

TECHNICAL SERVICE BULLETIN

QSE Electromagnetic Meter Installation

SUBJECT

The QSE Electromagnetic Meters are not structural components. Misalignment, improper spacing, or over tightening can lead to structural failure of the flow meter body during installation or over time. When installing to metal pipe, it is recommended to use flexible expansion joint fittings on one or both ends to eliminate stresses that might be incurred from misaligned rigid metal piping.

MODELS AFFECTED

All QSE Electromagnetic Meters

TOOLS NEEDED

With threaded QSE meters, no tools are needed - Hand tighten only.

For flanged QSE meters, a torque wrench and a tape measure are needed.

ACTION

The Noryl® flow tube design of the QSE Electromagnetic Meter is not intended to be a structural component. Stresses introduced into the meter body during installation can lead to catastrophic failure of the meter body, which is not repairable and is not covered under the product warranty.

Misalignment of the adjoining piping can create an imbalance in the load applied between the meter and the piping. Bolts on flanged QSE meters are torqued to the specified value. Additional torque should never be applied to compensate for leaks. The optimum installation strategy is that the meter

is installed to one piping flange assembly that is “fixed,” and then the piping on the opposite end is allowed to “float” so that it can be perfectly aligned, mated flush, and torqued without any additional stress being placed on the meter body. The end piping can then be secured into place as assembled without forcing the assembly into structural support.

If alignment cannot be achieved, flexible expansion joint fittings (a.k.a. bellows) are recommended.

See QSE Owner’s Manual (Sections **INSTALLATION – CONNECTIONS**) for best installation practices, torque specifications, and all installation *Warnings and Cautions*.

EXAMPLES

See Figures 1 through 4 (on next page) for examples of misaligned installations. These illustrations show flange fittings, but also apply to threaded QSE meters.

EXAMPLES (continued)

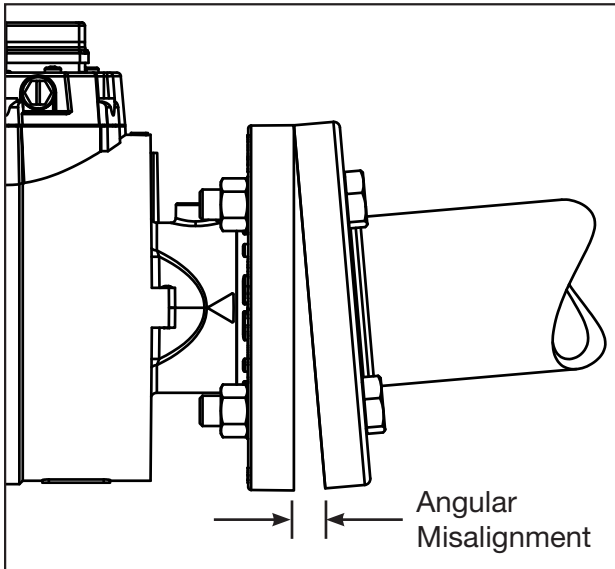


Figure 1

Misaligned (angular) Pipes/Flanges before tightening. This will cause **NON-WARRANTABLE DAMAGE**.

