

# Universal Bottle Sampler

Simple and efficient offline oil sampling



**Clean and  
contamination free  
sampling**

**Ideal for batch oil sampling  
and laboratory testing**

The UBS provides the dynamic link to portable particle and water counters. The UBS off-line sampler has microprocessor technology to recognise and adjust to the connecting monitor including the icountLCM20 and H<sub>2</sub>Oil water in oil monitor.



## Contact Information:

Parker Hannifin  
**Hydraulic Filter Division Europe**

**European Product  
Information Centre**  
**Freephone: 00800 27 27 5374**  
(from AT, BE, CH, CZ, DE, EE, ES,  
FI, FR, IE, IT, PT, SE, SK, UK)  
**filtrationinfo@parker.com**

[www.parker.com/hfde](http://www.parker.com/hfde)

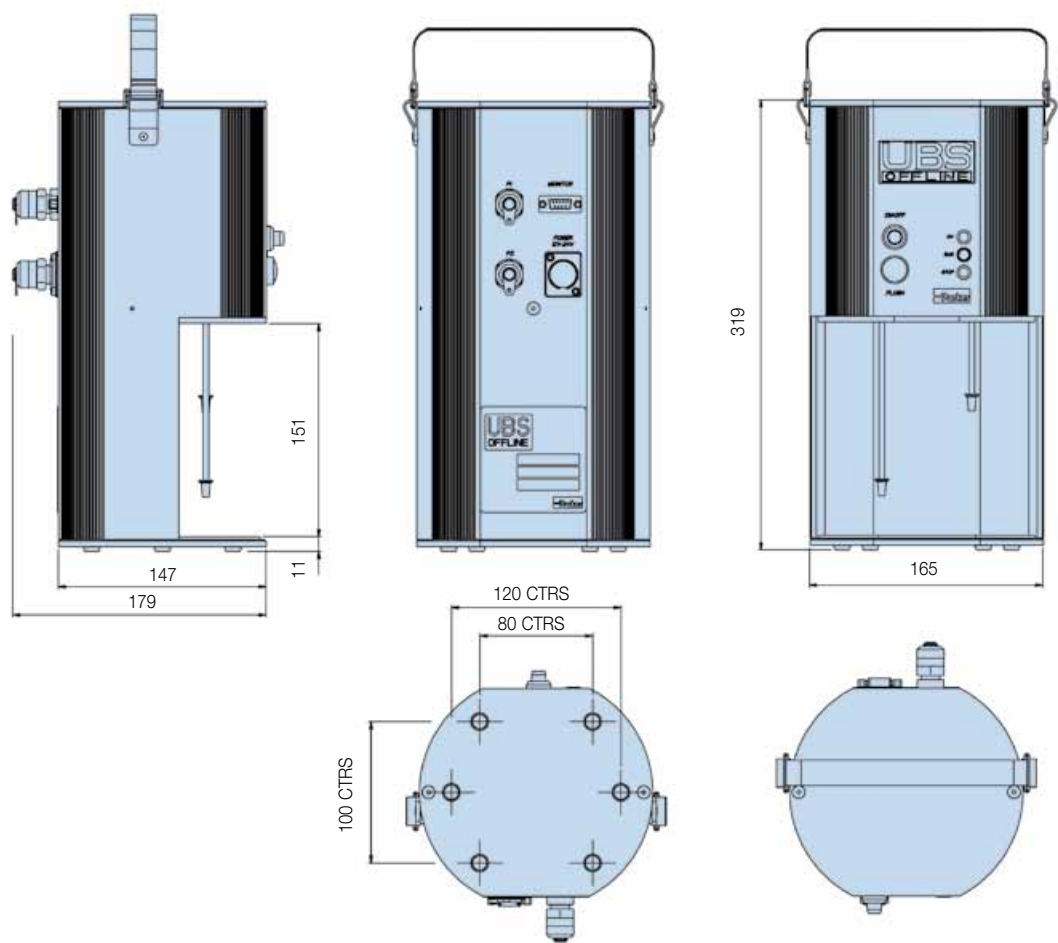
## Product Features:

- Simple operation
- Efficient testing procedure
- Clean and contamination free sampling
- Available for both mineral based and aggressive fluids
- Further advances the LCM20's flexibility into laboratory bottle sampling environments
- Can accept various different sized bottles
- Minimal working parts
- Internal auto setting fuse for overload protection
- Simple maintenance procedures

# Specification

| Description                                       | UBS offline       |
|---|-------------------|
| Viscosity range 2 to 250 cSt                      | ●                 |
| Operating temp +5 to +80°C                        | ●                 |
| Test time 2m15s / 4m15s (Flush 2m)                | ●                 |
| 12 Vdc power supply                               | ●                 |
| Extruded aluminium construction                   | ●                 |
| Unit weight - (Kg)                                | 4                 |
| Mineral oil and petroleum based compatibility     | Fluorocarbon seal |
| Phosphate Ester group compatibility               | EPDM seals        |
| CE certified                                      | ●                 |
| Military approved                                 | ●                 |
| Manual operation                                  | ●                 |
| Bottle pack                                       | ●                 |
| De-gassing chamber                                | ●                 |
| Manual  | ●                 |
| Sample tube pack                                  | ●                 |
| Interface cable to LCM20, H <sub>2</sub> Oil etc. | ●                 |

# Installation Details



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## System Flow Rate

Samples are best taken from a point in the system where the flow is TURBULENT (Reynolds No. greater than 4000). The turbulent flow creates a mixing action. Where flow is streamline or LAMINAR, larger particulate may tend to settle toward the lower pipe surface and not be sampled.

