Cole-Parmer®

40+ YEARS IN FLUID HANDLING

ALWAYS STOCKED. ALWAYS STANDING BY YOU.

Peristaltic Pumps

Contents

120 Series Peristaltic Pump Systems

Watson Marlow

– Small, stackable pumps require minimal benchtop space
– Includes a pump head that delivers flow rate from 0.001 to 190 mL/min—flow rate depends on drive rpm, pump head, and tubing size
– Simple operation—requires minimal key presses
– Control and view speed on digital LCD
– Keypad lock prevents setting accidental changes

Achieve unmatched accuracy and reliability in your fluid handling processes with our extensive selection of peristaltic pumps. Designed for professionals in laboratories, industries, and various specialized settings, our pumps offer precision, ease of use, and durability. Whether you need peristaltic pumps for scientific research or industrial processes applications, we understand your unique requirements and offer the ideal solution tailored to your specific needs. Browse our range today and elevate your fluid handling standards.

Drive	Pump Head	No. of Channels	Interchangeable Drive and Head	RPM	Control	Flow Range* (mL/min)	Tubing Sizes Accepted	Power	Item Number
120S	102R	1	No	0.1 to 32	Manual	0.003 to 54	0.5 to 4.8 mm bore tubing with 1.6 mm wall (Pumpsil® Only)	90 to 264 VAC, 47 to 63 Hz	50130-04
	114DV			0.1 to 220		0.002 to 190	0.5 to 4.8 mm bore tubing with 1.6 mm wall		50130-01
	400D1			1 to 220		0.01 to 120	0.5 to 4.0 mm bore tubing with 1.6 mm wall		50130-00
	400DM2	2		0.1 to 100		0.0001 to 36	0.13 to 2.79 mm bore 3-stop tubing		50141-98
	400DM3	3		0.1 to 100		0.0001 to 36	0.13 to 2.79 mm bore 3-stop tubing		50141-99

*Flow range is determined by drive, tubing size, and continuous vs. intermittent use. Flow rate is per channel.

Drive	Pump Head	No. of Channels	Interchangeable Drive and Head	RPM	Control	Flow Range* (mL/min)	Tubing Sizes Accepted	Power	Item Number
120U	102R	1	No	0.1 to 32	Manual, analog and remote	0.003 to 54	0.5 to 4.8 mm bore tubing with 1.6 mm wall (Pumpsil® Only)	90 to 264 VAC, 47 to 63 Hz	50130-09
	114DV		No	0.1 to 200		0.002 to 170	0.5 to 4.8 mm bore tubing with 1.6 mm wall	90 to 264 VAC, 47 to 63 Hz	50130-06
	400D1		No	0.1 to 200		0.001 to 120	0.5 to 4.0 mm bore tubing with 1.6 mm wall	90 to 264 VAC, 47 to 63 Hz	50130-05
120F	102R	1	No	10	Manual	0.3 to 17	0.5 to 4.8 mm bore tubing with 1.6 mm wall (Pumpsil® Only)	90 to 264 VAC, 47 to 63 Hz	50141-90
				17		0.5 to 29			50141-92
				31		0.9 to 52			50141-94
	114DV	1		10	Manual	0.2 to 8.5	0.5 to 4.8 bore tubing with 1.6 mm wall		50141-91
				17		0.3 to 14			50141-93
				31		0.6 to 26			50141-95
				52		1.0 to 44			50141-96
				220		4.4 to 190			50141-97

323 Series Peristaltic Pumps

Watson Marlow

– Flow ranges from 0.002 to 2000 mL/min
– Control and view speed on backlit LCD
– Up to 133:1 enhanced digital manual speed control
– Dispense a set quantity each time using MemoDose feature
– Keypad lock prevents tampering or accidental changes
– Accepts 313, 314, 314MC, and 318MC pump heads

Easily maintain fluid integrity using peristaltic pumps. Only the bore of the tubing contacts the fluid, eliminating the risk of the pump contaminating the fluid or the fluid contaminating the pump. Peristaltic pumps are great for use with most liquids, including viscous, shear-sensitive, corrosive, and abrasive fluids.

Drive	Pump Head Included	Interchangeable Drive and Head	RPM	Control	Flow Range* (mL/min)	Power	Item Number
323S	None	Yes	3 to 400	Manual	0.002 to 2000	100 to 120 / 200 to 240 VAC, 50/60 Hz	50130-20
	313DW				0.09 to 2000		50130-10
323Du	None		3 to 400	Manual, analog and remote	0.002 to 2000	100 to 120 / 200 to 240 VAC, 50/60 Hz	50130-21
	313DW				0.09 to 2000		50130-11
323Dz	None		2 to 400	Manual and remote	0.06 to 2000	100 to 120 / 200 to 240 VAC, 50/60 Hz	50142-17
	313DW						50142-02
323U	None		3 to 400	Manual and Analog	0.002 to 2000	100 to 120 / 200 to 240 VAC, 50/60 Hz	50142-16
	313DW				0.09 to 2000		50142-01
323E	None		15 to 400	Manual	0.45 to 2000	100 to 120 / 200 to 240 VAC, 50/60 Hz	50142-15

*Flow range is determined by drive, tubing size, and continuous vs. intermittent use. Flow rate is per channel.

300 Series Pump Heads

Watson Marlow

Pump Head	Description	Drives Compatible With	No. of Channels	No. of Rollers	Flow Range* (mL/min)	Tubing Sizes Accepted	Item Number
313DW	Rapid Load® Pump Head	323E, 323S, 323U, 323Du and 323Dz	1	3	0.06 to 2000	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm bore tubing with 1.6 mm wall	50130-13
313X	Extension Rapid Load® Pump Head						50130-12
313D	Rapid Load® Pump Head with Bayonet Plate				0.6 to 2000		50142-03
314DW	Rapid Load® Pump Head			4	0.06 to 1200	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm bore tubing with 1.6 mm wall	50130-15
314D	Rapid Load® Pump Head with Bayonet Plate				0.6 to 1200		50142-09
314X	Extension Rapid Load® Pump Head				0.06 to 1200	0.5, 0.8, 1.6, 3.2, 4.8, 6.4, 8 mm bore tubing with 1.6 mm wall	50130-14
314MC	Multichannel Microcassette Pump Head		5	4	0.002 to 53	2-stop tubing with the following bore sizes: 0.13, 0.19, 0.25, 0.38, 0.5, 0.63, 0.76, 0.88, 1.02, 1.14, 1.29, 1.42, 1.52, 1.65, 1.85, 2.05, 2.29, 2.54, 2.79 mm	50130-16
314MCX	Multichannel Microcassette Extension Pump						50130-17
318MC	Multichannel Microcassette Pump Head			8	0.002 to 36		50130-18
318MCX	Multichannel Microcassette Extension Pump						50130-19

*Flow range is determined by drive, tubing size, and continuous vs. intermittent use. Flow rate is per channel.

530 Series Peristaltic Pump Systems

Watson Marlow

– Flow rates from 0.04 mL/min to 3.5 L/min
– 2200:1 speed control range from 0.1 to 220 rpm in precise 0.1 rpm increments
– Secure 3-level PIN lock for controlled access
– Auto-restart and leak detection for uninterrupted performance

The 530S pump drive combines precision and ease of use, featuring advanced manual controls for reliable fluid management. The 520R2 pumphead features a twin spring roller for use with 2.4 mm wall thickness tubing – tube materials commonly used include Pumpsil® and Bioprene®. Ideal for environments demanding accuracy and security, it ensures seamless operation with minimal effort.

The 530Du pump system offers advanced digital and manual control options, ensuring reliable and flexible fluid management. Designed for precision and efficiency, it's perfect for applications requiring seamless operation and robust security.

Drive	Pump Head	No. of Channels	Interchangeable Drive and Head	RPM	Control	Flow Range* (mL/min)	Tubing Sizes Accepted	Power	Item Number
530S	520R2	1	No	0.1-220	Manual	0.04 to 3500	1.6, 3.2, 4.8, 6.4, 8, 9.6 mm bore with 2.4 mm wall	115/230 VAC, 50/60 Hz	50140-00
530Du					Manual, analog, and remote				50140-01

*Flow range is determined by drive, tubing size, and continuous vs. intermittent use. Flow rate is per channel.

DuPont Liveo Pharma APT Tubing

Thermoplastic Elastomer (TPE) Tubing

C-Flex® 072 Tubing

– Ideal for general-purpose, laboratory, biopharmaceutical, and single-use applications
– Flexible and durable for use in peristaltic pumps
– Less gas permeable compared to silicone
– Opaque tubing–perfect for light-sensitive fluids

Easily meet the critical demands of pharmaceutical and biopharmaceutical applications with C-Flex TPE tubing. This moldable and bondable tubing is specifically designed for aseptic welding connections and sealing disconnection; seal or weld before or after sterilization depending on your application requirements.

Excellent flexibility and durability offer prolonged service life in peristaltic pumps and help minimize downtime due to tubing failures. The low permeability characteristics protect sensitive fluids from gas ingress.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	3/32 (2.4)	1/32 (0.8)	50	50123-06
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50123-07
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50123-08
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50123-09
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50123-10
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50123-11
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50123-12
1/4 (6.4)	7/16 (11.1)	3/32 (2.4)	50	50123-13
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50123-14
5/16 (8)	1/2 (12.7)	3/32 (2.4)	50	50123-15
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50123-16
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50123-17
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50123-18
1/2 (12.7)	11/16 (17.5)	3/32 (2.4)	50	50123-19
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50123-20
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50123-21
3/4 (19.1)	1 (25.4)	1/8 (3.2)	15	50123-22
3/4 (19.1)	1-1/8 (28.6)	3/16 (4.7)	15	50123-23
3/4 (19.1)	1-1/4 (31.8)	1/4 (6.4)	15	50123-24
1 (25.4)	1-3/8 (34.9)	3/16 (4.8)	15	50123-25
1 (25.4)	1-1/2 (38.1)	1/4 (6.4)	15	50123-26

Thermoplastic Elastomer (TPE) Tubing

C-Flex® 374 Tubing

– Ideal for general-purpose, laboratory, biopharmaceutical, and single-use applications
– Flexible and durable for use in peristaltic pumps
– Less gas permeable compared to silicone
– Translucent tubing for flow visibility

Easily meet the critical demands of pharmaceutical and biopharmaceutical applications with C-Flex TPE tubing. This moldable and bondable tubing is specifically designed for aseptic welding connections and sealing disconnection; seal or weld before or after sterilization depending on your application requirements.

Excellent flexibility and durability offer prolonged service life in peristaltic pumps and help minimize downtime due to tubing failures. The low permeability characteristics protect sensitive fluids from gas ingress. Translucent tubing enables visual monitoring of the flow, so you can control or adjust the flow during the process.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50123-28
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50123-29
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50123-30
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50123-31
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50123-32
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50123-33
1/4 (6.4)	7/16 (11.1)	3/32 (2.4)	50	50123-34
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50123-35
5/16 (8)	7/16 (11.1)	3/32 (2.4)	50	50123-36
5/16 (8)	1/2 (12.7)	3/32 (2.4)	50	50123-37
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50123-38
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50123-39
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50123-40
1/2 (12.7)	11/16 (17.4)	3/32 (2.4)	50	50123-41
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50123-42
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50123-43
3/4 (19.1)	1 (25.4)	1/8 (3.2)	15	50123-44
3/4 (19.1)	1-1/8 (28.6)	3/16 (4.8)	15	50123-45
3/4 (19.1)	1-1/4 (31.8)	1/4 (6.4)	15	50123-46
1 (25.4)	1-3/8 (34.9)	3/16 (4.8)	15	50123-47
1 (25.4)	1-1/2 (38.1)	1/4 (6.4)	15	50123-48

*DuPont Tubing is for US Sales only.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50122-17
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50122-19
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50122-18
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50122-21
1/4 (6.4)	7/16 (11.1)	3/32 (2.4)	50	50122-22
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50122-20
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50122-23
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50122-25
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50122-24
1/2 (12.7)	11/16 (17.5)	3/32 (2.4)	50	50122-27
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50122-26
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50122-29
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50122-28

*DuPont Tubing is for US Sales only.

Pharma Advanced Pump Platinum-Cured Silicone Tubing

DuPont™ Liveo™ Pharma APT Tubing

– Designed for pumping ultra-pure liquids in pharmaceutical and biotechnological processes where contamination is a concern
– Superior resiliency
– Provides excellent flexibility
– Offers low extractables
– Contains no peroxide by-products, chlorophenyls, or PCBs
– Free from organic plasticizers, phthalates or latex additives
– Easily sterilized

The translucent DuPont Liveo Pharma Advanced Pump Tubing (APT) is specifically designed for pumping ultra-pure liquids in pharmaceutical and biotechnological processes where contamination is a concern. It offers a non-wetting surface, outstanding filling accuracy, complete traceability, and consistent performance.

Made from biomedical grade tear-resistant platinum-cured elastomer, the tubing allows you up to four times the pump life of standard platinum-cure tubing and exceeds United States Pharmacopeia (USP®) Class VI Plastics Test requirements. It also meets the European Pharmacopoeia monograph 3.1.9. “Silicone elastomer for closures and tubing”. The tubing is easily sterilized by ethylene oxide, autoclave steam for 30 minutes at 120 °C, and gamma radiation at 45 kGy.

Thermoplastic Elastomer (TPE) Tubing

DuPont™ Liveo™ Pharma TPE Tubing

– For use in many biopharmaceutical applications, including fluid, media, and solvent transport; single-use assemblies; peristaltic pump applications; and aseptic connection and disconnection without connectors
– High resiliency
– Provides excellent flexibility
– Offers low extractables
– Contains no peroxide by-products, chlorophenyls or PCBs
– Free from phthalates or latex additives
– Chemical resistant
– Easily sterilized

The translucent DuPont Liveo Pharma TPE tubing offers improved heat-welding and high tensile strength, as well as burst resistance before and after welding. The tubing features minimal spallation after 24 hours of pumping, stable clarity after sterilization, complete traceability, and consistent performance.

Made from medical grade elastomer, the tubing complies with United States Pharmacopeia (USP®) Class VI Plastics test requirements. It is manufactured to the principles of cGMPs for pharmaceutical products and ISO 7 Class cleanroom. The tubing is easily sterilized by ethylene oxide, autoclave steam for 30 minutes at 120 °C, and gamma radiation at 50 kGy.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50122-30
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50122-31
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50122-33
1/4 (6.4)	7/16 (11.1)	3/32 (2.4)	50	50122-34
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50122-32
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50122-36
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50122-35
1/2 (12.7)	11/16 (17.5)	3/32 (2.4)	50	50122-37
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50122-38
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50122-39

*DuPont Tubing is for US Sales only.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50121-85
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50121-87
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50121-86
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50121-89
1/4 (6.4)	7/16 (11.1)	3/32 (2.4)	50	50121-90
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50121-88
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50121-91
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50121-93
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50121-92
1/2 (12.7)	11/16 (17.5)	3/32 (2.4)	50	50121-94
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50121-95
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50121-97
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50121-96

*DuPont Tubing is for US Sales only.

Platinum-Cured Silicone Tubing

DuPont™ Liveo™ Pharma-50 Tubing

– Ideal for transfer of high-purity fluids in pharmaceutical and biotechnological applications
– Provides excellent flexibility
– Offers low extractables
– Contains no peroxide by-products, chlorophenyls or PCBs
– Free from organic plasticizers, phthalates or latex additives
– Easily sterilized

The translucent, platinum-cured silicone DuPont Liveo Pharma-50 tubing is designed to transfer ultra-pure liquids in pharmaceutical and biotechnological processes where contamination is a concern. The tubing is stable over a wide temperature range, is highly resilient, impairs no taste or odor, and offers a non-wetting surface.

The tubing is made from Biomedical grade elastomer and exceeds United States Pharmacopeia (USP®) Class VI Plastics test requirements. It also meets the European Pharmacopoeia monograph 3.1.9. “Silicone elastomer for closures and tubing”. The tubing is easily sterilized by ethylene oxide, autoclave steam for 30 minutes at 120 °C, and gamma radiation at 50 kGy.

Platinum-Cured Silicone Tubing

DuPont™ Liveo™ Pharma-65 Tubing

- Ideal for transfer of high-purity fluids in pharmaceutical and biotechnological applications
- Greater pressure and kink resistance
- Provides excellent flexibility
- Offers low extractables
- Contains no peroxide by-products, chlorophenyls or PCBs
- Free from organic plasticizers, phthalates or latex additives
- Easily sterilized

The translucent, platinum-cured silicone DuPont Liveo Pharma-65 tubing is designed to transfer ultra-pure liquids in pharmaceutical and biotechnological processes where contamination is a concern. The tubing offers greater pressure and kink resistance, is stable over a wide temperature range, is highly resilient, impairs no taste or odor, and offers a non-wetting surface.

