



GILSON PIPETTE SPECIFICATIONS

SYSTEMATIC ERROR = ACCURACY
RANDOM ERROR = REPEATABILITY

| PIPETMAN® M CONNECTED SINGLE CHANNEL | | | | | | | | | | | | | | |
|--------------------------------------|------------------------|-------------------------------|-------------|-----------------------|---------------------------|--|--|-----------------------------------|----------------------------------|-----------------|--------------------------------------|--------------------------------------|---------------------------------------|------------------------------------|
| Model | PIPETMAN® DIAMOND Tips | | Part Number | Gilson Specifications | | | | | | ISO 8655-2 | | | | |
| | | | | Standard PIPET Mode | | | | | | REPETITIVE Mode | | | | |
| | | | | Volume Range | Volume (µL) | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Volume Range | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| P10M | D10 DL10 | DF10ST DFL10ST | F81040 | 0.5-10 µL | 0.5 1 5 10 | ± 0.040 ± 0.025 ± 0.060 ± 0.080 | ≤ 0.013 ≤ 0.012 ≤ 0.020 ≤ 0.025 | ± 8.0 ± 2.5 ± 1.2 ± 0.8 | ≤ 2.6 ≤ 1.2 ≤ 0.4 ≤ 0.3 | 0.5-10 µL | ± 0.12 ± 0.12 ± 0.12 ± 0.12 | ≤ 0.08 ≤ 0.08 ≤ 0.08 ≤ 0.08 | ± 24.00 ± 12.0 ± 2.4 ± 1.2 | ≤ 16.0 ≤ 8.0 ≤ 1.6 ≤ 0.8 |
| P20M | D200 | DF30ST | F81041 | 2-20 µL | 2 10 20 | ± 0.075 ± 0.100 ± 0.150 | ≤ 0.025 ≤ 0.035 ≤ 0.050 | ± 3.8 ± 1.0 ± 0.8 | ≤ 1.3 ≤ 0.4 ≤ 0.3 | 2-20 µL | ± 0.2 ± 0.2 ± 0.2 | ≤ 0.1 ≤ 0.1 ≤ 0.1 | ± 10.0 ± 2.0 ± 1.0 | ≤ 5.0 ≤ 1.0 ≤ 0.5 |
| P100M | D200 | DF100ST | F81042 | 5-100 µL | 5 10 50 100 | ± 0.35 ± 0.30 ± 0.38 ± 0.40 | ≤ 0.10 ≤ 0.10 ≤ 0.12 ≤ 0.15 | ± 7.0 ± 3.0 ± 0.8 ± 0.4 | ≤ 2.0 ≤ 1.0 ≤ 0.2 ≤ 0.2 | 5-100 µL | ± 0.8 ± 0.8 ± 0.8 ± 0.8 | ≤ 0.3 ≤ 0.3 ≤ 0.3 ≤ 0.3 | ± 16.0 ± 8.0 ± 1.6 ± 0.3 | ≤ 6.0 ≤ 3.0 0.6 0.3 |
| P200M | D200 D300 | DF200ST DF300ST | F81043 | 20-200 µL | 20 100 200 | ± 0.40 ± 0.80 ± 1.00 | ≤ 0.15 ≤ 0.22 ≤ 0.26 | ± 2.0 ± 0.8 ± 0.5 | ≤ 0.8 ≤ 0.2 ≤ 0.1 | 5-200 µL | ± 1.6 ± 1.6 ± 1.6 | ≤ 0.6 ≤ 0.6 ≤ 0.6 | ± 8.0 ± 1.6 ± 0.8 | ≤ 3.0 ≤ 0.6 ≤ 0.3 |
| P300M | D200 D300 | DF200ST DF300ST | F81044 | 20-300 µL | 20 30 150 300 | ± 0.80 ± 0.70 ± 0.90 ± 1.05 | ≤ 0.16 ≤ 0.20 ≤ 0.23 ≤ 0.30 | ± 4.0 ± 2.3 ± 0.6 ± 0.4 | ≤ 0.8 ≤ 0.7 ≤ 0.2 ≤ 0.1 | 10-300 µL | ± 4.0 ± 4.0 ± 4.0 ± 4.0 | ≤ 1.5 ≤ 1.5 ≤ 1.5 ≤ 1.5 | ± 20.0 ± 13.33 ± 2.67 ± 1.33 | ≤ 7.5 ≤ 5.0 ≤ 1.0 ≤ 0.5 |
| P1200M | D1000 D1200 | DF1000ST DF1200ST | F81045 | 100-1200 µL | 100 120 600 1200 | ± 2.5 ± 2.4 ± 3.6 ± 6.0 | ≤ 0.4 ≤ 0.4 ≤ 0.8 ≤ 1.2 | ± 2.5 ± 2.0 ± 0.6 ± 0.5 | ≤ 0.4 ≤ 0.3 ≤ 0.1 ≤ 0.1 | 20-1200 µL | ± 16 ± 16 ± 16 ± 16 | ≤ 6.0 ≤ 6.0 ≤ 6.0 ≤ 6.0 | ± 16.0 ± 13.33 ± 2.67 ± 1.33 | ≤ 0.6 ≤ 0.5 ≤ 0.1 ≤ 0.1 |
| P5000M | D5000 | | F81046 | 500-5000 µL | 500 2500 5000 | ± 10 ± 15 ± 25 | ≤ 2 ≤ 4 ≤ 7 | ± 2.0 ± 0.6 ± 0.5 | ≤ 0.4 ≤ 0.2 ≤ 0.1 | 100-5000 µL | ± 40 ± 40 ± 40 | ≤ 15.0 ≤ 15.0 ≤ 15.0 | ± 8.0 ± 1.6 ± 0.8 | ≤ 3.0 ≤ 0.6 ≤ 0.3 |
| P10mLM | D10mL | | F81047 | 1-10 mL | 1 mL 5 mL 10 mL | ± 25 ± 30 ± 50 | ≤ 4 ≤ 8 ≤ 12 | ± 2.5 ± 0.6 ± 0.5 | 0.4 0.2 0.1 | 200 µL-10 mL | ± 60 ± 60 ± 60 | ≤ 30.0 ≤ 30.0 ≤ 30.0 | ± 6.0 ± 1.2 ± 0.6 | ≤ 3.0 ≤ 0.6 ≤ 0.3 |
| PIPETMAN® M CONNECTED MULTICHANNEL | | | | | | | | | | | | | | |
| P8x10M | D10 DL10 | DF10ST DFL10ST | F81048 | 0.5-10 µL | 0.5 1 5 10 | ± 0.05 ± 0.04 ± 0.08 ± 0.10 | ≤ 0.02 ≤ 0.02 ≤ 0.04 ≤ 0.06 | ± 10.0 ± 4.0 ± 1.6 ± 1.0 | ≤ 4.0 ≤ 2.0 ≤ 0.8 ≤ 0.6 | 0.5-10 µL | ± 0.24 ± 0.24 ± 0.24 ± 0.24 | ≤ 0.16 ≤ 0.16 ≤ 0.16 ≤ 0.16 | ± 48.0 ± 24.0 ± 4.8 ± 2.4 | ≤ 32.0 ≤ 16.0 ≤ 3.2 ≤ 1.6 |
| P12x10M | | | F81049 | | | | | | | | | | | |
| P8x20M | DL10 D200 | DFL10ST DF30ST | F81050 | 1-20 µL | 1 2 10 20 | ± 0.08 ± 0.09 ± 0.15 ± 0.25 | ≤ 0.05 ≤ 0.06 ≤ 0.10 ≤ 0.12 | ± 8.0 ± 4.5 ± 1.5 ± 1.3 | ≤ 5.0 ≤ 3.0 ≤ 1.0 ≤ 0.6 | 1-20 µL | ± 0.4 ± 0.4 ± 0.4 ± 0.4 | ≤ 0.2 ≤ 0.2 ≤ 0.2 ≤ 0.2 | ± 40.0 ± 20.0 ± 4.0 ± 2.0 | ≤ 20.0 ≤ 10.0 ≤ 2.0 ≤ 1.0 |
| P12x20M | | | F81051 | | | | | | | | | | | |
| P8x100M | D200 | DF100ST | F81052 | 10-100 µL | 10 50 100 | ± 0.25 ± 0.50 ± 0.80 | ≤ 0.14 ≤ 0.20 ≤ 0.25 | ± 2.5 ± 1.0 ± 0.8 | ≤ 1.4 ≤ 0.4 ≤ 0.3 | 5-100 µL | ± 1.6 ± 1.6 ± 1.6 | ≤ 0.6 ≤ 0.6 ≤ 0.6 | ± 16.0 ± 3.2 ± 1.6 | ≤ 6.0 ≤ 1.2 ≤ 0.6 |
| P12x100M | | | F81053 | | | | | | | | | | | |
| P8x200M | D200 D300 | DF100ST DF200ST DF300ST | F81054 | 20-200 µL | 20 100 200 | ± 0.50 ± 1.00 ± 2.00 | ≤ 0.16 ≤ 0.30 ≤ 0.50 | ± 2.5 ± 1.0 ± 1.0 | ≤ 0.8 ≤ 0.3 ≤ 0.3 | 5-200 µL | ± 3.2 ± 3.2 ± 3.2 | ≤ 1.2 ≤ 1.2 ≤ 1.2 | ± 16.0 ± 3.2 ± 1.6 | ≤ 6.0 ≤ 1.2 ≤ 0.6 |
| P12x200M | | | F81055 | | | | | | | | | | | |
| P8x300M | D200 D300 | DF200ST DF300ST | F81056 | 10-300 µL | 10 30 150 300 | ± 1.00 ± 1.00 ± 1.50 ± 2.40 | ≤ 0.18 ≤ 0.18 ≤ 0.375 ≤ 0.45 | ± 10.0 ± 3.3 ± 1.0 ± 0.8 | ≤ 1.8 ≤ 0.6 ≤ 0.3 ≤ 0.2 | 10-300 µL | ± 8.0 ± 8.0 ± 8.0 ± 8.0 | ≤ 3.0 ≤ 3.0 ≤ 3.0 ≤ 3.0 | ± 80.0 ± 26.7 ± 5.3 ± 2.7 | ≤ 30.0 ≤ 10.0 ≤ 2.0 ≤ 1.0 |
| P12x300M | | | F81057 | | | | | | | | | | | |
| P8x1200M | D1200 | DF1200ST | F81058 | 50-1200 µL | 50 120 600 1200 | ± 4.0 ± 4.0 ± 6.0 ± 9.6 | ≤ 0.7 ≤ 0.7 ≤ 1.5 ≤ 1.8 | ± 8.0 ± 3.3 ± 1.0 ± 0.8 | ≤ 1.4 ≤ 0.6 ≤ 0.3 ≤ 0.2 | 50-1200 µL | ± 32 ± 32 ± 32 ± 32 | ≤ 12 ≤ 12 ≤ 12 ≤ 12 | ± 64.0 ± 26.7 ± 5.3 ± 2.7 | ≤ 24.0 ≤ 10.0 ≤ 2.0 ≤ 1.0 |
| P12x1200M | | | F81059 | | | | | | | | | | | |

