

Selection Guide

Whether you are sampling in a treatment plant or out in the field, Cole-Parmer has a full line of products for retrieving your water samples.

Bailers—hollow tube apparatus used to retrieve groundwater samples 1983-1984



Dippers—sampling containers attached to long handles for retrieving liquid samples from a distance 1988



Dredges—tools for sampling sediment from bodies of water 1990



Flowmeters—instruments used to determine the flow rate of a body of water, such as a river. see online



Ladles—large-mouthed scooping devices for sampling 1986



Level Loggers—tools for measuring water level. 1996



Nets & Skimmers—tools for removing particulates from bodies of water 1989



Precleaned bottles—bottles cleaned to meet EPA standards for sampling. 1994



Pressure Loggers—instruments for measuring the pressure levels of water sources such as fire hydrants. online



Samplers—tube-like instruments with seals specifically designed for obtaining water samples in hard to reach areas 1984-1987



Sampling Bags—bags made specifically for water testing and collection. 1987



Sampling Pumps—portable pumps for collecting water samples 1991-1993



Separation & Settling—tools for measuring and testing solids in water samples 1995



Water Testing—instruments for testing water quality. 1997-2007



KEY INFORMATION

Cole-Parmer® Disposable Polyethylene, PVC, and FEP Bailers

Large opening for easy tie-off, greater water flow, and improved sink rate

- Individually weighted and sealed bailers are cleaned and rinsed with deionized water before packaging

These disposable bailers feature tapered ends and low-snap cord cleat to reduce hang-ups and snags. The angled nozzle ensures positive check-valve control. Choose from virgin polyethylene construction for strength and durability, virgin PVC for strength and economy of polyethylene with transparent features of FEP, or virgin FEP construction for high-purity applications. Double check-valve bailers allow you to sample from specific depth (point-source sampling).



All bailers have metal inserts for faster sink rate



Polyethylene bailers are opaque; PVC and FEP bailers are clear.

Catalog number	Length		Outside diameter		Number of check valves	Qty/cs	Price/cs
	in.	cm	in.	cm			
Polyethylene bailers							
TW-99157-00	12	30.5	1.6	4.06	One	24	
TW-99157-01					Two		
TW-99157-20	36	91.4	0.5	1.27	One	24	
TW-99157-21					Two		
TW-99157-30	36	91.4	0.75	1.91	One	24	
TW-99157-32					Two		
TW-99157-02	36	91.4	1.6	4.06	One	24	
TW-99157-03					Two		
TW-99157-04	48	121.9	1.6	4.06	One	24	
TW-99157-05					Two		
PVC bailers							
TW-99157-40	12	30.5	1.6	4.06	One	24	
TW-99157-42	36	91.4					
TW-99157-44	48	121.9					
FEP bailers							
TW-99157-23	36	91.4	0.5	1.27	One	12	
TW-99157-24					Two		
TW-99157-12	36	91.4	1.6	4.06	One	12	
TW-99157-13					Two		

Slow Emptying Devices

Reduces flow from bailer, minimizing agitation for VOC analysis.

Catalog number	Use for bailers	Price
TW-99157-06	99157-00, -01, -02, -03, -04, -05, -40, -42, -44	
TW-99157-16	99157-12, -13	
TW-99157-22	99157-20, -21	
TW-99157-25	99157-23, -24	

QuickFilter® Groundwater Filter

Disposable 0.45-µm filter cartridge with polyethersulfone membrane. Filter has bailer interface tube for direct connection to bottom of bailer. Gravity forces water through the filter into your sample container.



TW-99157-50 QuickFilter groundwater filter

Reusable Bailers

Heavier than disposable bailers—sink fast for quick sampling

PVC Bailers consist of a 3-ft (0.9-m) body and a detachable bottom piece with ball valve that lets water in when sampling; seals liquid in when retrieving. Order appropriate emptying devices and optional bailer extensions in table. Polyester suspension cord is available below.

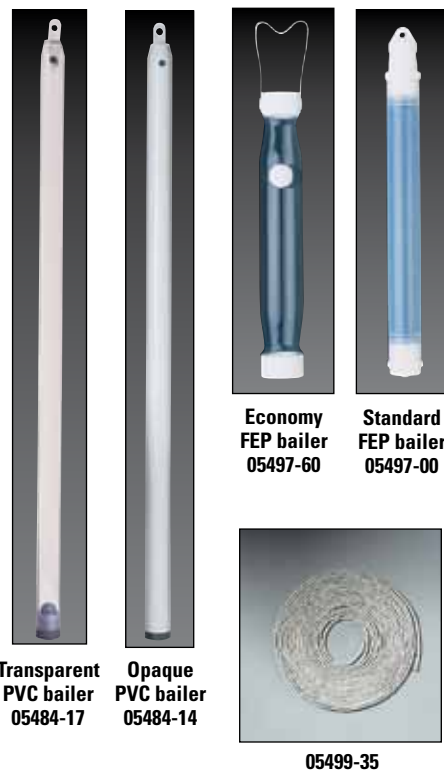
Three-foot bailers				One-foot extensions			Emptying devices		
Cat. no.	Type	OD	Volume	Price	Cat. no.	Volume	Price	Cat. no.	Price
TW-05484-10	Opaque	1.05"	285 mL	—	—	—	—	TW-05484-70	—
TW-05484-12		1.66"	840 mL	—	TW-05484-42	280 mL	—	TW-05484-72	—
TW-05484-14		2.375"	1935 mL	—	TW-05484-44	645 mL	—	—	—
TW-05484-15	Transparent	1.05"	285 mL	—	—	—	—	TW-05484-70	—
TW-05484-17		1.66"	840 mL	—	—	—	—	TW-05484-72	—
TW-05484-19		3.5"	4170 mL	—	—	—	—	—	—

FEP Bailers are available in two styles and lengths. Economy bailers have a 1¼" (4.4 cm) OD and feature a fixed top and bottom ball valve. Standard bailers have a 1⅞" (4.8 cm) OD and feature interchangeable top and bottom cap configurations. Order polyester suspension cord below.

Catalog number	Length		Cap configurations (top/bottom)	OD		Volume	Price
	ft	m		in.	cm		
Economy bailers							
TW-05497-60	1 ft	0.3 m	Fixed/ball	1¼	4.4	350 mL	—
TW-05497-65	3 ft	0.9 m					
Standard bailers							
TW-05497-00	1 ft	0.3 m	Standard/standard	1⅞	4.8	350 mL	—
TW-05497-05	3 ft	0.9 m					
TW-05497-10	1 ft	0.3 m	Standard/bottom emptying	1⅞	4.8	350 mL	—
TW-05497-15	3 ft	0.9 m					
TW-05497-20	1 ft	0.3 m	Standard/controlled flow	1⅞	4.8	350 mL	—

Polyester Suspension Cord is used to lower and retrieve bailers. Maximum working load is 110 lb (50 kg), 3/16" (0.5 cm) dia. Measures 100 ft (30.5 m) long.

[TW-05499-35](#) Polyester suspension cord



Open Water Grab Samplers®

Simple pull-ring operation lets you draw samples at desired depth

- Breaks down to 6-ft (1.8-m) sections for easy transport
- Fits into 4¼" (10.8 cm) or greater openings



Inert PP head with high-strength aluminum pole assembly. Samplers include a 1000-mL glass bottle and cap—accept any GPI 38-430 screw thread bottle.

Catalog number	Length		Price
TW-99152-00	6 ft	1.8 m	—
TW-99152-10	12 ft	3.7 m	—
TW-99152-20	18 ft	5.5 m	—

[TW-99152-50](#) Replacement bottle



CORETAKER®

Ideal for direct measurement of sludge blanket thickness

- Lifetime "no-breakage" guarantee
- Nonthreaded couplers using the Slip-Loc quick-connect/disconnect design
- Floats for easy retrieval

Use to examine the stratification of clarifiers and digesters in wastewater treatment. Rigid 8-ft (2.4-m) lengths of clear, 1¼" (3.2 cm) dia polycarbonate tubing will not turn cloudy from sunlight or become brittle in cold weather.

The design offers a Slip-Loc quick-disconnect coupler and twin double O-ring seals to ensure a liquid-tight connection. CORETAKER features a check valve for sample release; soft-foam, floating lanyard, and numbered yellow 1-ft (0.3-m) markers.



