

#### ABB MEASUREMENT & ANALYTICS | INSTRUCTION | IN/ANAINST/049-EN REV. B

# Universal sensor accessory ¾ in Open channel and open tank mounting kit and assembly



Installation procedure

### Measurement made easy

Universal sensor accessory ¾ in

Open channel and open tank mounting kit

# Introduction

This publication details the installation procedure for the 3KXA494400L005 and 3KXA494400L006 open channel and open tank mounting kits used with any <sup>3</sup>/<sub>4</sub> in sensor. The procedure must be carried out by a trained technician.

#### Requirements

#### Table 1 Tools required

Part number	Description	Quantity
-	6 mm OD semirigid tubing	as required
-	Flat-bladed screwdriver	1
-	Mallet (rubber or hide)	1
-	Adjustable spanner	1

# For more information

Further information is available from: www.abb.com/analytical

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# 1 Health & Safety

#### **Document symbols**

Symbols that appear in this document are explained below:

## **WARNING**

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

## NOTICE

NOTICE is used to address practices not related to physical injury.

#### Safety precautions

Be sure to read, understand and follow the instructions contained within this manual before and during use of the equipment. Failure to do so could result in bodily harm or damage to the equipment.

# 2 Identification

The contents are shown in Table 2 and Table 3.

#### Table 2 Open channel and open tank mounting assembly

Description	Part number
Open channel and open tank mounting assembly, comprising: baseplate, clamp (including locking knobs), channel and 2 × channel bungs, fixings	3KXA494400L0005
This instruction: Open channel and open tank mounting kit installation procedure	IN/ANAINST/049

#### Table 3 Open channel and open tank mounting kit

Description	Part number
Open channel and open tank mounting kit, comprising: Chain, Sensor mounting	3KXA494400L0006
This instruction: Open channel and open tank mounting kit installation procedure	IN/ANAINST/049

# 3 Assembly installation

Referring to Figure 1 on page 4:

- Secure baseplate (A) to the ground/top of wall using fixings (B) or to a handrail using U-bolts (C) (neither fixing type supplied).
- 2 Fit channel clamp  $\bigcirc$  and locking knobs  $\bigcirc$  onto threaded studs in baseplate  $\bigcirc$ .

#### NOTICE

Do not overtighten.

- **3** If required, cut channel section (F) to the required length.
- 4 Fit end bungs (G) into channel section (F) (one each end) and tap into place using a rubber or hide mallet.
- Fit channel section (F) under clamp (D) and between the 2 guide pins (H).
- **6** Secure in position with locking knobs (E).
- 7 Secure one end of chain (1) onto threaded stud (J).
- 8 Feed free end of chain (1) through channel clamp (D).
- 9 Pass M3 screw (k) (supplied) through the end of sensor chain mounting adapter (L), feed it through the last link on opposite end of chain (1) and screw M3 screw (k) into tapped hole in opposite side of sensor chain mounting adapter (L). Lock into position using supplied lock nut (M).
- 10 Pass EZLink<sup>™</sup> sensor cable connector (N) and sensor cable (O) through the hole in sensor chain mounting adapter (L) and feed entire cable (O) and chain (1) length through.
- **11** Screw sensor body (P) onto sensor chain mounting adapter (L) using PTFE tape to seal.

#### NOTICE

Do not overtighten.

- 12 Feed the cable/chain under channel clamp arrangement (D) and pull through so that the chain and cable lengths are similar.
- **13** Fit channel clamp nut Q into channel section F (as shown). This prevents the channel section sliding out of position if locking knobs E are loosened.
- 14 When the required chain/cable length has been determined (distance between the end of channel section (F) and the sensor (P) when the sensor is fully immersed to the required depth), secure the chain onto second threaded stud (R) using locknut (supplied).

### NOTICE

Ideally, the measuring end of the sensor should be a minimum of 300 mm (12 in) below the free surface of the liquid being monitored.

- **15** Gently lower the sensor into the sample until the sensor is fully immersed to the required depth.
- **16** Connect the EZLink sensor cable connector to the AWT420 transmitter.

#### 🗥 WARNING

Ensure the cable/chain run is routed securely and safely and does not present a trip hazard.

