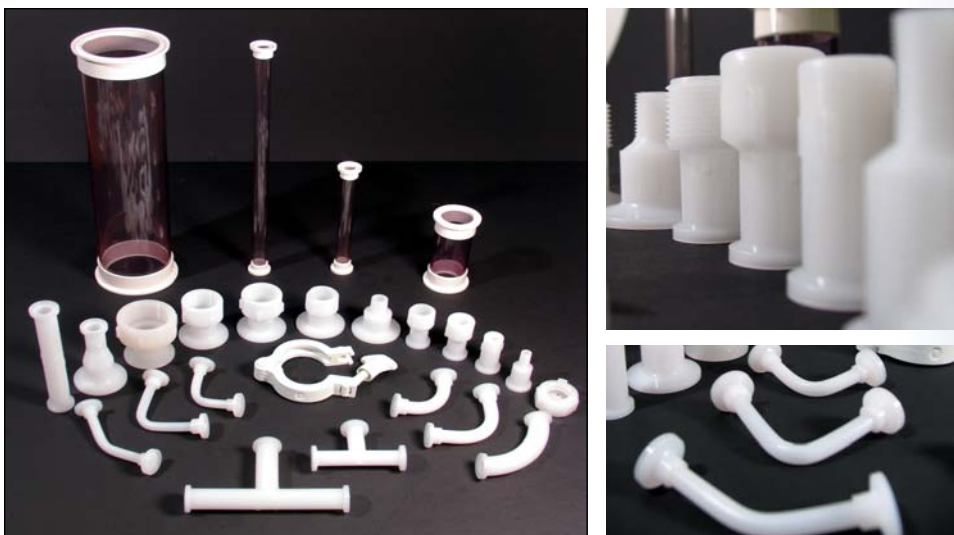


# Non-Metallic Rigid Piping Components

*BioConnex Sanitary Flange Rigid Piping Components are available in custom sizes to suit your applications.*

Components are constructed of polypropylene and PVDF. Durable yet affordable, they can be placed in service permanently or be considered disposable. Sanitary flanges conform to ISO 2852. All of these components can be customized. Modifications may be applied to any individual component to meet your specific application.



Sanitary Flanged 90° Elbows, 45° Elbows, Tees, Cross Tees, Reducing Tees and Concentric Reducers available in the following sizes:  
3mm, 6mm, 12mm, .75", 1", 1.5" and 2" ID's.

## Non-Metallic Rigid Piping Components Features:

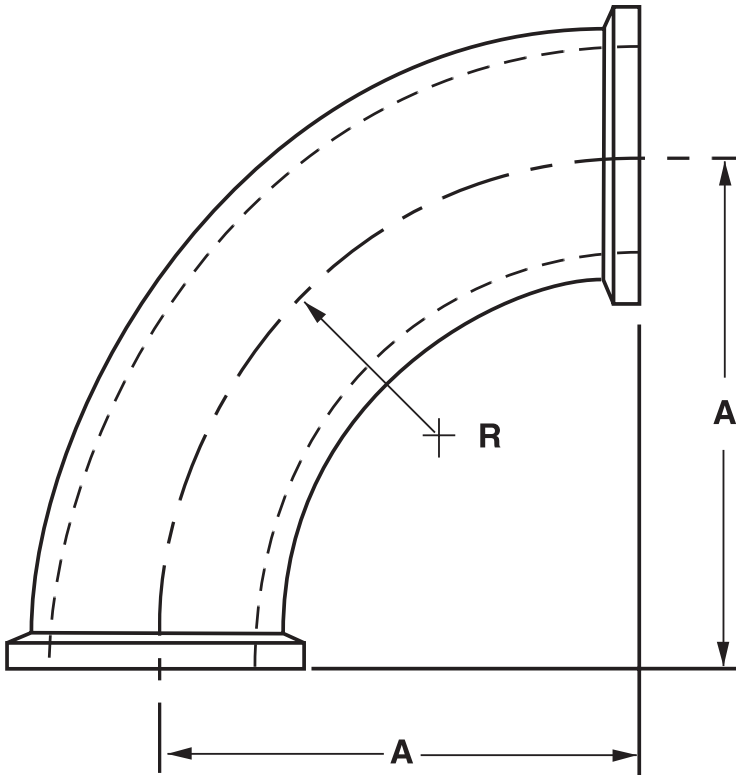
- Polypropylene or PVDF material
- Autoclave or irradiate to sterilize
- Maximum recommended working pressure, 150psi @ 70° F

