

BARBED FITTINGS

R-Series

MATERIAL SELECTION

Natural Kynar® - PVDF (NK7)

- USP Class VI
- Lot traceable
- Temperature range -62°C bis 107°C
- Pressure 17.9 bar at 21°C.

Kynar (PVDF) material can be autoclaved to 140 °C and meets USP Class VI requirements. Generally, chemically resistant to: most acids, salts, weak bases, halogenated solvents, alcohols, nuclear and UV radiation, oxidants, ozone and deionized water.

CrystaVu™ (CVU)

- USP Class VI
- Lot traceable

A clear transparent alternative to polycarbonate containing no Bisphenol-A (BPA) - will not deform at temperatures to 180°C. Autoclavable - enhanced characteristics compared with polycarbonate include: superior chemical resistance; no crazing with multiple autoclave cycles plus gamma and EtO Sterilization compatibility - USP Class VI, EU 2002/72/EC.

White Polypropylene (WP)

- Temperature range -22°C to 66°C
- Pressure 8.6 bar at 21°C

White Polypropylene has the same physical and chemical resistance properties as Natural Polypropylene, but is less expensive. WP fittings contain recycled runner material produced during virgin material, Natural Polypropylene production runs. White Polypropylene fittings are manufactured to the same tolerances and quality standards as our Natural Polypropylene fittings - WP is not a USP Class VI material and is not lot traceable.

Gray Kynar (PVDF)

- Temperature range -62°C to 107°C
- Pressure 17.9 bar at 21°C.

Gray PVDF fittings exhibit the same physical and chemical resistance properties as Natural Kynar®. PVDF fittings contain recycled runner material produced during virgin material, Natural Kynar® production runs. For applications that do not require lot traceability or a material that meets USP Class VI requirements, PVDF fittings represent an excellent value.

Non-Animal Derived Polypropylene (PP)

- USP Class VI
- Lot traceable
- Temperature range -22°C to 66°C
- Pressure 8.6 bar to 21°C

Polypropylene meets FDA requirements 21 CFR 177.1520(a)(3)(i) and (c)3.1a. PP material has a Drug Master File listing. It is radiation stable and is resistant to solvents, chemicals, water and other inorganic environments. It resists most strong mineral acids and bases; however, it is subject to attack by oxidizing agents.

Nylon - Natural (NN) & Medical (MN)

- Lot traceable
- Temperature range -45°C to 135°C
- Pressure 8.6 bar at 21°C

6/6 Nylons exhibit good tensile strength, moderate stiffness and high impact resistance. They're resistant to fuels, lubricants and many chemicals, but vulnerable to attack by phenols, strong acids and oxidizing agents. White Medical Nylon is made from the same resin as Natural Nylon, but has an FDA compliant white colorant added.

Black Nylon (BN)

- Lot traceable
- Temperature range -45°C to 135°C
- Pressure 10 bar at 21°C
- Automotive Approvals

Made from 6/6 nylon - exhibits strength, moderate stiffness, high service temperature, high impact resistance and tensile strength. Resistant to fuels, lubricants and many chemicals, but vulnerable to attack by phenols, strong acids and oxidizing agents. Used in fuel line, vacuum systems and general purpose applications: automotive industry approvals.

White Nylon (WN)

- Temperature range -45°C to 135°C
- Pressure 8.6 bar at 21°C

White Nylon has the same chemical and physical properties as Natural Nylon. WN fittings contain recycled runner material produced during virgin material, Natural Nylon production runs. White Nylon fittings are manufactured to the same tolerances and quality standards as our Natural Nylon fittings. Lot traceability certificates are not available for White Nylon.

BARBED FITTINGS

R-Series

MATERIAL SELECTION

Stainless Steel (SS)

- Lot traceable

Fittings produced with 316L alloy perform well in high temperature, harsh physical environments. 316L molybdenum bearing stainless steel has excellent impact and chemical resistance, but is less resistant than other types of stainless steel to highly oxidizing acids, such as nitric acid. The material has wide application in pharmaceutical and dairy processing and is used extensively in brewery, beverage and bioprocess industries.

