

## CALIBRATION OF FLOW RATES

The following is a list of cross-sectional areas of various syringes from different manufacturers. These sizes have some importance when using a syringe type pump, because the accuracy of the flow rate is determined by the cubic centimeters of fluid per unit length of syringe.

### **MULTIFIT**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 1 cc -       | 0.176 sq cm   |
| 2 cc -       | 0.626 sq cm   |
| 5 cc -       | 1.084 sq cm   |
| 10 cc -      | 1.692 sq cm   |
| 20 cc -      | 3.017 sq cm   |
| 30 cc -      | 4.047 sq cm   |
| 50 cc -      | 6.173 sq cm   |

### **STYLEX**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 1 cc -       |               |
| 2 cc -       | 0.716 sq cm   |
| 5 cc -       | 1.212 sq cm   |
| 10 cc -      | 2.018 sq cm   |
| 20 cc -      | 2.888 sq cm   |
| 30 cc -      | 3.987 sq cm   |
| 50 cc -      | 6.413 sq cm   |

### **MONOJECT**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 1 cc -       | 0.173 sq cm   |
| 3 cc -       | 0.622 sq cm   |
| 6 cc -       | 1.263 sq cm   |
| 12 cc -      | 1.977 sq cm   |
| 20 cc -      | 3.308 sq cm   |
| 35 cc -      | 4.474 sq cm   |
| 60 cc -      | 5.545 sq cm   |

### **PLASTIPAK**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 1 cc -       | 0.173 sq cm   |
| 2.5 cc -     | 0.578 sq cm   |
| 5 cc -       | 1.129 sq cm   |
| 10 cc -      | 1.635 sq cm   |
| 20 cc -      | 2.850 sq cm   |
| 30 cc -      | 3.662 sq cm   |
| 50 cc -      | 5.556 sq cm   |

### **TERUMO**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 1 cc -       | 0.175 sq cm   |
| 2.5 cc -     | 0.640 sq cm   |
| 10 cc -      | 1.947 sq cm   |
| 35 cc -      | 4.174 sq cm   |
| 60 cc -      | 6.673 sq cm   |

### **BURRON**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 1 cc -       | 0.184 sq cm   |
| 3 cc -       | 0.712 sq cm   |
| 5 cc -       | 1.197 sq cm   |
| 10 cc -      | 1.840 sq cm   |
| 20 cc -      | 3.247 sq cm   |
| 30 cc -      | 4.831 sq cm   |
| 60 cc -      | 7.159 sq cm   |

### **HAMILTON**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 0.05 cc -    | 0.008 sq cm   |
| .10 cc -     | 0.017 sq cm   |
| .25 cc -     | 0.042 sq cm   |
| .50 cc -     | 0.083 sq cm   |
| 1 cc -       | 0.167 sq cm   |
| 2.5 cc -     | 0.417 sq cm   |
| 5 cc -       | 0.833 sq cm   |
| 10 cc -      | 1.667 sq cm   |

### **UNIMETRICS**

| Syringe Size | Cross-Section |
|--------------|---------------|
| 0.05 cc -    | 0.008 sq cm   |
| .10 cc -     | 0.017 sq cm   |
| .25 cc -     | 0.042 sq cm   |
| .50 cc -     | 0.083 sq cm   |
| 1 cc -       | 0.167 sq cm   |

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