Made from biomedical grade elastomer, the tubing exceeds United States Pharmacopeia (USP®) Class VI Plastics Test Requirements. It also meets the European Pharmacopoeia monograph 3.1.9. “Silicone elastomer for closures and tubing”. The tubing is easily sterilized by ethylene oxide, autoclave steam for 30 minutes at 120 °C, and gamma radiation at 50 kGy.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50121-98
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50122-00
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50121-99
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50122-02
1/4 (6.4)	7/16 (11.1)	3/32 (2.4)	50	50122-03
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50122-01
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50122-04
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50122-05
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50122-06

*DuPont Tubing is for US Sales only.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50119-55
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50119-56
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50119-57
3/16 (4.8)	7/16 (11)	1/8 (3.2)	50	50119-60
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50119-61
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50119-62
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50119-58
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50119-59
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50119-63

Platinum-Cured Silicone Tubing, 61 Shore A

Cole-Parmer® Tubing

- Superior optical clarity—easily view your sample
- Odorless, noncytotoxic, and nonhemolytic
- Low-binding surface helps minimize particle and odor absorption
- Does not contain BPA, phthalates, PVC, or peroxides
- Cleanroom packed and double bagged package
- Sterilize by autoclave, gamma irradiation, EtO, and chemical sterilants
- Ideal for general-purpose, laboratory, and single-use applications

Use the platinum-cured silicone tubing for general fluid transfer and peristaltic pumping applications. It has a 61 A shore durometer rating, offering good resistance to high pressure compared to other soft tubing. Transparent tubing provides excellent optical clarity, so you can easily view your sample during use.

A low-binding surface minimizes flavor, odor, and protein absorption, helping to maintain the integrity of the fluid. Tubing is manufactured, double-bagged, and sealed in an ISO Class 7 cleanroom. For an added level of particle control, a liner is placed between the double-bagged tubing package and the box.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/50 (0.5)	9/64 (3.6)	1/16 (1.6)	25	50123-49
1/32 (0.8)	5/32 (4)	1/16 (1.6)	25	50123-50
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	25	50123-51
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	25	50123-52
3/32 (2.4)	7/32 (5.6)	1/16 (1.6)	25	50123-53
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	25	50123-54
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	25	50123-55
3/16 (4.8)	5/16 (8)	1/16 (1.6)	25	50123-56
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	25	50123-57
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	25	50123-58
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	25	50123-59
5/16 (8)	7/16 (11.1)	1/16 (1.6)	25	50123-60
5/16 (8)	1/2 (12.7)	3/32 (2.4)	25	50141-44
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	25	50123-61
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	25	50123-62
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	25	50123-63
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	25	50123-64
3/4 (19.1)	1 (25.4)	1/8 (3.2)	25	50123-65

Biocompatible Peristaltic Pump Tubing

PharMed® BPT Tubing

- Perfect for sensitive bioprocess fluids
- Ideal for general-purpose, laboratory and single-use applications
- Durable tubing provides long pump life, outlasting silicone tubing
- Withstands repeated clean-in-place (CIP) and steam-in-place (SIP) cleaning and sterilization
- Excellent gas barrier with very low gas permeability
- Opaque tubing-perfect for light-sensitive fluids
- Good general chemical resistance

A combination of biocompatible fluid surface and exceptional flex life makes PharMed BPT tubing ideal for transferring sensitive bioprocessing fluids. Formulated for use in the pharmaceutical and biotechnology industries, in cell harvesting, media processing, vaccine manufacturing, aseptic filling, and diagnostic testing applications.

PharMed BPT tubing withstands repeated CIP and SIP, simplifying cleaning and sterilization. Tubing can be used with most commercial cleaners and sanitizers; autoclave up to five cycles or use gamma irradiation without affecting overall service life.

Low Spallation Peristaltic Pump Tubing

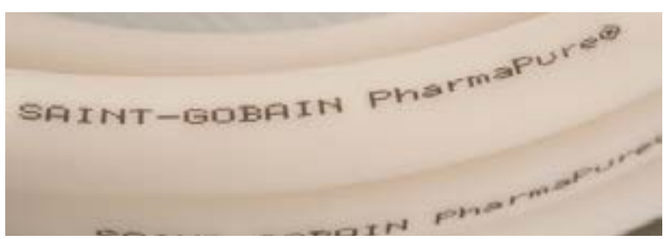
PharmaPure® Tubing

- Ideal for general-purpose, laboratory, and single-use applications
- Durable tubing provides long pump life, outlasting silicone tubing
- Excellent gas barrier with very low gas permeability
- Withstands repeated autoclaving

Made from a proprietary multilayer thermoplastic elastomer, PharmaPure peristaltic pump tubing offers excellent pump life, ultra-low particulate spallation, and very low gas permeability. Developed especially for the pharmaceutical and biotechnology industries, it is ideal for use in media processing, vaccine manufacturing, aseptic filling, and diagnostic testing applications.

Exceptional flex life characteristics and excellent wear properties of the PharmaPure tubing contribute to a long service life in peristaltic pumps and help minimize downtime due to tubing failures. The low permeability and low absorption characteristics ensure sensitive fluids are protected from gas ingress and concentration changes due to fluid absorption.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	5/32 (4)	1/16 (1.6)	25	50122-93
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	25	50122-94
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	25	50122-95
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	25	50122-96
3/16 (4.8)	5/16 (8)	1/16 (1.6)	25	50122-97
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	25	50122-98
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	25	50122-99
5/16 (8)	7/16 (11.1)	1/16 (1.6)	25	50123-00
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	25	50123-01
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	25	50123-02
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	25	50123-03
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	25	50123-04
3/4 (19.1)	1 (25.4)	1/8 (3.2)	25	50123-05



Reinforced Thermoplastic Elastomer (TPE) Tubing

Eldon James Tubing

– General-purpose, laboratory and single-use applications
– Great alternative to silicone tubing
– Does not contain PVC, DEHP, phthalates, or other plasticizers
– Ultra-low extractables and leachables
– Low gas and oxygen permeability
– Low protein binding and nonpyrogenic material
– Thermally weldable
– USP Class VI, USP 661, RoHS compliant, and BPOG tested

Designed for use with peristaltic pumps, this soft and flexible, yet durable tubing provides long service life.

The reinforced tubing design makes it ideal for demanding, high pressure use.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/8 (3.2)	3/8 (9.5)	1/8 (3.2)	25	50116-28
1/8 (3.2)	3/8 (9.5)	1/8 (3.2)	50	50116-29
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	25	50116-31
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50116-32
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	25	50116-34
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50116-35
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	25	50116-36
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50116-37
5/8 (15.9)	1 (25.4)	3/16 (4.8)	25	50116-20
5/8 (15.9)	1 (25.4)	3/16 (4.8)	50	50116-21
3/4 (19.1)	1-1/8 (28.6)	3/16 (4.8)	25	50116-23
3/4 (19.1)	1-1/8 (28.6)	3/16 (4.8)	50	50116-24
1 (25.4)	1-3/8 (35)	3/16 (4.8)	25	50116-26

Soft Thermoplastic Elastomer (TPE) Tubing

Cole-Parmer® Tubing

– Great alternative to silicone tubing
– Ultra-low extractables and leachables
– Low gas and oxygen permeability
– Low protein binding and nonpyrogenic material
– Thermally weldable
– USP Class VI, USP 661, and RoHS compliant and BPOG tested

Designed for use with peristaltic pumps, this soft and flexible, yet durable tubing provides long service life.

Tubing does not contain PVC, DEHP, phthalates, or plasticizers, making it ideal for various pharmaceutical, food, and beverage applications.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	3/32 (2.4)	1/32 (0.8)	50	50116-38
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50116-41
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50116-43
3/32 (2.4)	5/32 (4)	1/32 (0.8)	50	50116-39
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50116-45
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50116-46
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50116-47
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50116-48
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50116-49
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50116-50
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50116-51
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50116-55
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50116-54

Platinum-Cured Silicone Tubing, 50 Shore A

Cole-Parmer® Tubing

– Extruded to precise dimensional tolerances for accuracy
– Tasteless/odorless tubing—helps maintain fluid integrity
– Does not contain BPA or phthalates
– Translucent tubing provides good clarity
– Cleanroom packed and double bagged package
– Sterilize by autoclave, gamma irradiation, EtO, and chemical sterilants
– Ideal for general-purpose, laboratory, and single-use applications

Produced with very high dimensional tolerances, the platinum-cured silicone tubing provides the accuracy and purity needed for critical biopharmaceutical applications. This soft yet durable tubing offers a long service life in peristaltic pump or pinch valve use.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/1 (4.8)	1/16 (1.6)	50	50119-64
1/4 (2.4)	7/16 (11)	3/32 (2.4)	50	50119-71
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50119-65
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50119-66
3/16 (4.8)	7/16 (11)	1/8 (3.2)	50	50119-69
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50119-70
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50119-67
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50119-68
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50119-72

Peroxide-Cured Silicone Tubing

Cole-Parmer® Tubing

– Exhibits good heat, cold, ozone, UV, and abrasion resistance
– Ideal for general-purpose, laboratory, and single-use applications
– Free technical application support available to assist with tubing selection

Peroxide-cured silicone tubing provides a long shelf life and enhanced mechanical strength—excellent for use in peristatic pumps. Featuring a smooth bore, the tubing offers low coefficient of friction for effortless fluid transfer.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	25	50121-42
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	25	50121-43
3/16 (4.8)	5/16 (8)	1/16 (1.6)	25	50121-44
3/16 (4.8)	7/16 (11)	1/8 (3.2)	25	50121-47
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	25	50121-45
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	25	50121-48
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	25	50121-46
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	25	50121-49

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50119-45
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50119-47
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50119-48
5/32 (4)	1/4 (6.4)	3/64 (1.2)	50	50119-50
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50119-49
7/16 (11)	1/2 (12.7)	1/32 (0.8)	50	50119-53

PTFE Tubing

Cole-Parmer® Tubing

– Wide temperature range of –201 to 260 °C (–330 to 500 °F)
– Lowest coefficient of friction of any tubing
– Excellent flexibility
– Does not contain BPA, phthalates, or PVC
– Sterilize by autoclave, EtO, and chemical sterilants

A wide operating temperature range, superior chemical resistance, and excellent corrosion resistance make PTFE tubing ideal for use in extreme environments. Smooth, nonstick surface and low permeability characteristics ensure there is no buildup or absorption/adsorption of fluids, minimizing the risk of fluid contamination. PTFE tubing is more flexible than all other tubing in its class, reducing the chances of cracks from bending.

PVC Lab and Vacuum Tubing

Cole-Parmer® Tubing

– Versatile applications including peristaltic pumps, analytical instruments, incubators, gas, and drain lines
– Glass-smooth inner bore design for easy clean-ups and changeovers, enhancing workflow efficiency
– Ideal for general-purpose, laboratory, and single-use applications
– Free technical application support available to assist with tubing selection

Cole-Parmer PVC lab and vacuum tubing redefines liquid and gas transfer solutions. Tailored for versatility, it caters to a wide spectrum of industry needs, seamlessly integrating into applications ranging from peristaltic pumps to analytical instruments. Its innovative glass-smooth inner bore design not only ensures hassle-free clean-ups and changeovers but also sets a new benchmark for workflow efficiency. It is an excellent alternative to latex and silicone tubing.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
Lab				
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50121-16
5/64 (2)	5/32 (4)	1/25 (1)	50	50121-09
3/32 (2.4)	5/32 (4)	1/32 (0.8)	50	50121-17
1/8 (3)	1/5 (5)	1/25 (1)	50	50121-10
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50121-15
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50120-97
5/32 (4)	15/64 (6)	1/25 (1)	50	50121-11
1/5 (5)	5/16 (8)	5/64 (2)	50	50121-12
15/64 (6)	11/32 (9)	5/64 (2)	50	50121-13
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50120-98
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50120-99
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50121-00
5/16 (8)	15/32 (12)	5/64 (2)	50	50121-14
5/16 (8)	1/2 (12.7)	3/32 (2.4)	50	50121-01
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50121-02
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50121-03
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50121-04
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50121-05
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50121-06
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50121-07
1 (25.4)	1-1/4 (31.8)	1/8 (3.2)	50	50121-08
Vacuum				
3/16 (4.8)	9/16 (14.3)	3/16 (4.8)	50	50121-18
1/4 (6.4)	5/8 (15.9)	3/16 (4.8)	50	50121-19
3/8 (9.5)	7/8 (22.2)	1/4 (6.4)	50	50121-20
1/2 (12.7)	1-1/8 (28.6)	5/16 (8)	50	50121-21

Thermoplastic Vulcanizate (TPV) Pharma Grade Tubing

Cole-Parmer® Tubing

– Biocompatible thermoplastic tubing offers good chemical resistance
– Does not contain BPA, phthalates, PVC, or peroxides
– Sterilize by autoclave, gamma irradiation, and chemical sterilants
– Ideal for general-purpose, laboratory, and single-use applications
– Complies with U.S. Pharmacopeia 43, National Formulary 38 (USP), General Chapter <88> Class VI, Biological reactivity Tests, In Vivo (2020)

Use the biocompatible TPV tubing for peristaltic pumping, filling, and fluid transfer applications. This flexible opaque tubing offers excellent pump performance while providing great chemical resistance, making it a great alternative to silicone tubing.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50119-82
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50119-83
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50119-84
3/16 (4.8)	7/16 (11.2)	1/8 (3.2)	50	50119-87
1/4 (6.4)	3/8 (9.6)	1/16 (1.6)	50	50119-88
1/4 (6.4)	7/16 (11.2)	3/32 (2.4)	50	50119-89
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50119-85
3/8 (9.5)	5/8 (16)	1/8 (3.2)	50	50119-86
1/2 (12.7)	3/4 (19)	1/8 (3.2)	50	50119-90

Thermoplastic Vulcanizate (TPV) Industrial Tubing

Cole-Parmer® Tubing

– Compatible with most CIP (Clean-in-Place) and SIP (Steam-in-Place) systems
– Excellent for use in peristaltic pump applications
– Great alternative to Santoprene™ tubing
– Does not contain PVC, DEHP, phthalates, or other plasticizers
– Ultra-low extractables and leachables
– Low gas and oxygen permeability
– USP Class VI, USP 661, RoHS compliant, and BPOG tested

The tubing consists of a vulcanized elastomer which provides good compression set resistance. Highly durable and resistant to fatigue, acids, alkalis, and most oils and lubricants.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	3/32 (2.4)	1/32 (0.8)	50	50115-72
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50115-76
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50115-78
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50115-81
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50115-82
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50115-83
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50115-84
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50115-85
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50115-86
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50115-91
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50115-92
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50115-90
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50115-94
1 (25.4)	1-1/4 (31.8)	1/8 (3.2)	50	50115-79

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	3/32 (2.4)	1/32 (0.8)	50	50115-95
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50115-99
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50116-02
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50116-04
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50116-05
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50116-06
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50116-07
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50116-10
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50116-11
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50116-13
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50116-16
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50116-17
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50116-15
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50116-18

Thermoplastic Elastomer (TPE) Tubing

Cole-Parmer® Tubing

– Great alternative to silicone tubing
– Ultra-low extractables and leachables
– Low gas and oxygen permeability
– Low protein binding and nonpyrogenic material
– Thermally weldable
– USP Class VI, USP 661, RoHS compliant, and BPOG tested

Designed for use with peristaltic pumps, this soft and flexible, yet durable tubing provides long service life. Tubing does not contain PVC, DEHP, phthalates, or plasticizers, making it ideal for various pharmaceutical, food, and beverage applications.

Black TPE Tubing

Cole-Parmer® Tubing

– Safely transfer chemicals and caustic solutions including disinfectants, soap, and ink
– Won't crack or weaken—ensures longer pump life in demanding applications
– Engineered to resist abrasion and weathering
– Excellent flexural fatigue and abrasion resistance
– Ideal for general-purpose, laboratory, and single-use applications

Cole-Parmer TPE tubing is a high-performance industrial tubing manufactured from a thermoplastic elastomeric compound that consistently outperforms neoprene, EPDM and other general purpose rubber tubing. The Cole-Parmer TPE tubing features an extended service life in a wide range of applications including caustic chemical transfer, wastewater sampling, soap and disinfectant dispensing, vacuum pumps, glass and window washing systems, and more.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	25	50121-22
1/8 (3.2)	3/8 (9.5)	1/8 (3.2)	25	50121-33
3/16 (4.8)	5/16 (8)	1/16 (1.6)	25	50121-23
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	25	50121-24
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	25	50121-25
1/4 (6.4)	7/16 (11.1)	3/32 (2.4)	25	50121-26
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	25	50121-27
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	25	50121-28
3/8 (9.5)	5/8 (16)	1/8 (3.2)	25	50121-29
1/2 (12.7)	5/8 (16)	1/16 (1.6)	25	50121-30
1/2 (12.7)	3/4 (19)	1/8 (3.2)	25	50121-31
5/8 (16)	13/16 (20.6)	3/32 (2.4)	25	50121-32

Black FDA-Compliant Tubing

Viton® Tubing

– Withstands high temperatures up to 204 °C (400 °F)
– Excellent chemical resistance—great for transferring acids and solvents
– Black tubing keep light sensitive samples safe
– Soft and flexible—use with barbed fittings
– Meets FDA 21CFR 177.2600 and USP Class VI
– Ideal for general-purpose, laboratory, and single-use applications

Use this Viton® tubing in food or laboratory applications where FDA compliance is required. The tubing delivers excellent wear, abrasion, heat, UV, and ozone resistance, offering reliable performance every time. Viton tubing exhibits excellent chemical resistance, making it ideal for transferring acids and solvents.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50131-91
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50131-92
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50131-93
1/4 (6.4)	5/16 (8)	1/32 (0.8)	50	50131-94
5/16 (8)	7/16 (11.1)	1/16 (1.6)	50	50131-95
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50131-96
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50131-97
5/8 (15.9)	3/4 (19)	1/16 (1.6)	50	50131-98
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50131-99

Food and Beverage Tubing

Tygon® S3™ B-44-4X Tubing

– Sanitary fluid path minimizes potential for bacterial growth
– Lightweight, flexible, and easy to handle
– Withstands harsh alkaline cleaners and sanitizers
– Phthalate and BPA free

This tubing is specifically designed for food and beverage applications. The smooth, nonporous bore promotes easy filling, draining, and transferring of fluids without trapping any particles that can cause bacterial growth.

