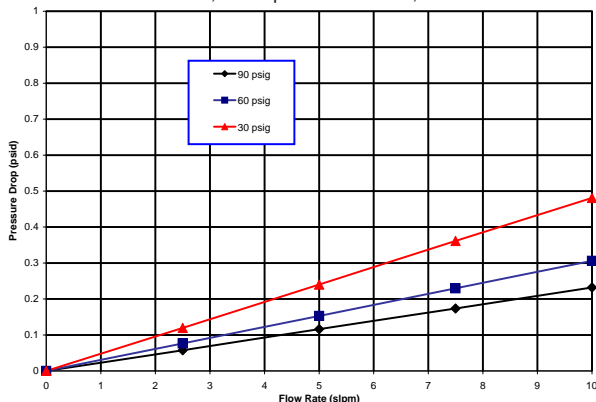


MicroTorr purifiers are the most complete and reliable solution for Point-of-Use (POU) gas purification. Combining model size with a selection of gas-specific purification materials, MicroTorr purifiers can be tailored to many different customer applications, while maintaining impurity removal to Part-Per-Billion (ppbV) levels or better. Optional valves and a 0.003 micron particle filter are available as well as custom subsystem configurations.

Competitive Advantages and Benefits:

- **Reliability.** Uncompromised process consistency and yield improvement.
- **Performance.** State-of-the-art purification technology, low pressure drop, and long lifetimes.
- **Regenerability.** Most MicroTorr media are factory regenerable, minimizing potentially hazardous waste.
- **Quality.** 316L stainless steel, Helium leak checked, pressure tested, and analytical testing to Part-per-Trillion (pptv) levels.
- **Support.** Lifetime estimation and regeneration service available through SAES Pure Gas Sales Network.

Pressure Drop vs. Flow Rate
MC1 & MC50, 0.003 µm Particle Filter, tested in N2



Ordering Information

MC1 - XXX XX

Model

Media

Options

MC1	202, 203, 206, 302, 403, 404, 702, 902, 903, 904, 905, 906	No options F 0.003µm Particle Filter V Inlet/Outlet Valves FV Filter and Valves
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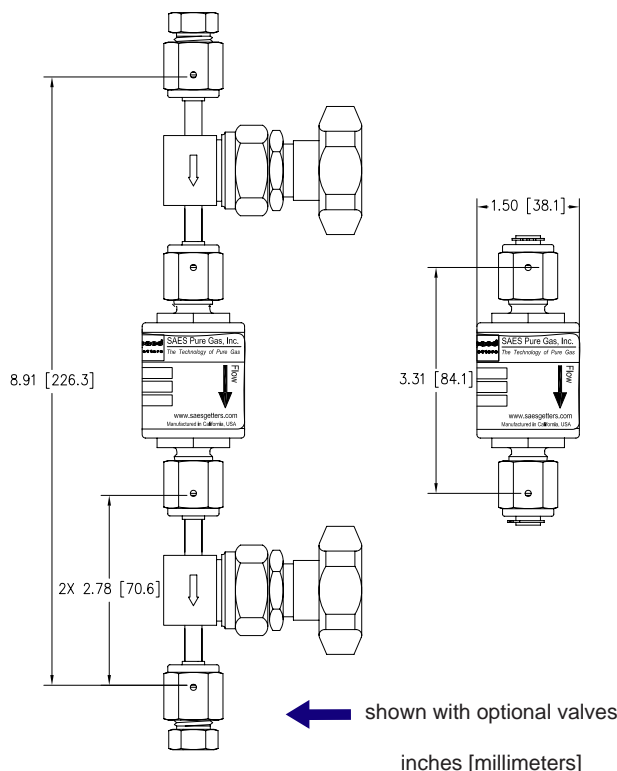
Example: MC1-902F

Model: MC1 Media: 902 Options: 0.003µm Particle Filter



MC1

- **Lifetime**
Consult factory for specific lifetimes
- **Maximum Flow: 5 slpm**
- **Nominal Flow: 0.5 slpm**
- **Maximum Pressure: 1,000 psig**





