

Overlook suggested needle sizing for peristaltic pumps

| Fill Vol. (mL) | Pump Element ID (mm) | Overlook Needle ID (mm) | Overlook Part Number |
|----------------|----------------------|-------------------------|----------------------------|
| < 0.5 | 0.5mm | 0.5mm | OVXXX-032020-XXX-XX-063-XX |
| 0.5 - 1.0 | 0.8mm | 0.8mm | OVXXX-050033-XXX-XX-063-XX |
| 1.0 - 1.7 | 1.2mm | 1.0mm | OVXXX-050038-XXX-XX-063-XX |
| | | 1.2mm | OVXXX-065047-XXX-XX-063-XX |
| 1.7 - 7.0 | 1.6mm or 3.2mm | 1.6mm | OVXXX-083063-XXX-XX-063-XX |
| | | 3.2mm | OVXXX-156124-XXX-XX-XXX-XX |
| 7.0 - 12.0 | 3.2mm or 4.8mm | 3.2mm | OVXXX-156124-XXX-XX-XXX-XX |
| | | 5.0mm | OVXXX-250194-XXX-XX-XXX-XX |
| 12.0 - 22.0 | 4.8mm | 5.0mm | OVXXX-250194-XXX-XX-XXX-XX |
| 22.0 - 35.0 | 6.0mm | 5.8mm | OVXXX-250230-XXX-XX-XXX-XX |
| | | 6.2mm | OVXXX-313243-XXX-XX-XXX-XX |
| > 35.0 | 8.0mm | 7.0mm | OVXXX-313273-XXX-XX-XXX-XX |
| | | 8.1mm | OVXXX-375319-XXX-XX-XXX-XX |

Important Notes to Consider:

- 1.) These pairings are basic guidelines to maximize dispensing efficiencies.
- 2.) For a pump element ID of 1.6mm and below, we recommend 1.6mm ID supply line tubing to needle.
- 3.) This keeps pulsation at tip to a minimum and allows easy connection of tubing to needle.
- 4.) There are only 8 Flexicon tubing sizes available, but 23 Overlook needle sizes.
- 5.) For instance; there are 4 needle sizes between 1.6mm and 3.2mm ID.
- 6.) Use the largest needle at the highest pump speed that maintains your target fill weight.
- 7.) Select a basket tip if foaming or splashing is an issue before slowing down pump.

Overlook needle coding is as follows: OVXXX-XXXXXX-XXX-XX-XXX-XX

Group # =====> **1** **2** **3** **4** **5** **6**

Group 1: Machine Mfg. (XXX is replaced with manufacturer code)

Group 2: Needle OD and ID (in thousandths of an inch)

Group 3: Length of needle from bottom of mounting shoulder to tip (in mm)

Group 4: Basket Tip? (00 = None, other number suggests angle of basket tip towards center line of needle)

Group 5: Supply Line Tubing ID (in thousandths of an inch...this info governs the design of the hose barb)

Group 6: If needle is a OneShot: "D", if Teflon coated: "T", if rainbow (metal-sensitive) coated: "C"

Example: OVBS-250230-106-10-250-DC

Group 1: OVBS = Overlook Bausch + Ströbel style needle

Group 2: 250230 = .250" OD x .230" ID tubing

Group 3: 106 = 106mm from bottom of mounting shoulder to needle tip

Group 4: 10 = 10° basket tip needle

Group 5: 250 = .250" ID supply line tubing to needle

Group 6: DC = OneShot with rainbow coating