

TS-VFM Troubleshooting

It may not be necessary to replace the entire VFM if the EMS system reports VFM alarms. This bulletin gives tips to decide whether the whole VFM needs to be changed, or just the encoder.

The Franklin Fueling Systems TS-VFM Vapor Flow Meter is used to measure the volume of vapors returning to the Underground Storage Tank (UST). It has two main components:

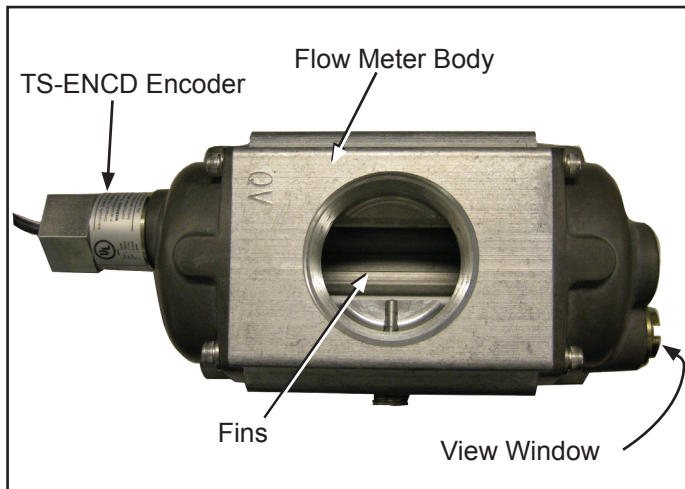


Figure 1: VFM Top View

1. The electronics section or encoder
2. The flow meter hardware (body)

If a "VFM missing alarm" occurs during normal operation, check the wiring connections from the TS-EMS or VRM console to the VFM. Measure the voltage at the corresponding probe module channel. The voltage should read approximately 18 VDC when the VFM is connected and 24 VDC when disconnected.

If an indication of "VFM Error" occurs, verify that the VFM is connected to a channel that is programmed for connection to VFM and NOT programmed as a magnetostrictive probe.

If all wiring and connections are confirmed and all programming is verified and a communication problem with the VFM still exists, it is possible the encoder has failed. The encoder is now available as a separate repair part and can be replaced without replacing the entire VFM.

Spare encoders can be ordered from a Franklin Fueling Systems distributor using part number TS-ENCD.

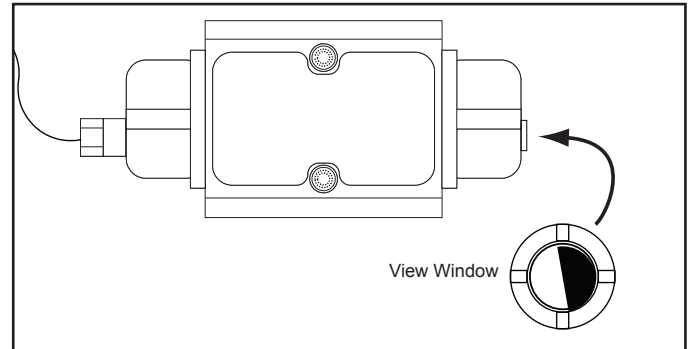


Figure 2: View-Port

If the V/L readings are 0 or vapor information is not being recorded by the VFM, it is possible that the VFM fins are not rotating. Use the view-port on the VFM to make a visual inspection to verify that the fins inside the VFM are spinning. If the fins are stationary, it is possible that they are blocked or jammed. Jammed fins could cause vapor collection warnings or alarms. In this case, it may be necessary to replace the entire VFM.

If you have questions about this equipment, contact Franklin Fueling Systems Technical Support at 1-800-984-6266