This lightweight and flexible tubing bends to accommodate corners and obstructions and requires minimal fittings for quick and easy installation. Clear tubing allows you to visually monitor the flow, so you can control or adjust the flow during the process.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	3/32 (2.4)	1/32 (0.79	50	22050-69
1/16 (1.6)	1/8 (3.2)	1/32 (0.79)	50	22050-70
3/32 (2.4)	5/32 (4)	1/32 (0.79)	50	22050-71
1/8 (3.2)	3/16 (4.8)	1/32 (0.79)	50	22050-72
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50106-77
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50106-78
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50106-79
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50106-80
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50106-81
5/16 (8)	1/2 (12.7)	3/32 (2.4)	50	50106-82
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50106-83
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50106-84
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50106-85
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50106-86
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50106-87
1 (25.4)	1-1/4 (31.8)	1/8 (3.2)	50	50106-88

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50113-72
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50113-73
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50113-74
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50113-75
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50113-76
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50113-77
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50113-78
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50113-79
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50113-80
1 (25.4)	1-3/8 (35)	3/16 (4.8)	25	50113-81

Plasticizer Free Thermoplastic Tubing

Tygon® 2475 Tubing

– Low gas permeation
– Smooth inner surface inhibits particle entrapment
– Free from added plasticizers or oils
– Meets USP Class VI criteria
– Ideal for general-purpose, laboratory, and single-use applications

Due to the absence of plasticizers, the Tygon 2475 high-purity thermoplastic tubing can withstand aggressive acids, bases, and solvents that would react with or extract plasticizer from a standard PVC tube. The clear tubing allows you to visually inspect the fluid path to ensure consistency of flow. Designed with lower gas permeation than standard silicone tubing, sensitive fluids are protected from moisture loss and oxidation.

The surface smoothness of the tubing helps reduce potential microbial buildup, critical in bioprocess applications. The tubing also features a very low absorption of aqueous substances, minimizing the risk of fluid alteration in single or repeat use applications.

Food and Beverage Tubing

Tygon® A-60-F Tubing

– Excellent flexural fatigue resistance—great for use in peristaltic pumps

– Steam clean in place to eliminate frequent tubing replacement

– Chemically compatible with a variety of cleaning solutions

Tubing will not crack or deteriorate, even in extreme temperatures. Featuring high flexural fatigue resistance, tubing is perfect for use in peristaltic pumps often found in food and beverage dispensing equipment. It resists kinks, retains its shape, and remains flexible for quick and easy installation.

This high-performance tubing withstands harsh sanitizing solutions and exhibits exceptional acid and alkali resistance.

Easily clean tubing using clean-in-place or steam-in-place cleaning and sterilization systems or autoclave up to five cycle times without affecting the service life.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50105-99
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50106-00
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50106-01
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50106-02
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50106-03
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50106-04
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50106-05
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50106-06
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50106-07
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50106-08
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50106-09

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50106-50
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50106-51
1/8 (3.2)	3/8 (9.5)	1/8 (3.2)	50	50106-52
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50106-53
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50106-54
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50106-55
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50106-56
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50106-57
5/16 (8)	1/2 (12.7)	3/32 (2.4)	50	50106-58
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50106-59
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50106-60
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50106-61
7/16 (11)	9/16 (14.3)	1/16 (1.6)	50	50106-62
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50106-63
1/2 (12.7)	11/16 (17.5)	3/32 (2.4)	50	50106-64
5/8 (15.9)	13/16 (20.6)	3/32 (2.4)	50	50106-65
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50106-66
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50106-67
1 (25.4)	1-1/4 (31.8)	1/8 (3.2)	50	50106-68

Chemical Dispensing Tubing

Tygon® A-60-G Tubing

– Outstanding resistance to heat, UV, and ozone

– Use in temperatures ranging from -60 to 135 °C (-75 to 275 °F)

– High flexural fatigue strength–ideal for use in peristaltic pumps

– Heat sealable–no fittings needed to join tubing

Use the Tygon A-60-G tubing for industrial cleaning and chemical dispensing applications. It has excellent resistance to inorganic fluids (acids and bases) and will not weaken or crack after exposure to heat, UV, and ozone, outperforming neoprene, EPDM, and other general tubing. Tubing also exhibits high flexural fatigue strength, making it ideal for use in peristaltic pumps.

Food and Beverage Dispensing Tubing

Tygon® E-1000 Tubing

– Remains flexible even at −55 °C (−67 °F)

– Soft and flexible tubing resists twisting and collapsing

– Non-DEHP tubing formulation

– Resistant to corrosive chemicals

Specially formulated for food and beverage dispensers, Tygon E-1000 tubing offers high performance even at temperatures as low as −55 °C (−67 °F). Soft and very flexible, tubing easily manages sharp radius curves and multiple directional changes without twisting and collapsing. The low-durometer tubing exhibits minimal resistance to compression, making it ideal for low-torque or battery-operated peristaltic pumps. Made with non-DEHP [bis (2-ethylhexyl) phthalate] plasticizer, Tygon E-1000 tubing exhibits excellent resistance to corrosive chemicals.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50106-10
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50106-11
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50106-12
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50106-13
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50106-14
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50106-15
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50106-16
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50106-17
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50106-18
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50106-19

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	3/32 (2.4)	1/32 (0.8)	50	50106-20
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50106-21
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50106-22
3/32 (2.4)	5/32 (4)	1/32 (0.8)	50	50106-23
3/32 (2.4)	7/32 (5.6)	1/16 (1.6)	50	50106-24
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50106-25
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50106-26
5/32 (4)	7/32 (5.6)	1/32 (0.8)	50	50106-27
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50121-84
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50106-28
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50106-29
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50106-30
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50106-31
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50106-32
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50106-33
5/16 (8)	1/2 (12.7)	3/32 (2.4)	50	50106-34
5/16 (8)	9/16 (14.3)	1/8 (3.2)	50	50106-35
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50106-36
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50106-37
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50106-38
7/16 (11)	9/16 (14.3)	1/16 (1.6)	50	50106-39
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50106-40
1/2 (12.7)	11/16 (17.5)	3/32 (2.4)	50	50106-41
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50106-42
1/2 (12.7)	13/16 (20.6)	5/32 (4)	50	50106-43
5/8 (15.9)	13/16 (20.6)	3/32 (2.4)	50	50106-44
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50106-45
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50106-46
3/4 (19.1)	1-1/8 (28.6)	3/16 (4.8)	50	50106-47
1 (25.4)	1-1/4 (31.8)	1/8 (3.2)	50	50106-48
1 (25.4)	1-1/2 (38.1)	1/4 (6.4)	50	50106-49

Laboratory Tubing

Tygon® E-3603 Tubing

– Smooth, polished inner wall prevents buildups

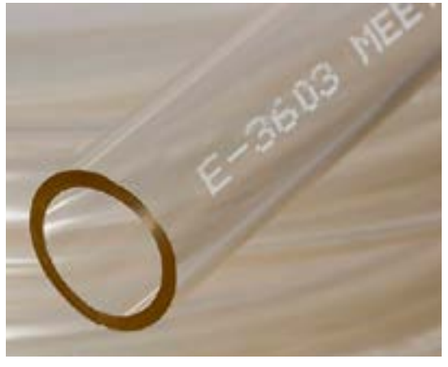
– Excellent lot-to-lot consistency for reproducible results

– Great flex fatigue resistance

– BPA and phthalate free

Use the clear and flexible Tygon E-3603 tubing for various general laboratory applications. This non-oxidizing and non-contaminating tubing offers excellent chemical resistance to virtually all organic chemicals used in the laboratory. High tolerances and lot-to-lot consistency ensure reproducible results.

Tubing slips over fittings and grips tight for a secure fit, making laboratory setup quick and simple. Abrasion and flex-fatigue resistant tubing provides superior life span.



Vacuum Tubing

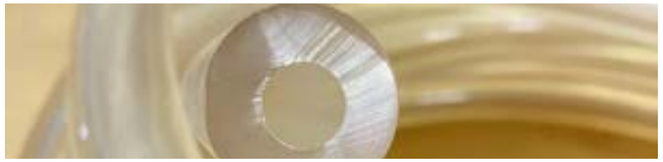
Tygon® S3™ E-3603 Tubing

– General laboratory, analytical instruments, and peristaltic and vacuum pumps; ideal for condensers, desiccators, gas lines, and drain lines
– Bio-based formulation reduces environmental impact
– Lot-to-lot consistency for reproducible results
– Easily slips over fittings and grips securely
– Contains no BPA or phthalates

Able to handle most organic chemicals found in the lab, the clear and flexible Tygon S3 E-3603 is non-oxidizing and non-contaminating. The tubing is less permeable than rubber tubing and features a glassy-smooth inner bore which prevents buildup and facilitates easy cleaning.

Designed to resist flex-fatigue and abrasions, the tubing is constructed with extra heavy walls which can withstand a full vacuum at room temperature. It can be sterilized through conventional autoclave methods and ethylene oxide.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
3/16 (4.8)	9/16 (14.3)	3/16 (4.8)	50	50113-65
1/4 (6.4)	5/8 (15.9)	3/16 (4.8)	50	50113-66
3/8 (9.5)	7/8 (22.2)	1/4 (6.4)	50	50113-67
1/2 (12.7)	1-1/8 (28.6)	5/16 (8)	50	50113-68
5/8 (15.9)	1-3/8 (35)	3/8 (9.5)	50	50113-69
3/4 (19.1)	1-1/2 (38.1)	3/8 (9.5)	50	50113-70
1 (25.4)	2 (50.8)	1/2 (12.7)	50	50113-71



Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50106-69
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50106-70
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50106-71
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50106-72
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50106-73
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50106-74
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50106-75
1 (25.4)	1-1/4 (31.8)	1/8 (3.2)	50	50106-76

Beverage Dispensing Tubing

Tygon® S3™ B-44-3 Tubing

– Minimal impact to the taste or odor of products it transfers
– Excellent chemical resistance
– Lightweight and easy to handle
– Clear tubing provides visual monitoring of flow
– Phthalate and BPA free

Use the Tygon S3 B-44-3 tubing for transferring a wide variety of beverages including soft drinks, fruit juices, and flavored teas. This specially formulated tubing does not affect the taste or odor of transferred products, and the transferred products do not affect the integrity of the tubing such as color, cracking, hardness, tackiness, and flexibility. The non-wetting properties of the tubing provide complete drainage and allow simple flush cleaning.

Lightweight and flexible, the tubing bends to accommodate corners and obstructions and requires minimal fittings for quick and easy installation. Clear tubing allows you to visually monitor the flow, so you can control or adjust the flow during the process.

Fuel and Lubricant Tubing

Tygon® F-4040-A Tubing

– Resists swelling and hardening caused by hydrocarbon-based fluids
– Low extractables help maintain fluid integrity
– Flexible and easy to install
– Translucent yellow tubing provides quick identification
– Ozone and UV resistant

Use the high-performance Tygon F-4040-A tubing for transferring fuels and industrial lubricants. Specially formulated tubing resists swelling and hardening caused by many hydrocarbon-based fluids that can lead to tubing failure.

Low permeation rating makes this tubing perfect for transferring gasoline, kerosene, heating oils, and glycol-based coolants. Highly flexible translucent yellow tubing provides quick identification, easy monitoring of the flow, and fast installation, even in tight places.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
3/32 (2.4)	3/16 (4.8)	3/64 (1.2)	50	50105-91
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50105-92
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50105-93
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50105-94
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50105-95
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50105-96
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50105-97
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50105-98

Long Flexible Life Tubing

Tygon® S3™ E-LFL Tubing

– A wide range of liquid transfer in labs, surfactant delivery, food and cosmetic processing, bioprocessing, food dispensing, and shear-sensitive fluid transfer
– Extremely low particle spallation
– Long flex life reduces downtime
– Suitable for high purity applications
– Meets USP Class VI, NSF-51 and FDA criteria

Compared to other clear tubing, the Tygon S3 E-LFL tubing offers longer pump life at 0 psi as well as back pressure up to 25 psi during peristaltic pump operations.

The reduction of particle spallation eliminates the need for frequent downstream filter replacements and lessens the risk of sensitive fluid contamination. The tubing is manufactured with non-DEHP bio-based plasticizers which increase pump performance while reducing environmental impact. The tubing is also resistant to gas permeation compared to silicone, helping to protect your sensitive fluids from oxidation or adulteration.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	25	50113-55
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	25	50113-56
3/16 (4.8)	5/16 (8)	1/16 (1.6)	25	50113-57
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	25	50113-58
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	25	50113-59
5/16 (8)	7/16 (11)	1/16 (1.6)	25	50113-60
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	25	50113-61
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	25	50113-62
3/4 (19.1)	1-1/4 (31.8)	1/4 (6.4)	10	50113-63
1 (25.4)	1-3/8 (35)	3/16 (4.8)	10	50113-64

Sanitary Platinum-Cured Silicone Tubing

Tygon® SPT-3350 Tubing

– Ideal for general-purpose, laboratory and single-use applications
– Minimal extractable maintains fluid integrity
– Excellent chemical resistance

Tygon SPT-3350 sanitary silicone tubing features a platinum curing process designed to meet the demanding sanitary standards of the food and beverage industry. To improve the flow of fluids, the inner surface of the tube is designed to reduce the risk of particle entrapment and microscopic buildup during fluid transfer. The smooth inner surface aids in complete cleaning and sterilization.

The tubing is made from 100% synthetic virgin silicone. No plant or animal products or by-products are used in the manufacture of, nor intentionally added to, the tubing. They are produced in an ISO 14644 Class 7 cleanroom facility from USP 88 Class VI and FDA 21 CFR approved raw materials in accordance with cGMP principles.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/32 (0.8)	3/32 (2.4)	1/32 (0.8)	50	50113-89
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50113-90
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50113-91
3/32 (2.4)	5/32 (4)	1/32 (0.8)	50	50113-92
3/32 (2.4)	7/32 (5.6)	1/16 (1.6)	50	50113-93
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50113-94
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50113-95
5/32 (4)	7/32 (5.6)	1/32 (0.8)	50	50113-96
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50113-97
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50113-98
3/16 (4.8)	3/8 (9.5)	3/32 (2.4)	50	50113-99
3/16 (4.8)	7/16 (11)	1/8 (3.2)	50	50114-00
1/4 (6.4)	5/16 (8)	1/32 (0.8)	50	50114-01
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50114-02
1/4 (6.4)	7/16 (11)	3/32 (2.4)	50	50114-03
1/4 (6.4)	1/2 (12.7)	1/8 (3.2)	50	50114-04
5/16 (8)	7/16 (11)	1/16 (1.6)	50	50114-05
5/16 (8)	1/2 (12.7)	3/32 (2.4)	50	50114-06
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50114-07
3/8 (9.5)	9/16 (14.3)	3/32 (2.4)	50	50114-08
3/8 (9.5)	5/8 (15.9)	1/8 (3.2)	50	50114-09
7/16 (11)	9/16 (14.3)	1/16 (1.6)	50	50114-10
7/16 (11)	5/8 (15.9)	3/32 (2.4)	50	50114-11
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50114-12
1/2 (12.7)	11/16 (17.5)	3/32 (2.4)	50	50114-13
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50114-14
5/8 (15.9)	13/16 (20.6)	3/32 (2.4)	50	50114-15
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50114-16
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50114-17
1 (25.4)	1-1/4 (31.8)	1/8 (3.2)	50	50114-18
1-1/4 (31.8)	1-1/2 (38.1)	1/8 (3.2)	50	50114-19
1-1/2 (38.1)	2 (50.8)	1/4 (6.4)	50	50114-20

Plasticizer-Free Chemical-Resistant Tubing

Versilon™ 2001 Tubing

– Ideal for general-purpose, laboratory, and single-use applications
– Plasticizer-free and oil-free tubing provides contamination-free fluid transfer
– Long service life in peristaltic pumps
– Clear wall provides visual monitoring of flow

Use the Versilon chemical-resistant tubing with a wide range of aggressive chemicals, including polar solvents. Durable Versilon 2001 tubing provides a long service life and does not degrade over time, leading to less downtime and tubing changes from tubing failure.

Great flexibility, excellent chemical resistance, and long service life make this tubing ideal for peristaltic pump applications. Plasticizer-free formulation does not contaminate fluids and will not yield any taste, making it ideal for food and beverage applications and water purification lines. Clear tubing allows easy monitoring of the flow, so you can control or adjust the flow during the process.

Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	3/16 (4.8)	1/16 (1.6)	50	50122-51
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50122-52
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50122-53
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50122-54
5/16 (8)	7/16 (11.1)	1/16 (1.6)	50	50122-55
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50122-56
1/2 (12.7)	3/4 (19.1)	1/8 (3.2)	50	50122-57
5/8 (15.9)	7/8 (22.2)	1/8 (3.2)	50	50122-58
3/4 (19.1)	1 (25.4)	1/8 (3.2)	50	50122-59
1 (25.4)	1-3/8 (35)	3/16 (4.8)	50	50122-60

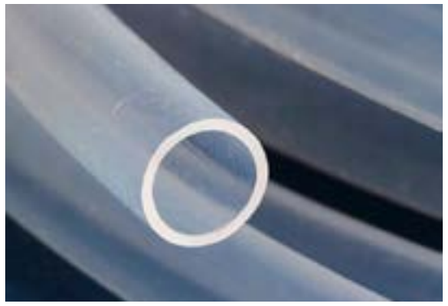
Chemical Resistant Tubing

Versilon™ PFA Tubing

– High-purity grade fluoropolymer ideal for extremely critical applications
– Enhanced burst strength
– Withstands up to 206 °C (500 °F)
– Retains excellent mechanical strength even at elevated temperatures

Made of high-purity grade fluoropolymer, Versilon PFA tubing provides superior chemical and diffusion resistance. Use in critical applications where precise quality control is required, such as semi-conductor, environmental, and pharmaceutical industries.

