# Sampling of Petroleum and Petroleum Products and LP Gases

Sampling of Petroleum and Petroleum Products Sampling Liquefied Petroleum (LP) Gases

## test method standards

All samplers conform to ASTM D4057 (formerly ASTM D270), D6074 or ASTM D1265 specifications.

## sample thief (bacon bomb)

- · Obtains bottom samples or samples from any level
- Four different capacities
- · Plated brass, stainless steel or acrylic construction
- · Standard Viton O-ring seal
- · Optional metal-to-metal seal

Obtains samples from storage tanks, tank cars and drums. When the thief strikes the bottom of the tank, a plunger assembly opens to admit the sample. The plunger closes again when the bomb is withdrawn, forming a tight seal. Samples can be taken at any depth with the use of a secondary trip line, or extension rods may be added for obtaining samples at levels of up to 18"(46cm) off the bottom. Equipped with plunger locking cam for tight closure during transport (except for 4 oz 11/8" dia. model). Special models include a 4 oz (118mL) 'pencil' model for sampling through small diameter pipes and openings, and clear acrylic samplers with plated brass plunger and end pieces. Modified samplers can be supplied for special applications – we invite your inquiries.



### specifications and ordering information

				Outside	Overall	Shipping
catalog	capacity			Diameter	Length	Weight
no.	oz(mL)	Construction	Seal	in (cm)	in (cm)	lbs (kg)
K27700	32 (946)	plated brass	Viton O-ring	3% (8.6)	155/32 (38.5)	13 (5.9)
K27701	32 (946)	stainless steel	Viton O-ring	33/8 (8.6)	155/32 (38.5)	13 (5.9)
K27790	16 (473)	plated brass	Viton O-ring	23/4 (7)	121/32 (30.6)	9 (4.1)
K27795	16 (473)	plated brass	Metal Seat	23/4 (7)	121/32 (30.6)	9 (4.1)
K27791	16 (473)	stainless steel	Viton O-ring	23/4 (7)	121/32 (30.6)	8 (3.6)
K27792	16 (473)	acrylic	Viton O-ring	2¾ (7)	121/32 (30.6)	8 (3.6)
K27780	8 (237)	plated brass	Viton O-ring	25/16 (5.9)	105/32 (25.8)	5 (2.3)
K27785	8 (237)	plated brass	Metal Seat	25/16 (5.9)	105/32 (25.8)	5 (2.3)
K27781	8 (237)	stainless steel	Viton O-ring	25/16 (5.9)	105/32 (25.8)	5 (2.3)
K27782	8 (237)	acrylic	Viton O-ring	25/16 (5.9)	105/32 (25.8)	5 (2.3)
K27770	4 (118)	plated brass	Viton O-ring	11/8 (4.7)	$9^{11}/_{16}$ (24.6)	4 (1.8)
K27771	4 (118)	stainless steel	Viton-O-ring	1% (4.7)	911/16 (24.6)	4 (1.8)
K27772	4 (118)	plexiglass	Buna N O-ring	1% (4.01)	911/16 (24.6)	3 (1.4)
K27760	4 (118)	plated brass	Viton O-ring	11/8 (2.8)	131/4 (33.7)	3 (1.4)
K27761	4 (118)	stainless steel	Viton O-ring	11/8 (2.8)	131/4 (33.7)	3 (1.4)
K27762	4 (118)	acrylic	Viton O-ring	11/8 (2.8)	131/4 (33.7)	3 (1.4)

## sample thief extension rods

Installs in sample thief plunger assembly. Stainless steel with threaded end.

#### ordering information

catalog no.	description					
K277-EXT1	1 (2.5)					
K277-EXT2	2 (5.1)					
K277-EXT3	3 (7.6)	32,16 and				
K277-EXT6	6 (15.2)	8 oz models				
K277-EXT12	12 (30.5)					
K277-EXT18	18 (45.7)					
K277C-EXT1	1 (2.5)					
K277C-EXT2	2 (5.1)					
K277C-EXT3	3 (7.6)	4 oz models				
K277C-EXT6	6 (15.2)					
K277C-EXT12	12 (30.5)					
K277C-EXT18	18 (45.7)					

## all-levels sample thief

Similar to the standard 16 oz (473mL) Sample Thief (Bacon Bomb), but equipped with an adjustable needle valve opening instead of a plunger to control rate of flow during 'all-levels' and 'running' sampling from storage tanks. Plated brass construction.

