D350

2” (50 mm) exit compression driver for high sensitivity, low distortion and smooth medium frequency response applications. That leads the D350 driver to deliver high performance, high quality and high value for the pinnacle in sound reinforcement applications.
Its construction features include:
- ferrofluid (Ferrosound®) loaded gap reducing heat buildup and offering consistent results over long-term demanding concert usage;
- voice coil is made of high temperature wire wound on polyimide former to withstand high operating temperatures;
- injected plastic housing;
- precisely engineered diaphragm structure and alignment mechanism allows for easy, reliable and cost effective repair in case of diaphragm failure.

SPECIFICATIONS

Nominal Impedance:		8	Ω
Impedância nominal @ 1308 Hz:		7,11	Ω
POWER USING CROSSOVER (12dB/oct)	ACTIVE	PASSIVE	
Nominal power (RMS) (HPF 500 Hz): [1]	107	200	W
Nominal power (RMS) (HPF 400 Hz): [1]	85	150	W
Peak power (HPF 500 Hz):	214	400	W
Peak power (HPF 400 Hz):	170	300	W
AES power (HPF 500 Hz): [2]	53	---	W
AES power (HPF 400 Hz): [2]	42	---	W
Sensitivity			
On horn, 1W@1m: [3]		110,00	dB SPL
On plane-wave tube, 0.0894V: [4]		111,60	dB SPL
Frequency response @ -10 dB:		600 to 7600	Hz
Throat diameter:		2	(in)
Diaphragm material:		Phenolic	
Voice coil diameter:		3,0	(in)
Re:		6,0	Ω
Flux density:		1,46	T
Minimum recommended crossover (12dB/oct):		400	Hz
Horn used in the tests:		HL 47-50	

[1] RMS power value of the amplifier to be used.
[2] AES Standard .
3 Sensitivity value as IEC 60268-5 standard.
4 The sensitivity represents the SPL in a terminated tube.

ADDITIONAL INFORMATION

Magnet material:	Barium ferrite
Magnet weight:	41,06 (oz)
Magnet diameter x depth:	6,1 x 0,71 (in)
Magnetic assembly weight:	7,28 (lb)
Housing material:	Plastic
Voice coil material:	Copper
Voice coil former material:	Ploymide
Voice coil winding length:	17,39 (ft)

