

COW Water Sampler (w/optional Refrigerator)



COW- Water Sampler



COW-with optional Refrigerator

Application

The COW composite sampler was made for influent, intermediate stages and final effluent in municipal and industrial waste water treatment plants or monitoring of sewer losses for industrial plants.

Design

The sampler is designed around a vacuum pump. Peristaltic pump samplers are not acceptable. Sample volumes must be adjustable from 30 to 500 ml by adjusting sample tube height. Sample volume should be repeatable, constant and not dependent on running time of a sample pump. The sampler must purge suction tube with air before and after sample cycle to keep suction hose clean. If a sample is missed then the unit should repeat the cycle two additional times before proceeding. Manual sample should be available by single button operation from front panel or remotely by external relay. The sampler should have four programmable modes of operation - 1) 0/4-20 mA flow input signal for internal pulsing, 2) internal timer, 3) external pulse from flow meter and 4) calendar function. Sample mode on timer is adjustable from 4 to 9,999 minute intervals. The sampler is equipped with an alarm with output relay to signal when a sample is missed. Suction & discharge hoses to be 3/4" nylon reinforced clear PVC hose. Suction lift of vacuum pump to be 20' (6 m). Operating liquid temperature ranges from 32°F – +160°F (0°C – +70°C). Unit comes with a built-in automatic cleaning/flushing system to clean sample chamber with external fluid. Cleaning cycle is programmable from 1-100 samples per cleaning.

Construction

The enclosure should be water-tight molded Minlon®, NEMA 4 (IP65) with touch pad front panel for normal control modes. The sample chamber should be clear plastic removable twist cup design for easy cleaning and a spare sample chamber cup should be supplied. The unit must be intended for permanent mounting to a handrail or wall with composite bottle mounted below. If mounted outdoors, then the sampler should be sheltered from rain and direct sunlight. Designs where water sampler must be lifted to remove composite bottles are not acceptable. Power supply options should be 110V/1/60 or 12VDC.

Dimensions

The water sampler's heavy duty Minlon® enclosure to be 16.8" (42.5 cm) high x 13.6" (34.5 cm) wide x 8.1" (20.5 cm) deep with two 9/32" mounting holes. A standard sampler should be supplied with 15' of 3/4" reinforced suction hose and 3' of 3/4" discharge hose.

*****Optional*** Handrail Mounting Kit**

Mounting plate with rain lip constructed of 1/8" aluminum plate. Supplied with SS bolts and two 1.5" (2" I.D.) x 3/8" pipe U-bolts for mounting to handrail. Dimensions are 14" high x 16" wide with 9" rain lip (or deep). P/N 31204004B

****Optional** Constant Temperature Refrigerator**

Constant temperature refrigerator has 6.1 cubic foot capacity. The constant temperature range is adjustable from +33°F – +45°F. Made of stainless steel external housing designed for corrosive environments. Inside of refrigerator has flat bottom with flat panel front door. There are leveling screws on bottom of unit for your convenience. Copper refrigerant lines are wrapped with asphalt cork tape for insulation. Sampler must be mounted on top of refrigerator. Mounting plate to be from 1/8" aluminum plate permanently attached to refrigerator with 10" rain shield lip. Single 3/4" hose to enter top of refrigerator cabinet in the center with weather tight grommet. (Sample bottle to be supplied by customer.)

Compressors must use R134 refrigerant. Specification is written around Cerlic refrigerator, P/N 28020.

Warranty

The manufacturer shall warrant the equipment to be free of defects from workmanship and material for a period of one (1) year after purchase.

Supplier

Cerlic Controls, AB,

Model – COW-μP, P/N 11905072

Phone – 404-256-3097 or Fax 404-256-3094

