# **Trusted Biomedical Components**

Plastic Fluid Control Components Catalog | v.012



# Product Portfolio

#### Your customers depend on your products, you can depend on ours

- Luers, Plugs and Couplers
- Tube to Tube and Reducing Connectors
- Check Valves and Filters
- Panel Mounts
- Spikes and Ports

#### Have an idea? We'll work with you to bring it to life!

Injectech offers custom design and assembly services to meet your project requirements and timelines. Contact us today at **sales@injectech.us** 













Standard | Bond-in

Wing Grip

Rotating

Plugs and Couplers

Rigid | ISO and High Flow



CHECK VALVES FILTERS

LUERS



Elbow



Tee





**Reducing Connectors** 



Check Valve

Straight



Filtered Check Valve



Filter





SPIKES



Panel Mount



Spike to Bond-In Port



Lock Nut







Spike Cap



**Color Code Ring** 

Products subject to minimum order quantities.

+1 970 482 0273 www.injectech.net



## CONTENTS

INTRODUCTION Product Portfolio Company History About Injectech Key Markets At a Glance Services Custom Design Why Choose Injectech? Sample Kits Quality Standards Product Change Notification   Fit, Form & Function	2-15 2 4-6 7 8 9 10 11 12 13 14 15
LUERS Male Luer Locks Male Luer Locks   Bond-In Ports Female Luer Locks   Bond-In Ports Female Wing Grip Luers Slip Luers Luer Plugs & Couplers Rotating Luers Rotating Luers with Snap Ring Luers   Rigid Barb Luers   ISO 80369-7 Luers   High Flow	16-59
PANEL MOUNTS	60-61
SPIKES	62-63
CHECK VALVES / FILTERS Check Valves Filters	64-69
TUBE TO TUBE Straight Connectors Straight Reducing Connectors Elbow Connectors Elbow Reducing Connectors Tee Connectors Tee Reducing Connectors Y Connectors	70-90
TECHNICAL INFORMATION Chemical Resistance Chart Material Properties Conversion Charts Barb Dimensions	91-102
INDEX	103-105
TERMS & CONDITIONS	106-107

LUERS

PANEL MOUNTS

**SPIKES** 

TUBE TO TUBE CHECK VALVES

# Company History

## Injectech, LLC was founded in 1998 as a custom molder and assembly enterprise in Fort Collins, Colorado.

In the beginning, Injectech was a "part-time" venture as we all worked for another component manufacturer during the daytime. Our primary focus was performing manual assemblies and molding.

Injectech had two machines in a rented garage unit and three very motivated owners. Our main projects were molding a line of regulator components as well as assembling a flu-vaccine introducer for the veterinary market. We did not have a cleanroom at that time. We were not ISO certified either. If we needed additional help, we would bring in contract labor/friends. We were in our infancy!



Our next steps involved creating our initial business strategy which included:

- Build a cleanroom
- Get ISO certification
- Implement a sales/marketing/ promotion plan

Over the next year, we would have the cleanroom built. We became ISO certified. We also were very creative regarding our sales and marketing plan strategy.

During this time, we also welcomed our first employees. It was a very challenging financial period. At some point, each one of the owners did not take salaries for a while.

The investment in time and salary deferrals finally paid off as we closed our first "Large Customer". We had left a sales call with only a promise that orders would come if we invested in the molds first. There was an element of risk, however, we had trust in this customer. The molds were built and the first orders came in. By this time, we had moved to our Loveland facility and had four machines operational.

The only machine large enough to run the molds had an error code one day and would not run. Panic mode! Unfortunately, the machine was an older model. The machine



manufacturer had stopped making replacement circuit boards for it. We found ourselves in a serious situation.

We looked at our financial leverage and found that the scenario was even more dire. The three of us contacted our parents for a bridge loan to cover the down payment on another machine. Luckily, the replacement machine was ready by the time the next customer shipment was due. And yes, our parents were paid back in the next two months.

We displayed at MD&M East in 2005 and closed an additional three projects with customers that are still with us today. In fact, they have become close friends. We also met new colleagues in the medical device industry. This led us into our relationship with Elcam Medical.

In 2009, Elcam Medical acquired shares of Injectech. Injectech proceeded to build our product offering during this time. We also had an influx of international business through Elcam. We are proud to say that we now service the medical device and bioprocess industries globally. These were exciting times as the sales/marketing plan was in full force and returning the results we had expected.

In 2016, Elcam decided to focus more on their core markets and sold their shares in Injectech as part of a strategy change. During this time, Injectech was experiencing significant growth numbers during our relationship.

Since 2003, Our core team had been managing the day-to-day operations of the company. This news had little change on the company. We simply continued what we feel Injectech does best – listening to our customers and providing quality products the medical device and bioprocess industries require.

We have learned a lot on this journey! We instill the hunger, drive, and urgency our customers expect to every employee on staff. We look forward to continued success in the future through our service mind-set.





# Company History









## **<<** What we have learned and are grateful for:

- A special "Thank You!" to each one of our employees that have believed in our vision. We appreciate all that you do!
- Injectech is saving/enhancing people's lives. We are proud of this! We have had family members that had Injectech products used in their surgeries. We are very proud of this.
- Injectech always provides open, honest communication with each of our customers. We know that manufacturing is imperfect. Things will go wrong. Dates will be missed. Many companies add us to their ASL/AVL list as they appreciate the relationships we build. We have been told that our communication and honesty are unmatched.

#### Dave Splett

VP, Business Development

- Persistence in our core values and a service mindset will continue to be the building blocks for our future.
- We have invested in a management team that we are truly proud of. We will continue to invest in molds and machines to provide our unique style of service to as many customers that we can.
- We are very grateful for our customers. We are grateful for the relationships we have built. We are seriously committed to building relationships. We give thanks to our past and present customers. Thank you for believing in several guys that wanted to provide a better service. Thank you for believing in us!

#### Larry Knipple

VP, Research and Development



# About Injectech

Injectech, LLC was founded as a custom molder and assembly enterprise. Since then we have become a trusted partner for medical device OEMs, biomedical/ pharmaceutical manufacturers, veterinary suppliers, and industrial businesses worldwide.

**Our Team -** Injectech, LLC's management team created Injectech in 1998, after multiple years of experience working with custom molding shops and suppliers to medical OEMs.

Injectech specializes in the development and manufacture of medical, pharmaceutical, and biomedical components and assemblies. In addition to our standard line of catalog fittings, Injectech offers specialty and custom manufacturing based upon our customers' specifications.

Injectech has collaborated with many large medical device OEMs in fulfilling their engineering, design, and assembly requirements. Give us a call, they did - and they are satisfied!



## **Our Mission**

Our mission is to design, develop and manufacture high quality plastic fluid management components, both catalog and custom, in a successful partnership with our customers. We will provide superior customer service throughout all aspects of our business.



## **Our Vision**

Our vision is to contribute to our customers' success by providing the products that fit their medical device applications. We will do this through problem solving, state-ofthe-art designs and high-quality production.



Our values are our guideposts. They are used to attract, hire, and retain the best people to grow with us. They determine how we make decisions, how we hold ourselves accountable and how we interact with our employees and customers.

## Injectech, LLC is committed to and abides by the following values:

**Integrity** | We strive to do the right thing always, act truthfully and honorably, and always be true to ourselves.

**Quality & Service |** We provide outstanding products and unsurpassed service that, together, deliver premium value to our customers.

**Respect |** We value our employees, encourage their development, communicate positively, and reward their performance.

**Accountability |** We are all personally accountable for delivering on our commitments.

**Equity |** We provide a supportive environment, free from discrimination, and with mutual respect and dignity.

**Collaboration |** We value team effort over individual effort; how we get things done is as important as what we achieve.

**Continuous Improvement |** We maintain a culture of ongoing assessment to improve our products and customer experience.

**Citizenship |** We are good citizens in the communities in which we live and work.

A Will to Succeed | We exhibit a strong will to succeed in the marketplace and every aspect of our business.

# Key Markets

We are proud to serve our key markets with quality, fluid-control components in a wide range of materials and sizes. Our plastic luer locks, tube to tube connectors, check valves, bond-in luers, spikes and more can be found on a variety of machines or tube sets within these industries.



## **Bioprocess**

Injectech supports the bioprocess industry with an extensive range of plastic fluid control components. Our barbed luers and couplers are found in the most common upstream and downstream applications while maintaining the strict quality standards of biopharmaceutical drugs.



## Cardiac

Nuclear

Our fittings are found in heart/ lung tubing packs and a variety of catheters; cardioplegia, thrombectomy, atherectomy, ablation and intra-aortic balloon. Our components provide easy, secure and strong connections from tube to tube or machine.



#### Diagnostic

We serve the diagnostic market with a large selection of male/female luers, straight, tee, elbow, and Y tube to tube connectors, and threaded fittings. We offer these fittings in a variety of sizes and materials including Nylon, Kynar and Animal Free Polypropylene.



#### We manufacture male/female luers, spikes, and caps that aid in the connections made between the cassette manifold and tubing in PET tracer machines. Our quality plastic fittings allow for easy operation and efficiency in the production of PET tracers.

Ophthalmic

Respiratory

requirements.

Our fluid control components are used in devices for surgeries and procedures in the ophthalmic industry such as vitrectomy and phacoemulsification. Our luers, tube to tube connectors and filters are designed to create a secure and reliable leak-tight fit.

Our fittings are found in ventilators, CPAP, and anesthesia machines.

manufactured in a variety of sizes

from 1/16" to 1/4". Our reducing

configurations to fit simple or unique

connectors come in multiple

Standard connectors are



### Orthopedic

We supply the negative pressure wound therapy, cuff and surgical markets with various plastic fittings to assist with a patient's healing process. In addition to our established line of components, we also offer custom fittings which can be tailored to your project's needs.

Injectech is committed to providing reliable plastic fittings that will contribute to the strong connections needed to keep patients safe.

# At a Glance

Injectech's flexibility, short lead times and highquality components offer a competitive advantage to our customers and partners.

From design to delivery, we are here to provide you with the highquality fittings you need - when you need them. Injectech maintains an ISO 13485 certified quality management system. All products are molded, assembled and packaged within an ISO Class 8 cleanroom. 20+ years in business

2,500 off-the-shelf components

26,000 sq. ft

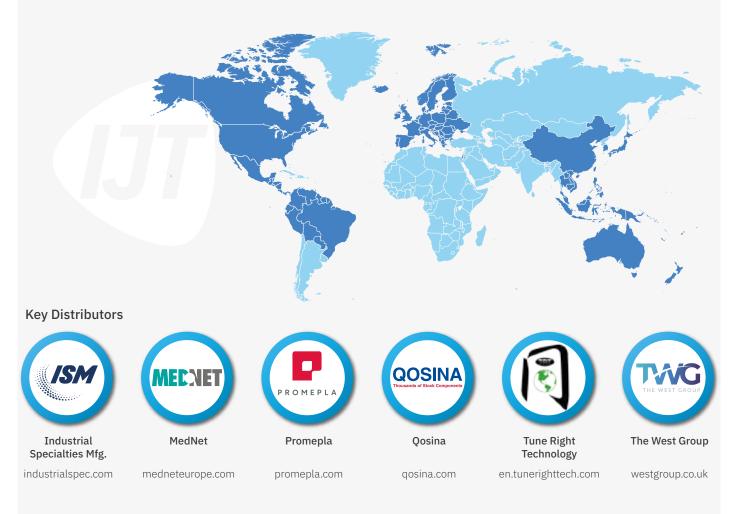
## Global business of skilled professionals

We ship our components to more than 2,000 customers across 30+ countries serving 7 key markets.

countries

30 +

2,000 customers



# Services

Injectech has an established reputation for flexible manufacturing; to that end, we offer our customers a number of specialized services. We are equipped to manage all stages of product development from design and engineering to verification and validation. Our plastic components are manufactured, inspected, assembled, and bagged in our Class 8 cleanroom. This same facility is where we design and ship our custom fittings. You can always trust where your components are coming from. Injectech can answer all of your questions quickly because we are with your project from start to finish.



# Custom Design

Do you have an idea for a product, but our established line of components doesn't fit your needs? Injectech offers custom design and assembly services while maintaining trustworthy customer service to meet your project requirements and timelines. Our custom services go beyond the manufacture of custom molded components. We provide complete project management services from design to delivery. Injectech's Product Development Team will collaborate with you to help answer any questions and address any obstacles in the process to ensure the success of your project.

Have an idea? We'll work with you to bring it to life!

- Custom component design
- Cost-reduction initiatives
- Tool management
- Molding analysis

Your customers depend on your products, you can depend on ours.

To order, and for information incl. price, delivery, and material guide: E: **sales@injectech.us** | T: **+1 970 482 0273** | **www.injectech.net**  Introduction | **11** 

# Why Choose Injectech?

We pride ourselves on developing successful partnerships with our customers. We offer precision design, injection molding and assembly services while focusing on quality, flexibility and superior customer service.

**Focused** Committed to our customers' success. We focus on flexibility, honesty and integrity. We continue to be a reliable resource for medical device OFMs.



### Trusted

We work to create trust and lasting relationships with our entire supply chain and customers. This ensures our products arrive promptly and are of superior quality.

## Professional

We provide quality plastic fittings at competitive prices with trusted materials. We understand medical applications and will utilize our knowledge to serve our customers.



## Understanding

We understand that our fittings are used in life-saving surgeries and medical procedures. This is a driving force in the high standard of our product offering.

## Quality

Our company conforms to ISO 13485 requirements. We continually improve our work processes to adapt to ever evolving changes.



## Customization

Not every project can utilize offthe-shelf solutions. We started our business by specializing in custom projects and welcome discussions to make unique ideas a reality.

## Knowledge

Our team's extensive experience and knowledge means we can confidently guide our customers in the right direction.



