

Mixtures: Fluorine Excimer Lasers

DESCRIPTION

Excimer lasers are multi-gas lasers. Output wavelength is a function of the rare gas/halogen combination. Excimer is the name of the rare gas / halide molecule. There are four wavelengths (spectral lines) that can be generated from fluorine mixtures.

Description	Rare Gas	Halogen Gas	Buffer Gas
ArF (193 nm)	Argon	F ₂ / He or F ₂ / Ne	He and/or Ne
F ₂ (157 nm)	None	F ₂ / He or F ₂ / Ne	He and/or Ne
KrF (248 nm)	Krypton	F ₂ / He or F ₂ / Ne	He and/or Ne
XeF (351 nm)	Xenon	F ₂ / He or F ₂ / Ne	He and/or Ne

Product Description	Cylinder Size*	Volume Liters	Pressure Psig/Bar
Fluorine Premixes			
ArF (193 nm)	1	7500	2400/167
KrF (248 nm)	2	6000	2150/149
XeF (351 nm)	3	2000	1925/134
Balance Gas	4	1000	2000/139
either Helium and/or Neon	5	300	1625/113
Fluorine Standard Gas Mixtures			
1% Fluorine Neon Balance	2	6000	2150/149
	2	5000	1760/122
	3	2000	1925/134
≤ 5 % Fluorine Helium Balance	1	1700	500/35
	2	1501	
	3	566	
	4	283	
≤ 5 % Fluorine Neon Balance	1	1700	500/35
	2	1501	
	3	566	
	4	283	

* Additional cylinder sizes are available upon request.

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CYLINDER VALVES AVAILABLE	
USA	CGA 670 CGA 679
Europe	DIN 8 DIN 14
Japan	JIS – Halogen mixtures
Other Countries	For customers in countries that require cylinder valve connections other than CGA, DIN, or JIS please contact Spectra Gases so we can accommodate your request.

OTHER CYLINDER SIZES AVAILABLE	
Europe	E-10 E-20 E-50
	These are European approved cylinders with 10, 20, and 50 liters of internal water volume respectively.