*CV means Coefficient of Variation

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. In the absence of ISO recommendations for repetitive pipetting Mode for air displacement pipettes, Gilson volumetric specifications for repetitive pipetting (REPETITIVE Mode) are guaranteed within ISO 8655-2 recommendations for standard pipetting (Cf. ISO 8655-2 table 1).



GILSON PIPETTE SPECIFICATIONS

SYSTEMATIC ERROR = ACCURACY
RANDOM ERROR = REPEATABILITY

| PIPETMAN® L SINGLE CHANNEL—VARIABLE VOLUME MODELS | | | | | | | | | | | | | |
|---|------------------------|----------------------|------------------------------|----------------------|-------------|----------------------------|-------------------|----------------------|---------------------|-----------------------|-------------------|----------------------|---------------------|
| Model | PIPETMAN® DIAMOND Tips | | Part Number | | Volume (µL) | Maximum Permissible Errors | | | | | | | |
| | | | With Stainless Steel Ejector | With Plastic Ejector | | Gilson | | | | ISO 8655 | | | |
| | | | | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| P2L | D10 DL10 | DF10ST DFL10ST | FA10001M | FA10001P | 0.2 | ± 0.024 | ≤ 0.012 | ± 12.0 | ≤ 6.0 | ± 0.08 | ≤ 0.04 | ± 40.0 | ≤ 20.0 |
| | | | | | 0.5 | ± 0.025 | ≤ 0.012 | ± 5.0 | ≤ 2.4 | ± 0.08 | ≤ 0.04 | ± 16.0 | ≤ 8.0 |
| | | | | | 1 | ± 0.027 | ≤ 0.013 | ± 2.7 | ≤ 1.3 | ± 0.08 | ≤ 0.04 | ± 8.0 | ≤ 4.0 |
| | | | | | 2 | ± 0.030 | ≤ 0.014 | ± 1.5 | ≤ 0.7 | ± 0.08 | ≤ 0.04 | ± 4.0 | ≤ 2.0 |
| P10L | D10 DL10 | DF10ST DFL10ST | FA10002M | FA10002P | 0.5 | ± 0.040 | ≤ 0.016 | ± 8.0 | ≤ 3.2 | ± 0.12 | ≤ 0.08 | ± 24.0 | ≤ 16.0 |
| | | | | | 1 | ± 0.025 | ≤ 0.012 | ± 2.5 | ≤ 1.2 | ± 0.12 | ≤ 0.08 | ± 12.0 | ≤ 8.0 |
| | | | | | 5 | ± 0.075 | ≤ 0.030 | ± 1.5 | ≤ 0.6 | ± 0.12 | ≤ 0.08 | ± 2.4 | ≤ 1.6 |
| | | | | | 10 | ± 0.100 | ≤ 0.040 | ± 1.0 | ≤ 0.4 | ± 0.12 | ≤ 0.08 | ± 1.2 | ≤ 0.8 |
| P20L | D200 | DF30ST | FA10003M | FA10003P | 2 | ± 0.10 | ≤ 0.030 | ± 5.0 | ≤ 1.5 | ± 0.2 | ≤ 0.1 | ± 10.0 | ≤ 5.0 |
| | | | | | 10 | ± 0.10 | ≤ 0.050 | ± 1.0 | ≤ 0.5 | ± 0.2 | ≤ 0.1 | ± 2.0 | ≤ 1.0 |
| | | | | | 20 | ± 0.20 | ≤ 0.060 | ± 1.0 | ≤ 0.3 | ± 0.2 | ≤ 0.1 | ± 1.0 | ≤ 0.5 |
| P100L | D200 | DF100ST | FA10004M | FA10004P | 10 | ± 0.35 | ≤ 0.10 | ± 3.5 | ≤ 1.0 | ± 0.8 | ≤ 0.3 | ± 8.0 | ≤ 3.0 |
| | | | | | 50 | ± 0.40 | ≤ 0.12 | ± 0.8 | ≤ 0.24 | ± 0.8 | ≤ 0.3 | ± 1.6 | ≤ 0.6 |
| | | | | | 100 | ± 0.80 | ≤ 0.15 | ± 0.8 | ≤ 0.15 | ± 0.8 | ≤ 0.3 | ± 0.8 | ≤ 0.3 |
| P200L | D200 D300 | DF200ST DF300ST | FA10005M | FA10005P | 20 | ± 0.50 | ≤ 0.20 | ± 2.5 | ≤ 1.0 | ± 1.6 | ≤ 0.6 | ± 8.0 | ≤ 3.0 |
| | | | | | 100 | ± 0.80 | ≤ 0.25 | ± 0.8 | ≤ 0.25 | ± 1.6 | ≤ 0.6 | ± 1.6 | ≤ 0.6 |
| | | | | | 200 | ± 1.60 | ≤ 0.30 | ± 0.8 | ≤ 0.15 | ± 1.6 | ≤ 0.6 | ± 0.8 | ≤ 0.3 |
| P1000L | D1000 D1200 | DF1000ST DF1200ST | FA10006M | FA10006P | 100 | ± 3.0 | ≤ 0.6 | ± 3.0 | ≤ 0.6 | ± 8.0 | ≤ 3.0 | ± 8.0 | ≤ 3.0 |
| | | | | | 500 | ± 4.0 | ≤ 1.0 | ± 0.8 | ≤ 0.2 | ± 8.0 | ≤ 3.0 | ± 1.6 | ≤ 0.6 |