05465-60

Limited Lifetime warranty

Catalog number	Description	Price
TW-05465-60	Coretaker, 16 ft (4.9 m)	—
TW-05465-62	Coretaker, 24 ft (7.3 m)	—

Drum and Tank Samplers

FEP construction makes samplers inert—no leachable fillers or plasticizers

- No glass parts to break for added safety and protection
- Translucent material makes it easy to identify layers
- Easy to clean

A Dipstik® Samplers

Sample free-flowing liquids from almost any source. Safety-pour top permits safe and neat transfer of contents. Push/seal bottom snaps close easily. Polypropylene samplers have heat welded bottom caps.

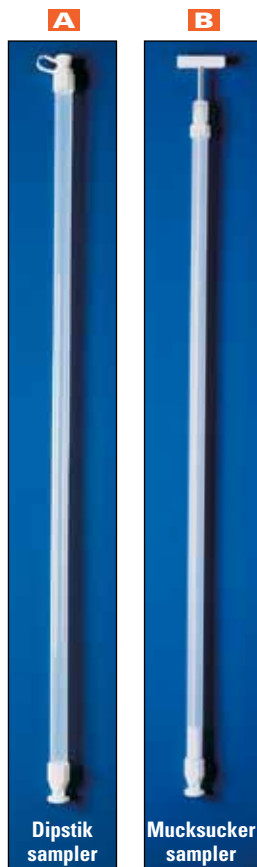


Catalog number	Length		Volume (ml)	Price
	ft	m		
Dipstik samplers, FEP				
TW-99200-00	3½	1.1	200	
TW-99200-02	7 ft	2.1	475	
Disposable Dipstik sampler, polypropylene				
TW-99200-10	3½	1.1	200	
TW-99200-12	7	2.1	475	

B Mucksucker® Samplers

High-suction syringe action is ideal for viscous fluids. Come with both a push/seal bottom and a coring bottom. Coring bottom features a wide mouth for handling sludge samples. PTFE construction.

Catalog number	Length		Volume (ml)	Price
	ft	m		
TW-99200-20	3½	1.1	200	
TW-99200-22	7	2.1	475	



Sludge Judge® Sludge Samplers

Measure settled solids in sewage treatment plants, chemical plants, or food processing facilities

- Take accurate, noncaustic measurements of settleable solids, 5% or less

A variety of Sludge Judge samplers are available to fit your sampling needs. Order complete assemblies to receive three 5-ft (1.5-m) sections that screw together, or separate component pieces if customized sampler lengths are desired. The bottom piece has a ball valve that allows liquid in when lowered into the sample and seals the sample when raised from the liquid. The middle section connects the top and bottom sections; order additional middle sections to increase the overall length. The top section has a nylon rope that aids in sampling. All sections feature 1-ft (0.3-m) increments which let you easily indentify how much sludge is in the sampler body.

Basic Sludge Judge and Sludge Judge Ultra versions have ¾" (1.9 cm) diameter pipe sections and hold approximately 3 oz (89 mL) of fluid per foot. Sludge Judge II version has 1¼" (3.2 cm) diameter pipe sections doubling the overall capacity of the sampler. Sludge Judge Ultra additionally features an ultraviolet stabilizer which reduces material degradation from UV light.



05465-70

Cat. no.	Description	Length	Price
Sludge Judge sampler, ¾" (1.9 cm) diameter			
TW-05465-70	Sludge Judge; top, middle, bottom sections	3 x 5 ft	1.5 m
TW-05465-72	Replacement bottom section with valve	5 ft	1.5 m
TW-05465-74	Replacement middle section/extension section	5 ft	1.5 m
TW-05465-76	Replacement top section with nylon rope	5 ft	1.5 m
Sludge Judge II sampler, 1¼" (3.2 cm) diameter			
TW-05465-30	Sludge Judge II; top, middle, bottom sections	3 x 5 ft	1.5 m
TW-05465-31	Replacement bottom section with valve	5 ft	1.5 m
TW-05465-32	Replacement middle section/extension section	5 ft	1.5 m
TW-05465-33	Replacement top section with nylon rope	5 ft	1.5 m
Sludge Judge Ultra sampler, ¾" (1.9 cm) diameter, UV resistant			
TW-05465-40	Sludge Judge Ultra; top, middle, bottom sections	3 x 5 ft	1.5 m
TW-05465-41	Replacement bottom section with valve	5 ft	1.5 m
TW-05465-42	Replacement middle section/extension section	5 ft	1.5 m
TW-05465-43	Replacement top section with nylon rope	5 ft	1.5 m

- TW-05465-77 Canvas carrying case
- TW-05465-78 Cleaning brush

HDPE Coliwaso Sampler

Sample multiphase liquid wastes with a wide range of viscosity, corrosivity, volatility, and solids content[†]

- Manufactured of high-density polyethylene
- Designed to meet EPA standards

Sampler consists of a 5-ft x ¾" ID (1.5 m x 1.9 cm) closure system, and closure-locking mechanism.



Cat. no.	Description	Length	Price
TW-99155-00	Coliwaso sampler	5 ft 1.5 m	



[†]Not for use with ketones, nitrobenzene, dimethylformamide, mesityl oxide, and tetrahydrofuran.

Extendable Tank Sampler

Sample at any depth with 5-ft (1.5-m) section additions

- Constructed of ¾" (1.9 cm) diameter durable butyrate plastic pipe

Sampler includes two 5-foot (1.5-m) sections and holds approximately three ounces per foot.



Cat. no.	Description	Length	Price
TW-99155-20	Extendable tank sampler	10 ft 3.0 m	

TW-99155-22 Additional extension, 5-ft (1.5 m) length

Swing Samplers

Sampler swings allowing collections from a variety of different angles—including 90°

- Easily collect samples from horizontally flowing streams

Use swing sampler to obtain liquids, powders, or even small solids. Includes one 960-mL bottle and fits almost any other laboratory sample bottles.



Cat. no.	Description	Length	Price
TW-99155-30	Swing sampler	6 to 12 ft (1.8 to 3.7 m)	
TW-99155-32		8 to 24 ft (2.4 to 7.3 m)	

TW-99155-34 Small snapper, 500-mL bottles

TW-99155-36 Large snapper, 1000-mL bottles

Sampling Dipper/Container Systems

All-in-one sample system includes handle and removable dipper/sample container. Sterile sampler allows liquid or powder sample to be taken and sent for testing in the same container reducing the need for cleaning and eliminating the risk of cross-contamination. Simply take the sample, snap off handle, and seal container. All samplers come individually wrapped and sterilized; choose from polystyrene (PS) or shatterproof polypropylene (PP).



STERILE

Catalog number	Capacity mL (oz)	Handle length	Container material/color	Cap included	Qty/pk	Price
TW-06282-70	30 (1)	8" (20.3 cm)	Clear PS	PE screw cap	50	
TW-06282-72			Blue PS			
TW-06282-75	100 (3)	15" (38.1 cm)	Clear PS	Metal screw cap	100	
TW-06282-77			Blue PS			
TW-06282-79	250 (8)	13" (33.0 cm)	Clear PS	Metal screw cap	50	
TW-06282-81			Blue PS			
TW-06282-85	40 (1.4)	9" (22.9 cm)	Blue PP	PE screw cap	250	
TW-06282-87	45 (1.5)			PP hinge lid		
TW-06282-89	90 (3)			PP hinge lid		150
TW-06282-91	125 (4)			PP screw cap		100

Dipper Sampler

Ideal for liquid sampling in tanks and bottles

The unique design of this dipper sampler makes it perfect for liquid sampling in cans, bottles, tanks and vats. Dipper can be immersed up to 18⁷/₈" (47.9 cm).

To collect a sample, simply submerge the cup and the dipper will automatically collect the sample. To release, lift up the finger ring to activate the valve on the bottom of the cup for rapid and convenient emptying of sample. The finger grips allow for one-handed operation.



33687-22

Specifications

Materials of construction: chrome-plated brass **Sterilize:** yes

Catalog number	Capacity, mL (oz)	Dimensions	Price
TW-33687-22	50 (1.7)	3 ⁵ / ₁₆ " L x 1 ¹ / ₄ " dia (10.0 x 3.2 cm)	

Cole-Parmer Ladles, 304 SS (medium gauge)

Catalog number	Capacity mL (oz)	Ladle (depth x dia)		Handle length	Qty/pk	Price/1 pk
LZ-07211-25	60 (2)	1" x 2 ³ / ₈ "	2.5 x 6.0 cm	10 ¹ / ₄ "	1	26.0 cm
LZ-07211-27	120 (4)	1 ¹ / ₂ " x 3"	3.8 x 7.6 cm	12 ⁷ / ₈ "		32.7 cm
LZ-07211-29	250 (8)	1 ³ / ₄ " x 4"	4.4 x 10.2 cm	12 ¹ / ₄ "		31.1 cm
LZ-07211-31	360 (12)	2 x 4 ¹ / ₂ "	5.1 x 11.4 cm	12 ¹ / ₄ "	1	31.1 cm
LZ-07211-24	700 (24)	2 ¹ / ₂ " x 6"	6.4 x 15.2 cm	18 ¹ / ₄ "		46.4 cm
LZ-07211-90	1000 (32)	3 ¹ / ₈ " x 6"	7.9 x 15.2 cm	12 ¹ / ₂ "		31.8 cm

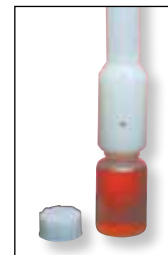


Ladle 07211-90 has a flat bottom and is graduated every eight ounces.