Tubing maintains great mechanical strength and resists stress cracking even at high temperatures.



Dimensions: in. (mm)			Reel length (ft)	Item number
Tubing ID	Tubing OD	Wall		
1/16 (1.6)	1/8 (3.2)	1/32 (0.8)	50	50107-39
1/8 (3.2)	3/16 (4.8)	1/32 (0.8)	50	50107-40
1/8 (3.2)	1/4 (6.4)	1/16 (1.6)	50	50107-43
5/32 (4)	1/4 (6.4)	3/64 (1.2)	50	50107-42
3/16 (4.8)	1/4 (6.4)	1/32 (0.8)	50	50107-41
3/16 (4.8)	5/16 (8)	1/16 (1.6)	50	50107-45
1/4 (6.4)	5/16 (8)	1/32 (0.8)	50	50107-44
1/4 (6.4)	3/8 (9.5)	1/16 (1.6)	50	50107-47
5/16 (8)	3/8 (9.5)	1/32 (0.8)	50	50107-46
3/8 (9.5)	7/16 (11)	1/32 (0.8)	50	50107-48
3/8 (9.5)	1/2 (12.7)	1/16 (1.6)	50	50107-50
7/16 (11)	1/2 (12.7)	1/32 (0.8)	50	50107-49
1/2 (12.7)	9/16 (14.3)	1/32 (0.8)	50	50107-51
1/2 (12.7)	5/8 (15.9)	1/16 (1.6)	50	50107-52
5/8 (15.9)	3/4 (19.1)	1/16 (1.6)	50	50107-53
3/4 (19.1)	7/8 (22.2)	1/16 (1.6)	50	50107-54
7/8 (22.2)	1 (25.4)	1/16 (1.6)	50	50107-55

Materials

PVDF (Kynar®)

• Excellent chemical resistance
• Temperature range: -62 to 129 °C (-80 to 265 °F)
• Sterilize by ethylene oxide or autoclave

Its trade name, Kynar, often refers to PVDF (polyvinylidene fluoride). PVDF is a high-purity engineering thermoplastic with excellent chemical resistance, abrasion resistance, flame resistance, and UV stability. PVDF is widely used for chemical tank liners and semiconductor equipment components.

Polypropylene (PP)

• Very good chemical resistance
• Temperature range: -13 to 66 °C (9 to 180 °F)
• Sterilize by ethylene oxide or gamma irradiation

Polypropylene is resistant to weak inorganic acids, organic acids, alcohols, ammonia, and oxidizing salts and has limited resistance to aliphatic hydrocarbons, esters, ketones, and ethers. Polypropylene is generally not recommended for aromatic and halogenated hydrocarbons.

Engage™ 8402

• Good chemical resistance
• Max temperature range: 96 °C (205 °F)

This ethylene-octene copolymer offers excellent performance in durable, flexible injection molded industrial and consumer goods. This provides high clarity in products requiring visual inspection and allows hot runner molds to enhance production efficiency. In addition, its low density can help control resin and production costs, while reducing the weight of the end products

Nylon

• Good chemical resistance
• Temperature range: -46 to 121 °C (-50 to 250 °F)
• Sterilize by ethylene oxide only

Nylon is resistant to various chemicals, especially aliphatic and aromatic hydrocarbons, alkalis, greases, fuels, lubricants, and ketones.

CrystalVu™

• Good chemical resistance

A transparent alternative to polycarbonate that is free from Bisphenol-A (BPA), maintaining its clarity and structure even at temperatures up to 180 °C. This alternative is autoclavable and boasts improved features compared to polycarbonate, such as superior chemical resistance and resilience against deformation after multiple autoclave cycles, gamma, and EtO sterilization.

Polycarbonate (PC)

• Good chemical resistance
• Operating temperature range: -20 to 147 °C (-29 to 297 °F)
• Sterilized using steam at 120 °C, gamma radiation, or by ethylene oxide (EtO)

Polycarbonate is resistant to mineral acids, many organic acids, oxidizing and reducing agents, neutral and acid salt solutions, many greases, waxes and oils, and saturated, aliphatic, and cycloaliphatic hydrocarbons and alcohols, except methyl alcohol. For example, Lexan polycarbonate sheet has good chemical resistance to various dilute organic and inorganic acids at room temperature.

Polyphenylsulfone (PPSU)

- Excellent chemical resistance
- Operating temperature range: up to 180 °C (356 °F)
- Sterilize by steam, autoclave, or gamma irradiation

Radel® PPSU displays excellent resistance to many chemicals, including aqueous systems, caustics, inorganic acids, aliphatic hydrocarbons, detergents and soaps, and certain alcohols.

High-Temperature Polycarbonate

- Good chemical resistance
- Operating temperature range: -20 to 232 °C (-4 to 450 °F)
- Sterilize using steam at 120 °C (248 °F), gamma radiation, or by ethylene oxide (EtO)

High-Density Polyethylene (HDPE)

- Good chemical resistance
- Temperature range: -53 to 65 ºC (65 to 150 ºF)
- Sterilize by ethylene oxide only

Polyethylene is an inert plastic and is not subject to attack by most chemicals. However, those substances that do attack the polyethylene may still be “packageable” under certain conditions. Generally, high-density polyethylene is more chemically resistant than low-density.

Polysulfone

- Excellent chemical resistance
- Operating temperature range: −100 to 150 °C (-148 to 302 ºF)

Polysulfone is highly resistant to mineral acids, alkali, and electrolytes in pH ranging from 2 to 13. It is resistant to oxidizing agents and can be cleaned with bleach. Polysulfones are transparent, amorphous polymers with high strength and high heat resistance. Their glass transition temperatures range from 180 to 250 °C. They are hydrolytically stable and, along with their heat resistance, are very stable to repeated steam sterilization cycles.

Stainless Steel

- Good chemical resistance
- Temperature range: -40 to 93 °C (-40 to 200 °F)
- Sterilize by ethylene oxide, autoclave or gamma irradiation

Stainless steel is generally resistant to acidic corrosion. However, exact resistance levels will depend on the steel in use, concentration, types of acid, and environmental temperature. Generally, stainless steel reacts with acids by forming hydrogen gas, while alkalis have no effect. However, it is important to note that stainless steel will corrode when exposed to chloride ions, such as those found in salt water or sea air.

Threading

UNF Thread

- Excellent chemical resistance
- Temperature range: -13 to 66 °C (9 to 180 °F)
- Sterilize by ethylene oxide or gamma irradiation

UNF stands for unified fine pitch threads. UNF threads are distinguished by having more threads per distance than UNC threads (unified course pitch threads). While both UNC and UNF bolts are used for fastening, they are often applied in different fields due to their unique advantages.

HEX

- Good chemical resistance
- Temperature range: -46 to 121 °C (-50 to 250 °F)
- Sterilize by ethylene oxide only

Hex bolts are threaded bolts structurally identified as a six-sided hexagonal-shaped head. Hex bolts can be either fully threaded or partially threaded (featuring a clear shank along part of the body) and are suitable for use in various applications, typically machinery and construction.

UNF Bottom Sealing Thread

- Fair chemical resistance
- Temperature range: -20 to 140 ºC (-4 to 284 ºF)

UNF bottom sealing thread may be used with a separate rotating lock ring; FSLLR.

NPT Thread

- Fair chemical resistance
- Temperature range: -20 to 140 ºC (-4 to 284 ºF)

The best-known and most widely used connection where the pipe thread provides both the mechanical joint and the hydraulic seal is the American National Pipe Tapered Thread, also referred to as NPT. NPT has a tapered male and female thread that seals with Teflon tape or jointing compound.

Special Tapered Thread

- Fair chemical resistance
- Temperature range: -20 to 140 ºC (-4 to 284 ºF)

Tapered threads are threads that taper along the thread profile and decrease in diameter as you travel down the part. In the same fashion as the straight threads you can either measure the tapered profile or observe the threads’ decreasing diameter.

Cleanroom Hose Barb Fittings

Cole-Parmer® Elbow Reducers

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Single barb design tightly “grips” the tubing
– Natural Kynar® is biopharma compatible, USP 661 and BPOG compliant
– Polypropylene (PP) meets FDA requirements 21 CFR 177.1520 (a)(3) (i) and (c)3.1a and is RoHS compliant
– Nylon is FDA and RoHS compliant

The reducing elbows feature a 90° bend and is designed to fit in a tight space. A single barb on each end of the fitting creates a tight seal to keep the tubing in place.

Tubing ID Dimensions (A x B)	Material	Pack Size	Item Number
3/32 x 1/16 in.	Polypropylene	10	50117-33
1/8 x 1/16 in.	Polypropylene	10	50117-36
1/8 x 3/32 in.	Polypropylene	10	50117-35
1/8 x 3/32 in.	White Nylon	10	50117-45
3/16 x 1/8 in.	Polypropylene	10	50117-37
1/4 x 1/8 in.	White Nylon	10	50117-46
3/8 x 1/4 in.	Polypropylene	10	50117-38
3/8 x 1/4 in.	Natural Kynar®	10	50117-42
1/2 x 1/4 in.	Polypropylene	10	50117-39
1/2 x 1/4 in.	Natural Kynar®	10	50117-43
1/2 x 3/8 in.	Polypropylene	10	50117-40
1/2 x 3/8 in.	Natural Kynar®	10	50117-44
1 x 3/4 in.	Polypropylene	10	50117-34
1 x 3/4 in.	Natural Kynar®	10	50117-41

Tubing ID Dimensions (A x B x C)	Material	Pack Size	Item Number
1/4 x 1/8 x 1/8 in.	Polypropylene	10	50114-77
1/4 x 1/8 x 1/8 in.	Natural Kynar®	10	50114-97
5/16 x 3/16 x 3/16 in.	Polypropylene	10	50114-79
5/16 x 3/16 x 3/16 in.	Natural Kynar®	10	50114-99
3/8 x 1/4 x 1/4 in.	Polypropylene	10	50114-81
3/8 x 1/4 x 1/4 in.	Natural Kynar®	10	50115-01
1/2 x 3/8 x 3/8 in.	Polypropylene	10	50114-83
1/2 x 3/8 x 3/8 in.	Natural Kynar®	10	50115-03
5/8 x 1/2 x 1/2 in.	Polypropylene	10	50114-85
5/8 x 1/2 x 1/2 in.	Natural Kynar®	10	50115-05
3/4 x 5/8 x 5/8 in.	Polypropylene	10	50114-73
3/4 x 5/8 x 5/8 in.	Natural Kynar®	10	50114-93
1 x 3/4 x 3/4 in.	Polypropylene	10	50114-75
1 x 3/4 x 3/4 in.	Natural Kynar®	10	50114-95

Cleanroom Hose Barb Fittings

Cole-Parmer® Y Reducers

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Single barb design tightly “grips” the tubing
– Natural Kynar® is biopharma compatible, USP 661 and BPOG compliant
– Polypropylene (PP) meets FDA requirements 21 CFR 177.1520 (a)(3) (i) and (c)3.1a and is RoHS compliant

Easily combine or split fluid flow with reduction Y fittings. Each Y fitting features one large hose barb and two small hose barbs. A single barb on each end of the fitting creates a tight seal to keep the tubing in place. An anti-rotation device on each port prevents tubing from rotating, minimizing kinks.

Cleanroom Hose Barb Fittings

Cole-Parmer® Cross Unions

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Single barb design tightly “grips” the tubing
– Natural Kynar® is biopharma compatible and USP 661 and BPOG compliant
– Polypropylene (PP)/High-Density Polyethylene meets FDA requirements 21 CFR 177.1520 (a)(3) (i) and (c)3.1a and is RoHS compliant

Easily combine or split fluid flow using cross union fittings. A single barb on each end of the fitting creates a tight seal to keep the tubing in place.

Tubing ID Dimensions in. (mm)	Material	Pack Size	Item Number
1/16 (1.6)	Natural Kynar®	10	50116-57
1/16 (1.6)	Polypropylene	10	50116-63
1/8 (3.2)	Natural Kynar®	10	50116-58
1/8 (3.2)	Polypropylene	10	50116-64
3/16 (4.8)	Natural Kynar®	10	50116-59
3/16 (4.8)	Polypropylene	10	50116-65
1/4 (6.4)	Natural Kynar®	10	50116-60
1/4 (6.4)	Polypropylene	10	50116-66
3/8 (9.5)	Natural Kynar®	10	50116-61
3/8 (9.5)	Polypropylene	10	50116-67
1/2 (12.7)	Natural Kynar®	10	50116-62
1/2 (12.7)	Polypropylene	10	50116-68

Cleanroom Hose Barb Fittings

Cole-Parmer® Straight Unions

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Single barb design tightly “grips” the tubing

Easily connect two tubing with straight reducers. A single barb on each end of the fitting creates a tight seal to keep the tubing in place.

Tubing ID Dimension in. (mm) (A)	Material	Pack Size	Item Number
1/16 (1.6)	White Nylon	10	50108-15
1/16 (1.6)	Natural Kynar®	10	50108-16
1/16 (1.6)	Natural Nylon	10	50108-17
1/16 (1.6)	Polypropylene	10	50108-18
3/32 (2.4)	White Nylon	10	50108-09
3/32 (2.4)	Natural Kynar®	10	50108-10
3/32 (2.4)	Polypropylene	10	50108-11
1/8 (3.2)	White Nylon	10	50108-27
1/8 (3.2)	Natural Kynar®	10	50108-28
1/8 (3.2)	Polypropylene	10	50108-29
5/32 (4)	White Nylon	10	50108-24
5/32 (4)	Natural Kynar®	10	50108-25
5/32 (4)	Polypropylene	10	50108-26
3/16 (4.8)	White Nylon	10	50108-31
3/16 (4.8)	Natural Kynar®	10	50108-32
3/16 (4.8)	Polypropylene	10	50108-33
1/4 (6.4)	White Nylon	10	50108-34

1/4 (6.4)	Natural Kynar®	10	50108-35
1/4 (6.4)	Polypropylene	10	50108-36
5/16 (8)	Natural Kynar®	10	50108-37
5/16 (8)	Polypropylene	10	50108-38
3/8 (9.5)	HDPE	10	50108-39
3/8 (9.5)	White Nylon	10	50108-40
3/8 (9.5)	Natural Kynar®	10	50108-41
3/8 (9.5)	Natural Nylon	10	50108-42
3/8 (9.5)	Polypropylene	10	50108-43
1/2 (12.7)	Natural Kynar®	10	50108-44
1/2 (12.7)	Natural Nylon	10	50108-45
1/2 (12.7)	Polypropylene	10	50108-46
5/8 (15.9)	White Nylon	10	50108-12
5/8 (15.9)	Natural Kynar®	10	50108-13
5/8 (15.9)	Polypropylene	10	50108-14
3/4 (19.1)	Natural Kynar®	10	50108-19
3/4 (19.1)	Polypropylene	10	50108-20
1 (25.4)	Natural Kynar®	10	50108-21
1 (25.4)	Polypropylene	10	50108-22
Oversized 1 (25.4)	Polypropylene	10	50108-23

Hose Barb Fittings

Tee Unions

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Single barb design tightly “grips” the tubing
– Natural Kynar® is biopharma compatible, USP 661 and BPOG compliant
– Polypropylene (PP)/High-Density Polyethylene meets FDA requirements 21 CFR 177.1520(a)(3) (i) and (c)3.1a, and is RoHS compliant
– Nylon is FDA and RoHS compliant

Easily combine or split fluid flow using tee unions. A single barb on each end of the fitting creates a tight seal to keep the tubing in place.

Tubing ID Dimension in. (mm) (A)	Material	Pack Size	Item Number
1/16 (1.6)	White Nylon	10	50110-87
1/16 (1.6)	Natural Kynar®	10	50110-88
1/16 (1.6)	Polypropylene	10	50110-89
3/32 (2.4)	White Nylon	10	50110-81
3/32 (2.4)	Natural Kynar®	10	50110-82
3/32 (2.4)	Polypropylene	10	50110-83
1/8 (3.2)	White Nylon	10	50110-97
1/8 (3.2)	Natural Kynar®	10	50110-98
1/8 (3.2)	Polypropylene	10	50110-99
1/8 (3.2)	Stainless Steel	10	50111-00
5/32 (4)	White Nylon	10	50110-94

5/32 (4)	Natural Kynar®	10	50110-95
5/32 (4)	Polypropylene	10	50110-96
3/16 (4.8)	White Nylon	10	50111-01
3/16 (4.8)	Natural Kynar®	10	50111-02
3/16 (4.8)	Polypropylene	10	50111-03
1/4 (6.4)	HDPE	10	50111-04
1/4 (6.4)	White Nylon	10	50111-05
1/4 (6.4)	Natural Kynar®	10	50111-06
1/4 (6.4)	Polypropylene	10	50111-07
5/16 (8)	Natural Kynar®	10	50111-08
5/16 (8)	Polypropylene	10	50111-09
3/8 (9.5)	HDPE	10	50111-10
3/8 (9.5)	White Nylon	10	50111-11
3/8 (9.5)	Natural Kynar®	10	50111-12
3/8 (9.5)	Natural Nylon	10	50111-13
3/8 (9.5)	Polypropylene	10	50111-14
1/2 (12.7)	White Nylon	10	50111-15
1/2 (12.7)	Natural Kynar®	10	50111-16
1/2 (12.7)	Polypropylene	10	50111-17
5/8 (15.9)	Natural Kynar®	10	50110-85
5/8 (15.9)	Polypropylene	10	50110-86
3/4 (19.1)	Natural Kynar®	10	50110-90
3/4 (19.1)	Polypropylene	10	50110-91
1 (25.4)	Natural Kynar®	10	50110-92
1 (25.4)	Polypropylene	10	50110-93

Hose Barb Fittings

Straight Reducers

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Single barb design tightly “grips” the tubing
– FDA and RoHS compliant

Easily connect two different size tubing with straight reducers. A single barb on each end of the fitting creates a tight seal to keep the tubing in place.

