

MEDNET

Your partner for components, materials and services

TUBE FITTINGS &
BIOPROCESS COMPONENTS



QUICK CONNECTORS



VALVES



CUSTOM SOLUTIONS



TUBING

BIOPROCESS COMPONENTS

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About MedNet

For over 30 years, MedNet has been providing the bioprocess industry with single-use component and material solutions for fluid management systems, as well as bioreactors. Our broad portfolio includes tubing, tube fittings, quick connectors, valves and other bioprocess components from well-known manufacturers. These are suitable for applications such as gene and cell therapy, filtration, fermentation, drug delivery or vaccine production.

Our high-quality components ensure secure leak-free connections, meet the industry requirements of ISO 13485, ISO 9001, ISO 14644-1 and are cleanroom manufactured. In addition, we provide regulatory documentation to fulfil all of the industry needs.

Most of our standard range is available from stock, enabling fast and straight-forward deliveries. Our qualified and experienced team possesses a wealth of knowledge covering applications, quality management and regulatory requirements.

We understand that every project is unique and that there may not be a standard, one-size-fits-all solution. With our customised approach, you stay in control of the entire process and we remain flexible throughout to make adjustments if needed.

Über MedNet

Seit mehr als 30 Jahren bietet MedNet ein breites Angebot für die Bioprozessindustrie mit Komponenten- und Materiallösungen für Einweg- und Flüssigkeitsmanagementsysteme sowie Bioreaktoren. Unser breites Portfolio umfasst Schläuche, Schlauchverbindungen, Schnellverschlusskupplungen, Ventile und andere Bioprozesskomponenten namhafter Hersteller. Diese eignen sich für Anwendungen wie Gen- und Zelltherapie, Filtration, Fermentation, Drug-Delivery oder Impfstoffherstellung.

Unsere hochqualitativen Komponenten gewährleisten sichere, leckagefreie Verbindungen, erfüllen die Branchenanforderungen von ISO 13485, ISO 9001 und ISO 14644-1 und werden in Reinräumen hergestellt. Darüber hinaus verfügen wir über regulatorische Dokumentationen, die allen Anforderungen der Branche gerecht werden.

Der Großteil unseres Standardsortiments ist ab Lager verfügbar, was eine schnelle und unkomplizierte Lieferung ermöglicht. Darüber hinaus können Sie von unserem gut etablierten und zertifizierten Netzwerk von Produktionspartnern profitieren, das umfassende Materialtechnologien anbietet, die auf Ihre individuellen Anforderungen zugeschnitten sind.

Wir wissen, dass jedes Projekt einzigartig ist und es keine Standardlösung gibt. Mit unserem maßgeschneiderten Ansatz können Sie die Kontrolle über den gesamten Prozess behalten und bleiben jederzeit flexibel, um bei Bedarf Anpassungen vorzunehmen.

TUBE FITTINGS AND BIOPROCESS COMPONENTS

SCHLAUCHVERBINDER UND BIOPROZESSKOMPONENTEN



Top quality single-use bioprocess fittings:

Suitable for tubing IDs from 1.6 mm (1/16") to
38.1 mm (1.5")

No parting lines on critical sealing surfaces
ensuring a secure seal

Wide range of tube fittings and sanitary fittings for
biopharmaceutical applications

Einwegverbinder in höchster Qualität für die Bioprozesstechnik:

geeignet für Schläuche mit einem Innendurchmesser von
1,6 mm (1/16") bis 38,1 mm (1.5")

Keine Trennnähte an kritischen Dichtflächen zur
Gewährleistung einer sicheren Verbindung

Große Auswahl an Schlauchverbindern und Sanitär-
fittings für biopharmazeutische Anwendungen

Tube-to-Tube Connectors

- The highest quality components for a reliable and leak free tube connection.
- Different configurations are available to connect two or more flexible or rigid tubes, for tubing ID ranges from 1.6 mm (1/16") to 38.1 mm (1.5").
- Product range includes straight through connectors, reducers, elbows, panel mounts, T's, Y's, multiport connectors and press in plugs.
- A wide variety of material options are available, the most popular include: polyamide (Nylon®), polypropylene, polycarbonate, PVDF (Kynar®), ABS.



Bag Ports



- Bag ports are designed to be ultrasonic or thermal welded to medical and bioreactor bags for media and fluid applications in the biopharmaceutical industry.
- The bag ports incorporate unique features that reduce process time and potential damage to expensive media. Available with TC connections and barbs for tubing ID ranges from 3.2 mm (1/8") to 38.1 mm (1").