| | | | | | 1000 | ± 8.0 | ≤ 1.5 | ± 0.8 | ≤ 0.15 | ± 8.0 | ≤ 3.0 | ± 0.8 | ≤ 0.3 |
| P5000L | D5000 | | FA10007 | | 500 | ± 12 | ≤ 3 | ± 2.4 | ≤ 0.6 | ± 40 | ≤ 15.0 | ± 8.0 | ≤ 3.0 |
| | | | | | 2500 | ± 15 | ≤ 5 | ± 0.6 | ≤ 0.2 | ± 40 | ≤ 15.0 | ± 1.6 | ≤ 0.6 |
| | | | | | 5000 | ± 30 | ≤ 8 | ± 0.6 | ≤ 0.16 | ± 40 | ≤ 15.0 | ± 0.8 | ≤ 0.3 |
| P10mLL | D10mL | | FA10008 | | 1000 | ± 30 | ≤ 6 | ± 3.0 | ≤ 0.6 | ± 60 | ≤ 30.0 | ± 6.0 | ≤ 3.0 |
| | | | | | 5000 | ± 40 | ≤ 10 | ± 0.8 | ≤ 0.2 | ± 60 | ≤ 30.0 | ± 1.2 | ≤ 0.6 |
| | | | | | 10000 | ± 60 | ≤ 16 | ± 0.6 | ≤ 0.16 | ± 60 | ≤ 30.0 | ± 0.6 | ≤ 0.3 |
| PIPETMAN® L MULTICHANNEL MODELS | | | | | | | | | | | | | |
| P8x10L | D10 DL10 | | FA10013 | | 0.5 | ± 0.08 | ≤ 0.04 | ± 16.0 | ≤ 8.0 | ± 0.24 | ≤ 0.16 | ± 48.0 | ≤ 32.0 |
| | | | | | 1 | ± 0.08 | ≤ 0.05 | ± 8.0 | ≤ 5.0 | ± 0.24 | ≤ 0.16 | ± 24.0 | ≤ 16.0 |
| | | | | | 5 | ± 0.20 | ≤ 0.10 | ± 4.0 | ≤ 2.0 | ± 0.24 | ≤ 0.16 | ± 4.8 | ≤ 3.2 |
| | | | | | 10 | ± 0.20 | ≤ 0.10 | ± 2.0 | ≤ 1.0 | ± 0.24 | ≤ 0.16 | ± 2.4 | ≤ 1.6 |
| P8x20L | DL10 D200 | | FA10009 | | 2 | ± 0.10 | ≤ 0.08 | ± 5.0 | ≤ 4.0 | ± 0.4 | ≤ 0.2 | ± 20.0 | ≤ 10.0 |
| | | | | | 10 | ± 0.20 | ≤ 0.10 | ± 2.0 | ≤ 1.0 | ± 0.4 | ≤ 0.2 | ± 4.0 | ≤ 2.0 |
| | | | | | 20 | ± 0.40 | ≤ 0.15 | ± 2.0 | ≤ 0.75 | ± 0.4 | ≤ 0.2 | ± 2.0 | ≤ 1.0 |
| P8x200L | D200 | | FA10011 | | 20 | ± 0.50 | ≤ 0.25 | ± 2.5 | ≤ 1.25 | ± 3.2 | ≤ 1.2 | ± 16.0 | ≤ 6.0 |
| | | | | | 100 | ± 1.00 | ≤ 0.40 | ± 1.0 | ≤ 0.4 | ± 3.2 | ≤ 1.2 | ± 3.2 | ≤ 1.2 |
| | | | | | 200 | ± 2.00 | ≤ 0.50 | ± 1.0 | ≤ 0.25 | ± 3.2 | ≤ 1.2 | ± 1.6 | ≤ 0.6 |
| P8x200LVR | D200 | | FA10035 | | 20 | ± 0.50 | ≤ 0.25 | ± 2.5 | ≤ 1.25 | ± 3.2 | ≤ 1.2 | ± 16.0 | ≤ 6.0 |
| | | | | | 100 | ± 1.00 | ≤ 0.40 | ± 1.0 | ≤ 0.4 | ± 3.2 | ≤ 1.2 | ± 3.2 | ≤ 1.2 |
| | | | | | 200 | ± 2.00 | ≤ 0.50 | ± 1.0 | ≤ 0.25 | ± 3.2 | ≤ 1.2 | ± 1.6 | ≤ 0.6 |
| P8x300L | D300 | | FA10015 | | 20 | ± 1.00 | ≤ 0.35 | ± 5.0 | ≤ 1.75 | ± 8.0 | ≤ 3.0 | ± 40.0 | ≤ 15.0 |
| | | | | | 30 | ± 1.00 | ≤ 0.35 | ± 3.3 | ≤ 1.17 | ± 8.0 | ≤ 3.0 | ± 26.67 | ≤ 10.0 |
| | | | | | 150 | ± 1.50 | ≤ 0.60 | ± 1.0 | ≤ 0.4 | ± 8.0 | ≤ 3.0 | ± 5.33 | ≤ 2.0 |
| | | | | | 300 | ± 3.00 | ≤ 1.00 | ± 1.0 | ≤ 0.33 | ± 8.0 | ≤ 3.0 | ± 2.67 | ≤ 1.0 |
| P8x300LVR | D300 | | FA10037 | | 20 | ± 1.00 | ≤ 0.35 | ± 5.0 | ≤ 1.75 | ± 8.0 | ≤ 3.0 | ± 40.0 | ≤ 15.0 |
| | | | | | 30 | ± 1.00 | ≤ 0.35 | ± 3.3 | ≤ 1.17 | ± 8.0 | ≤ 3.0 | ± 26.67 | ≤ 10.0 |
| | | | | | 150 | ± 1.50 | ≤ 0.60 | ± 1.0 | ≤ 0.4 | ± 8.0 | ≤ 3.0 | ± 5.33 | ≤ 2.0 |
| | | | | | 300 | ± 3.00 | ≤ 1.00 | ± 1.0 | ≤ 0.33 | ± 8.0 | ≤ 3.0 | ± 2.67 | ≤ 1.0 |
| P12x1200L | D1200 | | FA10039 | | 100 | ± 6.0 | ≤ 0.9 | ± 6.0 | ≤ 0.9 | ± 32 | ≤ 12.0 | ± 32.00 | ≤ 12.0 |
| | | | | | 120 | ± 6.0 | ≤ 0.9 | ± 5.0 | ≤ 0.75 | ± 32 | ≤ 12.0 | ± 26.67 | ≤ 10.0 |
| | | | | | 600 | ± 8.0 | ≤ 1.2 | ± 1.33 | ≤ 0.2 | ± 32 | ≤ 12.0 | ± 5.33 | ≤ 2.0 |
| | | | | | 1200 | ± 10.0 | ≤ 1.5 | ± 0.83 | ≤ 0.13 | ± 32 | ≤ 12.0 | ± 2.67 | ≤ 1.0 |