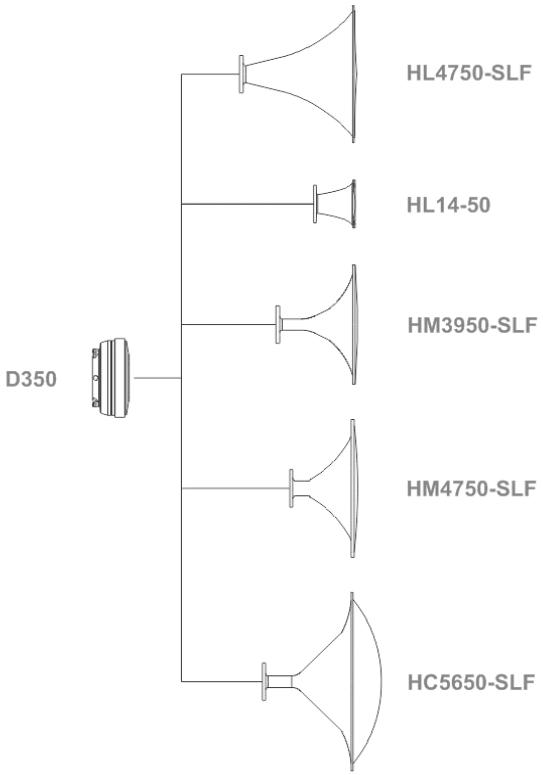
ADDITIONAL INFORMATION

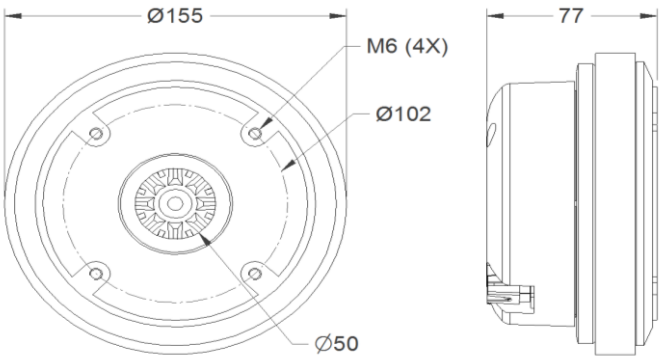
Hvc (Voice coil winding depth):	0,14	(in)
Wire temperature coefficient of resistance (α25):	0,01607717	1/°C
Volume displaced by driver:	0,04	(ft^3)
Net weight:	7,72	(lb)
Gross weight:	8,38	(lb)
Carton dimensions (W x D x H):	18,2x18,2x12 (7,2 x 7,2 x 4,7)	cm (in)

MOUNTING INFORMATION

Horn connection:	Bolt on
Connectors:	Push terminals
Polarity:	the positive terminal (red) gives diaphragm motion toward the horn throat

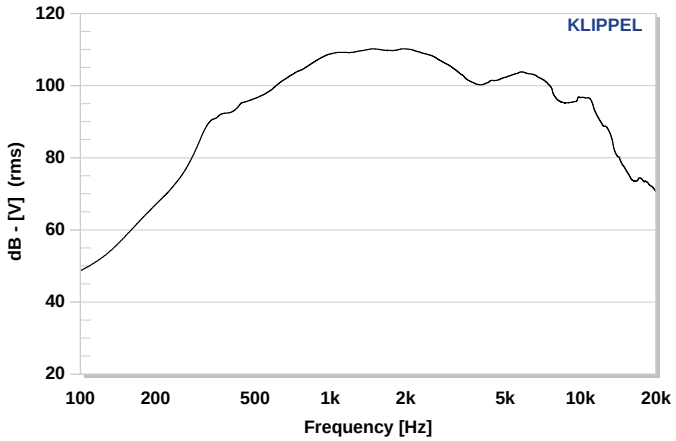
CONEXÃO DRIVER x CORNETA



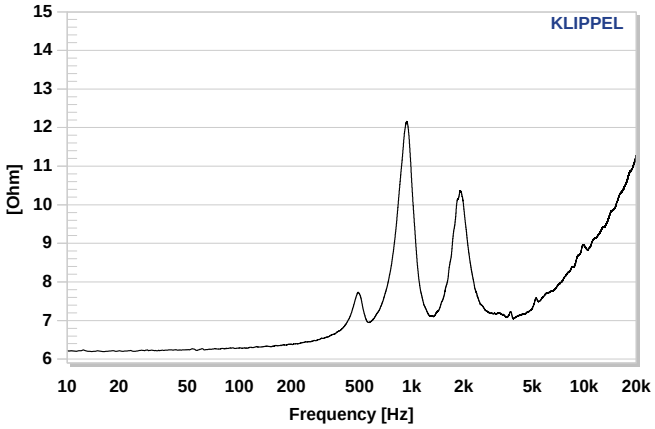


Dimensions in mm

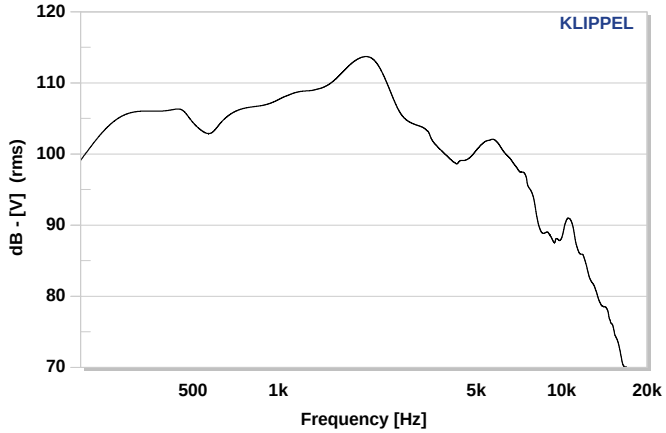
RESPONSE CURVE WITH HORN HL 47-50 IN ANECHOIC CHAMBER, 1W @ 1m



