



## FITTINGS

# Build-a-Part

Design your new component with Build-A-Part® bondable components! Component designers no longer need to be constrained by the limitations of injection molding tool design. The exact fitting, in the optimal layout for the process or product concept, is now available with Nordson MEDICAL's line of Build-A-Part® bondable components, designed for use with gases or liquids.

## HOW IT WORKS

The Build-A-Part® system is based on combining interchangeable components, joining junction blocks and luers, hose barbs or threaded features to create the desired configuration. The features are bonded to the junction blocks using commonly available adhesives. Junction blocks and features may be bonded together to create multi-port, multi-axis products that receive and redirect fluid flow in whatever direction the designer desires. The only limitation is the designer's imagination.

114 component options are available from stock in two primary materials. Options include ISO 594-1 compliant male and female luers and hose barbs in 1/16" (1.6 mm), 3/32" (2.4 mm) and 1/8" (3.2 mm) in straight, elbow and branch tee configurations. Also available are male threads including 10-32 UNF, 1/16-27 NPT, 1/8-27 NPT, 1/4-28 UNF and M6x1 versions, and mounting devices.

The complete range is available in two primary resins: white ABS or translucent polysulfone. For ease of testing concepts, Nordson MEDICAL offers designer kits in both resins. Each kit contains hundreds of components for prototype purposes, enabling designs to be created and modified prior to production commitment.

## BONDING SUGGESTIONS

Prior to actually bonding, press together a model of the manifold to use as a reference. Do not mix plastic resins. Consult your adhesive specialist if you need to bond dissimilar materials.

These components are designed for bonding with any one of a number of solvents, but other adhesive systems may be used. When solvent bonding, use a very small gauge needle (typically 27 or 30) for best solvent control. Consult your adhesive specialist for guidance on other systems.

Apply solvent sparingly. Most solvents are low viscosity and readily wick into the bondline. Excessive solvent may compromise the aesthetics and the function of the assembly.

Press the mating components together leaving a .01-.03" gap between them for the solvent. Place the components in an orientation such that they may be rotated ¼ turn to their final position after applying the solvent.

After applying solvent, wait a few seconds, then rotate the components to their final position. When making a long manifold with bondable junction blocks it may be helpful to push the assembly against a flat surface to align the blocks before the solvent has set.