*CV means Coefficient of Variation
 Gilson maximum permissible errors are guaranteed only when PIPETMAN® pipettes are used with the recommended PIPETMAN® DIAMOND Tips.
 For a pipette with a plastic tip ejector, the part number ends with the letter P.
 For a pipette with a stainless steel tip ejector, the part number ends with the letter M.
 P5000L and P10mLL are equipped with plastic tip ejectors.



GILSON PIPETTE SPECIFICATIONS

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PIPETMAN® L FIXED VOLUME MODELS



| Model | PIPETMAN® DIAMOND Tips | | Part Number | Volume (µL) | Gilson | | | | ISO 8655 | | | |
|--------|------------------------|----------------|-------------|-------------|-----------------------|-------------------|----------------------|---------------------|-----------------------|-------------------|----------------------|---------------------|
| | D10 DL10 | DF10ST DFL10ST | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| F1L | D10 DL10 | DF10ST DFL10ST | FA10017 | 1 | ± 0.02 | ≤ 0.015 | ± 2.0 | ≤ 1.50 | ± 0.05 | ≤ 0.05 | ± 5.0 | ≤ 5.0 |
| F2L | D10 DL10 | DF10ST DFL10ST | FA10018 | 2 | ± 0.05 | ≤ 0.02 | ± 2.5 | ≤ 1.0 | ± 0.08 | ≤ 0.04 | ± 4.0 | ≤ 2.0 |
| F5L | D10 DL10 | DF10ST DFL10ST | FA10019 | 5 | ± 0.050 | ≤ 0.025 | ± 1.0 | ≤ 0.5 | ± 0.125 | ≤ 0.075 | ± 2.5 | ≤ 1.5 |
| F10L | D10 DL10 | DF10ST DFL10ST | FA10020 | 10 | ± 0.06 | ≤ 0.03 | ± 0.6 | ≤ 0.3 | ± 0.12 | ≤ 0.08 | ± 1.2 | ≤ 0.8 |
| F20L | D200 | DF30ST | FA10021 | 20 | ± 0.10 | ≤ 0.05 | ± 0.5 | ≤ 0.25 | ± 0.20 | ≤ 0.10 | ± 1.0 | ≤ 0.5 |
| F25L | D200 | DF30ST | FA10022 | 25 | ± 0.20 | ≤ 0.07 | ± 0.8 | ≤ 0.28 | ± 0.50 | ≤ 0.20 | ± 2.0 | ≤ 0.8 |
| F50L | D200 | DF100ST | FA10023 | 50 | ± 0.35 | ≤ 0.12 | ± 0.7 | ≤ 0.24 | ± 0.50 | ≤ 0.20 | ± 1.0 | ≤ 0.4 |
| F100L | D200 | DF100ST | FA10024 | 100 | ± 0.55 | ≤ 0.15 | ± 0.55 | ≤ 0.15 | ± 0.80 | ≤ 0.30 | ± 0.8 | ≤ 0.3 |
| F200L | D200 | DF200ST | FA10025 | 200 | ± 1.2 | ≤ 0.30 | ± 0.6 | ≤ 0.15 | ± 1.60 | ≤ 0.60 | ± 0.8 | ≤ 0.3 |
| F250L | D300 | DF300ST | FA10026 | 250 | ± 1.50 | ≤ 0.75 | ± 0.6 | ≤ 0.3 | ± 4.00 | ≤ 1.50 | ± 1.6 | ≤ 0.6 |
| F300L | D1000 | DF1000ST | FA10027 | 300 | ± 2.4 | ≤ 0.50 | ± 0.8 | ≤ 0.17 | ± 4.00 | ≤ 1.50 | ± 1.33 | ≤ 0.5 |
| F400L | D1000 | DF1000ST | FA10028 | 400 | ± 2.4 | ≤ 0.80 | ± 0.6 | ≤ 0.2 | ± 4.00 | ≤ 1.50 | ± 1.0 | ≤ 0.4 |
| F500L | D1000 | DF1000ST | FA10029 | 500 | ± 3.0 | ≤ 0.80 | ± 0.6 | ≤ 0.16 | ± 4.00 | ≤ 1.50 | ± 0.8 | ≤ 0.3 |
| F1000L | D1000 | DF1000ST | FA10030 | 1000 | ± 5.0 | ≤ 1.3 | ± 0.5 | ≤ 0.13 | ± 8.00 | ≤ 3.00 | ± 0.8 | ≤ 0.3 |
| F5000L | D5000 | | FA10031 | 5000 | ± 20.0 | ≤ 7.0 | ± 0.4 | ≤ 0.14 | ± 40.00 | ≤ 15.00 | ± 0.8 | ≤ 0.3 |