# ...3 Assembly installation

4

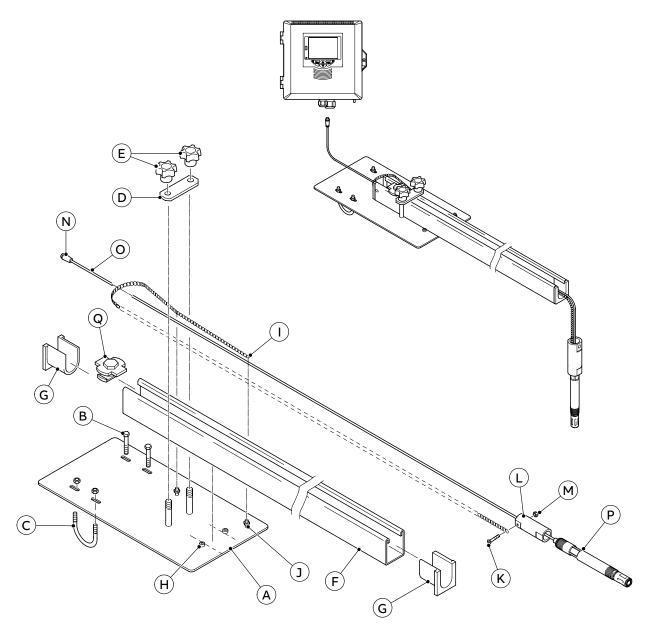


Figure 1 Open channel and open tank mounting assembly installation

Dimensions in mm (in)

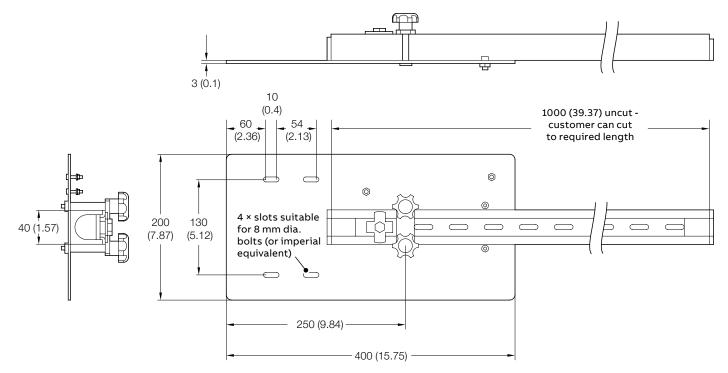


Figure 2 Open channel mounting kit – dimensions

# 4 Kit installation

Referring to Figure 3:

- Pass M3 screw (A) (supplied) through the end of sensor chain mounting adapter (B), feed it through the last link on opposite end of chain (C) and screw M3 screw (A) into tapped hole in opposite side of sensor chain mounting adapter (B). Lock into position using supplied lock nut (D).
- 2 Pass EZLink<sup>™</sup> sensor cable connector (E) and sensor cable (F) through the hole in sensor chain mounting adapter (B) and feed entire cable (F) and chain (C) length through.
- 3 Screw sensor body (G) onto sensor chain mounting adapter (B) using PTFE tape to seal.

#### NOTICE

Do not overtighten.

4 When the required chain/cable length has been determined, secure the chain onto second threaded stud using locknut (supplied).

#### NOTICE

Ideally, the measuring end of the sensor should be a minimum of 300 mm (12 in) below the free surface of the liquid being monitored.

- **5** Gently lower the sensor into the sample until the sensor is fully immersed to the required depth.
- **6** Connect the EZLink sensor cable connector to the AWT420 transmitter.

#### **WARNING**

Ensure the cable/chain run is routed securely and safely and does not present a trip hazard.

7 Secure the chain to the installation. Make sure that it does not come in contact with any wall or solid object.

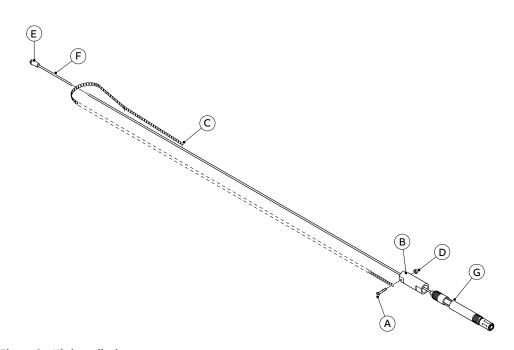


Figure 3 Kit installation

# 5 Cleaning

### Chain mount cleaning kit

Referring to Figure 4:

Connect the sensor-mounted cleaning adapter  $\bigcirc A$  to the sensor thread  $\bigcirc B$  until the air port aligns with the membrane.

**Note**. The bottom hole of the cleaning adapter is for ADS420. The top hole of the cleaning adapter is for <sup>3</sup>/<sub>4</sub> in pH probes.

8 Connect the push fit connector (C) and air supply using 6 mm OD semirigid tubing (customer-supplied). Refer to <u>OI/EZCLEAN</u> for instructions to configure the EZClean air blast system.

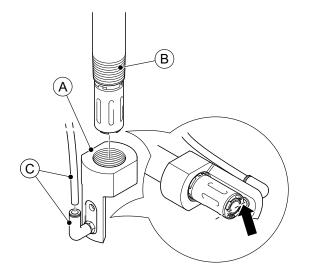


Figure 4 Cleaning kit

# Acknowledgements

EZLink is a trademark of ABB Limited.

#### Notes

#### Notes



#### **ABB Measurement & Analytics**

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