



Guardian Membrane Liquid Separator

Features

- Integral Porting and Mounting Bracket
- 316L Stainless Steel Standard: NACE MR-01-75 Compliant
- Up to 70 LPM Flow (2.5 SCFM)
- 1500 PSIG Maximum Pressure Rating
- Liquid / Liquid Separation

Applications

- CNG Sampling Systems
- Protect Liquid Analyzers
- Separate Water from Liquid Hydrocarbon Streams

The GMSL205 Series is designed to remove water from liquid hydrocarbon streams. The membrane is constructed with a special support layer to increase pressure drop. Hydrocarbon liquids pass through the M3 microscopic passages while water and other high surface tension liquids are blocked.

Fine immiscible liquid droplets are removed from the stream while allowing the unaltered hydrocarbon liquid to pass.



| Stainless Steel Housing Model | GMSL205-1/4" | GMSL205-1/2" |
|--|--|--|
| Port Size (NPT) | 1/4" | 1/2" |
| Drain & Gauge Port (NPT) | 1/4" | 1/2" |
| Maximum Pressure (psig) | 1500 | 1500 |
| Internal Volume (cc) In Sample Chamber – Behind Membrane | 19.69 | 19.69 |
| Principle Dimensions: (inch) | | |
| Center of Port to Back | 0.60 | 0.60 |
| Body Diameter | 3.94 | 3.94 |
| Body Depth (with knob) | 3.03 | 3.03 |
| Space Required to Remove Cap | 1.30 | 1.30 |
| Maximum Temp. (300°F) Standard Viton O-Ring | GVGMS205 | GVGMS205 |
| PTFE Membrane Code | MT.61.M3 | MT.61.M3 |
| Drawing **For More Detail & Options** | <u>GMSL205-1/4"</u> | <u>GMSL205-1/2"</u> |

| Stream | 1.5 PSID | 15 PSID |
|---------------|-----------------|-----------------|
| Gasoline | 65 CC / Minute | 650 CC / Minute |
| Kerosene | 29 CC / Minute | 290 CC / Minute |
| Diesel | 22 CC / Minute | 220 CC / Minute |

Flow Rate In CC / Minute At 1.5 PSID And 15 PSID Across M3 Liquid / Liquid Membrane.
 Note The Differential Must Be Lower Than Stream Pressure
 For Best Results Do Not Exceed 15 PSIG Differential To Eliminate Water Breakthrough On Membrane.

| | MT.33.M3 | MT.61.M3 |
|--------------------------|-----------------|-----------------|
| Membrane Type | H2O / HC | H2O / HC |
| Material | PTFE | PTFE |
| Diameter (mm) | 33 | 61 |
| Thickness (µm) | 150 | 150 |
| Maximum Temperature (°F) | 300 | 300 |
| Membrane Micron Size | 0.8 | 0.8 |

