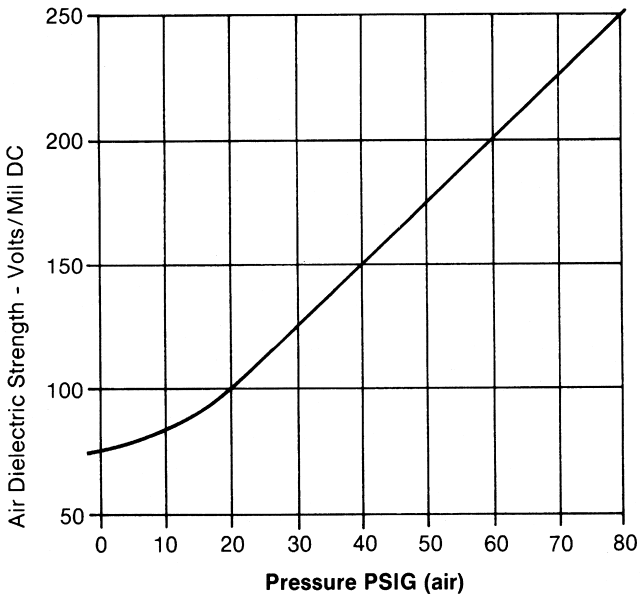
PRESSURE CONVERSIONS

		Pa	torr	atm	mbar	psi	kg/cm²	μ
Pascal	(newtons/m²)	1	7.5 (10^{-3})	9.87 (10^{-6})	10^{-2}	1.45 (10^{-4})	1.02 (10^{-5})	7.5
torr	(mm of mercury)	133	1	1.32 (10^{-3})	1.333	1.93 (10^{-2})	1.36 (10^{-3})	10^{3}
atm	(atmosphere)	1.013 (10^{5})	760	1	1013	14.7	1.033	7.6 (10^{5})
mbar	(millibar)	100	0.75	9.87 (10^{-4})	1	1.45 (10^{-2})	1.02 (10^{-3})	750.1
psi	(lb/in²)	6.89 (10^{3})	51.71	6.8 (10^{-2})	68.9	1	0.070	5.17 (10^{4})
kg/cm²		9.81 (10^{4})	735.6	0.968	981	14.2	1	7.35 (10^{5})
μ	(micron)	0.1333	10^{-3}	1.32 (10^{-6})	1.333(10^{-3})	1.93 (10^{-5})	1.359 (10^{-6})	1

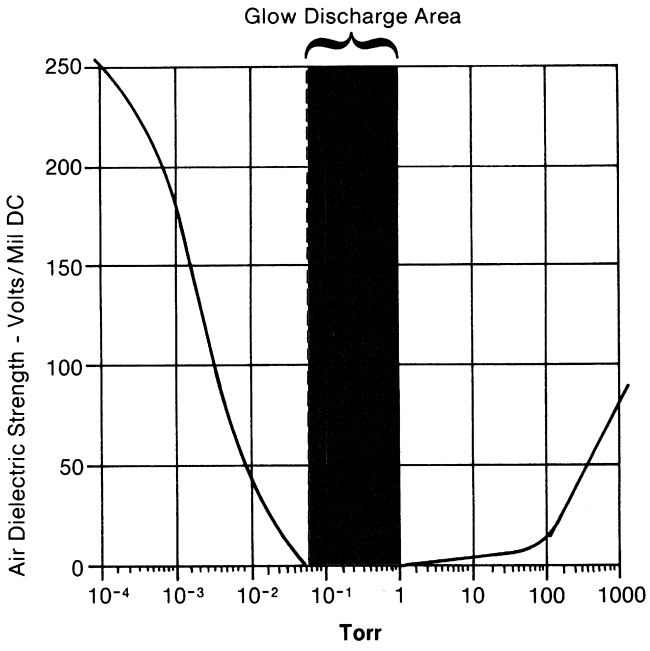
	kPa	lb/sq in	lb/sq ft	atm	kg/cm²	mm Hg at 32°F	in Hg at 32°F	ft water at 39.2°F
1 kPa	1	0.145	20.92	9.9 (10^{-3})	0.0102	7.519	0.295	0.335
1 lb/sq in	6.895	1	144	...	0.0703	51.713	2.036	2.307
1 lb/sq ft	0.048	6.94 (10^{-3})	1	...	...	0.3591	0.014	0.016
1 atmosphere	101.3	14.696	2116.2	1	1.0333	760	29.921	33.9
1 kg/cm²	98.07	14.223	2048.1	0.9678	1	735.56	28.958	32.81
1 torr	0.133	0.0193	2.785	...	...	1	0.039	0.045
1 in mercury	3.387	0.4912	70.73	0.0334	0.0345	25.4	1	1.133
1 ft water	2.984	0.4335	62.42	...	0.0305	22.418	0.883	1

DIELECTRIC STRENGTH VS. PRESSURE

Pressure PSIG Chart#1



Pressure Torr Chart#2



The voltage ratings are dependent upon system pressure. Catalog ratings are given at a system pressure of 10^{-4} torr or 80 PSIG air. For rating at system pressures between these points, the charts shown may be used to determine the approximate derating required. Voltage rating at pressures less than 10^{-4} torr or greater than 80 PSIG air is the same as at 10^{-4} torr or 80 PSIG since the voltage is limited by the external ambient air at normal atmospheric conditions.