



# 4580

Nominal Diameter	12" / 30 cm
Rated Impedance	8 Ω
Sensitivity	96 dB SPL
Power Handling Capacity	300 W AES
SPL max (continuous)	117 dB SPL
Usable frequency range	40 - 3000 Hz
Speaker net mass	6,4 kg

# 12" low-mid driver



### Architecture highlights :

- Natural convection Intercooling System
- Front side coated curvilinear cone designed for 2 way systems operation
- High compliance double half-roll fabric surround

### Motor architecture

Magnet material	-	Fe
Voice coil diameter	mm	64
Voice coil length	mm	15
Air gap height	mm	8

### Typical characteristics

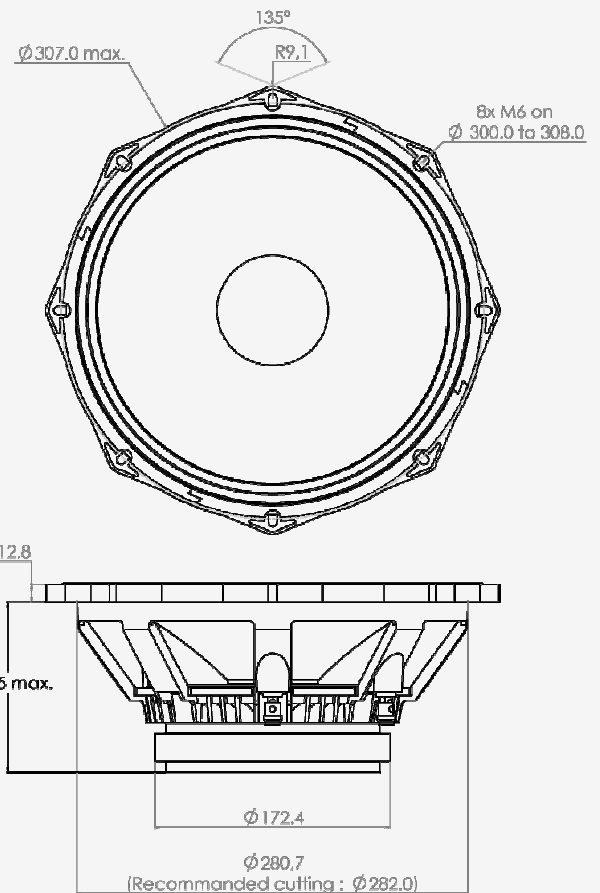
Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	96,0
Usable freq. range	-	Hz	40 - 3000
Power handling capacity (AES)	-	W	300
Max Sound Pressure Level	SPL <sub>max</sub>	dB SPL	117
Min. impedance modulus	Z <sub>min</sub>	Ω@Hz	5.9@290
Voice-coil inductance @ 1kHz	Le <sub>1k</sub>	mH	0,911
Voice-coil inductance @ 10kHz	Le <sub>10k</sub>	mH	0,434
BL product	BL	N/A	14,8
Moving mass	Mms	kg	0,052

### Thiele-Small parameters

Resonance frequency	Fs	Hz	43 (±5)
DC Resistance	Re	Ω	5.3 (±0.5)
Mechanical quality factor	Qms	1	3,12
Electrical quality factor	Qes	1	0,34
Total quality factor	Qts	1	0,31
Suspension compliance	Cms	10 <sup>-6</sup> .m/N	260
Effective piston area	Sd	m <sup>2</sup>	0,0539
Equivalent Cas air load	Vas	m <sup>3</sup>	0,1072
Max linear excursion	Xmax	mm	± 5,5
Linear displacement volume	Vd	10 <sup>-3</sup> .m <sup>3</sup>	0,2157
Reference efficiency	η <sub>0</sub>	%	2,4
Unity load volume	Vas.Qts <sup>2</sup>	10 <sup>-3</sup> .m <sup>3</sup>	10,1

### Absolute maximum ratings

Short term max. input voltage	Vmax	V	100
Max.excursion before damage	Xdam	mm	± 12,0
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Humidity proof



### Mounting information

Air volume occupied by the driver	10 <sup>-3</sup> .m <sup>3</sup>	2,20
Speaker net mass	kg	6,40
Baffle cut-out diameter (front mounting)	mm	282,0
Bolt number & Metric diameter	-	8x M6
Bolt circle diameter	mm	300 to 308
Max overall dimension (on ears)	mm	326.5
Max overall dimension (out of ears)	mm	307.0
Flange height	mm	12,8
Max magnet diameter	mm	172,4
Max depth (front mounting)	mm	124,5
Recommended reflex box	Lts / Hz	60L / 45Hz
Electrical connection		Ø4 mm Push buttons