IMPEDANCE CURVE IN FREE AIR

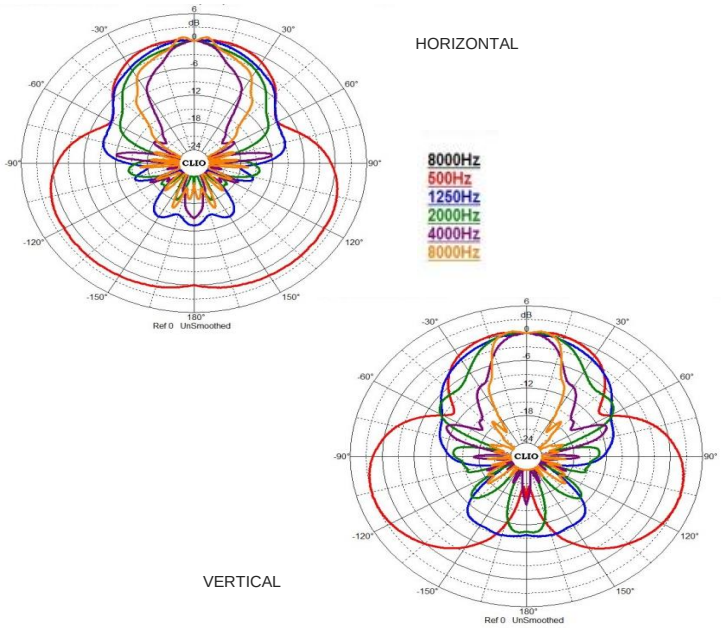


RESPONSE CURVE ON PLANE-WAVE TUBE, 1 mW

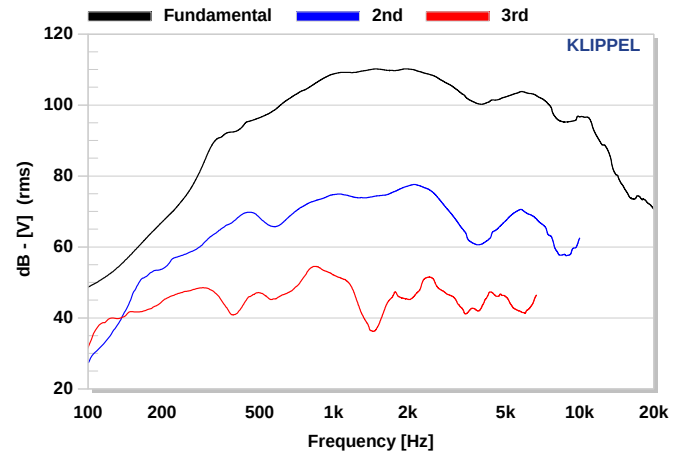


Response curve and Impedance measured with transducer in a terminated tube .

POLAR RESPONSE CURVE WITH HORN HL 47-50



HARMONIC DISTORTION CURVES WITH HORN HL 47-50 IN ANECHOIC CHAMBER, A 1W @ 1m



HOW TO CHOOSE THE RIGHT AMPLIFIER

The value of RMS power amplifier should be the same value as the rated power of the speaker.

FINDING VOICE COIL TEMPERATURE

It is very important to avoid maximum voice coil temperature. Since moving coil resistance (Re) varies with temperature according to a well known law, we can calculate the temperature inside the voice coil by measuring the voice coil DC resistance:

$$T_B = T_A + \left(\frac{R_B}{R_A - 1}\right)\left(T_A - 25 + \frac{1}{\alpha_{25}}\right)$$

T_A, T_B = Voice coil temperatures in °C.

R_A, R_B = Voice coil resistances at temperatures TA and TB , respectively.

α_{25} = Voice coil wire temperature coefficient at 25°C