## Use Non-Metallic Rigid Piping Components with:

- High Purity water lines
- Bioreactors
- Fermentors
- Filling machines
- Filtration and purification systems
- Mixing containers and vessels

# Standard 90 Degree Elbow

## Dimensional and Physical Properties



Size TC x HB	Part Number	Dim "A" (in)	Dim "R" (in)	Max Working Pres. (psi) @ 70° F
Mini	PP750-90EL	2.50	2.50	150
Ladish	PP100-90EL	2.50	2.50	150
1 1/2"	PP150-90EL	2.75	2.75	150
2"	PP200-90EL	3.50	3.50	150

Resin Data	Tensile Strength	Flexural Modulus	Hardness	Heat Deflection	Water Absorption	Maximum Recommended Working Temperature F°
Polypropylene used in Standard 90° Elbows	3900 psi (2 in/min) ASTM D 638	160000 psi ASTM D 790	80, R-scale, Rockwell D-785	87.8° F @ ASTM 66 psi	.01 % (24 hour duration)	180° F
PVDF used in the Standard 90° Elbows	5000 - 7000 psi ASTM D 638	240000-335000 psi ASTM D 790	76 - 80 Shore D ASTM D 2240	257 - 284° F 66 psi ASTM D 648	.01 - .03 % (24 hour duration)	240° F

Physical properties provided as general guidelines only. It is the end-users responsibility to ensure that the above mentioned products are compatible with the intended application and that the products are in compliance with all applicable regulatory requirements for use. User assumes all risk of usage.

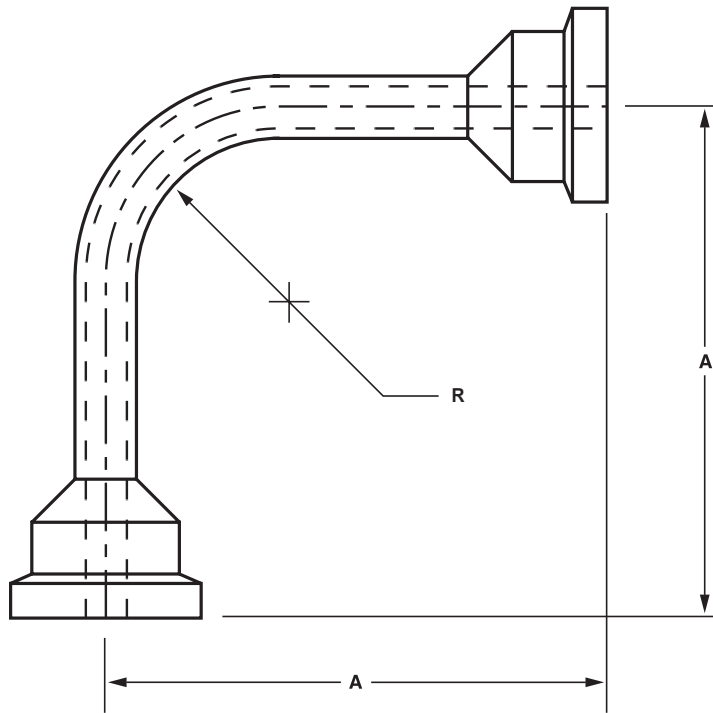
For additional information please contact:



P.O. Box 126, Readington, New Jersey, USA  
 Phone: +01-908-722-6948 Fax: +01-908-526-3256  
[www.bioconnex.com](http://www.bioconnex.com)

# Micro 90 Degree Elbow

## Dimensional and Physical Properties



Size	Part Number	Tube ID	Dim "A" (in) (Customer Specified)	Dim "R" (in)	Max Working Pres. (psi) @ 70° F
3mm	(PP, PVDF) 3MM-90EL	.118"	Customer Specified	.72"	150
6mm	(PP, PVDF) 6MM-90EL	.236"	Customer Specified	.72"	150
10mm	(PP, PVDF) 10MM-90EL	.394"	Customer Specified	1.00"	150
12mm	(PP, PVDF) 12MM-90EL	.472"	Customer Specified	1.00"	150

