

Cole-Parmer®

Your Go-To Guide for Lab Essentials

Reliable products and trusted
solutions for every application

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About Cole-Parmer

Founded in 1955

Cole-Parmer, an Antylia Scientific company, is a global manufacturer of lab equipment and supplies for research and process. Our products have been used extensively in life sciences, clinical, academic, biotech, and research laboratories since 1955.

Strong Track Record

We deliver high-quality products and we are committed to empowering your research and development processes with solutions that drive efficiency, accuracy, and success.

Scientific Experts

Our team of technical support representatives are highly trained product experts with scientific backgrounds and industry experience. They are here to help you select products, troubleshoot existing products, and solve regulatory compliance issues.

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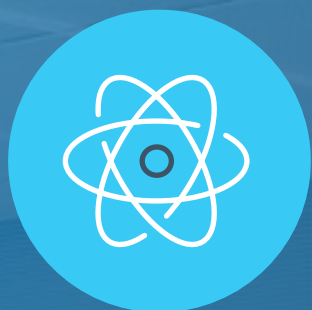
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Calibration keeps your lab in compliance, measuring accurately, and running consistently.

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OUTFIT YOUR LAB LIKE A PRO

Starting fresh? We’ve got what your lab needs, from basics to brilliance.

The Cole-Parmer Lab Setup Guide helps you outfit your space with lab-grade gear you can trust.

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Sample Preparation

At the heart of every successful experiment is the quality of your sample preparation. We offer a wide array of homogenizers, grinders, and mills.

HG-400 MiniG® Homogenizer

Vigorous clamp movement results in increased yields

- Consistent vertical motion of the clamp ensures equal conditions for all samples
- Adjustable clamp assembly easily secures vials or microplates of various sizes; order inserts separately
- Digital display allows for control of the rate and time
- Observation window in lid lets you view the grinding process
- To preserve your temperature-sensitive samples, cryogenic accessories are available online

The ideal solution for labs that want a compact yet powerful tissue homogenizer and cell lyser. Using the bead beating method, The HG-400 MiniG is designed for rapid cell disruption, cell lysis, and tissue homogenization. The adjustable clamp can handle sample vials from 2 mL to 50 mL centrifuge tubes or up to two deep-well titer plates. Order interchangeable inserts, vials, and grinding media separately.

Speed	Motor	Dimensions (W x H x D)	Power (VAC, Hz)	Item number
500 to 1500 strokes/minute	1/2 hp	28.6 x 54.6 x 43.2 cm (11.3 x 21.5 x 17 in.)	115/230, 50/60	04500-08

- [61031-50](#) Foam block holds 24 x 2 mL vials. Set of 2
- [04500-12](#) Foam block holds 24 x 5 mL vials. Set of 2
- [04575-38](#) Foam block holds 12 x 15 mL centrifuge tubes
- [04500-14](#) Foam block holds 6 x 50 mL centrifuge tubes
- [04500-15](#) Nesting tray holds 1 titer plate

HG-250 GenoLyte® Temperature-Controlled Homogenizer

Cool samples without freezing

- Sample temperature is maintained between 0 to 10 °C throughout the run
- Easily connect to a cooling system
- Digital control panel lets you set speed, run times, and run/rest cycles

This efficient, compact laboratory homogenizer uses a circulating chiller to maintain sample temperatures while effectively disrupting cellular materials by horizontally oscillating vials. The chamber accommodates most standard 2 mL vials; order vials and grinding media separately. Complete bundle includes HG-250 homogenizer, Cole-Parmer refrigerated/heating circulating bath (120 VAC, 60 Hz), and chiller hose.

Speed	Motor	Dimensions (W x H x D)	Power (VAC, Hz)	Item number
Fixed; 2000, 2500, 3000 rpm	1/2 hp	38.0 x 29.2 x 30.0 cm (15.6 x 11.5 x 11.0 in.)	115/230, 50/60	04500-05



Typical applications:

tissue homogenization, DNA/RNA research and extraction, cell lysis, protein extraction, biofuel research, pesticide residue extraction using QuEChERS or the SweEt method

Typical samples:

animal tissue, plant tissue, cell cultures, fruit, cannabis, seeds, yeast, and bacteria



Typical applications:

DNA/RNA research and extraction, protein extraction, tissue homogenization, and cell lysis

Typical samples:

animal tissue, plant tissue, cell cultures, bacteria, and yeast

HG-200 GenoLyte® Compact Homogenizer

Ideal for small-scale sample preparation

- High-intensity oscillating motion homogenizes samples in seconds
- Keep an eye on the grinding process with the clear lid for viewing
- Interchangeable vial holders (order separately) handle a range of vial sizes from 2 to 12 mL
- Clamp orientation makes it easy to load and unload samples
- Safety interlock switch stops the motor if the lid is opened during homogenization
- Digital display screen with rate and timer

This multipurpose mill is designed to effectively disrupt cellular material through bead beating, and can also be used to pulverize the toughest rocks and minerals, rapidly reducing samples to analytical fineness, blending powders, and making emulsions. Order interchangeable vial holders, vial sets, and grinding media separately.

Typical applications: DNA/RNA extraction, consumer product testing, and food safety

Typical samples: Animal tissue, yeast, food products, seeds, leaves and roots

Speed	Motor	Dimensions (W x H x D)	Power (VAC, Hz)	Item number
Fixed; 750, 2000, 3000, 4000 rpm	1/2 hp	38.0 x 20.5 x 30 cm (15 x 8 x 11 in.)	115/230, 50/60	41010-94

[04500-06](#) Vial holder for 6 x 2 mL vials

[04500-07](#) Vial holder for 4 x 5 mL vials

[04575-35](#) Vial holder for 1 x 12 mL vial



Go online for complete product information and accessories

HG-600 Geno/Grinder® High-Throughput Homogenizer

Fast and efficient homogenization

- Double-locking lid provides safe operation
- Sound insulation and suspension system ensure quiet, vibration-free operation
- Fully adjustable clamp allows simple front loading of vials or microplates
- Interior LED lighting and large observation window improve sample visibility
- Password-protected, programmable control screen tilts for optimal viewing angle
- To preserve your temperature-sensitive samples, cryogenic accessories are available online

The HG-600 Geno/Grinder high-throughput homogenizer lets you process samples with or without reagents in approximately 60 seconds or less. An adjustable clamp features unique vigorous vertical grinding motion allowing increased reproducibility, superior extraction efficiency, and consistency of every sample.

Typical applications: tissue homogenization, DNA/RNA research and extraction, cell lysis, pesticide residue extraction, protein and metabolite extraction, biofuel research, and QuEChERS

Typical samples: animal tissue, plant tissue, cell cultures, fruit, cannabis, seeds, yeast, and microorganisms

Clamp speed	Motor	Dimensions (W x H x D)	Power (VAC, Hz)	Item number
Adjustable from 500 to 1750 strokes/minute	1/2 hp	35.6 x 71.1 x 57.2 cm (14 x 28 x 22.5 in.)	115, 50/60	04500-17

[04500-23](#) Foam block holds 48 x 2 mL vials

[04500-25](#) Foam block holds 48 x 5 mL vials

[04575-63](#) Foam block holds 24 x 12 mL vials

[04575-62](#) Foam block holds 24 x 15 mL tubes

[04500-27](#) Foam block holds 16 x 50 mL tubes



HO-200 Series Tissue Homogenizer

Ergonomically designed to reduce hand strain

- Lightweight and powerful motor ideal for small samples
- Use as a handheld unit or post-mount to optional stand for hands-free operation
- Stainless steel probes are ideal for larger samples; available online
- Disposable plastic tip probes are ideal for when cross-contamination may be of concern
- Includes tip adapter and two disposable plastic probes



Sample size	Speed	Power	Item number
0.05 to 100 mL	5000 to 30,000 rpm	115 VAC, 60 Hz	04727-01

[04727-84](#) Plastic tip probe for hard tissue, 0.25 to 50 mL. 25/pk
[04727-86](#) Plastic tip probe for soft tissue, 0.25 to 50 mL. 25/pk

HO-600 Digital Handheld Tissue Homogenizer

Get accurate, repeatable results

- Integrated digital speed display ensures consistent results; accurate to ±0.5%
- On-board memory stores last set speed
- 40-watt motor maintains speed throughout the cycle, regardless of fluctuations in sample size or viscosity
- Use as a handheld unit or mount to a stand for longer operation time
- Bayonet probe mounting system features fast release



Sample size	Speed	Power	Item number
<0.2 to 120 mL	8000 to 32,000 rpm	100 to 240 VAC	78904-71

[78904-75](#) Stainless steel rotor-stator generator, 0.2 to 5 mL, 75 x 5 mm, flat-bottom end
[78904-76](#) Stainless steel rotor-stator generator, 0.2 to 5 mL, 110 x 7 mm, saw-tooth end
[78904-77](#) Stainless steel rotor-stator generator, 1.5 to 100 mL, 110 x 10 mm, saw-tooth end

HO-400 Series Laboratory Homogenizer

Process virtually any laboratory sample in seconds

- Powerful 850-watt motor processes samples up to 5 L
- Digital, programmable speed and time controls
- Use as a handheld unit or post-mount to optional stand for hands-free operation
- Accepts either stainless steel rotor-stator generators or disposable plastic probes



Sample size	Speed	Power	Item number
0.2 to 5000 mL	5000 to 25,000 rpm	110 VAC, 60 Hz	04727-28

[04727-43](#) Stainless steel rotor-stator generator, 100 to 2000 mL, 195 x 20 mm, saw-tooth end
[04727-45](#) Stainless steel rotor-stator generator, 200 to 5000 mL, 195 x 30 mm, flat-bottom end
[04727-89](#) Lab stand with support rod

HOA-600 Benchtop Automated Homogenizer Package

Simultaneously homogenize up to six samples in a single process

- Accommodates tube sizes from 1.5 to 50 mL
- Microprocessor control lets you program both time and speed for processing up to 10 minutes at variable speeds up to 30,000 rpm.
- Oscillating motion ensures the generator probes move through the entire tube volume for complete homogenization of each sample



– Motor holds processing speed to ±1% to ensure reproducibility and accuracy across all samples
Go to [coleparmer.com](#) and search for item number [78904-72](#) or contact our highly trained product experts to customize your package.

Ultrasonic Processors

100% microprocessor controlled and programmable, ensuring adherence to the most exacting protocol

130-Watt Ultrasonic Processors

Ideal for your low-volume applications—from 150 µL to 150 mL

- Automatic amplitude compensation ensures uniform probe amplitude regardless of varying load conditions
- Pulsar feature provides greater control of sample processing and mixing by repeatedly allowing samples to settle back under probe after each burst
- Built-in probe rests help keep everything close at hand
- Supplied with titanium probe and tip

Model 04714-50 features a timer that controls the processing time from 1 second to 10 hours and an independent on/off pulser to enable safe treatment of temperature-sensitive samples at high intensity.

Model 04714-52 incorporates a pulsing button directly on the handpiece; run continuously or in the pulse mode when the button is depressed.



500- and 750-Watt Ultrasonic Processors

Process batch samples as small as 250 µL or as large as 1000 mL

- Exclusive energy (joules) monitor provides the most accurate method to reproduce results
- Tactile keypad, menu-driven display, and simple function keys combine for a user-friendly system
- Timer controls processing from 1 second up to 10 hours and monitors both the elapsed time and duration of processing
- On/off independent pulser helps prevent overheating
- Variable power output control allows the ultrasonic vibrations at the probe tip to be set to any desired amplitude with on-screen display of output level
- Compact size—fits on any laboratory's existing bench space
- Supplied with converter 13-mm (½ in.) dia probe with replaceable tip

Models 04711-30 and 04711-40 also feature a temperature controller and memory. The integrated temperature controller prevents harmful sample overheating by terminating the ultrasonics when the sample reaches a predetermined temperature (set from 1 to 100 °C); order temperature probe separately below. Time-saving memory stores up to ten procedures to facilitate protocol duplication, automate repetitive tasks, and eliminate user-to-user method variability for consistent reproducibility.



Description	Sample volume	Dimensions (W x H x D)	Power	Item number
130-watt processor with full function pulser and timer	150 µL to 150 mL	24.8 x 8.9 x 31.8 cm (9¾ x 3½ x 12½ in.)	115 VAC, 50/60 Hz	04714-50
500-watt processor with timer	250 µL to 1000 mL	19.1 x 21.6 x 34.3 cm (7½ x 8½ x 13½ in.)		04711-70
500-watt processor with timer, temperature controller, and memory				04711-30
750-watt processor with timer, temperature controller, and memory				04711-40

[04711-50](#) Stainless steel temperature probe for models 04711-30 and -40

[04712-92](#) Stand for all models; 61 cm H (24 in.) x 13 mm dia (½ in.) stainless steel rod and 22.9 cm (9") L x 14.0 cm (5½") W cast-iron base

[04714-90](#) Converter clamp for 130-watt models. Secures converter onto a 13 mm (½") dia rod

[04714-91](#) Converter clamp for 500 and 750-watt models. Secures converter onto a 13 mm (½") dia rod

[04712-05](#) Foot switch for all models. Provides hands-free operation; with 1.8 m (6 ft) cable

Freezer/Mill® Cryogenic Grinders

Makes samples brittle and easier to grind without thermal degradation

- Continuous cooling of samples with liquid nitrogen produces finer ground particles for better particle uniformity and increased production rates
- Intuitive color LCD touch screen panel controls the grinding cycles, grinding time, impact rate as well as pre-cooling and cooling times
- Maintenance-free design with magnetic grinding mechanism and no mechanical moving parts

Some samples are impossible to grind at ambient temperatures. The Freezer/Mill is a programmable cryogenic mill specifically designed for grinding and pulverizing those tough or temperature-sensitive samples.

Samples are placed in a sealed grinding vial then immersed in liquid nitrogen (LN) until cooled to cryogenic temperatures, and then pulverized by magnetically shuttling a steel impactor back and forth against two stationary end plugs. Since the vials are sealed, the integrity of sample contents is maintained. Volatile compounds are retained, hazardous or critical samples are easily controlled, cleanup is simplified, and cross-sample contamination is eliminated.

Each Freezer/Mill has an insulated nitrogen tub with liquid nitrogen level sensor, insulated case, and lid safety interlock switch for user protection (liquid nitrogen required for operation). Model CG-500 with dual pre-cooling chambers keeps samples at the appropriate temperature while other samples are grinding.

Typical applications: DNA/RNA extraction, forensic/drug testing, RoHS/WEEE, consumer product testing, food safety, materials research, and medical research

Typical samples: animal tissue, plastic and polymers, yeast cultures, pharmaceuticals, tough or sticky food products, electronic components, textiles, hair, teeth, bones, plant tissue, cannabis, and packaging



CG-400 Freezer/Mill



CG-200 Freezer/Mill

Sample Types Include



Plastics & Polymers



Animal Tissue



Pharmaceuticals



Cannabis



Yeast

CG-900 Cryo-Blade™ Cryogenic Grinder

Breakthrough, automated processing from bulk to test portions in 15 minutes or less

- **High-throughput**—process up to 1 kg of sample per run
- **Efficient**—complete a method in 15 minutes or less
- **Versatile**—when liquid nitrogen is not available or desired, you can use dry ice instead *
- **Safe**—automated dispensing of liquid nitrogen eliminates the handling and manipulation of liquid nitrogen (patent pending)

The Cryo-Blade is a high-capacity cryogenic grinder for comminution and processing capability of up to 1 kg of sample. The Cryo-Blade automatically dispenses liquid nitrogen to allow the sample to reach cryogenic temperatures and then activates a grinding phase to pulverize samples, resulting in repeatable and reproducible sample preparation. No liquid nitrogen handling is required. The unit handles an extensive range of both dry and wet samples from watermelon to the toughest of samples such as muscle tissue.

Automatic and programmed modes are available. In automatic mode, parameters are set based on the volume of the sample. Programmed mode allows you to save up to 10 methods. The intuitive interface includes 12 languages.

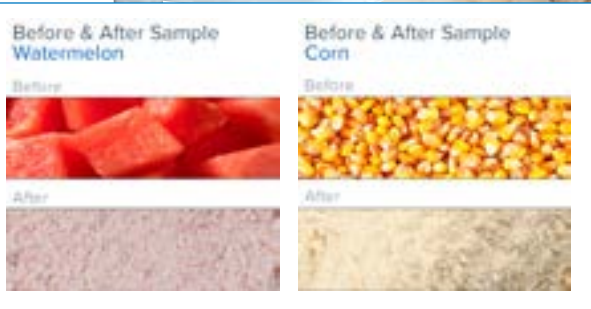
The insulated outer bowl, mechanical locking lever, and sensors provide a safe, consistent, and reliable sample each use. The removable 5 L inner bowl accommodates sample volume up to 1 kg and allows samples to be stored in the freezer, giving you the option of using a second bowl to prepare a new batch. The outer bowl is insulated to allow safe touch at all times, although it is recommended you use protective gloves.

Includes Cryo-Blade unit, insulated outer bowl, inner bowl, cryogenic processor lid with blade, and USB memory stick.

*Cycle can be executed in 15 minutes when using liquid nitrogen; 30 minutes when using dry ice.