Glass-Filled Black Nylon (GFBN)

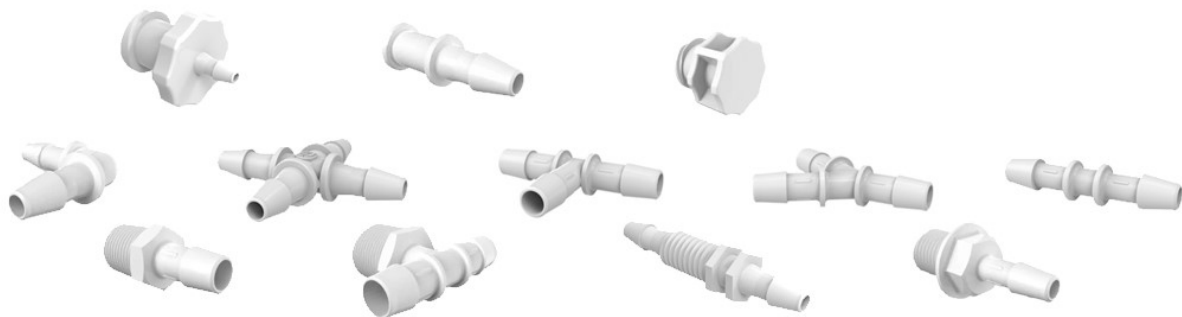
- Lot traceable
- Temperature range -45°C to 135°C
- Pressure 10 bar at 21°C
- Heat Deflection Temperature - ASTM D64: 246 °C bei 18,2 bar (264 psi)
- Automotive Approvals

GFBN is a standard material used in automotive and marine under-the-hood, heater and coolant applications. GFBN's enhanced impact resistance results from inclusion of uniformly dispersed glass fibers that add strength to the resin: automotive industry approvals.

High Density Polyethylene (HDPE)

- Lot traceable

HDPE complies with FDA 21 CFR 177.1520 when used unmodified for the manufacture of food contact articles. HDPE has various applications for use in medical products and devices. It has excellent resistance to chemicals, but exhibits lower thermal resistance than other materials. It is a softer material than nylon or polypropylene and much softer than Kynar®.



COUPLERS

For flexible tubing

EQUAL - COUPLERS



Type Tubing Size I.D.	Product No.				
	STRAIGHT	TEES	90° ELBOWS	Y-FITTINGS	CROSS FITTINGS
1.6 mm (1/16")	B-EC-100003	B-ET-100003	B-EL-100003	B-EY-100003	B-EX-100003
2.4 mm (3/32")	B-EC-100001	B-ET-100001	B-EL-100001	B-EY-100001	B-EX-100001
3.2 mm (1/8")	B-EC-100007	B-ET-100007	B-EL-100007	B-EY-100007	B-EX-100007
4.0 mm (5/32")	B-EC-100006	B-ET-100006	B-EL-100006	B-EY-100006	B-EX-100006
4.8 mm (3/16")	B-EC-100008	B-ET-100008	B-EL-100008	B-EY-100008	B-EX-100008
6.4 mm (1/4")	B-EC-100009	B-ET-100009	B-EL-100009	B-EY-100009	B-EX-100009
8.0 mm (5/16")	B-EC-100010	B-ET-100010	B-EL-100010	B-EY-100010	B-EX-100010
9.5 mm (3/8")	B-EC-100011	B-ET-100011	B-EL-100011	B-EY-100011	B-EX-100011
12.7 mm (1/2")	B-EC-100012	B-ET-100012	B-EL-100012	B-EY-100012	B-EX-100012
16 mm (5/8")	B-EC-100002	B-ET-100002	B-EL-100002	B-EY-100002	•
19 mm (3/4")	B-EC-100004	B-ET-100004	B-EL-100004	B-EY-100004	•
25.4 mm (1")	B-EC-100005	B-ET-100005	B-EL-100005	B-EY-100005	•

REDUCTION - COUPLERS



STRAIGHT - REDUCTION

Tubing Size I.D.	Product No.										
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")	16.0 mm (5/8")	19.0 mm (3/4")
2.4 mm (3/32")	B-EC-100013	•	•	•	•	•	•	•	•	•	•
3.2 mm (1/8")	B-EC-100027	B-EC-100026	•	•	•	•	•	•	•	•	•
4.0 mm (5/32")	•	B-EC-100024	B-EC-100025	•	•	•	•	•	•	•	•
4.8 mm (3/16")	B-EC-100029	B-EC-100028	B-EC-100031	B-EC-100030	•	•	•	•	•	•	•
6.4 mm (1/4")	B-EC-100033	B-EC-100032	B-EC-100035	B-EC-100034	B-EC-100036	•	•	•	•	•	•
8.0 mm (5/16")	•	•	B-EC-100038	B-EC-100037	B-EC-100039	B-EC-100040	•	•	•	•	•
9.5 mm (3/8")	•	•	B-EC-100042	B-EC-100041	•	B-EC-100043	B-EC-100044	•	•	•	•
12.7 mm (1/2")	•	•	•	•	•	B-EC-100045	B-EC-100046	B-EC-100047	•	•	•
16.0 mm (5/8")	•	•	•	•	•	B-EC-100014	B-EC-100015	B-EC-100016	B-EC-100017	•	•
19.0 mm (3/4")	•	•	•	•	•	•	•	B-EC-100019	B-EC-100020	B-EC-100018	•
25.4 mm (1")	•	•	•	•	•	•	•	•	B-EC-100023	B-EC-100021	B-EC-100022