Tubing ID Dimensions (AxB)	Material	Pack Size	Item Number
3/32 x 1/16 in.	White Nylon	10	50108-47
3/32 x 1/16 in.	Natural Kynar®	10	50108-48
3/32 x 1/16 in.	Polypropylene	10	50108-49
1/8 x 1/16 in.	White Nylon	10	50108-79
1/8 x 1/16 in.	Natural Kynar®	10	50108-80
1/8 x 1/16 in.	Polypropylene	10	50108-81
1/8 x 3/32 in.	White Nylon	10	50108-75
1/8 x 3/32 in.	Natural Kynar®	10	50108-76
1/8 x 3/32 in.	Polypropylene	10	50108-77
1/8 x 3/32 in.	Stainless Steel	10	50108-78
5/32 x 3/32 in.	White Nylon	10	50108-68
5/32 x 3/32 in.	Natural Kynar®	10	50108-69
5/32 x 3/32 in.	Polypropylene	10	50108-70
5/32 x 3/32 in.	Stainless Steel	10	50108-71
5/32 x 1/8 in.	White Nylon	10	50108-72
5/32 x 1/8 in.	Natural Kynar®	10	50108-73
5/32 x 1/8 in.	Polypropylene	10	50108-74
3/16 x 1/16 in.	Natural Kynar®	10	50108-84
3/16 x 1/16 in.	Polypropylene	10	50108-85
3/16 x 3/32 in.	Polypropylene	10	50108-82
3/16 x 3/32 in.	White Nylon	10	50108-83
3/16 x 1/8 in.	White Nylon	10	50108-86
3/16 x 1/8 in.	Natural Kynar®	10	50108-87
3/16 x 1/8 in.	Polypropylene	10	50108-88
1/4 x 1/16 in.	Natural Kynar®	10	50108-91
1/4 x 1/16 in.	Polypropylene	10	50108-92
1/4 x 3/32 in.	Natural Kynar®	10	50108-89
1/4 x 3/32 in.	Polypropylene	10	50108-90
1/4 x 1/8 in.	HDPE	10	50108-96
1/4 x 1/8 in.	White Nylon	10	50108-97
1/4 x 1/8 in.	Natural Kynar®	10	50108-98
1/4 x 1/8 in.	Polypropylene	10	50108-99
1/4 x 5/32 in.	White Nylon	10	50108-93
1/4 x 5/32 in.	Natural Kynar®	10	50108-94
1/4 x 5/32 in.	Polypropylene	10	50108-95
1/4 x 3/16 in.	White Nylon	10	50109-00
1/4 x 3/16 in.	Natural Kynar®	10	50109-01
1/4 x 3/16 in.	Polypropylene	10	50109-02
5/16 x 1/8 in.	Polypropylene	10	50109-05
5/16 x 5/32 in.	Natural Kynar®	10	50109-03
5/16 x 5/32 in.	Polypropylene	10	50109-04
5/16 x 3/16 in.	Natural Kynar®	10	50109-06
5/16 x 3/16 in.	Polypropylene	10	50109-07
5/16 x 1/4 in.	White Nylon	10	50109-08
5/16 x 1/4 in.	Natural Kynar®	10	50109-09
5/16 x 1/4 in.	Polypropylene	10	50109-10
3/8 x 1/8 in.	Natural Kynar®	10	50109-13
3/8 x 1/8 in.	Polypropylene	10	50109-14
3/8 x 5/32 in.	Natural Kynar®	10	50109-11
3/8 x 5/32 in.	Polypropylene	10	50109-12
3/8 x 1/4 in.	White Nylon	10	50109-15
3/8 x 1/4 in.	Natural Kynar®	10	50109-16
3/8 x 1/4 in.	Polypropylene	10	50109-17
3/8 x 5/16 in.	Natural Kynar®	10	50109-18
3/8 x 5/16 in.	Polypropylene	10	50109-19
1/2 x 1/4 in.	Natural Kynar®	10	50109-20
1/2 x 1/4 in.	Polypropylene	10	50109-21

Tubing ID Dimensions (AxB)	Material	Pack Size	Item Number
1/2 x 5/16 in.	Natural Kynar®	10	50109-22
1/2 x 5/16 in.	Polypropylene	10	50109-23
1/2 x 3/8 in.	Natural Kynar®	10	50109-24
1/2 x 3/8 in.	Polypropylene	10	50109-25
5/8 x 1/4 in.	Natural Kynar®	10	50108-50
5/8 x 1/4 in.	Polypropylene	10	50108-51
5/8 x 5/16 in.	Natural Kynar®	10	50108-52
5/8 x 5/16 in.	Polypropylene	10	50108-53
5/8 x 3/8 in.	Natural Kynar®	10	50108-54
5/8 x 3/8 in.	Polypropylene	10	50108-55
5/8 x 1/2 in.	Natural Kynar®	10	50108-56
5/8 x 1/2 in.	Polypropylene	10	50108-57
3/4 x 3/8 in.	Natural Kynar®	10	50108-58
3/4 x 3/8 in.	Polypropylene	10	50108-59
3/4 x 1/2 in.	Natural Kynar®	10	50108-60
3/4 x 1/2 in.	Polypropylene	10	50108-61
1 x 1/2 in.	Natural Kynar®	10	50108-66
1 x 1/2 in.	Polypropylene	10	50108-67
1 x 5/8 in.	Natural Kynar®	10	50108-62
1 x 5/8 in.	Polypropylene	10	50108-63
1 x 3/4 in.	Natural Kynar®	10	50108-64
1 x 3/4 in.	Polypropylene	10	50108-65

Threaded to Hose Barb Fittings

Straight Adapters

– Bioprocess, life sciences, and pharmaceutical industries

– Quick and easy assembly without tools

– Single barb design tightly “grips” the tubing

– FDA and RoHS compliant

Quickly and easily transition from soft tubing to a system that accepts a threaded connection using threaded barb adapters. Threads provide a tight and secure connection; a single barb on the other end of the fitting creates a tight seal to keep the tubing in place.

Tubing ID dimensions in. (mm)	Thread Type	Material	Pack Size	Item Number
1/16 (1.6)	10-32 UNF	White Nylon	10	50107-57
3/32 (2.4)	10-32 UNF	White Nylon	10	50107-56
1/8 (3.2)	10-32 UNF	White Nylon	10	50107-58
1/8 (3.2)	10-32 UNF	Natural Kynar®	10	50107-59
1/8 (3.2)	10-32 UNF	Polypropylene	10	50107-60
1/8 (3.2)	10-32 Taper	White Nylon	10	50107-61
1/8 (3.2)	1/4-28 UNF	White Nylon	10	50107-69
1/8 (3.2)	1/8” NPT(M)	White Nylon	10	50107-71
1/8 (3.2)	1/8” NPT(M)	Natural Kynar®	10	50107-72
1/8 (3.2)	1/8” NPT(M)	Polypropylene	10	50107-73

Tubing ID dimensions in. (mm)	Thread Type	Material	Pack Size	Item Number
1/8 (3.2)	1/4” NPT(M)	White Nylon	10	50107-80
5/32 (4)	1/4-28 UNF(M)	White Nylon	10	50107-68
5/32 (4)	1/4” NPT(M)	White Nylon	10	50107-79
3/16 (4.8)	1/8” NPT(M)	Natural Kynar®	10	50107-74
3/16 (4.8)	1/4” NPT(M)	White Nylon	10	50107-81
1/4 (6.4)	1/8” NPT(M)	White Nylon	10	50107-75
1/4 (6.4)	1/8” NPT(M)	Natural Kynar®	10	50107-76
1/4 (6.4)	1/4” NPT(M)	White Nylon	10	50107-82
1/4 (6.4)	1/4” NPT(M)	Natural Kynar®	10	50107-83
1/4 (6.4)	1/4” NPT(M)	Polypropylene	10	50107-84
1/4 (6.4)	3/8” NPT(M)	White Nylon	10	50107-90
1/4 (6.4)	3/8” NPT(M)	Natural Kynar®	10	50107-91
1/4 (6.4)	1/2” NPT(M)	White Nylon	10	50108-00
1/4 (6.4)	1/2” NPT(M)	Natural Kynar®	10	50108-01
1/4 (6.4)	3/4” NPT(M)	Natural Kynar®	10	50107-65
5/16 (8)	1/4” NPT(M)	White Nylon	10	50107-85
5/16 (8)	3/8” NPT(M)	Natural Kynar®	10	50107-92
5/16 (8)	1/2” NPT(M)	White Nylon	10	50108-02
3/8 (9.5)	1/8” NPT(M)	White Nylon	10	50107-77
3/8 (9.5)	1/8” NPT(M)	Natural Kynar®	10	50107-78
3/8 (9.5)	1/4” NPT(M)	White Nylon	10	50107-86
3/8 (9.5)	1/4” NPT(M)	Natural Kynar®	10	50107-87
3/8 (9.5)	3/8” NPT(M)	White Nylon	10	50107-93
3/8 (9.5)	3/8” NPT(M)	Natural Kynar®	10	50107-94
3/8 (9.5)	3/8” NPT(M)	Polypropylene	10	50107-95
3/8 (9.5)	1/2” NPT(M)	White Nylon	10	50108-03
3/8 (9.5)	1/2” NPT(M)	Natural Kynar®	10	50108-04
3/8 (9.5)	1/2” NPT(M)	Polypropylene	10	50108-05
3/8 (9.5)	3/4” NPT(M)	Natural Kynar®	10	50107-66
1/2 (12.7)	1/4” NPT(M)	Natural Kynar®	10	50107-88
1/2 (12.7)	1/4” NPT(M)	Polypropylene	10	50107-89
1/2 (12.7)	3/8” NPT(M)	Natural Kynar®	10	50107-96
1/2 (12.7)	1/2” NPT(M)	White Nylon	10	50108-06
1/2 (12.7)	1/2” NPT(M)	Natural Kynar®	10	50108-07
1/2 (12.7)	1/2” NPT(M)	Polypropylene	10	50108-08
1/2 (12.7)	3/4” NPT(M)	Natural Kynar®	10	50107-67
5/8 (15.9)	1/2” NPT(M)	White Nylon	10	50107-97
3/4 (19.1)	1/2” NPT(M)	White Nylon	10	50107-98
3/4 (19.1)	1/2” NPT(M)	Natural Kynar®	10	50107-99
3/4 (19.1)	3/4” NPT(M)	Natural Kynar®	10	50107-62
3/4 (19.1)	3/4” NPT(M)	Polypropylene	10	50107-63
1 (25.4)	3/4” NPT(M)	Natural Kynar®	10	50107-64
1 (25.4)	1” NPT(M)	Natural Kynar®	10	50107-70

Cleanroom Hose Barb Fittings

Cole-Parmer® Y Unions

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Single barb design tightly “grips” the tubing
– Natural Kynar® is biopharma compatible, USP 661 and BPOG compliant
– Polypropylene (PP)/High-Density Polyethylene meets FDA requirements 21 CFR 177.1520(a)(3) (i) and (c)3.1a and is RoHS compliant
– Nylon is FDA and RoHS compliant

Easily combine or split fluid flow using Y unions. A single barb on each end of the fitting creates a tight seal to keep the tubing in place. An anti-rotation device on each port prevents tubing from rotating, minimizing kinks.

Tubing ID Dimensions in. (mm)	Material	Pack Size	Item Number
1/16 (1.6)	White Nylon	10	50111-28
1/16 (1.6)	Natural Kynar®	10	50111-29
1/16 (1.6)	Polypropylene	10	50111-30
3/32 (2.4)	White Nylon	10	50111-18
3/32 (2.4)	Natural Kynar®	10	50111-19
3/32 (2.4)	Polypropylene	10	50111-20
1/8 (3.2)	White Nylon	10	50111-33
1/8 (3.2)	Natural Kynar®	10	50111-34
1/8 (3.2)	Polypropylene	10	50111-35
5/32 (4)	Natural Kynar®	10	50111-31
5/32 (4)	Polypropylene	10	50111-32
3/16 (4.8)	HDPE	10	50111-36
3/16 (4.8)	White Nylon	10	50111-37
3/16 (4.8)	Natural Kynar®	10	50111-38
3/16 (4.8)	Polypropylene	10	50111-39
1/4 (6.4)	White Nylon	10	50111-40
1/4 (6.4)	Natural Kynar®	10	50111-41
1/4 (6.4)	Polypropylene	10	50111-42
5/16 (8)	Natural Kynar®	10	50111-43
5/16 (8)	Natural Nylon	10	50111-44
5/16 (8)	Polypropylene	10	50111-45
3/8 (9.5)	White Nylon	10	50111-46
3/8 (9.5)	Natural Kynar®	10	50111-47
3/8 (9.5)	Natural Nylon	10	50111-48
3/8 (9.5)	Polypropylene	10	50111-49
1/2 (12.7)	HDPE	10	50111-50
1/2 (12.7)	White Nylon	10	50111-51
1/2 (12.7)	Natural Kynar®	10	50111-52
1/2 (12.7)	Polypropylene	10	50111-53
5/8 (15.9)	White Nylon	10	50111-21
5/8 (15.9)	Natural Kynar®	10	50111-22
5/8 (15.9)	Polypropylene	10	50111-23
3/4 (19.1)	Natural Kynar®	10	50111-24
3/4 (19.1)	Polypropylene	10	50111-25
1 (25.4)	Natural Kynar®	10	50111-26
1 (25.4)	Polypropylene	10	50111-27

Cleanroom Luer to Hose Barb Fittings

Cole-Parmer® Straight Adapters

– Bioprocess, life sciences, and pharmaceutical industries
– Quick and easy assembly without tools
– Forms a leak-free luer connection with a quick simple turn
– Single barb design tightly “grips” the tubing
– Natural Kynar® is biopharma compatible, USP 661 and BPOG compliant
– Polypropylene (PP) meets FDA requirements 21 CFR 177.1520(a)(3) (i) and (c)3.1a and is RoHS compliant
– Nylon is FDA and RoHS compliant
– CrystalVu™ adheres to standards including USP Class VI and EU 2002/72/EC regulations

Quickly and easily transition from soft tubing to a luer connection using these adapters. Luer fitting is a standardized system comprised of a male taper and a female mating part that provides a leak-free connection.

A single barb on one end of the fitting creates a tight seal to keep the tubing in place. Panel mount fittings have threads designed to be securely attached to a panel, bulkhead, or piece of equipment.