Resin Data	Tensile Strength	Flexural Modulus	Hardness	Heat Deflection	Water Absorption	Maximum Recommended Working Temperature F°
Polypropylene used in Micro 90° Elbow	3900 psi (2 in/min) ASTM D 638	160000 psi ASTM D 790	80, R-scale, Rockwell D-785	87.8° F @ ASTM 66 psi	.01 % (24 hour duration)	180° F
PVDF used in the Micro 90° Elbow	5000 – 7000 psi ASTM D 638	240000–335000 psi ASTM D 790	76 – 80 Shore D ASTM D 2240	257 – 284° F 66 psi ASTM D 648	.01 – .03 % (24 hour duration)	240° F

Physical properties provided as general guidelines only. It is the end-users responsibility to ensure that the above mentioned products are compatible with the intended application and that the products are in compliance with all applicable regulatory requirements for use. User assumes all risk of usage.

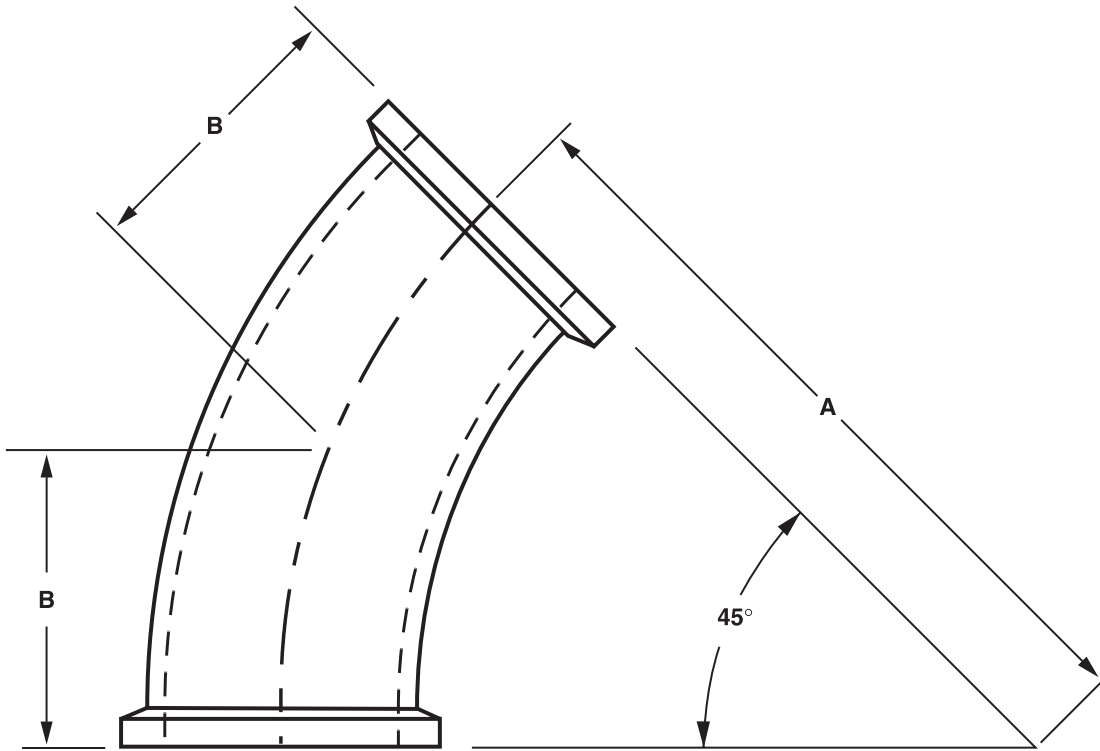
For additional information please contact:



P.O. Box 126, Readington, New Jersey, USA  
 Phone: +01-908-722-6948 Fax: +01-908-526-3256  
[www.bioconnexx.com](http://www.bioconnexx.com)

