Subject: Re: Omega18 vs Selenium18 sub
Posted by Wayne Parham on Sun, 21 Sep 2003 18:16:37 GMT
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There is a reliable correlation of the response characteristics of a speaker and it's electro-mechanical parameters. You can expect the formula to guide you in this regard. The best thing to do is model a system based on speaker parameters to see what you can expect. So I'd always recommend that you model the system when considering a part or comparing it with another. These days, modeling is not very difficult at all.Another thing to consider is that the response curve can be modeled pretty well, but there are important properties that don't show up in this sort of model. Cone flex introduces behaviors that aren't considered in T/S models, but they are usually not an issue below a few hundred Hertz. Distortion performance is an important property that isn't described in the T/S electro-mechanical model either. It's largely the result of electro-magnetic properties, so you would need to model the motor system to determine LF distortion. My point is that there are some properties that determine quality to a great degree, but that aren't described in the electro-mechanical terms usually used to calculate cabinet dimensions. T/S models are pretty accurate at predicting bass response though.