TEMPERATURE SCRUBBER SENSOR

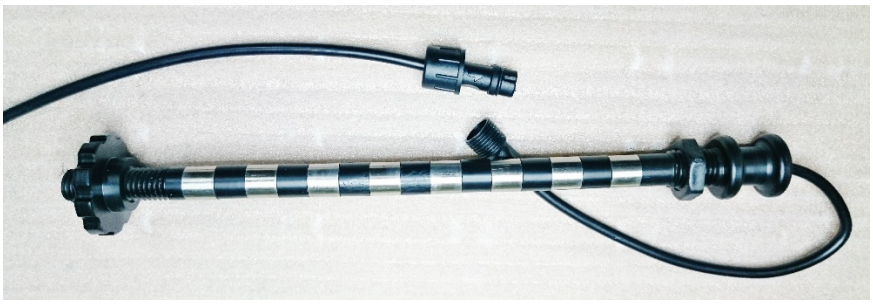
MANUAL

(revision 1/2017)

2017

DESCRIPTION

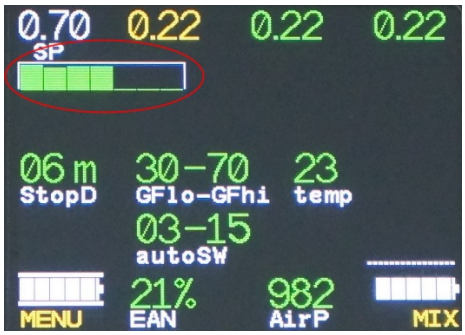
Temperature sensor is placed in the scrubber instead of central rod. This sensor has inner temperature sensors and a connecting wire. The relevant connector is placed in the scrubber cap: upon connecting it to the temperature sensor plug data will be displayed in the upper left part of the handset.



Attention: this system does not define CO2 level, it just measures temperature distribution in chemical absorbent layers (CO2 absorbent) in the scrubber starting from the first layer. Consequently, it does not give any signal if there is no absorbent in the system at all, or CO2 goes through scrubber due to damage or absence of O-ring. There will be no signal from this system if CO2 goes through valve box via either damaged, or absent non-return valve. THIS SYSTEM DOES NOT DEFINE CO2 LEVEL.

It is possible to receive information about temperature distribution in layers in the active scrubber part as per scrubber sensor scale.

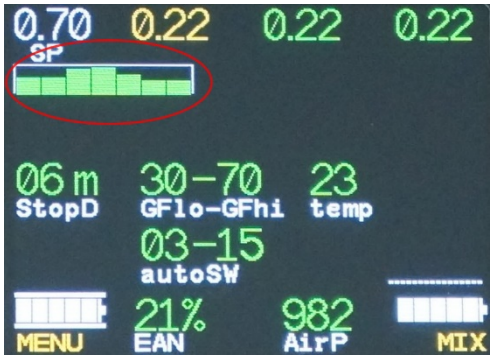
At the beginning the scale is displayed as an empty frame. Then as lower/bottom scrubber part is warming up, green segments will appear in the left scale part, then next segments to the right, and so on – from the left to the right. Segments' height is proportional to layer temperature (activeness).



Soon absorbent in the bottom scrubber part is exhausted and starts cooling. This process is displayed on the sensor in the following way: the very left segment on the scale becomes brighter again.

As time flows, absorbent is used further, the scrubber warms up.

The relevant scale parts become green on the scale. It's possible to judge about active/functioning scrubber part by segments moving from the left to the right on the scale.



When operation time of he scrubber comes to an end, scrubber values will change in accordance with algorythm, namely: they will remind car fuel sensor, i.e. empty scale warns that it's not recommended to rely on the rebreather, and you should make emergency ascent as per Open Circuit mode.

Warning: thanks to this system you receive information about scrubber functioning during the whole dive, but you should not take it as possible scrubber operation time for the next dive. The system does not give preliminary estimate of the operation time left, because it depends on several still unknown factors, namely: work you are to do, depth you are to dive to, water temperature you are to dive in. But as soon as you are in water, all these factors will be automatically taken into account, i.e. if you take any efforts, scrubber sensor will respond (the scale will be filled and emptied much faster).

Warning: if there is one green segment in the very right part of the scale, it means that warning alarm comes from the scrubber («Scrubber Warning»). Though this signal can be blocked, the dive should be terminated. If all the segments disappear on the scale (*scrubber resource is exhausted*), then warning alarm is on, warnings also appear on the HUD and handset. These alarms can not be switched off. If you continue the dive, not taking CO2 values into account, then the result can be fatal, even without any additional physical symptoms