Sanitary Fittings

- Sanitary fittings are used in single-use container fluid transport systems, manifolds and wherever sensitive fluids need to be transferred.
- Available in four flange sizes: 3/4" (Mini), 1-1.5" (Maxi), 2" and 3". Five size options for tubing ranges from 6.4 mm (1/4") to 38,1 mm (1"5) are available.
- New Y-Sanitary Fitting, 2" X 2" X 2" Maxi flanges, made of animal-free natural polypropylene.



Clamps



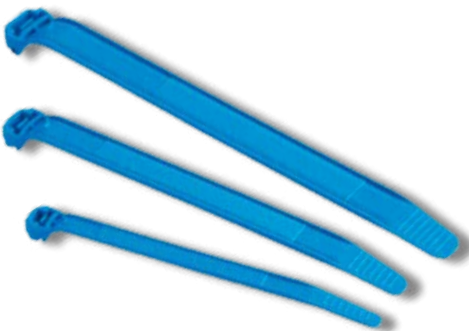
- Sanitary Flange Tri-Clamps and PharmaLok™ Clamps are designed to be used for the innovative connection of 3/4" (Mini), 1-1.5" (Maxi), 2", 3" and 4" flanges. Made of validated plastic material to avoid corrosion. Easily operated with one hand, PharmaLok™ Clamps enable the effortless attachment of flanged fittings to bag ports and filters.
- Our PharmaLok™ Tube Clamps cut off fluid flow in fluid management systems when a line needs to be connected or disconnected. A single hand movement compresses the tube into the clamp and seals the line. Four size options for tubing OD ranges from 6.4 mm (1/4") to 41.3 mm (1.625") are available.

Gaskets

- These components are manufactured for applications requiring the highest sanitary standards and chemical purity.
- Gasket material options include USP Class VI compliant platinum-cured silicone and PTFE/EPDM in sizes that fit the 3/4" Mini flange, 1-1.5" Maxi flange, 2" flange, 3" flange, 4" flange, and 6" flange.
- Tuf-flex® sanitary gaskets are unitized and will maintain ID without re-torquing or leaking.



Tubing Retainers



- Designed to effortlessly secure tubing over hose barbs.
- The lead-in ramp is designed to create a complete 360° compression, ensuring effective leak prevention.
- Seamless combination with silicone, TPE and PVC tubing.
- The size ranges available fit tubing from 3.2 mm ID (6.4 mm OD) to 4.8 mm ID (11.1 mm OD), 6.4 mm ID (9.5 mm OD) to 9.5 mm ID (15.9 mm OD), and 12.7 mm ID (15.9 mm OD) to 19.0 mm ID (28.6 mm OD).
- The materials used are cleanroom moulded and meet USP Class VI & ISO 10993 criteria.
- Additionally, the validated plastic material is corrosion-resistant, providing durability and reliability.

TUBING

SCHLÄUCHE



**A selection of materials to suit
a wide range of applications:**

Silicone, TPE, KFlex Kynar®, PUR, LLDPE, PVC

Wide range of inner and outer diameters

With metric and imperial dimensions

Medical-grade materials

**Große Auswahl an Materialien für
zahlreiche Anwendungen:**







Silikon, TPE, KFlex Kynar®, PUR, LLDPE, PVC

Große Bandbreite an Außen- und Innendurchmessern




Mit metrischen und imperialen Größen

Materialien geeignet für medizinische Anwendungen

Bioprocess Material Selection

	Material	Hardness	Properties	Compliance	Sterilisation
Platinum Cured	Silicone 	Shore 58A	high temperature resistance, extremely flexible, memory effect, plasticiser-free	USP Class VI, ISO 10.993 -3/-5/-6/-10/-11	autoclave, Gamma, EtO
	Flexelene™ 121C 	Shore 54A	chemical resistant, extremely flexible, temperature resistant from -50°C (-58°F) to 121°C (250°F) plasticiser-/DEHP-free	USP Class VI, ISO 10993 -4/-5	autoclave, Gamma, EtO
TPE	Flexelene™ 135C / braided 	Shore 68A	temperature resistant from -50°C (-58°F) to 135°C (275°F), plasticiser-/DEHP-free	USP Class VI, ISO 10993 -4/-5	autoclave, Gamma, EtO
	Acrolene 	Shore 75A	high chemical resistance, high temperature resistance	upon request	
	EJPrene 	Shore 70/80A	temperature resistant from -50°C (-58°F) to 135°C (275°F), available soft (70A) & flexible (80A) plasticiser-/DEHP-free	USP Class VI, ISO 10.993 -4/-5	autoclave, Gamma, EtO
flexible Kynar lined	KFlex Kynar® 	Shore 85A	inner layer from Kynar® for excellent chemical resistance (detach-free), outer layer from TPU for improved flexibility Kink resistant, dimensionally stable temperature resistant from -50°C (-58°F) to 80°C (176°F)	USP Class VI, ISO 10.993 -4/-5	EtO