Typical applications: analysis of organic pollutants in food products (pesticide residues), and QuEChERS

Typical samples: fruits, vegetables, seeds, cannabis, stalks, roots, fungi, flowers, and animal tissue



Go online for complete product information and accessories

Description	Capacity	No. of tubes held	Dimensions (L x W x H)	Power	Item number
CG-200 Freezer/Mill small cryogenic grinder	0.1 to 5 g	1) small vial or (1) microvial set	48.0 x 27.0 x 32.0 cm (19 x 10.5 x 12.75 in.)	115 VAC, 60 Hz	04500-39
CG-400 Freezer/Mill large cryogenic grinder	0.1 to 50 g	(1) large, (1) mid-size, (4) small vials, or (1) microvial set	52.0 x 55.0 x 46.0 cm (20.5 x 21.5 x 18 in.)		04500-40
CG-450 Freezer/Mill large cryogenic grinder with liquid nitrogen autofill	0.1 to 50 g	(1) large, (1) mid-size, (4) small vials, or (1) microvial set			04500-41
CG-500 Freezer/Mill high-capacity dual-chamber cryogenic grinder with liquid nitrogen autofill	0.1 to 100 g capacity (50 g per chamber)	(2) large, (2) mid-size, (8) small vials, or (2) microvial set	50.8 x 54.6 x 64.8 cm (20 x 21.5 x 25.5 in.)		04500-42

Sample volume	Max grinding speed	Mixing speed	Dimensions (L x W x H)	Power	Item number
1 kg	3600 rpm	180 rpm	91.4 x 68.6 x 101.6 cm (36 x 27 x 40 in.)	115 VAC	61211-71

[61211-70](#) Additional inner bowl

Visit coleparmer.com for complete product information and accessories

More Sample, Less Time, Better Yield

BM-200 Mini Mixer/Mill® Compact Ball Mill

Small but powerful

- Ideal for pulverizing dry, hard, brittle samples, slurry grinding
- High-intensity oscillating motion mills samples to analytical fineness in just seconds
- Intuitive programmable control panel includes rate, run time, and pause functions
- Four speeds over the 750 to 3500 rpm range for slow-speed mixing to high-speed milling for tough samples
- Safety interlock stops the motor if the lid is opened during the homogenization process
- Clear lid lets you view your sample being processed

The BM-200 Mixer/Mill is an efficient, compact laboratory mill designed for small-scale sample preparation. Finely ground samples provide increased surface area which improves acid dissolution for ICP and pellet pressing or fusion bead for XRF. Functionally described as a ball mill, this Mixer/Mill shakes containers back and forth thousands of times per minute. It is very effective for pulverizing samples from 0.25 to 1.5 g, or mixing product samples with volumes up to 3 mL. Order interchangeable vial holders and vial sets separately. A comprehensive selection of accessories is available online.

Speed	Motor	Dimensions (L x W x H)	Power (VAC, Hz)	Item number
Fixed; 750, 2000, 3000, or 3500 rpm	½ hp	38.0 x 20.5 x 30.0 cm (15 x 8 x 11 in.)	115/230, 50/60	04576-27



Typical applications:
size reduction,
nanomilling, powder
blending, emulsion,
and slurry grinding

Typical samples:
rocks, minerals,
cement, soil, and
ceramic

SM-200 ShatterBox® Ring and Puck Mill

Powerful and efficient

- Grind samples up to 150 g to analytical powder in minutes
- Dish-shaped grinding container swings in a tight high-speed circle to crush samples
- Membrane control panel features an LCD with 10-minute electronic timer
- Lockable caster wheels ensure mill stays in place during operation
- For 115 VAC operation

ShatterBox® ring and puck mill is ideal for pulverizing dry, brittle samples and slurry grinding. To use, place your sample between the puck and the wall of the grinding container, place the clamp over the container, then simply set the timer and run the mill. A puck and ring swing around inside a grinding container at a high speed to crush the samples to analytical quality powder. Clamp adjusts to fit various grinding containers. Safety interlock system and lid gas cylinders offer operator safety. A 10-minute timer counts down the time remaining. Press “Pause” any time to interrupt the grinding cycle. Grinding containers are available in various sizes and materials.

Speed	Motor	Dimensions (L x W x H)	Power (VAC, Hz)	Item number
825 rpm	½ hp	48 x 48 x 102 cm (19 x 19 x 40 in.)	115, 60 or 230, 50	04578-25



Typical applications:
pulverizing dry, brittle
samples and slurry
grinding

Typical samples:
cement, ceramics,
rocks, minerals,
soils, slag, ores,
pharmaceuticals,
sulfur pellets, and
dried plant material

BM-400 Series Mixer/Mill® High-Energy Ball Mills

Pulverize the toughest samples from 0.2 to 10 g

- Equipped with forced-air cooling and safety interlock system for operator protection
- Steel housing protects the clamp mechanism and rugged construction ensures a long life of heavy use
- Shock-mounted motor enables benchtop operation
- Digital control panel displays rest and run times, cycles, and mode; programmable 100-minute timer
- Adjustable clamp accepts vials in various materials to effectively grind all sample types

Functionally described as a shaker or a high-energy ball mill, the BM-400 and BM-450 Mixer/Mill is available with a single clamp, or dual clamps for double capacity. The vial, containing the sample and grinding media, is secured in the clamp and moved vigorously back and forth. The back-and-forth shaking motion is combined with lateral movements of the ends of the vial, so that the vial appears to be moving in a figure-8 pattern. Because of the amplitude and velocity of the clamp’s movement, each ball develops high G-forces, enough to pulverize the toughest rocks, slag, and ceramics to analytical fineness (<50 µm). Order grinding vial and jar sets separately.

Model	Max speed	Motor	Dimensions (L x W x H)	Power (VAC, Hz)	Item number
BM-400 Single clamp	1725 rpm	½ hp	55 x 56 x 39 cm (21 x 22 x 15 in.)	115, 60	04578-12
BM-450 Dual clamp			64.0 x 54.0 x 36.0 cm (25 x 21 x 14 in.)	115, 60	04578-10



Typical applications: nanomilling, slurry grinding,
blending powders, and mixing emulsions. It is also very
effective for mechanical alloying or mechanochemistry

Typical samples: rocks, minerals, soil, sand, cement,
ores, slag, ceramics, catalyst supports, glass,
pharmaceuticals, and paints

SM-300 ShatterBox® Ring and Puck Mill

Grind your samples with minimal loss in a soundproof enclosure

- Efficiently pulverize up to 150 grams of brittle material to analytical fineness
- Grinding times range from 2 to 5 minutes, with resultant particle size under 100 µm
- LCD touchscreen with easy navigation and real-time monitoring of clamping force
- Automated locking dish and guided dish positioning with an automatic elevation of the dish for easy operation
- Store up to 10 customizable grinding programs
- Electronically controlled, fully reproducible grinding methods with Ethernet capabilities
- Robust IP65-rated industrial interface, modular electronics, and steel cabinet

This versatile ring and puck mill can crush and grind many types and sizes of samples with minimal sample loss and increased safety. The ShatterBox swings a dish-shaped grinding container, with a puck and (often) a ring inside, in a tight high-speed circle; the sample is quickly crushed between the wall and floor of the container and the moving puck/ring grinding elements.

The SM-300 model has many advanced features, including industrial design, user friendly touch-screen interface, variable run speed, ergonomic dish loading platform, automated locking clamp, a safety-interlocking door, and lockable casters making the large more industrial mill easy to move from one laboratory to another.

The versatility of sample containers allows for grinding within smaller dishes without the ring as well as the ability to increase sample sizes and capacity. ShatterBox 8550 accepts a grinding container with or without a handles; order separately.

Speed	Motor	Dimensions (L x W x H)	Power (VAC, Hz)	Item number
800 to 1200 rpm (1050 rpm max for tungsten carbide dish)	½ hp	66.0 x 67.5 x 138.0 cm (26 x 26.6 x 54.3 in.)	115, 60	44444



Typical applications:
reduction,
nanomilling, powder
blending, emulsion,
and slurry grinding

Typical samples:
cement, superalloy,
granite, glass, sand,
slag, ceramics,
seeds, grains, pig-
ments, and catalyst
supports

Hot Plates & Stirrers

From mini to multiposition to large-capacity, we have the model to meet your lab's stirring and heating needs.

Find more at coleparmer.com/stirrers



ST-200 Series Modular Magnetic Stirrer

Create any configuration you need

- Easily configure your system by joining up to 10 stir plate modules via USB connection or included cable
- Control module features speed display, reverse stirring mode, and timer
- Top plate is corrosion-resistant glass and measures 9.2 cm (3.6 in.) dia
- Each stir plate module accommodates up to 1 L



Description	Speed	Timer	Power (VAC, Hz)	Item number
Kit (1 control module and 4 stir plates)	100 to 1500 rpm	0 to 9 hrs	100 to 240, 50/60	84003-80

[84003-82](#) Additional stir plate module

ST-200 Series Ultra-Thin Magnetic Stirrer

Ultra-slim design saves valuable space

- Advanced magnetic coil technology provides quiet, wear-free operation with no moving parts
- Use simple touch-and-slide bar to set stirring speed and timer
- LCD displays real-time parameters
- Reverse stirring mode allows for thorough mixing
- Set built-in timer for up to 9 hours or continuous operation



Top plate	Speed	Max stirring load	Power (VAC, Hz)	Item number
Polyester, 10 cm (4") dia	20 to 1500 rpm	1 L	100 to 240, 50/60	84003-71

200 Series Undergrad Hot Plates, Stirrers, and Stirring Hot Plates

Built with tough aluminum casing for longevity

- Compact, stackable design takes up less benchtop and storage space
- Hot warning light remains on even when unplugged
- BioCote® antimicrobial protection is built in for a cleaner, more hygienic product
- Designed to prevent accidental spillage on control panel
- IP32 rated for water and dust resistance

Safety in Design

For safety, all units are designed to direct spills away from the user controls. Using the latest technology and microprocessor-controlled dual thermocouples, hot plates offer you accurate temperature control and protection from overheating. The "Hot" warning light flashes when the hot plate surface reaches 50 °C keeping personnel safe from accidental burns.

Power in Performance

Powerful magnets and motors provide you with stirring speeds to 2000 rpm and mixing of large volumes of liquids up to 15 L.

Choice of Surfaces

The glass ceramic plate is chemical resistant, easy to clean, and stays cool around the edges to help prevent burns. The coated aluminum top plate provides rapid heating and better temperature uniformity. Stainless steel plate ensures strong coupling to stir bar.

Temperature Indication

Analog hot plates feature a true temperature indicator—the LED ring surrounding the control knob progressively illuminates, showing the plate temperature increasing in real time. Digital hot plates clearly show the surface temperature while in use, allowing you to keep a close eye on your parameters.

Optional Temperature Controller

Together with your Undergrad hot plate or stirring hot plate, the optional temperature controller ensures accurate control of sample fluids up to 200 °C with ±0.5 °C accuracy. The controller is automatically detected when plugged in and features a PT100 stainless steel probe.

Top plate		Heating	Stirring		Power (VAC, Hz)	Item number
Dimensions	Material	Temp range	Speed range	Max load		
HP-200 Series Undergrad Analog Hot Plates						
15 x 15 cm (6 x 6 in.)	Glass ceramic	450 °C	—	—	120, 60	04807-51
	Coated aluminum	325 °C				04807-53
ST-200 Series Undergrad Analog Stirrers						
15 x 15 cm (6 x 6 in.)	Glass ceramic	—	100 to 2000 rpm	15 L	120, 60	04807-55
	Stainless steel					04807-57
SHP-200 Series Undergrad Analog Stirring Hot Plates						
15 x 15 cm (6 x 6 in.)	Glass ceramic	450 °C	100 to 2000 rpm	15 L	120, 60	04807-59
	Coated aluminum	325 °C				04807-61
SHP-200 Series Undergrad Digital Stirring Hot Plates						
15 x 15 cm (6 x 6 in.)	Glass ceramic	450 °C	100 to 2000 rpm	15 L	120, 60	04807-63
	Coated aluminum	325 °C				04807-65

[04807-90](#) Temperature controller for HP-200 and SHP-200 units

Please note: BioCote® technology does not protect users or others against disease causing bacteria, germs, viruses, or other harmful organisms. This technology is not a substitute for good hygiene and/or cleaning practices.



Optional temperature controller

Shakers & Mixers

From blending small samples inside tubes, flasks, and dishes to mixing liquid batches up to 380 liters, we have what you need.

Find more at coleparmer.com/shakers
coleparmer.com/mixers

TR-200 Series Tube Rotators

Keep cultures in suspension without compromising viability

- Adjustable angle of rotation from horizontal for minimal mixing to vertical for full end-over-end mixing
- Safe for use in cold rooms down to 4 °C and incubators to 40 °C
- Order a tube holder disc to fit your application; more available online



Speed	Dimensions (W x H x D)	Power (VAC, Hz)	Item number
2 to 40 rpm	22.5 x 29.0 x 31.0 cm (8 7/8 x 11 1/8 x 12 1/4 in.)	120, 60	51901-29
		230, 50	51901-28

- [00077-11](#) Microcentrifuge tube holder disc holds 46 x 1.5 mL tubes
[00077-13](#) Centrifuge tube holder disc, holds 12 x 50 mL tubes
[00077-15](#) Test tube holder disc holds 20 x 9–20 mm dia tubes

RS-200 Series Roller Shakers

Gentle rocking and rolling action with little aeration

- Roller tubes can be detached to accommodate larger vessels
- Safe for use in cold rooms down to 4 °C and incubators to 40 °C
- Removable side panels ensure sample bottles stay in place
- Digital models feature a timer from 1 second to 9 hours



No. of rollers	Speed	Dimensions (W x H x D)	Power (VAC, Hz)	Item number
RS-200 Analog Roller Shakers				
6	33 rpm, fixed	26.0 x 11.5 x 61.0 cm (10¼ x 4½ x 24 in.)	120, 60	51901-19
			230, 50	51901-18
9		38.0 x 11.5 x 61.0 cm (15 x 4½ x 24 in.)	120, 60	51901-21
			230, 50	51901-20
RS-200D Digital Roller Shakers				
6	5 to 60 rpm	26.0 x 11.5 x 61.0 cm (10¼ x 4½ x 24 in.)	120, 60	51901-23
			230, 50	51901-22
9		38.0 x 11.5 x 61.0 cm (15 x 4½ x 24 in.)	120, 60	51901-25
			230, 50	51901-24

SH-200 Series Large Orbital Shaker

Versatile—accommodates different sizes of vessels

- Smooth orbital shaking action with 16-mm orbit is ideal for larger samples and multiwell plates
- Built-in timer and digital speed LED display provide reproducible results
- Maintains consistent shaking speeds, even over long periods of time
- Suitable for use in incubators to 40 °C
- Cradle system with four rubber securing bars hold flasks, bottles, and beakers securely in place



Speed	Dimensions (W x H x D)	Power (VAC, Hz)	Item number
30 to 300 rpm	39.0 x 27.5 x 45.0 cm (15 3/8 x 10 7/8 x 17 3/4 in.)	120, 60	51901-01
		230, 50	51901-00

We offer a variety of laboratory shakers to provide you with the exact shaking motion you require.

Orbital • Reciprocating • Hand motion • Rocking
• See-Saw • Gyrotory • Rotating • Vortex

OS-200 Series Digital Reversing Mixer

One-touch reversing for complete agitation of samples

- Timed mixing cycles let you repeatedly alternate clockwise and counterclockwise rotation to control vortexing and minimize aeration
- Brushless DC motor maintains speeds at all viscosities
- Features through-shaft design, countdown timer, and integrated light
- Complete system includes mixer, propeller/shaft, stand, and clamp



Description	Speed	Motor	Max torque	Power (VAC, Hz)	Item number
Mixer only	40 to 2010 rpm	1/10 hp (75 W)	100.2 N-cm (142 in-oz)	100/230,	50004-00
Mixer system				50/60	50004-10

OS-200 Series Ultra-Compact Digital Mixer

Compact yet dependable

- Perfect for smaller-scale mixing needs throughout your lab
- Mixes up to 2 liters of water at maximum speed of 2500 rpm
- Brushless DC motor is maintenance free
- LED display lets you make precise speed adjustments and ensures repeatability
- Stainless steel collet accepts 6 mm (1/4 in.) shafts
- Ready to go out of the box—system includes mixer, stand, two mixing blades, and universal AC adapter



Description	Speed	Motor	Max torque	Power (50/60 Hz)	Item number
Mixer system	50 to 2500 rpm	1/50 hp (15 W)	10.0 N-cm (14.2 in-oz)	115 VAC	50006-01
				115/230 VAC	50006-03

SP Laboratory Overhead Mixer

Designed for durability and reliability

- Soft-start feature and smooth gradual adjustment to speed setting eliminate splashing
- Controller features simple controls—a speed adjustment knob and separate “forward/off/reverse” switch
- Low/no maintenance brushless motor is powerful enough to mix up to 95 liters of water
- Adjustable tilt from 0 to 30° allows proper propeller placement
- System includes mixer, shaft, propeller, double clamp, and stand



Description	Speed	Motor	Max torque	Power (VAC, Hz)	Item number
Mixer only	50 to 2500 rpm	1/5 hp (50 W)	64 N-cm (91 in-oz)	100/240,	55008-02
Mixer system				50/60	55008-03

Maintain the Right Temperature

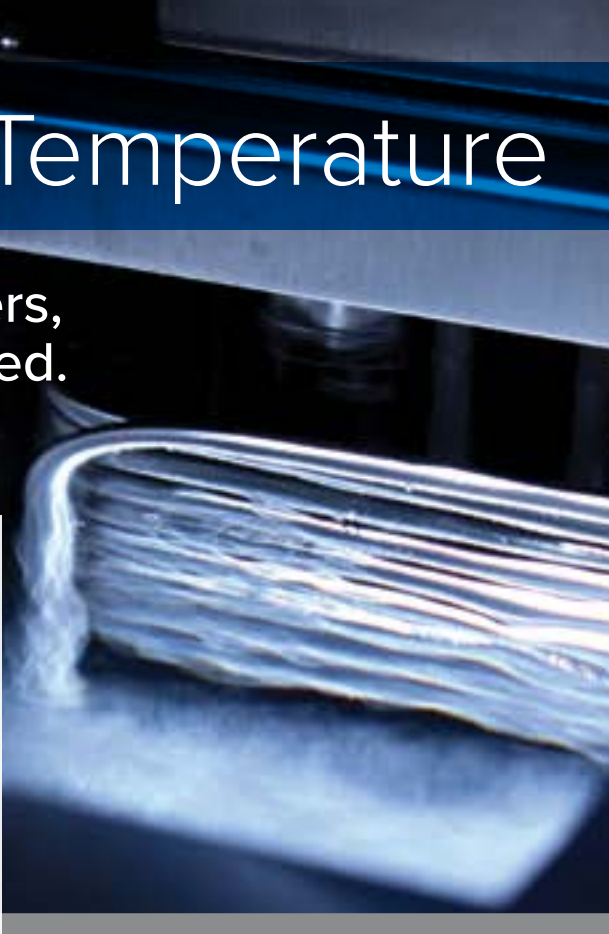
From utility baths to portable chillers, find the baths & circulators you need.

