BUILD-A-PART™

JUNCTION BLOCKS
PG-65

ACCESSORIES
PG-66

BARBS
PG-66

THREADS
PG-67

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.

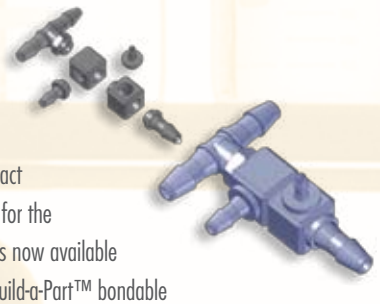
Apply solvent sparingly. Most solvents are low viscosity and readily wick into the bondline. Excessive solvent may compromise the aesthetics and the function of the assembly.

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.

Affordable Unique Solutions:

Design Your New Component with Build-A-Part™ bondable components!

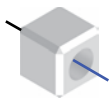
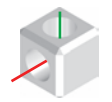
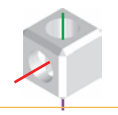
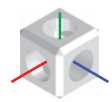
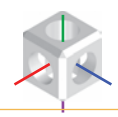
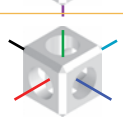
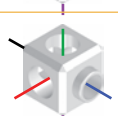
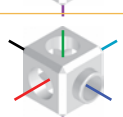
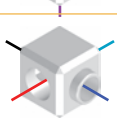


Component designers no longer need be constrained by the limitations of injection molding tool design. The exact fitting, in the optimal layout for the process or product concept, is now available with Value Plastics' line of Build-a-Part™ bondable components, designed for use with gases or liquids.

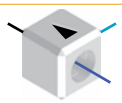
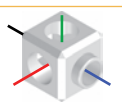
The Build-a-Part system is based on combining interchangeable components, joining junction blocks and luer, hose barb or threaded features to create the desired configuration. The features are bonded to the junction blocks using commonly available adhesives. Junction blocks and features may be bonded 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.

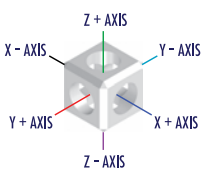
114 component options are available from stock in two materials. Options include ISO 594-1 compliant male and female luers and hose barbs in 1/16" (1.6 mm), 3/32" (2.4 mm) and 1/8" (3.2 mm) in straight, elbow and branch tee configurations. Also available are male threads including 10-32 UNF, 1/16-27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

The complete range is available in two resins: white ABS or translucent polysulfone. For ease of testing concepts, Value Plastics 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.

BLOCK	NUMBER	MATERIAL
Build-A-Part Junction Blocks. See Configuration Table for specifications.		
	BDJ01-40	Polysulfone
	BDJ01-81	Lace White ABS
	BDJ02-40	Polysulfone
	BDJ02-81	Lace White ABS
	BDJ03-40	Polysulfone
	BDJ03-81	Lace White ABS
	BDJ04-40	Polysulfone
	BDJ04-81	Lace White ABS
	BDJ05-40	Polysulfone
	BDJ05-81	Lace White ABS
	BDJ06-40	Polysulfone
	BDJ06-81	Lace White ABS
	BDJ07-40	Polysulfone
	BDJ07-81	Lace White ABS
	BDJ08-40	Polysulfone
	BDJ08-81	Lace White ABS
	BDJ09-40	Polysulfone
	BDJ09-81	Lace White ABS
	BDJ10-40	Polysulfone
	BDJ10-81	Lace White ABS
	BDJ11-40	Polysulfone
	BDJ11-81	Lace White ABS
	BDJ12-40	Polysulfone
	BDJ12-81	Lace White ABS
	BDJ13-40	Polysulfone
	BDJ13-81	Lace White ABS
	BDJ14-40*	Polysulfone
	BDJ14-81*	Lace White ABS
	BDJ15-40*	Polysulfone
	BDJ15-81*	Lace White ABS

*Check valve junction block. For use with RB01 and SB01

BLOCK	NUMBER	MATERIAL
Build-A-Part Junction Blocks with Mounting Port. See Config. Table below for specifications.		
	BDJ16-40*	Polysulfone
	BDJ16-81*	Lace White ABS
	BDJ17-40*	Polysulfone
	BDJ17-81*	Lace White ABS
	BDJ18-40	Polysulfone
	BDJ18-81	Lace White ABS
	BDJ19-40	Polysulfone
	BDJ19-81	Lace White ABS
	BDJ20-40	Polysulfone
	BDJ20-81	Lace White ABS
	BDJ21-40	Polysulfone
	BDJ21-81	Lace White ABS
	BDJ22-40	Polysulfone
	BDJ22-81	Lace White ABS



Build-A-Part Junction Block Configuration Table

BLOCK	X+ AXIS	X- AXIS	Y+ AXIS	Y- AXIS	Z+ AXIS	Z- AXIS
BDJ01	Female	Female				
BDJ02			Female		Female	
BDJ03			Female		Female	Female
BDJ04	Female	Female	Female	Female		
BDJ05	Female		Female		Female	
BDJ06	Female		Female		Female	Female
BDJ07	Female	Female	Female	Female	Female	
BDJ08	Female	Female	Female	Female	Female	Female
BDJ09	Male	Female	Female		Female	Female
BDJ10	Male	Female	Female	Female	Female	Female
BDJ11	Male	Female	Female	Female		
BDJ12	Male	Female	Female			
BDJ13	Male	Female	Female		Female	
BDJ14	Male	Female				
BDJ15	Female	Female				
BDJ16	Female	Female		Female[a]		
BDJ17	Male	Female	Female[a]			
BDJ18	Male[b]	Female	Female		Female	Female
BDJ19	Male[b]	Female	Female	Female	Female	Female
BDJ20	Male[b]	Female	Female	Female		
BDJ21	Male[b]	Female	Female			
BDJ22	Male[b]	Female	Female		Female	