Tubing ID Dimensions in. (mm)	Type	Material	Pack Size	Item Number
1/16 (1.6)	Female luer	CrystalVu™	10	50109-71
1/16 (1.6)		White Nylon	10	50109-72
1/16 (1.6)		Natural Kynar®	10	50109-73
1/16 (1.6)		Polypropylene	10	50109-75
3/32 (2.4)		CrystalVu™	10	50109-66
3/32 (2.4)		White Nylon	10	50109-67
3/32 (2.4)		Natural Kynar®	10	50109-68
3/32 (2.4)		Polypropylene	10	50109-70
1/8 (3.2)		CrystalVu™	10	50109-81
1/8 (3.2)		White Nylon	10	50109-82
1/8 (3.2)		Natural Kynar®	10	50109-83
1/8 (3.2)		Polypropylene	10	50109-85
5/32 (4)		CrystalVu™	10	50109-76
5/32 (4)		White Nylon	10	50109-77
5/32 (4)		Natural Kynar®	10	50109-78
5/32 (4)		Polypropylene	10	50109-80
3/16 (4.8)		CrystalVu™	10	50109-86
3/16 (4.8)		White Nylon	10	50109-87
3/16 (4.8)		Natural Kynar®	10	50109-88
3/16 (4.8)		Polypropylene	10	50109-90
1/4 (6.4)		CrystalVu™	10	50109-91
1/4 (6.4)		White Nylon	10	50109-92
1/4 (6.4)		Natural Kynar®	10	50109-93
1/4 (6.4)		Polypropylene	10	50109-95
1/16 (1.6)	Male Luer	CrystalVu™	10	50110-07
1/16 (1.6)		Natural Kynar®	10	50110-09
1/16 (1.6)		Polypropylene	10	50110-11
1/16 (1.6)		White Nylon	10	50110-08
3/32 (2.4)		CrystalVu™	10	50110-02
3/32 (2.4)		Natural Kynar®	10	50110-04
3/32 (2.4)		Polypropylene	10	50110-06
3/32 (2.4)		White Nylon	10	50110-03

Tubing ID Dimensions in. (mm)	Type	Material	Pack Size	Item Number
1/8 (3.2)	Male Luer	CrystalVu™	10	50110-17
1/8 (3.2)		Natural Kynar®	10	50110-19
1/8 (3.2)		Polypropylene	10	50110-21
1/8 (3.2)		White Nylon	10	50110-18
5/32 (4)		CrystalVu™	10	50110-12
5/32 (4)		Natural Kynar®	10	50110-14
5/32 (4)		Polypropylene	10	50110-16
5/32 (4)		White Nylon	10	50110-13
3/16 (4.8)		CrystalVu™	10	50110-22
3/16 (4.8)		Natural Kynar®	10	50110-24
3/16 (4.8)		Polypropylene	10	50110-26
3/16 (4.8)		White Nylon	10	50110-23
1/4 (6.4)		CrystalVu™	10	50110-27
1/4 (6.4)		Natural Kynar®	10	50110-29
1/4 (6.4)		Polypropylene	10	50110-31
1/4 (6.4)		White Nylon	10	50110-28
1/16 (1.6)	Male Slip Luer	CrystalVu™	10	50114-43
1/16 (1.6)		Natural Kynar®	10	50114-87
1/16 (1.6)		Polypropylene	10	50114-61
1/16 (1.6)		White Nylon	10	50115-32
3/32 (2.4)		CrystalVu™	10	50114-42
3/32 (2.4)		Natural Kynar®	10	50114-86
3/32 (2.4)		Polypropylene	10	50114-60
3/32 (2.4)		White Nylon	10	50115-31
1/8 (3.2)		CrystalVu™	10	50114-45
1/8 (3.2)		Natural Kynar®	10	50114-89
1/8 (3.2)		Polypropylene	10	50114-63
1/8 (3.2)		White Nylon	10	50115-34
5/32 (4)		CrystalVu™	10	50114-44
5/32 (4)		Natural Kynar®	10	50114-88
5/32 (4)		Polypropylene	10	50114-62
5/32 (4)		White Nylon	10	50115-33
3/16 (4.8)		CrystalVu™	10	50114-46
3/16 (4.8)		Natural Kynar®	10	50114-90
3/16 (4.8)		Polypropylene	10	50114-64
3/16 (4.8)		White Nylon	10	50115-35
1/4 (6.4)		CrystalVu™	10	50114-47
1/4 (6.4)		Natural Kynar®	10	50114-91
1/4 (6.4)		Polypropylene	10	50114-65
1/4 (6.4)		White Nylon	10	50115-36
1/16 (1.6)	Rotating Male Luer Lock	CrystalVu™	10	50114-37
1/16 (1.6)		Polypropylene	10	50114-55
1/16 (1.6)		White Nylon	10	50115-07
3/32 (2.4)		CrystalVu™	10	50114-36
3/32 (2.4)		Polypropylene	10	50114-54
3/32 (2.4)		White Nylon	10	50115-06
1/8 (3.2)		CrystalVu™	10	50114-39
1/8 (3.2)		Polypropylene	10	50114-57
1/8 (3.2)		White Nylon	10	50115-09
5/32 (4)		CrystalVu™	10	50114-38
5/32 (4)		Polypropylene	10	50114-56
5/32 (4)		White Nylon	10	50115-08
3/16 (4.8)		CrystalVu™	10	50114-40
3/16 (4.8)		Polypropylene	10	50114-58
3/16 (4.8)		White Nylon	10	50115-10
1/4 (6.4)		CrystalVu™	10	50114-41
1/4 (6.4)		Polypropylene	10	50114-59
1/4 (6.4)		White Nylon	10	50115-11

Cleanroom Luer to Plug Fittings

Cole-Parmer® Straight Adapters

- Bioprocess, life sciences, and pharmaceutical industries
- Forms a leak-free luer connection with a quick simple turn
- Large-bore luer fittings offer higher flow rates compared to standard luers
- Natural Kynar® is biopharma compatible, USP 661 and BPOG compliant
- Polypropylene (PP) meets FDA requirements 21 CFR 177.1520(a)(3) (i) and (c)3.1a and is RoHS compliant
- Nylon is FDA and RoHS compliant
- CrystalVu™ adheres to standards including USP Class VI and EU 2002/72/EC regulations

Luer fitting is a standardized system comprised of a male taper and a female mating part that provides a leak-free connection. Simply connect the plug to the mating luer adapter to stop the fluid flow.

The tether adds a layer of convenience and safety by ensuring that the cap or plug has an attachment point when not in use, reducing the risk of contamination and loss.

Description	Material	Pack Size	Item Number
Female luer	CrystalVu™	10	50109-96
Female luer	White Nylon	10	50109-97
Female luer	Natural Kynar®	10	50109-98
Female luer	Natural Nylon	10	50109-99
Female luer	Polypropylene	10	50110-00
Female luer with tether	Polypropylene	10	50110-01
Male luer	CrystalVu™	10	50110-32
Male luer	White Nylon	10	50110-33
Male luer	Natural Kynar®	10	50110-34
Male luer	Natural Nylon	10	50110-35
Male luer	Polypropylene	10	50110-36
Male luer lock	White Nylon	10	50110-50
Male luer lock	Natural Kynar®	10	50110-51
Male luer lock	Natural Nylon	10	50110-52
Male luer lock	Polypropylene	10	50110-53
Male luer slip	CrystalVu™	10	50110-54
Male luer slip	White Nylon	10	50110-55
Male luer slip	Natural Kynar®	10	50110-56
Male luer slip	Polypropylene	10	50110-57
Male luer slip	Natural Nylon	10	50110-58
Rotating male luer	CrystalVu™	10	50110-37
Rotating male luer	White Nylon	10	50110-38
Rotating male luer	Natural Kynar®	10	50110-39
Rotating male luer	Natural Nylon	10	50110-40
Rotating male luer	Polypropylene	10	50110-41
Rotating male luer lock	CrystalVu™	10	50110-49

Description	Type	Material	Pack Size	Item Number
Female luer x female luer	Straight	CrystalVu™	10	50114-21
		White Nylon	10	50114-22
		Natural Kynar®	10	50114-23
		Natural Nylon	10	50114-24
		Polypropylene	10	50114-25
Female slip luer x male slip luer	Elbow	CrystalVu™	10	50115-43
		White Nylon	10	50115-44
		Natural Kynar®	10	50115-45
		Natural Nylon	10	50115-46
		Polypropylene	10	50115-47

Cleanroom Luer Fittings

Cole-Parmer® Luer Unions

- Bioprocess, life sciences, and pharmaceutical industries
- Forms a leak-free luer connection with a quick simple turn
- Natural Kynar® is biopharma compatible, USP 661 and BPOG compliant
- Polypropylene (PP) meets FDA requirements 21 CFR 177.1520(a)(3) (i) and (c)3.1a and is RoHS compliant
- Nylon is FDA and RoHS compliant
- CrystalVu™ adheres to standards including USP Class VI and EU 2002/72/EC regulations

Luer fitting is a standardized system comprised of a male taper and a female mating part that provides a leak-free connection.

These straight unions feature a female luer coupler on each end to connect two male luer fittings together. The elbow unions feature a male luer coupler on each end of a 90° bend to connect two female luer fittings together.

Luer to Threaded Fittings

Straight and Elbow Adapters

– Bioprocess, life sciences, and pharmaceutical industries

– Polypropylene (PP) fittings meet FDA requirements 21 CFR 177.1520(a)(3)(i) and (c)3.1a and are RoHS compliant

– Nylon fittings are FDA and RoHS compliant

These adapters are designed to easily transition your fluid transfer system from a luer to thread connection. Luer fittings ensure a tight and reliable connection while allowing for quick and easy assembly and disassembly without the need for tools.

Threaded fittings are commonly used for sealing and connecting pipe fittings and are designed to create a tight seal when assembled, preventing leakage of fluids or gases under pressure.

The integral lock ring is a feature built into the male luer fitting that ensures the fittings remain firmly connected until intentionally disconnected.

Description	Thread Type	Type	Material	Pack Size	Item Number
Female Luer Thread Style with 1/4" Hex	10-32 UNF(M)	Straight	White Nylon	25	50120-00
Female Luer Thread Style with 1/4" Hex	10-32 UNF(M)	Straight	Polycarbonate	25	50120-01
Female Luer Thread Style with 5/16" Hex	1/4-28 UNF(M) Bottom Sealing	Straight	White Nylon	25	50120-35
Female Luer Thread Style with 5/16" Hex	1/4-28 UNF(M) Bottom Sealing	Straight	Polypropylene	25	50120-92
Female Luer Thread Style with 5/16" Hex	1/4-28 UNF(M)	Straight	White Nylon	25	50120-84
Female Luer Thread Style with 5/16" Hex	1/4-28 UNF(M)	Straight	Polypropylene	25	50120-85
Female Luer Thread Style with 5/16" Hex	1/4-28 UNF(M)	Straight	Polycarbonate	25	50120-86
Female Luer Thread with 7/16" Hex	1/8-27 NPT(M)	Straight	White Nylon	25	50119-94
Female Luer Thread with 7/16" Hex	1/8-27 NPT(M)	Straight	Polypropylene	25	50119-95
Female Luer Thread with 7/16" Hex	1/8-27 NPT(M)	Elbow	White Nylon	25	50120-71
Male Luer Integral Lock Ring	1/4-28 UNF(M)	Straight	White Nylon	25	50120-87
Male Luer Integral Lock Ring	10-32(M) Special Taper	Straight	Polypropylene	25	50120-89
Male Luer Integral Lock Ring with 7/16" Hex	1/8-27 NPT(M) Thread	Straight	Polypropylene	25	50119-91
Male Luer Integral Lock Ring with 9/16" Hex	1/4-18 NPT(M) Thread	Straight	Polypropylene	25	50120-91
Male Luer Integral Lock Ring with 9/16" Hex	1/4-18 NPT(M) Thread	Straight	White Nylon	25	50119-93

CPC® (Colder) Quick-Disconnect Fittings

– Bioprocess, life sciences, and pharmaceutical industries

– Simple "flip, click, and pull" design minimizes operator error

– Create quick and easy sterile connections, even in a non-sterile environment

– Robust construction provides reliable and repeatable fluid transfer

Quick-disconnect fittings are specialized connectors designed for quick and easy connection and disconnection of fluid lines. Fitting halves lock into place immediately for a secure connection.

For a complete coupling set, one body and one insert, or two genderless fittings of the same series are required. Available with or without shutoff valves to prevent fluid loss during disconnection.

Description	Type	Flow Pattern	Material	Connection ID Dimension in. (mm)	Pack Size	Item Number
MicroCNX®	Hose Barb Adapter	Straight	Polycarbonate	1/16 (1.6)	1	50112-14
				3/32 (2.4)	1	50112-16
				1/8 (3.2)	1	50112-15
AseptiQuik® G	Hose Barb Adapter		Polycarbonate	1/4 (6.4)	1	50111-54
			High-Temperature Polycarbonate	1/4 (6.4)	1	50111-55
			Polyphenylsulfone	1/4 (6.4)	1	50111-62
			Polycarbonate	1/4 (6.4)	1	50111-74
			Polycarbonate	3/8 (9.5)	1	50111-56
			High-Temperature Polycarbonate	3/8 (9.5)	1	50111-57
			Polyphenylsulfone	3/8 (9.5)	1	50111-63
			Polycarbonate	3/8 (9.5)	1	50111-75
			Polycarbonate	1/2 (12.7)	1	50111-58
			High-Temperature Polycarbonate	1/2 (12.7)	1	50111-59
			Polyphenylsulfone	1/2 (12.7)	1	50111-64
			Polycarbonate	1/2 (12.7)	1	50111-76
			Polycarbonate	3/4 (19.1)	1	50111-60
			High-Temperature Polycarbonate	3/4 (19.1)	1	50111-61
			Polyphenylsulfone	3/4 (19.1)	1	50111-65
	Sanitary Adapter		Polycarbonate	3/4 (19.1)	1	50111-68
			High-Temperature Polycarbonate	3/4 (19.1)	1	50111-69
			Polyphenylsulfone	3/4 (19.1)	1	50111-72
			Polycarbonate	1-1/2 (38.1)	1	50111-70
			High-Temperature Polycarbonate	1-1/2 (38.1)	1	50111-71
			Polyphenylsulfone	1-1/2 (38.1)	1	50111-73
	MPC™ Insert		Polycarbonate	—	1	50111-66
			High-Temperature Polycarbonate	—	1	50111-67
AseptiQuik® L	Hose Barb Adapter		Polycarbonate	3/4 (19.1)	1	50111-81
			High-Temperature Polycarbonate	3/4 (19.1)	1	50111-82
			Polyphenylsulfone	3/4 (19.1)	1	50111-85
			Polycarbonate	1 (25.4)	1	50111-83
			High-Temperature Polycarbonate	1 (25.4)	1	50111-84
			Polyphenylsulfone	1 (25.4)	1	50111-86

Description	Type	Flow Pattern	Material	Connection ID Dimension in. (mm)	Pack Size	Item Number
AseptiQuik® L	Sanitary Adapter	Straight	Polycarbonate	1-1/2 (38.1)	1	50111-87
			High-Temperature Polycarbonate	1-1/2 (38.1)	1	50111-88
			Polyphenylsulfone	1-1/2 (38.1)	1	50111-89
AseptiQuik® S	Hose Barb Adapter		Polycarbonate	1/8 (3.2)	1	50111-90
			High-Temperature Polycarbonate	1/8 (3.2)	1	50111-91
			Polycarbonate	1/4 (6.4)	1	50111-92
			High-Temperature Polycarbonate	1/4 (6.4)	1	50111-93
			Polycarbonate	3/8 (9.5)	1	50111-94
			High-Temperature Polycarbonate	3/8 (9.5)	1	50111-95
	Sanitary Adapter		Polycarbonate	1/4 (6.4)	1	50111-98
			High-Temperature Polycarbonate	1/4 (6.4)	1	50111-99
			Polycarbonate	3/4 (19.1)	1	50112-00
			High-Temperature Polycarbonate	3/4 (19.1)	1	50112-01
			Polycarbonate	3/4 x 3/4 (19.1 x 19.1)	1	50112-02
			High-Temperature Polycarbonate	3/4 x 3/4 (19.1 x 19.1)	1	50112-03
			Polycarbonate	3/4 x 1-1/2 (19.1 x 38.1)	1	50112-04
			High-Temperature Polycarbonate	3/4 x 1-1/2 (19.1 x 38.1)	1	50112-05
	MPC™ Insert		Polycarbonate	—	1	50111-96
			High-Temperature Polycarbonate	—	1	50111-97
AspetiQuik® W	Hose Barb Adapter		High-Temperature Polycarbonate	1 (25.4)	1	50112-10
			High-Temperature Polycarbonate	1-1/4 (31.8)	1	50112-11
			High-Temperature Polycarbonate	1-1/2 (38.1)	1	50112-12
	Sanitary Adapter		High-Temperature Polycarbonate	1-1/2 (38.1)	1	50112-13
AseptiQuik® STC II	AspetiQuik® G to Sanitary Adapter to Sanitary Adapter		Polycarbonate	3/4 x 3/4 (19.1 x 19.1)	1	50111-77
			High-Temperature Polycarbonate	3/4 x 3/4 (19.1 x 19.1)	1	50111-78
			Polycarbonate	3/4 x 1-1/2 (19.1 x 38.1)	1	50111-79
			High-Temperature Polycarbonate	3/4 x 1-1/2 (19.1 x 38.1)	1	50111-80
HFC	Hose Barb Body		Polysulfone with Alloy C-276 Valve	1/4 (6.4)	1	50112-23
			Polysulfone with Alloy C-276 Valve	3/8 (9.5)	1	50112-25
			Polysulfone with Alloy C-276 Valve	1/2 (12.7)	1	50112-27
	Hose Barb Insert		Polysulfone with Alloy C-276 Valve	1/4 (6.4)	1	50112-29
			Polysulfone with Alloy C-276 Valve	3/8 (9.5)	1	50112-31
			Polysulfone with Alloy C-276 Valve	1/2 (12.7)	1	50112-33
	Hose Barb Coupling Set		Polysulfone with Alloy C-276 Valve	1/4 (6.4)	1	50112-34
			Polysulfone with Alloy C-276 Valve	3/8 (9.5)	1	50112-35
			Polysulfone with Alloy C-276 Valve	1/2 (12.7)	1	50112-36
HFC39	Hose Barb Body		Polysulfone with Stainless Steel Valve	1/4 (6.4)	1	50112-22
			Polysulfone with Stainless Steel Valve	3/8 (9.5)	1	50112-24
			Polysulfone with Stainless Steel Valve	1/2 (12.7)	1	50112-26
	Hose Barb Insert		Polysulfone	1/4 (6.4)	1	50112-17
			Polysulfone	3/8 (9.5)	1	50112-18
			Polysulfone	1/2 (12.7)	1	50112-19
			Polysulfone with Stainless Steel Valve	1/4 (6.4)	1	50112-28
			Polysulfone with Stainless Steel Valve	3/8 (9.5)	1	50112-30
			Polysulfone with Stainless Steel Valve	1/2 (12.7)	1	50112-32
	Plug Body	—	Polysulfone	—	1	50112-20
	Cap Insert	—	Polysulfone	—	1	50112-21

