



AI-Driven Factory Reliability

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QUICK INSTALLATION GUIDE

AxonHD Vibration Sensor

1 INTRODUCTION

This guide provides the basic information required to put the AxonHD Vibration Sensor into operation and must be used by qualified professionals.

For more information such as:

- Product technical specifications;
- More detailed installation instructions;
- Product functionalities;
- Certifications.

Refer to the User's Manual via the QR code below:



2 PACKAGE CONTENTS

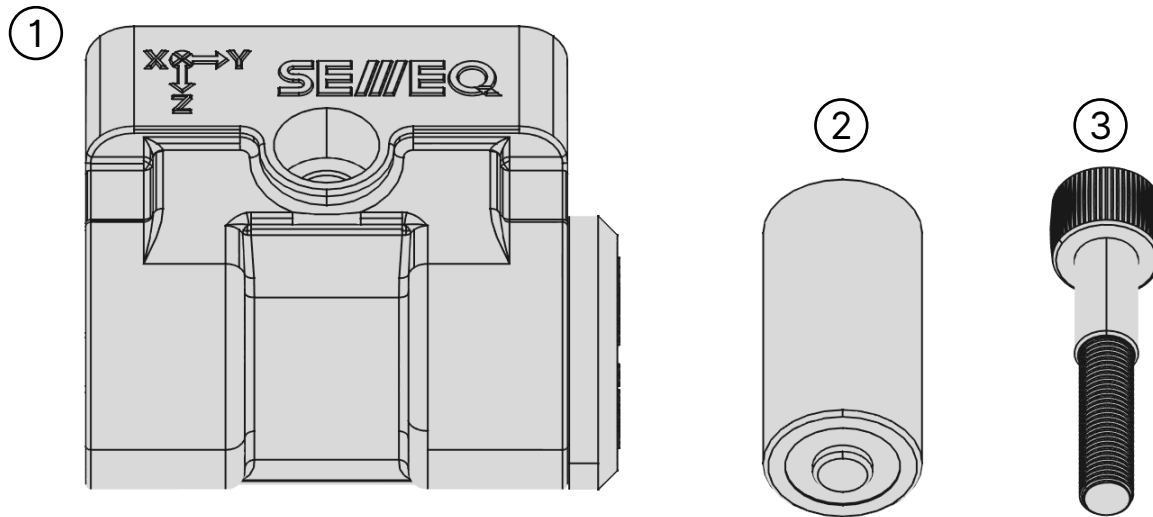


Figure 1 — Contents of the AxonHD Vibration Sensor package.

The AxonHD Vibration Sensor package must contain:

1. One AxonHD Vibration Sensor;
2. One CR123A battery;
3. One 1/4" x 1 1/2" Allen screw.

3 INSTALLATION TOOLS

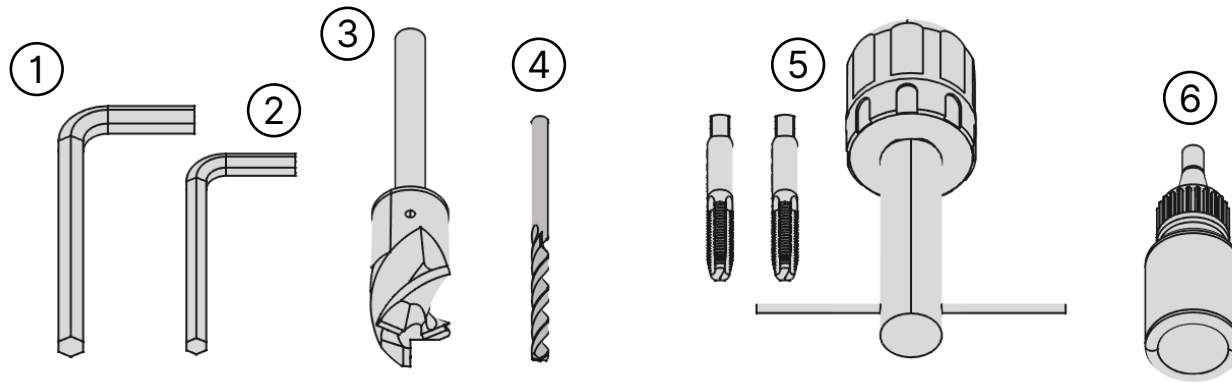


Figure 2 — Tools required for the installation described in this guide.

