



The safest and most versatile probes available on the market!

Liquid carry over from the pipeline into the sample conditioning system should be prevented when sampling natural gas as it can directly impact the accuracy of the compositional analysis and also damage the analyzer. Industry standards state that equipment used to remove liquid from the sample must be operated at flowing temperature and pressure conditions. Genie® Probes™ provide a means to insert Genie® Membrane Technology™ directly into a pipeline for the purpose of separating unwanted liquid and particulate from the gas sample at flowing temperature and pressure conditions, in compliance with industry standards.

The GP2™ probe consists of a housing and a membrane tip probe. The housing is installed in a depressurized pipeline through a vertically mounted thread-o-let or flange, and contains a “foot valve” in its lower end. Inserting the probe into the housing opens the “foot valve”, allowing pipeline gas to flow freely through the membrane. Retracting the probe from the housing closes the foot valve, making it possible to perform probe maintenance without depressurizing the pipeline. This insertion/retraction method is considerably less expensive and complex than pneumatic or hydraulic methods.

An optional hex adapter is available to prevent liquids from being forced through the membrane, and should be selected when the probe is being used in spot and composite sampling applications.

Technical Specifications

Maximum Pressure Rating	3,500 psig (241.3 barg)	
Temperature Ranges <small>* Actual limit depends on sealing material chosen. Refer to Temperature Range Comparison Chart.</small>	Type 6 membranes: -35°F (-37°C) to 185°F (85°C) *Type 7 membrane: -35°F (-37°C) to 300°F (149°C)	
Maximum Recommended Flow Rate <small>Results in approx. 2 PSI pressure differential. For higher flow rates, contact the factory.</small>	Type 6 Best Rejection: 4.1 LPM (8.7 CFH) <i>(actual conditions)</i>	Type 7 Highest Temps: 7.6 LPM (16.1 CFH) <i>(actual conditions)</i>
Internal Volume	13.758 cc	
Outlet Port Size	GP2 with Hex: 1/4" FNPT	GPCSA: 3/4" FNPT
	GP2 without Hex: 1/8" FNPT	
Process Connection	3/4" or 1" male NPT	
Thread-o-let Requirement	The inner diameter of all openings in pipe wall and thread-o-let must not be less than 0.910".	
Mounting Orientation	Vertical (Preferred), or 45° maximum angle relative to vertical required	
Wetted Materials	Machined parts: 316/316L stainless steel / ISO 15156-3 compliant All other metal parts: stainless steel / ISO 15156-3 compliant Foot Valve sealing material: Perfluoroelastomer Probe sealing material: User defined Membrane: inert	

Product Brief

Applications

- Extract a representative sample from a multi-phase gas source
- Spot, composite or continuous gas sampling
- Protection against liquids
- Online and portable analyzers
- BTU, H₂S, Moisture, and others
- Gas sampling of mixtures containing less than 30% hydrogen

Benefits

- API 14.1, GPA 2166 and ISO 10715 probe compliance
- Helps to preserve sample integrity
- Protects analyzers
- Helps to improve safety of personnel and equipment
- Does not require hydraulic fluid
- Probe maintenance without line depressurization

Features

- Genie® Membrane Technology™
- Vibration resistant
- No dead volume
- Low internal volume
- J-slot safety
- Optional hex adapter with 1/4" female NPT outlet and integrated outlet shut-off valve



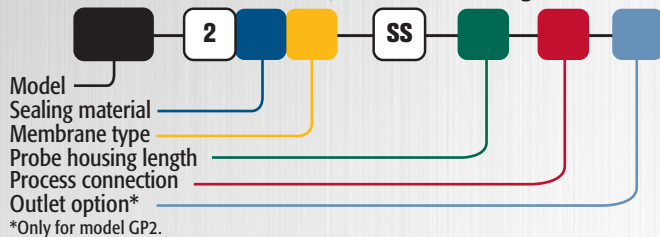
Corporation

Model Numbering & Additional Part Numbers

Your model number is determined by your specific needs. Choose options below.