## Flexible

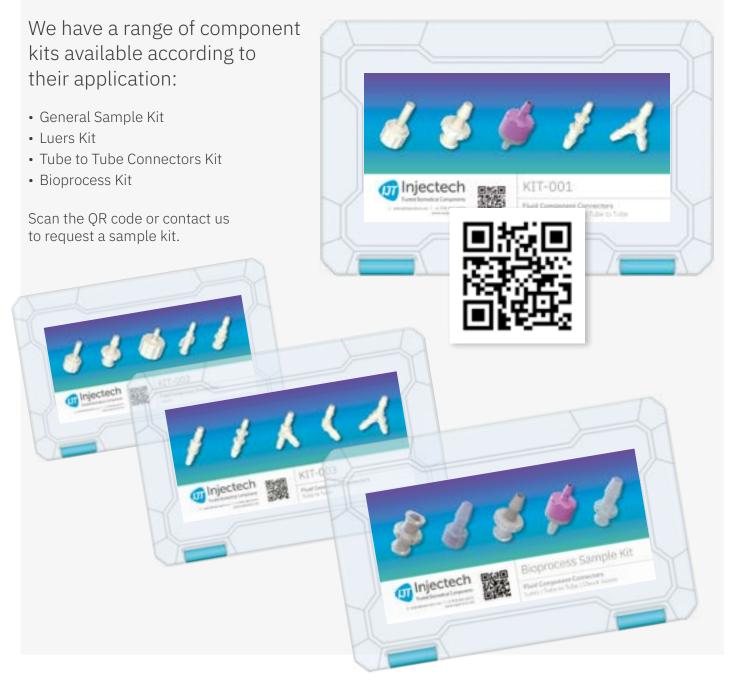
We collaborate with our customers. We understand that changes occur during a project's lifecycle so we are always prepared to find solutions that will keep a project on track.

# Sample Kits

Our component sample kits are available to assist customers during the component selection and flow control system specification process.

Our component sample kits provide manufacturers with a selection of components for the specification, design and testing processes. We work to support the design and production process of a variety of markets within the medical device and bioprocess industries.

# Kits for a variety of applications



# Quality Standards

Injectech's ISO 13485 certification is an extension of our commitment to quality, our customers and our philosophy. All medical products manufactured by Injectech, LLC are molded and/or assembled in our certified Class 8 cleanroom. Our products are double bagged and labeled prior to leaving our cleanroom.

Injectech, LLC uses virgin material in our manufacturing processes. Absolutely no regrind is allowed in our system. All materials are traceable to the material manufacturer's lot identification number.

We use high quality, medical grade materials to mold all of our fittings to ensure our parts will work for your intended application without issue. We can provide material certifications and more information by request.

We actively pursue providing you with exceptional quality products and ever-improving customer satisfaction through compliance and continual improvements. We consistently ensure that our quality management system is effective and that you receive the highest quality of service from the time you place the order to the



time you receive our products.

Injectech production is certified to meet ISO 13485 requirements and is performed in an ISO Class 8 cleanroom environment. We welcome both prototype and production runs.



The International Organization for Standardization (ISO) is in development of the new ISO 80369 standards to reduce the risk of misconnections between small-bore medical connectors.

These connectors are used in respiratory, enteral, urinary, blood pressure, neuraxial and intravenous systems which historically used an identical luer lock design. This increases the likelihood of a misconnection between the delivery systems used in the medical device industry. We have seen the impact of these new standards which has led to new designs, new parts, new molds, and the replacement of millions of components. The FDA is reviewing the deadline for ISO 80369 enforcement.

Injectech is proud to manufacture panel mounts, barbed luers, bond-in luers, filters and check valves that meet the ISO 80369-7 standard.

Call us at Injectech and we will discuss how this could affect your project and how we can help!

# Product Change Notification



As part of our commitment to customers, it is our policy to post updates on any changes that may affect a product's fit, form or function. We make every effort to contact customers who have purchased a part within the previous year.

We also encourage you to sign up to automatically receive alerts regarding such product changes by scanning the QR code. Our Quality Department is happy to address any concerns you may have about a change. Where possible, you will be informed if we plan to make a product obsolete. You will have the opportunity to purchase any remaining stock and we will assist in finding an alternative product. Additionally, we can send drawings or samples of alternative products for evaluation.

Please note that any changes to our custom product range are managed directly with the customer concerned.

# Statement concerning "Fit, Form, and Function"

**Fit:** the ability of a part to physically interface with, connect to, or become an integral part of another part. Injectech defines its standard product connector line as the "fit" to a mating connector and/or tubing. Exclusions may be considered perpendicular to intended "fit". Customer specific "fit" requirements for products/ connectors may be defined by end user with the creation of a unique part number. **Form:** the shape, size, dimensions, mass, weight and other visual parameters that uniquely distinguish a part. Injectech considers "form" that applies directly to the function/performance of the connector/product's intended use. Exclusions that may apply are variations in ejector pin marks that do not interfere with product's intended use. Customers may request consideration with the creation of a custom part number. **Function:** the action or actions that a part is designed to perform. Injectech products are initially designed to allow the transfer of media through the product or securing the product supporting media transfer. There are no exclusions from this definition as customers are required to test Injectech products in their specific applications.



**Example:** If a customer requires the part diameter to be controlled because the end use requires the fitting to snap into a housing. This would require a new assigned part number.



Ejector Pin Marks



**Notes:** any additional requirements specifying new part number assignments may be subject to a NRE (non-reoccurring engineering fee) and/or a minimum order requirement.

Please contact our sales department with any questions at **sales@injectech.us** 

## Luers

Injectech luer designs are tested for compliance to relevant international standards ISO 594-1, 594-2 and 80369-7 to ensure compatibility and a leak-tight fit.

#### Lot-traceable

- Manufactured with 100% virgin materials. Material and product certifications are available on request
- Manufactured and packaged in an ISO Class 8 cleanroom environment

0 00

• Manufactured to ISO 13485 quality system standards

#### Single Barb Design

- No mold parting line on the sealing surface minimizing potential leaks
- Single barbs allow for maximum relaxation of the tubing behind the barb resulting in a remarkable non-slip grip
- Geometry of the barb is designed for easy assembly without compromising the fitting's strength or pressure capability

All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net



ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



Multiple color options available for Nylon components. Subject to minimum order quantities.





This icon designates a fitting is compliant to the ISO 80369-7 standard.

## Male Luer Locks

Component	Cross Section	Part Number	Description
		04116	Male Luer Lock to 1/16" Barb (1.5mm) ID Tubing
		04116-N01-006 04116-PP00-004 04116-ABS00-002 04116-PC01-000 04116-RSPC01-005 04116-KY01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		04R116	Male Luer Lock to 1/16" Rigid Barb (1.5mm) ID Tubing
		04R116-N01-006 04R116-PP00-004 04R116-PC01-000 04R116-RSPC01-005 04R116-KY01-000	White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
(1997)		704116	80369-7 Male Luer Lock to 1/16" Barb (1.5mm) ID Tubing
		704116-N01-006 704116-PP00-004 704116-ABS00-003 704116-PC01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate





Multiple color options available for Nylon components. Subject to minimum order quantities.



# Male Luer Locks

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar ABS00-002 | Clear ABS

Component	Cross Section	Part Number	Description
		04332-N01-006 04332-PP00-004 04332-ABS00-002 04332-PC01-000 04332-RSPC01-005 04332-KY01-000	Male Luer Lock to 3/32" Barb (2.25mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		<b>04R332</b> 04R332-N01-006 04R332-PP00-004	Male Luer Lock to 3/32" Rigid Barb (2.25mm) ID Tubing White Nylon Animal Free Polypropylene
		704332-N01-006 704332-PP00-004 704332-ABS00-003 704332-PC01-000	80369-7 Male Luer Lock to 3/32" Barb (2.25mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate





LUERS

## Male Luer Locks

Component	Cross Section	Part Number	Description
		0418	Male Luer Lock to 1/8" Barb (3mm) ID Tubing
		0418-N01-006 0418-PP00-004 0418-ABS00-002 0418-PC01-000 0418-RSPC01-005 0418-KY01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		04HF18-N01-006 04HF18-PP00-004 04HF18-PC01-000 04HF18-RSPC01-005 04HF18-KY01-000	Male Luer Lock to 1/8" High Flow Barb (3mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		70418	80369-7 Male Luer Lock to 1/8" Barb (3mm) ID Tubing
		70418-N01-006 70418-PP00-004 70418-ABS00-003 70418-PC01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate

## Barb Design

Technical information regarding barb dimensions can be found on p102 at the back of this catalog.



# Male Luer Locks

LUERS

Component	Cross Section	Part Number	Description
		04532-N01-006 04532-PP00-004 04532-PP00-004 04532-ABS00-002 04532-PC01-000 04532-RSPC01-005 04532-KY01-000	Male Luer Lock to 5/32" Barb (4mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		04HF532CP-N01-006 04HF532CP-P00-004 04HF532CP-PC01-000 04HF532CP-RSPC01-005 04HF532CP-KY01-000	Male Luer Lock to 5/32" High Flow Barb (4mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		<b>704532</b> -N01-006 704532-PP00-004 704532-PBS00-003 704532-PC01-000	80369-7 Male Luer Lock to 5/32" Barb (4mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate





LUERS

## Male Luer Locks

Component	Cross Section	Part Number	Description
		04316	Male Luer Lock to 3/16" Barb (4.75mm) ID Tubing
	HILLS J	04316-N01-006 04316-PP00-004 04316-ABS00-002 04316-PC01-000 04316-RSPC01-005 04316-KY01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		04HF316CP-N01-006 04HF316CP-PP00-004 04HF316CP-PP00-004 04HF316CP-RSPC01-005 04HF316CP-KY01-000	Male Luer Lock to 3/16" High Flow Barb (4.75mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		04R316-N01-006	Male Luer Lock to 3/16" Rigid Barb (4.75mm) ID Tubing White Nylon
		04R316-PP00-004 04R316-PC01-000 04R316-RSPC01-005	Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate

04R316-KY01-000

Kynar



Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar ABS00-002 | Clear ABS



Multiple color options available for Nylon components. Subject to minimum order quantities.



# Male Luer Locks

Component	Cr Se

iponent	Cross Section	Part Number	Description
1972A		0414	Male Luer Lock to 1/4" Barb (6.25mm) ID Tubing
RO		0414-N01-006 0414-PP00-004 0414-ABS00-002 0414-PC01-000 0414-RSPC01-005 0414-KY01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		04HF14CP	Male Luer Lock to 1/4" High Flow Barb (6.25mm) ID Tubing
		04HF14CP-N01-006 04HF14CP-PP00-004 04HF14CP-PC01-000 04HF14CP-RSPC01-005 04HF14CP-KY01-000	White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
5573.		704316	80369-7 Male Luer Lock to 3/16" Barb (4.75mm) ID Tubing
120		704316-N01-006	White Nylon

704316-PP00-004 704316-ABS00-003 704316-PC01-000

Animal Free Polypropylene Clear ABS Clear Polycarbonate

corintian







## Male Luer Locks

Component	Cross Section	Part Number	Description
680x -		70414	80369-7 Male Luer Lock to 1/4" Barb (6.25mm) ID Tubing
		70414-N01-006 70414-PP00-004 70414-ABS00-003 70414-PC01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate

## Sample Kits are Available

Our sample kits include a variety of both male and female luer sizes as well as tube to tube connectors, spikes, plugs, and couplers. The fittings also come in many differing materials; polypropylene, polycarbonate, nylon, radiation stable polycarbonate, and more!

These kits are an invaluable development tool to assist with small quantity testing without having to purchase a multitude of different samples. At Injectech, we want to make the design process as simple as possible for your team and you.

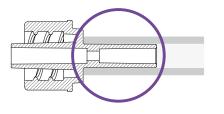


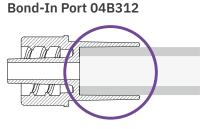
All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

#### **Bond-In Ports**

Our bond-in luers allow tubing to be assembled to either the inside or the outside of the fitting. Examples below:

#### Bond-In Port 04B095





# Male Luer Locks | Bond-in Ports



Component	Cross Section	Part Number	Description
		<b>04B095</b> 04B095-ACRL00-004	Male Luer Lock Bond-in Port .100/.090 (2.54mm/2.28mm) Clear Acrylic
		<b>04B110</b> 04B110-ACRL00-004	Male Luer Lock Bond-in Port .115/.105 (2.92mm/2.66mm) Clear Acrylic
		<b>04B130</b> 04B130-ACRL00-004	Male Luer Lock Bond-in Port .134/.123 (3.4mm/3.12mm) Clear Acrylic

All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us |T: +1 970 482 0273 | www.injectech.net





LUERS

# Male Luer Locks | Bond-in Ports

Component	Cross Section	Part Number	Description
		<b>04B187</b> 04B187-ACRL00-004	Male Luer Lock Bond-in Port .192/.182 (4.87mm/4.62mm) Clear Acrylic
		<b>04B312</b> 04B312-ACRL00-004	Male Luer Lock Bond-in Port .310/.320 (7.87mm/8.13mm) Clear Acrylic

Order online | injectech.net/Products

When quality counts, you can trust the reliable products Injectech supplies.



All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net



ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



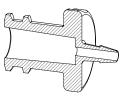
Multiple color options available for Nylon components. Subject to minimum order quantities.



## Female Luer Locks

Component	Cross Section	Part Number	Description
(5)		02116	Female Luer Lock to 1/16" Barb (1.5mm) ID Tubing
		02116-N01-006 02116-PP00-004 02116-ABS00-002 02116-PC01-000 02116-RSPC01-005 02116-KY01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		02R116	Female Luer Lock to 1/16" Rigid Barb (1.5mm) ID Tubing
		02R116-N01-006 02R116-PP00-004 02R116-PC01-000 02R116-RSPC01-005 02R116-KY01-000	White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		702116	80369-7 Female Luer Lock to 1/16"





702116

80369-7 Female Luer Lock to 1/16" Barb (1.5mm) ID Tubing

702116NP-N01-006 702116NP-PP00-004 702116-ABS00-003 702116-PC01-000 White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate







LUERS

Component	Cross Section	Part Number	Description
CE)		02332	Female Luer Lock to 3/32" Barb (1.5mm) ID Tubing
		02332-N01-006 02332-PP00-004 02332-ABS00-002 02332-PC01-000 02332-RSPC01-005 02332-KY01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		02HF332SB	Female Luer Lock to 3/32" Barb (2.25mm) Smooth Bore





for more information.