Mechanical Specifications

Model	MC1-*F	MC1-*FV
Maximum Flow	5 slpm	5 slpm
Nominal Flow	0.5 slpm	0.5 slpm
Valves	N/A	1/4" manual
Max Operating Pressure	1000 psig (69 barg) @ 40°C	
Max Temperature Rating	40°C (104°F) **	
Inlet	1/4" MVCR	1/4" FVCR
Outlet	1/4" MVCR	1/4" FVCR
Length (Face to Face)	3.31"±.03 [84.1mm±0.8]	8.91"±.08 [226.3mm±2.0]
Weight	0.7 lbs (0.3 kg)	2.6 lbs (1.2 kg)
Outside Diameter	1.50" [38.1mm]	
Electropolish	Yes	
Leak Rating	1x10 ⁻⁹ atm cc/sec of He	
Material	Body-316L Stainless Steel	
Filter (Outlet)	Integrated 0.003 micron, metal	

*The 3 digit number found in the model number equates to the "Media" row in the table below.

Purification and Removal Capabilities

Media	Gases Purified	Impurities Removed	Outlet Performance	Regenerable	Dangerous Goods (DG) Classification
202	Ar, CDA, H ₂ , He, Kr, N ₂ , Ne, O ₂ , Xe	H ₂ O	< 1 ppbV	YES	Non-DG
203	Ar, CDA, H ₂ , He, Kr, N ₂ , Ne, O ₂ , Xe	H ₂ O, CO ₂ ,	< 100 pptV	YES	Non-DG
		Acids, Bases, Organics, Refractory Compounds*	< 10 pptV		
206	CO	H ₂ O	< 1 ppbV	YES	Non-DG
302	B ₂ H ₆ , BCl ₃ , BF ₃ , CCl ₄ , Cl ₂ , CO ₂ , GeCl ₄ , GeH ₄ , H ₂ S, H ₂ Se, HBr, HCl, N ₂ O, NO, SiCl ₄ , SiF ₄ , SiH ₂ Cl ₂ , SiHCl ₃ , SO ₂	H ₂ O	< 1 ppbV	NO	Non-DG
403	Ar, CDA, H ₂ , He, Kr, N ₂ , Ne, Xe	Acids, Bases, Organics, Refractory Compounds*	< 1 ppbV	NO	Non-DG
404	CO ₂ , C ₂ H ₂ , Ar, CDA, H ₂ , He, Kr, N ₂ , Ne, Xe	NMHC	< 1 ppbV	YES	Non-DG
702	NH ₃ , C ₂ H ₆ N ₂ , C ₂ H ₈ N ₂	H ₂ O, O ₂ , CO ₂	< 1 ppbV	YES	DG - UN3089 Class 4.1
902	Ar, He, Kr, N ₂ , Ne, Xe	H ₂ O, O ₂ , CO, CO ₂ , H ₂ NMHC	< 1 ppbV	YES	DG - UN2881 Class 4.2
903	Ar, He, Kr, N ₂ , Ne, Xe	H ₂ O, O ₂ , CO, CO ₂ , H ₂	< 100 pptV	YES	DG - UN2881 Class 4.2
		Acids, Bases, Organics, Refractory Compounds*	< 10 pptV		
904	H ₂	H ₂ O, O ₂ , CO, CO ₂ , NMHC	< 1 ppbV	YES	DG - UN2881 Class 4.2
905	C ₂ F ₆ , C ₂ H ₆ , C ₂ F ₈ , C ₂ H ₈ , C ₂ F ₄ H ₂ , C ₄ F ₈ , C ₄ H ₁₀ , CCl ₄ , CF ₄ , CH ₄ , CHF ₃ , SF ₆	H ₂ O, O ₂ , CO, CO ₂ , H ₂ NMHC	< 1 ppbV	YES	DG - UN2881 Class 4.2
906	CDA, O ₂	H ₂ O, CO, CO ₂ , NMHC	< 1 ppbV	YES	Non-DG

*Organic compounds (C>5) measured as Toluene. Acid compounds (SO₂, NO_x, H₂S...) measured as SO₂. Base compounds (NH₃, amines...) measured as NH₃. Silicon/Refractory compounds (HMDSA, HMDSO, TMS) measured as HMDSO

Other Sizes Available

Model Number	MC1	MC50	MC190	MC200	MC400	MC450	MC500	MC1500	MC2525	MC2550	MC3000	MC4500	MC9000
Maximum Flow (slpm)	5	10	50	50	60	75	100	250	300	500	500	1000	1000
Average Flow (slpm)	0.5	1.5	5	5	9	10	12	40	80	80	80	200	300