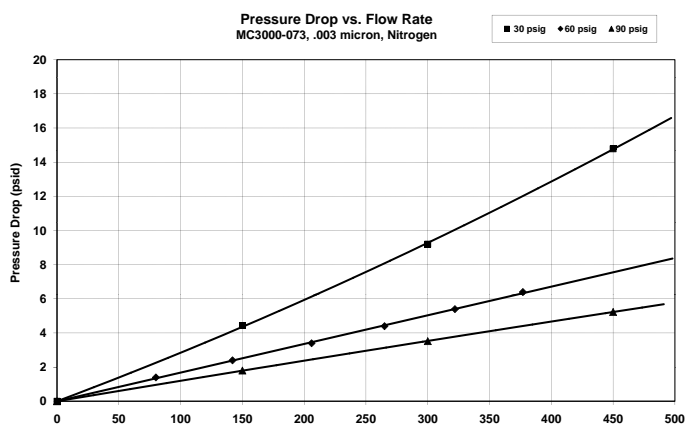


MicroTorr purifiers are the most complete and reliable solution for Point-of-Use (POU) gas purification. Combining model size with a selection of gas-specific purification materials, MicroTorr purifiers can be tailored to many different customer applications, while maintaining impurity removal to Part-Per-Billion (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.



Ordering Information

MC3000 - XXX XX

Model	Media	Options
MC3000	202, 203, 302, 403, 404, 502, 602, 702, 703, 902, 904, 905, 906	No options F 0.003µm Particle Filter V Inlet/Outlet Valves FV Filter and Valves

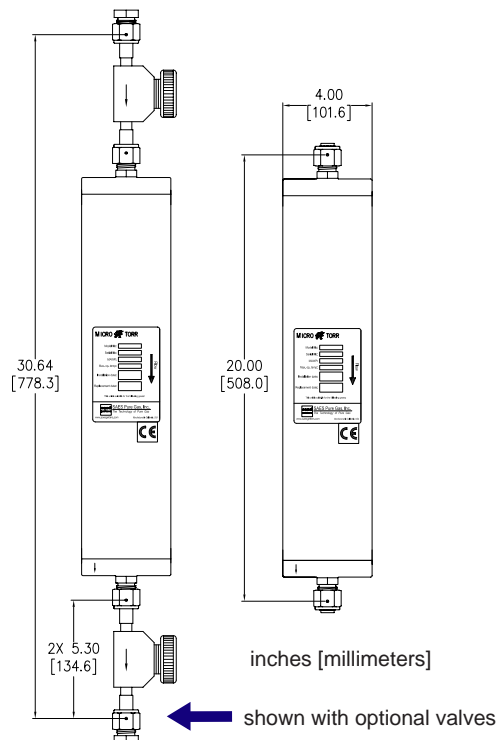
Example: MC3000-902F

Model: MC3000 Media: 902 Options: 0.003µm Particle Filter



MC3000

- **Lifetime**
Consult factory for specific lifetimes
 - **Maximum Flow: 500 slpm†**
 - **Nominal Flow: 80 slpm†**
 - **Maximum Pressure: 250 psig**
- † See reverse for Arsine & Phosphine flowrates



Install Vertically with flow downward in direction of arrow. Consult factory for other mounting options.



SAES Pure Gas, Inc.
The Technology of Pure Gas
 4175 Santa Fe Road, San Luis Obispo, CA 93401
 Tel: 1 (805) 541-9299 | Fax: 1 (805) 541-9399

