

SKF Axios



User Manual

Part Number **15V-090-00097-100**

Revision **A – June 2022**



Read this manual carefully before using the product. Failure to follow the instructions and safety precautions in this manual can result in serious injury, damage to the product or incorrect readings. Keep this manual in a safe location for future reference.

Copyright © 2022 by SKF Group
All rights reserved.

SKF Sverige AB
S-415 50 Gothenburg, Sweden
Telephone: +46 (0) 31 337 10 00

® SKF is a registered trademark of the SKF Group.

POWERED BY AWS is a trademark owned by Amazon Web Services, Inc

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication, but no liability can be accepted for any loss or damage whether direct, indirect, or consequential arising out of the use of the information contained herein. SKF reserves the right to alter any part of this publication without prior notice.

Product Registration

Please take a moment to [register](#) your product to receive exclusive benefits offered only to our registered customers, including technical support, tracking your proof of ownership and staying informed about upgrades and special offers. (Please visit our website for more details on these benefits.)

General Product Information

General information such as datasheets and catalogues are published on the [Condition Monitoring Systems](#) site on SKF.com. Supporting product information can also be downloaded from the [SKF Technical Support](#) self-service web portal.

Product Support Contact Information

Product Sales – For information on purchasing condition monitoring products, services and support on products out of warranty, please contact your [local SKF sales office](#) or [distributor](#).

Technical Support – SKF's Technical Support Group can be reached during normal business hours via phone. Always check the [self-service web portal](#) before contacting your nearest Technical Support Group (TSG) to see if the answer is already published. You may search the vast knowledge base within the self-service web portal for answers to commonly asked questions (FAQ), how-to articles, technical specs, installation and user manuals, best practices and more.

If further assistance is needed, click on **Open a support case** from within the self-service web portal.

Otherwise, [TSG](#) can be reached during normal local business hours by phone, and live chat (login required).

Customers in Europe, Middle East and Africa:

- Phone: +46 31 337 6500
- E-Mail: TSG-EMEA@skf.com
- Chat: www.skf.com/cm/tsg

Customers in the Americas, Asia and all other locations:

- Phone: 1-858-496-3627 or toll-free (USA) 1-800-523-7514
- E-Mail: TSG-Americas@skf.com
- Chat: www.skf.com/cm/tsg

8 Troubleshooting

If you have problems with one of your SKF Axios devices, use these suggestions to troubleshoot the problem. Then, if you're still having trouble, contact [SKF Technical Support](#).

8.1 Troubleshooting issues with SKF Axios Sensors

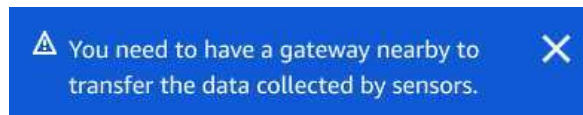
8.1.1 If you can't commission your sensors

Consider the following questions:

- **Are you holding your smartphone close to the sensor?**
When commissioning/pairing a sensor, your phone should touch the sensor. Don't move your phone while the sensor is being commissioned.
- **Does your smartphone have NFC activated?**
Ensure NFC is activated and broadcasting on your phone. Refer to your phone manufacturer's user guide for NFC settings.
- **Does the commissioning progress bar show up?**
If the commissioning progress bar (Android) or percentage complete (iPhone) doesn't appear, or resets to the beginning, the NFC communication between the sensor and your smartphone is weak or can't be established. Move your smartphone in a different position to try and establish the NFC connection. Smartphones often have different locations for transmitting NFC, depending on the brand. Check the hardware specifications of your smartphone and tap the sensor specifically with that part of your phone.

8.1.2 If your sensor is offline

Once a sensor has been paired to an asset, SKF Axios will make three attempts (over the course of 30 seconds) to take the initial measurement. If neither of those attempts is successful, then an alert like the one below will appear in the app.



If your sensor has stopped sending data, try the following:

- Try [Taking a one-time measurement](#). If you can do so, then the sensor is working. If you cannot, then the sensor is not working, and may have run

out of battery power. Replace it with a new sensor.