For proper execution of this guide, the user must have the following items:

1. 5/16" Allen wrench;
2. 3/16" Allen wrench;
3. Ø 1" end mill;
4. 5.4 mm drill bit;
5. UNF 1/4" x 28 hand tap set;
6. Threadlocker adhesive (TEK BOND 115 or equivalent recommended).

Note: Depending on the purchase configuration, these items may be supplied with the product.

4 MOUNTING AND PLACEMENT

4.1 SELECTION OF THE INSTALLATION POINT

Install the sensor as close as possible to the vibration source, preferably on the bearings.

Orient the sensor:

1. Vertically or horizontally;
2. Parallel or perpendicular to the ground;
3. Do not install in the axial direction.

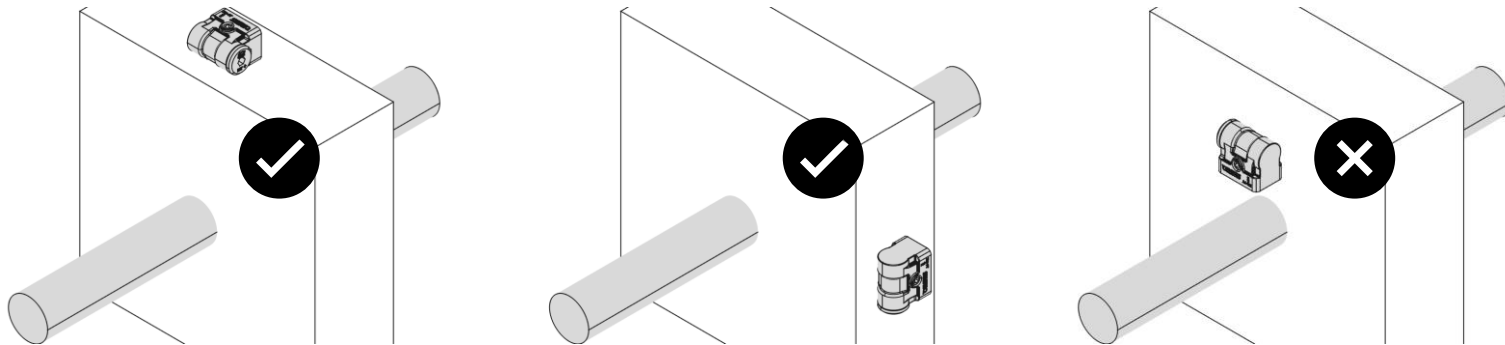


Figure 3 — Illustration showing vertical, horizontal, and axial installation orientations, respectively.

4.2 SURFACE PREPARATION

Prepare the mounting point to ensure proper sensor fastening and the quality of the measured signal:

1. Use a 5.4 mm drill bit together with a Ø 1" end mill to perform drilling, surface flattening, and cleaning;
2. Tap the hole using a 1/4"-28 UNF tap set.

Warning: Make sure the selected point has sufficient depth to fully accommodate the sensor screw, avoiding damage to internal equipment components such as bearings or oil reservoirs.

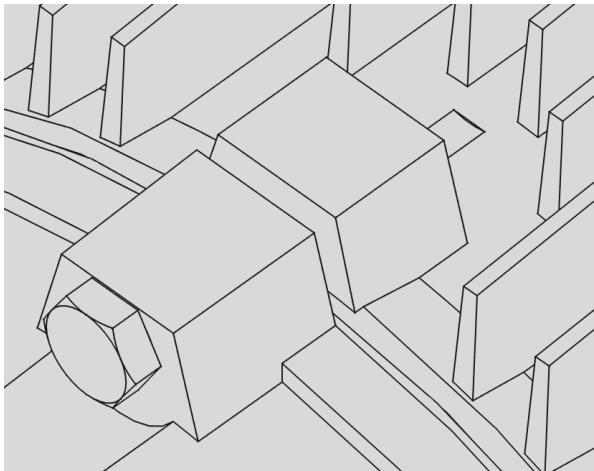


Figure 4 — Selected installation point before the preparation process.

