

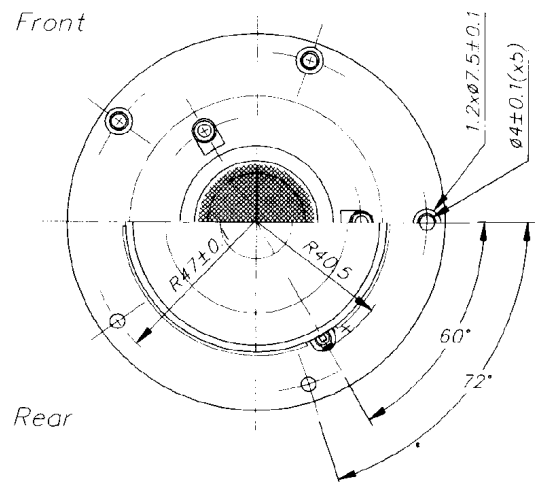
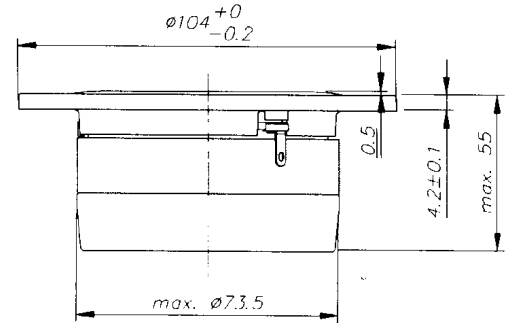
## 1" TWEETER

### SPECIAL FEATURES:

- COATED DIAPHRAGM OF FABRIC WITH SILK
- LINEAR RESPONSE FRONT PLATE
- LOW DAMPING FERROFLUID WITH HIGH STABILITY
- BRAIDS AND REAR CHAMBER
- REPLACEABLE VOICE COIL

|                                    |                     |
|------------------------------------|---------------------|
| NOMINAL IMPEDANCE                  | 6 $\Omega$          |
| VOICE COIL RESISTANCE              | 4.6 $\Omega$        |
| NOMINAL POWER (IEC 268-5)          | 100 W <sup>1)</sup> |
| SHORT TERM MAX. POWER (IEC 268-5)  | 450 W <sup>2)</sup> |
| LONG TERM MAX. POWER (IEC 268-5)   | 225 W <sup>3)</sup> |
| OPERATING POWER                    | 3.9 W               |
| SENSITIVITY (1W, 1m) / (2.83V, 1m) | 90/91 dB            |
| FREQUENCY RANGE                    | 1.5-30 kHz          |
| FREE AIR RESONANCE                 | 650 Hz              |
| VOICE COIL DIAMETER                | 26 mm               |
| VOICE COIL HEIGHT                  | 1.6 mm              |
| AIR GAP HEIGHT                     | 2 mm                |
| EFFECTIVE DIAPHRAGM AREA           | 7.1 cm <sup>2</sup> |
| MOVING MASS (incl. air)            | 0.3 g               |
| MAGNET WEIGHT (8.5 oz)             | 240 g               |
| FORCE FACTOR, BxI                  | 2.7 Txm             |
| Vas                                | 0.014 ltr           |
| Qms                                | 0.95                |
| Qes                                | 0.77                |
| Qts                                | 0.43                |

## D27TG-45-06



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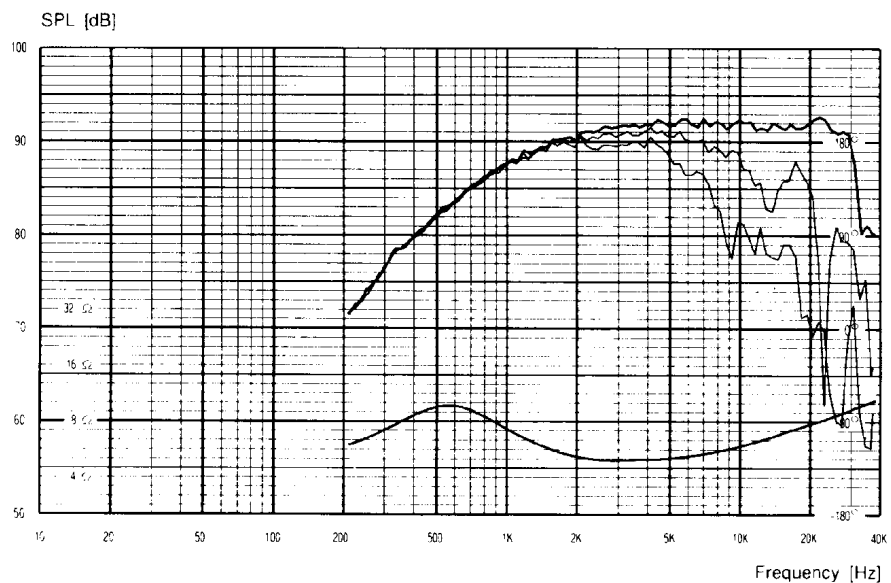
DISPERSION PLOT  
0, 30 and 60 deg.

