Before You Begin

Read these instructions before using your Sure Cross® radios. Do not discard these instructions.

For more detailed information about installing and using your Sure Cross products, download and read the Sure Cross Wireless I/O Network Manual (p/n 132607).

Always mount Q45VA so that the x-axis (reference label on side of sensor) is parallel to the main centerline of the asset. The front of the Q45VA can face either direction as long as x-axis is parallel. Verify the z-axis is perpendicular (reference label on side of sensor) with the radius of the of the asset main shaft.

There are four recommended ways to mount the Q45VA to the monitored asset:

- Install the Q45VA Sensor Node Directly to the Asset on p. 1
- Install the Q45VA Sensor Node Using Bracket Assembly BWA-BK-009 on p. 2
- Install the Q45VA Sensor Node Using Magnetic Mount Bracket BWA-BK-010 on p. 4
- Install the Q45 Using the Disc from BWA-BK-009 and Magnetic Mount Bracket BWA-BK-010 on p. 5

Install the Q45VA Sensor Node Directly to the Asset

Follow these instructions to mount the Q45VA Sensor Node directly to the asset you are monitoring. It is important to note that using this method to mount the sensor may not allow future replacement without damaging the sensor.

1. Clean the bottom surface of the Q45VA Sensor Node.
2. Apply Loctite 330 and 7387 Activator (or similar adhesive) to the base of the Q45 housing.
3. Place the Q45VA on the asset, ensuring the correct alignment as shown in Before You Begin on p. 1.
4. After the Q45VA Sensor Node is aligned, hold for several minutes until the epoxy hardens.
Install the Q45VA Sensor Node Using Bracket Assembly BWA-BK-009

Follow these instructions to mount the Q45VA Sensor Node to the monitored asset using the BWA-BK-009 bracket assembly.

The BWA-BK-009 bracket assembly includes:
- Screw retainers (2)
- Base plate (1)
- Phillip head screws (4)
- Set screw (1)
- Disc (1)

1. Flip the Q45VA upside down.
2. Insert the screw retainers into the two slots of the device and align the screw holes with the holes at the bottom of the Q45VA.
3. Position the base plate on the bottom of the Q45VA so that the four counterbores face up and the alignment mark faces the front of the Q45VA. Align the counterbores with the holes at the bottom of the device. See Figure 5 on p. 2.
4. Securely attach the base plate using the four Phillips head screws.
5. Apply Loctite to the center screw hole of the base plate. Secure the set screw into the center hole until it reaches resistance.
6. Fasten the disc on the set screw, with the threaded side facing away from the Q45VA. Tighten only with your fingers.
7. Using a felt marker, place a mark on the disc that aligns with the machined groove on the base plate. This marks the proper alignment of the Q45VA Sensor Node on your asset and aids in proper alignment if the Q45VA Sensor Node needs to be replaced in the future. See Figure 10 on p. 3.

8. Thoroughly clean the surface on the asset when the sensor is going to be mounted.
9. Apply Loctite 330 and 7387 Activator (or similar adhesive) per instructions to the exposed clean surface of the disc and place the sensor into position, ensuring the correct alignment is shown in Before You Begin on p. 1. See Figure 11 on p. 3.

10. Hold the Sensor Node in place for several minutes until the epoxy has hardened.
11. After the epoxy has hardened, remove the sensor from the disc.
12. Apply 262 Series Loctite to the set screw and screw the Sensor Node back onto the disc, ensuring that the groove in the base plate and the mark align.
Install the Q45VA Sensor Node Using Magnetic Mount Bracket BWA-BK-010

Follow these instructions to mount the Q45VA Sensor Node to the monitored asset using the BWA-BK-010 bracket. Mounting the Q45VA Sensor Node using this magnetic mount bracket is the easiest and most flexible mounting solution.

The BWA-BK-010 bracket assembly includes:
- Screw retainers (2)
- Magnetic base plate (1)
- Phillip head screws (4)

1. Turn the Q45VA Wireless Sensor Node upside down.
2. Insert the screw retainers into the two slots of the device and align the screw holes with the holes at the bottom of the Q45VA.
3. Position the base plate on the bottom of the Q45VA so that the four counterbore holes face up with v-groove of the magnet facing the front of the Q45VA. Align the counterbored holes with the holes at the bottom of the Q45VA.
4. Securely attach the base plate using the four Phillips head screws. Do not overtighten.
5. Verify the sensor is correctly alignment as shown in Before You Begin on p. 1.

Install the Q45 Using the Disc from BWA-BK-009 and Magnetic Mount Bracket BWA-BK-010

Mounting the Q45VA using these combined parts offers another mounting solution, especially if you are mounting to aluminum or any other non-magnetic surfaces.

Follow these instructions to mount the Q45VA to the monitored asset using the disc from the BWA-BK-009 bracket kit and the BWA-BK-010 bracket.

1. Follow the instructions to mount the Q45VA to the BSW-BK-010 as shown in Install the Q45VA Sensor Node Using Magnetic Mount Bracket BWA-BK-010 on p. 4.
2. Thoroughly clean the surface on the asset where the sensor is going to be mounted.
3. Apply Loctite 330 and 7387 Activator (or similar adhesive), according to its instructions, to the exposed clean grooved surface of the disc.
4. Place the disc on the asset and press until the disc is securely attached.
5. Mount the Q45VA with the BWA-BK-010 magnetic bracket already installed directly on the disc for a secure, magnetic, mobile mounting solution.
Figure 18. Mount the 010 bracket to the disc.