# Standard 45 Degree Elbow

## Dimensional and Physical Properties



Size	Part Number	Tube ID	Dim "A" (in)	Dim "B" (in)	Max Working Pres. (psi) @ 70° F
Mini	(PP, PVDF) 750-45EL	.560"	2.50"	.96"	150
1"	(PP, PVDF) 100-45EL	.856"	5.02"	2.08"	150
1.5"	(PP, PVDF) 150-45EL	1.356"	4.25"	1.63"	150
2"	(PP, PVDF) 200-45EL	1.856"	4.25"	1.63"	150

Resin Data	Tensile Strength	Flexural Modulus	Hardness	Heat Deflection	Water Absorption	Maximum Recommended Working Temperature F°
Polypropylene used in Standard 45° Elbow	3900 psi (2 in/min) ASTM D 638	160000 psi ASTM D 790	80, R-scale, Rockwell D-785	87.8° F @ ASTM 66 psi	.01 % (24 hour duration)	180° F
PVDF used in the Standard 45° Elbow	5000 - 7000 psi ASTM D 638	240000-335000 psi ASTM D 790	76 - 80 Shore D ASTM D 2240	257 - 284° F 66 psi ASTM D 648	.01 - .03 % (24 hour duration)	240° F

Physical properties provided as general guidelines only. It is the end-users responsibility to ensure that the above mentioned products are compatible with the intended application and that the products are in compliance with all applicable regulatory requirements for use. User assumes all risk of usage.

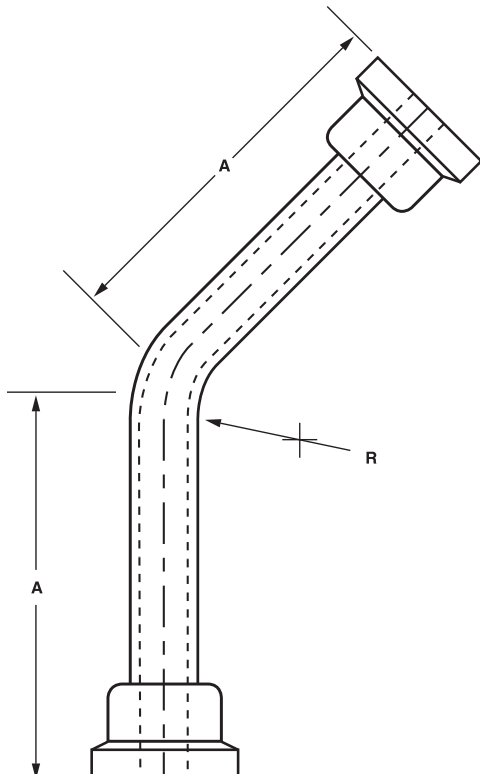
For additional information please contact:



P.O. Box 126, Readington, New Jersey, USA  
 Phone: +01-908-722-6948 Fax: +01-908-526-3256  
[www.bioconnex.com](http://www.bioconnex.com)

# Micro 45 Degree Elbow

## Dimensional and Physical Properties



Size	Part Number	Tube ID	Dim "A" (in) Customer Specified	Dim "R" (in)	Max Working Pres. (psi) @ 70° F
3mm	(PP, PVDF) 3MM-45EL	.118"	Customer Specified	.72"	150
6mm	(PP, PVDF) 6MM-45EL	.236"	Customer Specified	.72"	150
10mm	(PP, PVDF) 10MM-45EL	.394"	Customer Specified	1.00"	150
12mm	(PP, PVDF) 12MM-45EL	.472"	Customer Specified	1.00"	150

Resin Data	Tensile Strength	Flexural Modulus	Hardness	Heat Deflection	Water Absorption	Maximum Recommended Working Temperature F°
Polypropylene used in Micro 45° Elbow	3900 psi (2 in/min) ASTM D 638	160000 psi ASTM D 790	80, R-scale, Rockwell D-785	87.8° F @ ASTM 66 psi	.01 % (24 hour duration)	180° F
PVDF used in the Micro 45° Elbow	5000 - 7000 psi ASTM D 638	240000-335000 psi ASTM D 790	76 - 80 Shore D ASTM D 2240	257 - 284° F 66 psi ASTM D 648	.01 - .03 % (24 hour duration)	240° F

Physical properties provided as general guidelines only. It is the end-users responsibility to ensure that the above mentioned products are compatible with the intended application and that the products are in compliance with all applicable regulatory requirements for use. User assumes all risk of usage.

