

Datasheet

# Micro GC Fusion® - Hydrogen in Natural Gas

## Introduction

This datasheet highlights the 10 m Molsieve module and 12 m Q-Bond module used to test for hydrogen in pipeline natural gas. For samples with greater than 100 ppm of butanes, pentanes, and hexanes plus, an additional 10 m Rxi-1ms module is recommended.

## Starting Parameters

These parameters can be used as a starting point for creating a method and can be adjusted to ensure all compounds are fully separated. Exact retention times will vary from GC to GC, but the compound order remains the same.

Method Parameter	Module A – 10 m Molsieve, Backflush Injector (GCM-W02)	Module B - 12 m Q-Bond, Fixed Injector (GCM-RR2)	Module C (Optional) - 10 m Rxi-1ms, Fixed Injector (GCM-R03)
Inject time	15 ms	15 ms	35 ms
Backflush time	15 s	N/A	N/A
Injector temp	90°C	90°C	100°C
TCD temperature	70°C	70°C	70°C
Column pressure	35 psi, 99.999% argon	30 psi, 99.999% helium	23 psi, 99.999% helium
Column temp	100°C (100 s)	65°C (30 s) --> 210°C (1°C /s, hold 60 s)	70°C (40 s) --> 200°C (0.8°C/s, hold 20 s)
Sample pump time	15 s	15 s	15 s
Sample inlet temp	90°C	90°C	90°C

## Chromatograms