*CV means Coefficient of Variation



GILSON PIPETTE SPECIFICATIONS

SYSTEMATIC ERROR = ACCURACY
RANDOM ERROR = REPEATABILITY

PIPETMAN® G SINGLE CHANNEL



| Model | PIPETMAN® DIAMOND Tips | | Part Number | Volume (µL) | Maximum Permissible Errors | | | | | | | |
|-----------|------------------------|----------------------|-------------|-------------|----------------------------|-------------------|----------------------|---------------------|-----------------------|-------------------|----------------------|---------------------|
| | | | | | Gilson | | | | ISO 8655 | | | |
| | | | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| P2G | D10 DL10 | DF10ST DFL10ST | F144054M | 0.2 | ± 0.024 | ≤ 0.012 | ± 12.0 | ≤ 6.0 | ± 0.08 | ≤ 0.04 | ± 40.0 | ≤ 20.0 |
| | | | | 0.5 | ± 0.025 | ≤ 0.012 | ± 5.0 | ≤ 2.4 | ± 0.08 | ≤ 0.04 | ± 16.0 | ≤ 8.0 |
| | | | | 1 | ± 0.025 | ≤ 0.012 | ± 2.5 | ≤ 1.2 | ± 0.08 | ≤ 0.04 | ± 8.0 | ≤ 4.0 |
| | | | | 2 | ± 0.030 | ≤ 0.014 | ± 1.5 | ≤ 0.7 | ± 0.08 | ≤ 0.04 | ± 4.0 | ≤ 2.0 |
| P10G** | D10 DL10 | DF10ST DFL10ST | F144055M | 1 | ± 0.025 | ≤ 0.012 | ± 2.5 | ≤ 1.2 | ± 0.12 | ≤ 0.08 | ± 12.0 | ≤ 8.0 |
| | | | | 5 | ± 0.075 | ≤ 0.030 | ± 1.5 | ≤ 0.6 | ± 0.12 | ≤ 0.08 | ± 16.0 | ≤ 8.0 |
| | | | | 10 | ± 0.100 | ≤ 0.040 | ± 1.0 | ≤ 0.4 | ± 0.12 | ≤ 0.08 | ± 2.4 | ≤ 0.8 |
| P20G | D200 | DF30ST | F144056M | 2 | ± 0.10 | ≤ 0.030 | ± 5.0 | ≤ 1.5 | ± 0.2 | ≤ 0.1 | ± 10.0 | ≤ 5.0 |
| | | | | 10 | ± 0.10 | ≤ 0.050 | ± 1.0 | ≤ 0.5 | ± 0.2 | ≤ 0.1 | ± 2.0 | ≤ 1.0 |
| | | | | 20 | ± 0.20 | ≤ 0.060 | ± 1.0 | ≤ 0.3 | ± 0.2 | ≤ 0.1 | ± 1.0 | ≤ 0.5 |
| P100G | D200 | DF100ST | F144057M | 10 | ± 0.35 | ≤ 0.10 | ± 3.5 | ≤ 1.0 | ± 0.8 | ≤ 0.3 | ± 8.0 | ≤ 3.0 |
| | | | | 50 | ± 0.40 | ≤ 0.12 | ± 0.8 | ≤ 0.24 | ± 0.8 | ≤ 0.3 | ± 1.6 | ≤ 0.6 |
| | | | | 100 | ± 0.80 | ≤ 0.15 | ± 0.8 | ≤ 0.15 | ± 0.8 | ≤ 0.3 | ± 0.8 | ≤ 0.3 |
| P200G | D200 D300 | DF200ST DF300ST | F144058M | 20 | ± 0.50 | ≤ 0.20 | ± 2.5 | ≤ 1.0 | ± 1.6 | ≤ 0.6 | ± 8.0 | ≤ 3.0 |
| | | | | 100 | ± 0.80 | ≤ 0.25 | ± 0.8 | ≤ 0.25 | ± 1.6 | ≤ 0.6 | ± 1.6 | ≤ 0.6 |
| | | | | 200 | ± 1.60 | ≤ 0.30 | ± 0.8 | ≤ 0.15 | ± 1.6 | ≤ 0.6 | ± 0.8 | ≤ 0.3 |
| P1000G | D1000 D1200 | DF1000ST DF1200ST | F144059M | 100 | ± 3.0 | ≤ 0.6 | ± 3.0 | ≤ 0.6 | ± 8.0 | ≤ 3.0 | ± 8.0 | ≤ 3.0 |
| | | | | 500 | ± 4.0 | ≤ 1.0 | ± 0.8 | ≤ 0.2 | ± 8.0 | ≤ 3.0 | ± 1.6 | ≤ 0.6 |
| | | | | 1000 | ± 8.0 | ≤ 1.5 | ± 0.8 | ≤ 0.15 | ± 8.0 | ≤ 3.0 | ± 0.8 | ≤ 0.3 |
| P5000G*** | D5000 | | F144066 | 500 | ± 12 | ≤ 3 | ± 2.4 | ≤ 0.6 | ± 40 | ≤ 15.0 | ± 8.0 | ≤ 3.0 |
| | | | | 2500 | ± 15 | ≤ 5 | ± 0.6 | ≤ 0.2 | ± 40 | ≤ 15.0 | ± 1.6 | ≤ 0.6 |
| | | | | 5000 | ± 30 | ≤ 8 | ± 0.6 | ≤ 0.16 | ± 40 | ≤ 15.0 | ± 0.8 | ≤ 0.3 |
| P10mL*** | D10mL | | F144067 | 1000 | ± 30 | ≤ 6 | ± 3.0 | ≤ 0.6 | ± 60 | ≤ 30.0 | ± 6.0 | ≤ 3.0 |
| | | | | 5000 | ± 40 | ≤ 10 | ± 0.8 | ≤ 0.2 | ± 60 | ≤ 30.0 | ± 1.2 | ≤ 0.6 |
| | | | | 10000 | ± 60 | ≤ 16 | ± 0.6 | ≤ 0.16 | ± 60 | ≤ 30.0 | ± 0.6 | ≤ 0.3 |

PIPETMAN® G MULTICHANNEL



| | | | | | | | | | | | | |
|---------------------|--------------|--------------------|--------------------|------------------|----------------------------|----------------------------|-------------------------|---------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
| P8x10G P12x10G | D10 DL10 | DF10ST DFL10ST | F144068 F144069 | 1 | ± 0.08 | ≤ 0.05 | ± 8.0 | ≤ 5.0 | ± 0.24 | ≤ 0.16 | ± 24.0 | ≤ 16.0 |
| | | | | 5 10 | ± 0.20 ± 0.20 | ≤ 0.10 ≤ 0.10 | ± 4.0 ± 2.0 | ≤ 2.0 ≤ 1.0 | ± 0.24 ± 0.24 | ≤ 0.16 ≤ 0.16 | ± 4.8 ± 2.4 | ≤ 3.2 ≤ 1.6 |
| P8x20G P12x20G | DL10 D200 | DFL10ST DF30ST | F144070 F144071 | 2 | ± 0.10 | ≤ 0.08 | ± 5.0 | ≤ 4.0 | ± 0.4 | ≤ 0.20 | ± 20.0 | ≤ 10.0 |
| | | | | 10 20 | ± 0.20 ± 0.40 | ≤ 0.10 ≤ 0.20 | ± 2.0 ± 2.0 | ≤ 1.0 ≤ 1.0 | ± 0.4 ± 0.4 | ≤ 0.20 ≤ 0.20 | ± 4.0 ± 2.0 | ≤ 2.0 ≤ 1.0 |
| | | | | 20 100 200 | ± 0.50 ± 1.00 ± 2.00 | ≤ 0.25 ≤ 0.40 ≤ 0.50 | ± 2.5 ± 1.0 ± 1.0 | ≤ 1.25 ≤ 0.4 ≤ 0.25 | ± 3.2 ± 3.2 ± 3.2 | ≤ 1.2 ≤ 1.2 ≤ 1.2 | ± 16.0 ± 3.2 ± 1.6 | ≤ 6.0 ≤ 1.2 ≤ 0.6 |
| P8x300G P12x300G | D200 D300 | DF200ST DF300ST | F144074 F144075 | 30 | ± 1.00 | ≤ 0.35 | ± 3.33 | ≤ 1.17 | ± 8.0 | ≤ 3.0 | ± 26.67 | ≤ 10.0 |
| | | | | 150 300 | ± 1.50 ± 3.00 | ≤ 0.60 ≤ 1.00 | ± 1.0 ± 1.0 | ≤ 0.4 ≤ 0.33 | ± 8.0 ± 8.0 | ≤ 3.0 ≤ 3.0 | ± 5.33 ± 2.67 | ≤ 2.0 ≤ 1.0 |