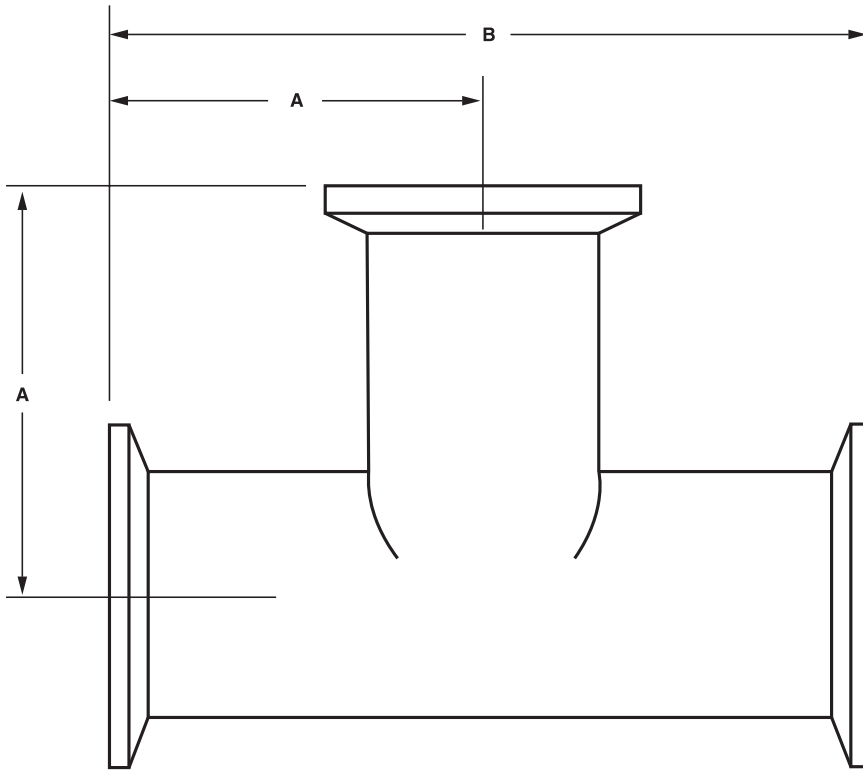
For additional information please contact:



P.O. Box 126, Readington, New Jersey, USA  
 Phone: +01-908-722-6948 Fax: +01-908-526-3256  
[www.bioconnex.com](http://www.bioconnex.com)

# Standard Tee

## Dimensional and Physical Properties



Size	Part Number	Tube ID	Dim "A" (in)	Dim "B" (in)	Max Working Pres. (psi) @ 70° F
Mini	(PP, PVDF) 750T	.560"	2.62"	5.25"	150
1"	(PP, PVDF) 100T	.856"	3.19"	6.38"	150
1.5"	(PP, PVDF) 150T	1.356"	2.75"	5.50"	150
2"	(PP, PVDF) 200T	1.856"	3.44"	6.88"	150

Resin Data	Tensile Strength	Flexural Modulus	Hardness	Heat Deflection	Water Absorption	Maximum Recommended Working Temperature F°
Polypropylene used in Standard Tee	3900 psi (2 in/min) ASTM D 638	160000 psi ASTM D 790	80, R-scale, Rockwell D-785	87.8° F @ ASTM 66 psi	.01 % (24 hour duration)	180° F
PVDF used in the Standard Tee	5000 - 7000 psi ASTM D 638	240000-335000 psi ASTM D 790	76 - 80 Shore D ASTM D 2240	257 - 284° F 66 psi ASTM D 648	.01 - .03 % (24 hour duration)	240° F

Physical properties provided as general guidelines only. It is the end-users responsibility to ensure that the above mentioned products are compatible with the intended application and that the products are in compliance with all applicable regulatory requirements for use. User assumes all risk of usage.

