



Gas Detection Solutions

For Life



Distributor Announcement

February 29, 2008

PURGE / TEST PROCEDURE USING MODEL GX-2003

When new natural gas mains are installed or existing mains removed from service, crews must purge the mains with an inert gas to eliminate the potential hazard of a combustible mixture. The most commonly used and preferred purge gas is nitrogen. After the purge is conducted an upstream valve is opened to allow natural gas to enter. A service valve on the line (usually a needle valve) with a stand pipe or diffuser attached is cracked to allow venting gas or nitrogen to escape.



A standard confined space instrument will not adequately test for safe conditions during this process, as the high gas level will overwhelm or damage an LEL sensor, and the sensor will not function in an oxygen-depleted (inert) atmosphere. The RKI Model GX-2003 has been specifically designed for this application, utilizing a robust thermal conductivity (TC) sensor that can measure high gas levels without damage, and does not require oxygen for accurate measurements.

For existing main:

1. Purge line with N₂. Use GX-2003 in % Vol only (purge) mode (also measures O₂) to verify that O₂ reading is 0.5 or less, and gas reading 2% or less, to verify purge.
2. Open line and perform service. This will introduce air into the main.
3. Purge again with N₂. Use GX-2003 in % Vol only mode (also measures O₂) to verify that O₂ reading is 0.5% or less.
4. Open upstream valve to charge line with gas. Use GX-2003 in % Vol only mode (also measures O₂) to verify that gas reading is 98% or more.

For new main:

1. Purge line with N₂. Use GX-2003 in % Vol only mode (also measures O₂) to verify that O₂ reading is 0.5% or less, to verify purge of air from line.
2. Open upstream valve to charge line with gas. Use GX-2003 in % Vol only mode (also measures O₂) to verify that gas reading is 98% or more.

All measurements taken at stand pipe or diffuser with service valve cracked.



Diffuser



GX-2003
Gas Monitor