Input: 2.83 V  
Mic.: 1 m

Mounted in  
infinite baffle.

11.08.93 FBJ

Anechoic room 6x7x8 meters.  
Half space free-field above 100 Hz.  
Brüel & Kjær 2012 Audio Analyzer.



# D27TG-45-06

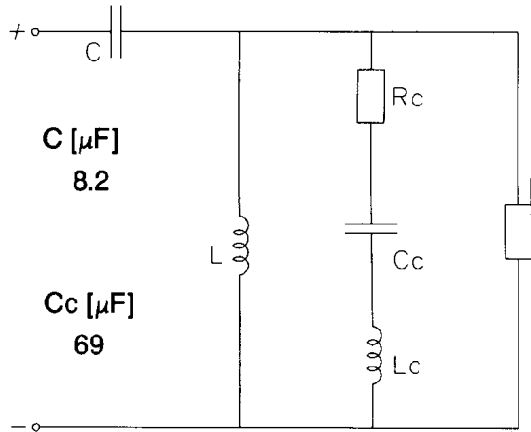
# Applications

**Recommended cross over:**

| Nom. power [W] | Fc [Hz] | L [mH] | C [ $\mu$ F] |
|----------------|---------|--------|--------------|
| 100            | 3500    | 0.47   | 8.2          |

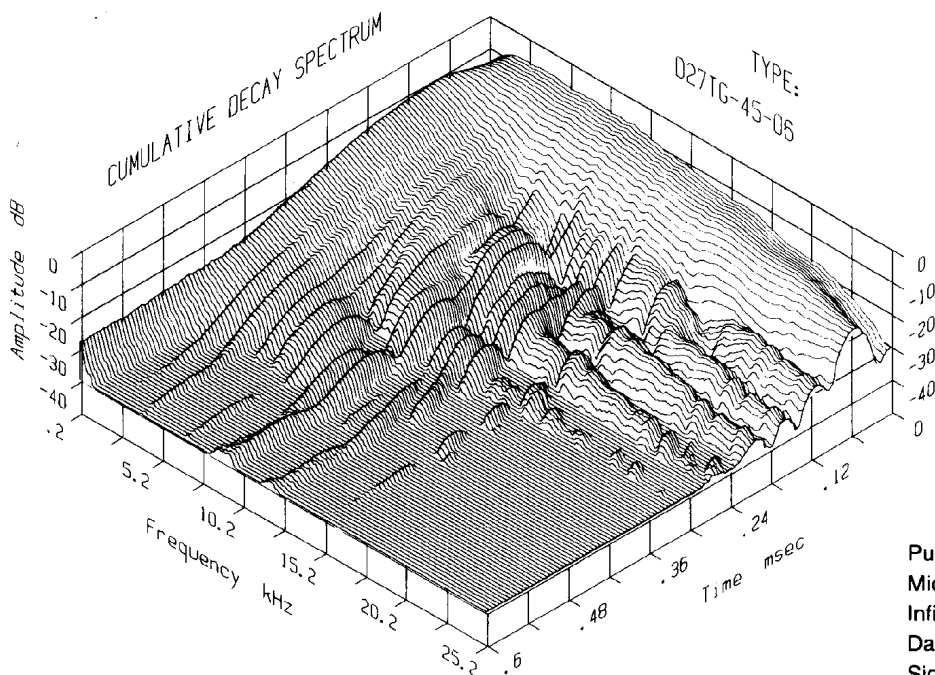
**Parallel compensation:**

| Rc [ $\Omega$ ] | Lc [mH] | Cc [ $\mu$ F] |
|-----------------|---------|---------------|
| 6.8             | 0.9     | 69            |



It is recommended to use at least 2<sup>nd</sup> order (12 dB/oct) cross over for this drive unit. The load provided by the cross over should be as low as possible at the tweeter resonance frequency. To ensure maximum electrical damping at resonance, and consequently minimum excursion, it is also recommended to apply the parallel compensation circuit shown. This is essential for high power input. The circuit shown is the one used for the powerhandling tests.

Note 1-3) Power test conditions: Amb. temp. 21°C  $\pm$  3°C. Note 1) 100 hours continuous. Note 2) Signal 1 sec., pause 1 min., repeated 60 times. Note 3) Signal 1 min., pause 2 min., repeated 10 times.



Pulse: 10 V/15  $\mu$ S  
 Mic.: 0.15 m  
 Infinite baffle  
 Date: 11.08.93  
 Sign.: FBJ