Find more at coleparmer.com/baths

WB-400 Series Digital Water Baths

Get digital accuracy at an analog price

- Full-color TFT display is visible from across the lab
- Quickly recall five frequently used temperature settings
- Seamless SS tank with rounded corners for easy cleaning
- Feature high domed lid and recessed handles
- Temp range of ambient +5 to 100 °C with ±0.1 °C stability



Bath capacity	Bath opening (W x H x D)	Power (VAC, Hz)	Item number
2 L	9.8 x 11.0 x 15.2 cm (3.9 x 4.3 x 6 in.)	120, 60	12105-84
5 L	12.7 x 27.5 x 15.2 cm (5 x 10.8 x 6 in.)		12105-86
10 L	27.0 x 29.5 x 15.2 cm (10.6 x 11.6 x 6 in.)		12105-88
20 L	24.1 x 43.2 x 15.2 cm (9.5 x 17 x 6 in.)		12105-90
28 L	24.1 x 43.2 x 20.3 cm (9.5 x 17 x 8 in.)		12105-92

WB-200 Series Digital Water Baths

Ideal for every lab, every day

- Digital display with timer and temperature settings
- Temp range of ambient +5 to 100 °C with ±0.2 °C stability
- Corrosion-resistant 304 stainless steel (SS) tank
- “Delay” function starts the heating cycle when most convenient for you
- Built-in overtemperature protection
- Attached SS gabled cover reduces heat loss



Bath capacity	Bath opening (W x H x D)	No. of module widths accepted	Power (VAC, Hz)	Item number
6.6 L	30.0 x 15.5 x 15.0 cm (11.8 x 6.1 x 5.9 in.)	2*	120, 60	78905-20
11 L	30.0 x 24.0 x 20.0 cm (11.8 x 9.4 x 7.9 in.)	4	120, 60	78905-22
27 L	50.0 x 29.5 x 20.0 cm (19.7 x 11.6 x 7.9 in.)	8	120, 60	78905-24

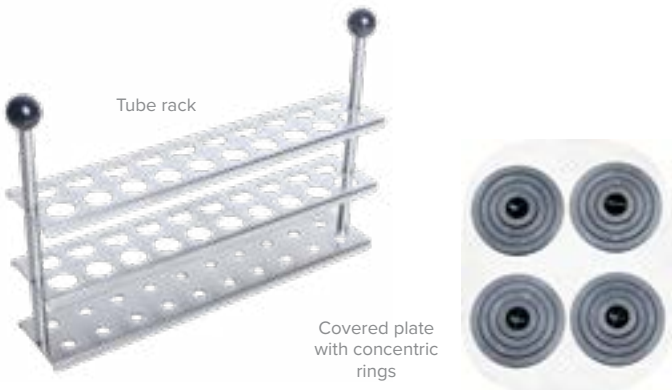
*The 6.6 L model does not accept the 78905-29 tube rack.

Optional Tube Racks

Tubes held	Module width	Item number
20 x 13 mm dia	1	78905-26
20 x 18 mm dia	1	78905-27
5 x 31 mm dia	1	78905-28
8 x 56 mm dia	3	78905-29

Optional Covered Plates with Concentric Rings

Flasks held	Fits bath size	Item number
2 (33 to 92 mm dia)	6.6 L	78905-30
4 (33 to 92 mm dia)	11 L	78905-31
8 (33 to 92 mm dia)	27 L	78905-32



IC-400 Series Standard Immersion Circulator

Save space with a slim profile

- Ensure precision due to an integral heating coil and re-circulating pump
- Simple intuitive operation
- Easily adjust the flow with a convenient slide control
- For use with reservoirs up to 28 L



Max Temperature °C	Reservoir Capacity (L)	Power (VAC, Hz)	Item number
135	28	120, 60	20873-73
135	28	240, 50	20873-74

RHC-400 Series Circulating Baths

PID algorithms optimize cooling and heating

- Digital display reads to 0.1° C with ±0.07 °C temperature stability
- Waterproof control panel swivels 180° for easy viewing
- Advanced performance reduces energy consumption
- Flow rate of 13.5 L/min; max 2.3 psi
- Includes reservoir cover



Reservoir capacity	Temperature range	Cooling capacity at 20 °C	Power (VAC, Hz)	Item number
7 L	–20 to 135 °C	200 W	120, 60	20873-47
15 L	–30 to 135 °C	915 W	120, 60	20873-53
20 L	–30 to 135 °C	915 W	120, 60	20873-61

CH-400 Series Air-Cooled Portable Industrial Chillers

Compact yet powerful

- High capacity in a robust-yet-compact design
- Chilling-specific, intelligent controller provides fault condition warnings
- Easy to use and maintain



Temperature range	Max flow	Cooling capacity at 20 °C	Power (VAC, Hz)	Item number
5 - 35 °C	13.2 L/min	5200 W	230, 60	20872-92
	41.6 L/min			20872-93

CB-200D-IB Electronic Ice Bucket

Waterless—no more wet melting ice

- Keep your samples cold, clean, and dry
- Ceramic-coated beads maintain a 4 °C temperature all day
- Holds 60 x 1.5 mL microtubes or a reagent bottle
- Includes aluminum bucket and 1.7 kg (3.7 lb) of autoclavable beads



Temperature range	Resolution	Accuracy	Power (VAC, Hz)	Item number
0 to 40 °C	0.1 °C	±1 °C	100–230, 50/60	24120-00

[99967-93](#) Additional aluminum bucket

[24120-99](#) Additional ceramic beads

North Science ULT Freezers

North Sciences/Traceable® Model TEC² Ultra-Low Temperature Freezers

100% peace of mind with two dual core compressors and fast recovery times

- Total sample security—system maintains temperature if one of the two cores, controls or systems is disabled
- Smart, situational awareness for complete performance monitoring
- Cloud-based monitoring with TraceableLIVE® service
- 7-inch color touch screen panel allows full user control
- Combines vacuum insulation panels with high-efficiency dual-layered insulated inner doors to ensure longest cold retention and recovery times
- Lockable, ergonomically designed door handle for easy and secure access
- GLP conformity makes transferring logged data to a PC simple and convenient
- USB interface to download historical temperature data

North Sciences series of ultra-low temperature (ULT) freezers offers TEC² technology with natural, hydrocarbon-based refrigerants to lower GWP (Global Warming Potential) and 100% redundancy provided by two complete and independent refrigeration systems. Fast, dual cooling system enables faster pull-down (4.5 hr) and door opening recovery times (80 min) after 2-minute door opening. Above industry standard (±2.5 °C) uniformity ensures your samples are being stored within the proper temperature range to maintain integrity.

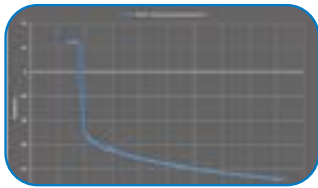
Standard ultra-low freezers rely on a cascade refrigeration system. If this system fails, an LN₂ or CO₂ backup can only sustain temperatures for approximately 7 hours. Your samples will need to be moved quickly. Maintenance, refilling, and supervision are also required with LN₂ and CO₂ backups. With North Sciences' TEC² technology, there is no need to move your samples in a rush or worry about LN₂ or CO₂ backups.

Maintaining temperature and uniformity is important, but being aware of external conditions and forces that have the potential to influence the freezer's performance makes the TEC² the world's first ULT freezer offering smart, situational awareness for complete performance monitoring and total sample security.

Now you can monitor everything from the inside out, 24/7. These freezers have an integrated Traceable® data logger, plus a one-year subscription to Standard TraceableLIVE® cloud-based control and monitoring service.



Touch-Screen Interface



Temperature Monitoring

Specifications

Temperature range: –86 to –40 °C (–123 to –40 °F)

Cooling type: direct cooling

Controller: microprocessor

Sensor: PT100

Interface: USB and RS-232

Material: 304 stainless steel inner chamber

Refrigerants: natural low GWP, hydrocarbon, CFC free

Alarms: high/low temperature, power-off failure, abnormal voltage, sensor error, filter screen check, controller failure, low battery, condenser malfunction, high ambient temperature, door ajar

Freezer capacity	No. of shelves	Capacity for 2-in boxes	Internal dimensions (W x H x D)	External dimensions (W x H x D)	Watts	Power (VAC, Hz)	Item number
425 L (15 cu ft)	3	288	61.0 x 118.0 x 57.5 cm (24 x 46.5 x 23 in.)	90.0 x 194.0 x 94.0 cm (35.5 x 77 x 37 in.)	845	120, 60	44260-85
					420	220, 50	44260-86
588 L (21 cu ft)	3	400	61.0 x 131.0 x 74.0 cm (24 x 52 x 29 in.)	90.0 x 199.5 x 115.5 cm (35.5 x 79 x 45.5 in.)	815	120, 60	44260-87
					405	220, 50	44260-88
728 L (26 cu ft)	3	500	96.6 x 135.0 x 57.0 cm (38 x 53 x 22 in.)	125.0 x 199.5 x 97.5 cm (49 x 79 x 38 in.)	850	120, 60	44260-89
					425	220, 60	44260-90
					425	220, 50	44260-91
838 L (30 cu ft)	3	600	89.5 x 131.0 x 72.0 cm (35 x 51.5 x 28 in.)	118.0 x 199.5 x 113.5 cm (46.5 x 79 x 45 in.)	900	220, 60	44260-92
					450	220, 50	44260-93

North Sciences/Traceable® TSi Series Ultra-Low Temperature Freezers

Sample security, reliability and sustainability for ultra-low temperature storage

- Cooling capacity adapts to user patterns substantially reducing energy and HVAC costs without compromising performance
- Smart, situational awareness for complete performance monitoring
- Cloud-based monitoring with TraceableLIVE® service
- Large 10-inch touch screen with state-of-the-art user interface design, oriented for ultimate user experience
- Variable-speed inverter drive technology
- Heated pressure equalization port
- Fast door-opening recovery time
- USB interface to download historical temperature data

North Sciences' TSi series ultra-low temperature freezers are designed to exceed all standards in reliability, sustainability and temperature management. The cooling capacity adapts to user patterns, substantially reducing energy and HVAC costs without compromising performance.

High-performance VIP thermal technology combined with double-injected foaming for both inner and outer doors improves the thermal insulation effect and energy savings

Now you can monitor everything from inside out, 24/7. These freezers have an integrated Traceable® data logger, plus a one-year subscription to Standard TraceableLIVE® cloud-based control and monitoring service.



Smart Interface



Safe and Secure Accessibility

Specifications

Temperature range: –86 to –40 °C (–123 to –40 °F)

Cooling type: direct cooling

Controller: microprocessor

Sensor: PT100

Interface: USB

Material: powder-coated galvanized steel interior and exterior

Refrigerants: R290, R170

Alarms: high/low temperature, hot condenser, sensor error, power failure, low battery, high ambient temp, filter, and door ajar

Freezer capacity	No. of shelves	Capacity for 2-in boxes	Internal dimensions (W x H x D)	External dimensions (W x H x D)	Watts	Power (VAC, Hz)	Item number
360 L (13 cu ft)	3	240	46 x 131 x 60 cm (18.1 x 51.6 x 23.6 in.)	64 x 197 x 82 cm (25.2 x 77.5 x 32.3 in.)	400	120, 60	44261-69
						220, 50	44261-70
480 L (17 cu ft)	3	320	60 x 131 x 60 cm (23.6 x 51.6 x 23.6 in.)	78 x 197 x 82 cm (30.7 x 77.5 x 32.3 in.)	440	120, 60	44261-71
						220, 50	44261-72
590 L (21 cu ft)	3	400	74 x 131 x 60 cm (29.1 x 51.6 x 23.6 in.)	92 x 192 x 82 cm (36.2 x 75.5 x 32.3 in.)	520	120, 60	44261-73
						220, 50	44261-74
730 L (25 cu ft)	3	500	74 x 131 x 73 cm (29.1 x 51.6 x 28.7 in.)	92 x 197 x 95 cm (36.2 x 77.5 x 37.4 in.)	610	120, 60	44261-75
						220, 50	44261-76
990 L (30 cu ft)	3	720	88 x 131 x 86 cm (34.6 x 51.6 x 33.9 in.)	106 x 197 x 108 cm (41.7 x 77.5 x 42.5 in.)	720	120, 60	44261-77
						220, 50	44261-78

North Sciences Minicore™ Compact Ultra-Low Temperature Freezer

Space-saving upright design fits just about anywhere

- Ideal for vaccines and critical material storage in biorepositories, research facilities, or anywhere valuable samples need to be stored safely
- Ensure reliability with cloud-based monitoring
- Compact size yet still has capacity for 2400 x 2 mL samples
- Low energy—operates on less than 3 A with a low 6 kWh/day
- Green technology—single compressor using CFC-free natural mix refrigerants with no environmental impact
- Ergonomically designed door handle for easy access
- Convenient USB port for data download and access port

Minicore ULT freezer is small enough to be used on a tabletop or can be moved around the lab floor on casters. The uniformity is above industry standard at ±2.5 °C ensuring your samples are being stored within the proper temperature range to maintain integrity. Constructed of epoxy-painted steel exterior, stainless steel inner chamber, and CFC-free polyurethane vacuum insulation panels.

Freezer comes supplied with a Traceable® data logger plus a 1-year Standard subscription to our TraceableLIVE® cloud-based control and monitoring service. TraceableLIVE lets you securely monitor your critical environments and notify your smartphone, tablet, PC, or Apple Watch® if anything goes wrong.



Control Panel



Safe and Secure Accessibility

LEARN MORE ABOUT

TraceableLIVE at coleparmer.com/traceablelive

Specifications

Temperature range: –86 to –40 °C (–123 to –40 °F)
Controller: microprocessor
Sensor: PT100
Display: LCD
Interface: USB
Alarms: high/low temperature, power failure, abnormal voltage, sensor error, filter, board failure, low battery, condenser, high ambient temperature, door ajar

Freezer capacity	No. of shelves	Capacity for 2-in boxes	Internal dimensions (W x H x D)	External dimensions (W x H x D)	Watts	Power (VAC, Hz)	Item number
55 L (1.9 cu ft)	1	24	33.0 x 41.0 x 45.3 cm (13 x 16 x 18 in.)	63.5 x 121.0 x 75.7 cm (25 x 48 x 30 in.)	442 221	120, 60 220, 50	44260-94 44260-95

North Sciences Messenger™ Portable Ultra-Low Temperature Freezers

Portable, reliable, continuous ULT operation

- Ideal for clinical trials and biologic drug delivery
- Intelligent temperature control with laboratory-grade PT100 sensor
- Temperature control accuracy of the whole box to avoid temperature fluctuations
- RFID digital locks protect samples
- 100% natural refrigerants
- Piston-based technology with no compressors or moving parts
- Maintenance-free life up to 50,000 hours

These Messenger shuttle freezers are the true portable ULT freezer solutions available today for delivering vaccines at ultra-low temperature without risks. Both models are perfectly sized, lightweight, and efficient—they solve the industry's pain point by making up for the shortage in liquid nitrogen transportation.

A cooling system with Stirling refrigerant delivers fast cooling with no fear of bumps and shakes. The integrated high pressure foam, vacuum insulation panels, double-layer submersible door, and double-layer sealing ring ensure very low thermal leakage.

Messenger 1 Model has a 1 L internal volume with adjustable temperature range of –86 to 4 °C and temperature control accuracy of ±0.5 °C. Built-in large capacity lithium battery can work for more than 1 hour without external power. Freezer weighs only 13.5 kg and can be shipped anywhere in the world by courier.

Messenger 10 Model features a 10 L internal volume with adjustable temperature range from –80 to 30 °C and temperature control accuracy of ±2 °C. Built-in large-capacity lithium battery lets you transport vaccines without any external power source.



Messenger 1
Ultra-Low Freezer



Messenger 10
Ultra-Low Freezer

Model	Capacity	Temperature range	Accuracy	Internal dimensions (W x H x D)	External dimensions (W x H x D)	Watts	Power	Weight	Item number
Messenger 1	1 L (0.035 cu ft)	–86 to 4 °C (–123 to 39.2 °F)	±0.5 °C	13.4 x 5.5 x 15 cm (5.3 x 2.2 x 6 in.)	27 x 45 x 27 cm (11 x 18 x 11 in.)	80	12–24 VDC	13.5 kg (29.8 lb)	44260-96

Incubators & Ovens

From creating optimal growth conditions to drying delicate samples, find the equipment you need.