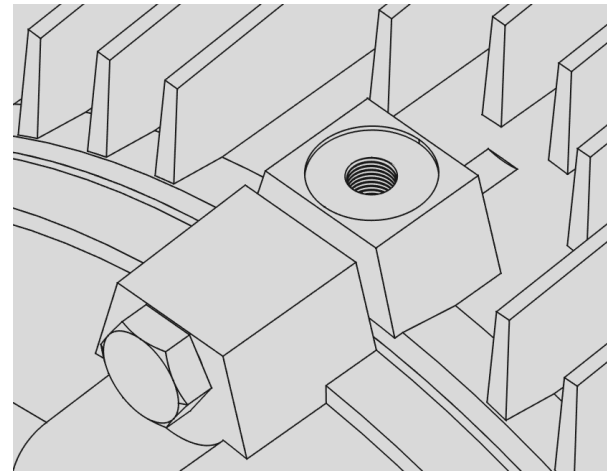


Figure 5 — Selected installation point after the preparation process.

4.3 POWERING ON

Before installation, power the sensor using the supplied battery:

1. Open the battery compartment cover, located on the side of the sensor, using a 5/16" Allen wrench;
2. Insert the battery into the compartment, ensuring correct polarity. The negative terminal must be in contact with the internal spring of the sensor;
3. Reinstall the compartment cover by turning it to its original position. Make sure the cover is fully seated, with the tab properly aligned with the corresponding step.

Warning: Properly closing the cover is essential to ensure the sensor's sealing and to maintain its protection rating.

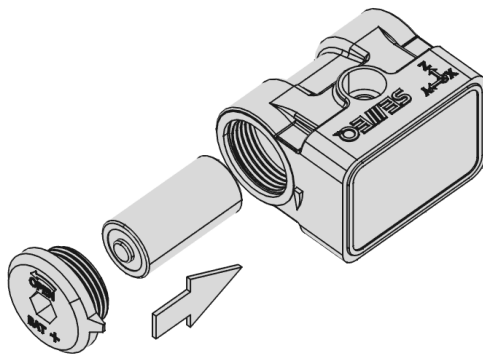


Figure 6 — Correct battery orientation.

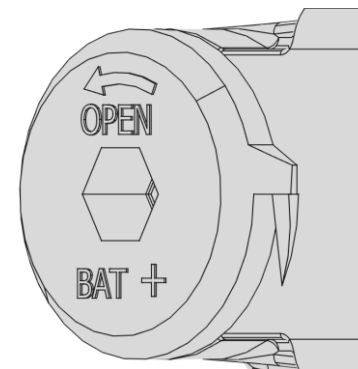


Figure 7 — Battery compartment cover properly closed. The tab must be rotated until it contacts the step.

4.4 FASTENING

To properly secure the sensor to the equipment:

1. Place the base of the sensor on the flattened surface, ensuring full contact and parallelism with the machine surface;
2. Align the sensor's X-axis — indicated on the product housing — with the rotational axis of the equipment;
3. Apply threadlocker adhesive to prevent loosening due to vibration;
4. Secure the sensor using the 1/4" x 1 1/2" Allen screw and a 3/16" Allen wrench.

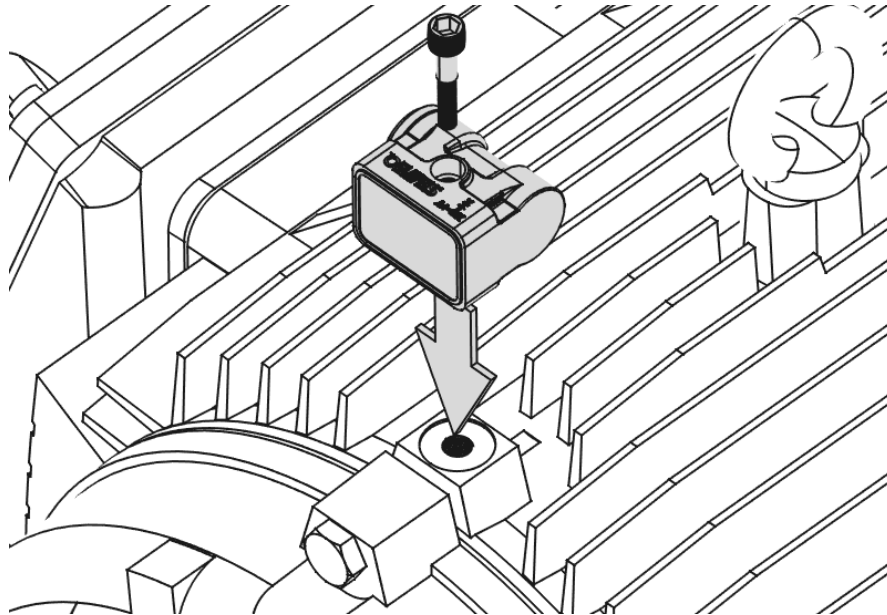
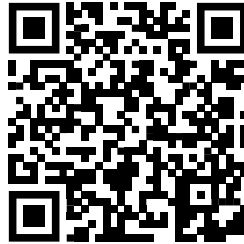


Figure 8 — Correct fastening of the sensor on the prepared surface using the supplied screw, with the sensor axis aligned parallel to the machine axis.

