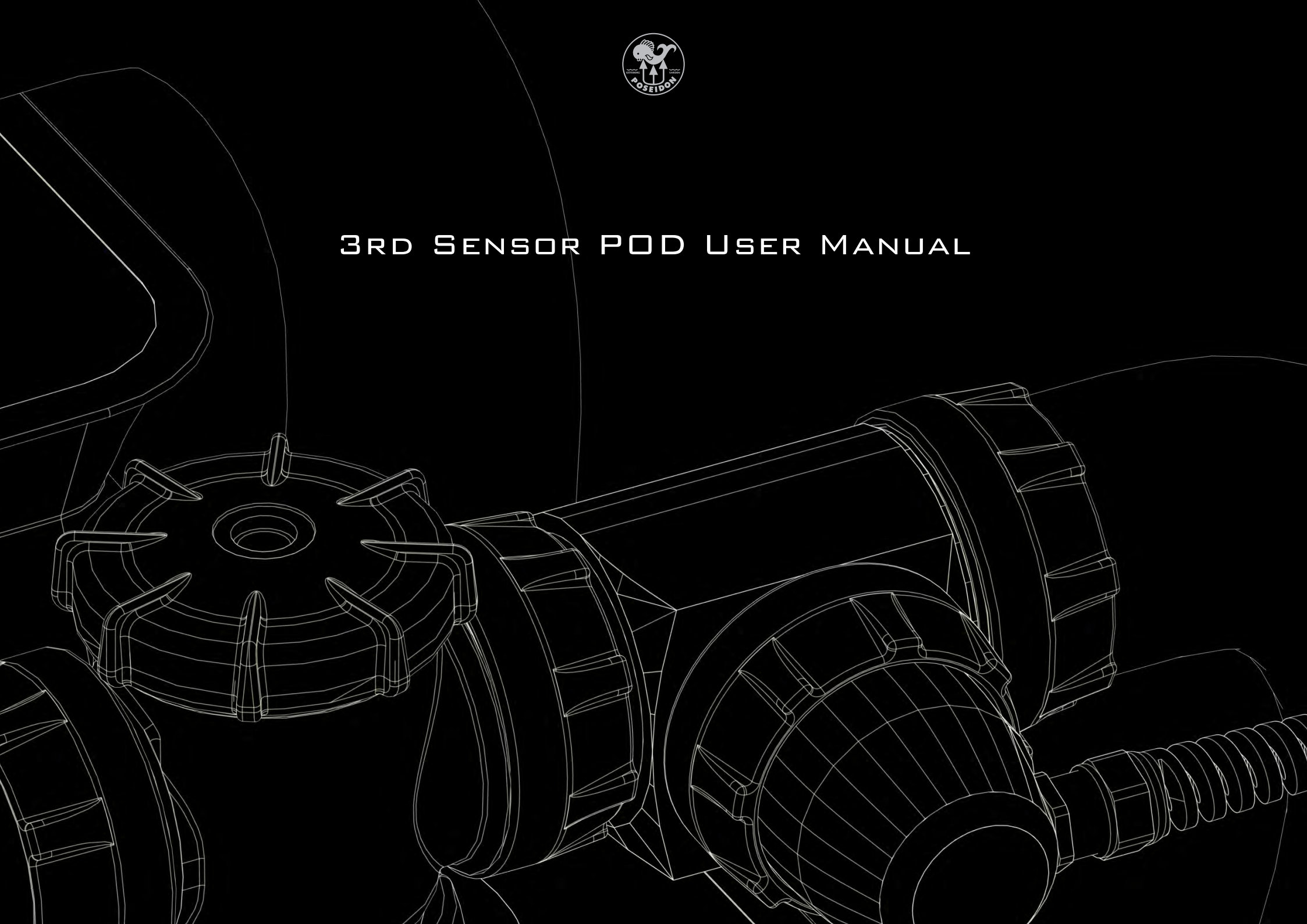# 3rd Sensor POD User Manual

The 3rd Sensor POD

The sensor POD is made for technical divers and more experienced divers that would like to monitor the loop PO_2 through an external dive computer with the capability of reading an O_2 sensor.

The sensor POD parts are made from a solid piece material; injection molded parts and standardized parts such as o-ring's etc.

The interface utilizes the standard MKVI and Poseidon SE7EN hose connection system. This makes connectivity easy and versatile options when it comes to placement of the POD.

The POD is delivered in a state where the user has to connect his O_2 cell to the external computer.

WARNING:

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Retain this manual for your reference. Review this manual periodically, and prior to diving. Improper use, or misuse, of this device could result in serious injury or even death.

Functional overview

The sensor POD consists of a main housing **(2)** and connection interfaces towards the MKVI and Poseidon SE7EN hose connection system at each end, discussed in next chapter. The main body has two breathing gas ports; Inlet **(A)** and outlet **(B)**. The third outlet of the main body **(C)** is the sensor housing slot where a suitable O_2 sensor can be fitted to the sensor holder **(3)**. All connections use the standard hose nut **(5)**.

