



Vortex Hydraulic Gas & Liquid Sampler

Low pressure, hydraulic operated sampling tool

The vortex hydraulic gas sampler is designed to capture and recover gas and liquid samples in a subsea environment. These samples are extracted in a low pressure state of no more than 14psi (0.96bar) by means of a hydraulic mechanical operated syringe which ingests then purges sample into a sample bottle. This tool is designed to be deployed from the surface with the syringe bled of air immediately upon entering the water. Sample filling relies on the suck and blow pumping motion created by the syringe and associated relief valves.

Samples taken can be discharged or cycled out of the syringe whilst under water if necessary.

Discharging syringe into sample bottle typically captures 0.268l fresh water by volume with exhaust relief set at 12psi. Discharging syringe into sample bottle typically captures 0.523l of fresh air by volume with exhaust relief set at 12psi.

Applications

Capture, contain and recover liquid
Capture, contain and recover gas

Features

3000m / 9842ft depth rated
Mount to any ROV
Able to discharge sample subsea

In the box

Hydraulic gas and liquid sampler
Rated sample bottle
Operational hoses
Operations and maintenance manual



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Specifications



Syringe cylinder volume	580ml / 0.153gal
Sample bottle volume	1 litre / 0.264gal
Main relief valve setting on syringe	0.8bar / 12psi
Syringe body and end caps material	Acrylic
Piston material	Acetal
Piston rings / seals material	Nitrile 50 x 60 x 4
Piston cap o-rings material	Nitrile N70
Depth rating	3000m / 9842ft
Containment bottle Internal volume	445ml / 0.11gal min (each bottle)
Burst (min)	599bar / 8700psi
Puncture force	260 Nf max *1
Material body	Tubes EN 10305-1 material LBM spec
Material cap	12.0338 (St4)
Weight empty in air	10kg / 22lbs
Complete tool dimensions	940 x 460mm / 37 x 18.1in

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