

**CLIF MOCK™**

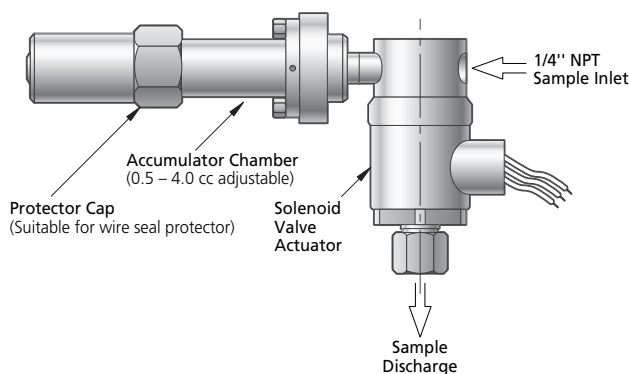
# True Cut™ CS Sampler

The True Cut™ CS Sampler captures proportion-to-flow samples of flowing liquids in a simple, cost-effective operation. The sampler body contains an accumulator chamber for collecting the sample, a 1/4-in. sample inlet port, and a solenoid valve actuator. When a flowmeter or measurement control system sends an electrical pulse to the solenoid valve, the CS accumulation chamber connects to the flow stream, and the instrument obtains a sample. When the sampler is de-energized, typically after 1.5 to 2 seconds, the sample is discharged into the sample receptacle.

The CS Sampler is available in two pressure ranges to meet a wide range of applications. The instrument is easy to install and easy to maintain. Various timers for controlling CS samplers are also available from Cameron's Measurement Systems division.

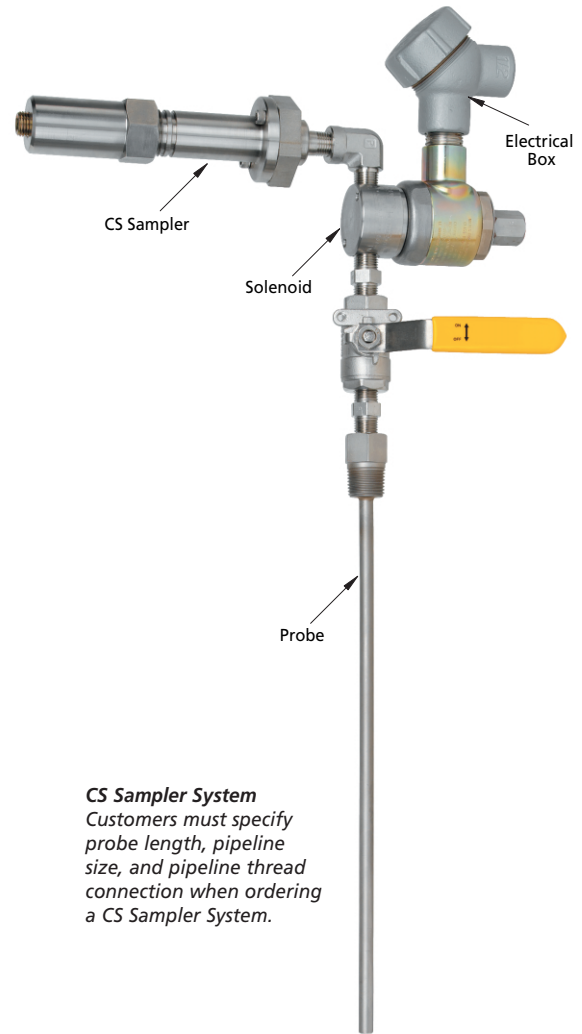
## Applications

- Tanker loading/unloading system
- Truck terminals
- Refineries/pipelines
- LACT units
- Loss control
- Custody transfer points
- Petrochemical plants
- Process vessels
- Barge facilities



## Specifications

Fluids Suitable for Sampling	Crude oil, refined hydrocarbons and non-corrosive chemicals
Viscosity	12 to 54 API gravity (thicker product may require heating; see Cameron for detailed instruction).
Maximum Operating Pressure	
Model CS-1	150 psig for three-way solenoid 500 psig for dual solenoid
Model CS-2	150 psig for three-way solenoid 500 psig for dual solenoid 1000 psig for pneumatically actuated or electrically actuated ball valve
Pipeline Size (in. ID)	Typically, 2 to 12-in. (pipeline size determines probe length required)
Actuator Method	
Model CS-1	Three-way solenoid (24 VDC, 9.25 watt or 120 VAC, 7.5 watt) Dual solenoid, 24 VDC, 9.5 watt
Model CS-2	Three-way solenoid (24 VDC, 9.25 watt or 120 VAC, 7.5 watt) Dual solenoid, 24 VDC, 9.5 watt Pneumatically actuated or electrically actuated ball valve (for product types and pressures not suitable for solenoids)
Sample Grab Size	Adjustable, 0.5 cc to 4.0 cc
Sample Outlet Connection	1-1/4-in., standard (other sizes available)
Standard Materials	Meter body 316 Stainless steel Seals Buna, Viton, Teflon



**CS Sampler System**  
Customers must specify probe length, pipeline size, and pipeline thread connection when ordering a CS Sampler System.

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