

Follow-up to: Corona and its Effects

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The original article can be found at

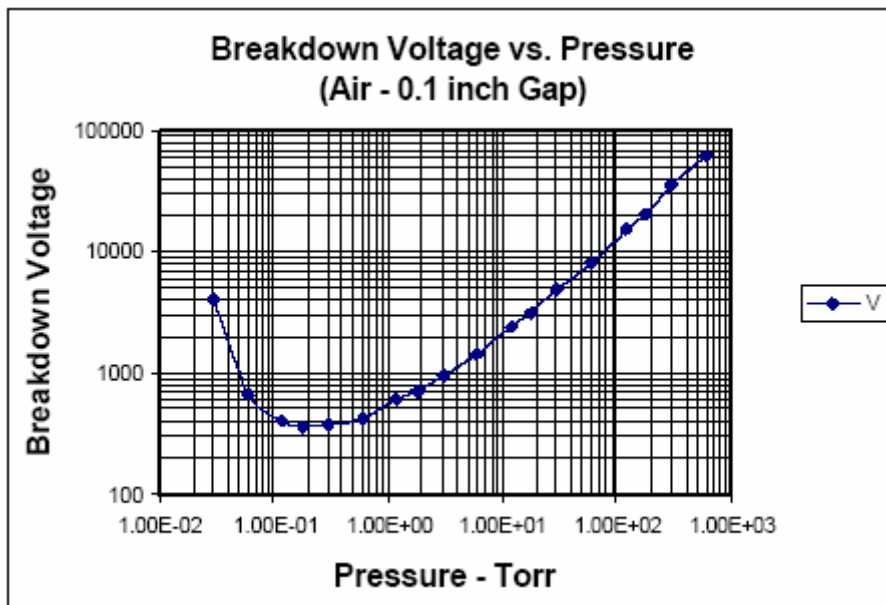
<http://www.highvoltageconnection.com/articles/corona.pdf>

One reader noted that cameras filtered for UV-C are available for daylight detection of corona. One major use is for power line companies. One such camera, from the Electric Power Research Institute (EPRI) “works by blocking out sunlight and then capturing images of both the corona discharge and the object under investigation. A bi-spectral imaging process then superimposes the corona image on the object image to pinpoint the location of the discharge.” This avoids the time and expense of nighttime viewing and thus makes corona investigation a normal daytime activity. These cameras have been used by the New York Power Authority and the Bonneville Power Administration. EPRI has produced two guides to help users use these cameras for inspection. (Best as we can tell, each guide costs \$10,000.)



Another reader mentioned that Paschen’s curve (which deserves its own discussion) would be useful when considering or calculating the corona onset voltage. This well-known curve shows the relationship between breakdown voltage and atmospheric pressure, i.e., altitude. For reference, the curve is located below.

Paschen Curve



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