Find more at coleparmer.com/incubators
coleparmer.com/ovens

INC-200 Series Mini Incubators

Digital temperature control

- Large chamber holds bottles and flasks up to 2 L
- Internal outlet powers small shakers and rocker

Capacity L (cu ft)	Temperature range	Power (VAC, Hz)	Item number
20 (0.7)	20 to 60 °C	115, 50/60	03608-00
	15 to 60 °C	115, 50/60	03608-01

INC-400 Series Incubators

Low energy consumption provides operating cost savings

- PID controller gives you accurate and reliable temperature control
- Easy-to-view LCD shows time, current and set temperatures, running status, and fan status
- Long-lasting silicone rubber gasket offers a tight seal, ensuring good heat retention and low energy consumption
- **Gravity convection** allows heat to fill the chamber naturally, providing more uniform growth and a lower chance of cross-contamination between samples
- **Mechanical convection** circulates heat to all levels of the chamber for more efficient heat distribution

Capacity L (cu ft)	Temperature range	Stability	Uniformity at 37 °C	Door configuration	No. of shelves included	Overall dimensions (W x H x D)	Power (VAC, Hz)	Item number	
INC-400G Series Gravity Convection Incubators									
16 (0.6)	25 to 65 °C	±0.5 °C	±1.5 °C	Door with glass observation window	2	51.0 x 35.0 x 40.0 cm (20.1 x 13.8 x 15.7 in.)	120, 60	52411-56	
35 (1.2)						60.0 x 42.0 x 46.0 cm (23.6 x 16.5 x 18.1 in.)	120, 60	52411-58	
50 (1.8)				Glass inner door, solid outer door	2	66.5 x 60.0 x 47.0 cm (26.2 x 23.6 x 18.5 in.)	120, 60	52411-60	
115 (4.1)						3	78.5 x 71.5 x 59.0 cm (30.9 x 28.1 x 23.2 in.)	120, 60	52411-62
210 (7.4)							91.5 x 87.0 x 66.0 cm (36 x 34.3 x 25.9 in.)	120, 60	52411-64
INC-400F Series Mechanical Convection Incubators									
16 (0.6)	25 to 65 °C	±0.5 °C	±1.5 °C	Door with glass observation window	2	51.0 x 36.5 x 40.0 cm (20.1 x 14.4 x 15.7 in.)	120, 60	52411-66	
35 (1.2)						62.5 x 42.0 x 44.5 cm (24.6 x 16.5 x 17.5 in.)	120, 60	52411-68	
50 (1.8)				Glass inner door, solid outer door	2	67.5 x 47.0 x 50.0 cm (26.6 x 18.5 x 19.7 in.)	120, 60	52411-70	
80 (2.8)						75.8 x 51.5 x 54.0 cm (29.8 x 20.3 x 21.3 in.)	120, 60	52411-72	
160 (5.7)						76.0 x 76.5 x 64.0 cm (29.9 x 30.1 x 25.2 in.)	120, 60	52411-74	
270 (9.5)						86.0 x 86.5 x 74.0 cm (33.9 x 34.1 x 29.1 in.)	120, 60	52411-76	



General-Purpose Ovens

PID controller for accurate, reliable temperature control

- Stainless steel inner chamber and powder-coated steel plate exterior resist corrosion for longer lifetime
- Rounded inner chamber corners offer easy cleaning

OVG-400 Series Gravity Convection Drying Ovens

- Gentle, natural air circulation provides more uniform growth and a lower chance of cross-contamination between samples
- Long-lasting silicone rubber gasket offers a tight seal, ensuring good heat retention and low energy consumption

OVF-400 Series Mechanical Convection Drying Ovens

- Forced air delivers fast heat-up and uniform temperature throughout the chamber for greater drying efficiency
- Long-lasting silicone rubber gasket offers a tight seal, ensuring good heat retention and low energy consumption

OVV-400B Series Botanical Vacuum Ovens

- Stainless steel internal tubing and compression fittings provide a higher ultimate vacuum ideal for botanicals and cannabis applications

OVV-400 Series Programmable Vacuum Ovens

- Easily manage up to eight programs with eight steps each
- Rubber O-ring and door lock handle create a secure seal to prevent air leakage or unauthorized access



Capacity L (cu ft)	Temperature range	Stability	Uniformity at 100 °C	No. of shelves included	Overall dimensions (W x H x D)	Power (VAC, Hz)	Item number
OVG-400 Series Gravity Convection Drying Ovens							
27 (0.95)	10 °C above ambient to 200 °C	±0.5 °C	±3 °C	2	46.0 x 66.0 x 52.0 cm (18 x 26 x 20.5 in.)	120, 60	52411-00
56 (1.97)			±3 °C		54.0 x 72.0 x 55.0 cm (21.2 x 28.3 x 21.6 in.)	120, 60	52411-02
96 (3.4)			±3.5 °C		59.0 x 81.0 x 65.0 cm (23.2 x 32 x 25.5 in.)	120, 60	52411-04
140 (5)			±3.5 °C		66.0 x 88.0 x 72.0 cm (26 x 34.6 x 28.3 in.)	120, 60	52411-06
200 (7)			±4 °C		71.0 x 94.5 x 78.0 cm (28 x 37.2 x 30.7 in.)	220, 50/60	52411-08
OVF-400 Series Mechanical Convection Drying Ovens							
16 (0.56)	10 °C above ambient to 250 °C	±0.5 °C	±1.5 °C	2	53.0 x 41.5 x 37.6 cm (20.8 x 16.3 x 14.8 in.)	120, 60	52411-09
30 (1)			±2 °C		62.2 x 50.5 x 45.1 cm (24.5 x 20 x 17.8 in.)	120, 60	52411-11
50 (1.8)			±2.5 °C		70.0 x 53.5 x 53.0 cm (27.5 x 21 x 20.8 in.)	120, 60	52411-13
80 (2.8)			±3 °C		73.6 x 61.5 x 52.2 cm (29 x 24.2 x 20.5 in.)	120, 60	52411-15
136 (4.8)			±3 °C		83.2 x 71.5 x 58.1 cm (32.8 x 28 x 22.8 in.)	120, 60	52411-17
220 (7.8)			±3 °C	88.0 x 91.5 x 63.0 cm (34.6 x 36 x 24.8 in.)	220, 50/60	52411-19	
400 (14)			±3.5 °C	128.5 x 106.0 x 75.0 cm (50.5 x 41.7 x 29.5 in.)	220, 50/60	52411-20	
620 (22)			±4 °C	98.0 x 188.0 x 80.0 cm (38.5 x 74 x 31.5 in.)	220, 50/60	52411-21	
OVV-400B Series Botanical Vacuum Ovens							
25 (0.88)	10 °C above ambient to 100 °C	±0.1 °C	±10 °C	4	60.5 x 45.0 x 49.0 cm (23.8 x 17.7 x 19.3 in.)	120, 60	52411-22
50 (1.7)	10 °C above ambient to 200 °C			6	73.0 x 55.0 x 56.0 cm (28.8 x 21.6 x 22 in.)	120, 60	52411-24
90 (3)				4 (heated)	74.0 x 59.1 x 61.0 cm (29 x 23.2 x 24 in.)	120, 60	52411-26
216 (7.6)					89.0 x 74.1 x 76.0 cm (35 x 29.2 x 30 in.)	120, 60	52411-28
OVV-400 Series Programmable Vacuum Ovens							
24 (0.85)	10 °C above ambient to 200 °C	±0.1 °C	±10 °C	2	44.5 x 62.0 x 58.0 cm (17.5 x 24.4 x 22.8 in.)	120, 60	52411-30
53 (1.8)				3	58.0 x 70.5 x 67.5 cm (22.8 x 27.8 x 26 in.)	120, 60	52411-32
91 (3.2)					61.0 x 81.0 x 80.5 cm (24 x 31.9 x 31.7 in.)	120, 60	52411-34

Weighing Your Options

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PB-300 Series Portable Toploading Balances

Comply with data integrity regulations

- Internal memory stores up to 500,000 readings and prevents data tampering
- Data exports feature GLP-compliant time and date stamps and other critical parameters
- Advanced connectivity supports USB and RS-232 interfaces
- Industry-leading 5-year warranty



Capacity	Readability	Calibration	Item no. (100/240 VAC)
200 g	0.001 g	External	10402-51
600 g	0.01 g	External	10402-52
2000 g	0.01 g	External	10402-53
3100 g	0.1 g	External	10402-54

[17101-52](#) NIST-traceable calibration for balances

PB-350 Series High-Capacity Portable Toploading Balances

Easily weigh heavy dynamic loads

- Collect and export data for further analysis with included software
- RS-232 interface provides printer or PC connection
- Built-in rechargeable battery provides portability
- Industry-leading 5-year warranty



Capacity	Readability	Calibration	Item no. (100/240 VAC)
1000 g	0.01 g	External Internal	10402-58 10402-63
2000 g	0.01 g	External Internal	10402-59 10402-64
6000 g	0.1 g	External Internal	10402-60 10402-65
10,000 g	0.1 g	External	10402-61
20,000 g	0.1 g	External	10402-62

[17101-52](#) NIST-traceable calibration for balances

Exclusive Laboratory Balances

Quality features at a remarkable price

PB-100 Series Portable Toploading Balances

- Perfect for your routine weighing applications requiring accuracy and traceability for GLP requirements
- Features include a print function, RS-232 interface, and capacity tracker
- Internal rechargeable battery allows convenient portability
- 3-year warranty

LB-200 Series Balances

- Vivid, backlit LCD easily visible in any lighting conditions
- Easy to operate with minimal training
- USB and RS-232 interfaces facilitate data collection
- Industry-leading 5-year warranty

LB-400 Series Precision Balances

- Large, backlit LCD provides clear visibility of weighing results
- Fast stabilization and response time
- Get secure data connections via USB, RS-232, and Ethernet interfaces; models with internal calibration also have Wi-Fi
- Industry-leading 5-year warranty

TB-800 Series Precision Touch-Screen Balances

- Color capacitive touch-screen display provides clear visibility to weighing results and menu options
- Go touchless—two IR proximity sensors offer programmable touch-free control
- Statistics working mode quickly analyzes data from series of measurements
- Enhanced features include autotest GLP function and multiple interfaces
- Industry-leading 5-year warranty

MB-200 Series Moisture Determination Balance

- No need to monitor sample—auto test does the work for you
- Large, backlit display shows temperature, time, and moisture simultaneously
- Measures what you need—grams, % moisture, % solids, % moisture vs dry weight, and % solid vs dry weight
- Industry-leading 5-year warranty

Add on these handy Square Weigh Boats

- Antistatic polystyrene material minimizes sample loss
- Rounded corners simplify transfer of powdered or granular samples

Size	Weigh capacity	White	Blue
		Item number	Item number
Small, 1½ x ¾ in.	20 mL	01017-05	01017-07
Medium, 3½ x 1 in.	100 mL	01017-15	01017-17
Large, 5½ x ¾ in.	330 mL	01017-25	01017-27



Capacity	Readability	Calibration	VAC	Item Number
PB-100 Series Portable Toploading Balances				
100 g	0.001 g	External	115	20000-32
400 g	0.01 g	External	115	20000-36
LB-200 Series Toploading Balances				
210 g	0.001 g	External	120/240	55000-05
410 g	0.001 g	External	120/240	55000-06
2200 g	0.01 g	External	120/240	55000-11
4200 g	0.01 g	External	120/240	55000-12
LB-200 Series Analytical Balances				
120 g	0.0001 g	External	120/240	55000-01
220 g	0.0001 g	External	120/240	55000-02
LB-400 Series Precision Toploading Balances				
600 g	0.001 g	Internal/Wi-Fi	120/240	10102-28
6000 g	0.01 g	Internal/Wi-Fi	120/240	10102-32
LB-400 Series Precision Analytical Balances				
160 g	0.0001 g	Internal/Wi-Fi	120/240	10102-24
220 g	0.0001 g	Internal/Wi-Fi	120/240	10102-25
310 g	0.0001 g	Internal/Wi-Fi	120/240	10102-26
TB-800 Series Precision Touch-Screen Toploading Balances				
2100 g	0.01 g	Internal/Wi-Fi	120/240	10102-07
4500 g	0.01 g	Internal/Wi-Fi	120/240	10102-08
6000 g	0.01 g	Internal/Wi-Fi	120/240	10102-09
TB-800 Series Precision Touch-Screen Analytical Balances				
160 g	0.0001 g	Internal/Wi-Fi	120/240	10102-01
220 g	0.0001 g	Internal/Wi-Fi	120/240	10102-02
310 g	0.0001 g	Internal/Wi-Fi	120/240	10102-03
MB-200 Series Moisture Determination Balance				
40 g	0.001 g	External	115	11124-06

[17101-52](#) NIST-traceable calibration for balances

Microscopes

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Trinocular Stereozoom Microscopes

Practical for larger objects or opaque specimens

MSS-200 Series

- Trinocular 45° inclined tubes with 360° rotatable head and pair of widefield WF 10x/21 mm eyepieces
- Incident and transmitted adjustable LED illuminations
- Coarse adjustment with tension control
- Achromatic optics, 29.9 to 4.6 mm field of view, and 100 mm working distance
- 100 to 240 VAC, 50/60 Hz operation

MSS-400 Series Professional

- Observe your specimen with the highest precision in three-dimensional imaging
- Trinocular 45° inclined tubes and pair of widefield WF 10x/23 mm eyepieces
- Incident and transmitted adjustable LED illuminations
- Achromatic optics, 35.4 to 4.2 mm field of view, and 110 mm working distance
- 100 to 240 VAC, 50/60 Hz operation

Magnification	Stand	Item number
MSS-200 Series Stereozoom Microscopes		
7.0 to 45x zoom	Pillar	78904-66
	Rack & pinion	78904-69
MSS-400 Series Professional Stereozoom Microscopes		
6.5 to 55x zoom	Rack & pinion	78904-48
	Pillar	78904-51
	Double-arm boom	78904-54
	Single arm	78904-57
	Pillar with dual LED flexible arms	78904-63



Compound Microscopes

Ideal for viewing very small samples not otherwise seen with the naked eye

MSU-100 Series

- Easy to use and rugged—the perfect entry-level educational microscope
- Revolving reversed nosepiece
- 115 x 100 mm stage; integrated 55 x 20 mm X-Y mechanical stage
- Corded or cordless operation
- Ergonomic carrying grip

MSU-200 Series

- Robust and sturdy with crisp high-resolution images
- Secured eyepieces and adjustable rack stop prevent damage to samples
- Reversed nosepiece for four semi-plan objectives
- 130 x 130 mm stage; mechanical 70 x 28 mm X-Y translation stage
- Ergonomic stand

MSU-400 Series

- Ideal for secondary schools, universities, small- and mid-sized laboratories
- Smooth-operating, reversed ball-bearing quadruple nosepiece for effortless objective changes
- Siedentopf type head with 30° incline for comfort
- 152/197 x 131 mm stage; integrated 75 x 36 mm X-Y rackless mechanical stage
- Integrated carrying grip for easy portability

MSU-600 Series

- Powerful with excellent quality—suitable for universities, life science, and Biomedical science labs
- Ergonomic features such as height adjustable eye tubes and a large rackless stage with double slide holder
- 187/230 x 140 mm rackless stage; integrated 79 x 52 mm X-Y mechanical stage
- Cable storage system
- We also offer models with polarization and metallurgical attachments suitable for materials science applications



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and reproductive harm. For more information, visit www.P65Warnings.ca.gov

Head style	Objectives	Eyepiece(s)	Working distance	Illumination	Power	Item number
MSU-100 Series Compound Microscopes						
Binocular	4/10/S40/S100x, achromatic	WF 10x/18 mm	48 to 75 mm	1 W NeoLED	Internal rechargeable batteries with AC adapter	78903-90
MSU-200 Series Compound Microscopes						
Binocular	4/10/S40/S100x, brightfield semi-plan	WF 10x/18 mm	48 to 75 mm	Adjustable 1 W NeoLED	100 to 240 VAC, 50/60 Hz	78904-00
MSU-400 Series Compound Microscopes						
Binocular	4x/10x/S40x/ S100x, brightfield semi-plan	HWF 10x/20 mm	48 to 76 mm	3 W adjustable Kohler NeoLED	100 to 240 VAC, 50/60 Hz	78904-02
Trinocular*	4x/10x/S40x/ S100x, brightfield semi-plan			3 W adjustable Kohler NeoLED	100 to 240 VAC, 50/60 Hz	78904-04
Trinocular*	4x/10x/S40x/ S100x, brightfield plan			3 W adjustable Kohler NeoLED	100 to 240 VAC, 50/60 Hz	78904-07
Trinocular*	10x/20x/S40x/ S100x, plan, phase contrast			3 W adjustable Kohler NeoLED	100 to 240 VAC, 50/60 Hz	78904-10
Trinocular*	4x/10x/S40x/ S100x, plan, fluorescence			3 W adjustable Kohler NeoLED; four 5 W LED Epi-illumination for fluorescence	100 to 240 VAC, 50/60 Hz	78904-13
MSU-600 Series Compound Microscopes						
Binocular	4x/10x/S40x/S100x, brightfield semi-plan	EWF 10x/22 mm	48 to 76 mm	3 W NeoLED	100 to 240 VAC, 50/60 Hz	78904-16
Trinocular*	4x/10x/S40x/S100x, brightfield semi-plan			3 W NeoLED	100 to 240 VAC, 50/60 Hz	78904-18
Trinocular*	4x/10x/S40x/S100x, brightfield plan			3 W Kohler NeoLED	100 to 240 VAC, 50/60 Hz	78904-21
Trinocular*	10x/20x/S40x/S100x, plan, phase contrast			3 W Kohler NeoLED	100 to 240 VAC, 50/60 Hz	78904-24

*Camera can be added on 23.2 mm dia port.

Reaction & Extraction

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RS-250 Series Reaction Station

Perform 10 reactions simultaneously under the same conditions

- Controlled temperature range from ambient +5 to 150 °C with ±1.0 °C temperature stability
- Powerful stirring speed from 400 to 2000 rpm
- Soft-start ramp feature minimizes splashing
- Manual and external control via the RS-232/RS-485 ports
- PTFE coating on block protects against chemical spills



No. of positions	Tube diameter	Sample volume	Watts	Power (50/60 Hz)	Item number
10	24 or 25 mm	1 to 25 mL	300	230 VAC	36630-11

HM-200 Series Heating Mantles

Be safe with “cool to the touch” exterior

- Unique ventilation slots and ceramic fiber insulation keep the chemical-resistant polypropylene exterior cool even while in use
- Holds round-bottom and volumetric flasks
- Maximum element temperature of 450 °C
- Thermal insulating cartridge provides maximum heat transfer



Flask size	Dimensions (W x H x D)	Watts	Power (50/60 Hz)	Item number
50 mL	26.0 x 17.5 x 12.7 cm (10.2 x 6.9 x 5 in.)	60	115	36002-00
100 mL		60	115	36002-04
250 mL		150	115	36002-08
500 mL	31.0 x 23.8 x 14.5 cm (12.2 x 9.4 x 5.7 in.)	200	115	36002-12
1000 mL		300	115	36002-16
2000 mL		500	115	36002-20
3000 mL	40.0 x 35.0 x 19.0 cm (15.7 x 13.8 x 7.5 in.)	500	115	36002-24
5000 mL		800	115	36002-28

RV-200 Series Rotary Evaporators

Unique PTFE sealing system offers excellent thermostability

- PID temperature controller provides stable temperature control
- Easily set and view operating parameters on two digital displays; one for rotation speed and timer and another for bath temperature and timer
- Stainless steel bath with PTFE coating withstands high temperatures and is easy to clean
- Choose simple one-handed manual lift or automatic motorized lift
- Come with control stand, uncoated glassware set (vertical condenser, 1 L sample flask, 1 L receiving flask), clip, water bath, and vacuum gauge



Simply add a vacuum pump and circulating chiller to complete your setup

Lift mechanism	Condenser type	Max evaporation flask size*	Evaporation rate	Rotation speed	Bath			Max vacuum	Dimensions (W x H x D)	Power (50/60 Hz)	Item number
					Temperature	Material	Watts				
Manual	Vertical	2 L	22 mL/min	20 to 300 rpm	5 to 99 °C	Stainless steel with PTFE coating	1000	8 mbar	57.0 x 75.4 x 38.6 cm (22.4 x 29.7 x 15.2 in.)	120 VAC	52411-92
Vertical										220 VAC	52411-93
										120 VAC	52411-94
										220 VAC	52411-95

*Unit is provided with a 1 L evaporation flask but accommodates either a 1 L or 2 L flask.