- Confirm that an available gateway is within range. SKF Axios sensors and gateways communicate using Bluetooth Low Energy (BLE), with a typical range of 20 to 30 meters (65 to 98 feet). In a completely open space, a sensor and a gateway may communicate with each other at greater distances.
- Check for obstacles. Concrete walls and metal objects attenuate the signals.
- Check for signal interference. The Bluetooth signal that sensors and gateways use to communicate occupies the 2.4GHz ISM (industrial, scientific and medical) band. Other devices that may use that band include wireless headsets and mice, wireless cameras, microwave ovens, and garage door openers.
- If the measurement action starts (you see a loading bar), but does not complete, try to retake the measurement. If the same thing happens again, try to [delete the sensor](#) and [recommission it](#).
- If the measurement action fails, or you are not able to commission the sensor, contact [SKF Technical Support](#).

8.1.3 If your sensor falls off

- Verify you are using the correct adhesive/epoxy
 - Is the sensor on a curved or flat surface?
 - Is the adhesive/epoxy suitable for the environment condition?
 - Check temperature limits, etc.
 - Are you holding the sensor in place for the minimum required time?

For more details on mounting your sensor, please see [Mounting a sensor to an asset](#).

8.2 Troubleshooting issues with SKF Axios gateways

8.2.1 If your mobile app can't communicate with the gateway

If you choose **Add gateway** in your mobile app, but the app can't find the gateway, try the following.

- **Make sure that the gateway is powered on.** Check the lights on the front of the gateway. If at least one of them is on, then the gateway has power. If the gateway has no power, check the following:

- Is the power cord firmly attached to the back of the gateway and the power outlet?
 - Is the power outlet functioning properly? Test this by trying a different outlet.
 - Is the gateway power cable working? To test this, try using the cable with another gateway.
 - Is the outlet where the cable plugs into the gateway clean, with no debris stuck inside? Be sure to check the outlet in the gateway and the connecting end of the cable.
- **Make sure that the gateway is in commissioning mode.**
See [Commissioning a Wi-Fi gateway](#) or [Commissioning an Ethernet gateway](#).
 - **Make sure your smartphone's Bluetooth is working.**
 - Try switching it off and on. If that doesn't help, restart your phone and check again.
 - Are you within your smartphone's Bluetooth range? Bluetooth range is typically less than 10 meters (32 feet).
 - Is there anything that might be interfering electronically with the Bluetooth signal? See [If your sensor is offline](#).

If none of these actions resolves the issue, try the following:

- Log out of the mobile app and restart it.
- [Reset your Wi-Fi gateway](#) or [reset your Ethernet gateway](#).

8.2.2 If your gateway goes offline

Your mobile or web app may tell you that your gateway is offline, or not connected to the network. In such cases, try the following:

- If you recently added the gateway to your configuration, wait for its status to update. A newly commissioned gateway may take up to 20 seconds to go online.
 - Sensors send data once an hour. If you do not want to wait, consider taking a [one-time measurement](#).
- Verify that you aren't trying to configure a Wi-Fi gateway with static IPs. The Wi-Fi gateway does not currently support static IPs. However, you can configure your network to always assign the same IP address to the same device.
- Verify that your firewall is not blocking the gateway. SKF Axios gateways use TCP port **8883**. You must allow connections to TCP port **8883** for amazonaws.com subdomains in order to provide firewall access to SKF Axios gateways.

- Confirm that the issue is not network congestion. There are two ways in which SKF Axios may notify you that a gateway is offline:
 - When looking at information about your gateways in the mobile or web app, you may notice that a gateway is listed as offline.
 - The timestamp for an offline gateway marks the last time SKF Axios received a signal from that gateway.

In this case, you may not have received a notification about the gateway's offline status. SKF Axios will not issue a notification every single time a gateway appears to be offline. A newly commissioned gateway is considered offline until it connects to the internet. A gateway on a congested network is considered offline if SKF Axios hasn't heard from that gateway in 15 minutes.

- Confirm that your gateway is connected to a power source. If it is, unplug the gateway and then plug it back in.
- If it's a Wi-Fi gateway, check the Wi-Fi connection. If the password for the Wi-Fi network has been changed since the gateway was added, it won't be able to connect. To reconnect, you'll have to delete the gateway and add it again, connecting to the Wi-Fi network using the new password. For more information about how to add a gateway, see [Commissioning a Wi-Fi gateway](#) or [Commissioning an Ethernet gateway](#).
- If it's an Ethernet gateway, check the network configuration.
- Delete the gateway using the SKF Axios mobile app, do a factory reset of the gateway, and then install the gateway again. For more information, see [Resetting the Wi-Fi gateway to factory settings](#) or [Resetting the Ethernet gateway to factory settings](#).

If none of these suggestions helps to get your SKF Axios device working again, contact [SKF Technical Support](#).