Drum and Liquid Samplers

Ideal for hard-to-reach places

Chemical-resistant HDPE is ideal for corrosive environments. Samplers have four ports to allow the sample container to fill adequately. The drum sampler (99152-70) is specially designed for sampling from 55-gallon drums or containers with openings as small as 2" (5 cm) ID. The standard liquid samplers (99152-75 and -80) have a larger sampling capacity and are ideal for most industrial and environmental applications. Rod diameter is 1¹/₄" (3.2 cm). Bottle with cap is included.



Sampler includes bottle and cap.

Catalog number	Capacity (mL)	Length	Price
TW-99152-70	100	3 ft 0.9 m	
TW-99152-75	500	6 ft 1.8 m	
TW-99152-80	500	8 ft 2.4 m	

[TW-99152-71](#) Replacement graduated sampler bottles; PP, 100 mL. Case of 100

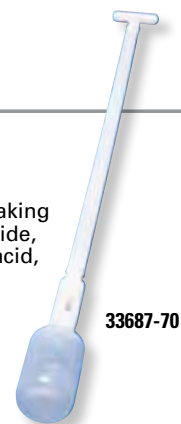
[TW-99152-76](#) Replacement graduated sampler bottles; PP, 500 mL. Case of 50

99152-70

Caustic Solution Samplers

Safely take samples of caustic solutions from drums, tanks, and barges

These polyethylene samplers are designed for taking samples of caustic solutions like sodium hydroxide, potassium hydroxide, hydrochloric acid, acetic acid, formaldehyde, and sulfuric acid.



33687-70

Catalog number	Capacity mL (oz)	Length	Price
TW-33687-70	473 (16)	3 ft 0.9 m	
TW-33687-75	473 (16)	8 ft 2.4 m	

Find MORE!

Additional sampling equipment.
General samplers on pages 1523–1525.
Soil samplers on pages 1554–1557.

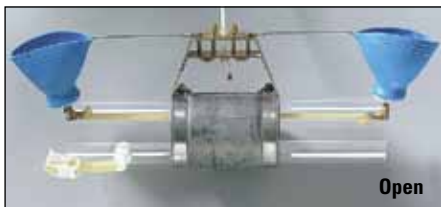
Water Samplers

Samplers to handle your depth and water source requirements

- Quality materials help minimize contamination

Low-Cost Water Sampler

Sampler is attached to 66-ft (20-m) calibrated line for depth measurement. Fitted plungers provide a positive seal preventing your sample from mixing with intermediate layers of water. Sampler includes a brass messenger for activation and a lead collar for rapid descent and minimal drift due to water currents. Sampler features a side drain outlet for removing small test samples.

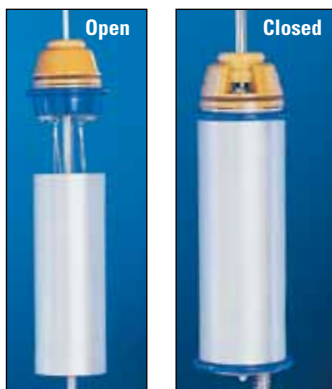


Low-cost water sampler 05488-20

Catalog number	Bottle type	Volume (liters)	Price
TW-05488-20	Acrylic	1.0	

Kemmerer Water Samplers

Sample at specific depths between 3 and 600 feet (0.9 and 183 m). The messenger activates the unique trip heads that ensure closure in fast flowing streams or turbulent waters, regardless of line angle. The 304 SS models have urethane end seals (do not use when mercury concentrations exceed 1 ppm). Acrylic models have silicone end seals. All models include a plastic carrying case; order messenger and line separately at right.



Kemmerer water sampler 05485-00

Catalog number	Bottle type	Volume (liters)	Price
TW-05485-00	304 SS	0.4	
TW-05485-10		1.2	
TW-05486-00	Acrylic	1.2	
TW-05486-10		2.2	

Water Sampling Bags

Designed for sampling of chlorinated water from municipalities, swimming pools, wastewater, and other areas

Use these sterile LDPE bags to safely hold your water samples. To use, simply flip bag around wipe/tape and bend wire to seal. Bags feature a convenient write-on strip.

Sodium Thiosulfate Bags are EPA approved for potable water collection; contain a nontoxic, nonnutritive 10-mg active ingredient tablet of sodium thiosulfate to neutralize the chlorine at the point of collection.

Stand-Up Sodium Thiosulfate Bags add a special gusset at the bottom which allows it to stand up completely by itself when full. No rack or holder is needed to keep it upright.

Sodium Thiosulfate Bag for Wastewater meets National Environmental Laboratory Accreditation Conference (NELAC) standard for sampling wastewater treated with 15 mg/L of chlorine; contains 30 mg of nontoxic, nonnutritive sodium thiosulfate.



06499-95

Alpha Water Samplers

Alpha samplers are suitable for use in oceans, deep lakes, and corrosive waters (do not use when mercury concentrations exceed 1 ppm). Vertical samplers retrieve large water samples at any depth and collect plankton or floating sediments. Choose horizontal samplers for sampling at the surface, thermocline, or just above the bottom. Urethane end seals snap shut with minimum surface disturbance on messenger contact. Drain valve provides easy sample removal. Samplers include a carrying case; order messenger and line separately below. Silicone end seals are available by special order; call your local dealer for details.



Vertical alpha water sampler 05487-10

Catalog number	Bottle type	Volume (liters)	Price
Vertical alpha water samplers			
TW-05487-00	PVC	2.2	
TW-05487-10	Acrylic		
Horizontal alpha water samplers			
TW-05488-00	PVC	2.2	
TW-05488-10	Acrylic		

Accessories for Kemmerer and Alpha Water Samplers

Solid 3/16" (0.3 cm) Braided Polyester Line is for use with sampling equipment that weighs less than 75 lb (34 kg). Maximum load is 110 lb (50 kg).

[TW-05499-33 Braided polyester line](#), 338 ft (100 m)

Tapered Nose Messengers activate closing mechanisms on sampling equipment. Fit up to 1/4" (0.6 cm) line.

[TW-05499-10 Messenger](#); 11-oz split-barrel, stainless steel; 4"L x 1" dia (10.1 x 2.5 cm). Enclosed spring mechanism

[TW-05499-15 Messenger](#); 8-oz solid-barrel, stainless steel; 2 1/2"L x 1" dia (6.4 x 2.5 cm)



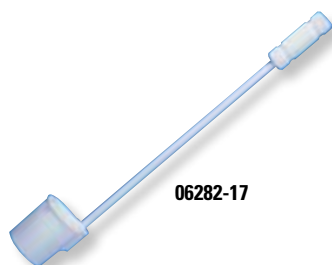
05499-10

Coli-Test Bag has a special barrier film that provides a visual color change when total coliform or *E. coli* is present in samples; contains 10 mg of sodium thiosulfate and is self-standing.



Catalog number	Capacity oz (mL)	Size (W x L)	Thickness (mil)	Qty/pk	Price/1 pk
Sodium thiosulfate bags for potable water sampling					
LZ-06499-90	4 (118)	3" x 7 1/2" (7.6 x 19 cm)	2.25	100	
LZ-06499-95	18 (532)	4 1/2" x 9" (11.4 x 22.8 cm)	2.5	100	
Stand-up sodium thiosulfate bags for potable water sampling					
LZ-06499-77	4 (118)	3" x 7 1/2" (7.6 x 19 cm)	2.25	100	
LZ-06499-97	18 (532)	4 1/2" x 9" (11.4 x 22.8 cm)	2.5	100	
Sodium thiosulfate bag for wastewater sampling					
LZ-06499-86	4 (118)	3" x 7 1/2" (7.6 x 19 cm)	2.25	100	
Coli-Test bag for water sampling, indicates total coliform and E. coli					
LZ-06499-88	4 (118)	3" x 7 1/2" (7.6 x 19 cm)	2.5	100	

[LZ-06499-91 Water scoop](#), 18" (46 cm) L coated handle. Two alligator clips hold a variety of bag sizes



06282-17



06281-50

06281-10



Screw-on cups let you easily take multiple samples.