ELBOWS - REDUCTION

Tubing Size I.D.	Product No.					
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.8 mm (3/16")	6.4 mm (1/4")	9.5 mm (3/8")
2.4 mm (3/32")	B-ER-100001	•	•	•	•	•
3.2 mm (1/8")	B-ER-100002	B-ER-100062	•	•	•	•
4.8 mm (3/16")	•	•	B-ER-100003	•	•	•
6.4 mm (1/4")	•	•	B-ER-100004	•	•	•
8.0 mm (5/16")	•	•	•	B-ER-100005	•	•
9.5 mm (3/8")	•	•	•	B-ER-100006	•	•
12.7 mm (1/2")	•	•	•	B-ER-100007	•	B-ER-100008



TEES - REDUCTION

Tubing Size I.D.	Product No.									
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")	16.0 mm (5/8")
1.6 mm (1/16")	•	B-ER-100028	B-ER-100030	•	•	•	•	•	•	•
3.2 mm (1/8")	B-ER-100039	B-ER-100038	•	B-ER-100040	B-ER-100041	B-ER-100042	•	•	•	•
4.0 mm (5/32")	•	•	•	•	•	•	•	B-ER-100036	•	•
6.4 mm (1/4")	•	B-ER-100044	B-ER-100046	•	B-ER-100047	•	•	B-ER-100048	•	B-ER-100045
8.0 mm (5/16")	•	•	•	•	•	•	•	•	•	•
9.5 mm (3/8")	•	•	•	B-ER-100050	•	B-ER-100051	•	•	•	•
12.7 mm (1/2")	•	•	•	•	•	B-ER-100053	B-ER-100054	B-ER-100055	•	•
16.0 mm (5/8")	•	•	•	•	•	•	B-ER-100026	B-ER-100027	•	•
19.0 mm (3/4")	•	•	•	•	•	•	•	B-ER-100031	B-ER-100032	B-ER-100029
25.4 mm (1")	•	•	•	•	•	•	•	•	B-ER-100035	B-ER-100034



Y-FITTINGS - REDUCTION

Tubing Size I.D.	Product No.						
	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")	16.0 mm (5/8")	19.0 mm (3/4")	25.4 mm (1")
3.2 mm (1/8")	B-ER-100057	•	•	•	•	•	•
4.8 mm (3/16")	•	B-ER-100058	•	•	•	•	•
6.4 mm (1/4")	•	•	B-ER-100059	•	•	•	•
9.5 mm (3/8")	•	•	•	B-ER-100060	•	•	•
12.7 mm (1/2")	•	•	•	•	B-ER-100061	•	•
16.0 mm (5/8")	•	•	•	•	•	B-ER-100056	•
19.0 mm (3/4")	•	•	•	•	•	•	B-ER-100064

BARBED PLUGS



Product No.							
1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	9.5 mm (3/8")	12.7 mm (1/2")
B-EP-100004	B-EP-100002	B-EP-100006	B-EP-100005	B-EP-100007	B-EP-100008	B-EP-100009	B-EP-100010

UNF, M6 THREADED ADAPTERS

UNF, M6 THREADED ADAPTERS



Thread Tubing Size I.D.	Product No.			
	10-32 UNF	10-32 Taper	1/4-28 UNF	M6X1
1.6 mm (1/16")	B-EA-100002	B-EA-100007	B-EA-100027	•
2.4 mm (3/32")	B-EA-100001	B-EA-100006	B-EA-100026	B-EA-100067
3.2 mm (1/8")	B-EA-100004	B-EA-100008	B-EA-100029	B-EA-100068
4.0 mm (5/32")	B-EA-100003	•	B-EA-100028	B-EA-100069
4.8 mm (3/16")	•	•	B-EA-100030	•

UNF, M6 THREADED ELBOWS



Thread Tubing Size I.D.	Product No.		
	10-32 UNF	10-32 Taper	1/4-28 UNF
1.6 mm (1/16")	B-EL-100135	•	•
2.4 mm (3/32")	B-EL-100013	•	•
3.2 mm (1/8")	B-EL-100014	B-EL-100016	B-EL-100023
4.8 mm (3/16")	•	•	B-EL-100136

