## Introduction

This publication details part numbers and installation procedures for the T-piece assembly (bayonet) and a cleaning adaptor kit for use with the ADS420 dissolved oxygen probe. The procedures must be carried out by a trained technician.

## Requirements

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTFE tape</td>
<td>as required</td>
<td></td>
</tr>
<tr>
<td>Adjustable spanner</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

## For more information

Publications for the associated sensors and transmitters are available for free download from: [www.abb.com/measurement](http://www.abb.com/measurement) or by scanning this code:

- [Data Sheet ADS420 dissolved oxygen probe](https://www.abb.com/measurement/DS/DS420/DS420-EN)
- [Operating Instruction ADS420 dissolved oxygen probe](https://www.abb.com/measurement/OI/OI420/420-EN)
1 Health & Safety

Document symbols

Symbols that appear in this document are explained below:

⚠️ WARNING

The signal word ‘WARNING’ indicates an imminent danger. Failure to observe this information may result in death or severe injury.

Potential safety hazards

⚠️ WARNING

Before removing a sensor from the process, reduce process pressure to zero and ensure the sensor is cool enough to handle.

⚠️ WARNING

These procedures must be carried out by suitable trained personnel and in accordance with any local regulations and practices.

2 Specifications

Material

T-piece body (NPT)

- 30 % GF polypropylene

Cleaning adaptor and blanking nut

- 316 stainless steel

Bayonet adaptor O-ring

- Viton

Operating process pressure

Maximum: 6 bar (87 psi)*

Operating process temperature range

0 to 50 °C (0 to 122 °F)

* Cleaning solution pressure to be 1 bar (14.5 psi) higher than process pressure
3 Identification

Table 2 T-piece assembly 3KXA494400L0012

<table>
<thead>
<tr>
<th>Description</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDO T-piece Bayonet Assembly: NPT Bayonet T-piece</td>
<td>3KXA494400L0012</td>
</tr>
<tr>
<td>T-piece, RDO T-Piece Bayonet Adaptor</td>
<td></td>
</tr>
<tr>
<td>This instruction: T-piece assembly and cleaning</td>
<td>IN/ANAINST/048-EN</td>
</tr>
<tr>
<td>adaptor kit</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 RDO cleaning adaptor kit 3KXA494400L0011

<table>
<thead>
<tr>
<th>Description</th>
<th>Part no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDO Cleaning adaptor kit: RDO T-piece cleaning</td>
<td>3KXA494400L0011</td>
</tr>
<tr>
<td>adaptor</td>
<td></td>
</tr>
<tr>
<td>This instruction: T-piece assembly and cleaning</td>
<td>IN/ANAINST/048-EN</td>
</tr>
<tr>
<td>adaptor kit</td>
<td></td>
</tr>
</tbody>
</table>

4 Dimensions

Clearance

Allow sufficient clearance for hand-mounting between the T-piece assembly install location and closest adjacent/ installation surface.

Dimensions in mm (in).

Figure 1 Recommended clearance between T-piece and installation surface

T-piece assemblies

Referring to Figure 2, the following T-piece mounting accessories are available:

- with a bayonet sensor fitting (B)
- with or without the optional jet wash system (blanking nut (C) shown in place of cleaning adaptor)
...4 Dimensions

Bayonet T-piece assembly

![Figure 2 Bayonet T-piece assembly – NPT](image)

Jet wash cleaning adaptor

![Figure 3 Jet wash cleaning adaptor](image)
5 Installation

**WARNING**

Before proceeding with any installation procedure, reduce process pressure to zero, isolate the process (input/output) supplies and ensure the local components are cool enough to handle.

### Bayonet T-piece assembly

Referring to Figure 4:

1. Connect the T-piece \(E\) to the process line using the 1 in NPT connectors at the threaded inlet/outlet.
2. Apply PTFE tape (or similar) around the probe thread \(B\).
3. Connect the sensor \(C\) into the bayonet adaptor \(D\) and tighten it.
4. Install the bayonet \(D\) into the T-piece \(E\) and twist it until the bayonet is locked in position.
5. Commission the process, ensuring the T-piece/sensor assembly does not leak.

### Cleaning adaptor

**WARNING**

Before performing this procedure, ensure the process line is empty to avoid spillage when removing blanking nut.

Referring to Figure 5:

1. Loosen the blanking nut \(A\) from the base the cleaning adaptor entry \(B\).
2. Put the EZClean cleaning adaptor \(C\) into the adaptor entry \(B\), and tighten it with a 14 mm A/F open-ended spanner.
3. Connect the push-fit connector and air supply using 6 mm OD semirigid tubing. Refer to OI/EZCLEAN-EN for instructions to configure the EZClean air blast system.
4. Commission the process, ensuring the T-piece/sensor assembly does not leak.

Figure 4 Bayonet T-piece assembly installation – NPT

Figure 5 Jet wash cleaning adaptor
Notes
Notes