



# SENECT Pressure sensor

## EDS

### Manual



## Product type

<b>Product name:</b>	SENECT® Pressure sensor EDS
<b>Type:</b>	EDS-xxxx-MA (xxxx describes the pressure range in mbar)
<b>Art.-Nr.:</b>	2002
<b>Producer:</b>	SENECT GmbH & Co. KG An 44 – Nr. 11 76829 Landau / Germany

### **Important note:**

Please read this manual carefully and store it so that you can use it later. Read the warning and safety notes attentive.

More information and latest software releases or documents can be downloaded from:

[www.senect.de](http://www.senect.de)

Further information, application descriptions and answers to frequently asked questions can be also found on the SENECT Forum:





<http://forum.senect.de>

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## Table of contents

Product type .....	2
Table of contents .....	3
Used symbols and wording .....	4
General Security Notes .....	5
Intended use .....	6
Getting started .....	7
Scope of delivery .....	7
Note .....	7
Installation and start-up .....	7
Application example .....	10
Maintenance and cleaning .....	12
Technical data .....	12
Information about the correct disposal .....	14
Guarantee .....	15

## Used symbols and wording

	<p><b><i>DANGER!</i></b></p> <p>Warning of life threatening dangers.</p> <p><b><i>WARNING!</i></b></p> <p>Warning of possible life threatening and / or severe irreversible injuries.</p> <p><b><i>ATTENTION!</i></b></p> <p>Warning of possible medium or slight injury.</p>
	<p><b><i>ATTENTION!</i></b></p> <p>Follow the notes to avoid damage of equipment</p>
	<p><b><i>NOTE!</i></b></p> <p>Further information for the use of the device!</p>
	<p><b><i>ATTENTION!</i></b></p> <p>Warning of electrical shock.</p>

## General Security Notes

The SENECT pressure sensor EDS is an electronic sensor unit for measuring the pressure in pipelines, hoses or vessels.



As this is an electronic product, the usual requirements, as with all electrical appliances, must be met. The device may only be operated



with compatible control units or control units approved by SENECT. The device and all connected lines must be installed and operated

protected from moisture and wetness. When laying all cables, care must be taken that no safety-relevant impairments such as tripping hazards occur. For many applications, fuse protection by a residual current circuit breaker with a tripping current  $< 30$  mA is mandatory. Find out more about this.

The device must be installed protected from overheating by direct sunlight and must only be operated at an ambient temperature between  $0^{\circ}\text{C}$  and  $+40^{\circ}\text{C}$ . The device must not be modified, except for extensions or software updates of SENECT®. It is forbidden to open the device or to penetrate the inside of the housing in any way.

The pressure sensor EDS is not intended to be used by persons (including children) with limited physical, sensory or

mental abilities or for lack of experience and/or knowledge, unless they are supervised or instructed by a person responsible for their safety on how to operate the device.

Please keep these instructions for use as a reference. Technical and optical changes as well as printing errors reserved.

## **Intended use**

The pressure sensor EDS is used to measure the pressure of gaseous media (air, oxygen) or liquid media (water) in pipelines or vessels at a temperature between  $>0^{\circ}\text{C}$  and  $+40^{\circ}\text{C}$ .

The sensor is intended for use in industrial fish farming and holding systems.

## Getting started

### Scope of delivery

- 1 x Pressure sensor EDS incl. connection cable
- 1 x Manual

### Note



Please make sure that the packaging was undamaged and not opened before commissioning and that all positions indicated in the scope of delivery are present. If you discover any defects, damage or the absence of items included in the scope of delivery, please report this immediately within 14 days. Subsequent complaints about defects that have already occurred before commissioning can no longer be accepted.

### Installation and start-up

The sensor is screwed into a suitable thread using the pressure sensor-side G1/4" threaded nipple.



Seal the thread with sealing tape or a suitable and approved sealing compound (e.g. Loxeal 58-11, BAM-tested Teflon tape).



Make sure never to touch the sensor membrane (not even for cleaning purposes) and that the cable connection side must be kept permanently dry, as this is where the pressure compensation to the atmosphere takes place.

Connect the supplied connection cable to the sensor and your control unit at one of the sensor slots marked in blue. The SENECT control units automatically detect the sensor and start operation.

Nevertheless, check in the menu under **Sensors / Slot X / Sensor Type** whether the sensor was recognized correctly (EDS-2500-MA). If not, select "EDS-2500-MA".

In the submenu item **Sensors / Slot X: EDS / Measuring range**, enter the measuring range of your sensor in mbar (e.g. 2500 mbar = 2.5 bar).

The sensor is now ready for use and you can make further settings. For further information, please refer to the manual of your SENECT controller.



## Quick start guide

1. Screw the sensor to the connecting piece so that it is pressure-tight (use sealing tape or mass)
2. Connect the cable to the sensor and control unit (slot "SENSOR").
3. Select the correct sensor type under **Sensors / Slot X / Sensor type** (EDS-2500-MA).
4. Enter the measuring range of your sensor in mbar under **Sensors / Slot X: EDS / Measuring range** (e.g. 2500 mbar).

Now your sensor is ready for use.