Find them all at coleparmer.com/evaporators

VPS-200 Vacuum Pump

Compact and portable

- Tough lightweight plastic housing features integral carrying handle
- Low-friction piston runs cool and quiet for a long service life
- ¼ in. hose barb connections



Free air capacity	Maximum vacuum	Maximum pressure†	Motor	Power (VAC, Hz)	Item number
10.5 L/min (0.37 cfm)	541 mm Hg (21.3 in Hg)	33 psig (2.27 bar)	1/11.5 hp (65 W)	115, 60	79202-00

†Intermittent duty: limit output to 33 psig – Continuous duty: limit output to 10 psig.

CHB-400 Series Cooling/Heating Recirculators

Save time with quick ramp up and cool-down

- Internal circulating tank design was built to minimize fluid evaporation
- Easy cooling for smaller instruments, jacketed reactors, and rotary evaporators
- Reliable, robust system maintains temperature to ±0.1 °C from –10 to 80 °C



Cooling capacity at 20 °C	Pump type	Flow rate (L/min)	Power (VAC, Hz)	Item number
250 W	Force	17	115, 60	13042-01
500 W	Force	17	115, 60	13042-17

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- Easily fine-tune pipetting speed with thumbwheel control and speedometer display
- Durable, UV-resistant plastic housing is ideal for use in cleanrooms and fume hoods
- Accepts glass or plastic serological pipettes, from 1 to 100 mL

⚠ WARNING: This product can expose you to chemicals including nickel, which is known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

Housing color	Power (VAC, Hz)	Item number
Blue	100 to 240, 50/60	25300-96
Steel gray		25300-98



Single-Channel Adjustable-Volume Pipettors

Cushioned finger grip for comfort

- Ergonomic, lightweight push-button design
- Forward and reverse pipetting modes
- Handgrip window volume display
- Fully autoclavable

Volume (µL)	Increments (µL)	Item number
0.1 to 2.5	0.01	24501-01
0.5 to 10	0.1	24501-02
5 to 50	0.5	24501-03
10 to 100	0.5	24501-05
20 to 200	0	24501-07
100 to 1000	5	24501-08
500 to 5000	50	24501-09
2000 to 10,000	100	24501-10



Vacuum Aspiration Systems

Safe and convenient handling of liquid waste disposal

- Easily switch between manual aspiration and continuous aspiration, reducing hand fatigue
- Collection bottle outlet with hydrophobic filter prevents aerosol and liquid contamination
- The 4 L model offers level detection which prevents bottle from overfilling
- Wetted parts are autoclavable; easy to disassemble and clean
- Includes vacuum bottle, cap, tubing, aspiration handle, hanging bracket, and single/multi-channel adapters

Pumping speed	Vacuum range	Bottle size	Cap style	Power (VAC, Hz)	Item number
15 L/min (air)	0 to 600 mbar	2 L	Barbed fitting	100 to 240, 50/60	13050-51
		4 L	Quick release		13050-50



FB-200 Series Tissue Float Bath

View tissue cuttings more easily

- Improved visibility with black anodized bath surface
- Easily set temperature from 30 to 70 °C (86 to 158 °F) with analog dial
- Temperature control prevents overheating
- Dry slides on convenient edge



Bath capacity	Internal dimensions	Power (VAC, Hz)	Item number
2.5 L	7.6 x 22 cm (3 x 8 1/2 in.)	115, 50/60	48572-50

SW-200 Series Slide Warmer

Holds up to 50 slides

- Use to safely dry glass slides after sample mounting in preparation for clearing and staining
- Slides can be arranged in different orientations
- Dark surface provides good visibility of samples

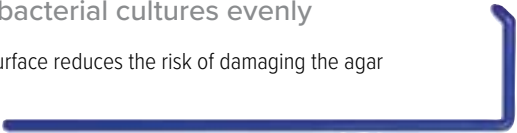


Capacity	Temperature range	Power (VAC, Hz)	Item number
50 slides, 76 x 25 mm (3 x 1 in.)	Ambient to 100 °C	115, 50/60	48573-01

Sterile Cell Spreaders

Spread bacterial cultures evenly

- Smooth surface reduces the risk of damaging the agar



Material	Packaging	Item number
Sterile polypropylene	50 bags of 10	04396-51
	100, individually wrapped	04396-52

Sterile Cell and Tissue Culture Plates

Printed lot numbers for easy traceability

- Treated surface provides optimal growth
- Gamma sterilized and nonpyrogenic
- Individually packaged in easy-open blister pack; includes lid



No. of wells	Max well volume	Qty	Item number
6	17 mL	100	01927-70
12	6.8 mL	100	01927-72
24	3.5 mL	100	01927-74
96	0.2 mL	100	01927-76
96	0.39 mL	100	01927-78

Sterile Cell-Line Bioreactor Flasks

Achieve high cell density growth

- Features a 10,000 MWCO regenerated cellulose semi-permeable membrane and 0.2 µm bottom vent membrane barrier
- Polystyrene housing and molded silicone gas transfer bottom
- Sterilized by gamma irradiation and pressure tested



Application	Capacity (mL)	Qty	Item number
For CL1000 suspension cells	1000	3	24406-53
For CL350 suspension cells	350	5	24406-54
For adherent cells	1000	3	24406-55

Erlenmeyer Flasks

Perfect choice for suspension cell culture

- Sterilized by gamma irradiation per ISO 11137-2 (SAL 10⁻⁶)
- DNase/RNase free and nonpyrogenic
- Flask neck is designed for easier holding and pouring
- Two cap styles—with a leakproof plug seal or vented with a 0.22 µm hydrophobic PTFE membrane for continuous gas exchange while ensuring sterility and preventing leakage

Capacity (mL)	Graduation intervals (mL)	Cap type	Qty/cs	Item number
Polyethylene Terephthalate Glycol (PETG) Flasks; temp range of –60 to 60 °C				
125	25	Seal	24	34522-40
		Vent		34522-41
250	25	Seal	12	34522-42
		Vent		34522-43
500	50	Seal	12	34522-44
1000			6	34522-46
Polycarbonate (PC) Flasks; temp range of –80 to 121 °C				
125	25	Seal	24	34522-48
		Vent		34522-49
250	25	Seal	12	34522-50
		Vent		34522-51
500	50	Seal	12	34522-52
		Vent		34522-53
1000	50	Seal	6	34522-54
		Vent		34522-55
2000	100	Seal	6	34522-56
		Vent		34522-57
3000	100	Seal	4	34522-58
		Vent		34522-59
Baffled PC Flasks; temp range of –80 to 121 °C				
125	25	Vent	24	34522-61
250	25	Vent	12	34522-63
500	50	Vent	12	34522-65
1000	50	Vent	6	34522-67



Use flasks with a baffled bottom to improve mixing and increase gas exchange.

Sterile Media Bottles

Square shape saves space

- Ideal for safe transport and storage of cell culture media
- Autoclavable PET resin
- Thick walls and crush-resistant corners
- Sterilized by gamma irradiation
- With PE cap



Capacity (mL)	Qty	Item number
500	96	06287-02
1000	48	06287-03

Class A Glass Round Media Bottles

Meet ASTM E438 requirements

- Wide mouth for easy pouring
- Withstand temperatures from –50 to 550 °C
- Borosilicate glass bottle and PP cap are autoclavable



Capacity (mL)	Graduations	Qty	Item number
100	20	10	34503-38
250	50	10	34503-39
500	100	10	34503-40
1000	100	10	34503-41
2000	200	1	34503-43
5000	500	1	34503-82
10,000	1000	1	34503-83

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TELOS® Sample Preparation Plates

Increase the performance of your HPLC method by removing interfering species

- Improve sensitivity for more reliable and consistent data
- Extend lifetime of HPLC columns by removing unwanted species
- Accelerates sample preparation compared to centrifugation



PPT Protein Precipitation Plate is designed for high throughput and automated processing. The precipitation is removed by filtration, eliminating time-consuming centrifugation and transfer steps. Prefiltration design reduces clogging.

Phospholipid Removal Plate easily removes 99% of phospholipids simultaneously with proteins. Provides stable batch-to-batch reproducibility and reduces sample retest rates. Low extractable residue material will not interfere in UV or MS detection.

Compatible with instrument brand	Fits models	Typical life	Item number
ABI Analytical	757, 759, 783A, 785A, 1000S, 980, 120A, 130A	1000 hrs	11941-10
Agilent	1100 DAD, 8453	1000 hrs	11941-12
	1100/1200 DAD (to fit G1315/1365 A & B series detectors)	2000 hrs	11941-13
	1100/1200 DAD (to fit G1315/1365 C & D series detectors)	2000 hrs	11941-14
Dionex™	UltiMate™ 3000, 3000RS, 3100, 3400	2000 hrs	11941-17
Dionex/Gynkotek	UVD160, 170S, 170U, 320, 340S, 340U	2000 hrs	11941-20
Shimadzu	SPD-10A, AVP, AV, AVVP, M10AVP, 20A, 20AV, M20A	2000 hrs	11941-26
	Spectrophotometers	2000 hrs	11941-27
	LC2010	2000 hrs	11941-28
Varian	Prostar 325, 335	2000 hrs	11941-33
Waters	996, 2996 PDA	2000 hrs	11941-35
	2487	2000 hrs	11941-36

Description	Qty	Item number
PPT protein precipitation plate, 96 wells, 2 mL	1	64822-01
Phospholipid removal plate, 96 wells, 30 mg/2 mL	2	64822-00

UHPLC and HPLC Columns

Get the performance you deserve

- Large choice of lengths and inner diameters to fit your application
- Multiple phases available in 1.7, 3, and 5 µm particle size
- 1.7 µm particle size provides increased efficiency at high linear velocities and with lower backpressure; operating pressure up to 18,000 psi
- Maintain chromatographic integrity and increase column lifetime with cartridge guards and in-line filters

Each Cole-Parmer UHPLC and HPLC column is tested using a rigorous QC test, using basic analyte probes as well as neutral efficiency markers to ensure that the column reproducibility is of the highest quality. Our columns are subject to tight specification using basic analytes in an unbuffered mobile phase system. Cole-Parmer stationary phases have been proven to exhibit excellent peak shapes and efficiency for the full range of analyte species.

Cole-Parmer C18

- Superior peak shapes
- Based on ultra-pure silica
- For acids, bases, and neutrals

C18 stationary phase offers unique high and low pH performance. It provides the best in peak shape, resolution and extended pH range for method development flexibility for simple compound screens or complex metabolite identification.

Cole-Parmer Polar Endcapped C18

- Retention of polar analytes by polar endcapping group
- Enhanced resolution
- 100% aqueous compatible
- For hydrophilic analytes, organic acids, and catecholamines

Polar endcapped C18 is designed to aid in the separation and retention of polar analytes. It provides additional interactions between the stationary phase and polar molecules, improving their retention and removing the need for complex mobile phase systems.

Cole-Parmer Diphenyl

- Unique selectivity
- No MS bleed; stable hydrophobic ligand
- Enhanced polar retention
- For metabolites, positional isomers, and hydrophilic/hydrophobic analytes

Diphenyl provides extra retention of compounds containing aromatic functionality. Extra selectivity and retention are possible for polar substrates, along with metabolite profiling.

Cole-Parmer C8

- Reduced hydrophobicity over C18
- Excellent peak shapes
- For lipids, steroids, and highly hydrophobic analytes

C8 provides similar characteristics to C18 for situations where less hydrophobicity is required.

Phase Characteristics

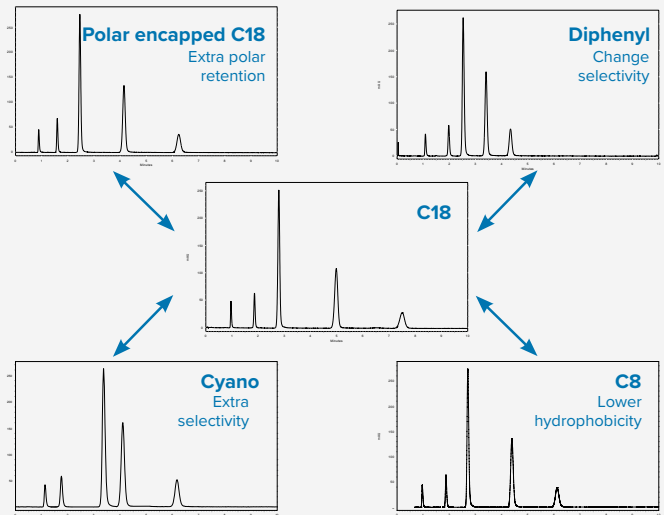
Chemistry	C18	Polar endcapped C18	Diphenyl	C8
Carbon loading	17%	18%	13%	13%
Specific area	380 m²/g	380 m²/g	380 m²/g	380 m²/g
Pore size	100 Å	100 Å	100 Å	100 Å
pH range	1 to 12	2 to 10	2 to 9	2 to 10
USP classification	L1	L1	L11	L7

Method Development

Method development typically starts with a C18 or C8 column as both provide hydrophobic retention with good peak shapes for neutral, acidic and basic analytes. If retention of polar molecules is also needed then the polar endcapped C18 is a good starting choice.

If selectivity is insufficient then diphenyl or cyano stationary phases are a good alternative; they will change selectivity and even elution order since they work on dipole characteristics as opposed to just hydrophobicity.

Cyano stationary phase is good in normal phase (NP) conditions for polar analytes with COOH, NH₂, NHR₂ or NR₂ groups. If small polar molecules still do not retain then HILIC chromatography is a suitable alternative.



- Acidic, neutral & basic analytes**

 - C18
 - Diphenyl
 - C8

Polar basic molecules

 - C18 operated at high pH
 - Polar endcapped C18
 - Diphenyl
- Polar acidic molecules**

 - Polar endcapped C18
 - HILIC
 - Cyano in NP mode

Alternate selectivity

 - Diphenyl
 - Cyano

Our comprehensive selection of phases and sizes is available online.

UHPLC and HPLC Columns

Particle size	Length	Column ID	C18	Polar endcapped C18	Diphenyl	C8
			Item number	Item number	Item number	Item number
UHPLC Columns						
1.7 µm	50 mm	2.1 mm	-	16470-54	16471-33	-
		4.6 mm	16470-09	16470-51	16471-30	16470-30
	100 mm	2.1 mm	-	16470-53	16471-32	16470-32
	150 mm	2.1 mm	16470-10	16470-52	16471-31	16470-31
HPLC Columns						
3 µm	50 mm	2.1 mm	16470-08	16470-50	16471-29	16470-29
	100 mm	2.1 mm	16470-07	16470-49	16471-28	16470-28
		4.6 mm	16470-05	16470-47	16471-26	16470-26
	150 mm	2.1 mm	16470-06	16470-48	16471-27	-
4.6 mm		16470-04	16470-46	-	-	
5 µm	50 mm	2.1 mm	16470-03	16470-45	16471-24	16470-24
	100 mm	4.6 mm	16470-02	16470-44	16471-23	16470-23
	150 mm	4.6 mm	16470-01	16470-43	-	16470-22
	250 mm	4.6 mm	16470-00	16470-42	16471-21	16470-21

Guard and Filter Options

Guard cartridges provide extra protection and are quick to replace in the direct-connect guard holder, reducing downtime. Guards are 10 mm in length which adds sufficient protection to the system without changing retention or selectivity parameters. Available in formats to match your analytical HPLC columns.

An alternative to a guard cartridge system is an in-line filter. These filters have a finger tight direct connection design, and are placed between the column and the fitting to trap particulate matter before it reaches the analytical UHPLC or HPLC column.

Particle size	Length	Diameter	Qty	C18	Polar endcapped C18	C8
				Item number	Item number	Item number
3 µm	10 mm	2 mm	2	-	16470-61	-
		4 mm	2	16470-17	16470-59	16470-38
5 µm	10 mm	2 mm	2	-	16470-57	-
		4 mm	2	-	16470-55	-

[16470-93](#) In-line filters for UHPLC, 0.5 µm. Pack of 4

[16470-91](#) In-line filters for HPLC, 2 µm. Pack of 10

BIO UHPLC and HPLC Columns

Large 300 Å pore size is optimal for peptides

- C18 phase is ideal for peptide mapping and hydrophilic proteins
- Use C4 phase to analyze large hydrophobic molecules
- 1.7 µm UHPLC particle size increases your sensitivity options
- Fully scalable 1.7 to 5 µm particle sizes for method transfer
- Maintain chromatographic integrity and increase column lifetime with in-line filters

Cole-Parmer BIO C18 and BIO C4 columns are optimized stationary phases providing improved selectivity, throughput, sensitivity, and column robustness for biomolecules. Biomolecules are a diverse range of compounds, amino acids, proteins, peptides, nucleic acids, vitamins and obtaining quality separations is critical.

Phase Characteristics

Chemistry	BIO C18	BIO C4
Carbon loading	11.5%	5%
Specific area	150 m²/g	150 m²/g
Pore size	300 Å	300 Å
pH range	2 to 9	2 to 9
USP classification	L1	L26



Particle size	Length	Column ID	BIO C18	BIO C4
			Item number	Item number
UHPLC Columns				
1.7 μm	50 mm	2.1 mm	16470-75	16470-88
		4.6 mm	16470-72	16470-85
	100 mm	2.1 mm	16470-74	16470-87
	150 mm	2.1 mm	16470-73	16470-86
HPLC Columns				
3 μm	50 mm	2.1 mm	16470-71	16470-84
	100 mm	2.1 mm	16470-70	16470-83
		4.6 mm	16470-68	16470-81
	150 mm	2.1 mm	-	16470-82
5 μm		4.6 mm	-	16470-80
	50 mm	2.1 mm	16470-66	16470-79
	100 mm	4.6 mm	16470-65	16470-78
	150 mm	4.6 mm	16470-64	16470-77
	250 mm	4.6 mm	16470-63	16470-76

[16470-93](#) In-line filters for UHPLC, 0.5 µm. Pack of 4

[16470-91](#) In-line filters for HPLC, 2 µm. Pack of 10

Omnifit® EZ and EZ SolventPlus™ Chromatography Columns

Easier to use, yet provide excellent results

- Precision borosilicate glass columns provide inertness, visibility, and performance
- Fixed or adjustable endpieces of PTFE with dual O-rings for secure seal
- PEEK™ column threads offer outstanding durability—won't chip or break
- Superior frit placement adds bed support and even distribution of sample flow

EZ columns are ideal for low- to medium-pressure applications and are resistant to many solvents used in liquid chromatography. Modular design gives you the flexibility to mix and match column sizes with different endpiece types to meet your specific requirements.