Component	Cross Section	Part Number	Description
		0218	Female Luer Lock to 1/8" Barb (3mm) ID Tubing
		0218-N01-006 0218-PP00-004 0218-ABS00-002 0218-PC01-000 0218-RSPC01-005 0218-KY01-000	White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		02HF18-N01-006 02HF18-PP00-004 02HF18-PC01-000 02HF18-RSPC01-005 02HF18-KY01-000	Female Luer Lock to 1/8" High Flow Barb (3mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		70218-N01-006 70218-PP00-004 70218-ABS00-003	80369-7 Female Luer Lock to 1/8" Barb (3mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS





Component	Cross Section	Part Number	Description
CG-5		<b>CP033</b> CP033-ABS05-000	Female Luer Lock to 1/8" Rigid Barb (3mm) ID Tubing Blue ABS
		02532-N01-006 02532-PP00-004 02532-ABS00-002 02532-RSPC01-005 02532-RSPC01-005 02532-KY01-000	Female Luer Lock to 5/32" Barb (4mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		02HF532-N01-006 02HF532-PP00-004 02HF532-PC01-000 02HF532-RSPC01-005 02HF532-KY01-000	Female Luer Lock to 5/32" High Flow Barb (4mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar



Animal Derivative Free Materials:

ABS00-002 | Clear ABS

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



Multiple color options available for Nylon components. Subject to minimum order quantities.



## Female Luer Locks

Component	Cross Section	Part Number	Description
		<b>702532NP-N01-006</b> 702532NP-PP00-004 702532-ABS00-003 702532-PC01-000	80369-7 Female Luer Lock to 5/32" Barb (4mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate
		02316-N01-006 02316-PP00-004 02316-ABS00-002 02316-PC01-000 02316-RSPC01-005 02316-KY01-000	Female Luer Lock to 3/16" Barb (4.75mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		02HF316-N01-006 02HF316-PP00-004 02HF316-PC01-000 02HF316-RSPC01-005	Female Luer Lock to 3/16" High Flow Barb (4.75mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate

Kynar

02HF316-KY01-000





LUERS

Component	Cross Section	Part Number	Description
		<b>702316</b> 702316NP-N01-006 702316NP-PP00-004 702316-ABS00-003 702316-PC01-000	80369-7 Female Luer Lock to 3/16" Barb (4.75mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate
		<b>0214</b> -N01-006 0214-PP00-004 0214-ABS00-002 0214-PC01-000 0214-RSPC01-005 0214-KY01-000	Female Luer Lock to 1/4" Barb (6.25mm) ID Tubing White Nylon Animal Free Polypropylene Clear ABS Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		02HF14-N01-006 02HF14-PP00-004 02HF14-PC01-000 02HF14-RSPC01-005 02HF14-KY01-000	Female Luer Lock to 1/4" High Flow Barb (6.25mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

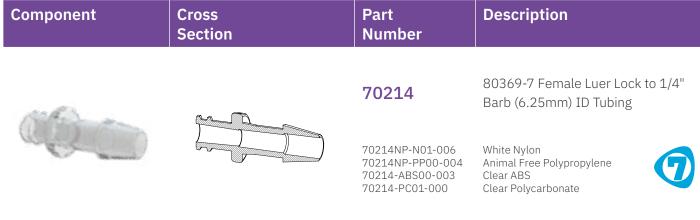
PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.



## Female Luer Locks





All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net





LUERS

# Female Luer Locks | Bond-in Ports

Component	Cross Section	Part Number	Description
		02B062 02B062-ACRL00-004 02B062-COPE00-000	Female Luer Lock Bond-in Port .065/.056 (1.65mm/1.42mm) Clear Acrylic Clear Copolyester
		02B085 02B085-ACRL00-004 02B085-COPE00-000	Female Luer Lock Bond-in Port .088/.079 (2.23mm/2mm) Clear Acrylic Clear Copolyester
		<b>02B104</b> 02B104-ACRL00-004 02B104-COPE00-000	Female Luer Lock Bond-in Port .114/.100 (2.89mm/2.54mm) Clear Acrylic Clear Copolyester

#### ISO 80369-7 Design

Injectech has conducted extensive research to determine the best manufacturing methods and proper protocol to evaluate and meet compliance to the ISO 80369-7 standard. Our female bond-in luers meet the requirements for the ISO 80369-7 standard.





This icon designates a fitting is compliant to the ISO 80369-7 standard.

## Female Luer Locks | Bond-in Ports

Component	Cross Section	Part Number	Description
020		<b>02B130</b> 02B130-ACRL00-004 02B130-COPE00-000	Female Luer Lock Bond-in Port .134/.124 (3.4mm/3.14mm) Clear Acrylic Clear Copolyester
		<b>02B156</b> 02B156-ACRL00-004 02B156-COPE00-000	Female Luer Lock Bond-in Port .163/.134 (4.14mm/3.4mm) Clear Acrylic Clear Copolyester
020		<b>02B187</b> 02B187-ACRL00-004 02B187-COPE00-000	Female Luer Lock Bond-in Port .192/.183 (4.87mm/4.64mm) Clear Acrylic Clear Copolyester





# In need of a material that holds up against oncology drug carrier solvents such as Dimethylsulfoxide (DMSO)?

Eastman Tritan<sup>™</sup> Copolyester, manufactured by Eastman, outperformed polycarbonate when testing the impact resistance of materials against DMSO.

#### Products we offer in Tritan<sup>™</sup> copolyester:

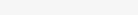
- Female bond-ins
- Tube to tube connectors
- Reducing tube to tube connectors



Materials	Dimethylsulfoxide (DMSO) % Retention of impact energy to break	
Tritan™ MX731	60 <u>+</u> 7	
Polycarbonate	All broke on jig	
Lipid Resistant Polycarbonate	All broke on jig	

\*Source - Eastman Chemical Company | Results were achieved through Eastman's well developed Four-Step Test for testing how polymers will perform when frequently exposed to drugs and disinfectants. For a full explanation of these results and the testing protocol, please contact us.





PP00-004 | Animal Free Polypropylene KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:



Multiple color options available for Nylon components. Subject to minimum order quantities.



## Female Wing Grip Luers

Component	Cross Section	Part Number	Description
		<b>02G116</b> 02G116-PP00-004 02G116-ABS00-002 02G116-PC01-000	Female Wing Grip Luer to 1/16" Barb (1.5mm) ID Tubing Animal Free Polypropylene Clear ABS Clear Polycarbonate
		02G332-PP00-004 02G332-ABS00-002 02G332-PC01-000	Female Wing Grip Luer to 3/32" Barb (2.25mm) ID Tubing Animal Free Polypropylene Clear ABS Clear Polycarbonate
0200		02G18-PP00-004 02G18-ABS00-002 02G18-PC01-000	Female Wing Grip Luer to 1/8" Barb (3mm) ID Tubing Animal Free Polypropylene Clear ABS Clear Polycarbonate

## Wing Grip Luers allow easy connections - even when wearing gloves.

Wing features offer a flat, comfortable, non-slip gripping surface that provides the extra leverage needed to ensure a secure connection.





### Slip Luers

Component	Cross Section	Part Number	Description
<u></u>		01116	Female Slip Luer to 1/16" Barb (1.5mm) ID Tubing
Carlo Carlo		01116-PP00-004 01116-ABS00-002 01116-RSPC01-001	Animal Free Polypropylene Clear ABS Lipid Resistant Radiation Stable Polycarbonate
0.200		01332-PP00-004 01332-ABS00-002 01332-RSPC01-001	Female Slip Luer to 3/32" Barb (2.25mm) ID Tubing Animal Free Polypropylene Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		S01332	Female Slip Luer to 3/32" Barb (2.25mm) ID Tubing
60		S01332-ABS01-001	White ABS

LUERS

#### Slip Luers

Slip luers do not incorporate the ISO threads, allowing for quick assembly.



### Slip Luers

Component	Cross Section	Part Number	Description
0250		<b>0118</b> 0118-ABS00-002 0118-RSPC01-001	Female Slip Luer to 1/8" Barb (3mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		<b>03116</b> 03116-ABS00-002 03116-RSPC01-001	Male Slip Luer to 1/16" Barb (1.5mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		03332-ABS00-002 03332-RSPC01-001	Male Slip Luer to 3/32" Barb (2.25mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate

#### New to the Slip Luer range



01116-PP00-004 Female Slip Luer



01332-PP00-004 Female Slip Luer



### Slip Luers

Component	Cross Section	Part Number	Description
		<b>S03332</b> S03332-N01-006	Male Slip Luer to 3/32" Barb (2.25mm) ID Tubing White Nylon
		<b>0318</b> 0318-ABS00-002 0318-RSPC01-001	Male Slip Luer to 1/8" Barb (3mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		<b>CP030</b> CP030-ABS01-001	Male Slip Luer to 1/8" Barb (3mm) ID Tubing White ABS



ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



Multiple color options available for Nylon components. Subject to minimum order quantities.



### Luer Plugs & Couplers

Component	Cross Section	Part Number	Description
		<b>02STY</b> 02STY-PP00-004	Female Luer Lock to Stylet Animal Free Polypropylene
		02P-N01-006 02P-PP00-004 02P-PC01-000 02P-RSPC01-005 02P-KY01-000	Female Luer Lock Plug White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		<b>C0101</b> C0101-N01-006	Female Slip Luer Coupler White Nylon







This icon designates a fitting is compliant to the ISO 80369-7 standard.

### Luer Plugs & Couplers

Component	Cross Section	Part Number	Description
CO		C0202-N01-006 C0202-PP00-004 C0202-PC01-000 C0202-RSPC01-005 C0202-KY01-000	Female Luer Lock Coupler White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
		<b>C0303</b> C0303-N01-006	Male Slip Luer Coupler White Nylon
0-62-0		7C0303 7C0303-RSPC01-001	Male Slip Luer Coupler Lipid Resistant Radiation Stable

Polycarbonate



ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



Multiple color options available for Nylon components. Subject to minimum order quantities.



### Luer Plugs & Couplers

Component	Cross Section	Part Number	Description
		04PCL-N01-006 04PCL-PP00-004 04PCL-PC01-000	Male Luer Lock Plug, Closed Luer White Nylon Animal Free Polypropylene Clear Polycarbonate
		04P-N01-006 04P-PP00-004 04P-PC01-000 04P-RSPC01-005 04P-KY01-000	Male Luer Lock Plug White Nylon Animal Free Polypropylene Clear Polycarbonate Radiation Stable Polycarbonate Kynar
6 300 0		L0103 L0103-RSPC01-001	Female/Male Luer Slip Elbow Lipid Resistant Radiation Stable Polycarbonate

#### Lot Traceability

Injectech products are molded from 100% virgin - lot-traceable raw materials.

Material certifications can be supplied with each order at your request.



### Luer Plugs & Couplers

Component	Cross Section	Part Number	Description
		<b>CP029</b> CP029-N01-006	Male Luer Lock to Modified Luer Taper White Nylon
		<b>CP120</b> CP120-PP00-004	Double Ended Cap Animal Free Polypropylene
		<b>CP142</b> CP142-PP00-004	Female Luer Plug with Lugs Animal Free Polypropylene



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.



### Luer Plugs & Couplers

Component	Cross Section	Part Number	Description
		<b>T010101</b> T010101-PP00-004	Female Slip Luer Tee Animal Free Polypropylene



#### Injectech's lot traceability

All our products are molded from 100% virgin, lot-traceable raw materials. Material certifications can be supplied with each order at your request.





### Rotating Luers

Component	Cross Section	Part Number	Description
06		<b>03R02C</b> 03R02C-ABS00-002 03R02C-RSPC01-001	Rotating Male Luer to Female Luer Lock Coupler Clear ABS Lipid Resistant Radiation Stable Polycarbonate
600		<b>03R116</b> 03R116-ABS00-002 03R116-RSPC01-001	Rotating Male Luer to 1/16" Barb (1.5mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		<b>03R332</b> -ABS00-002 03R332-RSPC01-001	Rotating Male Luer to 3/32" Barb (2.25mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate

LUERS



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.



# Rotating Luers

LUERS

Component	Cross Section	Part Number	Description
		<b>03R18</b> 03R18-ABS00-002 03R18-RSPC01-001	Rotating Male Luer to 1/8" Barb (3mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
6600		O3R532 03R532-ABS00-002 03R532-RSPC01-001	Rotating Male Luer to 5/32" Barb (4mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
CC (200		<b>03R316</b> 03R316-ABS00-002 03R316-RSPC01-001	Rotating Male Luer to 3/16" Barb (4.75mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable

All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

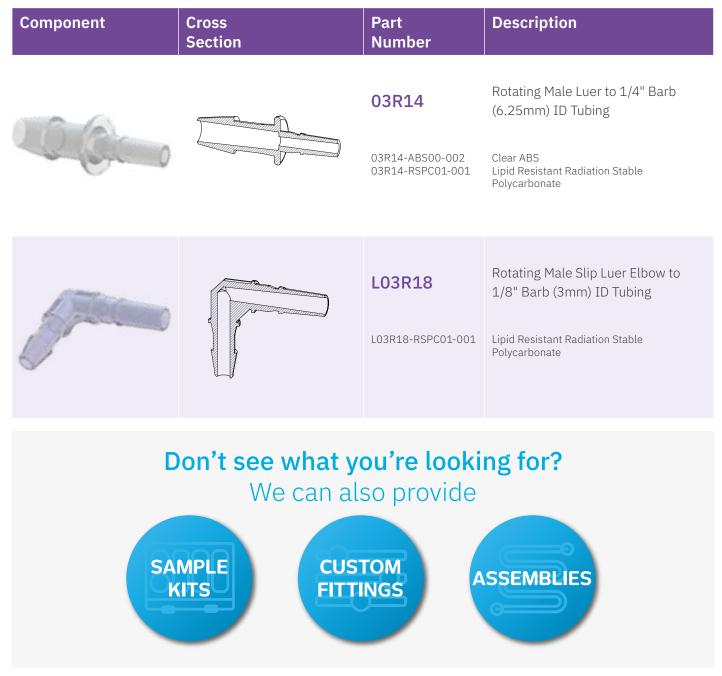
Polycarbonate

#### **Rotating Luers**

Rotating luers allow you to color code your conections. They are also a useful interface when connecting luers in spaces with limited axial movement.