*CV means Coefficient of Variation

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

**P10G model can be used up to 0.5 µL.









***P5000G and P10mL do not have tip ejectors.



GILSON PIPETTE SPECIFICATIONS

SYSTEMATIC ERROR = ACCURACY
RANDOM ERROR = REPEATABILITY

PIPETMAN® CLASSIC SINGLE CHANNEL—VARIABLE VOLUME MODELS

| Model | PIPETMAN® DIAMOND Tips | | Part Number | Volume (µL) | Maximum Permissible Errors | | | | | | | |
|--|------------------------|----------------------|-------------|-------------|----------------------------|-------------------|----------------------|---------------------|-----------------------|-------------------|----------------------|---------------------|
| | | | | | Gilson | | | | ISO 8655 | | | |
| | | | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
|  P2 | D10 DL10 | DF10ST DFL10ST | F144801 | 0.2 | ± 0.024 | ≤ 0.012 | ± 12.0 | ≤ 6.0 | ± 0.08 | ≤ 0.04 | ± 40.0 | ≤ 20.0 |
| | | | | 0.5 | ± 0.025 | ≤ 0.012 | ± 5.0 | ≤ 2.4 | ± 0.08 | ≤ 0.04 | ± 16.0 | ≤ 8.0 |
| | | | | 1 | ± 0.025 | ≤ 0.012 | ± 2.5 | ≤ 1.2 | ± 0.08 | ≤ 0.04 | ± 8.0 | ≤ 4.0 |
|  P10 | D10 DL10 | DF10ST DFL10ST | F144802 | 5 | ± 0.025 | ≤ 0.012 | ± 2.5 | ≤ 1.2 | ± 0.12 | ≤ 0.08 | ± 12.0 | ≤ 8.0 |
| | | | | 10 | ± 0.075 | ≤ 0.030 | ± 1.5 | ≤ 0.6 | ± 0.12 | ≤ 0.08 | ± 2.4 | ≤ 1.6 |
| | | | | 10 | ± 0.100 | ≤ 0.040 | ± 1.0 | ≤ 0.4 | ± 0.12 | ≤ 0.08 | ± 1.2 | ≤ 0.8 |
|  P20 | D200 | DF30ST | F123600 | 2 | ± 0.10 | ≤ 0.030 | ± 5.0 | ≤ 1.5 | ± 0.2 | ≤ 0.1 | ± 10.0 | ≤ 5.0 |
| | | | | 5 | ± 0.10 | ≤ 0.040 | ± 2.0 | ≤ 0.8 | ± 0.2 | ≤ 0.1 | ± 4.0 | ≤ 2.0 |
| | | | | 10 | ± 0.10 | ≤ 0.050 | ± 1.0 | ≤ 0.5 | ± 0.2 | ≤ 0.1 | ± 2.0 | ≤ 1.0 |
| | | | | 20 | ± 0.20 | ≤ 0.060 | ± 1.0 | ≤ 0.3 | ± 0.2 | ≤ 0.1 | ± 1.0 | ≤ 0.5 |
|  P100 | D200 | DF100ST | F123615 | 10 | ± 0.35 | ≤ 0.10 | ± 3.5 | ≤ 1.0 | ± 0.8 | ≤ 0.3 | ± 8.0 | ≤ 3.0 |
| | | | | 50 | ± 0.40 | ≤ 0.12 | ± 0.8 | ≤ 0.24 | ± 0.8 | ≤ 0.3 | ± 1.6 | ≤ 0.6 |
| | | | | 100 | ± 0.80 | ≤ 0.15 | ± 0.8 | ≤ 0.15 | ± 0.8 | ≤ 0.3 | ± 0.8 | ≤ 0.3 |
|  P200 | D200 D300 | DF200ST DF300ST | F123601 | 20 | ± 0.50 | ≤ 0.20 | ± 2.5 | ≤ 1.0 | ± 1.6 | ≤ 0.6 | ± 8.0 | ≤ 3.0 |
| | | | | 100 | ± 0.80 | ≤ 0.25 | ± 0.8 | ≤ 0.25 | ± 1.6 | ≤ 0.6 | ± 1.6 | ≤ 0.6 |
| | | | | 200 | ± 1.60 | ≤ 0.30 | ± 0.8 | ≤ 0.15 | ± 1.6 | ≤ 0.6 | ± 0.8 | ≤ 0.3 |
|  P1000 | D1000 D1200 | DF1000ST DF1200ST | F123602 | 100 | ± 3.0 | ≤ 0.6 | ± 3.0 | ≤ 0.6 | ± 8.0 | ≤ 3.0 | ± 8.0 | ≤ 3.0 |
| | | | | 500 | ± 4.0 | ≤ 1.0 | ± 0.8 | ≤ 0.2 | ± 8.0 | ≤ 3.0 | ± 1.6 | ≤ 0.6 |
| | | | | 1000 | ± 8.0 | ≤ 1.5 | ± 0.8 | ≤ 0.15 | ± 8.0 | ≤ 3.0 | ± 0.8 | ≤ 0.3 |
|  P5000** | D5000 | | F123603 | 500 | ± 12 | ≤ 3 | ± 2.4 | ≤ 0.6 | ± 40 | ≤ 15.0 | ± 8.0 | ≤ 3.0 |
| | | | | 2500 | ± 15 | ≤ 5 | ± 0.6 | ≤ 0.2 | ± 40 | ≤ 15.0 | ± 1.6 | ≤ 0.6 |
| | | | | 5000 | ± 30 | ≤ 8 | ± 0.6 | ≤ 0.16 | ± 40 | ≤ 15.0 | ± 0.8 | ≤ 0.3 |
|  P10mL** | D10mL | | F161201 | 1000 | ± 30 | ≤ 6 | ± 3.0 | ≤ 0.6 | ± 60 | ≤ 30.0 | ± 6.0 | ≤ 3.0 |
| | | | | 5000 | ± 40 | ≤ 10 | ± 0.8 | ≤ 0.2 | ± 60 | ≤ 30.0 | ± 1.2 | ≤ 0.6 |
| | | | | 10000 | ± 60 | ≤ 16 | ± 0.6 | ≤ 0.16 | ± 60 | ≤ 30.0 | ± 0.6 | ≤ 0.3 |