EZ SolventPlus columns have only the most chemically inert materials in the fluid path—borosilicate glass, PTFE, ETFE, and Chemraz®—ensuring the utmost chemical resistance. Ideal for techniques using organic solvents such as reversed phase chromatography.

Select from three endpiece configurations to suit your application—one fixed and one adjustable, two adjustable, or two fixed. Each adjustable endpiece gives you the flexibility to modify the bed length up to 80 mm in height (up to 160 mm with two adjustable endpieces). Once in place, fine adjustments can be made to position the endpiece to cause minimal disturbance to the packed bed. Each column is supplied assembled and ready to use, with all the frits, tubing, fittings, and connections needed to get started.

EZ Columns

Column ID	Column length	Max pressure	One fixed & one adjustable endpieces	Two adjustable endpieces	Two fixed endpieces
			Item number	Item number	Item number
6.6 mm	100 mm	900 psi	11942-94	11942-93	11942-95
	250 mm		11943-00	11942-99	11943-01
10 mm	250 mm	600 psi	11943-15	11943-14	11943-16
	500 mm		11943-24	11943-23	11943-25
15 mm	250 mm	300 psi	11943-33	11943-32	11943-34
	400 mm		11943-39	11943-38	11943-40
25 mm	250 mm	150 psi	11943-51	11943-50	11943-52
	500 mm		11943-60	11943-59	11943-61
35 mm	250 mm	150 psi	11943-66	11943-65	11943-67
	330 mm		11943-69	11943-68	11943-70
50 mm	250 mm	75 psi	11943-75	11943-74	11943-76

EZ SolventPlus™ Columns

Column ID	Column length	Max pressure	One fixed & one adjustable endpieces	Two adjustable endpieces	Two fixed endpieces
			Item number	Item number	Item number
6.6 mm	100 mm	900 psi	11943-90	11943-89	11943-91
	400 mm		11944-02	11944-01	11944-03
10 mm	150 mm	600 psi	11944-08	11944-07	11944-09
15 mm	250 mm	300 psi	11944-29	11944-28	11944-30
25 mm	250 mm	150 psi	11944-47	11944-46	11944-48
35 mm	250 mm	150 psi	11944-62	11944-61	11944-63
50 mm	250 mm	75 psi	11944-71	11944-70	11944-72

Your chromatography experts • Find them all at coleparmer.com/chromatography

Liquid chromatography (LC)	Fast protein liquid chromatography (FPLC)	QuEChERS sample preparation	Vacuum manifolds
Low-pressure liquid chromatography (LPLC)	Gas chromatography (GC)	Solid-phase extraction (SPE)	Collection plates and mats
High-performance liquid chromatography (HPLC)	Flash chromatography (FC)	Filtration	Viols and closures
Ultra high-performance liquid chromatography (UHPLC)	Ion chromatography (IC)	Syringes and syringe filters	Solvent safety systems
	Thin-layer chromatography (TLC)	Columns and media	Standards and solvents
		Fittings, tubing, and valves	



Materials of Construction

Column: borosilicate glass

Endpiece: PTFE

Threaded end: PEEK

Frit (bed support):
EZ columns: PE
EZ SolventPlus columns: PTFE

O-ring:
EZ columns: FKM/FPM
EZ SolventPlus columns: Chemraz®

Adjusting and retaining nuts: acetal

Connection cap:
EZ columns: glass-filled PP
EZ SolventPlus columns: ETFE

Fitting nuts:
EZ columns: glass-filled PP
EZ SolventPlus columns: ETFE

VapLock™ Closed Systems

Protect lab personnel from hazardous solvent vapors

- Minimize chemical exhaust from solvent reservoir bottles and waste containers—ideal for HPLC and other analytical testing instruments
- Avoid costly fines by maintaining regulatory compliance
- Achieve repeatable results and ensure the purity of the process
- Simply attach to any standard solvent bottle and waste container
- Versatile—large selection of components provides a solution for any system

Solvent Delivery

- Cap seals securely to prevent contamination and evaporation
- Integral check valve prevents vapors from escaping
- Filtered air replaces fluid withdrawn from the container, maintaining pressure
- Simple and quick bottle changes—easy to remove without tangling inlet tubes



Solvent Delivery Container Caps. PTFE cap body, PP spin collar, PTFE/SS integrated air inlet valve, and 50 µm PTFE exhaust filter.

Cap size	Ports	Seal material	Item number
GL45	(2) ¼ in.-28 UNF(F)	FFKM	12018-08
		EPDM	12018-06
	(4) ¼ in.-28 UNF(F)	FFKM	12018-09
		EPDM	12018-07

⚠ WARNING: This product can expose you to chemicals including tetrafluoroethylene, which is known to the State of California to cause cancer and reproductive harm. For more information, visit www.P65Warnings.ca.gov

Waste Collection

- Fully enclosed and sealed system collects waste while containing harmful vapors
- Manifolds include multiple connection ports to adapt to your system; free-spinning collar allows quick disconnect
- Exhaust filter absorbs solvent vapors to prevent escaping to the environment; choose filter with breakthrough indicator to know when to replace
- Includes everything needed for closed waste containment—select a waste manifold kit to use with your existing container, or choose a system with waste container included

Waste Manifold Kits. Include a 10-port manifold [6 ports x ¼ in. -28 UNF(F), 3 ports x ¼ in. NPT(F), and 1 port x ½ in. NPT(F)], fittings, plugs for unused ports, tubing with connections, and exhaust filter with breakthrough indicator.

Cap size	Manifold material	Item number
38-430	PTFE	12018-63
Wako 38 mm	PP	12018-68
Wako 38 mm	PTFE	12018-69
GL45	PTFE	12018-75
DIN 45	PP	12018-80

⚠ WARNING: This product can expose you to chemicals including tetrafluoroethylene, which is known to the State of California to cause cancer and reproductive harm. For more information, visit www.P65Warnings.ca.gov

Solvent Waste Systems. Include container, manifold, fittings, plugs for unused ports, tubing with connections, and exhaust filter with breakthrough indicator.

Container	Manifold	Fittings	Item number
20 L capacity, translucent PE; FM approved, OSHA, NFPA, and EPA compliant	10 ports, PP	Quick-disconnect, PP	12020-69
	10 ports, PTFE	Quick-disconnect, SS	12020-70

⚠ WARNING: This product can expose you to chemicals including tetrafluoroethylene, which is known to the State of California to cause cancer and reproductive harm. For more information, visit www.P65Warnings.ca.gov



For a full selection, please visit coleparmer.com/vaplock

Breakthrough Filter Indicator
The exhaust filter's indicator changes color as the activated carbon filter absorbs hazardous carbon vapors.

Unexposed Exposed

Replacement Exhaust Filters. Activated carbon, HDPE cartridge, ¼ in. NPT(F) port.

Description	Qty	Item number
75 g filter	1	12019-79
	5	12019-81
75 g filter with breakthrough indicator	1	12019-80

⚠ WARNING: This product can expose you to chemicals including formaldehyde, which is known to the State of California to cause cancer. For more information, visit www.P65Warnings.ca.gov

Traceable® Cold Chain

Whether in storage or in transit, make sure your products are kept at the optimal conditions.

Find more at coleparmer.com/coldchain

Wi-Fi Data Loggers with TraceableLIVE® Cloud Service

Get alerts before you lose valuable samples

- Remotely monitor your critical environments 24/7 via Wi-Fi*
- View current conditions anywhere—cloud-based interface sends email, text, and push notifications
- Securely connect to data via smartphone, tablet, PC, or Apple Watch®
- No software required—web, Android™, Apple® iOS data visibility

Data loggers compatible with TraceableLIVE cloud service provide a simple, efficient, and reliable way to ensure your critical samples are not compromised due to parameter variations. This latest technology is ideal for monitoring a process in real time, any time. Plus you get the value, accuracy, and peace of mind of NIST-traceable calibration at a noncalibrated price.



Sensor included	Temperature parameters			Item number
	Range	Resolution	Accuracy	
Cryogenic data loggers				
One 316 SS probe with 1.8-m (6-ft) cable	–200 to 105 °C (–328 to 221 °F)	0.01 °C/F	±0.25 °C (±0.4 °F)	18001-08
Two 316 SS probes with 1.8-m (6-ft) cable				18001-09
Ultra-low temperature data loggers				
One 316 SS probe with 1.8-m (6-ft) cable	–90 to 105 °C (–130 to 221 °F)	0.01 °C/F	±0.1 °C (±0.18 °F)	18000-27
Two 316 SS probes with 1.8-m (6-ft) cable				18000-28
Refrigerator/freezer data loggers				
Two bottle probes	–50 to 60 °C (–58 to 140 °F)	0.01 °C/F	±0.25 °C (±0.45 °F) from –40 to 60 °C, otherwise ±0.5 °C	99460-00
Two quick-disconnect bottle probes				98768-68
Two vaccine bottle probes				61011-31
Two SS probes with detachable sensor and 3-m (10-ft) cable				99460-15
Temperature/humidity data loggers				
Ambient sensor dongle	0 to 55 °C (32 to 131 °F) 0 to 100% RH	0.01 °C/F 0.1% RH	±0.4 °C (±0.72 °F) ±3% (20 to 80% RH), ±5% (remaining)	18000-29
External probe with 3-m (10-ft) cable				18000-30

*Requires a TraceableLIVE subscription; see pages 34–35 for details.

Bluetooth®-Enabled Data Loggers with TraceableGO™ App

Connect to your data on your smartphone

- View and download data with free TraceableGO app* and your Bluetooth®-enabled device
- Track environmental conditions of reagents, clinical samples, vaccines, pharmaceuticals, and food items during transport to any location
- Get an immediate response to see if your contents have been exposed to conditions outside the set parameters
- Set sampling rate from 1 minute to 12 hours
- Supplied with NIST-traceable calibration



Description	Temperature data loggers				Temperature/humidity data logger
Item number	18004-12	18004-28	18004-29	18004-30	18004-13
Sensor type	Integrated (ambient)	Bullet	Bottle	Platinum RTD sensor; 316 SS tip	Integrated (ambient)
Cable	None	3-m (10-ft) immersible	3-m (10-ft) micro	2.7-m (9-ft) FEP coated	None
Temperature range	–20 to 70 °C (–4 to 158 °F)	–50 to 70 °C (–58 to 158 °F)	–50 to 70 °C (–58 to 158 °F)	–90 to 100 °C (–130 to 212 °F)	–20 to 70 °C (–4 to 158 °F)
Temperature accuracy	±0.4 °C (±0.7 °F)	±0.3 °C (±0.5 °F)	±0.3 °C (±0.5 °F)	±0.2 °C (±0.4 °F)	±0.4 °C from –10 to 70 °C, otherwise ±0.5 °C (±0.7 °F from 14 to 158 °F; otherwise ±0.9 °F)
Humidity range	—	—	—	—	0 to 95% RH, noncondensing
Humidity accuracy	—	—	—	—	±3% RH from 5 to 75%, otherwise ±5% RH
Memory	64K (65,536) data points, 7.5 months on a 5-minute logging interval. Store up to 90 alarm events				

*You have the option to subscribe to cloud-based TraceableLIVE® service to upload data to cloud—ideal for tracking data from multiple loggers or to comply with regulatory agency requirements. The low-cost TraceableLIVE subscription provides unlimited trip data to be saved on the cloud as well as the ability to send a report to an email; see pages 34–35 for details.

Excursion-Trac™ Data Logging Refrigerator/Freezer Thermometers

Rolling memory retains most recent 525,600 readings

- Track excursion durations with time and date
- Memory can be cleared after downloading data and alarm events to USB drive
- Works with TraceableLIVE® platform to upload, manage, and store reports
- Solution-filled bottle probe mimics temperature of stored samples, eliminating rapid temperature fluctuations caused by door opening
- Features LCD, visual and audible alarms, min/max, and NIST-traceable calibration
- Choose Vaccine-Trac™ model to meet CDC recommendations for vaccine storage and handling



Description	Temperature range	Accuracy	Power	Item number
Excursion-Trac; 1 bottle probe	–50 to 70 °C (–58 to 158 °F)	±0.25 °C	Two AAA batteries (included)	94460-07
Excursion-Trac; 2 bottle probes				94460-09
Vaccine-Trac; 1 bottle probe				94460-03

TraceableOne™ USB Temperature Data Loggers

Economical, single-use units

- Automatically generate a PDF report
- Download directly to PC—no software required
- Ready to use—preprogrammed alarm parameters
- Plastic pouch keeps logger dry even when shipping materials with cold packs or ice
- Supplied with NIST-traceable calibration



Alarms (low to high)	Logging cycle	Logging interval	Qty/pk	Item number
For refrigerated items				
2 to 8 °C	10 days	1 min	10	18004-15
	10 days	1 min	40	18004-01

Cryogenics

Get the cryogenic products you need to handle, store, transport, and safeguard valuable samples.

Find more at coleparmer.com/cryogenics

PolarSafe® Cardboard Cryogenic Storage Boxes and Dividers

Customize to fit your needs

- Snug-fitting lid prevents accidental separation if dropped
- Bottom drain holes allow safe drainage of liquid nitrogen and prevent moisture buildup
- Moisture repellent coating for use in mechanical freezers or liquid nitrogen tanks to –196 °C



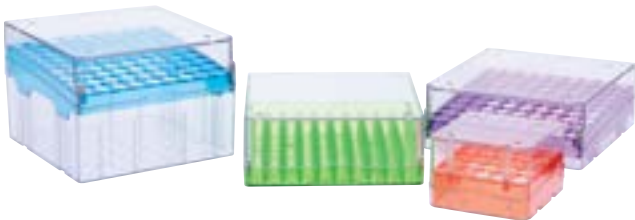
Storage Boxes

Description	Vial size	Vials held	Dimensions (L x W x H)	Item number
Boxes with cell dividers	0.5, 1.5, 2 mL	25	3 x 3 x 2 in.	06755-71
	0.5, 1.5, 2 mL	81	5¼ x 5¼ x 2 in.	06755-72
	0.5, 1.5, 2 mL	100	5¼ x 5¼ x 2 in.	06755-73
Boxes without cell dividers	—	—	3 x 3 x 2 in.	06755-74
	—	—	5¼ x 5¼ x 4¾ in.	06755-75
	—	—	5¼ x 5¼ x 2 in.	06755-76
	—	—	5¼ x 5¼ x 3 in.	06755-77
	—	—	5¼ x 5¼ x 3 in.	06755-77

Magne-Box™ Cryo-Boxes

Magnetic closure keeps your samples secure

- Clear lids with colored inserts and numbered grids for easy sample identification
- Polycarbonate design for use from –196 to 121 °C
- Slot openings on the bottom of boxes allow for drainage
- Fits in standard-size freezer rack



Vial size (mL)	Vials held	Color	Dimensions (inches)	Item number	Qty/pk
2	25	Orange	3 x 3 x 2½	04200-03	8
2	81	Assorted (purple, green, blue, orange)	5¼ x 5¼ x 2½	04200-04	4
4 to 5	81-tall	Blue	5¼ x 5¼ x 3¾	04200-05	4
2	100	Green	5¼ x 5¼ x 2½	04200-06	4

Cell Dividers

For box model(s)	Vial size	Vials held	Dimensions (L x W x H)	Item number
06755-74	0.5, 1.5, 2 mL	25	2½ x 2½ x 1¼ in.	06755-80
06755-75	50 mL	16	5½ x 5½ x 2¾ in.	06755-78
	15 mL	36	5½ x 5½ x 2¾ in.	06755-79
06755-76, 06755-77	15, 50 mL	25	4¾ x 4¾ x 1½ in.	06755-81
	1.5, 2 mL	49	4¾ x 4¾ x 1½ in.	06755-82
	1.5, 2 mL	64	4¾ x 4¾ x 1½ in.	06755-83
	0.5, 1.5, 2.0 mL	81	4¾ x 4¾ x 1½ in.	06755-84
	0.5, 1.5 mL	100	4¾ x 4¾ x 1½ in.	06755-85
	0.5, 1.5 mL	144	4¾ x 4¾ x 1½ in.	06755-86
	0.5, 1.5 mL	144	4¾ x 4¾ x 1½ in.	06755-86

PolarSafe® EPS Microtube Rack

Secure, stackable freezer storage

- Accommodates microtubes and cryovials up to 2.0 mL
- Snug-fitting lid remains in place during handling
- Grippable indentations allow easy removal from freezer
- Alphanumeric index in base lets you quickly locate tubes



Vial size	Vials held	Dimensions (L x W x H)	Item number	Qty/pk
0.5 to 2.0 mL	100	14½ x 4½ x 3 in.	06755-01	10

PolarSafe® Stainless Steel Freezer Racks

Get organized for easier retrieval of samples

- Sturdy corrosion-resistant stainless steel construction for long-term use
- Designed to fit all major brands of –80 °C ultralow upright and chest freezers
- Handles at both ends accommodate freezers with right- or left-handed doors
- Drawer racks facilitate access to samples without having to remove the entire rack from the freezer
- Vertical racks include stainless steel locking rods to secure containers



Racks for Upright Freezers

For use with	Capacity	Array	Rack dimensions (W x H x D)	Item number
2" boxes	9	3 x 3	5½ x 6½ x 16½ in.	04398-12
	12	3 x 4	5½ x 8½ x 16½ in.	04398-13
	16	4 x 4	5½ x 8½ x 21½ in.	04398-14
	20	4 x 5	5½ x 11 x 21½ in.	04398-15
	20	5 x 4	5½ x 8½ x 26¾ in.	04398-17
	24	4 x 6	5½ x 12½ x 21½ in.	04398-16
	25	5 x 5	5½ x 11 x 26¾ in.	04398-18
3" boxes	12	4 x 3	5½ x 9½ x 21½ in.	04398-30
	16	4 x 4	5½ x 12½ x 22½ in.	04398-32
2", 3", 3¾" boxes	16, 12, 10	4 open columns	5½ x 9½ x 21½ in.	04398-33
Standard 96-/384-well plates	70 w/lids, 80 w/o lids	—	5½ x 9½ x 18½ in.	04398-34
	84 w/lids, 96 w/o lids	—	5½ x 9½ x 22 in.	04398-35
96-well deep well plates	36	6 x 6	5½ x 11 x 22 in.	04398-36