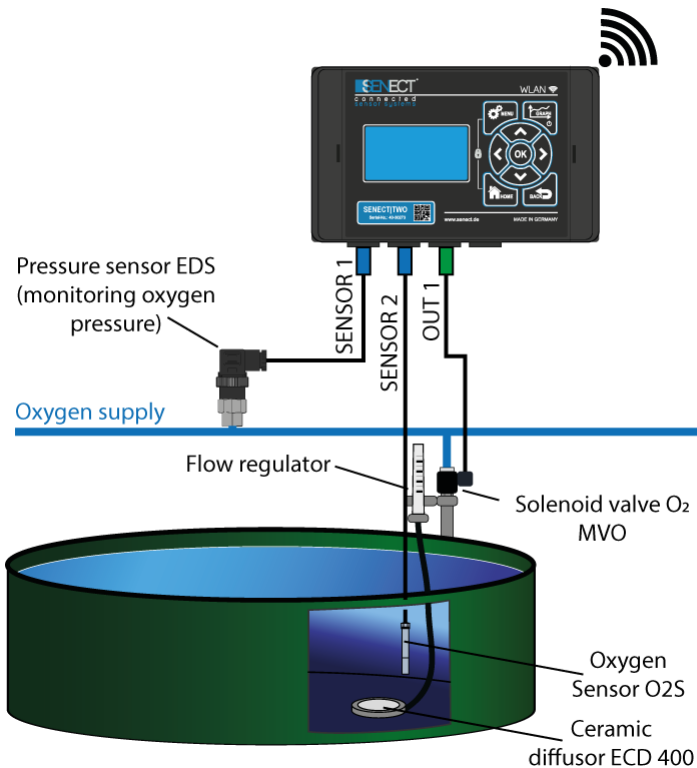
Depending on the software version you are using the menu is different.

Updates to this manual can be found at [www.senect.de](http://www.senect.de).



## Application example

The pressure sensor EDS can be used to monitor the line pressure of the ventilation line (oxygen or compressed air). If there is a fault in this supply line (tank empty, generator defective, leakage), the EDS can trigger an alarm if the pressure falls below the set lower threshold value.



Make the following settings:

- **Sensor / Slot X: EDS / Alarm Treshold / Lower Threshold:** e.g. 1500 mbar
- **Sensor / Slot X: EDS / Alarm Treshold/ Upper Threshold:** e.g. 2000 mbar
- **Sensor / Slot X: EDS / Alarm Treshold / Hysteresis:** e.g. 10 mbar

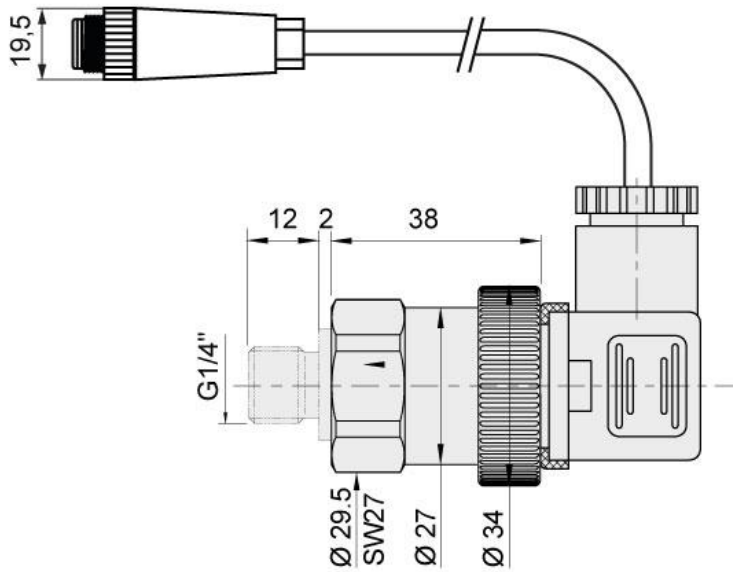
These settings trigger an alarm when the pressure drops below 1500 mbar or exceeds 2000 mbar.

## Maintenance and cleaning

When cleaning the sensor, be careful **never to touch the inside of the sensor membrane**. Do not use cleaning agents.

## Technical data

Dimensions Sensor:	Ø 21-34 mm, Width: max. 34 mm, Length: 80 mm
Material (medium-contact):	Stainless steel (1.4542)
Cabel length:	5 m
Voltage:	24 V DC
Power consumption:	<< 1 W
Temperature range:	0° to 40 °C (medium up to +125°C)
Overpressure:	Depending on model EDS-2500-MA: 7,5 bar
Measuring range:	JeDepending on model EDS-2500-MA: 2,5 bar
Precision:	< 0,5% FS
Response time:	T <sub>90</sub> < 3 s
Ingress protection:	IP65 (outside)



## Information about the correct disposal



Your device is well packed at delivery. Please dispose the packaging material accordingly to the regulations in your country.

Do not throw the product in the casual litter bin. Make sure you are informed about the local disposal regulations and dispose your product accordingly. Alternatively, you can also send the product back to the producer.

The SENECT GmbH & Co. KG is member of the Stiftung Elektro-Altgeräte Register and the products are registered (WEEE-Reg.-Nr.: DE37193510).

## Guarantee



Please check at delivery of your device, that all parts are delivered completely and that they function correctly. In case of any claims, contact us immediately per email or phone ([info@senect.de](mailto:info@senect.de) or +49-6341 - 95 95 210). Please describe your claim as detailed as possible so that we can provide a solution as fast as possible. The product has a guarantee of 1 year and a warranty of 2 years. Furthermore, the § 377 HBG (German law) is valid.