*CV means Coefficient of Variation

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

**P5000 and P10mL do not have tip ejectors.



GILSON PIPETTE SPECIFICATIONS

SYSTEMATIC ERROR = ACCURACY
RANDOM ERROR = REPEATABILITY

MICROMAN® E



| Model | Capillary Piston | Part Number | Volume (µL) | Maximum Permissible Errors | | | | | | | |
|--------|--------------------|-------------|--------------------|----------------------------|----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------------|--------------------------|
| | | | | Gilson | | | | ISO 8655 | | | |
| | | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| M10E | CP10 CP10ST | FD10001 | 1 5 10 | ± 0.09 ± 0.10 ± 0.15 | ≤ 0.03 ≤ 0.03 ≤ 0.06 | ± 9.0 ± 2.0 ± 1.5 | ≤ 3.0 ≤ 0.6 ≤ 0.6 | ± 0.2 ± 0.2 ± 0.2 | ≤ 0.1 ≤ 0.1 ≤ 0.1 | ± 20.0 ± 4.0 ± 2.0 | ≤ 10.0 ≤ 2.0 ≤ 1.0 |
| M25E | CP25 CP25ST | FD10002 | 3 10 25 | ± 0.25 ± 0.27 ± 0.30 | ≤ 0.08 ≤ 0.08 ≤ 0.10 | ± 8.3 ± 2.7 ± 1.2 | ≤ 2.7 ≤ 0.8 ≤ 0.4 | ± 0.7 ± 0.7 ± 0.7 | ≤ 0.3 ≤ 0.3 ≤ 0.3 | ± 23.33 ± 7.0 ± 2.8 | ≤ 10.0 ≤ 3.0 ≤ 1.2 |
| M50E | CP50 CP50ST | FD10003 | 20 50 | ± 0.34 ± 0.70 | ≤ 0.20 ≤ 0.30 | ± 1.7 ± 1.4 | ≤ 1.0 ≤ 0.6 | ± 0.7 ± 0.7 | ≤ 0.3 ≤ 0.3 | ± 3.5 ± 1.4 | ≤ 1.5 ≤ 0.6 |
| M100E | CP100 CP100ST | FD10004 | 10 50 100 | ± 0.50 ± 0.75 ± 1.00 | ≤ 0.20 ≤ 0.30 ≤ 0.40 | ± 5.0 ± 1.5 ± 1.0 | ≤ 2.0 ≤ 0.6 ≤ 0.4 | ± 1.5 ± 1.5 ± 1.5 | ≤ 0.6 ≤ 0.6 ≤ 0.6 | ± 15.0 ± 3.0 ± 1.5 | ≤ 6.0 ≤ 1.2 ≤ 0.6 |
| M250E | CP250 CP250ST | FD10005 | 50 100 250 | ± 1.50 ± 1.70 ± 2.50 | ≤ 0.30 ≤ 0.30 ≤ 0.50 | ± 3.0 ± 1.7 ± 1.0 | ≤ 0.6 ≤ 0.3 ≤ 0.2 | ± 6 ± 6 ± 6 | ≤ 2.0 ≤ 2.0 ≤ 2.0 | ± 12.0 ± 6.0 ± 2.4 | ≤ 4.0 ≤ 2.0 ≤ 0.8 |
| M1000E | CP1000 CP1000ST | FD10006 | 100 500 1000 | ± 3.0 ± 5.0 ± 8.0 | ≤ 1.6 ≤ 2.5 ≤ 4.0 | ± 3.0 ± 1.0 ± 0.8 | ≤ 1.6 ≤ 0.5 ≤ 0.4 | ± 12 ± 12 ± 12 | ≤ 4.0 ≤ 4.0 ≤ 4.0 | ± 12.0 ± 2.4 ± 1.2 | ≤ 4.0 ≤ 0.8 ≤ 0.4 |

*CV means Coefficient of Variation

DISTRIMAN®

| Description | Part Number |
|-----------------------------|-------------|
| DISTRIMAN (1 µL to 1.25 mL) | F164001 |

DISTRITIPS®

| DISTRITIPS (Pack of 50) | Aliquot Range | Part Number | Volume (µL) | Maximum Permissible Errors | | | | | | | |
|-------------------------------|---------------|--------------------|-------------|----------------------------|-------------------|----------------------|---------------------|-----------------------|-------------------|----------------------|---------------------|
| | | | | Gilson | | | | ISO 8655 | | | |
| | | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| 125 µL Micro Micro ST** | 1-12.5 µL | F164100 F164130 | 2 | ± 0.100 | ≤ 0.080 | ± 5.0 | ≤ 4.0 | ± 0.2 | ≤ 0.1 | ± 10.0 | ≤ 5.0 |
| | | | 5 | ± 0.125 | ≤ 0.075 | ± 2.5 | ≤ 1.5 | ± 0.2 | ≤ 0.1 | ± 4.0 | ≤ 2.0 |
| | | | 10 | ± 0.200 | ≤ 0.100 | ± 2.0 | ≤ 1.0 | ± 0.2 | ≤ 0.1 | ± 2.0 | ≤ 1.0 |
| 1250 µL Mini Mini ST** | 10-125 µL | F164110 F164140 | 20 | ± 0.80 | ≤ 0.20 | ± 4.0 | ≤ 1.0 | ± 1.5 | ≤ 0.6 | ± 7.5 | ≤ 3.0 |
| | | | 50 | ± 1.00 | ≤ 0.40 | ± 2.0 | ≤ 0.8 | ± 1.5 | ≤ 0.6 | ± 3.0 | ≤ 1.2 |
| | | | 100 | ± 1.00 | ≤ 0.60 | ± 1.0 | ≤ 0.6 | ± 1.5 | ≤ 0.6 | ± 1.5 | ≤ 0.6 |
| 12.5 mL Maxi Maxi ST** | 0.1-1.25 mL | F164120 F164150 | 200 | ± 6.0 | ≤ 1.0 | ± 3.0 | ≤ 0.5 | ± 12.0 | ≤ 4.0 | ± 6.0 | ≤ 2.0 |
| | | | 500 | ± 7.5 | ≤ 1.5 | ± 1.5 | ≤ 0.3 | ± 12.0 | ≤ 4.0 | ± 2.4 | ≤ 0.8 |
| | | | 1000 | ± 10.0 | ≤ 2.5 | ± 1.0 | ≤ 0.25 | ± 12.0 | ≤ 4.0 | ± 1.2 | ≤ 0.4 |

*CV means Coefficient of Variation

**ST means pre-sterilized syringes (individually wrapped)



GILSON PIPETTE SPECIFICATIONS

SYSTEMATIC ERROR = ACCURACY
RANDOM ERROR = REPEATABILITY

| PIPETMAN® FIXED VOLUME | | | | | | | | | | | | |
|------------------------|------------------------|--------------------|----------------|-------------|----------------------------|-------------------|----------------------|---------------------|-----------------------|-------------------|----------------------|---------------------|
| Model | PIPETMAN® DIAMOND Tips | | Part Number | Volume (µL) | Maximum Permissible Errors | | | | | | | |
| | | | | | Gilson | | | | ISO 8655 | | | |
| | | | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| F2 | D200 | DF30ST | F123770 | 2 | ± 0.08 | ≤ 0.03 | ± 4.0 | ≤ 1.5 | ± 0.08 | ≤ 0.04 | ± 4.0 | ≤ 2.0 |
| F5 | D200 | DF30ST | F123771 | 5 | ± 0.10 | ≤ 0.04 | ± 2.0 | ≤ 0.8 | ± 0.125 | ≤ 0.075 | ± 2.5 | ≤ 1.5 |
| F10 | D200 | DF30ST | F123772 | 10 | ± 0.10 | ≤ 0.05 | ± 1.0 | ≤ 0.5 | ± 0.12 | ≤ 0.08 | ± 1.2 | ≤ 0.8 |
| F20 | D200 | DF30ST | F123604 | 20 | ± 0.20 | ≤ 0.06 | ± 1.0 | ≤ 0.3 | ± 0.2 | ≤ 0.1 | ± 1.0 | ≤ 0.5 |
| F25 | D200 | DF30ST | F123775 | 25 | ± 0.25 | ≤ 0.07 | ± 1.0 | ≤ 0.3 | ± 0.5 | ≤ 0.2 | ± 2.0 | ≤ 0.8 |
| F50 | D200 | DF100ST | F123778 | 50 | ± 0.40 | ≤ 0.15 | ± 0.8 | ≤ 0.3 | ± 0.5 | ≤ 0.2 | ± 1.0 | ≤ 0.4 |
| F100 | D200 | DF100ST | F123784 | 100 | ± 0.80 | ≤ 0.25 | ± 0.8 | ≤ 0.3 | ± 0.8 | ≤ 0.3 | ± 0.8 | ≤ 0.3 |
| F200 | D200 D300 | DF200ST DF300ST | F123605 | 200 | ± 1.6 | ≤ 0.30 | ± 0.8 | ≤ 0.2 | ± 1.6 | ≤ 0.6 | ± 0.8 | ≤ 0.3 |
| F250 | D1000 | DF1000ST | F123787 | 250 | ± 3.0 | ≤ 0.75 | ± 1.2 | ≤ 0.3 | ± 4 | ≤ 1.5 | ± 1.6 | ≤ 0.6 |
| F300 | D1000 | DF1000ST | F123788 | 300 | ± 3.5 | ≤ 0.75 | ± 1.2 | ≤ 0.3 | ± 4 | ≤ 1.5 | ± 1.3 | ≤ 0.5 |
| F400 | D1000 | DF1000ST | F123789 | 400 | ± 3.6 | ≤ 0.80 | ± 0.9 | ≤ 0.2 | ± 4 | ≤ 1.5 | ± 1.0 | ≤ 0.4 |
| F500 | D1000 | DF1000ST | F123790 | 500 | ± 4.0 | ≤ 1.0 | ± 0.8 | ≤ 0.2 | ± 4 | ≤ 1.5 | ± 0.8 | ≤ 0.3 |
| F1000 | D1000 | DF1000ST | F123606 | 1000 | ± 8.0 | ≤ 1.3 | ± 0.8 | ≤ 0.1 | ± 8 | ≤ 3 | ± 0.8 | ≤ 0.3 |
| F5000 | D5000 | | F123607 | 5000 | ± 30.0 | ≤ 8.0 | ± 0.6 | ≤ 0.2 | ± 40 | ≤ 15 | ± 0.8 | ≤ 0.3 |

