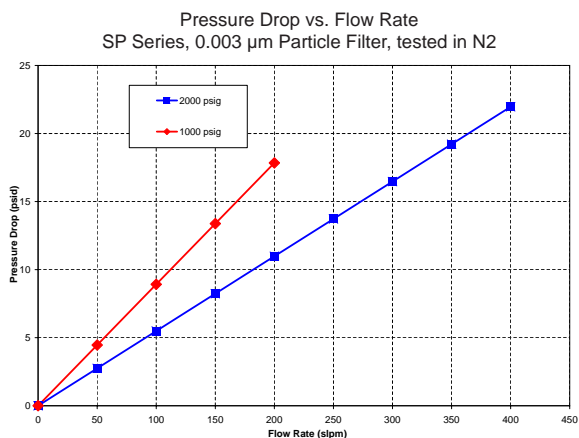


MicroTorr purifiers are the most complete and reliable solution for Point-of-Use (POU) gas purification. Combining model size with a selection of gas-specific purification materials, MicroTorr purifiers can be tailored to many different customer applications, while maintaining impurity removal to Part-Per-Billion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

SPXXX - XXX XX

Model

Media

Options

SP70	202, 203, 206, 404,	F	0.003µm Particle Filter
SP300	902, 903, 904, 905	FV	Filter and Valves
SP600			

Example: SP600-902F

Model: SP600 Media: 902 Options: 0.003µm Particle Filter



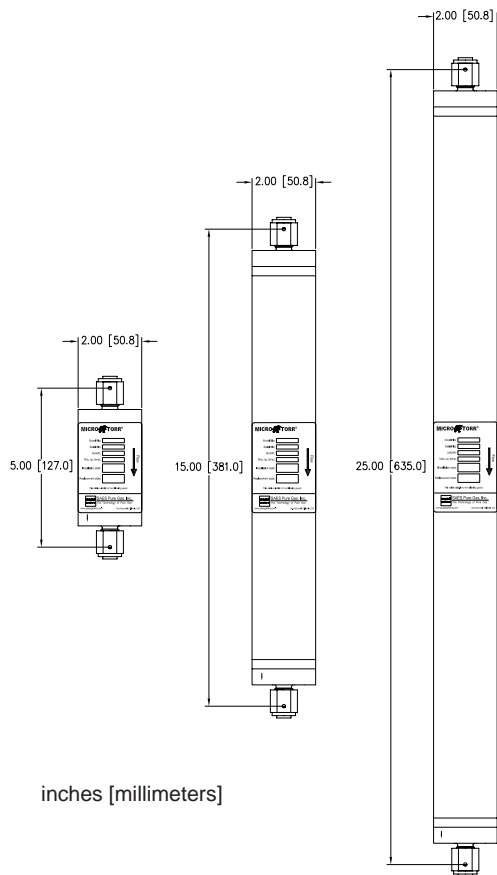
SP70, SP300, SP600

• **Lifetime**

Consult factory for specific lifetimes

- | | SP70 | SP300 | SP600 |
|---------------------|-------------|--------------|--------------|
| • Maximum Flow*: | 75 slpm | 200slpm | 400slpm |
| • Nominal Flow: | 1.5 slpm | 10 slpm | 15 slpm |
| • Maximum Pressure: | 3000 psig | | |

*Maximum flowrate at pressure over 2000 psig.
See reverse for more information.





Mechanical Specifications

Model	SP70-*F	SP300-*F	SP600-*F
Maximum Flow (psig ≤ 2,000)	20 slpm	100 slpm	200 slpm
Maximum Flow (psig > 2,000)	40 slpm	200 slpm	400 slpm
Nominal Flow	1.5 slpm	10 slpm	15 slpm
Material	Body-316L Stainless Steel		
Filter (Outlet)	Integrated - .003 micron metal		
Valves	N/A	N/A	N/A
Max Operating Pressure	3000 psig (206.8 barg) @ 40°C	3000 psig (206.8 barg) @ 40°C	3000 psig (206.8 barg) @ 40°C
Max Temp Rating	40° C (104° F)	40° C (104° F)	40° C (104° F)
Inlet	1/4" MVCR	1/4" MVCR	1/4" MVCR
Outlet	1/4" MVCR	1/4" MVCR	1/4" MVCR
Length (Face to Face)	5.00"±.05 [127.0mm±1.3]	15.00"±.05 [381.0mm±1.3]	25.00"±.05 [635.0mm±1.3]
Outside Dia (Purifier)	2.00" [50.8mm]	2.00" [50.8mm]	2.00" [50.8mm]
Electropolish	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
Weight	< 2.3 lbs (< 1.0 kg)	6.6 lbs (3.0 kg)	11.0 lbs (5.0 kg)

*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 , Acids, Bases, Organics, Refractory Compounds*	< 100 pptV < 10 pptV	YES	Non-DG
206	CO	H ₂ O	< 1 ppbV	YES	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
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 , Acids, Bases, Organics, Refractory Compounds*	< 100 pptV < 10 pptV	YES	DG - UN2881 Class 4.2
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 ₃ F ₈ , C ₃ 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

*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