### ordering information

catalog no. description

K27800 All-Levels Sample Thief

## adjustable-levels sample thief

Takes samples at depths up to 12" (30.5cm) from bottom. Similar to the standard 16 oz (473mL) Sample Thief (Bacon Bomb), but with built-in graduated extension rod adjustable between 0-12" (30.5cm). Plated brass construction.

### ordering information

catalog no. description

**K27900** Adjustable-Levels Sample Thief



85 Corporate Drive, Holtsville, New York 11742 1-800-878-9070 (in u.s. only) TEL: +1 631 589 3800 FAX: +1 631 589 3815 Email: sales@koehlerinstrument.com www.koehlerinstrument.com

# Sampling of Petroleum and Petroleum Products and LPG

## drum thief (sampling tube)

Choice of plated brass or stainless steel construction

For tube sampling from barrels and drums. Takes bottom samples or all-levels samples. 40" Long x  $1\frac{1}{4}$ " dia. (102x3.2cm). Maximum sample capacity of 24 oz (710mL). Shipping Weight: 6 lbs (2.7kg).

## ordering information

catalog no. description

**K27400** Drum Thief, plated brass **K27401** Drum Thief, stainless steel

## weighted beaker

- Capacity 32 oz. (946mL)
- Choice of  $\frac{3}{4}$ " or  $1\frac{1}{2}$ " (19 or 38mm) opening

For beaker sampling from tank cars, tank trucks, shore tanks, ship tanks and barge tanks. Copper or stainless steel construction with weighted bottom. Includes handle and chained cork. Takes all level samples, running samples, and top, upper, middle, lower and outlet samples. Select  $^{3}\!/_{4}$ " (19mm) opening for light crude oils, light lubricating oils, kerosenes, gasolines, transparent gas oils, diesel fuels, and distillates, or  $1^{1}\!/_{2}$ " (38mm) for heavy crude and fuel oils, heavy lubricating oils and nontransparent gas oils.

Shipping weight: 6 lbs (2.7kg).

### ordering information

catalog no. description

K27600 Weighted Copper Beaker, with ¾" opening
K27610 Weighted Copper Beaker, with 1½" opening
K27601 Weighted Stainless Steel Beaker, with ¾" opening

# LPG sample containers

- Two-valve type with 20% outage tube
- · Built-in pressure relief valve
- · Conforming to ASTM D1265 and GPA 2140 specifications

Welded stainless steel cylinders for obtaining representative samples of liquefied petroleum (LP) gases. Two-valve type (1/4 IPS), with 20% outage tube and built-in pressure relief valve factory preset between 540 to 600psi (38-42 kg/cm2).

#### ordering information

catalog no. description

K27851LPG Sample Cylinder, 150mLK27852LPG Sample Cylinder, 300mLK27853LPG Sample Cylinder, 500mLK27854LPG Sample Cylinder, 1000mLK27856LPG Sample Cylinder, 3000mL

## core-type sampling thief (Tulsa oil thief)

- Obtains bottom samples or samples from any level
- Butterfly valve on bottom for easy sampling
- · Stainless steel and brass construction
- Three Petcocks for draining at different levels

The K28100, Core-Type Sampling Thief is used to manually obtain samples of a liquid, semi liquid or solid state whose vapor pressure at ambient conditions is below 101kPa (crude oil, etc.)

### ordering information

catalog no. description

**K28100** Core-Type Sampling Thief





# specifications

Conforms to the specifications of: ASTM D4057

Capacity: 33oz.

Empty Weight: 6.187 lbs.

Sample Container Material: Polycarbonate

Markings: Every inch from 3" to 14"

Distance from tank bottom to inlet valve: 1.729"

Max height: 21" Max length: 4.7" Max width: 4.2"

