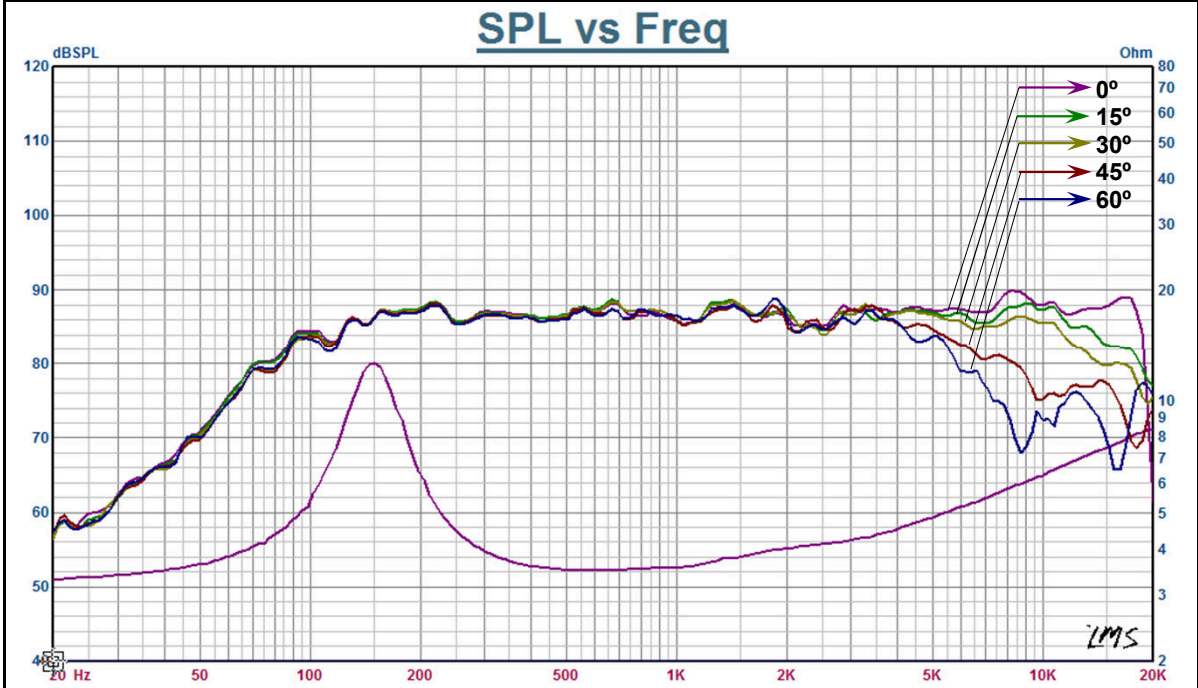


**Model: 3DEV-MR320**

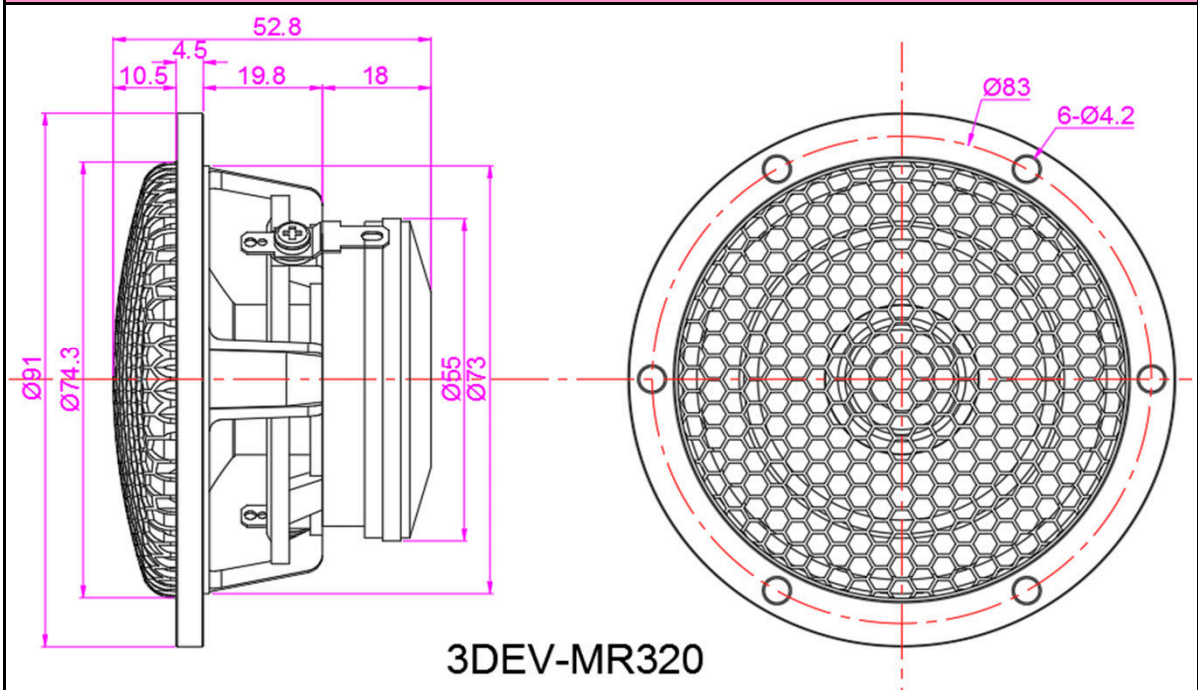
Rubber/pp/ccaw

| T/S Parameters             |      |               | Magnet and Voice Coil Properties |      |            |
|----------------------------|------|---------------|----------------------------------|------|------------|
| Normal Impedance           | Znom | 4 ohm         | Magnet size                      |      | 55*3mm     |
| DC resistance              | Re   | 3.2 ohm       | Voice coil diameter              | Dc   | 20.4 mm    |
| Voice coil inductance      | Le   | 0.21 mH @1kHz | Winding height                   | Hc   | 6.0 mm     |
| Resonance frequency        | Fs   | 148 Hz        | Linear excursion P-P             | Xm   | 2 mm       |
| Mechanical Q factor        | Qms  | 2.75          | Max excursion P-P                |      | 10 mm      |
| Electrical Q factor        | Qes  | 0.63          | Normal long term Power           | Pnom | 15 W       |
| Total Q factor             | Qt   | 0.58          | Instant(10ms) Max Power          | Pmax | 30 W       |
| Moving mass(incl.air load) | Mms  | 2.5 g         | Other Properties                 |      |            |
| Suspension compliance      | Cms  | 0.69 mm/N     | Sound Pressure Level/1m/1W       | SPL  | 86 dB      |
| Effective dome diameter    | d    | 6.1 cm        | Recommended range                |      | 150-18k Hz |
| Effective piston area      | Sd   | 29.3 sq.cm    | Net. weight                      |      | 0.33 kg    |
| Equivalent volume          | Vas  | 0.8 L         | Overall dimension                |      | Φ91*52.8mm |
| Force factor               | Bl   | 3.2Tm         |                                  |      |            |

