

ABB MEASUREMENT & ANALYTICS | INSTRUCTION | IN/ANAINST/048-EN REV. A

ADS420 Dissolved oxygen probe



T-piece assembly and cleaning adaptor kit

Measurement made easy

ADS420 dissolved oxygen probe

T-piece assembly and cleaning adaptor kit

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 1 Items required

| Part number | Description | Quantity |
|-------------|--------------------|-------------|
| - | PTFE tape | as required |
| - | Adjustable spanner | 1 |

For more information

Publications for the associated sensors and transmitters are available for free download from: <u>www.abb.com/measurement</u> or by scanning this code:



Search for or click on:

| Data Sheet ADS420 dissolved oxygen probe | DS/ADS420-EN |
|--|--------------|
| Operating Instruction ADS420 dissolved oxygen probe | OI/ADS420-EN |

1 Health & Safety

Document symbols

Symbols that appear in this document are explained below:

A 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.

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)

3 Identification

Table 2 T-piece assembly 3KXA494400L0012

| Description | Part no. |
|---|-------------------|
| RDO T-piece Bayonet Assembly: NPT Bayonet T-piece, RDO T-Piece Bayonet Adaptor | 3KXA494400L0012 |
| This instruction: T-piece assembly and cleaning adaptor kit | IN/ANAINST/048-EN |

Table 3 RDO cleaning adaptor kit 3KXA494400L0011

| Description | Part no. |
|---|-------------------|
| RDO Cleaning adaptor kit: RDO T-piece cleaning adaptor | 3KXA494400L0011 |
| This instruction: T-piece assembly and cleaning adaptor kit | IN/ANAINST/048-EN |

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 ${\scriptstyle (B)}$
- with or without the optional jet wash system (blanking nut [©] shown in place of cleaning adaptor)

...4 Dimensions

Bayonet T-piece assembly



Figure 2 Bayonet T-piece assembly – NPT

Jet wash cleaning adaptor



Figure 3 Jet wash cleaning adaptor

5 Installation

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:

- 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

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.
- Connect the push-fit connector and air supply using 6 mm
 OD semirigid tubing.
 Refer to <u>OI/EZCLEAN-EN</u> 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

Notes

Notes

For your local ABB contact, visit: **www.abb.com/contacts**

For more product information, visit: www.abb.com/measurement

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