Installation

Make sure to follow all instructions provided by the computer manufacturer prior to installing any cable into this sensor POD. Once the POD is installed make sure to follow the dive computer pre dive, dive and post dive instructions. This accessory provides a useful interface in between your off board computer and your Poseidon SE7EN.

Installing the dive computer cable

Insert the computer cable from D, through the cable gland. The cable gland is suitable for use with a 3-6,5 mm cable. Solder an appropriate O_2 sensor connector to the cable and pull back the cable to an optimum position. A cable tie can be used as a strain relief on the inside of the sensor lid. Tighten the cable gland properly by hand.

Installing the O_2 sensor

Screw the O_2 sensor into the sensor holder **(3)**. Connect the sensor to the dive computer cable interface and push the sensor holder into the sensor lid **(1)**. Inspect the o-ring **(10)** and screw the nut **(5)** onto the mail body.
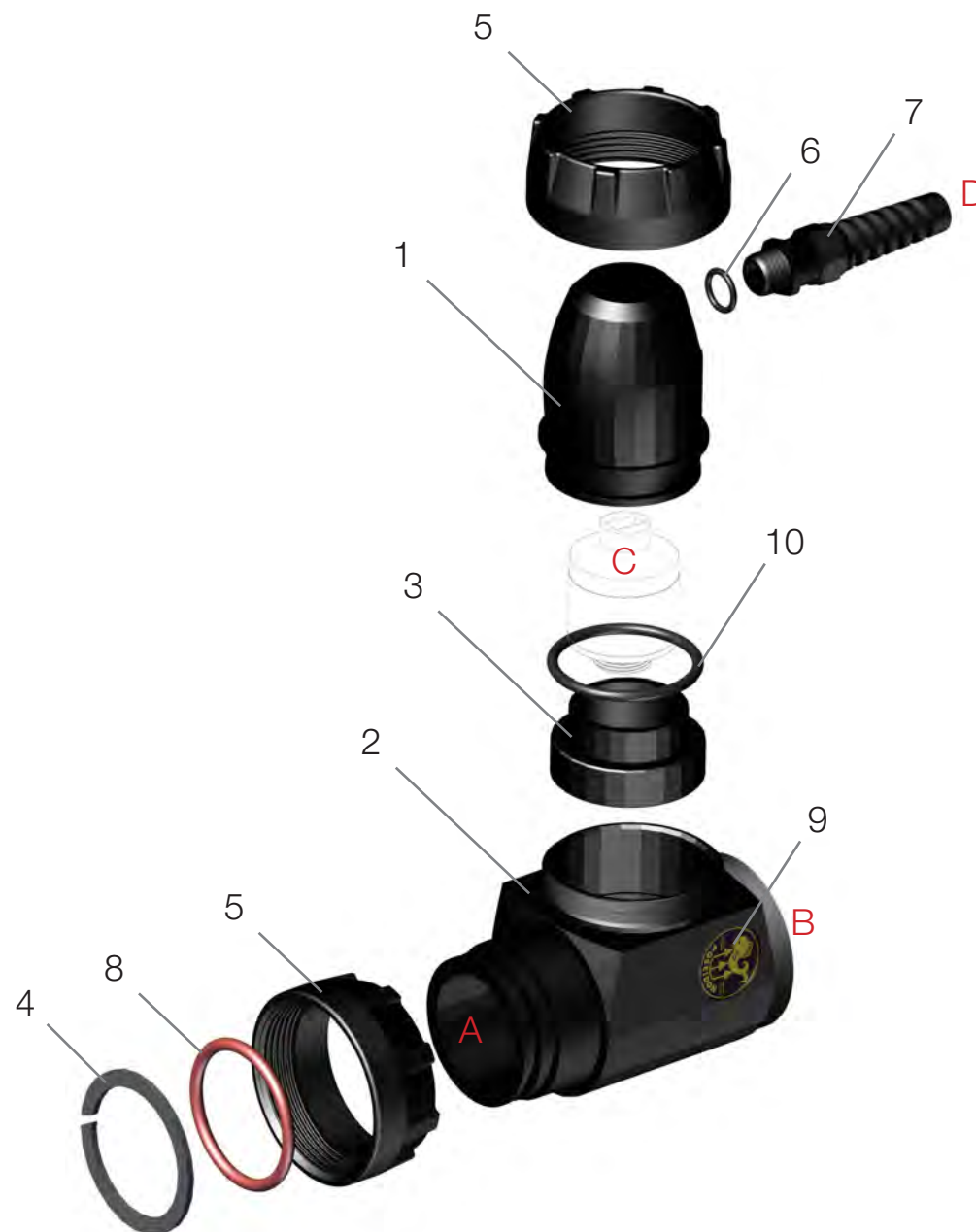
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WARNING:

The 3rd sensor is not calibrated and validated throughout the dive. Please refer to your dive computer manual for proper procedures.

Figure 1. *Functional overview.*

Assembly with your MKVI or Poseidon SE7EN

Attach the sensor POD either to the inhalation counterlung right before the T-piece. Refer to figure 2. Route the cable to the off board computer in such a way that it does not interfere or restricts your movement. The sensor housing allows rotation in 360° for best setup. Poseidon offers a sligthly shorter hose that gives a better fit when the sensor pod is installed. The shorter hose can be ordered separately, article number; 0132-004.