**Frequency response & Impedance graph**



**Outline drawings**

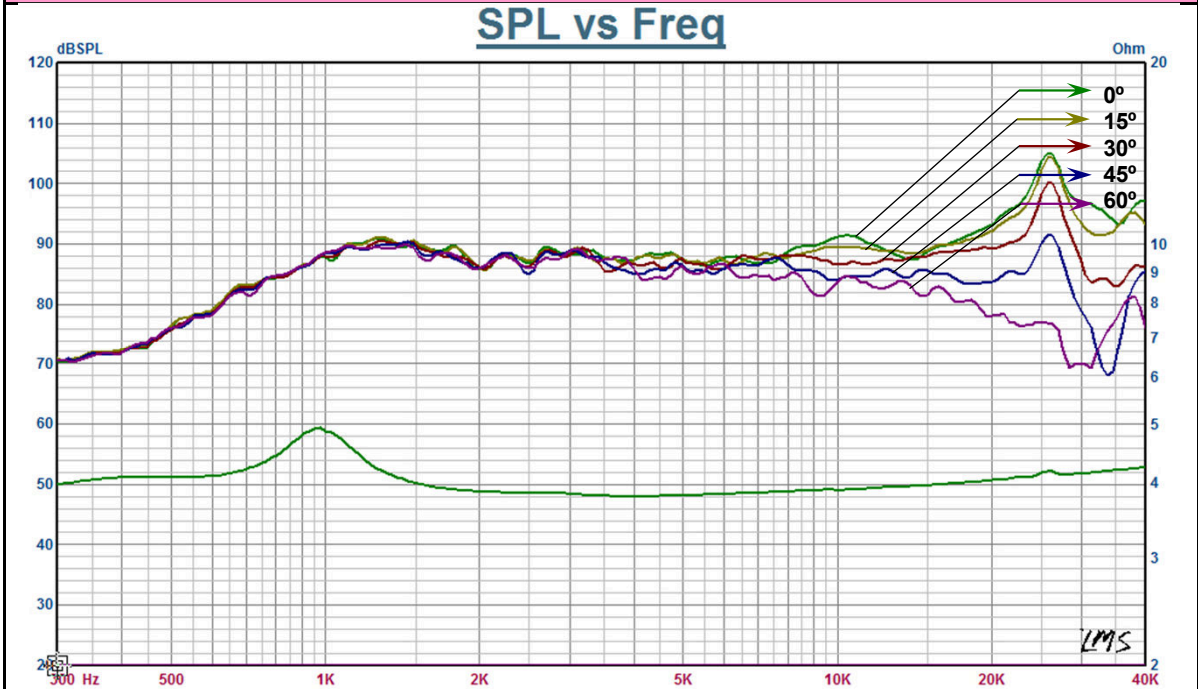


**Model: 3DEV-TW120**

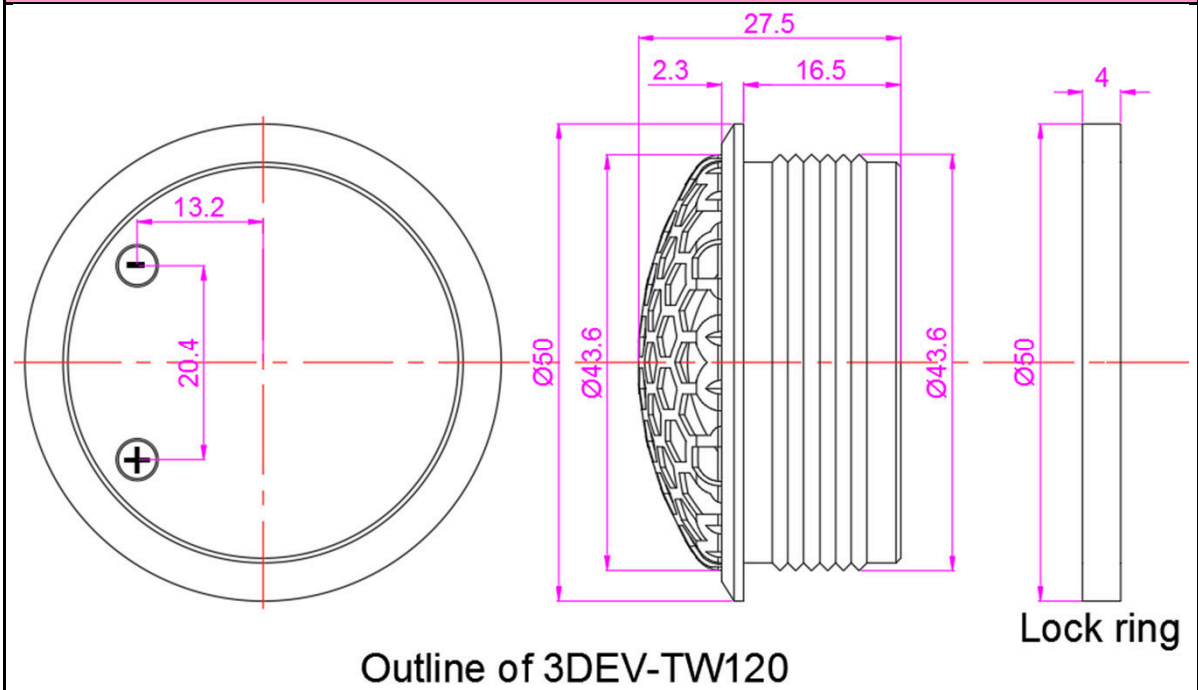
Silk/AL/ccaw

| T/S Parameters             |      |                  | Magnet and Voice Coil Properties |      |               |
|----------------------------|------|------------------|----------------------------------|------|---------------|
| Normal Impedance           | Znom | 4 ohm            | Magnet size                      |      | Φ19*3.5mm     |
| DC resistance              | Re   | 3.5 ohm          | Voice coil diameter              | Dc   | 20.4 mm       |
| Voice coil inductance      | Le   | 0.03 mH at 10kHz | Winding height                   | Hc   | 1.5 mm        |
| Resonance frequency        | Fs   | 960 Hz           | Linear excursion P-P             | Xm   | 0.6mm         |
| Mechanical Q factor        | Qms  | N/A              | Max excursion P-P                |      | N/A           |
| Electrical Q factor        | Qes  | N/A              | Normal long term Power           | Pnom | 8 W           |
| Total Q factor             | Qt   | N/A              | Instant(10ms) Max Power          | Pmax | 15 W          |
| Moving mass(incl.air load) | Mms  | N/A              | Other Properties                 |      |               |
| Suspension compliance      | Cms  | N/A              | Sound Pressure Level/1m/1W       | SPL  | 88 dB         |
| Effective dome diameter    | d    | 2.1 cm           | Recommended range                |      | 2500-20000 Hz |
| Effective piston area      | Sd   | N/A              | Net. weight                      |      | 73 g          |
| Equivalent volume          | Vas  | N/A              | Overall dimension                |      | Φ50*27.5mm    |
| Force factor               | Bl   | N/A              |                                  |      |               |