Drawer Racks for Upright Freezers

For use with	Capacity	Array	Rack dimensions (W x H x D)	Item number
2" boxes	9	3 x 3	5½ x 7½ x 16½ in.	04398-19
	12	3 x 4	5½ x 9½ x 16½ in.	04398-20
	16	4 x 4	5½ x 9½ x 22 in.	04398-21
	20	4 x 5	5½ x 11½ x 22 in.	04398-22
	20	5 x 4	5½ x 9½ x 26¾ in.	04398-24
	24	4 x 6	5½ x 12½ x 22 in.	04398-23
	25	5 x 5	5½ x 11½ x 26¾ in.	04398-25
3" boxes	12	4 x 3	5½ x 10½ x 22 in.	04398-31
15-mL centrifuge tubes	160	2 drawers	5½ x 9½ x 22 in.	04398-27
50-mL centrifuge tubes	78	2 drawers	5½ x 9½ x 22 in.	04398-26

Vertical Racks for Chest Freezers

For use with	Capacity	Array	Rack dimensions (W x H x D)	Item number
2" boxes	12	1 x 12	5½ x 26¾ x 5½ in.	04398-28
	13	1 x 13	5½ x 28¼ x 5½ in.	04398-29

Cryogenic Vials

Get a leakproof seal

- Temperature range of –196 to 121 °C
- Polyethylene vial and cap
- Stable skirted bottom
- Sterile and autoclavable



Volume	Thread	Qty	Item number
2 mL	External	50	04395-59
	Internal		04395-65

PolarSafe® EVA Ice Containers

Mess-free insulation for any cryogenic medium

- Thick, nontoxic EVA material is leakproof and will not “sweat”
- Compatible with ice, dry ice, liquid nitrogen, alcohol, and saline solutions
- Ergonomic handles on bases and lids are glove friendly
- Integral pour spouts make cleanup easy



Capacity	Color	Item number
Round buckets		
2.5 L	Blue	04393-88
	Green	04393-90
	Purple	04393-93
4 L	Green	04394-02
	Purple	04394-06
	Black	04394-09
Rectangular pans		
1 L	Green	04393-54
	Purple	04393-57
	Black	04393-60
4 L	Green	04393-66
	Purple	04393-69
	Blue	04393-76
9 L	Green	04393-78
	Purple	04393-81

Traceable® Products

Insulated Cryogenic Gloves

Protect your hands

- Multilayered for maximum protection, yet still flexible and lightweight
- Cryogenic safety kits with gloves, apron, and face shield are also available online



Size	Qty	Item number
Small	One pair	04578-05
Medium	One pair	04578-04
Large	One pair	04578-03
X-large	One pair	04578-06

Portable Dewar Flasks

Ideal for short-distance transport and cooling small samples

- Two spring clips keep insulated lid securely in place
- Constructed of borosilicate glass 3.3 core with blue-coated protective metal casing
- Features a detachable handle



Capacity (L)	Static holding time* (hours)	Evaporation rate* (L/day)	ID cm (in.)	Height cm (in.)	Item number
1	18	1.2	10.0 (3 ⁹ / ₁₆)	21.5 (8 ¹ / ₂)	03772-10
2	26	1.9	13.8 (5 ⁷ / ₁₆)	24.5 (9 ⁵ / ₁₆)	03772-20
4	75	1.4	13.8 (5 ⁷ / ₁₆)	38.5 (15 ³ / ₁₆)	03772-40

*Values given for liquid nitrogen. For storing dry ice and liquid nitrogen, it is necessary to drill a 2-mm hole in center of lid.

PolarSafe® Cryogenic Transport and Storage Dewars

Safely store samples for up to 80 days without a LN₂ refill

- Ultralow evaporation loss and high thermal efficiency enhance cryogenic protection
- Lightweight aluminum construction and carrying handles for easy mobility
- Choose models supplied with stainless steel racks to hold your storage boxes
- The 115 L model features a lockable lid with temp and fluid level display
- Go online to order a PolarSafe dewar bundled with a Traceable® liquid nitrogen data logger—the perfect combination for your cryogenic storage needs



Capacity	Included racks	Maximum storage	Evaporation rate	Static holding time	Neck ID	Height	Item number
3 L	—	—	0.1 L/day	20 days	5.0 cm (2 in.)	42.9 cm (16 ⁷ / ₈ in.)	44260-61
6 L	—	—	0.1 L/day	38 days	5.0 cm (2 in.)	47.6 cm (18 ³ / ₄ in.)	44260-62
10 L	—	—	0.1 L/day	63 days	5.0 cm (2 in.)	53.7 cm (21 ¹ / ₂ in.)	44260-63
30 L	6 square racks able to hold 4 boxes each	600 1.2-/2 mL cryovials (25 per box)	0.28 L/day	71 days	12.5 cm (4 ⁷ / ₈ in.)	65.7 cm (25 ⁷ / ₈ in.)	44260-56
95 L	6 square racks able to hold 5 boxes each	3000 2 mL cryovials (100 per box); 972 5 mL cryovials (81 per box)	0.81 %/day	66 days	21.6 cm (8 ⁵ / ₈ in.)	79.1 cm (31 ¹ / ₈ in.)	44260-54
115 L	6 square racks able to hold 6 boxes each	3600 2 mL cryovials (100 per box); 1458 5 mL cryovials (81 per box)	0.83 %/day	80 days	21.6 cm (8 ⁵ / ₈ in.)	81.9 cm (32 ¹ / ₈ in.)	44260-55

[44260-80](#) Trolley for 30 L to 50 L dewars

PolarSafe® Insulated Transport Bags and Boxes

Transport critical samples with less worry

- Maintain a temperature range of 2 to 8 °C for 8 to 15 hours*
- Easily arrange modular cooling packs for different-sized samples
- Money-saving bundles include the recommended cooling packs
- **Lightweight nylon bag** features shoulder strap and document pocket
- **Extremely durable polypropylene box** has integrated handles and shoulder strap



Description	Item number
5 L bag with two end-caps and two frames	03726-32
10 L bag with two end-caps and four frames	03726-34
16 L bag with four blocks (1 L)	03726-36
30 L bag with two blocks (1 L, slim) and four blocks (1 L)	03726-38
5 L box with two end-caps and two frames	03726-40
10 L box with two end-caps and four frames	03726-42
20 L box with two blocks (2 L)	03726-44

*Based on 25 °C ambient temperature. Estimates can vary depending on how samples are packed. Additional temperature/time data available online.

[03726-19](#) Security sealing ties, plastic. 100/cs

Reimagined with even more intuitive user experience.

Maintain compliance—all come with NIST-traceable certificate from our A2LA-accredited (1750.01) calibration laboratory.



Refrigerator/Freezer Digital Thermometer with Probe

Protect valuable samples in your fridge

- Alarm indicator bar lights up orange when you are 1° away from out-of-range set point; turns bright red and blinks when excursion occurs
- Get alerts about issues affecting the contents of your fridge—without even opening the door
- Use the mute button to silence the buzzer alarm while investigating the issue
- Reduce upkeep with boosted battery power and interior tech upgrades for higher performance
- Make readings quickly and with certainty using the triple display—shows current, high, and low temperatures simultaneously



Range	Accuracy	Power	Probe type	Item number
–50 to 70 °C (–58 to 158 °F)	±1 °C	Two AAA batteries (included)	Buffered bottle	56000-00
			Bullet	56000-03
			Buffered 5 mL vaccine	56000-07

Multichannel Timers

Antimicrobial protection is built in for a cleaner, more hygienic product

- Ergonomic design provides optimal viewing angle, easy use, and increased stability on bench
- Large, tactile buttons are glove-friendly
- Repetitive or recurring tasks are quick and easy with on-board memory function that returns display to previously programmed countdown time
- Never miss your cue with extra-loud alarms that sound for one full minute

Channels	Timing capacity	Accuracy	Power	Item number
3	99 hours, 59 minutes, 59 seconds	±0.001%	One AAA (included)	56000-13
4		±0.01%		56000-16

Thermohygrometer with Clock

Monitor temperature, humidity, and time simultaneously, at a glance

- All three parameters are displayed on screen, all the time, so you can log conditions without putting down your clipboard
- Features Min/Max memory, which is easily cleared at the beginning of each process
- Goes anywhere, whether magnetically mounted or set on the benchtop with built-in kickstand
- Internal sensors make it ideal for use in hoods, cleanrooms, incubators, and environmental cabinets



Humidity	Temperature	Power	Item number
20 to 90% RH; accuracy is ±5% RH mid-range, otherwise 8%	0 to 50 °C (32 to 122 °F); accuracy is ±1 °C	One AAA battery (included)	56000-10



Traceable® Products

Accurate, reliable measurements every time!

Each Traceable® product goes through an intense quality control process and comes with NIST-traceable certification.

Find more at coleparmer.com/traceable

Table/Wall-Mount Thermometers

Don't be caught off guard

- Alarm provides alert when temperature rises above or falls below a set point
- Display shows current probe temperature in °C or °F
- Min and Max monitor high and low readings for any time period
- Bottle probes have sensors buffered from rapid temperature fluctuations



Application	Sensor	Temperature	Item number
General purpose	Probe on 3 m (10 ft) micro-cable	–50 to 70 °C (–58 to 158 °F)	94460-88
Refrigerator/freezer	Bottle probe		94460-74
	5 mL bottle probe		94460-73

Precision Monitoring Thermohygrometer

View numerically and graphically

- Scroll through temperature and humidity data for the past seven days
- Maintain data integrity—historical data cannot be cleared, only overwritten



Humidity	Temperature	Item number
0 to 90% RH Accuracy: ±4% from 20 to 80%; ±5% otherwise	–20 to 50 °C (–4 to 122 °F) Accuracy: ±0.4 °C	18004-34

Remote Alarm RH/Temperature Monitor

Triple display simultaneously shows Min/Max, and current RH/temperature

- Remote humidity/temperature sensor on a 2-m (6.5 ft) cable
- High/low alarm feature may be set by user in 1% RH or 1° increments
- Supplied with battery, external sensor, stand, and wall mount



Humidity	Temperature	Item number
5.0 to 95.0% RH Accuracy: ±3% RH from 25 to 75%; ±5% otherwise	0 to 60 °C (32 to 140 °F) Accuracy: ±0.5 °C	98766-85

Thermohygrometer with Dew Point and Wet Bulb

High/low alarm for all four parameters

- Audible alarm will sound for one minute and red LED will flash until readings return to non-alarm condition
- Displays current conditions along with minimum and maximum readings
- Wall mount or place on your desktop



Humidity	Temperature	Item number
1 to 99% RH Accuracy: ±4% from 35 to 75%; ±5% otherwise	–40 to 70 °C (–40 to 158 °F) Accuracy: ±1.8 °F (±1 °C)	90080-03

General-Purpose and Refrigerator/Freezer Thermometers

Get multiple readings simultaneously

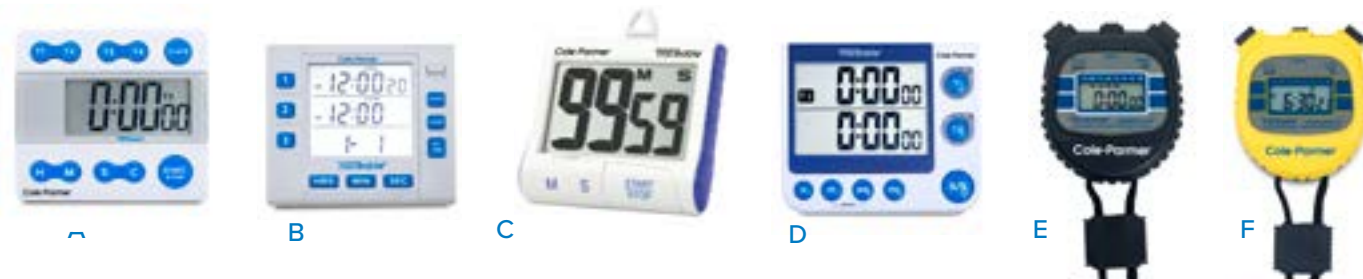
- Keep samples safe—programmable alarm alerts you to out-of-range conditions
- Min/Max feature stores the highest and lowest readings until cleared
- Get more done—monitor multiple applications with dual-probe units
- Versatile—mount to outside of freezer or place on benchtop
- **Advanced models** feature high accuracy, one-button field calibration, and date/time stamp
- **Data logging models** record up to 525,600 data points to be transferred to your computer using a USB flash drive



Application	Probe(s) included	Range	Resolution	Accuracy	Power	Item number
A. Standard thermistor models						
Refrigerator/freezer	One bottle probe	–50 to 70 °C (–58 to 158 °F)	1 °	±1 °C	One AA battery (included)	94460-72
Refrigerator/freezer	One 5 mL bottle probe					94460-71
General purpose	One bullet probe					94460-70
B. Advanced thermistor models with improved accuracy (not shown)						
Refrigerator/freezer	Two bottle probes	–50 to 70 °C (–58 to 158 °F)	0.01 °	±0.30 °C	Two AAA batteries (included)	94460-92
General purpose	One solid SS probe					94460-98
C. Advanced thermistor models with improved accuracy and data logging						
Refrigerator/freezer	One bottle probe	–50 to 70 °C (–58 to 158 °F)	0.01 °	±0.25 °C	Two AAA batteries (included)	94460-07
Refrigerator/freezer	Two bottle probes					94460-09
General purpose	One bullet probe					94460-11
D. Advanced RTD high-accuracy models						
Refrigerator/freezer	One bottle probe	–50 to 70 °C (–58 to 158 °F)	0.01 °	±0.01 °C	Two AAA batteries (included)	37803-88
General purpose	One bullet probe	–100 to 70 °C (–148 to 158 °F)				37804-03
General purpose	One bullet probe	–100 to 199.99 °C (–148 to 392 °F)				37804-05
General purpose	One solid SS probe	–100 to 199.99 °C (–148 to 392 °F)				37804-04

Our Most Popular Digital Timers and Stopwatches

Accurately track time in the lab, field, or production floor



Description	A. Large-display clock/timer	B. 100-Hour triple-display clock/timer	C. Extra-large-digit timer	D. Dual-display flashing LED timer	E. Water-resistant stopwatch	F. Waterproof/shockproof stopwatch
Item number	08649-10	94411-10	94461-07	94461-16	35002-13	94460-55
Number of channels	Four	Three	One	Two	—	—
Timing modes	—	—	—	—	Single-event, lap, cumulative split	Single-event, lap, cumulative split
Timing capacity	100 hours	100 hours	100 minutes	100 hours	24 hours	24 hours
Resolution	1 sec	1 sec	1 sec	1 sec	0.01/1 sec*	0.01/1 sec*
Accuracy	±0.01%	±0.001%	±0.01%	±0.01%	±5 sec/day	±0.01
Count direction	Up/down	Up/down	Up/down	Up/down	Up	Up
Display	LCD, ¾ "H	LCD, ¾ "H	LCD, 1½ "H	LCD, ¾ "H	LCD, ¾ "H	LCD, ½ "H
Clock	Yes	Yes	No	No	Yes	Yes
Alarm	1 min beep	1 min or infinity (will beep until acknowledged)	1 min beep	Adjustable audio and visual	1 min beep	1 min beep
Battery included	One 1.5 V button cell	One AAA battery	One AAA battery	Two AAA batteries	1.5 V button cell	1.5 V button cell

*Resolution is 0.01 second for the first 30 minutes of timing and 1 second thereafter.

Traceable® 7600

Smart Monitoring for Modern Labs



Stay confident in your lab’s most critical environments. The new Traceable® 7600 combines the proven reliability of TraceableLIVE® with an intuitive touchscreen, enhanced security, and next-generation smart probes for simplified calibration.

Key Features

- **Real-time alerts** — Receive email, text, or push notifications directly to your connected device.
- **Dual-band Wi-Fi** — Connect to 2.4 or 5 GHz networks for seamless performance.
- **Remote alarm acknowledgment** — Manage notifications and settings through the TraceableLIVE® app.
- **Quick setup** — One-time configuration takes only minutes.
- **Smart probes** — Easy-grip calibrated sensors store their own data for quick swaps and minimal downtime.
- **Accurate calibration** — Each unit includes a NIST-traceable certificate from our ISO/IEC 17025:2017 accredited lab.
- **Secure interface** — PIN-protected settings prevent tampering and safeguard configuration data.

Build the System That Fits Your Lab

Choose from kits featuring bullet, ambient, or vaccine bottle probes with optional open-door sensors. Smart sensors and loggers can be purchased individually to create or expand your setup.

Item No.	Product Description	Item No.	Product Description
07504-31	Wi-Fi Data Logger Kit w/ Temperature Bottle Probe, Door Sensor and TraceableLIVE® Cloud Service	07504-12	Smart Temperature Bottle Probe
07504-33	Wi-Fi Data Logger Kit w/ Bullet Probe, Door Sensor, and TraceableLIVE® Cloud Service	07504-13	Smart Temperature Bullet Probe
07504-34	Wi-Fi Data Logger Kit w/ Vaccine Bottle Probe, Door Sensor, and TraceableLIVE® Cloud Service	07504-14	Smart Temperature Vaccine Bottle Probe
07504-11	Wi-Fi Data Logger Compatible w/ Traceable® 7600 Smart Probes and TraceableLIVE® Cloud Service	07504-29	Open-Door Sensor Only

Calibration Just Got Easier with Smart Sensors



Keep the Data Logger and Swap the Sensor for More Efficient Recalibration

The Traceable® 7600 Smart Wi-Fi Data Logging Refrigerator/Freezer Thermometer comes equipped with smart sensor probes and open-door sensors. They’re called smart because each sensor is calibrated instead of the data logger.

When it’s time to recalibrate, the data logger stays put, and you can swap out the sensor that’s expired for one that is ready to go. It’s quick, it’s easy, and it poses little to no disruption to your lab’s sample monitoring activity.