06282-05

NEW



06282-26



06282-21

NEW



06282-90

Cole-Parmer® Dippers, PTFE

Nonstick, high-purity PTFE material offers almost total chemical resistance. Material is FDA and USP Class VI approved. Shaft is PTFE-encapsulated steel; extra shaft can extend length. Temperature range is -328 to 572°F (-200 to 300°C); autoclavable.



Catalog number	Capacity mL (oz)	Dipper dia		Handle length	Price
TW-06282-11	100 (3)	2 1/8"	5.4 cm	24" (61 cm)	
TW-06282-13	250 (8)	2 3/8"	6.7 cm		
TW-06282-15	500 (16)	3 1/8"	7.9 cm		
TW-06282-17	1000 (32)	4"	10.1 cm		

TW-06282-19 Replacement/extension dipper shaft

Dippers, PE

Durable polyethylene dippers handle corrosives and liquid samples up to 248°F (120°C). The 36" L handle allows you to reach into large tanks. Dippers have securely welded solid handles and molded-in spouts for easy pouring. Handle end has finger grip design for comfortable holding and a hole for hanging.

Catalog number	Capacity mL (oz)	Dipper dia		Handle length		Qty/pk	Price/1 pk
LZ-06281-10	500 (16.9) [†]	4"	10.2 cm	36"	91.4 cm	1	
LZ-06281-50	1000 (33.8)	5"	12.7 cm				

[†]Cup is graduated every 50 mL.

Dippers with Replaceable Cup

Lightweight, yet sturdy, dippers feature a polypropylene (PP) cup that screws onto the handle—order extra cups for your multiple sampling applications. Two pouring spouts on the cup allow you to pour from either side. Long handles make these dippers ideal for sampling from large tanks, vats, streams, and lakes. High-density polyethylene (HDPE) handles are ribbed for a sure grip; end has hook for hanging.

Catalog number	Capacity mL (oz)	Dipper dia		Handle length		Qty/pk	Price/1 pk
Dippers with replaceable cup							
TW-06282-00	500 (16)	3 3/8"	9.8 cm	36"	0.9 m	1	
TW-06282-05				72"	1.8 m		
Extra/replacement screw-on PP cup							
TW-06282-50	500 (16)	3 3/8"	9.8 cm	—		1	

Long-Handled Dippers, HDPE

Chemical- and corrosion-resistant high-density polyethylene (HDPE) dippers come in a variety of handle lengths. The 12-foot handle is available as one piece or in a two-piece screw-together formation. All handles have a hook at end for hanging storage.

The container is welded at a 45° for convenient sampling from elevated positions. Pouring spout makes retrieving and dispensing samples easier.

Catalog number	Capacity mL (oz)	Handle length		Handle type	Price
TW-06282-21	500 (16)	3 ft	0.9 m	Molded one piece	
TW-06282-22	1000 (32)				
TW-06282-23	500 (16)	6 ft	1.8 m	Molded one piece	
TW-06282-24	1000 (32)				
TW-06282-25	500 (16)	12 ft	3.7 m	Screw-together two piece	
TW-06282-26	1000 (32)				
TW-06282-27	500 (16)			Molded one piece	
TW-06282-28	1000 (32)				

Dipper with Telescoping Handle, PP/aluminum

Safely reach samples from a distance

For improved sampling at an elevated position, a 1000-mL graduated polypropylene (PP) pitcher is fixed with a downward offset at the end of an aluminum handle. The telescoping handle expands from a minimum length of 3 ft (0.9 m) to a maximum length of 9 ft (2.7 m) at 6" (15 cm) intervals for optimal sampling distance versatility. The three sections of the handle can be disassembled for complete cleaning and easy storage.

Catalog number	Capacity mL (oz)	Handle length		Price
TW-06282-90	1000 (32)	3 to 9 ft	0.9 to 2.7 m	

Surber Stream Bottom Samplers

Quantitative sampler for benthic invertebrates

- Recommended for sampling shallow streams with fine loose sediment
- Open base encloses area of 12" x 12" (30.5 x 30.5 cm)

Also known as a riffle or run sampler, this sampler has two pivoting stainless steel frames with lockable braces to hold the frames at right angles to each other. The net is 29" (74 cm) long with a filter area that is 17.5" (44.5 cm) long. Net is made out of Nitex® nylon.



05491-10

Catalog number	Size	Price
TW-05491-10	243 µm	
TW-05491-12	363 µm	
TW-05491-14	500 µm (EPA)	
TW-05491-16	600 µm	
TW-05491-18	1000 µm	

Hess Stream Bottom Samplers

Quantitative sampler for benthic invertebrates

- Recommended for sampling shallow streams with gravel and cobble bottoms
- Open base encloses area of 0.086 square meters

Similar to the Surber sampler above, this 304 stainless steel cylindrical sampler has an open top and reversible handles for pushing and rotating into stream bottoms. Once sampler is in place, scrub the substrate inside so that specimens are carried by the current into the net. Includes Dolphin™ adapter and bucket for easy sample removal. Net is made out of Nitex® nylon.



05491-20

Catalog number	Size	Price
TW-05491-20	243 µm	
TW-05491-22	363 µm	
TW-05491-24	500 µm (EPA)	
TW-05491-26	600 µm	
TW-05491-28	1000 µm	

Sedgewick Rafter Counting Cells

Standard Methods recommended way to count zooplankton in the 400 to 1000 µm range

- Slide is 1" x 3" (2.5 x 7.6 cm)
- Cell size is 1.96" W x 0.787" H x 0.04" D (5 x 2 x 0.1 cm)
- Cell volume is 1.0 mL

Intended for use with standard or inverted compound microscopes at low magnifications. Model 05491-64 features a millimeter square grid, providing the ability to extrapolate the number of zooplankton, thus saving time by not having to count the entire cell. Both cells include two cover glasses and one plastic case.



05491-64

Catalog number	Description	Price
TW-05491-60	Counting cell	
TW-05491-64	Gridded counting cell	
TW-05491-62	Replacement cover slips. Pack of 12	

Indestructible Aquatic Tri-Nets

Extremely durable, all-purpose net for heavily weeded and overgrown areas

- Mouth is 12" x 12" x 12" (30.5 x 30.5 x 30.5 cm)
- Net is 6" (15.2 cm) deep
- Handle is 52" L x 1 1/4" dia (132 x 3.2 cm)

Triangular frame provides extreme rigidity needed for digging. The net has a full muslin shroud to protect the mesh and a Dacron® wear band along the bottom edge. Stainless steel net ring and removable, hardwood handle will provide years of use.



05491-50

Catalog number	Size	Net material	Price
TW-05491-50	800/900 µm	Multifilament	
TW-05491-52	500 µm (EPA)	Nitex® nylon	

Aquatic Kick Nets

Muslin shroud on the bottom provides protection and viewing ability from above

- Mouth is 18" W x 9" tall (45.7 x 22.9 cm)
- Net is 10" (25.4 cm) deep
- Two-piece handle is 60" L x 1 1/4" dia (132 x 3.2 cm)

Use these kick nets in stream beds. As one person holds the net, another kicks the stream bed or runs their fingers through the substrate to drive invertebrates into the net. Stainless steel net ring and removable, two-piece hardwood handle will provide years of use.



05491-40

Catalog number	Size	Net material	Price
TW-05491-40	800/900 µm	Multifilament	
TW-05491-42	500 µm (EPA)	Nitex® nylon	

D-Frame Aquatic Dip Nets

Heavy-duty, canvas bottom bag for open and lightly weeded areas

- Mouth is 12" W x 10" tall (30.5 x 25.4 cm)
- Net is 22" (55.9 cm) deep
- Handle is 52" L x 1 1/4" dia (132 x 3.2 cm)

Stainless steel net ring and removable hardwood handle will provide years of use. Canvas shroud on bottom of net protects it from snags while still allowing clear view of contents.



05491-30

Catalog number	Size	Net material	Price
TW-05491-30	800/900 µm	Multifilament	
TW-05491-32	500 µm (EPA)	Nitex® nylon	

Wisconsin Plankton Net Sampler

Two-hoop, 80-µm nylon net support system

- Tapered SS bucket with 9 inch² filter area. Bucket screws onto sampler and has a drain area with hose and hose clamp to simplify sample retrieval. Sampler measures 30" L x 7" dia (76.2 x 17.8 cm); mouth diameter is 5" (12.7 cm). Includes case.



