6              |
| P12x100M  |                |                                 | <b>F81019</b> |            |                          |                                      |                                       |            |                                      |                                      |
| P8x200M   | D200<br>D300   | DF100ST**<br>DF200ST<br>DF300ST | <b>F81029</b> | 20-200 µL  | 20<br>100<br>200         | ± 0.50<br>± 1.00<br>± 2.00           | ≤ 0.16<br>≤ 0.30<br>≤ 0.50            | 5-200 µL   | ± 3.2<br>± 3.2<br>± 3.2              | ≤ 1.2<br>≤ 1.2<br>≤ 1.2              |
| P12x200M  |                |                                 | <b>F81030</b> |            |                          |                                      |                                       |            |                                      |                                      |
| P8x300M   | D200**<br>D300 | DF200ST**<br>DF300ST            | <b>F81031</b> | 10-300 µL  | 10<br>30<br>150<br>300   | ± 1.00<br>± 1.00<br>± 1.50<br>± 2.40 | ≤ 0.18<br>≤ 0.18<br>≤ 0.375<br>≤ 0.45 | 10-300 µL  | ± 8.0<br>± 8.0<br>± 8.0<br>± 8.0     | ≤ 3.0<br>≤ 3.0<br>≤ 3.0<br>≤ 3.0     |
| P12x300M  |                |                                 | <b>F81032</b> |            |                          |                                      |                                       |            |                                      |                                      |
| P8x1200M  | D1200          | DF1200ST                        | <b>F81020</b> | 50-1200 µL | 50<br>120<br>600<br>1200 | ± 4.0<br>± 4.0<br>± 6.0<br>± 9.6     | ≤ 0.7<br>≤ 0.7<br>≤ 1.5<br>≤ 1.8      | 50-1200 µL | ± 32<br>± 32<br>± 32<br>± 32         | ≤ 12<br>≤ 12<br>≤ 12<br>≤ 12         |
| P12x1200M |                |                                 | <b>F81021</b> |            |                          |                                      |                                       |            |                                      |                                      |

Gilson maximum permissible errors are guaranteed only when PIPETMAN pipettes are used with the recommended PIPETMAN DIAMOND Tips.

Under these conditions, Gilson volumetric specifications in standard pipetting (PIPET mode) are guaranteed with a performance exceeding ISO 8655-2 recommendations for this mode.

\* A plastic adapter is required to eject D10 and DF10ST tips (short tips). The adapter is supplied with P10M. No adapter is required when using DL10 and DFL10ST tips (long tips).

\*\* These PIPETMAN DIAMOND Tips can be used with the indicated pipettes for the REPETITIVE mode but not until the maximal volume of the pipette in PIPET mode. Please refer to the volume range of your tips.

Recommended tips to get best results in REPETITIVE mode.

