

Diaphragm Type Gas Meters Installation Procedure Effective August 2000

Introduction

This procedure is suggested where there is no established company procedure or practice.

The installation should comply with all state and local building and safety regulations as well as all federal regulations including Section 192.353 of Title 49 of the Code of Federal Regulations. The two pertinent paragraphs of the Code are:

- Each meter and service regulator, whether inside or outside of a building, must be installed in a readily accessible location and be protected from corrosion and other damage. However, the upstream regulator in a series may be buried.
- Each meter installed within a building must be located in a ventilated place and not less than 3 feet from any source of ignition or any source of heat which might damage the meter.

The use of this meter outside of the temperature range from -40°F to 150°F is not recommended.

Customer inquires as to the selection and application of diaphragm type gas meters can be directed to Schlumberger RMS area service and sales representative or to its factory.



Safety Warning

This product, as of the date of its manufacture, is designed and tested to conform to all governmental or industry safety standards then existing as may apply to the manufacturer.

The purchaser and user of this product are warned that compliance with the manufacturer's instructions and procedures is required in order to avoid the hazards of leaking gas resulting from improper installation, start-up or use of this product, and further, that all area fire control, building codes or other safety regulations established under public laws which regulate or concern the application, installation, operation or general use of this product, should be complied with.

In order to ensure the safe and proper operation of this product, the manufacturer recommends that a qualified installer install this product.

Before Startup

- 1 Read the meter badge data regarding Maximum Allowable Operating Pressure and capacity flow rate to be sure the meter meets the installation requirements.
- 2 Sight across both swivel flanges or test with a suitable bar to determine that they are nominally in the same plane and will not cause excessive strain on the meter or piping when the connection nuts are tightened.

Startup

- 1 Blow out the service lines before the meter is installed so that no dirt, debris, or liquids of any kind can be carried into the meter when the gas is flowing in the line.
- 2 Place a new connection washer (gasket) on each swivel pilot.
- 3 Support the meter so that both hubs are against the connection washers and run the connection nuts down hand tight.
- 4 In alternating fashion, tighten the nuts to an appropriate torque for the connection size.
- 5 Before turning the gas on in a new installation, check the system downstream of the meter to be sure that all connections are made up and tight or that the downstream valve, if there is one, is closed.



Avoidance of an inadvertent and dangerous gas stream to atmosphere is well worth the checking time.
Avoid high differential pressure across the meter.

- 6 To avoid high differential pressure across the meter, open the upstream and downstream valves very slowly to prevent any pressure surges into or out of the meter.
- 7 Each valve should be cracked for a few seconds and then slowly over a period of ten seconds or more turned to the 1/4 open position and then to the full open position.
- 8 A good practice is to always pressurize the meter with the inlet valve so that the meter runs forward.

Locked off gas in a downstream section of a high pressure system could damage a meter with a Reverse Stop if the outlet valve from the meter is opened first.

- 9 After the meter has been pressurized, apply soap solution or other good leak detecting liquid to the connections and check for leaks.