

### POSITIVE-DISPLACEMENT PIPETTE SPECIFICATIONS

#### MICROMAN<sup>®</sup> E

Model	Capillary Piston	Part Number	Nominal Volume (μL)	Vol. (μL)	Vol. (%)	Maximum Permissible Errors							
						Gilson				ISO 8655-2 (Table 3)			
						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	10	1	10	± 0.090	≤ 0.030	± 9.0	≤ 3.00	± 0.200	≤ 0.100	± 20	≤ 10
				5	50	± 0.100	≤ 0.030	± 2.0	≤ 0.60	± 0.200	≤ 0.100	± 4.0	≤ 2.0
				10	100	± 0.150	≤ 0.060	± 1.5	≤ 0.60	± 0.200	≤ 0.100	± 2.0	≤ 1.0
M25E	CP25 CP25ST	FD10002	25	3	12.0	± 0.25	≤ 0.080	± 8.3	≤ 2.67	± 0.35	≤ 0.15	± 11.67	≤ 5.0
				10	40.0	± 0.27	≤ 0.080	± 2.7	≤ 0.80	± 0.35	≤ 0.15	± 3.5	≤ 1.5
				25	100	± 0.30	≤ 0.100	± 1.2	≤ 0.40	± 0.35	≤ 0.15	± 1.4	≤ 0.60
M50E	CP50 CP50ST	FD10003	50	20	40.0	± 0.34	≤ 0.20	± 1.7	≤ 1.00	± 0.70	≤ 0.30	± 3.5	≤ 1.5
				50	100	± 0.70	≤ 0.30	± 1.4	≤ 0.60	± 0.70	≤ 0.30	± 1.4	≤ 0.60
M100E	CP100 CP100ST	FD10004	100	10	10	± 0.50	≤ 0.20	± 5.0	≤ 2.00	± 1.4	≤ 0.6	± 14	≤ 6.0
				50	50	± 0.75	≤ 0.30	± 1.5	≤ 0.60	± 1.4	≤ 0.6	± 2.8	≤ 1.2
				100	100	± 1.00	≤ 0.40	± 1.0	≤ 0.40	± 1.4	≤ 0.6	± 1.4	≤ 0.60
M250E	CP250 CP250ST	FD10005	250	50	20.0	± 1.50	≤ 0.30	± 3.0	≤ 0.60	± 3.0	≤ 1.0	± 6.0	≤ 2.0
				100	40.0	± 1.70	≤ 0.30	± 1.7	≤ 0.30	± 3.0	≤ 1.0	± 3.0	≤ 1.0
				250	100	± 2.50	≤ 0.50	± 1.0	≤ 0.20	± 3.0	≤ 1.0	± 1.2	≤ 0.40
M1000E	CP1000 CP1000ST	FD10006	1000	100	10	± 3.0	≤ 1.6	± 3.0	≤ 1.60	± 12	≤ 4.0	± 12	≤ 4.0
				500	50	± 5.0	≤ 2.5	± 1.0	≤ 0.50	± 12	≤ 4.0	± 2.4	≤ 0.80
				1000	100	± 8.0	≤ 4.0	± 0.8	≤ 0.40	± 12	≤ 4.0	± 1.2	≤ 0.40

\*CV means Coefficient of Variation (%)

#### NOTE

With a precise pipetting technique, the M25E model can be used to aspirate volumes as low as 2.5 μL (10% of the nominal volume of the pipette).



## CAPILLARY PISTON

Capillary Piston Model	Volume Range	MICROMAN® E Model Compatibility	CP Qty/Rack	Rack Qty/ Commercial Unit	CP Qty/ Commercial Unit	Part Number	
TIPACK - Assembled CP	Capillary Piston 10 µL (CP10)	1-10 µL	M10E	96	10	960	F148312
	Capillary Piston 25 µL (CP25)	3-25 µL	M25E	96	10	960	F148012
	Capillary Piston 50 µL (CP50)	20-50 µL	M50E	96	10	960	F148013
	Capillary Piston 100 µL (CP100)	10-100 µL	M100E	96	10	960	F148314
	Capillary Piston 250 µL (CP250)	50-250 µL	M250E	96	10	960	F148014
	Capillary Piston 1000 µL (CP1000)	100-1000 µL	M1000E	91	2	182	F148560
TIPACK - Assembled Sterilized CP	Sterilized Capillary Piston 10 µL (CP10ST)	1-10 µL	M10E	96	10	960	F148313
	Sterilized Capillary Piston 25 µL (CP25ST)	3-25 µL	M25E	96	6	576	F148712
	Sterilized Capillary Piston 50 µL (CP50ST)	20-50 µL	M50E	96	6	576	F148713
	Sterilized Capillary Piston 100 µL (CP100ST)	10-100 µL	M100E	96	10	960	F148315
	Sterilized Capillary Piston 250 µL (CP250ST)	50-250 µL	M250E	96	6	576	F148714
	Sterilized Capillary Piston 1000 µL (CP1000ST)	100-1000 µL	M1000E	91	2	182	F148180

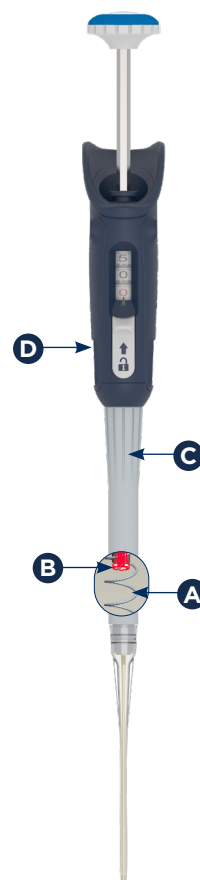
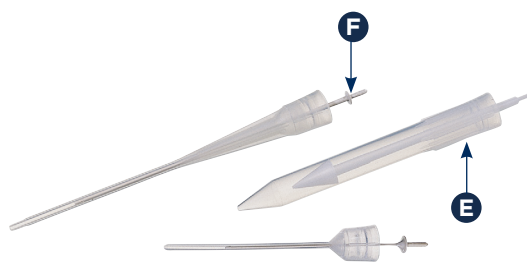
## DESCRIPTION AND MATERIALS

MICROMAN® E				
Model	Spring (A)	Clamp (B)	Shaft (C)	Body (D)
M10E	SS	Be Alloy	PBT	PVDF/PP
M25E	SS	Be Alloy	PVDF	PVDF/PP
M50E	SS	Be Alloy	PVDF	PVDF/PP
M100E	SS	Be Alloy	PBT	PVDF/PP
M250E	SS	Be Alloy	PVDF	PVDF/PP
M1000E	SS	Be Alloy	PVDF	PVDF/PP

CAPILLARY PISTONS		
Model	Capillary (E)	Piston (F)
CP10	PP	LCP
CP25	PP	LCP
CP50	PP	LCP
CP100	PP	PE
CP250	PP	PE
CP1000	PP	POM

### Abbreviations

SS = Stainless Steel  
 Be = Beryllium  
 PBT = Polybutylene Terephthalate  
 PP = Polypropylene  
 PVDF = Polyvinylidene Fluoride  
 LCP = Liquid Crystal Polymer  
 PE = Polyethylene  
 POM = Polyacetal



### NOTE

For information on chemical resistance of plastic materials, please refer to the LT800550 Gilson Guide to Pipetting - Appendix E on [www.gilson.com](http://www.gilson.com).