Description	Type	Flow Pattern	Material	Connection ID Dimension in. (mm)	Pack Size	Item Number
MPC™	Hose Barb Body	Straight	Polysulfone	1/8 (3.2)	25	50112-40
			Polycarbonate	1/8 (3.2)	25	50112-38
			Polycarbonate	1/4 (6.4)	25	50112-42
			Polysulfone	1/4 (6.4)	25	50112-44
			Polycarbonate	3/8 (9.5)	25	50112-46
			Polysulfone	3/8 (9.5)	25	50112-48
	Hose Barb Body with Lock		Polycarbonate	1/8 (3.2)	25	50112-86
			Polysulfone	1/8 (3.2)	25	50112-88
			Polycarbonate	1/4 (6.4)	25	50112-90
			Polysulfone	1/4 (6.4)	25	50112-92
			Polycarbonate	3/8 (9.5)	25	50112-94
			Polysulfone	3/8 (9.5)	25	50112-96
	Hose Barb Insert		Polysulfone	1/8 (3.2)	25	50112-58
			Polycarbonate with Buna-N O-Ring	1/8 (3.2)	25	50112-54
			Polycarbonate with Silicone O-Ring	1/8 (3.2)	25	50112-56
			Polycarbonate with Buna-N O-Ring	1/4 (6.4)	25	50112-60
			Polycarbonate with Silicone O-Ring	1/4 (6.4)	25	50112-62
			Polysulfone	1/4 (6.4)	25	50112-64
			Polycarbonate with Buna-N O-Ring	3/8 (9.5)	25	50112-66
			Polycarbonate with Silicone O-Ring	3/8 (9.5)	25	50112-68
			Polysulfone	3/8 (9.5)	25	50112-70
	Sanitary Body		Polysulfone	3/4 (19.1)	1	50112-81
			Polysulfone	1 (25.4)	1	50112-82
	Sanitary Insert		Polysulfone	3/4 (19.1)	1	50112-83
			Polysulfone	1-1/2 (38.1)	1	50112-84
	Body to Body Adapter		Polysulfone	—	1	50112-50
			Polycarbonate	—	1	50112-49
	Plug Body	Plug	Polycarbonate	—	25	50112-74
			Polysulfone	—	25	50112-76
	Cap Insert	Cap	Polycarbonate	—	25	50112-78
			Polysulfone	—	25	50112-80
	Cap Insert with Lock		Polycarbonate	—	25	50112-98
			Polysulfone	—	25	50113-00
	Insert to Insert Adapter	Straight	Polysulfone	—	1	50112-71
MPX®	Hose Barb Body		Polycarbonate	1/2 (12.7)	25	50113-08
	Hose Barb Body		Polysulfone	1/2 (12.7)	25	50113-10
	Hose Barb Body with Lock		Polycarbonate	1/2 (12.7)	25	50113-34
	Hose Barb Body with Lock		Polysulfone	1/2 (12.7)	25	50113-36
	Hose Barb Insert		Polycarbonate	3/8 (9.5)	25	50113-14
	Hose Barb Insert		Polysulfone	3/8 (9.5)	25	50113-16
	Hose Barb Insert		Polycarbonate	1/2 (12.7)	25	50113-18
	Hose Barb Insert		Polysulfone	1/2 (12.7)	25	50113-20
	Sanitary Body		Polysulfone	3/4 (19.1)	1	50113-30
	Sanitary Insert		Polysulfone	3/4 (19.1)	1	50113-31
	Sanitary Insert		Polysulfone	1-1/2 (38.1)	1	50113-32
	Body to Body Adapter		Polycarbonate	—	1	50113-11
	Body to Body Adapter		Polysulfone	—	1	50113-12
	Plug Body	Plug	Polycarbonate	—	25	50113-23
	Plug Body		Polysulfone	—	25	50113-25

Description	Type	Flow Pattern	Material	Connection ID Dimension in. (mm)	Pack Size	Item Number
MPX®	Cap Insert	—	Polycarbonate	—	25	50113-27
	Cap Insert		Polysulfone	—	25	50113-29
	Cap Insert with Lock		Polycarbonate	—	25	50113-38
	Cap Insert with Lock		Polysulfone	—	25	50113-40
	Insert to Insert Adapter	Straight	Polysulfone	—	1	50113-21
MPC™ to MPX®	Body to Body Adapter		Polycarbonate	—	1	50112-51
			Polysulfone	—	1	50112-52
	Insert to Insert Adapter		Polysulfone	—	1	50112-72
MPU®	Hose Barb Body		Polysulfone	3/4 (19.1)	1	50113-01
	Hose Barb Body		Polysulfone	1 (25.4)	1	50113-02
	Hose Barb Insert		Polysulfone	3/4 (19.1)	1	50113-03
	Hose Barb Insert		Polysulfone	1 (25.4)	1	50113-04
	Plug Body	—	Polysulfone	—	1	50113-05
	Cap Insert		Polysulfone	—	1	50113-06

Steam-Thru® Sanitary Steam-in-Place Connectors

CPC® (Colder) Quick-Disconnect Fittings

- Bioprocess, life sciences, and pharmaceutical industries
- Quick and easy assembly without tools
- Single barb design tightly “grips” the tubing
- Innovative three-port steam design
- Steam-Thru II thumb latch secures valve position
- 3/4” sanitary connection for condensate port

The CPC (Colder) Steam-Thru connectors feature a unique three-port design for a true steam-through steam-in-place (SIP) process, eliminating dead legs and the need for a laminar flow hood. Use the Steam-Thru SIP connection to sterilize the fitting while connected to stainless steel equipment.

The two cycle connectors offer the flexibility of “steam on” and “steam off” functionality, allowing a second SIP cycle following media transfer. The “steam off” function helps minimize cross-contamination risks associated with reusable components.

Connection ID Dimensions in. (mm)	Type	Material	Pack Size	Item Number
3/8 ID x 3/4 x 3/4 Sanitary	Single Cycle	Polysulfone with Polyethylene Sleeve	1	50113-42
3/8 ID x 3/4 x 3/4 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-46
3/8 ID x 3/4 x 1-1/2 Sanitary		Polysulfone with Polyethylene Sleeve	1	50113-44
3/8 ID x 3/4 x 1-1/2 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-48
1/2 ID x 3/4 x 3/4 Sanitary		Polysulfone with Polyethylene Sleeve	1	50113-41
1/2 ID x 3/4 x 3/4 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-45
1/2 ID x 3/4 x 1-1/2 Sanitary		Polysulfone with Polyethylene Sleeve	1	50113-43
1/2 ID x 3/4 x 1-1/2 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-47
3/8 ID x 3/4 x 3/4 Sanitary	Two Cycle	Polysulfone with Polycarbonate Sleeve	1	50113-50
3/8 ID x 3/4 x 1-1/2 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-52
1/2 ID x 3/4 x 3/4 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-49
1/2 ID x 3/4 x 1-1/2 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-51
3/4 ID x 3/4 x 3/4 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-53
3/4 ID x 3/4 x 1-1/2 Sanitary		Polysulfone with Polycarbonate Sleeve	1	50113-54

Sanitary Clamp Fittings

Cole-Parmer’s range of sanitary fittings are meticulously designed to meet the stringent demands of industries requiring high levels of cleanliness and hygiene. They are crafted to prevent contamination, ensuring the highest standards of purity and reliability in fluid handling systems. Our fittings provide the security and performance needed to keep your operations running smoothly and efficiently. Choose our sanitary fittings for their durability, compliance, and ease of use, and experience the difference in your fluid handling systems.

Clamp Size (in.)	Material	Pack Size	Item Number
Straight Concentric Reducers			
1 x 3/4	Polypropylene	1	50118-92
1 x 3/4	316L Stainless Steel	1	50118-00
1-1/2 x 3/4	Polypropylene	1	50118-93
1-1/2 x 1	Polypropylene	1	50118-96
1-1/2 x 1	316L Stainless Steel	1	50118-01
2 x 3/4	Polypropylene	1	50118-94
2 x 1	Polypropylene	1	50118-97
2 x 1	316L Stainless Steel	1	50118-02
2 x 1-1/2	Polypropylene	1	50118-99
2 x 1-1/2	316L Stainless Steel	1	50118-03
3 x 3/4	Polypropylene	1	50118-95
3 x 1	Polypropylene	1	50118-98
3 x 1-1/2	Polypropylene	1	50119-00
Straight Eccentric Reducers			
1 x 3/4	316L Stainless Steel	1	50118-04
1-1/2 x 1	316L Stainless Steel	1	50118-05
2 x 1	316L Stainless Steel	1	50118-06
Hose Barb Adapters			
3/4 Mini Tri-Clamp x 1/8 ID	Polypropylene	1	50119-01
3/4 Clamp x 1/8 ID	316L Stainless Steel	1	50118-07
3/4 Mini Tri-Clamp x 3/16 ID	Polypropylene	1	50119-02
3/4 Mini Tri-Clamp x 1/4 ID	Polypropylene	1	50119-03
3/4 Clamp x 1/4 ID	316L Stainless Steel	1	50118-08
3/4 Mini Tri-Clamp x 3/8 ID	Polypropylene	1	50119-04
3/4 Clamp x 3/8 ID	316L Stainless Steel	1	50118-09
3/4 Mini Tri-Clamp x 1/2 ID	Polypropylene	1	50119-05
3/4 Clamp x 1/2 ID	316L Stainless Steel	1	50118-10
3/4 Clamp x 3/4 ID	316L Stainless Steel	1	50118-11
1 Clamp x 1 ID	316L Stainless Steel	1	50118-12
1-1/2 Tri-Clamp x 1/4 ID	Polypropylene	1	50119-06
1-1/2 Tri-Clamp x 3/8 ID	Polypropylene	1	50119-07
1-1/2 Tri-Clamp x 1/2 ID	Polypropylene	1	50119-08
1-1/2 Tri-Clamp x 3/4 ID	Polypropylene	1	50119-09
1-1/2 Tri-Clamp x 1 ID	Polypropylene	1	50119-10

Clamp Size (in.)	Material	Pack Size	Item Number
1-1/2 Clamp x 1-1/2 ID	316L Stainless Steel	1	50118-13
2 Clamp x 2 ID	316 Stainless Steel	1	50118-14
Threaded Adapters			
3/4 Clamp x 1/8 NPT(M)	316L Stainless Steel	1	50118-15
3/4 Clamp x 1/4 NPT(M)	316L Stainless Steel	1	50118-16
3/4 Clamp x 3/8 NPT(M)	316L Stainless Steel	1	50118-17
3/4 Clamp x 1/2 NPT(M)	316L Stainless Steel	1	50118-18
3/4 Clamp x 3/4 NPT(M)	316L Stainless Steel	1	50118-19
1 Clamp x 3/4 NPT(M)	316L Stainless Steel	1	50118-20
1 Clamp x 1 NPT(M)	316L Stainless Steel	1	50118-21
1 Clamp x 1-1/2 NPT(M)	316L Stainless Steel	1	50118-22
1-1/2 Clamp x 3/4 NPT(M)	316L Stainless Steel	1	50118-23
1-1/2 Clamp x 1 NPT(M)	316L Stainless Steel	1	50118-24
1-1/2 Clamp x 1-1/4 NPT(M)	316L Stainless Steel	1	50118-25
1-1/2 Clamp x 1-1/2 NPT(M)	316L Stainless Steel	1	50118-26
45° Elbow Unions			
3/4	316L Stainless Steel	1	50118-31
1	316L Stainless Steel	1	50118-32
1-1/2	316L Stainless Steel	1	50118-33
2	316L Stainless Steel	1	50118-34
90° Elbow Unions			
3/4	Polypropylene	1	50118-89
3/4	316L Stainless Steel	1	50118-27
1	Polypropylene	1	50118-90
1	316L Stainless Steel	1	50118-28
1-1/2	Polypropylene	1	50118-91
1-1/2	316L Stainless Steel	1	50118-29
2	316L Stainless Steel	1	50118-30
Tee Unions			
3/4	Polypropylene	1	50118-86
3/4	316L Stainless Steel	1	50118-35
1	Polypropylene	1	50118-87
1	316L Stainless Steel	1	50118-36
1-1/2	Polypropylene	1	50118-88
1-1/2	316L Stainless Steel	1	50118-37
2	316L Stainless Steel	1	50118-38
Cross Unions			
1	316L Stainless Steel	1	50118-39
1-1/2	316L Stainless Steel	1	50118-40
2	316L Stainless Steel	1	50118-41
Sanitary Caps			
3/4 Clamp x Cap	Polypropylene	100	50118-67
1-1/2 Clamp x Cap	Polypropylene	100	50118-72

Sanitary Clamps
Cole-Parmer®

Cole-Parmer's range of sanitary fittings are meticulously designed to meet the stringent demands of industries requiring high levels of cleanliness and hygiene. They are crafted to prevent contamination, ensuring the highest standards of purity and reliability in fluid handling systems.

Use the sanitary clamps with sanitary fittings to create a leakproof connection. These easy-to-use clamps are made from 304 stainless steel or Glass-Filled Nylon.

Clamp Size (in.)	Material	Pack Size	Item Number
1/2 to 3/4	304 Stainless Steel	1	50118-42
3/4	Glass-Filled Nylon	1	50118-81
1 to 1-1/2	304 Stainless Steel	1	50118-43
1-1/2	Glass-Filled Nylon	1	50118-82
2	Glass-Filled Nylon	1	50118-83
2	304 Stainless Steel	1	50118-44
2-1/2	304 Stainless Steel	1	50118-45
3	Glass-Filled Nylon	1	50118-84
3	304 Stainless Steel	1	50118-46
4	Glass-Filled Nylon	1	50118-85
4	304 Stainless Steel	1	50118-47

Sanitary Gaskets
Cole-Parmer®

Cole-Parmer sanitary gaskets are compatible with Tri-Clamp® style fittings. The gasket is placed between the two fittings, and the clamp holds the assembly together. This design provides a highly sanitary connection that is easy to assemble and disassemble, making it perfect for processes requiring regular maintenance and cleaning.

Black Buna gaskets are made of a synthetic rubber compound that is FDA and 3A compliant, offering excellent resistance to many hydrocarbons, fats, oils, greases, hydraulic fluids, and chemicals. Peroxide-cured black EPDM gaskets are FDA, USP Class VI, and 3A compliant and offer excellent resistance to water, steam, and mild acidic or alkaline environments, making them suitable for SIP and CIP processes.

Black FKM gaskets are made from high-quality fluorocarbon rubber material that is FDA, USP Class VI, and 3A compliant and provide exceptional chemical, temperature, and pressure resistance, making them suitable for SIP and CIP processes.

Platinum-cured silicone gaskets are non-toxic and highly biocompatible gaskets that meet FDA, USP, and 3A compliance, making them ideal for pharmaceutical, food, and beverage applications.

PTFE gaskets are FDA, USP Class VI, and 3A compliant and offer excellent chemical, heat, stress, and corrosion resistance for worry-free and leak-free fluid transfer.

Clamp Size (in.)	Material	Pack Size	Item Number
1/2	Black Buna	10	50134-00
1/2	Black EPDM	10	50133-70
1/2	Black FKM	10	50133-80
1/2	Platinum-Cured Silicone	10	50133-90
1/2	PTFE	10	50133-60
3/4	Black Buna	10	50134-01
3/4	Black EPDM	10	50133-71
3/4	Black FKM	10	50133-81
3/4	Platinum-Cured Silicone	10	50133-91

Clamp Size (in.)	Material	Pack Size	Item Number
3/4	PTFE	10	50133-61
1	Black Buna	10	50134-02
1	Black EPDM	10	50133-72
1	Black FKM	10	50133-82
1	Platinum-Cured Silicone	10	50133-92
1	PTFE	10	50133-62
1-1/2	Black Buna	10	50134-03
1-1/2	Black EPDM	10	50133-73
1-1/2	Black FKM	10	50133-83
1-1/2	Platinum-Cured Silicone	10	50133-93
1-1/2	PTFE	10	50133-63
2	Black Buna	10	50134-04
2	Black EPDM	10	50133-74
2	Black FKM	10	50133-84
2	Platinum-Cured Silicone	10	50133-94
2	PTFE	10	50133-64
2-1/2	Black Buna	10	50134-05
2-1/2	Black EPDM	10	50133-75
2-1/2	Black FKM	10	50133-85
2-1/2	Platinum-Cured Silicone	10	50133-95
2-1/2	PTFE	10	50133-65

Syringe Pumps

Legacy Syringe Pump

KDS Scientific

– Accepts a single syringe with 10 µL to 60 mL capacity
– Quickly set parameters using menu-driven setup
– Precise flow control with less than ±1% accuracy
– Dispense up to 423 mL/hr (with a 60 mL syringe)

The single-syringe infusion pump combines precision with simplicity to deliver accurate amount of fluid every time. Pump accommodates a syringe ranging from 10 µL to 60 mL. A button release of drive nut offers easy syringe installation.

Model	No. of Syringes	Mode	Programmable	Accuracy	Syringe Size	Flow Rate	Power	Item Number
Legacy KDS 100	1	Infusion	No	<±1%	10 µL to 60 mL	1667 pL/min to 7.05 mL/min	110 VAC, 50/60 Hz	51005-10
							230 VAC, 50/60 Hz	51005-11

Legato® Syringe Pump

KDS Scientific

– Infusion, withdrawal, and programmable multi-step capabilities
– Holds one or two syringes from 0.5 µl to 140 mL
– High-resolution color touch screen with intuitive icon-driven setup
– Precise flow control with reduced flow pulsation

The Legato series syringe pumps combine superior flow performance with intuitive usability and advanced connectivity. The high-resolution 4.3" color touchscreen display is a standout feature, which shows all pump operating parameters on a single screen including, flow rate, volume delivered, elapsed time, time remaining, and syringe selection. Core features like USB, TTL, and RS-485 communication enable seamless integration with PCs and laboratory automation systems. Daisy-chain up to 99 pumps for synchronized multi-pump workflows. Unique to the Legato design, the screen orientation rotates automatically when placed on its side, reducing the pump's footprint by four times to maximize valuable bench space.

