



GENIE[®] 120

Supreme Membrane Separator

The original brand known for sample conditioning and analyzer protection!

The Supreme 100 Series™ remove 100% of entrained liquid and particulate in gas samples, which allow only gas sample to flow to analyzers. This action protects analyzers and other sampling components against liquid damage. The Genie[®] Supreme Series™ 100 models can accommodate a wide range of applications just as the original Genie[®] Series 100 Membrane Separators™, yet they offer an improved housing design for easy maintenance and the innovative Liquid Block Technology™ that prevents liquid from being forced across the membrane should sample line pressure conditions become upset. Genie[®] Supreme Series Membrane Separators™ are safe and easy to install and maintain, especially in heated, densely populated cabinets.

The Model 120 is ideal for low flow applications and can withstand high pressure in the housing. This high pressure model has a 1" cross sectional membrane area, the same as the original Genie[®] Model 101, and it is ideal for the removal of relatively small amounts of liquid present on a continuous basis; it is also perfect for protecting gas chromatographs, mass spectrometers, O₂ analyzers, moisture analyzers, and other analyzers with relatively small flow requirements. Please note that special fittings may be ordered, such as a Universal Assembly™. Additional information such as FAQs is available.



Product Brief

Applications

- Protection against liquids
 - On-line and portable analyzers
 - GC's, Mass Specs, O₂, H₂S, Moisture, and others
- Spot, composite, or continuous gas sampling in any process industry including natural gas, petrochemical, and oil refining
- Gas sample conditioning

Benefits

- Helps preserve sample integrity
- Superior analyzer protection
- Quick and easy to install and maintain
- Quick and easy membrane inspection
- Economical

Features

- Genie[®] Membrane Technology™
- Liquid Block™ option
- Low internal volume
- Straight through Bypass
- Built-in membrane retention
- Threaded housing cover
- All connection ports on the housing
- Back mounting
- Universal Assembly™ option



Technical Specifications

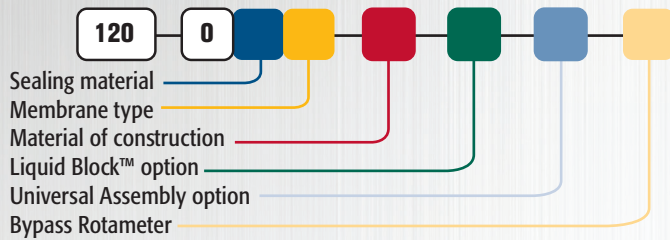
Maximum pressure rating *Due to rotameter limitations	Stainless Steel: 2,000 psig (137.9 barg) Kynar: 350 psig (24.1 barg) *120UA: 100 psig (6.9 barg)
Maximum Liquid Block® valve auto-reset pressure	35 psig (2.4 barg) Slowly open the supply pressure so that the minimum differential pressure required to shut off the Liquid Block™ is not met or exceeded.
Maximum temperature *Actual limit depends on sealing material chosen. Refer to Temperature Range Comparison Chart. **Due to rotameter limitations.	Type 6 membrane: 185°F (85°C) *Type 7 membrane in a Kynar Housing: 212°F (100°C) *Type 7 membrane: 300°F (149°C) **120UA: 130°F (54°C)
Maximum Recommended Flow Rate Results in approx. 2 PSI pressure differential. For higher flow rates, contact the factory.	Type 6 Best Rejection: 0.72 SLPM (1.5 SCFH) Type 7 Highest Temps: 2.5 SLPM (5.4 SCFH)
Bypass flow rates	Requirement varies with application
Port sizes	Inlet, Outlet, & Bypass: 1/8" female NPT
Internal volume	Total with Liquid Block: 2.4 cc Upstream of membrane: 1.3 cc Downstream of membrane: 1.1 cc Total without Liquid Block: 2.1 cc Upstream of membrane: 1.1 cc Downstream of membrane: 1.0 cc
Wetted materials	Machined parts: 316/316L stainless steel / ISO 15156-3 compliant All other metal parts: stainless steel / ISO 15156-3 compliant Sealing material: User defined Membrane: Inert

Model Numbering & Additional Part Numbers

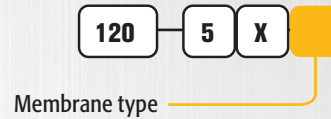
Your model number is determined by your specific needs. Choose options below.

Sealing material	0 = fluoroelastomer	1 = perfluoroelastomer	(others available upon request)
Membrane type	6 = Better Rejection; Rejects ALL types of liquids from vapor 7 = Highest Temps; Rejects ONLY high surface tension liquids		
Material of construction	SS = Stainless Steel	K = Kynar	
Liquid Block™ option	Blank = No Liquid Block™	LB = Liquid Block™	(not available in Kynar)
Universal Assembly option	Blank = No Universal Assembly	U = Universal Assembly	(not available in Kynar)
Bypass Rotameter* (only if option U is selected) <small>*Dwyer Rotameter with Integral Valve</small>	0 = Without Rotameter	1 = 10-100 cc/min*	2 = 100-1000 cc/min*
Mounting bracket	Part # 120-509-SS (sold separately)		
O-ring replacement	Part # 120-5_0 (sold separately)		

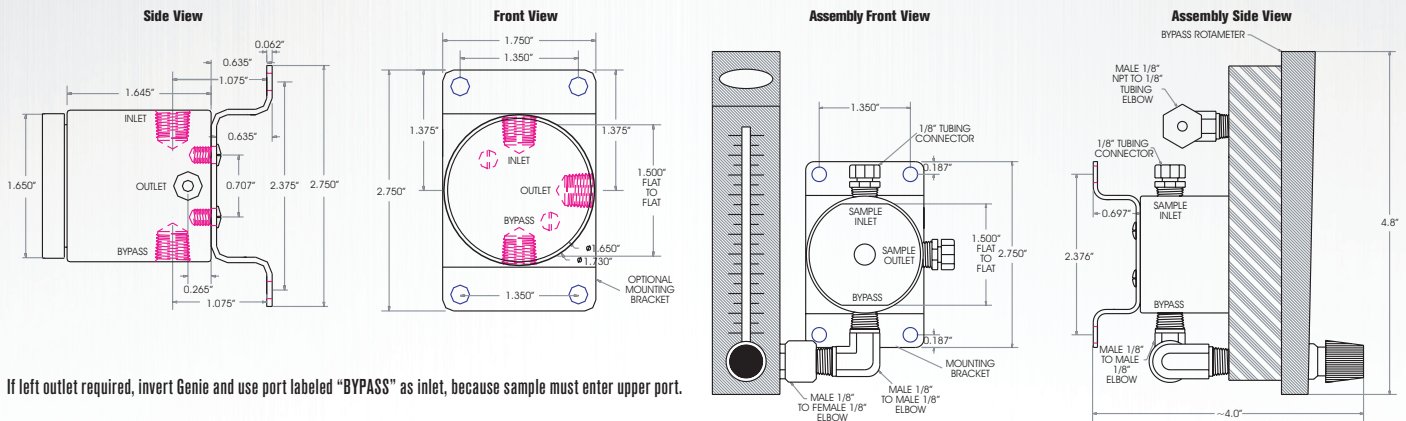
How to build the model number:



How to build the replacement membrane kit number: (Five membranes per kit. O-rings sold separately)



Dimensions



If left outlet required, invert Genie and use port labeled "BYPASS" as inlet, because sample must enter upper port.



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



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