### Rotating Luers



All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net



ABS00-002 | Clear ABS



Multiple color options available for Nylon components. Subject to minimum order quantities.



### Rotating Luers

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar

Component	Cross Section	Part Number	Description
6600		03R532CP 03R532CP-ABS00-002 03R532CP-RSPC01-001	
6		<b>03R316CP</b> 03R316CP-ABS00-002 03R316CP-RSPC01-001	Rotating Male Luer to 3/16" High Flow Barb (4.75mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
199-10 ·	Contraction of the second s	03R14CP	Rotating Male Luer to 1/4" High Flow Barb (6.25mm) ID Tubing

03R14CP-ABS00-002 Clear ABS 03R14CP-RSPC01-001 Lipid Resistant Radiation Stable Polycarbonate

All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net



### Rotating Luers with Snap Ring

Component	Cross Section	Part Number	Description
		RSR-ABS00-002 RSR-N01-006 RSR-N02-002 RSR-N03-006 RSR-N05-002	Rotating Snap Ring Clear ABS White Nylon Black Nylon Red Nylon Blue Nylon
(CALERIA)		RSR-PC01-000 RSR-RSPC01-001	Clear Polycarbonate Lipid Resistant Radiation Stable Polycarbonate Rotating Male Luer to Female Luer Lock Coupler with Snap Ring
		A03R02C-ABS00-002 A03R02C-RSPC01-001	Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		A03R116	Rotating Male Luer with Snap Ring to 1/16" Barb (1.5mm) ID Tubing
	Contraction of the second s	A03R116-ABS00-002 A03R116-RSPC01-001	Clear ABS Lipid Resistant Radiation Stable Polycarbonate

LUERS



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene

Rotating Luers with Snap Ring



Multiple color options available for Nylon components. Subject to minimum order quantities.



# LUERS

Component	Cross Section	Part Number	Description
		A03R332-ABS00-002 A03R332-RSPC01-001	Rotating Male Luer with Snap Ring to 3/32" Barb (2.25mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		A03R18 A03R18-ABS00-002 A03R18-RSPC01-001	Rotating Male Luer with Snap Ring to 1/8" Barb (3mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		A03R532-ABS00-002 A03R532-RSPC01-001	Rotating Male Luer with Snap Ring to 5/32" Barb (4mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate

#### **Rotating Luers with Snap Ring**

Products are shipped pre-assembled and are available with snap rings in multiple colored options.



### Rotating Luers with Snap Ring

Component	Cross Section	Part Number	Description
		A03R316 A03R316-ABS00-002 A03R316-RSPC01-001	Rotating Male Luer with Snap Ring to 3/16" Barb (4.75mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		<b>A03R14</b> A03R14-ABS00-002 A03R14-RSPC01-001	Rotating Male Luer with Snap Ring to 1/4" Barb (6.25mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		A03R532CP A03R532CP-ABS00-002 A03R532CP-RSPC01-001	Rotating Male Luer with Snap Ring to 5/32" High Flow Barb (4mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate

#### **Rotating Luers with Snap Ring**

Products are shipped pre-assembled and are available with snap rings in multiple colored options.



### Rotating Luers with Snap Ring

Component	Cross Section	Part Number	Description
		A03R316CP A03R316CP-ABS00-002 A03R316CP-RSPC01-001	Rotating Male Luer with Snap Ring to 3/16" High Flow Barb 4.75mm) ID Tubing Clear ABS Lipid Resistant Radiation Stable Polycarbonate
		A03R14CP-ABS00-002 A03R14CP-ABS00-002 A03R14CP-PC01-000 A03R14CP-RSPC01-001	Rotating Male Luer with Snap Ring to 1/4" High Flow Barb (6.25mm) ID Tubing Clear ABS Clear Polycarbonate Lipid Resistant Radiation Stable Polycarbonate
	The threade	Rotating Luer - Snap R d snap ring rotates inde o connect without twist	ependently, allowing
ABS	Polycarbonate RSPC Red Ny Color/Material		ylon Yellow Nylon Green Nylon Black Nylon

All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

### Rigid Barb Overview

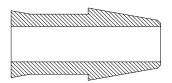
The rigid barb design offers a smaller barb outside diameter. This results in easier tube assembly when working with rigid tubing. Barb comparisons below:

#### **Standard Barb**

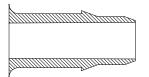
#### **Rigid Barb**



LUERS



OD for 1/8" standard barb is 0.188"



OD for 1/8" rigid barb is 0.156"

### Male & Female Luer Locks



Male Luer Lock to 1/16" Rigid Barb (1.5mm) ID Tubing

#### 04R116



Male Luer Lock to 3/16" Rigid Barb (4.75mm) ID Tubing

#### 04R316



Male Luer Lock to 3/32" Rigid Barb (2.25mm) ID Tubing

#### 04R332



Female Luer Lock to 1/16" Rigid Barb (1.5mm) ID Tubing

#### 02R116

#### Available in a variety materials, contact us for more information

### ISO 80369-7 Compliant Overview

#### ISO 80369-7 Design

The ISO 80369 series of standards aims to minimize misconnections between small bore connectors of different functional categories. ISO 80369-7 specifically addresses intervascular and hypodermic applications. Injectech has conducted extensive research to determine the best manufacturing methods and proper protocol to evaluate and meet compliance to the ISO 80369-7 standard.



### Male Luer Locks



80369-7 Male Luer Lock to 1/16" Barb (1.5mm) ID Tubing

#### 704116



80369-7 Male Luer Lock to 1/8" Barb (3mm) ID Tubing

#### 70418



80369-7 Male Luer Lock to 3/16" Barb (4.75mm) ID Tubing

#### 704316



80369-7 Male Luer Lock to 3/32" Barb (2.25mm) ID Tubing

#### 704332



80369-7 Male Luer Lock to 5/32" Barb (4mm) ID Tubing

#### 704532



80369-7 Male Luer Lock to 1/4" Barb (6.25mm) ID Tubing

#### 70414

54 | Luers

All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

#### **ISO Standards**

Information regarding the ISO 80369-7 standards can be found on p14.





All fittings in this section are compliant to the ISO 80369-7 standard.

### Female Luer Locks



80369-7 Female Luer Lock to 1/16" Barb (1.5mm) ID Tubing

#### 702116



80369-7 Female Luer Lock to 1/8" Barb (3mm) ID Tubing

#### 70218



80369-7 Female Luer Lock to 3/16" Barb (4.75mm) ID Tubing

#### 702316



80369-7 Female Luer Lock to 3/32" Barb (2.25mm) ID Tubing

#### 702332



80369-7 Female Luer Lock to 5/32" Barb (4mm) ID Tubing

#### 702532



80369-7 Female Luer Lock to 1/4" Barb (6.25mm) ID Tubing

70214

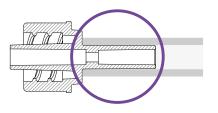
All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

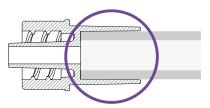
### Bond-In Overview

Our bond-in luers allow tubing to be assembled to either the inside or the outside of the fitting. Examples below:



#### Bond-In Port 04B095





Bond-In Port 04B312

### Male Bond-In Ports



Male Luer Lock Bond-in Port .100/.090 (2.54mm/2.28mm)

#### 04B095



Male Luer Lock Bond-in Port .134/.123 (3.4mm/3.12mm)

#### 04B130



Male Luer Lock Bond-in Port .115/.105 (2.92mm/2.66mm)

#### 04B110



Male Luer Lock Bond-in Port .192/.182 (4.87mm/4.62mm)

#### 04B187



Male Luer Lock Bond-in Port .310/.320 (7.87mm/8.13mm)

#### 04B312

#### **ISO Standards**

Information regarding the ISO 80369-7 standards can be found on p14.





All fittings in this section are compliant to the ISO 80369-7 standard.

### Female Bond-In Ports



Female Luer Lock Bond-in Port .065/.056 (1.65mm/1.42mm)

#### 02B062



Female Luer Lock Bond-in Port .114/.100 (2.89mm/2.54mm)

#### 02B104



Female Luer Lock Bond-in Port .163/.134 (4.14mm/3.4mm)

#### 02B156



Female Luer Lock Bond-in Port .088/.079 (2.23mm/2mm)

#### 02B085



Female Luer Lock Bond-in Port .134/.124 (3.4mm/3.14mm)

#### 02B130



Female Luer Lock Bond-in Port .192/.183 (4.87mm/4.64mm)

#### 02B187

All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

### High Flow Barb Overview

The high flow barb design incorporates two important features:

- A smaller barb outside diameter for easier insertion into tubing
- A larger through hole to allow increased flow and vacuum rates

Male luers with barb sizes 1/8" (3mm) and below are limited in flow rate by the core pin that makes the internal feature of the barb. Our 5/32" (4mm) up to 1/4"

(6.25mm) barb sizes incorporate a larger luer through hole. This is designated by a "CP" in the part number to indicate a larger total through hole diameter when compared to our other male luer products.

#### Part number designations

- HF designates our high flow barb design
- CP designates a larger luer core pin



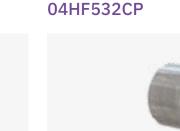
### Male High Flow Luers



Male Luer Lock to 1/8" High Flow Barb (3mm) ID Tubing

#### 04HF18





(4mm) ID Tubing

Male Luer Lock to 3/16" High Flow Barb (4.75mm) ID Tubing

#### 04HF316CP

Male Luer Lock to 1/4" High Flow Barb (6.25mm) ID Tubing

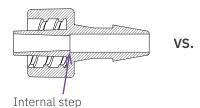
Male Luer Lock to 5/32" High Flow Barb

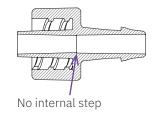
#### 04HF14CP

Available in a variety materials, contact us for more information

5/32" Standard Barb

5/32" High Flow Barb







### Female High Flow Luers



Female Luer Lock to 1/8" High Flow Barb (3mm) ID Tubing

#### 02HF18



Female Luer Lock to 3/16" High Flow Barb (4.75mm) ID Tubing

#### 02HF316



Female Luer Lock to 5/32" High Flow Barb (4mm) ID Tubing

#### 02HF532



Female Luer Lock to 1/4" High Flow Barb (6.25mm) ID Tubing

#### 02HF14

#### Available in a variety materials, contact us for more information



Injectech panel mounts are tested for compliance to international standard ISO 80369-7 to ensure compatibility and a leak-tight fit.

#### Lot-traceable

- Manufactured with 100% virgin materials. Material and product certifications are available on request
- Manufactured and packaged in an ISO Class 8 cleanroom environment
- Manufactured to ISO 13485 quality system standards

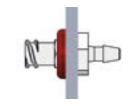
#### **Range of Available Materials**

- Nylon
- Animal Free Polypropylene
- Kynar

#### **Panel Mounts**

Injectech manufactures the only ISO 80369-7 certified panel mounts in plastic components. Panel mount threads are 1/4-28 UNF.









This icon designates a fitting is compliant to the ISO 80369-7 standard.

### Panel Mounts

Component	Cross Section	Part Number	Description
(Continue)		PM702116	Panel Mount Female Luer Lock to 1/16" Barb (1.5mm) ID Tubing
		PM702116-N01-006 PM702116-PP00-004 Contact us	White Nylon Animal Free Polypropylene Kynar
(Carlos and Carlos and	Contraction of the second	PM702332	Panel Mount Female Luer Lock to 3/32" Barb (2.25mm) ID Tubing
		PM702332-N01-000 PM702332-PP00-004 Contact us	White Nylon Animal Free Polypropylene Kynar
		PM70218	Panel Mount Female Luer Lock to 1/8" Barb (3mm) ID Tubing
		PM70218-N01-000 PM70218-PP00-004 Contact us	White Nylon Animal Free Polypropylene Kynar
	Th.	PMNUT	Panel Mount Lock Nut 1/4-28 UNF with 7/16" Hex
U.		PMNUT-N00-006	Natural Nylon
		CRING	Panel Mount Color Code Ring Color Options Available
		CRING1 CRING2 CRING3 CRING4 CRING5 CRING7	White Nylon Black Nylon Red Nylon Green Nylon Blue Nylon Yellow Nylon



### Spikes

Injectech spikes are tested for compliance to international standard ISO 594-1 to ensure compatibility and a leak-tight fit.

#### Lot-traceable

- Manufactured with 100% virgin materials. Material and product certifications are available on request
- Manufactured and packaged in an ISO Class 8 cleanroom environment
- Manufactured to ISO 13485 quality system standards

#### **Range of Available Materials**

- ABS
- Nylon
- Animal Free Polypropylene

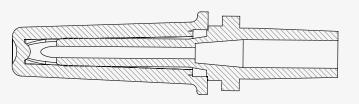
#### Spikes

Typically for dialysis, IV and nuclear medicine applications. CP026 Spike with CP027 Cap may be ordered pre-assembled.



### Spikes

Component	Cross Section	Part Number	Description
		CP024 CP024-ABS01-001	Spike to 1/4" OD Bond-In Port (non-vented) White ABS
		CP026 CP026-N01-000	Spike to Male Slip Luer (non-vented) White Nylon
		CP027 CP027-N01-000 CP027-PP00-004	Cap for CP026 Spike White Nylon Animal Free Polypropylene



CP026 / CP027 - Spike + Cap Assembly

### Check Valves / Filters

Injectech's line of check valves and filters are ISO 594-1, 594-2 and 80369-7 certified.

#### Lot-traceable

- Manufactured with 100% virgin materials. Material and product certifications are available on request
- Manufactured and packaged in an ISO Class 8 cleanroom environment
- Manufactured to ISO 13485 quality system standards

#### **Range of Available Materials**

- ABS
- MABS
- Polystyrene
- Silicone

#### **Check Valves / Filters**

Injectech offers a wide range of check valves and filters. This product line was created with the intent of offering customized solutions, whether it be different configurations or reverse flow features.