05491-00

Cat. no.	Description	Price
TW-05491-00	Wisconsin plankton net sampler	



Water Sampling Dredges

Dredges

Quickly sample sediment from various bodies of water

- Options to meet your sampling type and area requirements

Economical Dredge

This stainless steel dredge is designed to sample soft sand or silt bottoms from lakes, ponds, streams, or rivers. A simple trigger mechanism holds the sampler open while lowering to cover a uniform area; dredge closes when it hits the bottom.



Catalog number	Sampling area	Price
TW-05470-20	6" x 7½" x 3"	15.2 x 19 x 7.6 cm

Ekman Dredge

Sample soft, silty, vegetation free river, stream, or lake bottoms. Messenger-activated dredge is constructed of stainless steel with stainless steel springs and cables. Features flow-through design for low drag and good descent stability. Dredge has positive-acting lid and jaw-control mechanism. Order required messenger and descent cable from "Accessories" at right.



05470-00

Catalog number	Sampling area	Case	Price
TW-05470-00	6" x 6" x 6"	15.2 x 15.2 x 15.2 cm	Plastic

Ponar® Dredge

Designed to sample all types of benthos sediments (except the hardest clay) in both fresh and salt water. Closing mechanism releases when dredge strikes bottom; locking "safety pin" prevents accidental closing.

Dredge is constructed of corrosion-resistant stainless steel; jaw weights and arms are zinc-plated. Top surfaces are covered with #30-mesh screen to reduce shock waves and drifts, and to prevent sediments and organisms from escaping.

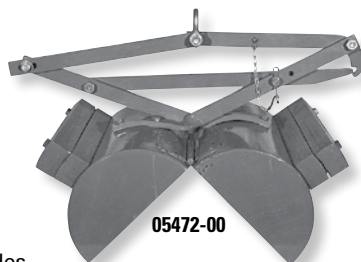


05471-10

Catalog number	Sampling area	Price
TW-05471-10	6" x 6"	15.2 x 15.2 cm

Petersen Dredge

Sample sand, marl, gravel, clay, and hard-bottom surfaces of deep lakes and oceans. Dredge provides deep-biting penetration with its tapered jaws and 70-lb weight. Vent holes in the jaws reduce frontal shock waves. A latch-type mechanism closes jaws when dredge hits bottom. Dredge is made of zinc-plated steel. Includes jaw weights and a safety lock to hold jaws open during handling and transporting. Sampling area is 12" x 12" (30.5 x 30.5 cm). We recommend using a winch and steel aircraft cable to operate this dredge. Order separately under "Accessories" at right.



05472-00

Catalog number	Sampling area	Price
TW-05472-00	12" x 12"	30.5 x 30.5 cm

Accessories for Dredges

A Winch handles 1000 lb with 1:1 and 1:5 drives. Drum is 6½" (16.5 cm) dia; holds 88 ft (26.8 m) of 3/16" polyester line or 200 ft (61 m) of 1/8" (0.3 cm) aircraft cable. Includes "U" bolts.



05475-00

[TW-05475-00 Winch](#)

B Winch Mount has 4" x 5½" (10.1 x 13 cm) mounting plate for winch 05475-00 above. Clamps to side boards or transom—2" (5.1 cm) clamp opening.



05475-01

[TW-05475-01 Winch mount](#)

C Tapered Nose Messengers activate closing mechanisms on sampling equipment. Fit up to ¼" (0.6 cm) dia line.



05499-10

TW-05499-10 Messenger; 11-oz split-barrel, stainless steel; 4"L x 1" dia (10.1 x 2.5 cm). Enclosed spring mechanism

TW-05499-15 Messenger; 8-oz solid-barrel, stainless steel; 2½"L x 1" dia (6.4 x 2.5 cm)

D Steel Aircraft Cable is for use with dredges, core samplers, and other heavy sampling equipment. Diameter is 1/8" (0.3 cm). Maximum load is 400 lb (181 kg). Cable includes thimble, shackle, and two clamps.



05499-23

[TW-05499-23 Steel aircraft cable](#), 328 ft (100 m)

E Polyester Line is a solid braided line for use with sampling equipment that weighs less than 75 lb (34 kg). Diameter is 3/16" (0.5 cm). Maximum load is 110 lb (50 kg).



05499-35

TW-05499-35 Polyester line, 100 ft (30.5 m)

TW-05499-36 Polyester line, 200 ft (61 m)

TW-05499-33 Polyester line, 328 ft (100 m)

Find MORE!

Additional sampling equipment.

General samplers on pages 1523–1525.
Soil samplers on pages 1554–1557.

Water Sampling Sampling Pumps

MASTERFLEX® E/S® Portable Sampler

Economical choice for basic sampling applications

- Features a single-turn potentiometer for speed control, ON indicator, and three-position power/reversing switch
- Reversible flow and prime/purge function
- Floats up to 30 minutes if dropped in water when case is closed and latched!
- IP54-rated control panel protects against inclement weather and splashing water

The Masterflex E/S portable sampler, part of our environmental sampling series from Masterflex, is designed for the ultimate in portability and versatility. Run up to four hours on the self-contained 12 VDC rechargeable battery, or indefinitely from any AC or 12 VDC power supply. The variable-speed drive has a top speed of 400 rpm, allowing you to adjust the flow rate to the needs of your application.

Pump is encased in a high-visibility yellow housing for easy recognition and recovery in the field. Unit measures 16"H x 11¹/₃"W x 10¹/₂"D (40.6 x 28.8 x 26.7 cm). Pump includes AC adapter with 12-ft (3.7-m) cable; order automotive adapter separately at right to run off of a DC power supply. Order pump heads and tubing separately below.



Masterflex® E/S® portable sampling pump 07571-00 with Easy-Load® pump head 07518-12



Catalog number	Power	Price
TW-07571-00	115 VAC (includes battery charger)	
TW-07571-05	230 VAC (includes battery charger)	

Masterflex® Easy-Load® Pump Heads

Catalog number	Materials	Tubing size	Price
TW-07518-10	Polysulfone body, stainless steel rotor	L/S® 25	
TW-07518-12		L/S 15 and L/S 24	

Masterflex® Pump Tubing

Catalog number	Tubing type	Tubing	Ft/pk	Price/pk
TW-96410-25	Silicone (platinum-cured)	L/S 25	25	
TW-96410-15		L/S 15		
TW-96410-24		L/S 24		
TW-06424-25	C-FLEX®	L/S 25	25	
TW-06424-15		L/S 15		
TW-06424-24		L/S 24		

Flow Ranges

Masterflex tubing size	Tubing type†	Flow range
L/S 25	Precision	125 to 650 mL/min
L/S 15	High-performance	125 to 650 mL/min
L/S 24		210 to 1100 mL/min

†High-performance tubing has thicker walls than precision tubing for greater pressure generation, suction lift, and longer life.

Accessories

- [TW-07571-50 Automotive adapter](#), 25-ft (7.6-m) cable
- [TW-07571-52 Auxiliary power supply](#) for 07571-00, 12 VDC. Includes cable to connect to external 115 V power supply input
- [TW-07571-54 Auxiliary power supply](#) for 07571-05, 12 VDC. Includes cable to connect to external 230 V power supply input
- [TW-30622-55 Tubing connector](#), barbed, HDPE. Connects 3/16" ID sample line tubing to L/S 15 and 25 tubing. Pack of 10
- [TW-30621-85 Tubing connector](#), barbed, HDPE. Connects 1/4" ID sample line tubing to L/S 24 tubing. Pack of 10
- [TW-07570-04 Flow-through tubing weight](#), SS. Prevents curling and floating. Fits L/S 15, L/S 24, and L/S 25 tubing

Cole-Parmer® Submersible Sampling Pump

12 VDC powered is ideal for those field well purging/sampling applications

- Attach 1/2" or 3/8" tubing (not included) and lower pump into well

What's included: Model 75509-50 has a 50-ft (15.2-m) cable with alligator clips. Model 75509-55 has hermetically sealed electric connectors and a 70-ft (21.3-m) cable with alligator clips. **75509-50**



Specifications

Maximum temperature: 140°F (66°C)

Wetted parts: ABS/polycarbonate body, stainless steel impeller, nitrile seal

Duty cycle: intermittent

Catalog number	Flow rate, GPM (LPM)				Power		Dimensions (L x dia)	Price
	At 15 ft (4.6 m)	At 30 ft (9.1 m)	At 45 ft (13.7 m)	At 60 ft (18.3 m)	VDC	Amps		
LZ-75509-50	1.4 (5.3)	0.3 (1.1)	—	—	12	5	6 ⁵ / ₁₆ " x 1 ⁵ / ₈ " (16 x 4 cm)	
LZ-75509-55	2.3 (8.7)	1.7 (6.4)	1.1 (4.1)	0.3 (1.1)	12	10	13 ³ / ₈ " x 1 ⁵ / ₈ " (35 x 4 cm)	

Multiprobe Flowblock Sampling System

Recommended technology used by the US EPA

- Ports fit a variety of probe sizes for use with most meters
- Quick-connect fittings for easy connections to sampling pumps

Multiprobe flowblock can be used directly in-line with most ground water pumping systems, and operates at flow rates of 100 mL/min to 1 GPM. Acrylic flowblock accepts up to four probe types, allowing you to measure several parameters of a sample at the same time.