## System Condition Changes

Changes in the system operating condition, flow, temperature, pressure or vibration, can result in previously sedimented contaminant being retrained into the flowing oil. It is also possible that these changes may cause partially contaminated filter elements to shed particulate into the system. Samples should, therefore, be extracted when the system is in a steady state condition and the result less likely to be distorted by contaminant peaks.

There are a number of proprietary sampling valves available which adhere to good theoretical principles. However, they do tend to generate a level of precision and cost which is unnecessary for trend monitoring.



Sampling points should enable extraction of a sample without changing the system's condition. Fine control needle valves are not desirable, as they have a tendency to silt up under some operating conditions, causing the distribution of contaminants in the fluid to be changed. The sampling port should be protected to maintain cleanliness and thoroughly flushed before collecting the sample for analysis. Allow sufficient airspace in the bottle to enable 80% fill.

## Bottle Cleanliness

It is preferable that bottles have sealing screw caps and both parts are cleaned to a suitable level in accordance with ISO3722.

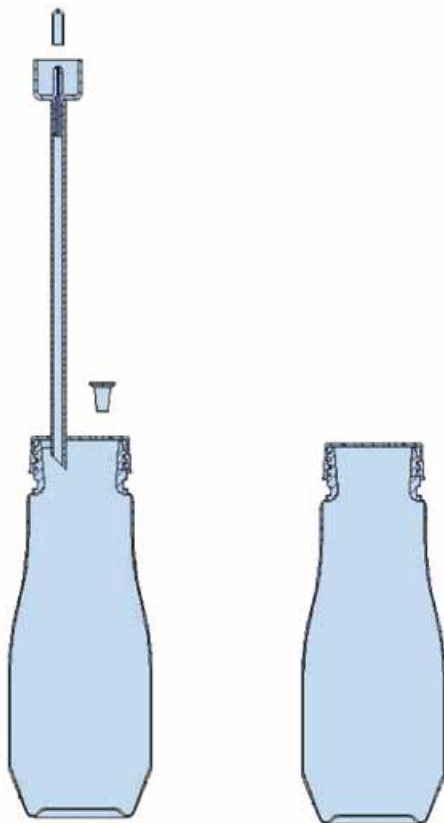
The bottle should not contain more than one tenth the number of particles per 100ml than are expected to be monitored. Standard Parker bottles are supplied clean to ISO13/11 (NAS Class 4) and should not be used to accurately count oils cleaner than ISO 15/12 (NAS Class 6) although they may be used for "trend monitoring" at lower levels.

The bottle should remain capped until time of sample filling and re-capped immediately afterwards.

## Sample Mixing

Sedimentation of contaminant in a sample will occur, the rate of which is dependent upon both fluid and particle characteristics.

Samples should be analysed, without delay, once agitated and de-glassed.



ACC6NW001 x 50 = ACC6NW002

ACC6NK001

## Ordering Information

### Standard products table

| Part number    | Description   |
|----------------|---|
| <b>UBS9002</b> | Universal bottle sampler (includes aluminium case and accessories)            |
| <b>UBS9003</b> | Universal bottle sampler  |
| <b>UBS9004</b> | Aggressive universal bottle sampler   |
| <b>UBS9005</b> | Aggressive universal bottle sampler (Includes aluminium case and accessories) |

### Accessories

| Part number      | Supersedes | Description                               |
|------------------|------------|---|
| <b>ACC6NK001</b> | B89907     | Sample bottle pair with cap, without tube |
| <b>ACC6NW001</b> | B89911     | Sample bottle pair with extraction hose   |
| <b>ACC6NW002</b> | B89910     | 100 Sample bottle pack (50 x ACC6NW001)   |
| <b>ACC6NK002</b> | S840054    | UBS Power supply                          |
| <b>ACC6NK003</b> | S890005    | UBS De-gassing chamber and pump           |
| <b>ACC6NK004</b> | B89603     | UBS De-gassing chamber only               |
| <b>ACC6NK005</b> | B89902     | Cable and adaptor                         |

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.

Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.



## Typical Applications

- Batch sampling
- Aircraft rig certification
- Oil research
- Laboratory testing
- Transfer line monitoring



## Simple To Use UBS

The oil sample is drawn into the UBS Off-line where it is secured, free from further contamination, in a bottle together with a clean waste bottle by a peristaltic, self-priming pump. Simple operation and efficient testing are assured once the UBS Off-line is connected to any of the CM monitors, and powered up using its own power source. The oil sample requires agitation and de-gassing before carrying out the contamination test. A de-gassing kit option is available and consists of a vacuum chamber and pump. (Standard with UBS9002)

