

General Oceanics – Water Sampling

Niskin Water Sampling Bottles

Niskin Non-metallic free-flushing sampling bottles activated by GO Devil messenger (1000-MG) when individually or serially attached to hydro-cable. Sequential closure by remote command with model 1018 Rosette® multi-bottle array, or with model AR1015 Acoustic Command Control option. Vertical, Horizontal and ROV versions available.

An alternative design is also available - the **GO-FLO** sampling bottle avoids sample contamination at the surface, internal spring contamination, loss of sample on deck (internal seals), and exchange of water from different depths. They feature a "soft" close-open-close operation. Automatically opening at approx. 10 metres, they flush until closed by a messenger. Inert gas can be injected into the bottle to force retrieved sample out of sampling valve, directly through filter system. (see separate sheet)



- Sizes: Available in 1.2L, 1.7L, 2.5L, 5L, 8L, 10L, 12L, 20L and 30L capacities.
- **Mounting:** All bottles have cable clamps that accept wire up to and including 6.35mm. Clamps on larger bottles can accept diameters up to and including 8.0mm.
- Material: Non-metallic construction of PVC tube section, end stoppers, handles (on 5 30 Litre sizes, and cable clamp blocks (aluminium on 20 & 30 litre bottle). Delrin stopcocks, air vent screws and push rod. Stainless steel wire bolts & wing-nuts. End stopper closure band of latex tubing. With brass snap hook. Buna-N O-ring seals (other materials available). Nylon monofilament lanyards.

 Maximum working temperature is 60°C (140°F).
- **End Closure:** Stopper with spherical section sealing surface held firmly against O-ring seal by internal latex tubing.
- **Drainage:** Thumbscrew air vent at top. Stopcock at base: 4.7mm dia, (9.52mm basal stopcock for 20- and 30-litres bottles) for rapid drainage.

Options: Teflon coating, stainless steel springs with Teflon or epoxy coating, clear tubes, reversing thermometers. Special wire clamp bolts and mounting blocks for oversize wire Teflon air vent screw and petcock, Plastic snap hook, Storage racks, Borehole cages for sampling in arctic areas.

STANDARD ORDER includes bottle, wire clamp bolts with wing nuts, latex tubing and wire mounting lanyards. Specify size when ordering. **GO-Devil Messenger weight** ordered separately.

Spares/repair kits:

Bottle repair kits (including end stoppers, hardware, PVC cement), O-ring kits,

Other types of bottles available:

1010X - External spring Niskin bottle

1010H - Horizontal bottle (Niskin or external spring type) with center release block

1010V - Vertical wire mounting assembly for Niskin bottle

1010C - Convertible bottle with removable release plate for horizontal or vertical deployment

1010R - Niskin bottle with reversing thermometer mounting rack (thermometers no longer available)

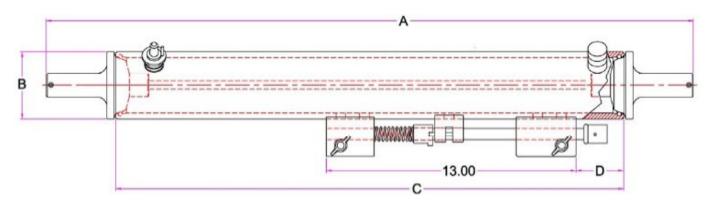
1010PC - Niskin bottle with clear polycarbonate housing

1010-ROV - Niskin bottle with pull trigger for remote actuation by ROV

Swale Technologies Ltd



Niskin Bottle Weights & Dimensions



	1.2L	1.7L	2.5L	5L	8L	10L	12L	20L	30L
A (mm)	762	633	851	692	895	1060	1216	905	1178
B (mm)	61	89	89	142	142	142	142	218	218
C (mm)	724	457	673	457	660	826	991	641	914
D (mm)	216	63.5	63.5	63.5	63.5	63.5	63.5	63.5	63.5
Empty Kg	2.0	2.5	3.0	3.6	4.5	5.7	6.1	11.4	12.7
Full Kg	3.24	4.2	5.5	8.7	12.5	15.7	18.1	31.4	42.7

Please contacts us for special requirements. Technical data subject to change without notice.