3 Easy Steps to Recalibrate

Recalibrating is as easy as 1, 2, 3. The visual guide below will help you have your Traceable 7600 Smart Wi-Fi Data Logging Refrigerator/Freezer Thermometer back up and running in no time.

STEP 1

Check if calibration is near expiration.



STEP 2

Purchase new probes.



STEP 3

Switch probes and you are ready to go.



24/7 Peace of Mind for Your Lab

TraceableLIVE® keeps you connected to your lab environments anywhere, anytime. Receive instant alerts and access real-time data so you can act before valuable samples are compromised.



Instant Alerts
Get notified via app, email, text, or voice call* when action is needed.



Automatic Updates
TraceableLIVE® stays up to date with secure, maintenance-free updates.



Cloud Access
View, store, and analyze data across devices—anytime, anywhere.



Team Ready
Add unlimited users and devices for full lab visibility and collaboration.



Fully Compliant
Meets 21 CFR Part 11 (North America), Annex 11 (Europe), and ISO 17025 calibration standards.

**Apple Watch® and voice call notifications available with Premium plans.*

Compliant. Reliable. Connected.

TraceableLIVE® is developed and maintained by a dedicated team of programmers and lab professionals to ensure continuous reliability and regulatory alignment.

Temperature Monitoring With Traceable®

Eliminate stress, safeguard temperature-sensitive items, and maintain compliance.

Traceable® Fridge/Freezer Digital Thermometer



Accurate, NIST-traceable monitoring for refrigerators and freezers.

[Item #94460-72](#)

Traceable® Excursion-Trac™ Data Logging Refrigerator/Freezer Thermometers



USB drive lets users store and analyze thousands of readings.

[Item #94460-09](#)

Traceable® Wi-Fi Data Logging Refrigerator/Freezer Thermometers Compatible with TraceableLIVE® Cloud Service



TraceableLIVE™ cloud service enables users to always be connected to their environments.

[Item # 99460-00](#)

Traceable® 7600 Smart Wi-Fi Data Logging Refrigerator/Freezer Thermometer



Smart sensor probes and open-door sensors can be swapped out for recalibration for uninterrupted monitoring.

[Item #07504-31](#)

TraceableLIVE® — Smart Monitoring Simplified

Eliminate stress, safeguard temperature-sensitive items, and maintain compliance with TraceableLIVE®, the cloud-based platform that keeps you connected to your lab—anytime, anywhere. Receive real-time alerts, monitor conditions remotely, and ensure uninterrupted data integrity.

Flexible Subscription Options

Choose the plan that fits your facility’s needs. Available as monthly subscriptions or prepaid annual activations.

	Free	Standard	Premium
Monthly (per device)	—	\$8.99	\$14.99
Annual (per device)	—	\$100	\$168
Users	1 admin	Unlimited	Unlimited
Devices	3	Unlimited	Unlimited
Notifications	Email, push	Email, push, text (+\$2)	Email, push, text, voice
Storage	30-day rolling	Unlimited	Unlimited

**Subscriptions renew automatically. Activation codes can be added to purchase orders for annual service.*



Prepaid Packages

Prefer one payment? Choose a 1- or 2-year prepaid plan—no credit card billing required. Add it to any TraceableLIVE® device or existing account.

Instant, Real-Time Protection

Stay informed with alerts for temperature excursions, lost connections, low batteries, or calibration reminders. Receive notifications via app, text, email, or Apple Watch®. Premium plans include voice alerts, recurring reports, and custom alarm templates.

Fast Setup, Full Control

Connect and start monitoring in under two minutes. Access unlimited data and user visibility through secure cloud access—fully compliant with 21 CFR Part 11, Annex 11, and ISO 17025 standards.

TraceableLIVE® keeps your lab connected and compliant—wherever you work.



Lab Supplies

From outfitting your lab bench to stocking your shelves to keeping your cleanroom clean, we keep you working efficiently day after day.

Find more at coleparmer.com/labware
coleparmer.com/glassware
coleparmer.com/cleaning
coleparmer.com/pipettes

Graduated Cylinders

Wide hexagonal base provides stability

- Easy-read graduations will not wear off
- Feature convenient pour spout
- Choose polypropylene (PP) or borosilicate 3.3 glass

Capacity	Graduations	Qty	Item number
PP cylinders; –15 to 150 °C			
50 mL	1 mL	10	06200-24
100 mL	1 mL	10	06200-25
250 mL	5 mL	10	06200-26
Glass cylinders; –50 to 550 °C			
50 mL	1 mL	1	34502-71
100 mL	1 mL	1	34502-72
250 mL	2 mL	1	34502-73
500 mL	5 mL	1	34502-74
1000 mL	10 mL	1	34502-75



CHEMICAL COMPATIBILITY

Can't decide on the right material for your sample? No worries—we make it as easy as 1, 2, 3 with our Chemical Compatibility Chart. Go to coleparmer.com/chemchart.

Graduated PP Beakers

Perfect for general lab use

- Molded-in graduations will not wear off
- Handles temperatures from –15 to 150 °C
- Feature convenient pour spout



Capacity	Graduations	Qty	Item number
Beakers; accurate to ±2.5%			
50 mL (1¾ oz)	5 mL (½ oz)	100	06200-06
100 mL (3½ oz)	5 mL (½ oz)	100	06200-08
250 mL (8 oz)	10 mL (1 oz)	50	06200-12
400 mL (13 oz)	25 mL (1 oz)	50	06200-14
600 mL (20 oz)	25 mL (1 oz)	25	06200-16
Beakers with molded-in handle; accurate to ±3% to 4%			
250 mL	50 mL	5	06200-18
1000 mL	50 mL	5	06200-20
2000 mL	100 mL	4	06200-21
5000 mL	100 mL	5	06200-23

Wide-Mouth HDPE Bottles

Large opening allows easier filling

- Meets USP Class VI requirements
- Reliable and sturdy; include leakproof PP closure
- Handles freezer storage to –100 °C



Capacity	Qty	Item number
30 mL (1 oz)	12	06047-10
60 mL (2 oz)	12	06047-20
125 mL (4 oz)	12	06047-30
250 mL (8 oz)	12	06047-40
500 mL (16 oz)	12	06047-50
1000 mL (32 oz)	6	06047-60
2000 mL (64 oz)	1	06055-10
4000 mL (128 oz)	1	06055-20

Glass Erlenmeyer Flasks

Economical option for everyday use

- Easy-to-read graduations; graduated tolerances to ±5%
- Feature a heavy-duty rim with narrow mouth opening
- Temperature range of –50 to 550 °C; autoclavable

Capacity	Graduations	Qty	Item number
25 mL	5 mL	24	34502-55
50 mL	10 mL	12	34502-56
100 mL	20 mL	12	34502-57
125 mL	20 mL	12	34502-58
250 mL	50 mL	12	34502-59
300 mL	50 mL	8	34502-60
500 mL	100 mL	8	34502-61
1000 mL	100 mL	6	34502-62
2000 mL	400 mL	1	34502-63
3000 mL	500 mL	1	34502-64
4000 mL	500 mL	1	34502-65
5000 mL	500 mL	1	34502-66
6000 mL	500 mL	1	34502-67



Tri-Corner PP Beakers

Easy pouring from three sides

- Perfect for use with stirrers—flat bottom keeps stir bars centered
- Accurate to ±5%; molded graduations
- Withstand temperatures to 121 °C
- Autoclavable



Capacity	Graduations	Qty	Item number
50 mL / 1.5 oz	5 mL / 0.5 oz	100	06020-01
100 mL / 3.5 oz	10 mL / 0.5 oz	100	06020-03
250 mL / 8 oz	10 mL / 0.5 oz	100	06020-05
400 mL / 13 oz	20 mL / 1 oz	100	06020-07
800 mL / 26 oz	50 mL / 2 oz	100	06020-09
1000 mL / 32 oz	50 mL / 2 oz	100	06020-11
Five of each above		30	06010-07

Graduated PP Sample Containers

Durable, leakproof design

- Includes sample identification label and screw-on HDPE cap
- Sterile models come individually wrapped



Capacity	Sterile	Qty	Item number
4 oz	Yes	100	06049-40
	No	500	06049-50
8 oz	Yes	100	06049-60
	No	500	06049-61

Disposable PS Forceps

Reduce cross-contamination

- Corrugated handles provide a secure grip
- Features serrated blunt tips
- Sterile; come individually wrapped



Overall length	Qty	Item number
12.2 cm (4.8 in.)	100	06443-20

Double-Ended Stainless Steel Spatulas

One-piece seamless construction for long life

- Multifunctional—ideal for sample transfer, mixing, scraping, and handling powders and pastes
- Smooth polished 304 SS surface resists chemical and corrosion



End types	Overall length	Qty	Item number
Macro spoon for medium to large particles / flat straight spatula	15.0 cm (5.9 in.)	3	06287-05
	18.0 cm (7.1 in.)	3	06700-71
	21.0 cm (8.3 in.)	3	06287-07
	25.0 cm (9.8 in.)	3	06287-08
	30.0 cm (11.8 in.)	3	06287-09
Flat rounded spatula / flat straight spatula	14.6 cm (5.7 in.)	3	06369-09
	15.5 cm (5.9 in.)	3	06287-11
	18.1 cm (7.1 in.)	3	06369-07
	21.0 cm (8.3 in.)	3	06369-05
	22.5 cm (8.9 in.)	3	06369-16
	30.0 cm (11.8 in.)	3	06287-15

Disposable HDPE Volumetric Spoons

Accurately measure set volumes

- Manufactured and packed in an ISO Class 8 cleanroom to ensure cleanliness and reduce cross-contamination
- High-quality HDPE conforms to FDA, EC, and EU regulations
- Gamma irradiated and individually packaged so they can be used straight out of the bag without cleaning
- SAL 10⁻⁶ compliant
- BSE/TSE free



Capacity	Overall length	Qty	Item number
1 mL	15.3 cm (6.0 in.)	100	06264-00
2.5 mL	16.0 cm (6.3 in.)	100	06264-01
5 mL	16.5 cm (6.5 in.)	100	06264-02
10 mL	17.1 cm (6.7 in.)	100	06264-03
20 mL	18.0 cm (7.1 in.)	100	06264-04
30 mL	18.7 cm (7.4 in.)	100	06264-05

Disposable PS Sampling Spoons and Scoops

Long handles are curved at bottom for a more secure grip

- Flat bottom for stability on benchtop or scale
- FDA-grade material; safe for food, drug, and cosmetic contact
- Individually packaged, sterilized by gamma irradiation, and lot stamped for accurate tracing
- Choose double bagged for extra protection from contamination—ideal for use in multi-zone cleanrooms
- Scoops with snap-on lid let you safely transport samples without any spills



Capacity	Qty/cs	Item number
Single-Bagged Scoops		
30 mL (1 oz)	100	06260-00
60 mL (2 oz)	100	06260-01
120 mL (4 oz)	100	06260-02
250 mL (8 oz)	100	06260-03
500 mL (17 oz)	50	06260-04
1000 mL (34 oz)	25	06260-05

316L Stainless Steel Pharma Scoops

Fully welded with no dead spaces or crevices

- Hygienic design for the pharmaceutical industry
- Smooth, mirror polish surface—better than 0.5 µm Ra is ideal for powders and granules
- BSE/TSE free



Capacity	Overall length	Qty	Item number
10 mL	7.5 cm (3.0 in.)	1	07205-10
50 mL	11.0 cm (4.3 in.)	1	07205-11
100 mL	18.0 cm (7.1 in.)	1	07205-12
250 mL	23.5 cm (9.3 in.)	1	07205-13
500 mL	24.0 cm (9.4 in.)	1	07205-14
750 mL	33.0 cm (13.0 in.)	1	07205-15
1000 mL	34.0 cm (13.4 in.)	1	07205-16
1250 mL	30.5 cm (12.0 in.)	1	07205-17
1700 mL	35.5 cm (14.0 in.)	1	07205-18
2500 mL	32.0 cm (12.6 in.)	1	07205-19

ThinTouch™ Nitrile Gloves

Soft feel and textured fingertips for better grip

- Specially formulated for enhanced tactile sensitivity
- High tensile strength for puncture and tear resistance
- Powder-free, latex-free, and AQL of 1.5



Size	Box of 100 gloves	Case of 10 boxes
	Item number	Item number
Small	15957-64	15957-68
Medium	15957-65	15957-69
Large	15957-66	15957-70
X-large	15957-67	15957-71

Critical Task Wipes

Eco-friendly lab wipes made from 100% recycled cellulose

- Perfect for light-duty tasks, delicate surfaces, and optics
- Low linting and low in chemical extractables



Wipe size	Qty	Item number
11 x 21 cm (4.4 x 8.3 in.)	1 box of 280 wipes	78902-93
	60 boxes of 280 wipes	78902-95

Test Tube Rack with Tubes

Two tiered and adjustable

- Durable, chemical-resistant polypropylene rack
- Twelve 15 mL graduated tubes with screw-on cap



Rack capacity	Item number
Twelve tubes, 15 mm dia	06739-27

Cleanroom Swabs

Ideal for precision cleaning and applying lubricants

- Reduce the potential for lint and other residues
- Polypropylene handle minimizes contaminants
- Suitable for ISO Class 5 cleanroom



Wipe head	Handle	Overall length	Qty	Item number
Double-layer polyester, large	PP	13.1 cm (5.2 in.)	100	33676-11
Open-hole foam	PP, notched	8.5 cm (3.3 in.)	500	33676-05

Premoistened Clean Wipes

Will not scratch surfaces

- Strong, nonwoven cloth is soft and lint-free
- Individually sealed canister for use in cleanrooms



Solution	Qty	Item number
100% DI water	100 wipes	33675-05
70% Alcohol/ 30% DI water	100 wipes	33675-03

Disposable Serological Pipettes

Filter plug prevents overfilling

- Transparent medical-grade polystyrene
- Sterilized by gamma irradiation and tested before lots are released
- Sharp, black, permanent graduations guarantee precise reading and accurate dispensing to ±2%
- Come individually wrapped in fiber-free paper with easy peel-apart opening



Max volume	Graduation interval	Band color	Qty	Item number
1.1 mL	0.5, 1.0, 1.2 mL	Purple	500	04395-18*
2.2 mL	0.01 mL	White	500	04395-19
10 mL	0.1 mL	Orange	200	04395-21
100 mL	1.0 mL	Pink	50	04395-22

*Pipette 04395-18 meets the APHA standards for the examination of dairy products.

40+ YEARS IN
FLUID
HANDLING

ALWAYS STOCKED. ALWAYS STANDING BY YOU.

Peristaltic Pumps



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				0.06 to 2000		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.

The Smarter Way To Store Your Tubing

Streamline your lab or production space with a single point for organized storage and precise cut-to-length tubing dispensing, reducing waste and downtime.



Order your tubing display today.



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



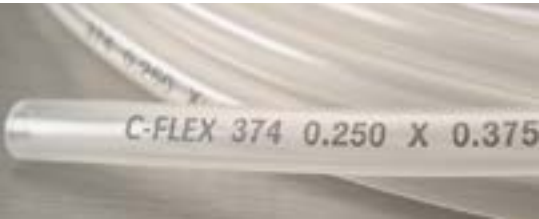
Thermoplastic Elastomer (TPE) Tubing

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		
1/8 (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.

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.

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.



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.

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-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

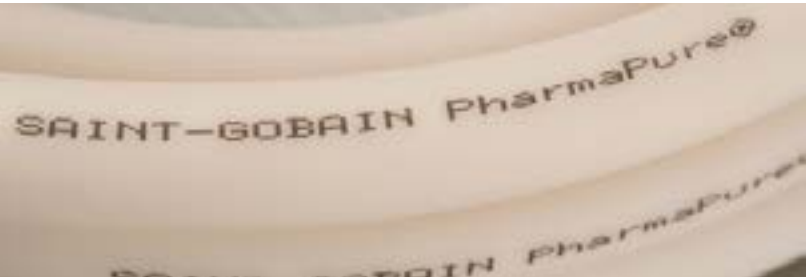
PharmaPure® Tubing

- 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.



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		
1/8 (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

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 peristaltic 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

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



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.

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	50115-95
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

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

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



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	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		
1/32 (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

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

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		
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



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		
3/16 (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



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.

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 °C (65 to 150 °F)
- 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.

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 °C (-4 to 284 °F)

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

Polysulfone

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

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.

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 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



Tubing ID Dimensions (AxB)	Material	Pack Size	Item Number
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	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



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

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	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	
	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	
	Sanitary Adapter		Polycarbonate	—	1	50111-66
			High-Temperature Polycarbonate	—	1	50111-67
MPC™ Insert			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		
			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		
	Sanitary Adapter		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		
			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
	Sanitary Adapter			High-Temperature Polycarbonate	1-1/2 (38.1)	1	50112-12	
				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		
			Polysulfone with Alloy C-276 Valve	1/4 (6.4)	1	50112-29		
	Hose Barb Insert		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		
			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		
	Hose Barb Coupling Set		Polysulfone with Alloy C-276 Valve	1/2 (12.7)	1	50112-36		
			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		
HFC39	Hose Barb Body		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		
	Hose Barb Insert		Polysulfone with Stainless Steel Valve	3/8 (9.5)	1	50112-30		
			Polysulfone with Stainless Steel Valve	1/2 (12.7)	1	50112-32		
			Polysulfone	—	1	50112-20		
			Cap Insert	—	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	
	Polycarbonate	—		25	50112-98		
	Polysulfone	—		25	50113-00		
	Cap Insert with Lock	Polysulfone		—	25	50112-71	
		Insert to Insert Adapter	Polysulfone	—	1	50112-71	
	MPX®	Hose Barb Body	Straight	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
	Insert to Insert Adapter		Polysulfone	—	1	50112-52
			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		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	Two Cycle	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



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 µL/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 µL/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 µL/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 µL/min to 39 mL/min		51005-06
Legato 101	2	Infusion	No	±0.5%	0.5 µL to 10 mL	1.28 µL/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 µL/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 µL/min to 11.70 mL/min		51005-05
Legato 200		Infusion	No	±0.35%	0.5 µL to 140 mL	3.06 µL/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 µL/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 µL/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	Polycarbonate	Yes		59900-17
Luer		No		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.



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

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.

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

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