5 PRODUCT LINKING

5.1 APP INSTALLATION

1. On your smartphone, download the *SEMEQ SmartSync* app using the QR code below:



Apple App Store



Google Play Store

2. Log in with your *SEMEQ Portal Stream* credentials.
3. Select the *CORPORATION* and *PLANT* to which the sensor will be linked, then click *DOWNLOAD TREE*. If prompted, click *DOWNLOAD*. You will be redirected to the *IMPLANTATION* screen.

Note: The linking process can also be performed via *SEMEQ Portal Stream*. Refer to the *User's Manual* for more information.

5.2 MONITORING TREE CREATION

The monitoring tree organizes the plant into 4 levels: Area → Sector → Machine → Equipment.

It usually mirrors the existing structure of the industrial plant. Use it to organize assets and improve filtering, search, and analysis.

On the *IMPLANTATION* screen:

1. Create levels according to your structure by clicking *ADD XXX*, where *XXX* is the level to be created.
2. Repeat the process until the target equipment is mapped,

To ensure proper asset identification and data quality:

- Fill in all available information (e.g., TAGs, equipment type).
- Use clear and standardized names.
- Add as much data as possible.
- Take and upload photos when prompted.

5.3 SENSOR REGISTRATION

1. Navigate to the desired equipment.
2. Click *LINK A SENSOR TO THIS ASSET*.
3. Fill in the sensor data:
 - i. Enter the serial number;
 - ii. Select the model according to the AxonHD variant.
4. Photograph the installed sensor:
 - i. Ensure clear visibility and identification;
 - ii. Click *NEXT*.
5. Register the installation point:
 - i. Enter the point name;
 - ii. Prefer using the dropdown with indicative text.
 - iii. Use a consistent naming pattern to improve filtering and analysis.
 - iv. Use custom text only when necessary.

6. Select the sensor orientation on the equipment according to the figures shown.
7. Click *SAVE*.
8. Click *SAVE*.
9. Take a photo of the equipment showing all linked sensors and click *SAVE*.

Important: Fill in all available information accurately. This improves the quality of analysis and system results.

5.4 DATA UPLOAD

1. Return to the home screen by exiting the *IMPLANTATION* screen. Click the X icon in the top-left corner.
3. Open the *UPLOAD* screen from the side menu.
4. Click *SEND*.

After sending the data to the SEMEQ server, the sensor will be operational.

To validate:

1. Wait for the next sensor transmission or power cycle the device.
2. Check the transmission in *SEMEQ Portal Stream*.

For configuration of special features (e.g., external trigger), refer to the User's Manual.

Enjoy your monitoring system.

6 TECHNICAL SUPPORT

If you have any questions or require additional support, please contact SEMEQ through the channels below:

Technical Support

Address: Av. Ambrósio Fumagalli, 2040 - Limeira/SP -
Brasil – ZIP Code: 13.485-333
Phone: +55 19 3446-6862 ramal 877
Whatsapp: +55 19 99710 7611
E-mail: suporte@semeq.com

Sales — Brazil

Address : Av. Ambrósio Fumagalli, 2040 - Limeira/SP -
Brasil - CEP: 13.485-333
Phone : +55 19 3446-6862 ramal 865
Whastapp: +55 19 99741-3289
E-mail: comercial@semeq.com

Sales — USA

Address : 1820 Craig Rd. St Louis-MO 63146
Phone : +1 678 468-7853
Whastapp: +1 678 468-7853
E-mail: sales.systems@semeq.com

Sales — Philippines

Address : Unit 502 Coherco Financial Tower, 1780
Muntinlupa City - Philippines
Phone : +63 2 8429 9967
Whastapp: +63 91 7598-8896
E-mail: sales.ph@semeq.com

Or visit www.semeq.com.