Model	No. of Syringes	Mode	Programmable	Accuracy	Syringe Size	Flow Rate	Power	Item Number
Legato 100	1	Infusion	No	±0.5%	0.5 µL to 60 mL	1.28 pL/min to 88.28 mL/min	100–240 VAC, 50/60 Hz	51005-01
Legato 110		Infusion/Withdrawal	2 Programs/50 steps each	±0.5%	0.5 µL to 60 mL	1.28 pL/min to 88.28 mL/min		51005-03
Legato 185		Infusion/Withdrawal	2 Programs/50 steps each	±0.35%	0.5 µL to 60 mL	0.54 pL/min to 39 mL/min		51005-06
Legato 101	2	Infusion	No	±0.5%	0.5 µL to 10 mL	1.28 pL/min to 25.99 mL/min		51005-02
Legato 111		Infusion/Withdrawal	2 Programs/50 steps each	±0.5%	0.5 µL to 10 mL	1.28 pL/min to 25.99 mL/min		51005-04
Legato 180		Infusion/Withdrawal	2 Programs/50 steps each	±0.35%	0.5 µL to 10 mL	0.58 pL/min to 11.70 mL/min		51005-05
Legato 200		Infusion	No	±0.35%	0.5 µL to 140 mL	3.06 pL/min to 215.8 mL/min		51005-07
Legato 210		Infusion/Withdrawal	1 Program/100 steps	±0.35%	0.5 µL to 140 mL	3.06 pL/min to 215.8 mL/min		51005-08
Legato 210P		Infusion/Withdrawal	40 Programs/25 steps	±0.35%	0.5 µL to 140 mL	3.06 pL/min to 215.8 mL/min		51005-09

PendoTECH® PressureMAT®

Sensor Monitors

- Designed for seamless integration with PendoTECH Single-Use Pressure Sensors™
- Portable, lightweight design for flexible use in labs and pilot plants
- No calibration or maintenance required with state-of-the-art solid-state electronics

The PendoTECH® PressureMAT® Sensor Monitors are versatile, high-precision units designed for real-time monitoring of pressure in filtration, chromatography, bioreactor monitoring, perfusion, and fill finish operations. With support for single-use pressure sensors, they provide continuous monitoring, one-touch zero tare functionality, and high-resolution readings. The system includes user-configurable alarms and relay output for automated control of pumps and valves.

No. of Pressure Sensor Channels	No. of Flow Sensor Channels	Analog Input	Output	Item Number
PressureMAT® Sensor Monitors				
1	None	None	1 relay and 1 analog	59900-10
3			1 relay and 3 analog	59900-06
4			4 analog	59900-08
PressureMAT® Plus Sensor Monitors				
2	1	4-20 mA	4 analog	59900-05
3		None	4 analog	59900-07

Connection	Material	Sterile	Pressure Range	Item Number
Luer	Polysulfone	No	−11.5 to 75 psi (−0.79 to 5.2 bar)	59900-11
1/8" Hose Barb				59900-12
1/4" Hose Barb				59900-13
3/8" Hose Barb				59900-14
1/2" Hose Barb				59900-15
3/4" Hose Barb				59900-16
1/2" Sanitary Flange				59900-18
1" Sanitary Flange				59900-17
Luer	Polycarbonate	Yes		59900-27
1/4" Hose Barb		No		59900-19
3/8" Hose Barb		No		59900-20
1/2" Hose Barb		No		59900-21

PendoTECH® Single-Use Pressure Sensors™

- Wide compatibility with hose-barb, sanitary flange, and luer fittings
- Highly accurate across a broad pressure range (-11.5 to 75 psi)
- Unobstructed fluid path minimizes hold-up volume and dead legs
- Compatible with gamma and x-ray irradiation for sterilization

PendoTECH® Single-Use Pressure Sensors™ provide precise monitoring of gas and liquid pressure in critical bioprocessing applications such as filtration, chromatography, and bioreactor operations. Designed with MEMS-HAP™ high-accuracy sensor chips, they deliver reliable, real-time pressure readings while eliminating contamination risks. Available in multiple connection types, these sensors feature a seamless fluid path and are 100% quality tested to ensure peak performance.

PendoTECH® Single-Use Temperature Sensors™

- No calibration required - each sensor is pre-tested for accuracy
- High sensitivity with better than ±0.2 °C accuracy in the 0-70 °C range
- Gamma and x-ray irradiation compatible for sterilization

PendoTECH® Single-Use Temperature Sensors™ deliver precise and reliable in-line temperature measurements for bioprocess applications such as filtration, chromatography, filling operations, and general process monitoring. These sensors connect seamlessly to a variety of monitors via a reusable cable and require no calibration, ensuring easy setup and dependable performance. Designed to minimize contamination risks while maintaining high accuracy (±0.2 °C or better), they are available in multiple sizes to integrate smoothly into existing workflows.

Connection	Material	Sterile	Temperature Range	Item Number
1/8" Hose Barb	Polysulfone	No	0 to 70 °C (32 to 158 °F)	59900-23
1/4" Hose Barb				59900-24
3/8" Hose Barb				59900-25
1/2" Hose Barb				59900-26

65-mm Variable Area Flowmeters

Cole-Parmer®

- Crystal-clear acrylic material with a stable float ensures easy viewing and long-lasting performance
- Easily convertible from panel to partial or full in-line mounting configurations
- Max operating temperature of 65 °C (150 °F)
- Accuracy of ±5% of full scale reading

Whether you need an accurate flow measurement solution for industrial processes, lab setups, or HVAC systems, our direct-read acrylic flowmeters provide the perfect combination of precision, durability, and convenience. With a variety of customizable options, they are designed to fit seamlessly into your workflow.

Max Flow Rate	Valve	Fitting Material	Float Material	Item Number
Flowmeters for Air				
1.4 LPM	No	Brass	Glass	15308-16
2.75 LPM			Stainless Steel	15308-17
3.5 LPM			Carboloy	15308-18
8.5 LPM			Glass	15308-19
16 LPM			Stainless Steel	15308-20
22 LPM			Carboloy	15308-21
50 LPM			Stainless Steel	15308-22
1.4 LPM		Stainless Steel	Glass	15308-44
2.75 LPM			Stainless Steel	15308-45
3.5 LPM			Carboloy	15308-46
8.5 LPM			Glass	15308-47
16 LPM			Stainless Steel	15308-48
22 LPM			Carboloy	15308-49
50 LPM			Stainless Steel	15308-50

Max Flow Rate	Valve	Fitting Material	Float Material	Item Number
1.4 LPM	Yes	Brass	Glass	15308-30
2.75 LPM			Stainless Steel	15308-31
3.5 LPM			Carboloy	15308-32
8.5 LPM			Glass	15308-33
16 LPM			Stainless Steel	15308-34
22 LPM			Carboloy	15308-35
50 LPM			Stainless Steel	15308-36
1.4 LPM		Stainless Steel	Glass	15308-58
2.75 LPM			Stainless Steel	15308-59
3.5 LPM			Carboloy	15308-60
8.5 LPM			Glass	15308-61
16 LPM			Stainless Steel	15308-62
22 LPM			Carboloy	15308-63
50 LPM			Stainless Steel	15308-64
Flowmeters for Water				
20 mL/min	No	Brass	Glass	15308-23
70 mL/min			Stainless Steel	15308-24
100 mL/min			Carboloy	15308-25
175 mL/min			Glass	15308-26
450 mL/min			Stainless Steel	15308-27
700 mL/min			Carboloy	15308-28
1400 mL/min			Stainless Steel	15308-29
20 mL/min		Stainless Steel	Glass	15308-51
70 mL/min			Stainless Steel	15308-52
100 mL/min			Carboloy	15308-53
175 mL/min			Glass	15308-54
450 mL/min			Stainless Steel	15308-55
700 mL/min			Carboloy	15308-56
1400 mL/min			Stainless Steel	15308-57
20 mL/min	Yes	Brass	Glass	15308-37
70 mL/min			Stainless Steel	15308-38
100 mL/min			Carboloy	15308-39
175 mL/min			Glass	15308-40
450 mL/min			Stainless Steel	15308-41
700 mL/min			Carboloy	15308-42
1400 mL/min			Stainless Steel	15308-43
20 mL/min		Stainless Steel	Glass	15308-65
70 mL/min			Stainless Steel	15308-66
100 mL/min			Carboloy	15308-67
175 mL/min			Glass	15308-68
450 mL/min			Stainless Steel	15308-69
700 mL/min			Carboloy	15308-70
1400 mL/min			Stainless Steel	15308-71

150-mm Variable Area Flowmeters

Cole-Parmer®

- Flowmeters are constructed with aluminum side panels and borosilicate glass flow tube
- Easy installation and exchange of flow tubes
- Non-rotating adapter prevents tubes from turning
- Panel mounting with hex nuts makes installation simple and secure

These single-flow tube, variable-area flowmeters are designed for precise low-flow rate measurements of air and water in mL/minute at a given set of pressure and temperature parameters. The Optigrad™ 150-mm universal scale minimizes parallax and eye fatigue. The flowmeters include 1/8" NPT(F) standard mounting fittings, side plates, thick protective magnifying front shield and back plate, and stable flow tubes for accurate readings.

Max Flow Rate		Valve	Fitting Material	Float Material	Item Number
Air	Water				
18 mL/min	-	No	Stainless Steel	Sapphire	15309-40
46 mL/min	0.5 mL/min			Glass	15309-41
91 mL/min	1.1 mL/min			Glass	15309-42
138 mL/min	2.3 mL/min			Stainless Steel	15309-43
262 mL/min	4.9 mL/min			Stainless Steel	15309-44
370 mL/min	5.7 mL/min			Glass	15309-45
816 mL/min	19 mL/min			Stainless Steel	15309-46
1665 mL/min	44 mL/min			Stainless Steel	15309-47
2214 mL/min	49 mL/min			Glass	15309-48
3780 mL/min	89 mL/min			Glass	15309-49
4494 mL/min	132 mL/min			Stainless Steel	15309-50
8555 mL/min	200 mL/min			Glass	15309-51
16,493 mL/min	498 mL/min			Stainless Steel	15309-52
23,105 mL/min	579 mL/min			Glass	15309-53
42,860 mL/min	1339 mL/min			Stainless Steel	15309-54
60,212 mL/min	1972 mL/min			Carboloy	15309-55
34 mL/min	-	Cartridge Valve	Aluminum	Stainless Steel	15309-82
138 mL/min	2.25 mL/min			Stainless Steel	15309-83
262 mL/min	4.9 mL/min			Stainless Steel	15309-84
816 mL/min	19.2 mL/min			Stainless Steel	15309-85
1665 mL/min	44.3 mL/min			Stainless Steel	15309-86
4494 mL/min	132.5 mL/min			Stainless Steel	15309-87
7720 mL/min	234 mL/min			Stainless Steel	15309-88
16,493 mL/min	498 mL/min			Stainless Steel	15309-89
23,105 mL/min	579 mL/min			Glass	15309-90
60,212 mL/min	1972 mL/min			Carboloy	15309-91
18 mL/min	-	Hi-Res Valve	Stainless Steel	Sapphire	15309-56
46 mL/min	0.5 mL/min			Glass	15309-57
91 mL/min	1.1 mL/min			Glass	15309-58
138 mL/min	2.3 mL/min			Stainless Steel	15309-59
262 mL/min	4.9 mL/min			Stainless Steel	15309-60
370 mL/min	5.7 mL/min			Glass	15309-61
816 mL/min	19 mL/min			Stainless Steel	15309-62

Max Flow Rate		Valve	Fitting Material	Float Material	Item Number
Air	Water				
1665 mL/min	44 mL/min	Hi-Res Valve	Stainless Steel	Stainless Steel	15309-63
2214 mL/min	49 mL/min			Glass	15309-64
3780 mL/min	89 mL/min			Glass	15309-65
4494 mL/min	132 mL/min			Stainless Steel	15309-66
8555 mL/min	200 mL/min			Glass	15309-67
16,493 mL/min	498 mL/min			Stainless Steel	15309-68
23,105 mL/min	579 mL/min			Glass	15309-69
42,860 mL/min	1339 mL/min			Stainless Steel	15309-70
60,212 mL/min	1972 mL/min			Carboloy	15309-71

Differential Pressure Flowmeters

Alicat

– Provides accurate, real-time flow, temperature, and pressure readings
– No warm-up required
– NIST-traceable accuracy
– Ideal for general-purpose, laboratory, and industrial applications

These flowmeters, with a fast control response time, offer quick integration into test stands for accurate verification without any warmup time. The stand-alone units measure flow rate, temperature, and pressure. Key features include a backlit monochrome display, data I/O port for logging data to your computer, and flexible mounting options, including upside-down installation.

Max Flow Rate	Process Connection	Item Number
Mass Flowmeter		
1 SCCM	M5 female (10-32 compatible)	15308-72
2 SCCM	M5 female (10-32 compatible)	15308-73
5 SCCM	M5 female (10-32 compatible)	15308-74
10 SCCM	M5 female (10-32 compatible)	15308-75
20 SCCM	M5 female (10-32 compatible)	15308-76
50 SCCM	M5 female (10-32 compatible)	15308-77
100 SCCM	1/8" NPT(F)	15308-78
200 SCCM	1/8" NPT(F)	15308-79
500 SCCM	1/8" NPT(F)	15308-80
1 SLPM	1/8" NPT(F)	15308-81
2 SLPM	1/8" NPT(F)	15308-82
5 SLPM	1/8" NPT(F)	15308-83
10 SLPM	1/8" NPT(F)	15308-84
20 SLPM	1/8" NPT(F)	15308-85
50 SLPM	1/4" NPT(F)	15308-86
100 SLPM	1/4" NPT(F)	15308-87
250 SLPM	1/2" NPT(F)	15308-88
500 SLPM	3/4" NPT(F)	15308-89
1000 SLPM	3/4" NPT(F)	15308-90
2000 SLPM	3/4" NPT(F)	15308-91

Max Flow Rate	Process Connection	Item Number
Mass Flowmeter		
3000 SLPM	1-1/4" NPT(F)	15308-92
0-5000 SLPM	1-1/2" NPT(F)	15308-93
Liquid Flowmeter		
0.5 CCM	M5 female (10-32 compatible)	15309-17
1 CCM	M5 female (10-32 compatible)	15309-18
2 CCM	1/8" NPT(F)	15309-19
5 CCM	1/8" NPT(F)	15309-20
10 CCM	1/8" NPT(F)	15309-21
20 CCM	1/8" NPT(F)	15309-22
50 CCM	1/8" NPT(F)	15309-23
100 CCM	1/8" NPT(F)	15309-24
200 CCM	1/8" NPT(F)	15309-25
500 CCM	1/8" NPT(F)	15309-26
1 LPM	1/8" NPT(F)	15309-27
2 LPM	1/4" NPT(F)	15309-28
5 LPM	1/4" NPT(F)	15309-29
10 LPM	1/4" NPT(F)	15309-30

Differential Pressure Flow Controllers

Alicat

– Provides accurate, real-time flow, pressure, and temperature readings
– No warm-up required
– Control valve enables precise flow control
– NIST-traceable accuracy

These flow controllers, with a fast measurement response time, offer quick integration into test stands for accurate verification without any warm-up time. They are capable of measuring and controlling flow generated by both positive pressure and suction. Real-time monitoring of flow, pressure, and temperature is available directly on the display screen.

Max Flow Rate	Process Connection	Item Number
Mass Flowmeter		
0.5 SCCM	M5 female (10-32 compatible)	15308-94
1 SCCM	M5 female (10-32 compatible)	15308-95
2 SCCM	M5 female (10-32 compatible)	15308-96
5 SCCM	M5 female (10-32 compatible)	15308-97
10 SCCM	M5 female (10-32 compatible)	15308-98
20 SCCM	1/8" NPT(F)	15308-99
50 SCCM	1/8" NPT(F)	15309-00
100 SCCM	1/8" NPT(F)	15309-01
200 SCCM	1/8" NPT(F)	15309-02
500 SCCM	1/8" NPT(F)	15309-03

Max Flow Rate	Process Connection	Item Number
Mass Flowmeter		
1 SLPM	1/8" NPT(F)	15309-04
2 SLPM	1/8" NPT(F)	15309-05
5 SLPM	1/8" NPT(F)	15309-06
10 SLPM	1/8" NPT(F)	15309-07
20 SLPM	1/8" NPT(F)	15309-08
Liquid Flowmeter		
5 CCM	1/8" NPT(F)	15309-31
10 CCM	1/8" NPT(F)	15309-32
20 CCM	1/8" NPT(F)	15309-33
50 CCM	1/8" NPT(F)	15309-34
100 CCM	1/8" NPT(F)	15309-35
200 CCM	1/8" NPT(F)	15309-36
500 CCM	1/8" NPT(F)	15309-37

USA +1.800.323.4340
+1.847.549.7600
Canada +1.800.363.5900
China +86.21.5109.9909
French speaker +33 (0) 1 87 17 01 42
German speaker +49 (0) 937 792030
India +1.800.266.1244
Italy +39.02.84349215
UK +44 (0) 1480.272279
All others +1.847.549.7600

coleparmer.com