UNF THREADED PLUGS



Thread	Product No.	
	10-32 UNF	1/4-28 UNF
	B-EP-100011	B-EP-100013

NPT THREADED ADAPTERS

NPT THREADED ADAPTERS



Thread Tubing Size I.D.	Product No.						
	1/6" NPT	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
3.2 mm (1/8")	•	B-EA-100033	B-EA-100044	•	•	•	•
4.0 mm (5/32")	•	B-EA-100032	B-EA-100043	•	•	•	•
4.8 mm (3/16")	B-EA-100024	B-EA-100034	B-EA-100045	•	•	•	•
6.4 mm (1/4")	B-EA-100025	B-EA-100035	B-EA-100046	B-EA-100059	B-EA-100072	B-EA-100015	•
8.0 mm (5/16")	•	B-EA-100076	B-EA-100047	B-EA-100060	B-EA-100073	•	•
9.5 mm (3/8")	•	B-EA-100036	B-EA-100048	B-EA-100061	B-EA-100074	B-EA-100016	•
12.7 mm (1/2")	•	•	B-EA-100049	B-EA-100062	B-EA-100075	B-EA-100017	•
16 mm (5/8")	•	•	•	•	B-EA-100070	B-EA-100012	•
19 mm (3/4")	•	•	•	•	B-EA-100071	B-EA-100013	•
25.4 mm (1")	•	•	•	•	•	B-EA-100014	B-EA-100031

NPT THREADED ELBOWS



Thread Tubing Size I.D.	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
1.6 mm (1/16")	B-EL-100138	•	•	•	•	•
2.4 mm (3/32")	B-EL-100026	•	•	•	•	•
3.2 mm (1/8")	B-EL-100028	B-EL-100040	•	•	•	•
4.0 mm (5/32")	B-EL-100027	B-EL-100039	•	•	•	•
4.8 mm (3/16")	B-EL-100029	B-EL-100041	•	•	•	•
6.4 mm (1/4")	B-EL-100030	B-EL-100042	B-EL-100053	B-EL-100063	B-EA-100020	•
8.0 mm (5/16")	B-EL-100031	B-EL-100043	B-EL-100054	•	•	•
9.5 mm (3/8")	B-EL-100032	B-EA-100044	B-EL-100055	B-EL-100064	B-EA-100021	•
12.7 mm (1/2")	•	B-EA-100045	B-EL-100056	B-EL-100065	B-EA-100022	•
16 mm (5/8")	•	•	•	B-EL-100061	B-EA-100017	•
19 mm (3/4")	•	•	•	B-EL-100062	B-EA-100018	B-EA-100024
25.4 mm (1")	•	•	•	•	B-EA-100019	B-EA-100025

NPT THREADED TEES



Thread Tubing Size I.D.	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
3.2 mm (1/8")	B-ET-100021	B-ET-100030	•	•	•	•
4.0 mm (5/32")	B-ET-100020	B-ET-100029	•	•	•	•
4.8 mm (3/16")	B-ET-100022	B-ET-100031	•	•	•	•
6.4 mm (1/4")	B-ET-100023	B-ET-100032	B-ET-100042	B-ET-100052	B-ET-100015	•
8.0 mm (5/16")	B-ET-100024	B-ET-100033	B-ET-100043	•	•	•
9.5 mm (3/8")	B-ET-100025	B-ET-100034	B-ET-100044	B-ET-100053	B-ET-100016	•
12.7 mm (1/2")	•	B-ET-100035	B-ET-100045	B-ET-100054	B-ET-100017	•
16 mm (5/8")	•	•	•	B-ET-100050	B-ET-100013	•
19 mm (3/4")	•	•	•	B-ET-100051	B-ET-100055	B-ET-100018
25.4 mm (1")	•	•	•	•	B-ET-100014	B-ET-100019

NPT THREADED CONNECTORS



Thread	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
	B-EN-100004	B-EN-100005	B-EN-100006	B-EN-100007	B-EN-100001	B-EN-100003

NPT THREADED REDUCTION



Thread	Product No.			
	1/8" NPT	1/4" NPT	3/8" NPT	3/4" NPT
1/4" NPT	B-ER-100020	•	•	•
3/8" NPT	B-ER-100021	B-ER-100022	•	•
1/2" NPT	B-ER-100023	B-ER-100024	B-ER-100025	•
1" NPT	•	•	•	B-ER-100019