MICRO TORR® Specifications
 MC3000

Mechanical Specifications

Model	MC3000-*	MC3000-*V	MC3000-*F	MC3000-*FV
Maximum Flow	500 slpm [†]	500 slpm [†]	500 slpm [†]	500 slpm [†]
Nominal Flow	80 slpm [†]	80 slpm [†]	80 slpm [†]	80 slpm [†]
Material	Body-316L Stainless Steel			
Filter (Outlet)	2.0 micron metal		Integrated 0.003 micron, metal	
Valves	N/A	1/2" manual	N/A	1/2" manual
Max Operating Pressure	250 psig (17.3 barg) @ 40°C		250 psig (17.3 barg) @ 40°C	
Max Temperature Rating	40°C (104°F)	40°C (104°F)	40°C (104°F)	40°C (104°F)
Inlet	1/2" MVCR	1/2" FVCR	1/2" MVCR	1/2" FVCR
Outlet	1/2" MVCR	1/2" FVCR	1/2" MVCR	1/2" FVCR
Length (Face to Face)	20.00"±.06 [508.0mm±1.5]	30.64"±.11 [778.3mm±2.8]	20.00"±.06 [508.0mm±1.5]	30.64"±.11 [778.3mm±2.8]
Outside Diameter	4.00" [101.6mm]	4.00" [101.6mm]	4.00" [101.6mm]	4.00" [101.6mm]
Electropolish	Yes	Yes	Yes	Yes
Leak Rating	1x10 ⁻⁹ atm cc/sec of He	1x10 ⁻⁹ atm cc/sec of He	1x10 ⁻⁹ atm cc/sec of He	1x10 ⁻⁹ atm cc/sec of He
Weight	14.0 lbs (6.4 kg)	18.7 lbs (8.5 kg)	14.0 lbs (6.4 kg)	18.7 lbs (8.5 kg)

*The 3 digit number found in the model number equates to the "Media" row in the table below.
[†]Flowrates with 502 media: Arsine/Phosphine max= 125.0 slpm, nominal= 80.0 slpm.

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, CO ₂ , N ₂ O, CO, D ₂	H ₂ O	< 1 ppbV	YES	Non-DG
203	Ar, CDA, H ₂ , He, Kr, N ₂ , Ne, O ₂ , Xe, N ₂ O, CO, D ₂	H ₂ O, CO ₂	< 100 pptV	YES	Non-DG
		Acids, Organics, Refractory Compounds* Bases*	< 1 pptV < 5 pptV		
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, NF ₃ , NO, SiCl ₄ , SiF ₄ , SiH ₂ Cl ₂ , SiHCl ₃ , SO ₂ , CHClF ₂	H ₂ O	< 1 ppbV	NO	Non-DG
		Metals Removal	< 1 ppbW		
403	Ar, CDA, H ₂ , He, Kr, N ₂ , Ne, O ₂ , Xe, CO ₂	Acids, Organics, Refractory Compounds*	< 1 pptV	NO	Non-DG
		Bases*	< 5 pptV		
404	Ar, CDA, H ₂ , He, Kr, N ₂ , Ne, O ₂ , Xe, CO ₂ , C ₂ H ₂ , C ₃ H ₆ , C ₂ H ₄ , NH ₃	Organics*	< 1 ppbV	YES	Non-DG
502	PH ₃ , AsH ₃	H ₂ O, O ₂	< 1 ppbV	NO	Non-DG
602	CO	H ₂ O, O ₂ , CO ₂ , Acids, Bases, Organics, Refractories*	< 1 ppbV	NO	DG - UN3089 Class 4.1
702	NH ₃ , C ₂ H ₆ N, C ₂ H ₆ N ₂ , C ₂ H ₄ , C ₃ H ₈ , CH ₃ SiH ₃ , GeH ₄ , H ₂ -SiH ₄ mix, SF ₆	H ₂ O, O ₂ , CO ₂	< 1 ppbV	YES	DG - UN3089 Class 4.1
703	NH ₃	H ₂ O, O ₂ , CO ₂ , NMHCs	< 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	< 100 pptV	YES	DG - UN2881 Class 4.2
		Acids, Organics, Refractory compounds*	< 1 pptV		
		Bases*	< 5 pptV		
904	H ₂ , H ₂ -Inerts Mix, D ₂	H ₂ O, O ₂ , CO, CO ₂	< 100 pptV	YES	DG - UN2881 Class 4.2
		Acids, Organics, Refractory compounds*	< 1 pptV		
		Bases*	< 5 pptV		
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 NMHCs	< 1 ppbV	YES	DG - UN2881 Class 4.2
906	CDA, O ₂ , N ₂ O	H ₂ O, CO, CO ₂ , NMHCs	< 1 ppbV	YES	Non-DG

*Organic compounds (C>5) measured as Toluene. Acid compounds (SO₂, NOx, 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	MC700	MC1500	MC2525	MC2550	MC3000	MC4500	MC9000
Maximum Flow (slpm)	5	10	50	50	60	75	100	120	250	300	500	500	1000	1000
Average Flow (slpm)	0.5	1.5	5	5	9	10	12	25	40	80	80	80	200	300

Piping Options Available

Dual Purifier Manifold, 3 Valve Bypass, 5 Valve Bypass

S110-480_L, DCN 4647

www.saespuregas.com

Specifications subject to change