### Check Valves

Component	Cross Section	Part Number	Description
	← ← FLOW DIRECTION	<b>CV704116</b> CV704116	Check Valve   Male Luer Lock to 1/16" Barb (1.5mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone
	← ← ← FLOW DIRECTION	<b>CV704332</b> CV704332	Check Valve   Male Luer Lock to 3/32" Barb (2.25mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone
	← ← ← FLOW DIRECTION	<b>CV70418</b> CV70418	Check Valve   Male Luer Lock to 1/8" Barb (3mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone

CHECK VALVES FILTERS



### Check Valves

Component	Cross Section	Part Number	Description
		<b>CV702116</b> CV702116	Check Valve   Female Luer Lock to 1/16" Barb (1.5mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone
	FLOW DIRECTION $\rightarrow \rightarrow \rightarrow$		
	FLOW DIRECTION $\rightarrow \rightarrow \rightarrow$	<b>CV702332</b> CV702332	Check Valve   Female Luer Lock to 3/32" Barb (2.25mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone
		<b>CV70218</b> CV70218	Check Valve   Female Luer Lock to 1/8" Barb (3mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone



CHECK VALVES FILTERS





This icon designates a fitting is compliant to the ISO 80369-7 standard.

### Check Valves

Component	Cross Section	Part Number	Description
		CV116	Check Valve 1/16" Barbs (1.5mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk
CF.		CV116	ABS, Polystyrene, Silicone
	FLOW DIRECTION $\rightarrow \rightarrow \rightarrow$		
		<b>CV332</b> CV332	Check Valve 3/32" Barbs (2.25mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone
	FLOW DIRECTION $\rightarrow \rightarrow \rightarrow$		
		<b>CV18</b>	Check Valve 1/8" Barbs (3mm) Cracking Pressure ≤ 8 mbar Back Pressure 2 bar (29psi) Silicone Disk ABS, Polystyrene, Silicone

FLOW DIRECTION  $\rightarrow \rightarrow \rightarrow$ 

CHECK VALVES FILTERS



### Filters

Component	Cross Section	Part Number	Description
		F70418	Male Luer Lock to 1/8" Barb (3mm)   Hydrophobic Bacterial Filter (0.2 microns)
	Tell and	F70418	ABS

### Need a Custom Filter or Check Valve?

Injectech are specialists in custom filters and check valves, some of our custom options include:

- A wide range of materials
- Different end connections
- Filter media material options
- Outer housing material options

To find out more about our custom capabilities or to discuss your project requirements contact us via sales@injectech.us



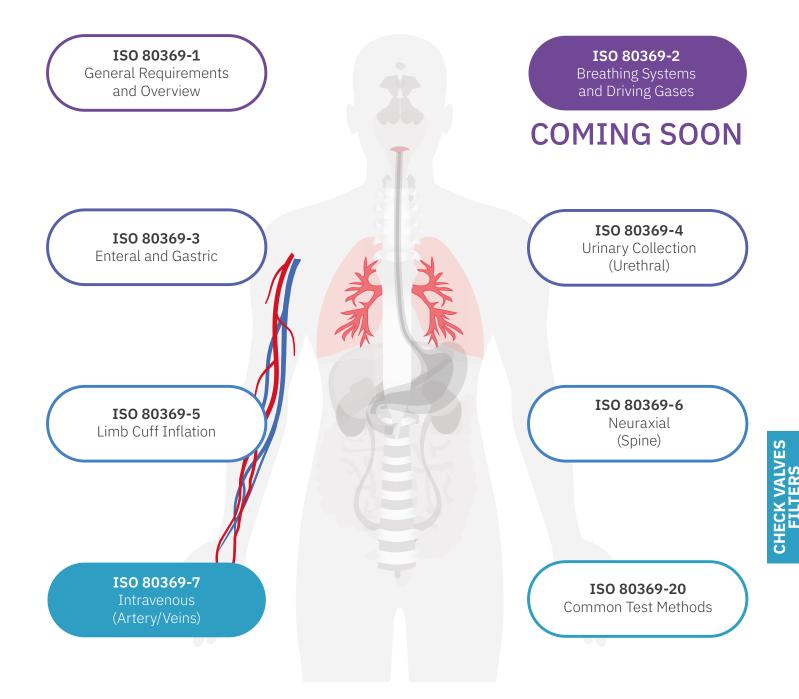
All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

### ISO 80369 Compliant Products

Healthcare facilities depend on a variety of medical devices in all levels of care management. The ISO 80369 standard was created with the intention to prevent misconnections between small bore connectors in liquid and gas applications.

### Let us help you make the right connection

Injectech offers a range of 80369-7 luers and are in the process of making 80369-2 compliant connectors, ready for you to make the swap.



### Tube to Tube

Injectech tube to tube connectors are available in several different styles for the most precise fit into tubing.

#### Lot-traceable

• Manufactured with 100% virgin materials. Material and product certifications are available on request

63

200

- Manufactured and packaged in an ISO Class 8 cleanroom environment
- Manufactured to ISO 13485 quality system standards

#### **Range of Available Materials**

- Nylon
- Animal Free Polypropylene
- Clear Polycarbonate
- Kynar
- Clear Copolyester

#### Tube to Tube Barbed Connectors

Fluid Control:

A key component of leading-edge biomedical technologies.

Single barb design advantages:

- Leak potential is minimized because there is no parting line on the barb's sealing surface.
- Single barbs allow for maximum relaxation of the tubing behind the barb, resulting in a remarkable non-slip grip.
- The geometry of the barb is designed for ease of assembly, without compromising the fitting's strength or pressure capability.



### Straight Connectors

Component	Cross Section	Part Number	Description
		IC116-N01-006 IC116-PP00-004 IC116-PC01-000 IC116-KY01-000	Straight Connector with 1/16" Barbs (1.5mm) ID Tubing White Nylon Animal Free Polypropylene Clear Polycarbonate Kynar
	Constitution Const	CR116-N01-006 CR116-PP00-004 CR116-KY01-000	Straight Connector with 1/16" Rigid Barbs (1.5mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar
		IC332-N01-006 IC332-PP00-004 IC332-KY01-000	Straight Connector with 3/32" Barbs (2.25mm) ID Tubing White Nylon Animal Free Polypropylene Kynar



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.

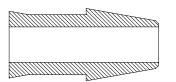


### Straight Connectors

Component	Cross Section	Part Number	Description
		CR332-N01-006 CR332-PP00-004 CR332-KY01-000	Straight Connector with 3/32" Rigid Barbs (2.25mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar
		IC18-N01-006 IC18-PP00-004 IC18-RSPC01-005 IC18-KY01-000	Straight Connector with 1/8" Barbs (3mm) ID Tubing White Nylon Animal Free Polypropylene Radiation Stable Polycarbonate Kynar
		CR18-N01-006 CR18-PP00-004 CR18-KY01-000	Straight Connector with 1/8" Rigid Barbs (3mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar

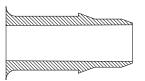
The rigid barb design offers a smaller barb outside diameter. This results in easier tube assembly when working with rigid tubing. Barb comparisons below:

#### **Standard Barb**



OD for 1/8" standard barb is 0.188"





OD for 1/8" rigid barb is 0.156"



## Straight Connectors

Component	Cross Section	Part Number	Description
		IC532-N00-006 IC532-PP00-004 IC532-KY01-000 IC532-COPE00-000	Straight Connector with 5/32" Barbs (4mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester
		IC316-N00-006 IC316-PP00-004 IC316-KY01-000 IC316-COPE00-000	Straight Connector with 3/16" Barbs (4.75mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester
		IC14-N00-006 IC14-PP00-004 IC14-KY01-000 IC14-C0PE00-000	Straight Connector with 1/4" Barbs (6.25mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester

#### Single Barb Design

- No mold parting line on the sealing surface minimizing potential leaks
- Single barbs allow for maximum relaxation of the tubing behind the barb resulting in a remarkable non-slip grip
- Geometry of the barb is designed for easy assembly without compromising the fitting's strength or pressure capability



8	8		
Component	Cross Section	Part Number	Description
		C332R116-N01-006 C332R116-PP00-004 C332R116-KY01-000	Straight Reducing Connector 3/32" to 1/16" Barbs (2.25mm to 1.5mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
	Constitution of the second sec	CR332R116 CR332R116-N01-006 CR332R116-PP00-004 CR332R116-KY01-000	
	Contraction of the second s	C18R116-N01-006 C18R116-PP00-004 C18R116-KY01-000	Straight Reducing Connector 1/8" to 1/16" Barbs (3mm to 1.5mm) ID Tubing White Nylon Animal Free Polypropylene Kynar



Component	Cross Section	Part Number	Description
		CR18R116-N01-006 CR18R116-PP00-004 CR18R116-KY01-000	Straight Reducing Connector 1/8" to 1/16" Rigid Barbs (3mm to 1.5mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar
		C18R332-N01-006 C18R332-PP00-004 C18R332-KY01-000	Straight Reducing Connector 1/8" to 3/32" Barbs (3mm to 2.25mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
	Constant Constant of Constant	CR18R332-N01-006 CR18R332-PP00-004 CR18R332-KY01-000	Straight Reducing Connector 1/8" to 3/32" Rigid Barbs (3mm to 2.25mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.



Component	Cross Section	Part Number	Description
		C532R332-N00-006 C532R332-PP00-004 C532R332-KY01-000	Straight Reducing Connector 5/32" to 3/32" Barbs (4mm to 2.25mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
-		C532R18-N00-006 C532R18-PP00-004 C532R18-KY01-000	Straight Reducing Connector 5/32" to 1/8" Barbs (4mm to 3mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
		C316R332-N00-006 C316R332-PP00-004 C316R332-KY01-000	Straight Reducing Connector 3/16" to 3/32" Barbs (4.75mm to 2.25mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar

#### Samples are available

Please contact us for samples to test in your application.



Component	Cross Section	Part Number	Description
666	Construction of the second sec	C316R18 C316R18-N00-006 C316R18-PP00-004 C316R18-KY01-000	Straight Reducing Connector 3/16" to 1/8" Barbs (4.75mm to 3mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
		C316R532-N00-006 C316R532-PP00-004 C316R532-KY01-000	Straight Reducing Connector 3/16" to 5/32" Barbs (4.75mm to 4mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
	The second secon	C14R18-N00-006 C14R18-PP00-004 C14R18-KY01-000	Straight Reducing Connector 1/4" to 1/8" Barbs (6.25mm to 3mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.



Component	Cross Section	Part Number	Description
		C14R532-N00-006 C14R532-PP00-004 C14R532-KY01-000	Straight Reducing Connector 1/4" to 5/32" Barbs (6.25mm to 4mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
		C14R316-N00-006 C14R316-PP00-004 C14R316-KY01-000	Straight Reducing Connector 1/4" to 3/16" Barbs (6.25mm to 4.75mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
		C116R132 C116R132-KY01-000	Straight Reducing Connector 1/16" Barbs to 1/32" Barbs (3mm to 0.8mm) ID Tubing Kynar



## Elbow Connectors

Component	Cross Section	Part Number	Description
		IL116-N01-006 IL116-PP00-004 IL116-KY00-001	Elbow Connector with 1/16" Barbs (1.5mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
		LR116-N01-006 LR116-PP00-004 LR116-KY01-000	Elbow Connector with 1/16" Rigid Barbs (1.5mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar
		IL332-N01-006 IL332-PP00-004 IL332-KY01-000	Elbow Connector with 3/32" Barbs (2.25mm) ID Tubing White Nylon Animal Free Polypropylene Kynar



Animal Derivative Free Materials:

ABS00-002 | Clear ABS

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



Multiple color options available for Nylon components. Subject to minimum order quantities.



## Elbow Connectors

Component	Cross Section	Part Number	Description
		L332-N01-006 L332-PP00-004 L332-KY01-000	Square Grip Elbow Connector with 3/32" Barbs (2.25mm) ID Tubing Agressive barb facilitates connection to softer low durometer tubing White Nylon Animal Free Polypropylene Kynar
		<b>IL18</b> IL18-N01-006 IL18-PP00-004 IL18-KY01-000	Elbow Connector with 1/8" Barbs (3mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
		LR18 LR18-N01-006 LR18-PP00-004 LR18-KY01-000	Elbow Connector with 1/8" Rigid Barbs (3mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar



## Elbow Connectors

Component	Cross Section	Part Number	Description
Ale		IL532-N00-006 IL532-PP00-004 IL532-KY01-000 IL532-COPE00-000	Elbow Connector with 5/32" Barbs (4mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester
		IL316-N00-006 IL316-PP00-004 IL316-KY01-000 IL316-COPE00-000	Elbow Connector with 3/16" Barbs (4.75mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester
		IL14-N00-006 IL14-PP00-004 IL14-KY01-000 IL14-COPE00-000	Elbow Connector with 1/4" Barbs (6.25mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester



Animal Derivative Free Materials:

ABS00-002 | Clear ABS

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



Multiple color options available for Nylon components. Subject to minimum order quantities.



# Reducing Elbow Connectors

Component	Cross Section	Part Number	Description
- Same		IL14R18	Elbow Reducing Connector with 1/4" to 1/8" Barbs (6.25mm to 3mm) ID Tubing
		IL14R18-N00-006 IL14R18-PP00-004 IL14R18-KY01-000	Natural Nylon Animal Free Polypropylene Kynar



All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

#### Barb Design

Technical information regarding barb dimensions can be found on p102 at the back of this catalog.



