

Table: Calculated velocity for all parameter sets**Set 1: Diameter 120 µm**

| Flowrate ($\mu\text{L}/\text{min}$) | Spiral S1 | T-junction S1 | Y-junction S1 |
|---------------------------------------|-----------|---------------|---------------|
| 5 | 7.3683 | 7.3683 | 7.3683 |
| 10 | 14.7366 | 14.7366 | 14.7366 |
| 15 | 22.1049 | 22.1049 | 22.1049 |
| 20 | 29.4731 | 29.4731 | 29.4731 |
| 25 | 36.8414 | 36.8414 | 36.8414 |
| 30 | 44.2097 | 44.2097 | 44.2097 |
| 35 | 51.5780 | 51.5780 | 51.5780 |
| 40 | 58.9463 | 58.9463 | 58.9463 |
| 45 | 66.3146 | 66.3146 | 66.3146 |

Set 2 and 3 Diameter 160 µm

| Set 2 Flowrate ($\mu\text{L}/\text{min}$) | Spiral S2 | T-junction S2 | Y-junction S2 |
|---|-----------|---------------|---------------|
| 5 | 4.1447 | 4.1447 | 4.1447 |
| 10 | 8.2893 | 8.2893 | 8.2893 |
| 15 | 12.4340 | 12.4340 | 12.4340 |
| 20 | 16.5786 | 16.5786 | 16.5786 |
| 25 | 20.7233 | 20.7233 | 20.7233 |
| 30 | 24.8680 | 24.8680 | 24.8680 |
| 35 | 29.0126 | 29.0126 | 29.0126 |
| 40 | 33.1573 | 33.1573 | 33.1573 |
| 45 | 37.3019 | 37.3019 | 37.3019 |

| Set 3 Flowrate ($\mu\text{L}/\text{min}$) | Spiral S3 | T-junction S3 | Y-junction S3 |
|---|-----------|---------------|---------------|
| 5 | 4.1447 | 4.1447 | 4.1447 |
| 10 | 8.2893 | 8.2893 | 8.2893 |
| 15 | 12.4340 | 12.4340 | 12.4340 |
| 20 | 16.5786 | 16.5786 | 16.5786 |
| 25 | 20.7233 | 20.7233 | 20.7233 |
| 30 | 24.8680 | 24.8680 | 24.8680 |
| 35 | 29.0126 | 29.0126 | 29.0126 |
| 40 | 33.1573 | 33.1573 | 33.1573 |
| 45 | 37.3019 | 37.3019 | 37.3019 |