NPT THREADED PLUGS



Thread	Product No.					
	1/8" NPT	1/4" NPT	3/8" NPT	1/2" NPT	3/4" NPT	1" NPT
	B-EP-100075	B-EP-100076	B-EP-100077	B-EP-100018	B-EP-100012	B-EP-100014

BSPT THREADED ADAPTERS

BSPT THREADED ADAPTERS



Thread Tubing Size I.D.	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
3.2 mm (1/8")	B-EA-100038	B-EA-100051	•
4.0 mm (5/32")	B-EA-100037	B-EA-100050	•
4.8 mm (3/16")	•	B-EA-100052	•
6.4 mm (1/4")	B-EA-100040	B-EA-100053	B-EA-100063
8.0 mm (5/16")	B-EA-100041	B-EA-100054	B-EA-100064
9.5 mm (3/8")	B-EA-100042	B-EA-100055	B-EA-100065
12.7 mm (1/2")	•	B-EA-100056	B-EA-100066

BSPT THREADED ELBOWS



Thread Tubing Size I.D.	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
3.2 mm (1/8")	B-EL-100034	B-EL-100047	•
4.0 mm (5/32")	B-EL-100033	B-EL-100046	•
4.8 mm (3/16")	•	B-EL-100048	•
6.4 mm (1/4")	B-EL-100036	B-EL-100049	B-EL-100057
8.0 mm (5/16")	B-EL-100037	B-EL-100050	B-EL-100058
9.5 mm (3/8")	B-EL-100038	B-EL-100051	B-EL-100059
12.7 mm (1/2")	•	B-EL-100052	B-EL-100060

BSPT THREADED TEES



Thread Tubing Size I.D.	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
4.0 mm (5/32")	B-ET-100026	B-ET-100036	•
4.8 mm (3/16")	•	B-ET-100037	•
6.4 mm (1/4")	B-ET-100027	B-ET-100038	B-ET-100046
8.0 mm (5/16")	•	B-ET-100039	B-ET-100047
9.5 mm (3/8")	B-ET-100028	B-ET-100040	B-ET-100048
12.7 mm (1/2")	•	B-ET-100041	B-ET-100049

BSPT THREADED PLUGS



Thread	Product No.		
	1/8" BSPT	1/4" BSPT	3/8" BSPT
	B-EP-100015	B-EP-100016	B-EP-100017

BULKHEAD & PANEL MOUNTS

STRAIGHT 10-32 UNF - BULKHEAD



Tubing Size I.D. Thread	Product No.			
	1.6 mm (1/16")	2.4 mm (3/32")	3.2 mm (1/8")	4.8 mm (3/16")
10-32 UNF	B-EB-100023	B-EB-100001	B-EB-100002	B-EB-100005

ELBOWS - BULKHEAD



Tubing Size I.D. Thread	Product No.	
	3.2 mm (1/8")	4.8 mm (3/16")
10-32 UNF	B-EB-100016	•
5/16-24 UNF	•	B-EB-100017

STRAIGHT 1/4" NPSM ADAPTERS - BULKHEAD



Tubing Size I.D.	Product No.						
	6.4 x 6.4 mm (1/4" x 1/4")	8.0 x 6.4 mm (5/16" x 1/4")	8.0 x 8.0 mm (5/16" x 5/16")	9.5 x 6.4 mm (3/8" x 1/4")	9.5 x 8.0 mm (3/8" x 5/16")	9.5 x 9.5 mm (3/8" x 3/8")	4.8 x 4.8 mm (3/16" x 3/16")
	B-EB-100010	B-EB-100011	B-EB-100012	B-EB-100013	B-EB-100014	B-EB-100015	B-EB-100005

PANEL MOUNT ADAPTERS



Tubing Size I.D. Thread	Product No.							
	1.6 mm (1/16")	2.4 mm (3/32")	4.0 mm (5/32")	4.8 mm (3/16")	6.4 mm (1/4")	8.0 mm (5/16")	9.5 mm (3/8")	12.7 mm (1/2")
1/4-28 UNF	B-EP-100036	B-EP-100035	B-EP-100037	B-EP-100038	•	•	•	•
1/4" NPSM	•	•	B-EP-100040	B-EP-100041	B-EP-100042	B-EP-100043	B-EP-100044	B-EP-100045
1/8" NPSM	•	•	•	•	B-EP-100039	•	•	•

PANEL MOUNT NUTS



Thread	Product No.			
	10-32 UNF	1/4-28 UNF	5/16-24 UNF	1/4" NPSF
	B-EE-100022	B-EE-100025	B-EE-100023	B-EE-100024