# Installation Instructions **Kit for Oxymax COS61/COS61D**

For maintenance of oxygen sensors COS61 and  ${\it COS61D}$ 

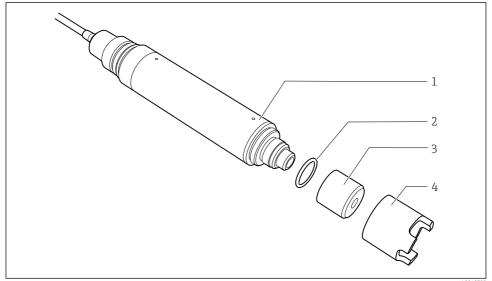




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### 1 Overview of Oxymax COS61/COS61D



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### ■ 1 Overview of Oxymax COS61/COS61D

- 1 Sensor shaft
- 2 O-ring
- 3 Optical spot cap
- 4 Protection cage

### 2 Intended use

- The components of the kit are to be used exclusively as retrofit or replacement parts for sensors COS61/COS61D. Any other use is not permitted!
- Only use original parts from Endress+Hauser.
- In the W@M Device Viewer, check if the spare part is suitable for the existing device.

### 3 Authorized installation personnel

- Installation, commissioning, operation and maintenance of the measuring system may be carried out only by specially trained technical personnel.
- The technical personnel must be authorized by the plant operator to perform the stated tasks
- The electrical connection may only be established by an electrical technician.

- The technical personnel must have read and understood these Installation Instructions and must follow the instructions they contain.
- Measuring point faults may be repaired only by authorized and specially trained personnel.
- In the case of Ex-certified devices, the technical staff must also be trained in explosion protection.
- Repairs not described in the Operating Instructions provided must only be carried out directly at the manufacturer's site or by the service organization.

### 4 Safety instructions

### **WARNING**

Risk of injury from high pressure, high temperature or chemical hazards if process medium escapes!

► Before installing or removing an assembly, depressurize the system, drain the system and clean it

### **A** CAUTION

Risk to health due to contact with the process medium

- ► Wear protective gloves, protective goggles and protective clothing, particularly when working with reagents, chemicals or process solutions.
- ► In case of contact with eyes or skin, rinse the affected area with plenty of water and then seek medical advice. Show the relevant safety data sheet to the physician.

### NOTICE

### Material damage due to solvents!

► Do not use any halogen-containing organic solvents or acetone. These solvents could destroy plastic components of the sensor.

### Potential impact on the process

Before decommissioning an active device, the potential impact on the overall process must be taken into account! This applies in particular when using the associated measuring instrument to control process variables.

# 5 Scope of delivery

### 5.1 Kit COV61

COV61	For sensor							
	1	COS61						
	2	COS61D						
		Optical spot cap						
		Е	Sensor with black spot cap					
		F	Sensor with gray spot cap					
			Number of optical spot caps					
			1 1 piece					
			3	3 pieces				
			>> Maintenance parts					
				MA	Seal set			



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- 1 Seal set
- 2 Optical spot cap
- 3 Powder for zero solution

### 6 Additional documentation

Detailed information on the device can be found in the Operating Instructions for the sensor and in the other documentation available via:

- www.endress.com/device-viewer
- Smartphone/tablet: Endress+Hauser Operations app

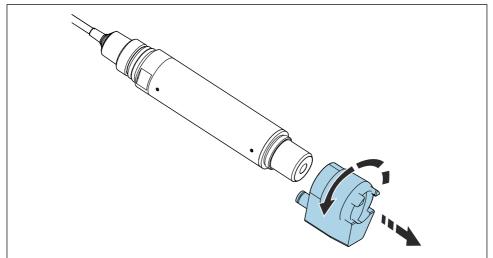
# 7 Replacement of spare parts

- If the sensor already has a gray spot cap, continue with the steps described below. If the sensor has a black spot cap, please proceed with the steps outlined in the "Changing spot caps"→ 

  9 section.
- ▶ Replace the O-ring immediately if it is damaged.
- **Recommendation:** Always replace the O-ring each time you replace the spot cap.

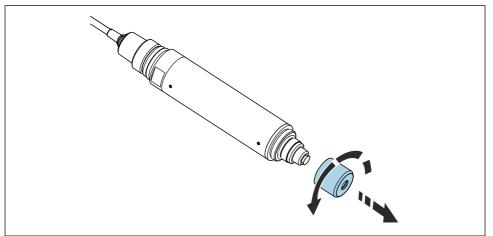
### Replacing the O-ring

- 1. Clean the sensor before replacing the O-ring. A cleaning agent appropriate to the type of contamination should be used for this purpose.
  - More information on this can be found in Operating Instructions BA00460C/07 and BA00387C/07, which can be found in the Downloads area at www.endress.com.
- 2. Remove the protection cage or cleaning unit.



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3. Unscrew and remove the optical spot cap.

