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Subject: 1:1 throat area

Posted by [DMoore](#) on Tue, 20 Feb 2007 21:20:19 GMT

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I think one consideration is the size of the diaphragm being employed in a 1:1 throat area. It is conceivable that a relatively small cone in a low Fc horn with a proper mouth size would provide enough pathway length to achieve a considerable amount of acoustic resistance applied to the cone. As the cone diameter and the corresponding throat size increase, the horn pathway would shorten for a given Fc and mouth size, and the acoustic resistance would be reduced as a matter of course. The resulting response due to increased impedance/reactance caused by a too-short-horn would be more "peaky" in such a case. The typical design response is to raise the Fc of the horn in question. The matter seems to be related to overall pathway length, mouth size, and Fc, and the diaphragm/throat size is subjective in relation to that consideration. DM

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