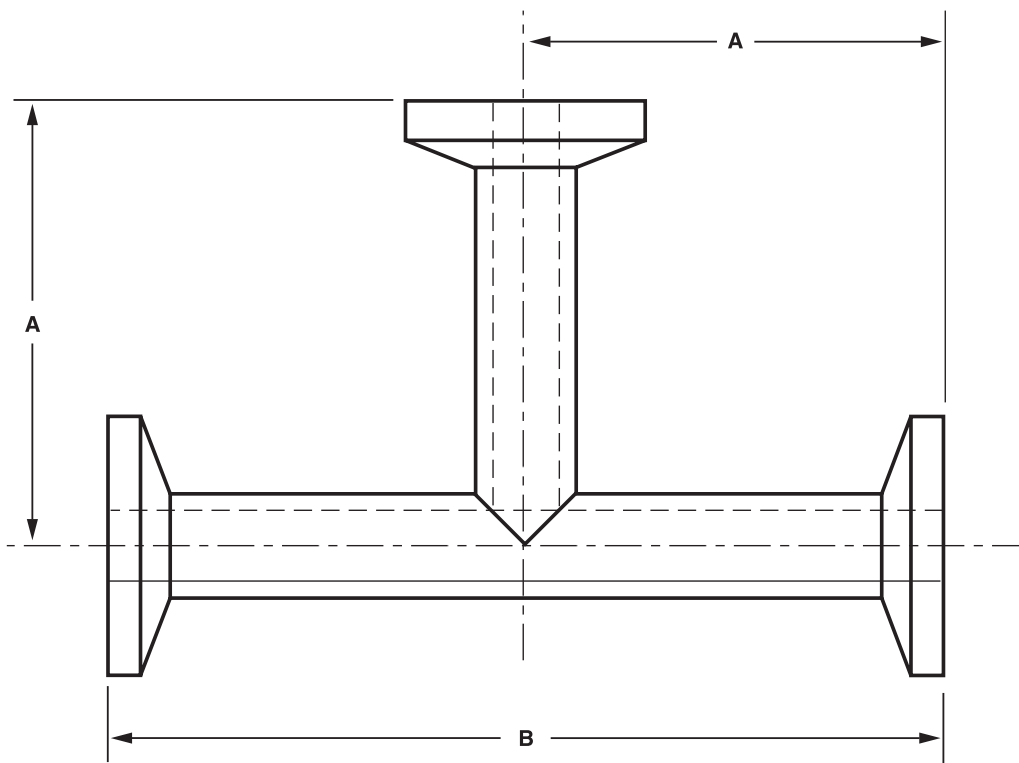
For additional information please contact:



P.O. Box 126, Readington, New Jersey, USA  
 Phone: +01-908-722-6948 Fax: +01-908-526-3256  
[www.bioconnex.com](http://www.bioconnex.com)

# Micro Tee

## Dimensional and Physical Properties



Size	Part Number	Tube ID	Dim "A" (in)	Dim "B" (in)	Max Working Pres. (psi) @ 70° F
3mm	(PP, PVDF) 3MMT	.118"	1.58"	3.11"	150
6mm	(PP, PVDF) 6MMT	.236"	1.58"	3.11"	150
10mm	(PP, PVDF) 10MMT	.394"	1.58"	3.11"	150
12mm	(PP, PVDF) 12MMT	.472"	1.58"	3.11"	150

Resin Data	Tensile Strength	Flexural Modulus	Hardness	Heat Deflection	Water Absorption	Maximum Recommended Working Temperature F°
Polypropylene used in Micro Tee	3900 psi (2 in/min) ASTM D 638	160000 psi ASTM D 790	80, R-scale, Rockwell D-785	87.8° F @ ASTM 66 psi	.01 % (24 hour duration)	180° F
PVDF used in the Micro Tee	5000 - 7000 psi ASTM D 638	240000-335000 psi ASTM D 790	76 - 80 Shore D ASTM D 2240	257 - 284° F 66 psi ASTM D 648	.01 - .03 % (24 hour duration)	240° F

Physical properties provided as general guidelines only. It is the end-users responsibility to ensure that the above mentioned products are compatible with the intended application and that the products are in compliance with all applicable regulatory requirements for use. User assumes all risk of usage.