Other Materials

	Material	Hardness	Properties	Compliance	Sterilisation
Polyurethane	PUR 	Shore 85A	mechanically stable, kink resistant, plasticiser-free, good bondability	upon request	
	LLDPE 	Shore 44D	chemical resistant, plasticiser-free, cost effective	upon request	
Polyvinyl Chloride	PVC 	Shore 70A	flexible, cost-effective, good bonding properties, phtalate-/DEHP-free	USP Class VI	

QUICK CONNECT COUPLINGS

SCHNELLVERSCHLUSS- KUPPLUNGEN



Valved or open-flow thumb latch technology

Straight and elbow connectors
also available as panel mount

Tubing sizes
IDs from 1.6 mm (1/16") to 19.0 mm (3/4")

Barbed, threaded or bioprocess connection

Materials: polypropylene, PVDF (Kynar®),
stainless steel, polyamide (Nylon), polycarbonate,
polyethylene, polysulphone, nickel-plated brass

Druckknopf-Technologie mit oder ohne Ventil

Ellbogen- und gerade Konfigurationen
auch als Gehäusedurchführung verfügbar

Schlauchgrößen
IDs von 1.6 mm (1/16") bis 19.0 mm (3/4")

Schlauch-, Gewinde- oder Bioprozessanschluss

Materialien: Polypropylen, PVDF (Kynar®), Edelstahl,
Polyamid (Nylon), Polycarbonat, Polyethylen,
Polysulfon, verchromtes Messing

Bioprocess Quick Connect Selection



		Series Lock	RQC / MPC	RQX / MPX	60 / HFC series	Aseptic Disconnect
Female	Open	●	●	●	●	●
	Open/Locking		●	●		
	Valved	●			●	●
Male	Open	●	●	●	●	●
	Valved	●			●	●
Tube Connection	Barb Straight for Tube ID	1/16" - 1" 1.6 mm - 25.4 mm	1/8" - 3/4" 3.2 mm - 19.0 mm	3/8" - 1/2" 9.5 mm - 12.7 mm	1/4" - 3/4" 6.4 mm - 19.0 mm	1/4" - 1/2" 6.4 mm - 12.7 mm
	Barb Elbow for Tube ID				3/8" - 1/2" 9.5 mm - 12.7 mm	
Threaded Connection	Straight Male	NPT 1/8" - 1/2"			NPT 3/8", 1/2", 3/4"	
	Straight Female	NPT 1/8" - 1/2"				
Bioprocess Connection	Mini	3/4" 19.0mm				
	Maxi	1" - 1.5" 25.4mm - 38.1mm				
Bulkhead	Female Open Flow				●	
	Female Valved				●	
	Male Open Flow	●			●	
	Male Valved	●			●	
Cap/Plug	Female	●	●	●		●
	Male	●	●	●		●
Body Materials	Polycarbonate		●	●		
	Polypropylene	●	●	●	●	
	Polysulfone	●			●	●

VALVES

VENTILE



Pressure activated check valves:

Valves with opening pressure from 0.087 psi to 4.351 psi (6 mbar to 300 mbar), various input and output types: luer-to-luer, luer-to-tube, tube-to-luer, tube-to-tube, tube-to-thread

Double check valves with opening pressure of 2.5 psi (172 mbar)

female luer / tube pocket / male luer or female luer / male rotating adaptor / male luer

Luer-activated valves

Druckaktivierte Rückschlagventile:

Ventile mit Öffnungsdruck von 0,087 psi bis 4,351 psi (6 mbar bis 300mbar), verschiedene Zu- und Abgänge: Luer-zu-Luer-, Luer-zu-Schlauch, Schlauch-zu-Luer, Schlauch-zu-Schlauch, Schlauch-zu-Gewinde

Doppel-Rückschlagventile mit Öffnungsdruck von 2,5 psi (172mbar)

weiblicher Luer / Schlauch / männlicher Luer oder weiblicher Luer / Rotieradapter / männlicher Luer

Luer aktivierte Ventile

Pressure-Activated Check Valves

Tube-to-tube

- Open at low fluid pressures in the flow direction and prevent backflow
- Available with diaphragm or duckbill valve



