

BIOPRENE TUBING

Thermoplastic elastomer tubing

Highly resistant to oxidising agents

Validated processes

Bioprene peristaltic pump tubing is fully approved for food and pharmaceutical applications. Validated processes are supported. Like Marprene, Bioprene lasts at least 10 times as long as tubing in other materials. Long-life tubing means stoppages for a tube change are rare events, easily fitted in with general maintenance.

Easy sterilisation

Clean-in-place and steam-in-place (with tubing elements) are no problem for the tube that has everything.



USP, ISO and FDA approvals matter in maintaining validated processes. Bioprene peristaltic pump tubing offers long life and chemical resistance, and carries the widest range of safety approvals

- USP Class VI FDA approvals
- Fully documented bio-compatibility and comprehensive validation pack
- Safe for use in biomedical applications
- Ex-stock availability
- Comprehensive stock of a wide range of sizes
- UV opaque
- Fully weldable
- No odor
- Low extractables
- Suitable for repeated autoclave cycles

Watson-Marlow Bioprene: the best peristaltic pump tube life with excellent chemical resistance

For long life and chemical compatibility

Bioprene offers exceptionally long life and resistance to a wide range of chemicals. It is a first choice for applications including metering tablet-coating materials, pH control and media feed in fermentation and bioreactor metering, as well as pharmaceutical handling, dispensing, metering, transfer and filtration.

General industrial long-life transfer tube. Highly resistant to oxidising agents such as ozone, peroxides and sodium hypochlorite.

Bioprene	Typical values
Material	Thermoplastic elastomer
Colour / transparency	Beige / opaque
Spallation	Fair
Life, hours	313/314, 520R pumpheads: 10,000; 620R pumphead: 6,000
Certification	FDA regulations 21 CFR 177.2600 for contact with aqueous food
Sterilisation methods	Gamma, autoclave, EtO. CIP, SIP: refer to Watson-Marlow for details
Operating temperature	5C-80C
Hardness, shore A (5 sec)	64 shore: 66; 73 shore: 74; 87 shore: 88
Specific gravity	64 shore: 0.97; 73 shore: 0.96; 87 shore: 0.95
Tear B, ppi	-
Ultimate tensile strength, psi	64 shore: 1007; 73 shore: 1410; 87 shore: 2263
Elongation at break, %	64 shore: 473; 73 shore: 510; 87 shore: 547
Tensile stress at 100% elongation, psi	64 shore: 367; 73 shore: 525; 87 shore: 987
Compression set, %	-
Weather resistance	Excellent
Sunlight resistance	Excellent
Gas permeability, O ₂ cc.cm x 10 ⁻⁴ / cm ² .sec.atm	5.8
Gas permeability rating	Fair
Water absorption	Good
Odour	Excellent
ASTM methods	Hardness: ASTM D 2240; Specific gravity: ASTM D 792; Tear B, Ultimate tensile strength, Elongation at break, Tensile stress at 100% elongation: ASTM D 412

Bore	Wall	Coil size	Part number	Coil size	Part number	Coil size	Part number
inch	mm	inch	mm				
1/16	0.5	1/16	1.6	50ft / 15m	903.0005.016	903.0005.J16	903.0005.R16
1/32	0.8	1/16	1.6		903.0008.016	903.0008.J16	903.0008.R16
1/8	1.6	1/16	1.6		903.0016.016	903.0016.J16	903.0016.R16
3/32	2.4	1/16	1.6		903.0024.016	903.0024.J16	903.0024.R16
1/4	3.2	1/16	1.6		903.0032.016	903.0032.J16	903.0032.R16
3/16	4.8	1/16	1.6		903.0048.016	903.0048.J16	903.0048.R16
1/2	6.4	1/16	1.6		903.0064.016	903.0064.J16	903.0064.R16
5/16	8.0	1/16	1.6		903.0080.016	903.0080.J16	903.0080.R16
					903.0005.024	903.0005.J24	
					903.0008.024	903.0008.J24	
1/16	1.6	3/32	2.4	50ft / 15m	903.0016.024	903.0016.J24	903.0016.R24
1/8	3.2	3/32	2.4		903.0032.024	903.0032.J24	903.0032.R24
3/16	4.8	3/32	2.4		903.0048.024	903.0048.J24	400ft / 122m 903.0048.R24
1/4	6.4	3/32	2.4		903.0064.024	903.0064.J24	300ft / 91m 903.0064.R24
5/16	8.0	3/32	2.4		903.0080.024	903.0080.J24	200ft / 61m 903.0080.R24
3/8	9.6	3/32	2.4		903.0096.024	903.0096.J24	150ft / 46m 903.0096.R24
					903.0048.032	903.0048.I32	
1/4	6.4	1/8	3.2		903.0064.032	903.0064.I32	200ft / 61m 903.0064.R32
3/8	9.6	1/8	3.2		903.0096.032	903.0096.I32	150ft / 46m 903.0096.R32
1/2	12.7	1/8	3.2		903.0127.032	903.0127.I32	
5/8	15.9	1/8	3.2	10ft / 3m	903.0159.032	903.0159.I32	
-	8.0	-	4.0		903.0080.040	903.0080.I40	
-	12.0	-	4.0		903.0120.040	903.0120.I40	
-	16.0	-	4.0		903.0160.040	903.0160.I40	
3/8	9.6	3/16	4.8		903.0096.048	903.0096.I48	
1/2	12.7	3/16	4.8		903.0127.048	903.0127.I48	
3/4	19.0	3/16	4.8		903.0159.048	903.0159.I48	
1	25.4	3/16	4.8		903.0190.048	903.0190.I48	
					903.0254.048	903.0254.I48	

Custom sizes are available to order, as are other specific requirements

Bioprene for validation

The Watson-Marlow Pumps Group has direct operations in 16 countries:

United States | Mexico | Belgium | Brazil | China | Denmark | France | Germany | Italy | Korea | Malaysia | Netherlands | South Africa | Sweden | Switzerland | United Kingdom

Distributors in over 50 countries. For local contact information please visit:

www.watson-marlow.com

The information contained in this document is believed to be correct, but Watson-Marlow accepts no liability for any errors it contains and reserves the right to, alter specifications without notice.

WARNING These products are not designed for use in and should not be used for, patient connected applications.

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Watson-Marlow, Inc.

37 Upton Technology Park, Wilmington, MA 01887

Tel: 1-800-282-8823 Fax: 1-978-658-0041

support@wmbpumps.com

www.watson-marlow.com