## Tee Connectors

Component	Cross Section	Part Number	Description
5		<b>IT116</b> IT116-N01-006 IT116-PP00-004 IT116-KY01-000	Tee Connector with 1/16" Barbs (1.5mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
		<b>IT332</b> -N01-006 IT332-PP00-004 IT332-KY01-000	Tee Connector with 3/32" Barbs (2.25mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
5		<b>IT18</b> IT18-N01-006 IT18-PP00-004 IT18-KY01-000 IT18-COPE00-000	Tee Connector with 1/8" Barbs (3mm) ID Tubing White Nylon Animal Free Polypropylene Kynar Clear Copolyester



Animal Derivative Free Materials:

ABS00-002 | Clear ABS

PP00-004 | Animal Free Polypropylene KY01-000 | Kynar



Multiple color options available for Nylon components. Subject to minimum order quantities.



## Tee Connectors

Component	Cross Section	Part Number	Description
5700		<b>TR18</b> -N01-006 TR18-PP00-004 TR18-KY01-000	Tee Connector with Rigid 1/8" Barbs (3mm) ID Tubing Rigid barb facilitates connection to high durometer tubing White Nylon Animal Free Polypropylene Kynar
- Ale		IT532-N00-006 IT532-PP00-004 IT532-KY01-000 IT532-COPE00-000	Tee Connector with 5/32" Barbs (4mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester
500		IT316-N00-006 IT316-PP00-004 IT316-KY01-000 IT316-COPE00-000	Tee Connector with 3/16" Barbs (4.75mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester



## Tee Connectors

Component	Cross Section	Part Number	Description
	And and a second s	IT14	Tee Connector with 1/4" Barbs (6.25mm) ID Tubing
		IT14-N00-006 IT14-PP00-004 IT14-KY01-000 IT14-COPE00-000	Natural Nylon Animal Free Polypropylene Kynar Clear Copolyester

# Injectech's engineering team is built around quality and performance.





As a custom injection molding manufacturer, we can work with you to bring an initial concept of a part through design, development and process validation. Our extensive mold qualification process gives customers the satisfaction that each part produced will meet their requirements.

**TUBE TO TUBE** 



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.



# Tee Reducing Connectors

Component	Cross Section	Part Number	Description
Jose State		<b>T1169018</b> T1169018-N01-006 T1169018-PP00-004 T1169018-KY01-000	Tee Reducing Connector with 1/16" Barbs to 1/8" Barbed Leg (1.5mm to 3mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
		<b>T18L116</b> T18L116-N01-006 T18L116-PP00-004 T18L116-KY01-000	Tee Reducing Connector with 1/8" Barbs to 1/16" Barbed Leg (3mm to 1.5mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
500		<b>T18L332</b> T18L332-N01-006 T18L332-PP00-004 T18L332-KY01-000	Tee Reducing Connector with 1/8" Barbs to 3/32" Barbed Leg (3mm to 2.25mm) ID Tubing White Nylon Animal Free Polypropylene Kynar



## Tee Reducing Connectors

Component	Cross Section	Part Number	Description
		<b>T14L332</b> -N00-006 T14L332-PP00-004 T14L332-KY01-000	Tee Reducing Connector with 1/4"Barbs to 3/32" Barbed Leg (6.25mm to 2.25mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
		<b>T14L18</b> T14L18-N00-006 T14L18-PP00-004 T14L18-KY01-000	Tee Reducing Connector with 1/4" Barbs to 1/8" Barbed Leg (6.25mm to 3mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar
		<b>T14L316</b> -N00-006 T14L316-PP00-004 T14L316-KY01-000	Tee Reducing Connector with 1/4" Barbs to 3/16" Barbed Leg (6.25mm to 4.75mm) ID Tubing Natural Nylon Animal Free Polypropylene Kynar



KY01-000 | Kynar ABS00-002 | Clear ABS

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene



Multiple color options available for Nylon components. Subject to minimum order quantities.



# Tee Reducing Connectors

Component	Cross Section	Part Number	Description
		<b>T18R116</b> -N01-006 T18R116-PP00-004 T18R116-KY01-000	Asymmetric Tee Reducing Connector with 1/8" Barbs to 1/16" Barb (3mm to 1.5mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
500		<b>T18R332-N01-006</b> T18R332-PP00-004 T18R332-KY01-000	Asymmetric Tee Reducing Connector with 1/8" Barbs to 3/32" Barb (3mm to 2.25mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
500		<b>CP031</b> CP031-ABS01-001	Barbed Tee Reducing Connector for 3/32", 1/8" and 3/16" (2.25mm, 3mm and 4.75mm) ID Tubing White ABS

#### Samples are available

Please contact us for samples to test in your application.



## Y Connectors

Component	Cross Section	Part Number	Description
		Y116-N01-006 Y116-PP00-004 Y116-KY01-000	Y Connector with 1/16" Barbs (1.5mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
		Y332-N01-006 Y332-PP00-004 Y332-KY01-000	Y Connector with 3/32" Barbs (2.25mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
		<b>Y18</b> -N01-006 Y18-PP00-004 Y18-KY01-000	Y Connector with 1/8" Barbs (3mm) ID Tubing White Nylon Animal Free Polypropylene Kynar



KY01-000 | Kynar ABS00-002 | Clear ABS



Multiple color options available for Nylon components. Subject to minimum order quantities.



## Y Connectors

Animal Derivative Free Materials:

PP00-004 | Animal Free Polypropylene

Component	Cross Section	Part Number	Description
		Y532-N01-006 Y532-PP00-004 Y532-KY01-000	Y Connector with 5/32" Barbs (4mm) ID Tubing White Nylon Animal Free Polypropylene Kynar
		Y316	Y Connector with 3/16" Barbs (4.75mm) ID Tubing
Can )		Y316-N01-006 Y316-PP00-004 Y316-KY01-000	White Nylon Animal Free Polypropylene Kynar



# **Order online | injectech.net/Products**

When quality counts, you can trust the reliable products Injectech supplies.



All products subject to minimum order quantities. To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

# Technical Information

Useful guides to help our customers make informed choices.

#### **Guides, Specifications and Charts**

- Chemical Resistance Chart
- Material Properties
- Conversion Charts
- Barb Dimensions
- Index

• Terms & Conditions

To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

# **Resistance Chart**

Key:

EX | Excellent SA | Satisfactory

UN | Unsatisfactory

	Chemical Resistance of Resin							
Chemical	%	Temp °C	Temp °F	ABS	PVDF	Nylon	Polycarbonate	Polypropylene
Acetic Acid	5	23	73	EX	EX	SA	SA	EX
Acetone	100	50	122	UN	UN	SA	UN	EX
Acetophenone	100	24	75	SA	UN	EX	_	SA
Acetylene	100	24	75	-	EX	EX	_	_
Air	100	82	180	EX	EX	EX	_	_
Ammonia, Liquid	100	24	75	SA	UN	SA	UN	EX
Ammonium Hydroxide	10	23	73	SA	EX	EX	UN	EX
Ammonium Hydroxide	10	70	158	UN	EX	UN	UN	EX
Barium Sulfide	100	24	75	EX	EX	SA	_	EX
Benzene	100	23	73	SA	EX	EX	UN	SA
Bleach	100	23	73	-	EX	SA	UN	SA
Boric Acid	7	35	95	EX	EX	UN	EX	EX
Calcium Carbonate	Sat sol.	24	75	EX	EX	_	_	EX
Carbon Dioxide	100	50	122	SA	EX	EX	_	EX
Carbon Monoxide	100	50	122	SA	EX	EX	_	EX
Carbon Tetrachloride	100	50	122	UN	EX	EX	UN	UN
Chlorine Water Dilute	Dilute	23	73	UN	EX	SA	UN	UN
Chlorine Water Concen.	Concen.	23	73	UN	EX	UN	UN	UN
Chlorobenzene	100	23	73	SA	EX	EX	UN	UN
Chlorofluorocarbon 11	100	24	75	-	EX	EX	SA	_
Chloroform	100	23	73	UN	EX	SA	UN	UN
Cyclohexanone	100	24	75	UN	EX	EX	UN	SA
Dichlorethylene	100	23	73	-	EX	SA	_	EX
Ethanol	95	50	122	SA	EX	EX	SA	EX
Ethyl Acetate	95	50	122	SA	UN	EX	UN	SA
Ethylene Glycol	100	23	73	EX	EX	EX	SA	EX
Ethylene Oxide	100	24	75	UN	EX	SA	SA	SA
Ethylene Oxide	100	79	175	UN	EX	UN	SA	UN
Fatty Acids	-	-	-	-	EX	_	SA	EX
Fluorine	100	23	73	UN	EX	UN	_	_

### For reference only | Please test in your application.

Key:

EX | Excellent SA | Satisfactory

UN | Unsatisfactory

Chemical Resistance of Resin								
Chemical	%	Temp °C	Temp °F	ABS	PVDF	Nylon	Polycarbonate	Polypropylene
Formaldehyde	37	24	75	UN	EX	_	UN	EX
Gasoline	100	85	185	EX	EX	EX	UN	SA
Glucose	Concen.	24	75	EX	EX	_	_	EX
Glycerin	100	24	75	EX	EX	_	EX	EX
Hydrochloric Acid	2	23	73	EX	EX	EX	EX	EX
Hydrochloric Acid	10	25	77	EX	EX	UN	EX	EX
Hydrofluoric Acid	10	23	73	SA	EX	UN	_	EX
Hydrogen Peroxide	1	24	75	EX	EX	SA	EX	EX
Hydrogen Peroxide	5	43	110	SA	EX	UN	EX	SA
Isopropanol	70	23	73		EX	EX	_	EX
Kerosene	100	85	185	SA	EX	EX	SA	SA
Methyl Ethyl Ketone	100	50	122	UN	UN	EX	UN	SA
Methylene Chloride	100	23	73	UN	EX	SA	UN	EX
Methanol	100	23	73	UN	EX	EX	SA	EX
Nitric Acid	10	23	73	SA	EX	UN	UN	EX
Oxygen	100	24	75	_	EX	SA	_	_
Ozone	100	43	110	SA	SA	UN	UN	_
Phenol	90	23	73	UN	EX	UN	_	EX
Phosphoric Acid	5	98	208	SA	EX	UN	UN	EX
Propane	100	23	73	SA	EX	EX	_	_
Sodium Bicarbonate	Concen.	24	75	EX	EX	EX	_	EX
Sodium Chloride	10	23	73	EX	EX	EX	_	EX
Sodium Chloride	Sat sol.	24	75	EX	EX	EX	_	EX
Sodium Hydroxide	10	70	158	SA	EX	SA	_	EX
Steam	-	120	248	UN	EX	UN	UN	SA
Sulfuric Acid	30	23	73	SA	EX	UN	EX	EX
Tetrahydrofuran	100	23	73	SA	UN	EX	_	UN
Toluene	100	50	122	SA	EX	EX	UN	UN
Trichloroethylene	100	23	73	SA	EX	SA	UN	UN
Water	100	79	175	EX	EX	EX	UN	EX

## For reference only | Please test in your application.

# Material Properties



### Polycarbonate | PC01-000

Polycarbonate is a clear material, which makes it desirable for many clinical and diagnostic applications. It has a higher impact strength than nylon, acrylic or ABS. It is a commonly used material for sunglass lenses due to its abrasion resistance and superior optical qualities. Polycarbonate is chemical resistant, but some oils and solvents will cause it to stress crack. It has excellent bonding characteristics; however, when solvents are used for assembly, it may be necessary to anneal the components prior to solvent bonding. Polycarbonate is used in: IV components, cardiac surgery and general medical applications.

#### Sterilization

Polycarbonate has sufficient temperature resistance to allow autoclave sterilization, but is not suited to repeated cycles. It is also compatible with gamma and EtO (Ethylene Oxide) sterilization methods.

#### Classifications

- Meets Requirements for USP Class VI, ISO 10993-1, and FDA 21 CFR 177.1500
- RoHS Compliant
- DEHP Free
- Phthalate Free
- Conflict Mineral Compliant
- Human Derivative Free

### Radiation Stable Polycarbonate | RSPC01-005

Radiation Stable Polycarbonate has the same properties as standard polycarbonate, but is formulated with stabilizing additives that increase its resistance to gamma radiation. The formulation includes an indicator pigment that changes from light purple to clear when the parts have undergone gamma sterilization.

#### Sterilization

RSPC can withstand radiation doses in the range of 100 kGy (see Polycarbonate).

#### Classifications

- Meets Requirements for USP Class VI
- Meets Requirements for ISO 10993
- RoHS Compliant
- DEHP Free
- REACH Compliant
- Phthalate Free
- Latex Free
- Conflict Mineral Compliant
- Ozone Depleting Substances Compliant
- California Prop. 65 Compliant

### Lipid Resistant Radiation Stable Polycarbonate | RSPC01-001

In addition to radiation tolerance, Lipid Resistant Radiation Stable Polycarbonate is less affected by oils and fats, which can occasionally cause crazing in other polycarbonate formulations.

#### Sterilization

Lipid Resistant Radiation Polycarbonate can withstand radiation doses in the range of 100kGy (see Polycarbonate).

#### Classifications

- Meets Requirements for USP Class VI
- Meets Requirements for ISO 10993
- RoHS Compliant
- DEHP Free
- Animal Derivative Free
- REACH Compliant
- Phthalate Free
- Human Derivative Free

### Acrylonitrile Butadiene Styrene (ABS) | ABS01-001

ABS is a low cost, impact resistant material that typically produces a glossy, impervious surface. ABS polymers are resistant to aqueous acids, alkalis, concentrated hydrochloric and phosphoric acids, and animal, vegetable and mineral oils. ABS is an ideal material for structural applications where impact resistance, strength, and stiffness are required. Athletic helmets and Legos blocks are common examples of products manufactured from ABS.

#### Sterilization

ABS is compatible with EtO (Ethylene Oxide) sterilization, but is not compatible with autoclave or gamma sterilization.

#### Classifications

- Meets Requirements for USP Class VI, ISO 10993-1, and FDA 21 CFR 181.32
- Conflict Mineral Compliant
- RoHS Compliant

### Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS) | ABS00-002 & ABS00-003

With similar characteristics to ABS01-001 White, ABS00-002 Clear is used to produce many of our male and female luers.