Luer-to-tube



- Open at low fluid pressures in the flow direction and prevent backflow

Luer-to-luer

- Function as one-way valves
- Function as anti-siphon valves in pump applications



Luer-Activated Valves



- nPulse™, needle-free valve with neutral fluid displacement characteristics: flat, smooth swabbable surface and self opening slit septum
- Needle-free/Swabable valves with high flow rate: robust, flat and swabbable slit septum

CUSTOM SOLUTIONS

KUNDENSPEZIFISCHE LÖSUNGEN



In addition to “off-the-shelf” components, MedNet draws on its extensive experience and resources to help you arrive at a suitable solution for your individual project.

Whether you are looking for special material characteristics, a custom-made component, a bespoke set or assembly – we can help.

We will help you find that missing puzzle piece and deliver the adequate technologies that comply with the regulatory and quality requirements of your project.

MedNet bietet nicht nur Standardartikel; wir finden mit Ihnen die individuelle Lösung für Ihre Anwendung.

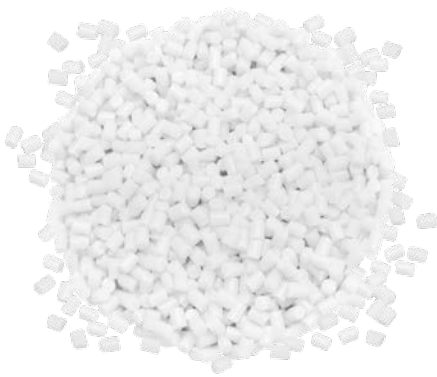
Sei es ein Material mit besonderen Eigenschaften, eine kundenspezifische Komponente, ein individuell zusammengestelltes Set oder eine speziell gefertigte Baugruppe.

Wir unterstützen Sie bei der Auswahl der richtigen Bausteine und sorgen für die Bereitstellung der passenden Technologien; natürlich den regulatorischen und qualitativen Anforderungen Ihres Projektes entsprechend.

Materials and Material Development

Together with our industry leading partners Foster Corporation and Arkema, we can provide you with innovative material expertise: Established as global leader in specialty materials, Arkema provides high-performance medical-grade materials that are designed for robustness, safety and chemical resistance. For more than thirty years, Foster Corporation has been showcasing industry-leading, custom biomedical polymer compounding, expert formulation development and production of polymer enhancements.

Polymers



- Pebax® MED Polyether Block Amid
- Rilsan® Clear MED Polyamide / Copolyamid
- Rilsan® MED Polyamide 11
- Rilsamid® MED Polyamide 12
- Kynar® PVDF

Typical Applications

- Single-use films for bioreactors
- Media bags and drug delivery
- Tubes for peristaltic pumps
- Fittings and connectors



Custom Components

Are you struggling to find the right solution for your project? If you are looking for a special assembly or components that can optimise your production line, we can offer you a broad portfolio of fluid management

components as well as a network of service providers to make your customised solution a reality! Choose from our broad portfolio and let us support you in implementing your solution.



ASSEMBLED LINES
(PVC, PU BRAIDED)



MANIFOLDS



STOPCOCKS



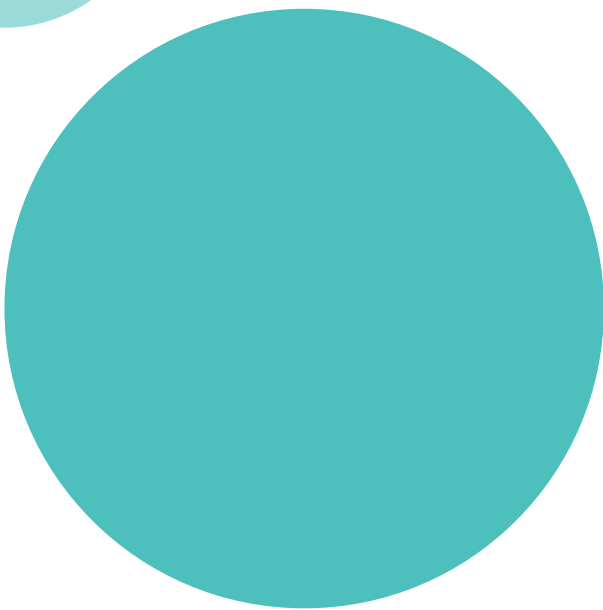
SYRINGES
(PC, TRITAN™,
TRITAN™ OIL-FREE)



PRESSURE MONITORING



CUSTOM COMPOUNDS



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