35434-90

Specifications

Inlet: 1/8" or 1/4" quick-connect hose barbs

Volume: less than 40 mL with probes installed

Outlet: 1/8" or 1/4" quick-connect hose barbs

Flow rate: 100 mL/min to 1 GPM

Catalog number	Description	Price
TW-35434-90	Multiprobe flowblock	

[TW-35434-70 Oakton® multiparameter PCD 650 meter kit](#). See page 1058 for details

MASTERFLEX® E/S® Composite Sampler

Program operation to meet EPA sampling requirements under EPA 833-B92.001 CFR40 Part 122.21 and 122.26

- Controls can wait up to 90 days for a remote signal
- Use one of the six preset sampling programs or change up to five of those programs to suit your specific needs
- Adjustable back-lit LCD and glow-in-the-dark keypad help you to read the control panel in low-light environments
- Slim design makes it easy to pass through standard 18-inch (45.7 cm) diameter manhole
- When case is closed and latched, sampler floats in water for up to 30 minutes!
- IP56-rated control panel protects against inclement weather and splashing water
- Rechargeable battery makes it ideal for field applications

The versatile Masterflex E/S composite sampler can collect a 9.0-liter sample while running unattended—ideal for a variety of environmental field applications. The highly visible yellow housing makes it easy to spot and recover in the field.

The programmable control panel lets you set the sample size, sampling time, and delayed start. Start/stop and standby functions can be programmed for convenient remote control operation. The standby function delays the sampling up to 167 hours, 59 minutes—you don't have to be there when the sampling begins.

The sampler lifts water, slurries, and liquid waste up to 25 ft (7.6 m), and logs 300 sampling events. The reversible flow function purges the tubing and removes material from the inlet. In-line sensors ensure volume accuracy and prevent the carboy from overfilling. The flow rate depends on the tubing you use. See chart at right to determine lift and flow rate.

The sampler can be powered by the built-in 12 VDC battery, or by the universal converter for 115 or 230 VAC operation. The converter can also recharge the 12 VDC battery. The battery will run the motor for three hours before it needs recharging. The LCD alerts you at startup when the internal battery needs recharging. Order automotive power adapter separately below to run off of a DC power supply. Unit measures 13½"W x 17½"H x 11"D (34.3 x 44.5 x 27.9 cm).

What's included: a Masterflex® L/S® Easy-Load® pump head, a 9-liter HDPE carboy, 12 VDC rechargeable battery, 115/230 VAC power converter/battery recharger, quick-disconnect fittings for inlet and outlet connections, and 25-ft of L/S 24 peroxide-cured silicone tubing.



Catalog number	Description	Price
TW-07580-00	Masterflex E/S composite sampler	

Lift and Flow Rates

Lift (ft)	Tubing size	Flow rate (mL/min) at 70°F (21°C), 600 rpm		
		Silicone	Tygon Lab	Tygon LFL
1	L/S 15	1012	1110	1110
12		952	1035	1065
25		435	765	855
1	L/S 24	1627	1650	1650
12		1095	1432	1545
25		15 ft max lift	840	1005

Masterflex® Precision Pump Tubing

Cat. no.	Tubing type	Tubing	Qty/pk	Price/pk
TW-96400-15	Silicone (peroxide-cured)	L/S 15	25 ft (7.6 m)	
TW-96400-24		L/S 24		
TW-06409-15	Tygon Lab	L/S 15	50 ft (15.2 m)	
TW-06409-24		L/S 24		
TW-06429-15	Tygon LFL	L/S 15	25 ft (7.6 m)	
TW-06429-24		L/S 24		
TW-77390-50	PTFE tubing sets	4-mm	Two 15" (38.1 cm) lengths	
TW-77390-60		6-mm		



07580-00



"Hot Keys" make setup easy for multiple sampling sites.

Find MORE!

For more Masterflex® L/S® pump tubing formulations, see pages 1253–1259.

Accessories

- [TW-07580-50](#) Carrying strap, optional
- [TW-07518-12](#) Replacement L/S Easy-Load pump head, for use with L/S® sizes 15 and 24 tubing
- [TW-77390-00](#) L/S PTFE tubing pump head, optional
- [TW-07571-50](#) Automotive adapter, 25-ft (7.6-m) cable
- [TW-77200-07](#) Replacement universal power supply, 12-ft (3.7-m) cable
- [TW-07571-55](#) Replacement battery, 12 VDC
- [TW-06032-20](#) Replacement HDPE carboy, 9 liter
- [TW-06360-82](#) Replacement quick-disconnect fitting, ¼" hose barb for internal-external tubing connection to pump
- [TW-07570-04](#) Flow-through tubing weight, SS. Prevents curling and floating. Fits L/S 15, L/S 24, and L/S 25 tubing

Water Sampling Sampling Pumps

WS705/755 Peristaltic Water Samplers

All the features needed for a wide variety of water sampling requirements

- Retractable pull handle and heavy-duty wheels provide easy transport
- Weathertight enclosure for the battery prevents accidental wetness
- Quick-disconnect pickup hoses can be stored inside the enclosure lid for easy transport

The WS705/755 samplers combine all of the features you need for stormwater, industrial discharge, water and wastewater, or rivers and stream sampling. Sample size control allows individual time-weighted samples or full-bottle discrete samples. Sample interval controls the time between individual composite samples or enables the external trigger mode. Start delay timer allows multiple units to be set for concurrent sampling or to delay the start of sampling after an event for a more representative sample. An automatic 15-second back-flush cycle cleans debris from the strainer and empties fluid from the hose to prevent contamination.

WS705 sampler features one pump and bottle for most composite/discrete sampling applications. WS755 has two pumps and two bottles, and offers the unique ability to set the sampling mode for each pump and bottle individually. This allows time-weighted composite sample and a discrete sample simultaneously, or you can take two individual time-weighted samples with different sample sizes for each pump.

Order the optional stormwater kit to trigger the sampler for stormwater monitoring applications; includes a rain sensor, flow sensor, and auto-drain rain gauge all in one package.

What's included: 15-ft (4.5-m) sampling hose with intake strainer, 1-gallon sample bottle, rechargeable battery, and 120 VAC charger. Model WS755 adds on a second 15-ft (4.5-m) sampling hose and 1-gallon sample bottle.



99243-75

Specifications



- Maximum lift:** 20 ft (6.1 m)
- Intake hose type:** reinforced PVC
- Flow rate:** 1000 mL/min at 4 ft head
- Tubing size:** ¼" ID
- Housing:** UV-protected PVC
- Dimensions (W x H x D):** 18" x 22" x 10" (45.7 x 56 x 25.4 cm)
- Power:** internal rechargeable 12 VDC battery with 120 VAC adapter/charger (included)

Catalog number	Description	Price
TW-99243-75	WS705 composite/discrete water sampler	
TW-99243-15	WS755 stormwater/wastewater sampler	

[TW-99243-12 Stormwater kit](#) for samplers. Includes rain sensor, flow sensor, and auto-drain rain gauge

[TW-99243-07 Replacement battery](#), 12 VDC rechargeable

[TW-99243-08 Replacement battery charger](#)

WS700R Refrigerated Wastewater Sampler

Ideal for wastewater, industrial, and environmental sampling

- Meets federal, state, and local wastewater regulations
- Peristaltic pump prevents sample contamination
- Simple to operate—no programming required

This economical refrigerated sampler allows you to take individual time-weighted composite samples or full-bottle discrete grab samples in the supplied 2-gallon polyethylene sample bottle. Sample size control allows individual time-weighted samples or full-bottle discrete samples. Sample interval control allows you to set the time between individual composite samples or enable the external trigger mode. Start delay timer allows multiple units to be set for concurrent sampling or to delay the start of sampling after an event for a more representative sample. Automatic 15-second backflush cycle clears debris from the intake strainer and empties the sample hose so the next composite sample is not contaminated. An external pulse type flow meter can control the sample interval for true flow proportional water sampling. The sample bottle is equipped with a float switch that automatically turns off the pump when the bottle is full.