*CV means Coefficient of Variation

| PLATEMASTER® | | | | | | | | | | | | | |
|--------------|------------------------|-------------------------------|----------------------------------|----------------|-----------------------------------|--|--|--|---|--|--|--|--|
| Model | PIPETMAN® DIAMOND Tips | | | Part Number | Volume (µL) | Maximum Permissible Errors | | | | | | | |
| | | | | | | Gilson | | | | ISO 8655 | | | |
| | | | | | | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (µL) | Random Error (µL) | Systematic Error (%) | Random Error (%CV)* |
| P20 | D200 DS200** | D200ST DS200ST** | DF100ST DF200ST DFS200ST** | F110761 | 0.5 10 20 | ± 0.12 ± 0.12 ± 0.20 | ≤ 0.10 ≤ 0.10 ≤ 0.18 | ± 24.0 ± 1.2 ± 1.0 | ≤ 20.00 ≤ 1.0 ≤ 0.9 | ± 0.40 ± 0.40 ± 0.40 | ≤ 0.20 ≤ 0.20 ≤ 0.20 | ± 80.00 ± 4.0 ± 2.0 | ≤ 40.0 ≤ 2.0 ≤ 1.0 |
| P220 | D200 DS200* D300 | D200ST DS200ST** D300ST | DF200ST DFS200ST** DF300ST | F110762 | 2 5 20 100 200 220 | ± 0.12 ± 0.25 ± 0.40 ± 1.00 ± 1.60 ± 1.80 | ≤ 0.15 ≤ 0.18 ≤ 0.30 ≤ 0.80 ≤ 0.80 ≤ 0.80 | ± 6.0 ± 5.0 ± 2.0 ± 1.0 ± 0.8 ± 0.8 | ≤ 7.5 ≤ 3.5 ≤ 1.5 ≤ 0.8 ≤ 0.4 ≤ 0.36 | ± 8.00 ± 8.00 ± 8.00 ± 8.00 ± 8.00 ± 8.00 | ≤ 3.00 ≤ 3.00 ≤ 3.00 ≤ 3.00 ≤ 3.00 ≤ 3.00 | ± 400.0 ± 160.0 ± 40.0 ± 8.0 ± 4.0 ± 3.64 | ≤ 150.0 ≤ 60.0 ≤ 15.0 ≤ 3.0 ≤ 1.5 ≤ 1.4 |

*CV means Coefficient of Variation

*Validated for use with 384-well plates.



GILSON PIPETTE SPECIFICATIONS

SYSTEMATIC ERROR = ACCURACY
RANDOM ERROR = REPEATABILITY

| DISPENSAN [®] | | | | | | | | | | | |
|------------------------|-------------|--------------|--------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|
| Model | Part Number | Volume Range | Scaling (mL) | Maximum Permissible Errors | | | | | | | |
| | | | | Gilson | | | | ISO 8655 | | | |
| | | | | Systematic Error (mL) | Random Error (mL) | Systematic Error (%) | Random Error (%CV)* | Systematic Error (mL) | Random Error (mL) | Systematic Error (%) | Random Error (%CV)* |
| DISPENSAN 2.5 mL | F110101 | 0.25-2.5 mL | 0.05 | ± 0.012 ± 0.012 ± 0.012 | ≤ 0.002 ≤ 0.002 ≤ 0.002 | ± 4.800 ± 0.960 ± 0.480 | ≤ 0.800 ≤ 0.160 ≤ 0.080 | ± 0.030 ± 0.030 ± 0.030 | ≤ 0.010 ≤ 0.010 ≤ 0.010 | ± 12.000 ± 2.400 ± 1.200 | ≤ 4.000 ≤ 0.800 ≤ 0.400 |
| DISPENSAN 5.0 mL | F110102 | 0.5-5 mL | 0.10 | ± 0.030 ± 0.030 ± 0.030 | ≤ 0.005 ≤ 0.005 ≤ 0.005 | ± 6.000 ± 1.200 ± 0.600 | ≤ 1.000 ≤ 0.200 ≤ 0.100 | ± 0.030 ± 0.030 ± 0.030 | ≤ 0.010 ≤ 0.010 ≤ 0.010 | ± 6.000 ± 1.200 ± 0.600 | ≤ 2.000 ≤ 0.400 ≤ 0.200 |
| DISPENSAN 10 mL | F110103 | 1-10 mL | 0.20 | ± 0.060 ± 0.060 ± 0.060 | ≤ 0.010 ≤ 0.010 ≤ 0.010 | ± 6.000 ± 1.200 ± 0.600 | ≤ 1.000 ≤ 0.200 ≤ 0.100 | ± 0.060 ± 0.060 ± 0.060 | ≤ 0.020 ≤ 0.020 ≤ 0.020 | ± 6.000 ± 1.200 ± 0.600 | ≤ 2.000 ≤ 0.400 ≤ 0.200 |
| DISPENSAN 25 mL | F110104 | 2.5-25 mL | 0.50 | ± 0.150 ± 0.150 ± 0.150 | ≤ 0.025 ≤ 0.025 ≤ 0.025 | ± 6.000 ± 1.200 ± 0.600 | ≤ 1.000 ≤ 0.200 ≤ 0.100 | ± 0.150 ± 0.150 ± 0.150 | ≤ 0.050 ≤ 0.050 ≤ 0.050 | ± 0.588 ± 1.200 ± 0.600 | ≤ 2.000 ≤ 0.400 ≤ 0.200 |
| DISPENSAN 50 mL | F110105 | 5-50 mL | 1.00 | ± 0.300 ± 0.300 ± 0.300 | ≤ 0.050 ≤ 0.050 ≤ 0.050 | ± 6.000 ± 1.200 ± 0.600 | ≤ 1.000 ≤ 0.200 ≤ 0.100 | ± 0.300 ± 0.300 ± 0.300 | ≤ 0.100 ≤ 0.100 ≤ 0.100 | ± 6.000 ± 1.200 ± 0.600 | ≤ 2.000 ≤ 0.400 ≤ 0.200 |

*CV means Coefficient of Variation