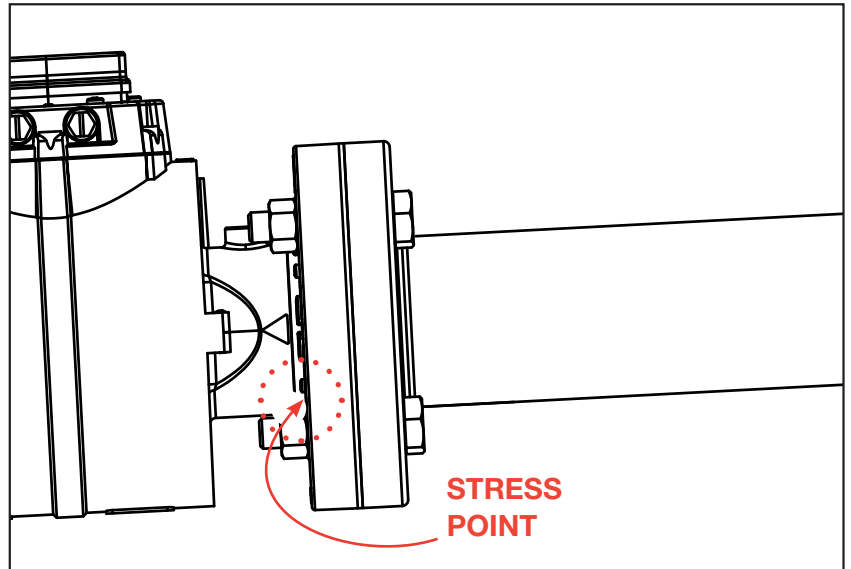


Figure 2

Misaligned (angular) Pipes/Flanges after tightening. Meter body is at high risk of structural failure (breaking) due to excess stress. This will cause **NON-WARRANTABLE DAMAGE**.

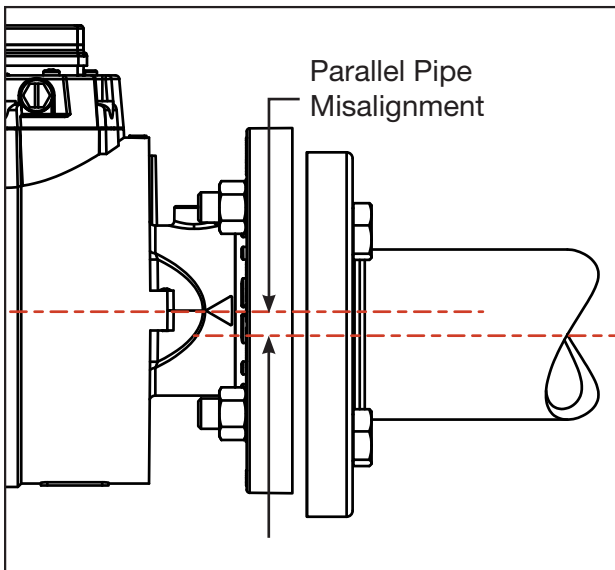


Figure 3

Misaligned (parallel) Pipes/Flanges before tightening. This will cause **NON-WARRANTABLE DAMAGE**.

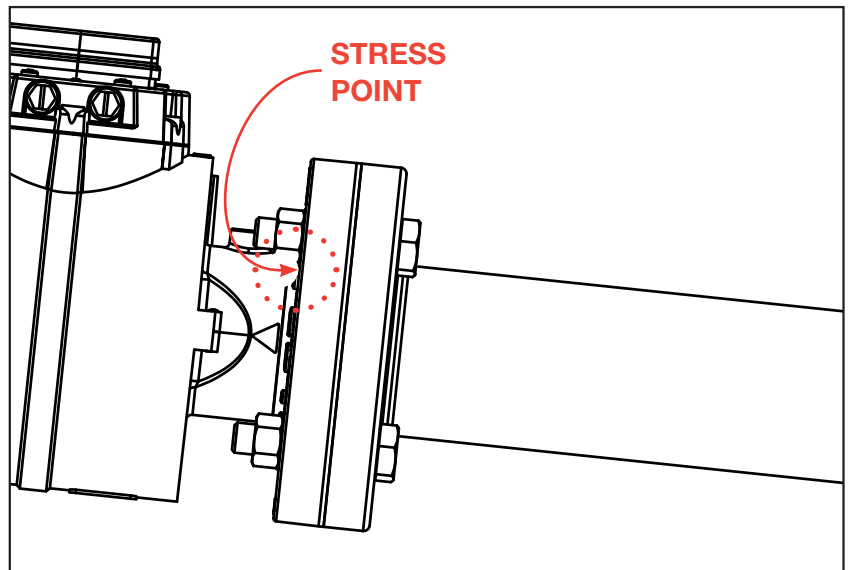


Figure 4

Misaligned (parallel) Pipes/Flanges after tightening. Meter body is at high risk of structural failure (breaking) due to excess stress. This will cause **NON-WARRANTABLE DAMAGE**.