What's included: 15-ft (4.5-m) reinforced PVC sample hose with intake strainer, 2.5-gallon polyethylene sample bottle, rechargeable battery, and 120 VAC power adapter/charger.



99243-20

Specifications



- Maximum lift:** 20 ft (6.1 m)
- Intake hose type:** reinforced PVC
- Flow rate:** 1000 mL/min at 4 ft head
- Tubing size:** ¼" ID
- Housing:** UV-protected PVC
- Dimensions (W x H x D):** 20" x 27" x 20" (50.8 x 68.6 x 50.8 cm)
- Power:** Sampler: internal rechargeable 12 V battery with 120 VAC adapter/charger (included)
Refrigerator: 120 VAC, 60 Hz

Accessories

[TW-99243-12 Storm water kit](#) for samplers. Includes rain sensor, flow sensor, and auto-drain rain gauge

Catalog number	Description	Price
TW-99243-20	Global Water WS700R refrigerated wastewater sampler	

**Glass Sample Bottles
Pre-cleaned by Vacuum and Ionization**

- Vacuum and ionization process removes contaminants such as dirt, dust, carton lint, oil, aerosols, and fine glass particles
- Saves you time—eliminates the need to rewash bottles
- Individually sealed for long-term storage with no contamination
- Bottles come with PTFE-lined caps; jars are available with PTFE-lined or pulp/vinyl-lined caps
- Clear wide-mouth square glass bottles have French square design for a more efficient use of shelf space while making the container easier to grip when pouring



Capacity mL (oz)	Dimensions (H x OD)		Neck size (mm)	Catalog number	Qty/ cs	Price/ cs
	in.	mm				
A Clear narrow-mouth bottles						
30 (1)	3.1 x 1.2	79 x 31	20	LZ-34606-00	48	
60 (2)	3.7 x 1.3	94 x 33	20	LZ-34606-10		
120 (4)	4.4 x 1.9	112 x 48	22	LZ-34606-20	24	
240 (8)	5.4 x 2.4	137 x 60	24	LZ-34606-30		
480 (16)	6.6 x 3.0	168 x 75	28	LZ-34606-40		
960 (32)	8.3 x 3.7	210 x 94	33	LZ-34606-50	12	
B Clear wide-mouth square glass bottles						
15 (½)	2.4 x 0.9	62 x 24	20	LZ-34610-00		
30 (1)	2.8 x 1.4	72 x 35	24	LZ-34610-10	48	
60 (2)	3.4 x 1.5	86 x 37	28	LZ-34610-20		
120 (4)	4.4 x 1.8	112 x 45	33	LZ-34610-30		
240 (8)	5.4 x 2.0	137 x 51	43	LZ-34610-40	24	
480 (16)	6.5 x 2.4	167 x 62	48	LZ-34610-50		
960 (32)†	8.0 x 1.3	202 x 33	58	LZ-34610-60	12	
C Amber narrow-mouth glass bottles						
60 (2)	3.7 x 1.5	94 x 39	20	LZ-34607-00		
120 (4)	4.4 x 1.9	112 x 48	22	LZ-34607-10	24	
240 (8)	5.4 x 2.4	138 x 60	24	LZ-34607-20		
480 (16)	6.6 x 3.0	168 x 75	28	LZ-34607-30		
960 (32)	8.3 x 3.7	210 x 94	33	LZ-34607-40	12	
D Amber wide-mouth glass bottles						
30 (1)	2.6 x 1.4	65 x 36	28	LZ-34609-00		
60 (2)	3.0 x 1.7	75 x 44	33	LZ-34609-10		
120 (4)	3.7 x 2.1	95 x 54	38	LZ-34609-20	24	
240 (8)	4.7 x 2.6	119 x 65	45	LZ-34609-30		
480 (16)	5.7 x 3.2	146 x 81	53	LZ-34609-40		
960 (32)	7.0 x 3.5	178 x 89	58	LZ-34609-50	12	
E Clear wide-mouth glass jars with PTFE lined caps						
30 (1)	1.7 x 1.7	43 x 43	43	LZ-34608-00	48	
60 (2)	1.9 x 2.2	49 x 55	53	LZ-34608-10		
120 (4)	2.7 x 2.3	69 x 60	58	LZ-34608-20	24	
270 (9)	3.5 x 2.9	89 x 73	70	LZ-34608-30		
480 (16)	3.8 x 3.6	96 x 91	89	LZ-34608-40		
960 (32)	6.7 x 3.7	170 x 95	89	LZ-34608-50	12	
E Clear wide-mouth glass jars with pulp/vinyl lined caps						
30 (1)	1.7 x 1.7	43 x 43	43	LZ-34608-05	48	
60 (2)	1.9 x 2.2	49 x 55	53	LZ-34608-15		
120 (4)	2.7 x 2.3	69 x 60	58	LZ-34608-25	24	
270 (9)	3.5 x 2.9	89 x 73	70	LZ-34608-35		
480 (16)	3.8 x 3.6	96 x 91	89	LZ-34608-45		
960 (32)	6.7 x 3.7	170 x 95	89	LZ-34608-55	12	

†Graduated in mL and oz.

Cole-Parmer
Pre-cleaned EPA Sample Containers

- Containers include certificate of analysis
- Caps feature a 0.07" PTFE-faced silicone seal

A-D Glass Bottles, Jars, and Jugs are pre-cleaned according to EPA procedure 1 methods for extractable organic, semivolatile, and pesticide analysis.

E Glass Septa Jars are pre-cleaned according to EPA procedure 2 methods for purgeable volatile organic analysis.



Catalog number	Capacity mL (oz)	Dimensions (H x OD)		Neck size	Qty/ cs	Price/cs
		in.	cm			
A Clear wide-mouth jars						
LZ-99535-40	60 (2)	1¾ x 2½	4.4 x 5.4	53 mm	24	
LZ-99535-41	125 (4)	2½ x 2¾	5.4 x 6.0	58 mm		
LZ-99535-42	250 (8)	3¾ x 2½	8.6 x 7.3	70 mm		
LZ-99535-43	500 (16)	3¾ x 2½	9.5 x 7.3	89 mm	12	
LZ-99535-44	950 (32)	6½ x 3¾	16.5 x 9.2	89 mm		
B Amber narrow-mouth glass bottles						
LZ-99535-30	125 (4)	4¾ x 1½	11.7 x 3.8	24 mm	24	
LZ-99535-31	250 (8)	5¾ x 2¾	14.6 x 6.0	24 mm		
LZ-99535-32	500 (16)	7 x 3	17.8 x 7.6	28 mm	12	
LZ-99535-33	1000 (34)	8¾ x 4	22.5 x 10.2	33 mm		
C Amber wide-mouth glass bottles						
LZ-99535-50	125 (4)	3¼ x 2	8.3 x 5.1	38 mm		
LZ-99535-51	250 (8)	4¾ x 2½	12.1 x 6.4	45 mm		
LZ-99535-52	500 (16)	5¾ x 3¾	14.9 x 7.9	53 mm	12	
LZ-99535-53	950 (32)	7¼ x 3¼	18.4 x 8.3	53 mm		
D Amber narrow-mouth glass jugs						
LZ-99535-34	2500 (80)	12¼ x 5	31.1 x 12.7	38 mm	6	
LZ-99535-35	4000 (135)	14 x 6¼	35.6 x 15.9	38 mm	4	
E Clear wide-mouth glass septa jars						
LZ-99535-20	60 (2)	1¾ x 2½	4.4 x 5.4	53 mm		
LZ-99535-21	125 (4)	2½ x 2¾	5.4 x 6.0	58 mm	24	

Cole-Parmer Lab Markers

Fine-point fiber tip writes on cold, wet surfaces. Quick-drying ink permanently marks plastic; washes off glass, metal, or porcelain—won't bleed when subjected to water or alcohol.

Catalog number	Color	Qty/pk	Price
LZ-09964-00	Black	10	
LZ-09964-10	Blue		
LZ-09964-15	Green		
LZ-09964-20	Red		



Imhoff Settling Cone

Use to determine settleable materials in water and wastewater samples

- Externally graduated in mL from the bottom upward

Clear styrene-acrylonitrile cone can be used with a heavy-gauge steel support rack (sold separately below). Rack holds up to three cones and measures 17½"L x 5½"W x 16"H (44.5 x 14.0 x 40.6 cm).