#### Classifications

- Meets Requirements for USP Class VI, FDA 21 CFR 181.32
- Conflict Mineral Compliant
- DEHP Free
- RoHS Compliant
- Animal Derivative Free
- Human Derivative Free
- REACH Compliant
- California Prop. 65 Compliant
- BPA Free
- Phthalate Free
- Latex Free

# Material Properties

### Nylon | N01-006

### Natural Nylon | N00-006

### Acrylic | ACRL00-004

Nylon is a widely used medical polymer due to its strength / impact resistance, relatively low cost and wide temperature resistance range (-50 °C - 135 °C). Nylon is resistant to a wide range of chemicals, but is vulnerable to attack by strong acids and oxidizers.

#### Sterilization

Nylon is compatible with EtO (Ethylene Oxide) sterilization and can withstand gamma sterilization (to 50 kGy). It does have a tendency to discolor with increased doses of gamma radiation. Nylon may also be autoclaved; however, it is a hygroscopic material and may swell when exposed to moist environments.

#### Classifications

- Meets Requirements for FDA 21 CFR 177.1500
- RoHS Compliant
- REACH Compliant
- Phthalate Free
- BPA Free
- Ozone Depleting Substances Compliant
- California Prop. 65 Compliant

With similar characteristics to N01-000, N00-006 is used to produce many of our larger sized tube to tube connectors.

#### Classifications

- Meets Requirements for FDA 21 CFR 177.1500
- RoHS Compliant
- REACH Compliant
- Phthalate Free
- BPA Free
- Ozone Depleting Substances Compliant
- California Prop. 65 Compliant

Acrylic is used for molding and extrusion of medical applications. It has excellent chemical resistance to fats and oils, bonding and welding capabilities, bonding to PVC tubing, excellent impact strength, and light transmission. Acrylic also has good melt flow rate and heat resistance.

#### Sterilization

Acrylic is compatible with EtO (Ethylene Oxide), gamma, and E-beam sterilization.

#### Classifications

- Meets Requirements for USP Class VI and ISO 10993
- RoHS Compliant
- REACH Compliant
- Phthalate Free
- BPA Free
- Conflict Mineral Compliant
- Latex Free
- DEHP Free

### Kynar (PDVF -Polyvinylidene Flouride) | KY01-000

Kynar is a high-strength, high-purity resin that is resistant to solvents, acids, bases and deionized water. It exhibits a high tolerance for heat and is animal derivative free. Due to its chemical resistance and adaptability to multiple sterilization techniques, it is highly suited to many bioprocess, pharmaceutical and medical applications.

#### Sterilization

Kynar is compatible with sterilization by autoclave, high doses of gamma radiation and EtO (Ethylene Oxide).

#### Classifications

- Meets Requirements for USP Class VI
- Animal Derivative Free
- RoHS Compliant
- REACH Compliant
- BPA Free
- DEHP Free
- Phthalate Free
- Latex Free
- Ozone Depleting Substances Compliant
- Conflict Mineral Compliant

## Polypropylene (Animal Free) | PP00-004

Injectech uses an animal derivative free grade of propylene for all of its stock polypropylene products. This grade of polypropylene is formulated for use in medical, biomedical and bioprocess applications and is resistant to a broad spectrum of solvents and chemicals.

#### Sterilization

Polypropylene is highly compatible with EtO (Ethylene Oxide) sterilization and is compatible with gamma sterilization in the range of 35-40 kGy (higher doses may produce a slight color shift). It may be autoclaved for up to 20 minutes @ 121 °C; however, since the material softens at this temperature, caution must be exercised when loading the autoclave to avoid any stresses that could deform the connector.

#### Classifications

- Meets Requirements for USP Class VI, ISO 10993-5, and FDA 21 CFR 177.1500
- Animal Derivative Free
- RoHS Compliant
- REACH Compliant
- Ozone Depleting Substances Compliant
- Phthalate Free
- Conflict Mineral Compliant
- California Prop. 65 Compliant
- BPA Free
- Latex Free
- DEHP Free

### Eastman Tritan™ Copolyester | COPE00-000

The clear copolyester used by Injectech is proudly supplied by Eastman Chemical Company. Eastman's Tritan™ Copolyester is a tough, clear polymer that delivers best-in-class chemical resistance. It helps manufacturers of intravenous (IV) components differentiate their products in the marketplace while improving user satisfaction and confidence. It has excellent solvent bonding, adhesive bonding, and welding as well as low extractables. Tritan<sup>™</sup> Copolyester also has great chemical resistance to oncology drugs, drug carrier solvents, enteral feeding solutions, and lipids.

#### Sterilization

Tritan<sup>™</sup> Copolyester is compatible with EtO (Ethylene Oxide) sterilization, gamma sterilization, and e-beam irridation. Unlike many other polymers, Tritan<sup>™</sup> does not suffer color shifting or loss of properties following nonautoclave sterilization methods such as gamma or electron beam (e-beam) radiation.

#### Classifications

- Meets Requirements for USP Class VI - ISO 10993-5
- Animal Derivative Free
- Antioxidant Free
- RoHS Compliant
- BPA Free
- DEHP Free

# **Conversion Charts**

Flow Rate Conversions						
cc/min	× 1 =	ml/min	/ 1 =	cc/min		
cf/min (ft³/min)	x 28.31 =	l/min	/ 28.31 =	cf/min (ft³/min)		
cf/min (ft³ /min)	x 1.699 =	m³/hr	/ 1.699 =	cf/min (ft³/min)		
cf/hr (ft³/hr)	x 472 =	ml/min	/ 472 =	cf/hr (ft³/hr)		
cf/hr (ft³/hr)	x 0.125 =	g/min	/ 0.125 =	cf/hr (ft³/hr)		
gal/hr	x 63.1 =	ml/min	/ 63.1 =	gal/hr		
gal/hr	x 0.134 =	cf/hr	/ 0.134 =	gal/hr		
gal/min	x 0.227 =	m³/hr	/ 0.227 =	gal/min		
gal/min	x 3.785 =	l/min	/ 3.785 =	gal/min		
oz/min	x 29.57 =	ml/min	/ 29.57 =	oz/min		

Length Conversions					
inch	x 2.54 =	cm	/ 2.54 =	inch	
foot	x 12 =	inch	/ 12 =	inch	
foot	x 0.305 =	m	/ 0.305 =	foot	
yard	× 1.094 =	m	/ 1.094 =	yard	
angstrom	× 1010 =	m	/ 1010 =	angstrom	

	Pressure/Vacuum Conversions					
atm	x 33.9 =	ft H <sub>2</sub> O	/ 33.9 =	atm		
atm	x 760 =	mm Hg	/ 760 =	atm		
atm	× 1033.2 =	g/cm <sup>2</sup>	/ 1033.2 =	atm		
atm	× 14.70 =	psi	/ 14.70 =	atm		
atm	× 1.013 =	bar	/ 1.013 =	atm		
atm	x 101.3 =	kPa	/ 101.3 =	atm		
bar	x 14.5 =	psi	/ 14.5 =	bar		
bar	x 0.9869 =	atm	/ 0.9869 =	bar		
bar	× 100 =	kPa	/ 100 =	bar		
ft H <sub>2</sub> O	x 0.4335 =	psi	/ 0.4335 =	ft H <sub>2</sub> O		
kPa	x 10000 =	dyne/cm <sup>2</sup>	/10000 =	kPa		
kPa	× 0.1450 =	psi	/ 0.1450 =	psi		
kPa	x 7.5 =	mm Hg	/ 7.5 =	kPa		
psi	× 0.0703 =	kg/cm <sup>2</sup>	/ 0.0703 =	psi		

98 | Technical Information

To order, and for information incl. price, delivery, and material guide: E: sales@injectech.us | T: +1 970 482 0273 | www.injectech.net

Metric C	onversions
1 centimeter	.3937 inches
1 inch	2.54 centimeters
1 foot	30.48 centimeters
1 square centimeter	.1550 sq. inches
1 square inch	6.452 sq. centimeters
1 cubic centimeter	.061 cubic inches
1 cubic inch	16.39 cubic centimeters
1 liter	61.02 cubic inches
1 liter	1.057 quarts
1 quart	.946 liters
1 ounce	28.35 grams
1 gram	.0352 ounces
1 gram	.0022 lbs.
1 pound per square inch	.0703 kilograms per sq. centimeter
1 kilogram per square centimeter	14.22 lbs. per sq. in.
1 millimeter	.0393 inches

Weight and Measure Conversions						
1 foot	12 inches					
1 foot of water	.434 lbs. per sq. inch					
1 inch of mercury	1.133 feet of water					
1 atmosphere	29.92 inches of mercury					
1 atmosphere	14.7 lbs. per sq. inch					
1 pound per square inch	2.036 inches of mercury					
1 pound (advp)	16 ounces					
1 gallon	4 quarts					
1 quart	2 pints					
1 pint	20 ounces					
1 gallon	277 cubic inches					
1 square foot	144 sq. inches					
1 cubic foot	1,728 cubic inches					

# **Conversion Charts**

						Te	emper	ature	Con	versio	ns						
°C	Temp	°F	°C	Temp	°F	°C	Temp	°F	°C	Temp	°F	°C	Temp	°F	°C	Temp	°F
-17.8	0	32.0	-1.1	30	86.0	15.6	60	140.0	32.2	90	194.0	143	290	554	310	590	1094
-17.2	1	33.8	-0.6	31	87.8	16.1	61	141.8	32.8	91	195.8	149	300	572	316	600	1112
-16.7	2	35.6	0	32	89.6	16.7	62	143.6	33.3	92	197.6	154	310	590	321	610	1130
-16.1	3	37.4	0.6	33	91.4	17.2	63	145.4	33.9	93	199.4	160	320	608	327	620	1148
-15.6	4	39.2	1.1	34	93.2	17.8	64	147.2	34.4	94	201.2	166	330	626	332	630	1166
-15.0	5	41.0	1.7	35	95.0	18.3	65	149.0	35.0	95	203.0	171	340	644	338	640	1184
-14.4	6	42.8	2.2	36	96.8	18.9	66	150.8	35.6	96	204.8	177	350	662	343	650	1202
-13.9	7	44.6	2.8	37	98.6	19.4	67	152.6	36.1	97	206.6	182	360	680	349	660	1220
-13.3	8	46.4	3.3	38	100.4	20.0	68	154.4	36.7	98	208.4	188	370	698	354	670	1238
-12.8	9	48.2	3.9	39	102.2	20.6	69	156.2	37.2	99	210.2	193	380	716	360	680	1256
-12.2	10	50.0	4.4	40	104.0	21.1	70	158.0	38	100	212	199	390	734	366	690	1274
-11.7	11	51.8	5.0	41	105.8	21.7	71	159.8	43	110	230	204	400	752	371	700	1292
-11.1	12	53.6	5.6	42	107.6	22.2	72	161.6	49	120	248	210	410	770	377	710	1310
-10.6	13	55.4	6.1	43	109.4	22.8	73	163.4	54	130	266	216	420	788	382	720	1328
-10.0	14	57.2	6.7	44	111.2	23.3	74	165.2	60	140	284	221	430	806	388	730	1346
-9.4	15	59.0	7.2	45	113.0	23.9	75	167.0	66	150	302	227	440	824	393	740	1364
-8.9	16	60.8	7.7	46	114.8	24.4	76	168.8	71	160	320	232	450	842	399	750	1382
-8.3	17	62.6	8.3	47	116.6	25.0	77	170.6	77	170	338	238	460	860	404	760	1400
-7.8	18	64.4	8.9	48	118.4	25.6	78	172.4	82	180	356	243	470	878	410	770	1418
-7.2	19	66.2	9.4	49	120.2	26.1	79	174.2	88	190	374	249	480	896	416	780	1436
-6.7	20	68.0	10.0	50	122.0	26.7	80	176.0	93	200	392	254	490	914	421	790	1454
-6.1	21	69.8	10.6	51	123.8	27.2	81	177.8	99	210	410	260	500	932	427	800	1472
-5.6	22	71.6	11.1	52	125.6	27.8	82	179.6	100	212	413	266	510	950	432	810	1490
-5.0	23	73.4	11.7	53	127.4	28.3	83	181.4	104	220	428	271	520	968	438	820	1508
-4.4	24	75.2	12.2	54	129.2	28.9	84	183.2	110	230	446	277	530	986	443	830	1526
-3.9	25	77.0	12.8	55	131.0	29.4	85	185.0	116	240	464	282	540	1004	449	840	1544
-3.3	26	78.8	13.3	56	132.8	30.0	86	186.8	121	250	482	288	550	1022	454	850	1562
-2.8	27	80.6	13.9	57	134.6	30.6	87	188.6	127	260	500	293	560	1040	460	860	1580
-2.2	28	82.4	14.4	58	136.4	31.1	88	190.4	132	270	518	299	570	1058	466	870	1598
-1.7	29	84.2	15.0	59	138.2	31.7	89	192.2	138	280	536	304	580	1076	471	880	1616

To use | Begin in the column labeled 'Temp' with the temperature that you need to convert (either Farenheit or Celcius).

• To convert from Farenheit to Celcius: read the equivalent value in the column to the left.

• To convert from Celcius to Farenheit: read the equivalent value in the column to the right.

		/olume Conversion	S	
cubic cm (cc)	× 1 =	ml	/ 1 =	cubic cm (cc)
oz (fluid)	x 29.57 =	ml	/ 29.57 =	oz (fluid)
cubic ft (ft <sup>3</sup> )	x 7.48 =	gal	/ 7.48 =	cubic ft (ft <sup>3</sup> )
cubic ft (ft <sup>3</sup> )	x 0.0283 =	m <sup>3</sup>	/ 0.0283 =	cubic ft (ft <sup>3</sup> )
cubic meters	× 1000 =	liters	/ 1000 =	cubic meters
gal	x 128 =	oz (fl)	/ 128 =	gal
gal	x 3.785 =	liters	/ 3.785 =	gal
gal	x 0.8333 =	imp gal	/ 0.8333 =	gal
quart	x 0.25 =	gal	/ 0.25 =	quart
quart	x 0.9464 =	liters	/ 0.9464 =	quart
cup	x 236.59 =	mL	/ 236.59 =	cup
cup	x 8 =	oz (fl)	/ 8 =	cup
pint	x 0.125 =	gal	/ 0.125 =	pint
pint	x 0.4732 =	liters	/ 0.4732 =	pint
bushel	x 9.3092 =	gal	/ 9.3092 =	bushel
bushel	x 35.239 =	liters	/ 35.239 =	bushel
bushel	x 64 =	pints (fl)	/ 64 =	bushel

### Providing your Project with Support from Start to Finish

Injectech has an established reputation for flexible manufacturing. We offer our customers a number of specialized services. We are equipped to manage all stages of project development from design and engineering to verification and validation.