**Frequency response & Impedance graph**



**Outline drawings**

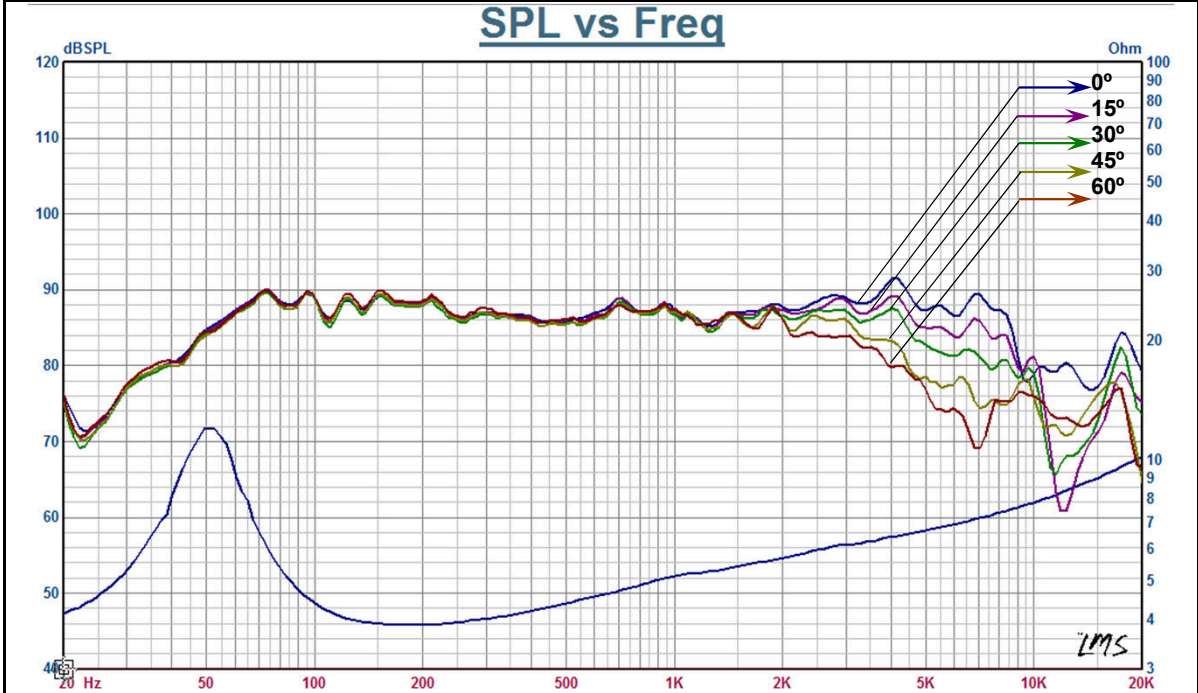


**Model: 3DEV-BD635**

Rubber/pp/ccaw

| T/S Parameters             |      |             | Magnet and Voice Coil Properties |      |             |
|----------------------------|------|-------------|----------------------------------|------|-------------|
| Normal Impedance           | Znom | 4 ohm       | Magnet size                      |      | 90mm*20mm   |
| DC resistance              | Re   | 3.5 ohm     | Voice coil diameter              | Dc   | 35.5 mm     |
| Voice coil inductance      | Le   | 0.73 mH     | Winding height                   | Hc   | 16.0 mm     |
| Resonance frequency        | Fs   | 49 Hz       | Linear excursion P-P             | Xm   | 12mm        |
| Mechanical Q factor        | Qms  | 2.38        | Max excursion P-P                |      | 26mm        |
| Electrical Q factor        | Qes  | 0.78        | Normal long term Power           | Pnom | 80 W        |
| Total Q factor             | Qt   | 0.59        | Instant(10ms) Max Power          | Pmax | 180 W       |
| Moving mass(incl.air load) | Mms  | 16.3 g      | Other Properties                 |      |             |
| Suspension compliance      | Cms  | 0.66 mm/N   | Sound Pressure Level/1m/1W       | SPL  | 86 dB       |
| Effective dome diameter    | d    | 13 cm       | Recommended range                |      | 50-4000 Hz  |
| Effective piston area      | Sd   | 132.7 sq.cm | Net. weight                      |      | 1.4kg       |
| Equivalent volume          | Vas  | 16.5L       | Overall dimension                |      | Φ166*78.6mm |
| Force factor               | Bl   | 4.73Tm      |                                  |      |             |

**Frequency response & Impedance graphs**



**Outline drawing**