Sensor base pressure equalization groove should be placed in the lowest position possible when the diver is in horizontal swimming attitude, to drain any moisture that may form inside the sensor housing.

For more installation guidance refer to MKVI manual or Poseidon SE7EN manual.

Post assembly and pre dive.

Follow the normal MKVI / SE7EN checklists including negative loop pressure test and perform the automated pre dive test sequence WITH the POD installed. This will make sure that the POD and the rest of loop is integral. Proper pre-dive calibration of 3rd sensor is critical. Refer to your dive computer manual. Poseidon offers a calibration kit for this purpose number with article 6011-055.

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WARNING:

Modifications or alterations of the original content of the product beyond what is described in this manual are prohibited.

Figure 2. *T-piece assembly.*

Post dive care

Make sure to remove the sensor from the POD after each dive to check for humidity in the back of sensor and allow sensor to dry.

Maintenance

Prior to and after dive make sure that sealing surfaces are clean and that o-rings are lubricated. The Oxygen sensor is a consumable, make sure to maintain and store it in accordance to the manufacturer recommendations.

Partslist.

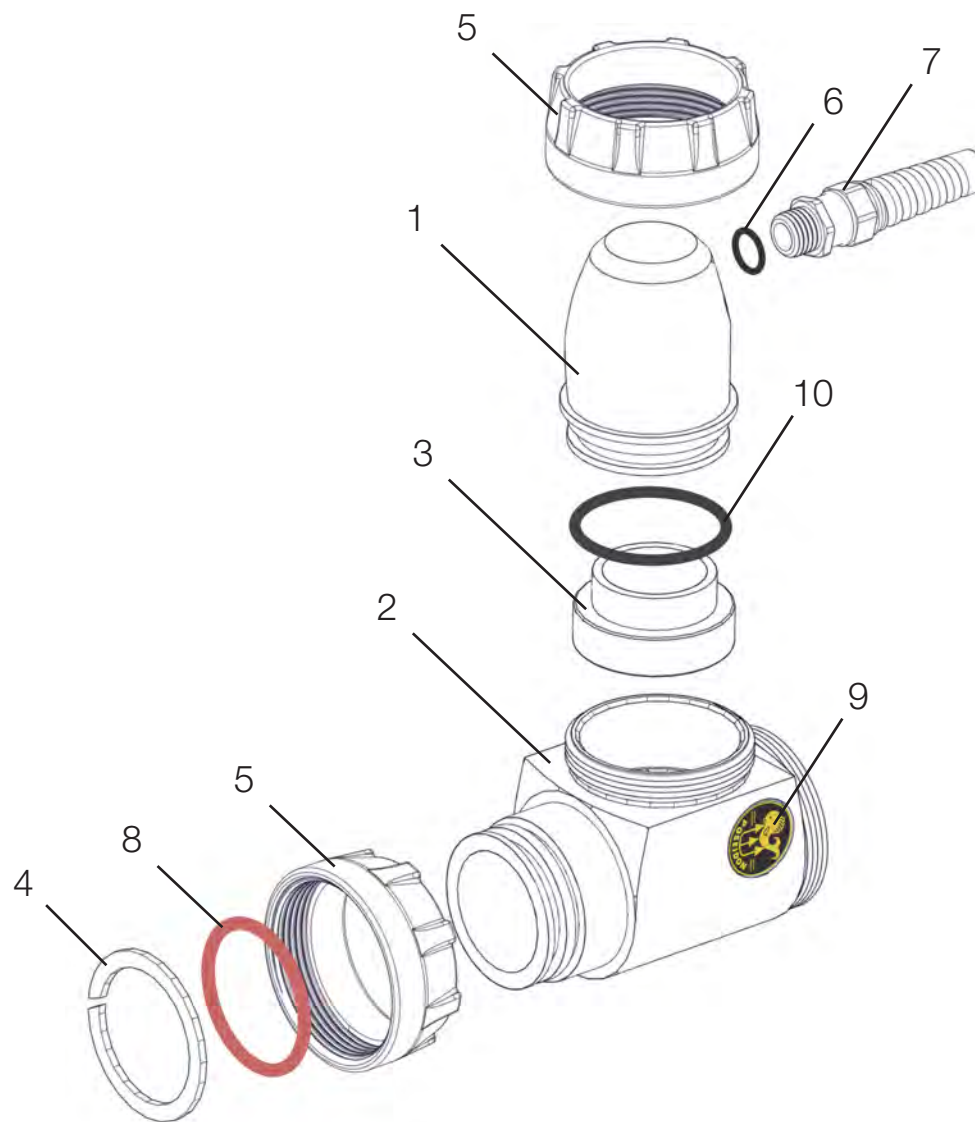| Item no.	Default/QTY	Part no.	Replaces
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2	1	0000-916	
3	1	0000-918	
4	1	0000-919	
5	2	6010-136	
6	1	6010-252	
7	1	0011-278	2856_59
8	1	0013-261	
9	1	4539	
10	1	0014-034	

Figure 3. *Included parts.*