Don't see the fitting you need for your project? Contact us to find out how we can assist you. Along with our established line of plastic barbed fittings, Injectech can also produce custom components to meet your needs. We provide:



#### Manufacturing

- Lot-traceable materials
- ISO Class 8 cleanroom
- ISO 13485 certified
- All electric injection presses
- Automated processes



**Custom Design** 

- Prototype machining and molding Design support and
- consulting
- Production molds
- Material sourcing



Engineering

- Custom molding
- First article inspection reports
- Thorough part qualification
- Functional and dimensional verifications



#### Assembly

- Solvent and adhesive bonding
- Cleanroom assembly
- Component sourcing
- Molding analysis

# Barb Dimensions

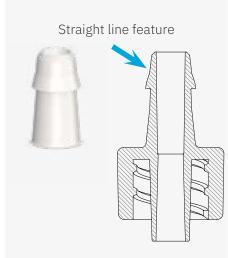


## **Standard Barb**

Barb Size	Barb OD
1/32"	0.066
1/16"	0.094
3/32"	0.141
1/8"	0.188
5/32"	0.234
3/16"	0.282
1/4"	0.388



Rigid Barb	
Barb Size	Barb OD
1/16"	0.078
3/32"	0.117
1/8"	0.156
3/16"	0.234



High Flow Barb	
Barb Size	Barb OD
1/8"	0.164
5/32"	0.208
3/16"	0.264
1/4"	0.335

# Index

01116
0118
01332
0211626
021431
0218
02316
0233227
0253229
02B062
02B085
02B104
02B130
02B156
02B187
02G116
02G18
02G332
02HF14
02HF18
02HF316 30, 59
02HF332SB27
02HF532 29, 59
02P40
02R11626, 53
02STY40
03116
0318
03332

03R02C45
03R11645
03R1447
03R14CP48
03R1846
03R31646
03R316CP48
03R33245
03R53246
03R532CP48
0411617
041422
041819
0431621
0433218
0453220
04B09524, 56
04B11024, 56
04B130 24, 56
04B187 25, 56
04B312 25, 56
04HF14CP 22, 58
04HF18 19, 58
04HF316CP21, 58
04HF532CP 20, 58
04P42
04PCL
04R11617, 53

# Index

INDEX

04R316 21, 53
04R332
70214
70218
702116
702316
702332 27, 55
702532
70414
70418
704116 17, 54
704316 22, 54
704332
704532 20, 54
7C030341
A03R02C49
A03R11649
A03R1451
A03R14CP52
A03R18
A03R31651
A03R316CP52
A03R33250
A03R53250
A03R532CP51
C010140
C020241
C030341

C116R13278	3
C14R1877	7
C14R31678	3
C14R53278	3
C18R11674	ŀ
C18R33275	)
C316R1877	7
C316R33276	)
C316R53277	7
C332R11674	ŀ
C532R1876	)
C532R33276	)
CP02463	}
CP02663	}
CP02763	3
CP02943	}
CP030	)
CP03188	3
CP03329	)
CP12043	}
CP14243	}
CR11671	L
CR1872	)
CR18R11675	)
CR18R33275	)
CR33272	)
CR332R11674	ŀ
CRING61	L

# Index

CV11667
CV1867
CV33267
CV70211666
CV7021866
CV70233266
CV70411665
CV7041865
CV70433265
F7041868
IC11671
IC1473
IC1872
IC31673
IC33271
IC53273
IL11679
IL1481
IL14R1882
IL1880
IL31681
IL33279
IL53281
IT11683
IT1485
IT1883
IT31684
IT33283

IT5328	34
L01034	2
L03R184	7
_3328	80
LR1167	'9
LR188	80
PM7021166	1
PM702186	1
PM7023326	1
PMNUT6	1
RSR4	.9
5013323	7
5033323	9
Τ0101014	4
Г11690188	6
T14L188	37
T14L3168	37
T14L3328	37
T18L1168	6
T18L3328	6
T18R1168	88
T18R3328	88
TR188	34
Y1168	39
Y188	39
Y3169	0
Y3328	9
Y5329	0

# Terms and Conditions

#### These Terms and Conditions of Sale are subject to change without notice.

**AGREEMENT.** Buyer accepts these Terms and Conditions of Sale ("Terms and Conditions") by (a) executing a separate agreement with Injectech, LLC ("Injectech") which incorporates these terms and conditions, (b) delivering a purchase order for Injectech products or services ("Products") with specifications, quantities, delivery dates and other terms acceptable to Injectech, (c) accepting delivery of the Products, or (d) paying the price for the Products, whether prior to delivery or not, as agreed to by the parties and/or set forth in the quote or invoice, whichever comes first.

**PAYMENT TERMS.** Net 30 days from receipt on open account, subject to approval. Visa, MasterCard and American Express are also accepted. All prices quoted and monies due are in U.S. dollars. Buyer agrees to be solely liable for any and all taxes arising out of Buyer's purchase of Products and sale of such Products to its customers. Injectech will add sales, use and other taxes as required by law.

MINIMUM ORDER. Please contact us for minimum order quantity requirements.

**DELIVERY AND SHIPMENT.** All domestic shipments shall be F.O.B. Injectech's facility, Fort Collins, Colorado. All international shipments shall be EXW Injectech's facility, Fort Collins, Colorado (Incoterms 2000). Risk of loss shall transfer to Buyer upon delivery to the freight carrier. A Packaging/Handling fee will be applied as a percentage of the total invoice amount.

**INSPECTION/ACCEPTANCE OF PRODUCTS.** Buyer shall be responsible for inspecting all Products prior to acceptance. If the products are rejected, Injectech must receive written notice within 30 days of delivery. Otherwise, the Products shall be deemed to have been accepted by the Buyer. Injectech does not perform C=0 inspections unless specified by customers or agreed by both parties. Standard inspection criteria are based in the latest revision of WI 8.2.2 and/or AQL 0.65 sampling plan.

**LIMITED WARRANTY.** Injectech does not specify or warrant any product it sells for any particular purpose, use or application. It is solely up to the purchaser to determine whether the Injectech product will function in the purchaser's application. Injectech warrants to Buyer that all Products shall be free from material defects in materials and workmanship. Injectech's sole liability, for any breach of the foregoing warranty shall be for Injectech, at its sole option, to repair, replace or modify the defective Product or to refund to Buyer the purchase price paid by Buyer for the defective Product. The warranty service shall be performed at a location determined by Injectech. In order to receive the warranty service, Buyer must return the defective Product within 30 days of notification from Buyer hereunder. All defective Products returned under this warranty that are replaced, or for which a refund is given to Buyer, shall become Injectech's property. Notwithstanding the foregoing, this limited warranty shall not apply if:

(1) Product is altered or modified after delivery, including in Buyer's manufacturing or assembly process.

(2) Any repairs or alterations have been performed by Buyer without prior notification to and authorization by Injectech.

(3) Negligence, misuse, or abuse of the product by any party.

This limited warranty does not extend to products not manufactured by Injectech or to damages caused by purchased components, parts or supplies not manufactured by Injectech. THE FOREGOING LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES AND INJECTECH HEREBY EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, NON-INFRINGEMENT AND IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT AND FITNESS FOR A PARTICULAR USE.

**FORCE MAJEURE.** Injectech shall not be liable, directly or indirectly, for any delays or failures in performance resulting from causes beyond its reasonable control, including but not limited to, fire, acts of God or third parties, labor disputes or disturbances, shortage of raw materials, supplies or components, manufacturing issues, retooling, upgrading of technology, embargo, government regulation, order or directive, or communication or utility failures.

**CANCELLED ORDERS.** Cancellations of custom orders are subject to a cancellation fee based upon the amount of design, development and manufacturing at the time of cancellation.

**RETURNED GOODS.** A return authorization must be obtained from Injectech for Products that do not conform to our warranty statement. Injectech does not allow returns in regards to changes to specifications, customer errors, or shipping schedules once the Product has been shipped.

**INDEMNIFICATION.** Buyer shall indemnify and hold harmless Injectech and its affiliated companies and each of their respective officers, directors, employees, shareholders, agents and representatives from all losses, claims, damages, expenses or liabilities of any kind (including attorney's fees and court costs) resulting from or arising out of any use, modification, resale or transfer by Buyer of the Products. Buyer represents, warrants, and covenants that Buyer will not infringe or misappropriate, and neither the Products nor any element thereof will infringe or misappropriate, any intellectual property rights, including without limitation, any copyrights, trademarks, trade names, trade secrets and patent rights ("Intellectual Property Rights") of any other person as a result of any specifications provided by Buyer. Buyer will, at its own expense, indemnify, defend, hold harmless and pay any and all costs and damages awarded against Injectech based on any third-party claims that the Products infringe any Intellectual Property Rights. In the event of any third-party claim, demand, suit, or action (a "Claim") for which indemnification is required hereunder, the indemnified party may, at its option, require Buyer to defend such Claim at Buyer's sole expense. Buyer may not agree to settle any Claim without the express prior written consent of the indemnified party.

LIMITATIONS ON LIABILITY. INJECTECH SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE CAUSED BY DELAY IN FURNISHING ANY PRODUCT. UNDER NO CIRCUMSTANCE SHALL INJECTECH BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, COLLATERAL, SPECIAL, PUNITIVE, TREBLE, EXEMPLARY OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS OR GOODWILL) WHETHER SUCH CLAIM IS BASED ON CONTRACT, NEGLIGENCE, TORT, WARRANTY OR ANY OTHER BASIS, IRRESPECTIVE OF WHETHER INJECTECH HAS BEEN ADVISED OF THE POSSIBILITY OF ANY SUCH LOSS OR DAMAGE. IN NO EVENT SHALL INJECTECH'S AGGREGATE LIABILITY EXCEED THE TOTAL AMOUNTS ACTUALLY PAID BY BUYER FOR THE PRODUCTS PURCHASED.

**EXPORT REGULATIONS; PERMITS.** Buyer is solely responsible for compliance with any and all applicable export control requirements, including the U.S. Export Administration Regulations, related documentation requirements and internal control procedures and regulations of the Office of Foreign Assets Control of the U.S. Department of the Treasury. Buyer shall be solely responsible for obtaining any necessary export control licenses and permits.

**REGULATORY REQUIREMENTS.** Injectech, LLC relies on the material suppliers, resin manufacturers, equipment, and chemical suppliers' regulatory information. We do not test or analyze these materials for any specified regulatory requirements; the information provided by the material suppliers, resin manufacturers, equipment, and chemical suppliers has been compiled in a readily retrievable format as a service to our customers. Ultimately customers and end-users must make their determinations ensuring the use of these products is safe, lawful, and suitable for their intended applications.

**CHANGES.** Injectech reserves the right to change, in whole or in part, at any time, prices, discounts, rebates, warranties, product specifications, products offered, policies and terms and conditions of sale, including these Terms and Conditions.

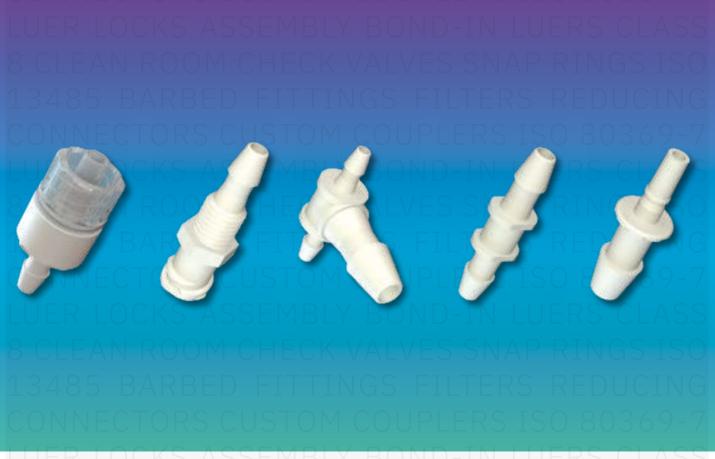
Product Change Notification Policy: Our policy is to notify customers for changes related to a product's form, fit or function. Injectech's products are our proprietary designs with which we serve many diverse customers and markets. Therefore, we will not withhold changes to standard parts pending customer approval. You may visit www.injectech.net to view details of our product change notification policy.

**APPLICABLE LAW; VENUE.** These Terms and Conditions shall be governed by and construed in accordance with the laws of the State of Colorado. Any action at law, suit in equity, or judicial proceeding of any kind arising directly, indirectly, or otherwise in connection with, out of, related to or from these Terms and Conditions shall be litigated only in the state or federal courts located in the City and County of Denver, Colorado, and the parties waive any right they may have to challenge the jurisdiction of this court or seek to bring any action in any other forum, whether originally or by transfer, removal or change of venue.



Injectech proudly supplies fluid control components such as male luer locks, female luer locks, check valves, and tube to tube connectors to medical device OEMs, biomedical and pharmaceutical manufacturers, veterinary suppliers, and industrial businesses worldwide. Our services not only include the manufacture of high quality plastic fittings, we also provide custom design and assembly. We maintain an ISO 13485 certified quality management system and all products are molded, assembled, and packaged within an ISO Class 8 cleanroom.

LUER LOCKS ASSEMBLY BOND-IN LUERS CLASS 8 CLEAN ROOM CHECK VALVES SNAP RINGS ISO 13485 BARBED FITTINGS FILTERS REDUCING CONNECTORS CUSTOM COUPLERS ISO 80369-7



307 N Link Lane | Fort Collins | CO 80524 | USA sales@injectech.us +1 970 482 0273

injectech.net

Plastic Fluid Control Components Catalog | v.012