SeapHOx™ V2 Configurations

Family	Model	Pressure Sensor/Range
SeapHOx™ V2		0 – none
		1 – 20 m strain gauge
		2 – 100 m strain gauge

Example: SEAPHOX.1 is a SeapHOx with 20 m strain gauge pressure sensor. See table below for description of each selection:

PART #	DESCRIPTION	NOTES
SEAPHOX V2		
SeaPHOx Configuration Selections — MUST SELECT ONE		

		 Pressure port plug

SEAPHOX.1	**SeapHOx™ V2 Ocean CTD + pH + DO sensor. Integrates the SeaFET (v 2.0) Ocean pH sensor with flow cell and the Sea-Bird SBE 37SMP-ODO MicroCAT CTD with 20 meter pressure sensor, with Integrated SBE 63 Optical Dissolved Oxygen sensor (ODO) with titanium housing. 20 meter depth rating. All sensors using wet-pluggable (MCBH) connector. Includes SeapHOx integration kit (mount brackets, flow tube adapter, Y-cable, RS-232 programming cable, hardware).**	**Pressure sensor is installed in MicroCAT end cap (behind mount clamp), & is not field replaceable / swappable. While highest pressure rating gives you most flexibility in using MicroCAT, it is at expense of accuracy & resolution. It is advantageous to use lowest range pressure sensor compatible with your intended maximum operating depth, because accuracy & resolution are proportional to pressure sensor's full scale range. For example, comparing 20 & 100 m sensors:**
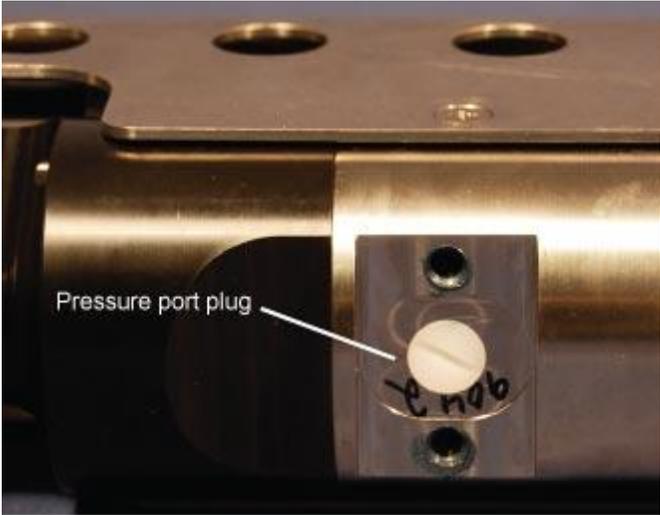		
		● **20 m sensor:**
		   initial accuracy = 0.02 m (= 0.1% * 20 m), resolution = 0.0004 m (= 0.002% * 20 m)
		● **100 m sensor:**
		   initial accuracy = 0.1 m (= 0.1% * 100 m), resolution = 0.002 m (= 0.002% * 100 m)

| SEAPHOX.2 | SeapHOx™ V2 Ocean CTD + pH + DO sensor. Integrates the SeaFET (v 2.0) Ocean pH sensor with flow cell and the Sea-Bird SBE 37SMP-ODO MicroCAT CTD with 100 meter pressure sensor, with Integrated SBE 63 Optical Dissolved Oxygen sensor (ODO) with titanium housing. 50 meter depth rating. All sensors using wet-pluggable (MCBH) connector. Includes SeapHOx integration kit (mount brackets, flow tube adapter, Y-cable, RS-232 programming cable, hardware). | |

SBE 37-SMP Mooring Clamp Wire Size Selections (Specify clamp to match O.D. of mooring wire jacket; cannot accommodate wire size greater than 1.2 in. diameter) — MUST SELECT ONE		
50465.ɪ	Wire guide & mounting clamp for 1/4 in. diameter mooring wire	Mounting Clamp. 37-SMP clamped to mooring cable here. Wire Guide. Cable goes through here but is not clamped, to avoid putting through tension on end cap (which could pull off end cap).
50469.ɪ	Wire guide & mounting clamp for 5/16 in. or 8 mm diameter mooring wire	
50470.ɪ	Wire guide & mounting clamp for 3/8 in. diameter mooring wire	Cable fits loosely through wire guide, & is clamped only at mounting clamp. See document **67219**. '.ɪ' designation indicates that guide and clamp are to be installed on instrument at factory. Thread for clamping to mooring cable: ● 1/4 in. diameter: 1/4-28 UNF ● 5/16 in./8 mm diameter: 5/16-24 UNF ● 3/8 in. diameter: 3/8-24 UNF
50473.ɪ	Wire guide & mounting clamp for 1/2 in. diameter mooring wire	

50467.ɪ	Wire guide & mounting clamp for 6 mm diameter mooring wire	1/2 in. diameter: 9/16-12 UNC 6 mm diameter: 1/4-20 UNF 10 mm diameter: 7/16 -14 UNF 12 mm diameter: 1/2-13 UNF **Clamp Size Note:** Mooring wire is typically specified by wire size, not by outer diameter (O.D.) of the mooring wire jacket. Verify the wire jacket O.D. before selecting the clamp size. The clamp size must be less than or equal to the wire jacket O.D. but larger than the wire diameter. For example, Mooring System Inc.'s specifications for 3x19 wire rope (in 2016) are as follows:
50471.ɪ	Wire guide & mounting clamp for 10 mm diameter mooring wire	
50474.ɪ	Wire guide & mounting clamp for 12 mm diameter mooring wire	

Wire Diameter	Jacket Diameter	Recommended Sea-Bird Clamp
3/16 inch (5.0 mm)	0.255 inch (6.5 mm)	1/4 inch
1/4 inch (6.5 mm)	0.330 inch (8.4 mm)	5/16 inch
5/16 inch (8.0 mm)	0.392 inch (9.9 mm)	3/8 inch

		3/8 inch (9.5 mm)	0.453 inch (11.5 mm)	10 mm (0.394 inch)
		7/16 inch (11.1 mm)	0.5 inch (12.7 mm)	1/2 inch

For mounting on a rope, verify the rope outer diameter, and select a clamp smaller than the rope O.D. to account for the rope compressibility (for example, for 5/16 inch rope, select a ¼ inch clamp; a 5/16 inch clamp will be too large).

50479.ɪ	Alternative mounting - plastic brackets to provide through-bolt mounting to a flat surface	See document 67218. '.ɪ' designation indicates that brackets are to be installed on instrument at factory.

SeapHOx Spares & Accessories - See selections in SBE 37-SMP and SeaFET V2

SeapHOx Integration Kits

50618	SeapHOx™ V2 integration kit (mount brackets, flow tube adapter, Y-cable (MCBH SBE 37 connector), fasteners	These kits are intended for customers who already own a SeaFET™ and/or a MicroCAT and send their units to Sea-Bird for upgrade to a SeapHOx system. These kits are not intended for customers to perform the integration on their own.
50637	SeapHOx™ V2 integration kit (mount brackets, flow tube adapter, Y-cable (XSG SBE 37 connector), fasteners	