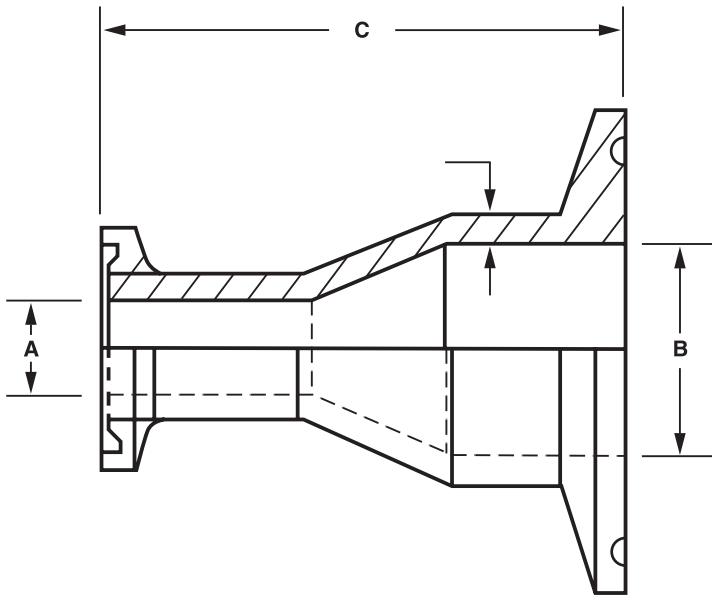
For additional information please contact:



P.O. Box 126, Readington, New Jersey, USA  
 Phone: +01-908-722-6948 Fax: +01-908-526-3256  
[www.bioconnex.com](http://www.bioconnex.com)

# Concentric Reducer

## Dimensional and Physical Properties



Configuration	Part Number	Dim "A" (in)	Dim "B" (in)	Dim "C" (in)	Max Working Pres. (psi) @ 70° F
3mm x 1"	(PP, PVDF) CR100-3MM	.118"	.856"	2.30"	150
6mm x 1"	(PP, PVDF) CR100-6MM	.236"	.856"	2.30"	150
10mm x 1"	(PP, PVDF) CR100-10MM	.394"	.856"	2.30"	150
12mm x 1"	(PP, PVDF) CR100-12MM	.472"	.856"	2.30"	150
Mini x 1"	(PP, PVDF) CR100-750	.560"	.856"	3.00"	150
Mini x 1.5"	(PP, PVDF) CR150-750	.560"	1.356"	3.07"	150
Mini x 2"	(PP, PVDF) CR200-750	.560"	1.856"	3.05"	150
1" x 1.5"	(PP, PVDF) CR150-100	.856"	1.356"	3.01"	150
1" x 2"	(PP, PVDF) CR200-100	.856"	1.856"	3.10"	150
1.5" x 2"	(PP, PVDF) CR200-150	1.356"	1.856"	2.97"	150

Resin Data	Tensile Strength	Flexural Modulus	Hardness	Heat Deflection	Water Absorption	Maximum Recommended Working Temperature F°
Polypropylene used in Concentric Reducer	3900 psi (2 in/min) ASTM D 638	160000 psi ASTM D 790	80, R-scale, Rockwell D-785	87.8° F @ ASTM 66 psi	.01 % (24 hour duration)	180° F
PVDF used in the Concentric Reducer	5000 - 7000 psi ASTM D 638	240000-335000 psi ASTM D 790	76 - 80 Shore D ASTM D 2240	257 - 284° F 66 psi ASTM D 648	.01 - .03 % (24 hour duration)	240° F

Physical properties provided as general guidelines only. It is the end-users responsibility to ensure that the above mentioned products are compatible with the intended application and that the products are in compliance with all applicable regulatory requirements for use. User assumes all risk of usage.

For additional information please contact:



P.O. Box 126, Readington, New Jersey, USA  
 Phone: +01-908-722-6948 Fax: +01-908-526-3256  
[www.bioconnex.com](http://www.bioconnex.com)