[a]For non-flow manifolding [b] For use with BDMD

Material Suffix Key

-40 Polysulfone
-81 Lace White ABS
-9 Clear Polycarbonate
-F1A Medical Grade Polysulfone
-X0 Stainless Steel
-X2 Buna-N Rubber

RB01 SB01 (-X2 -X0)
Check Valve Ball 5/32" Diameter

BDMRP (-40 -81)
Bondable Plug

BDMD (-40 -81)
Bondable Mounting Device

BDMFTLL (-40 -81 -9)
Bondable Female Luer Thread Style

BDMMTL (-40 -81)
Bondable Male Luer (May be used with separate rotating lock ring; RMLLR)

RMLLR (-1 -2 -3 -4 -5 -06 -07 -6 -9002 -J1A)
Rotating Male Luer Lock Ring *(For use with BDMMTL)*

BDMR210 (-40 -81 -9)
Bondable 200 Series Barb, 1/16" (1.6 mm) ID Tubing

BDMR410 (-40 -81)
Bondable 400 Series Barb, 1/16" (1.6 mm) ID Tubing

BDMR220 (-40 -81)
Bondable 200 Series Barb, 3/32" (2.4 mm) ID Tubing

BDMR420 (-40 -81)
Bondable 400 Series Barb, 3/32" (2.4 mm) ID Tubing

BDMR230 (-40 -81)
Bondable 200 Series Barb, 1/8" (3.2 mm) ID Tubing

BDMR430 (-40 -81)
Bondable 400 Series Barb, 1/8" (3.2 mm) ID Tubing

BDMR240 (-40 -81)
Bondable 200 Series Barb, 5/32" (4.0 mm) ID Tubing

BDMR445 (-40 -81)
Bondable 400 Series Barb, .170" (4.3 mm) ID Tubing

BDML210 (-40 -81 -9)
Bondable Elbow 200 Series Barb, 1/16" (1.6 mm) ID Tubing

BDML410 (-40 -81)
Bondable Elbow 400 Series Barb, 1/16" (1.6 mm) ID Tubing

BDML220 (-40 -81 -9 -F1A)
Bondable Elbow 200 Series Barb, 3/32" (2.4 mm) ID Tubing

BDML420 (-40 -81)
Bondable Elbow 400 Series Barb, 3/32" (2.4 mm) ID Tubing

BDML230 (-40 -81)
Bondable Elbow 200 Series Barb, 1/8" (3.2 mm) ID Tubing

BDML430 (-40 -81)
Bondable Elbow 400 Series Barb, 1/8" (3.2 mm) ID Tubing

Material Suffix Key

-40 Polysulfone
-81 Lace White ABS
-9 Clear Polycarbonate
-X0 Stainless Steel
-X2 Buna-N Rubber

BDMT210 (-40 -81)
Bondable Tee 200 Series Barb, 1/16" (1.6 mm) ID Tubing

BDMT410 (-40 -81)
Bondable Tee 400 Series Barb, 1/16" (1.6 mm) ID Tubing

BDMT220 (-40 -81)
Bondable Tee 200 Series Barb, 3/32" (2.4 mm) ID Tubing

BDMT420 (-40 -81)
Bondable Tee 400 Series Barb, 3/32" (2.4 mm) ID Tubing

BDMT230 (-40 -81)
Bondable Tee 200 Series Barb, 1/8" (3.2 mm) ID Tubing

BDMT430 (-40 -81)
Bondable Tee 400 Series Barb, 1/8" (3.2 mm) ID Tubing

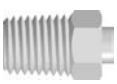
BDMX (-40 -81)
Bondable 10-32 UNF Special Tapered Thread with 1/4" Hex

BDMK (-40 -81)
Bondable 10-32 UNF Thread with 1/4" Hex

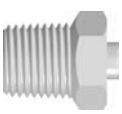
BDMS (-40 -81)
Bondable 1/4-28 UNF Thread with 5/16" Hex

BDMM6 (-40 -81)
Bondable M6x1 Thread with 5/16" Hex

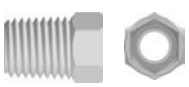
BDM16 (-40 -81)
Bondable 1/16-27 NPT Thread with 5/16" Hex



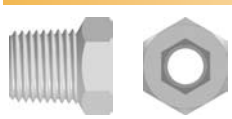
BDM18 (-40 -81)
Bondable 1/8-27 NPT Thread with 7/16" Hex



BDF16 (-40 -81)
Bondable 1/16-27 NPT Thread with 5/16" Hex



BDF18 (-40 -81)
Bondable 1/8-27 NPT Thread with 7/16" Hex



BDFM6 (-40 -81)
Bondable M6x1 Thread with 5/16" Hex

BDFS (-40 -81)
Bondable 1/4-28 UNF Thread with 5/16" Hex