Imhoff settling cone 06340-02 and support rack 06340-20

Cat. no.	Description	Price
TW-06340-02	Imhoff settling cone	

TW-06340-20 Support rack

Settometer

Measure the rate and amount of solid/liquid separation of sludge samples

- Easy-to-read white calibration markings indicate percent solid and settled sludge volume

This clear plastic settlometer includes mixing paddle, snap-on lid, and instructions. Order the optional interval timer separately below to measure sludge settling rates.



05476-00

Cat. no.	Description	Volume	Price
TW-05476-00	Settometer	1.4 L	

TW-08648-02 Interval timer, 60-minute

Churn Sample Splitters

Mix and divide a water sample into subsamples for testing

- Polyethylene vessel with polypropylene spigot
- Swing handle included for ease of transportation

Use the sample splitter to efficiently composite representative cross-section samples of water-sediment mixtures from rivers and streams. Composite samples are homogenized and then split into representative subsamples using the churn splitter. The spring-loaded spigot drains the subsamples into containers for water quality analysis.



99160-02

Churn handle homogenizes samples.

Catalog number	Volume (liters)	Dimensions (H x dia)		Price
		in.	cm	
TW-99160-00	4	6½ x 12	17.0 x 30.0	
TW-99160-02	8	8½ x 11	22.0 x 28.0	
TW-99160-04	14	10½ x 12	27.0 x 30.0	

Sludge Interface Detector

Quickly locate sludge blanket depth

- Audio and visual LED indicators
- Sensitivity adjustment
- Low-battery indicator

The SID-10200 detector is a portable handheld instrument that accurately determines the sludge blanket solid/liquid interface depths in primary tanks, clarifiers, sedimentation basins, and a wide variety of sludge settling tanks. The solid/liquid interface is detected when the probe is lowered into the tank. As solids density increases the meter's LED lightbars begin to illuminate and the alarm horn frequency increases.

The meter has a sensor with a 30-ft (9.1-m) cable that has 1-ft (0.3-m) incremented depth marks. The unit is powered by six AA batteries (included) and measures 8"L x 4½"W x 3½"D (20.3 x 11.4 x 8.9 cm).



05956-20

Catalog number	Description	Price
TW-05956-20	Sludge interface detector	

TW-05956-22 Replacement sensor with 30-ft (9.1-m) cable

TW-05956-24 Replacement sensor with 20-ft (6.1-m) cable

TW-09376-01 Replacement batteries, AA. Pack of 4

Process Centrifuge

Get true, accurate measurements of solids concentration

- Specifically designed for the 15-minute centrifuge test outlined by the US EPA
- Quick and reliable estimates of suspended solids in RAS, WAS, mixed liquor, and clarifiers

Heavy-duty stainless steel and aluminum construction makes this centrifuge ideal for industrial environments such as wastewater plants, meat packing, food and beverage, and pulp and paper mills.

The ½-hp TEFC motor operates at a fixed speed of 3000 rpm. Updated digital controller provides more accurate timing up to 999 minutes with digital countdown. A 15-minute quick-start key is ideal for EPA testing. Calibrated polycarbonate tubes are clearly marked to indicate % volume, and the conical shape accentuates small amounts of solids concentration.

What's included: full 90° swing-out, six-place rotor; six 19-mm polycarbonate conical-bottom test tubes (approx 11 mL); and 8-ft (2.4-m) power cord with plug.



05477-10



Catalog number	Speed (fixed)	RCF	Timer (fixed)	Dimensions (H x dia)	Power (VAC, Hz)	Price
TW-05477-10	3000 rpm	1792 g	15 minutes	13" x 16"	115, 60	
TW-05477-15				(33 x 40.6 cm)	230, 50	

TW-05477-50 Replacement centrifuge tubes; polycarbonate, 19 mm. Pack of 12

Water-Level Indicators

Economical alternative to more precise indicators

Contact of the 3/8"-diameter (1 cm) brass probe with the water surface is indicated by an LED and an audio alert beeper. Depth is provided by numbered metal tags secured at 5-foot (1.5 m) intervals. The cable is two-conductor steel and copper with plastic insulating jacket and tensile strength of 300 pounds (136 kg). The cable is connected to a small but sturdy stand and reel assembly that allows convenient deployment and return of the cable and electrode assembly.

2 year warranty



99050-10

Catalog number	Length		Price
TW-99050-10	100 ft	30.5 m	
TW-99050-12	200 ft	61.0 m	
TW-99050-14	300 ft	91.4 m	
TW-99050-18	400 ft	121.9 m	
TW-99050-16	500 ft	152.4 m	

Stainless Steel Water-Level Indicator

Ideal for precise measurement of groundwater levels in wells and standpipes

■ Narrow, stainless steel indicator probe
This indicator fits into narrow openings—probe measures only 6 5/8" L x 3/8" OD (16.6 x 1 cm). Stainless steel (SS) probe is connected to a 100-ft (30.5 m), 24-gauge, polyurethane-coated SS cable that is marked in 0.01-ft increments, conforming to ASTM standards. Cable is fastened to a 6" (15.2 cm) aluminum reel. Powered by three AA batteries (included).



99050-00

Catalog number	Description	Price
TW-99050-00	Stainless steel water-level indicator	

[TW-09376-01](#) Replacement batteries, AA. Pack of 4

Storm Water Sampler

Ideal for economical quarterly first-flush, EPA-compliant storm water grab samples

- Collects a full one-liter grab sample within the first 30 minutes of a qualifying rain event
- Mount in a variety of outfall types—storm grates, ditches, and streams

The Storm Water Sampler combines convenience and affordability to easily meet EPA requirements for storm water grab samples. To collect the one-liter grab sample of first flush runoff, simply position the sampler in its protective mounting tube prior to the rain event, and leave it in place until after the storm. The sampler automatically collects the sample into the bottle and shuts off after the bottle is full, preventing dilution with later runoff. After the storm, the sampler can be retrieved at your convenience.



99159-00

Catalog number	Description	Price
TW-99159-00	Sampler bottle, HDPE, disposable for inorganic analysis	
TW-99159-02	Sampler bottle, glass, disposable for organic analysis	
TW-99159-12	Sampler mounting kit, reusable	

Water-Level Loggers

Data logging capabilities let you remotely monitor and record water levels

- Ideal for use with ground water, surface water, storm water, and sewers
- Temperature- and barometric-pressure compensated readings with vented cable

These highly accurate water-level loggers can record over 81,000 readings. Program the logger to store data with one of four programs: fast (10 measurements per second), programmable interval (1 second to multiple years), logarithmic, and exception. Cable lengths up to 500 feet (152 m) and serial communications models available; contact our Application Specialists for details.



32922-52

Units include Windows®-based software for easy option setting, stored data access, and data download into a standard spreadsheet. The software also provides additional features such as real-time monitoring, measurement interval with start and stops, engineering unit selections, station ID, and sensor calibration. USB connections provide convenient connection for downloads without having to remove the sensor from the well.

Weatherproof loggers easily mount to a 2" (5.1 cm) wellhead with standard hardware. The internal 9 V batteries power the logger and sensor for up to a year, depending on the recording interval. A third battery retains data even if the other two batteries fail.

What's included: cable, 9 V batteries, software, and USB cable.

Specifications

Resolution: 12 bit
Linearity: ±0.1 full-scale
Accuracy: ±0.2 full-scale
Recording rate: high speed (10 samples per second), fixed interval (programmable from 1 sec to >1 year), logarithmic, exception

Data storage: 81,759 points with time-and-date stamp

Output: USB type B port (cable included)

Dimensions
Logger: 11 1/2" L x 1 7/8" dia (29.2 x 4.8 cm)
Sensor: 7 1/2" L x 7/8" dia (19.1 x 2.2 cm)

Catalog number	Measurement range		Cable length		Price
TW-32922-50	0 to 3 ft	0 to 0.9 m	3 ft	0.9 m	
TW-32922-52			25 ft	7.6 m	
TW-32922-54	0 to 15 ft	0 to 4.6	25 ft	7.6 m	
TW-32922-56			50 ft	15.2 m	
TW-32922-58			25 ft	7.6 m	
TW-32922-60	0 to 30 ft	0 to 9.1	50 ft	15.2 m	
TW-32922-62			75 ft	22.9 m	
TW-32922-64	0 to 60 ft	0 to 18.3	100 ft	30.5 m	
TW-32922-66			125 ft	38.1 m	
TW-32922-68	0 to 120 ft	0 to 36.6	150 ft	45.7 m	

[TW-32922-90](#) Locking well cap. Fits over 2" (5.1 cm) pipe to secure logger

[TW-09376-04](#) Replacement batteries, 9 V. Pack of 4

Find MORE!

For more Level Measurement products, see pages 843-847.