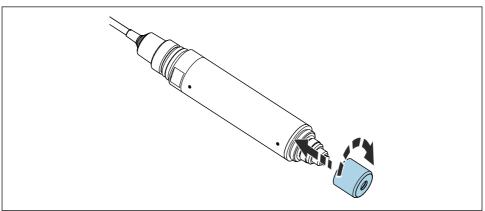


### NOTICE

### Material damage caused by mechanical cleaning of optical components!

Polishing or scratching can result in the impaired functionality or total failure of the sensor.

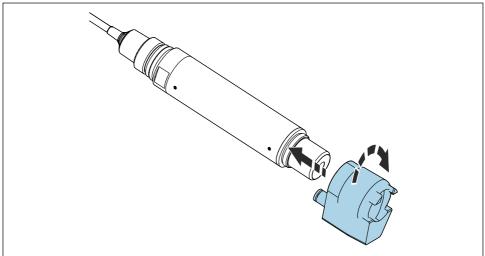
- ► Clean the optical components by dabbing them carefully with a soft cleaning cloth.
- 4. Carefully remove the existing O-ring from the sensor, e.g. with an O-ring picker. Do not use any sharp objects when installing, so as not to damage the sensor.
- 5. Carefully mount the new O-ring. When installing, make sure that the O-ring is not damaged by the thread.
- 6. Screw on the optical spot cap.



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7. Calibrate sensor.

8. Screw on the protection cage or cleaning unit.



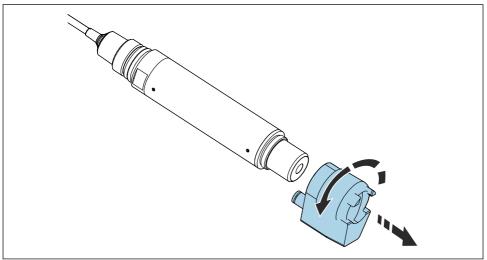
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## 8 Changing spot caps

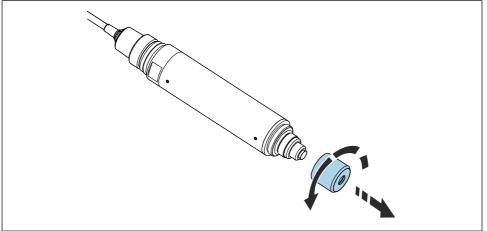
If the sensor currently has a black spot cap, this sensor must now be changed over to a gray spot cap.

### Replacing the O-ring

- 1. Clean the sensor before replacing the O-ring. A cleaning agent appropriate to the type of contamination should be used for this purpose.
  - More information on this can be found in Operating Instructions BA00460C/07 and BA00387C/07, which can be found in the Downloads area at www.endress.com.
- 2. Remove the protection cage or cleaning unit.



3. Unscrew and remove the optical spot cap.



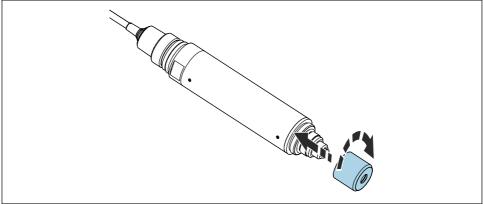
### **NOTICE**

### Material damage caused by mechanical cleaning of optical components!

Polishing or scratching can result in the impaired functionality or total failure of the sensor.

- ► Clean the optical components by dabbing them carefully with a soft cleaning cloth.
- Carefully remove the existing O-ring from the sensor, e.g. with an O-ring picker. Do not use any sharp objects when installing, so as not to damage the sensor.

- 5. Carefully mount the new O-ring. When installing, make sure that the O-ring is not damaged by the thread.
- 6. Screw on the new optical spot cap (gray).



7. Dissolve the supplied capsule with zero solution in 10 l of water and stir.



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8. Place the sensor in the zero solution and wait until the values are stable at 0 mg/l.

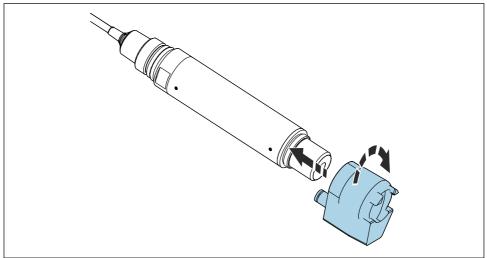


- 9. Perform zero point calibration with the transmitter → CM44x: Cal/oxygen/zero point calibration. Follow the transmitter procedure.
- 10. Mount the sensor above the water surface.



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- 11. Set the calibration pressure in the transmitter  $\rightarrow$  CM44x: Cal/Oxygen/Slope/Cal. settings/Pressure.
- 12. Perform slope calibration with the transmitter  $\rightarrow$  CM44x: Cal/Oxygen/Slope/100% RH air. Follow the transmitter procedure.
- 13. Screw on the protection cage or cleaning unit.



#### 9 **Disposal**

#### 9.1 Sensors



If required by the Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), the product is marked with the depicted symbol in order to minimize the disposal of WEEE as unsorted municipal waste. Do not dispose of products bearing this marking as unsorted municipal waste. Instead, return them to the manufacturer for disposal under the applicable conditions.





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