Model	GP2 = Probe w/ 1/8" FNPT outlet	GPCSA = Probe w/ adapter for YZ, PGI, & Welker Sampler
Sealing material	0 = Neoprene	J = RGD resistant HNBR (other materials available upon request)
Membrane type	6 = Better Rejection; Rejects ALL types of liquids from vapor 7 = Highest Temps; Rejects ONLY high surface tension liquids	
Probe housing length	Blank = 4"	B = 7"
Process connection	Blank = 3/4" NPT x 0.9 dia.	1 = 1" NPT x 0.9 dia.
Outlet option	H= Hex adapter with 1/4" NPT Outlet Port	Blank= No option
Membrane replacement	Part # GP-CMA-5_6 (contains 2 complete assemblies - sold separately)	

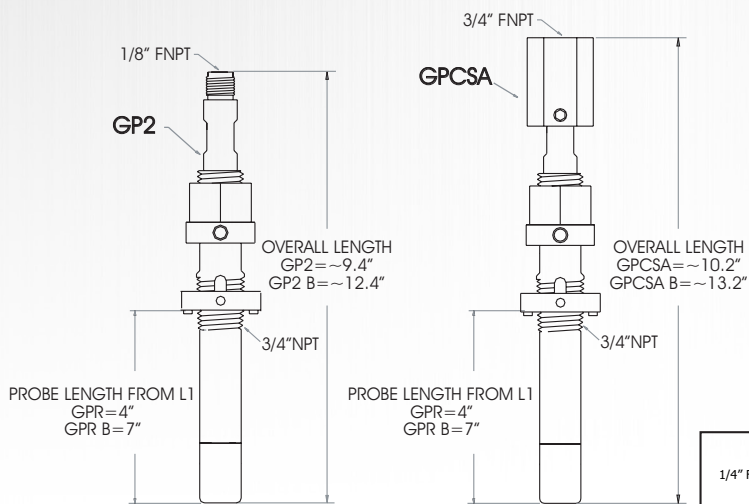
How to build the model number (probe and housing):



Dimensions

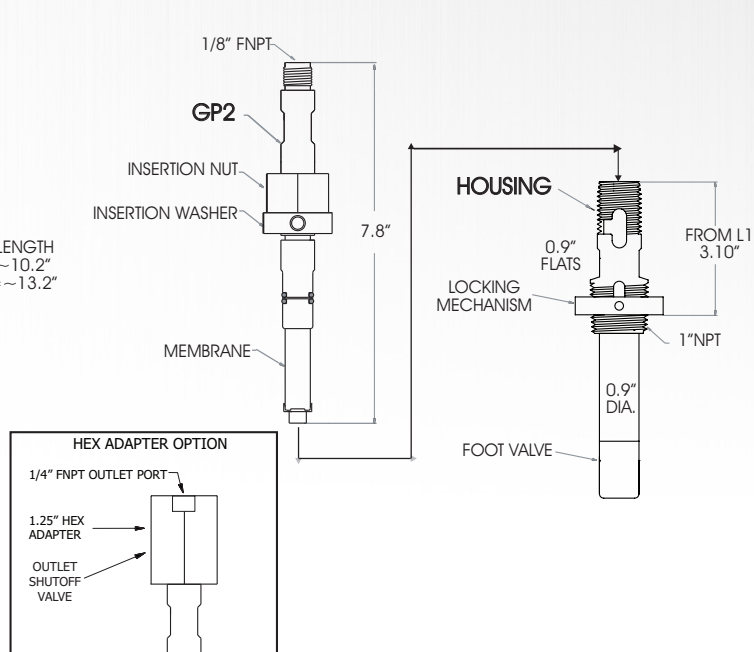
Inserted

3/4" NPT x 0.9" DIAMETER HOUSING SHOWN



Extracted

1" NPT x 0.9" DIAMETER HOUSING SHOWN



Analytically Correct™ sample systems, sample conditioning components, and revolutionary gas and liquid sampling technology.

Contact us for expert product application assistance.

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