## KEY FEATURES maltcross

- High power handling: 1.000 W program power
- 2,5" copper wire voice coil
- Malt Cross ${ }^{\circledR}$ Cooling System
- Low power compression losses
- High sensitivity: 98 dB
- FEA optimized magnetic circuit
- Aluminium demodulating ring



## TECHNICAL SPECIFICATIONS

| Nominal diameter | 380 mm | 15 in$8 \Omega$ |
| :---: | :---: | :---: |
| Rated impedance |  |  |
| Minimum impedance |  | 6,9 $\Omega$ |
| Power capacity ${ }^{1}$ |  | $500 \mathrm{~W}_{\text {AES }}$ |
| Program power ${ }^{2}$ |  | 1.000 W |
| Sensitivity | 98 dB 1 W | / 1m@ $\mathrm{Z}_{\mathrm{N}}$ |
| Frequency range |  | - 4.000 Hz |
| Recom. enclosure vol. | 60 / 150 I | 2,1/5,2 $\mathrm{ft}^{3}$ |
| Voice coil diameter | $63,5 \mathrm{~mm}$ | 2,5 in |
| Bl factor |  | 18,3 N/A |
| Moving mass |  | $0,098 \mathrm{~kg}$ |
| Voice coil length |  | 19,5 mm |
| Air gap height |  | $9,5 \mathrm{~mm}$ |
| $\mathrm{X}_{\text {damage }}$ (peak to peak) |  | 40 mm |

- Waterproof cone treatment for both sides of the cone
- Extended controlled displacement: $\mathrm{X}_{\text {max }} \pm 8 \mathrm{~mm}$
- 40 mm peak-to-peak excursion before damage
- Weight 6,2 kg
- Optimized for 2 or 3 way PA systems and line array for utlimate professional applications



## THIELE-SMALL PARAMETERS ${ }^{3}$

Resonant frequency, $\mathrm{f}_{\mathrm{s}}$
46 Hz
D.C. Voice coil resistance, $\mathbf{R e}_{\mathrm{e}}$

5,7 $\Omega$
Mechanical Quality Factor, $\mathbf{Q}_{\mathrm{ms}} \quad 8$
Electrical Quality Factor, $\mathbf{Q}_{\text {es }} \quad 0,49$
Total Quality Factor, $\mathbf{Q}_{\text {ts }} \quad 0,46$
Equivalent Air Volume to $\mathbf{C}_{\mathbf{m s}}, \mathbf{V}_{\text {as }} \quad 131,5$ I
Mechanical Compliance, Cms $_{\text {m }}$
Mechanical Resistance, $R_{m s}$
Efficiency, $\eta_{0}$
$120 \mu \mathrm{~m} / \mathrm{N}$
$3,5 \mathrm{~kg} / \mathrm{s}$
2,5 \%
Effective Surface Area, $\mathbf{S}_{\boldsymbol{d}}$
Maximum Displacement, $X_{\text {max }}{ }^{4}$
0,088 m²

Displacement Volume, $\mathrm{V}_{\mathrm{d}}$
8 mm
$704 \mathrm{~cm}^{3}$
Voice Coil Inductance, $\mathrm{L}_{\mathrm{e}} \quad 1,1 \mathrm{mH}$

[^0]${ }^{3}$ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working
for a short period of time)
${ }^{4}$ The $X_{\max }$ is calculated as $\left(\mathrm{L}_{\mathrm{vc}}-\mathrm{H}_{\mathrm{ag}}\right) / 2+\left(\mathrm{H}_{\mathrm{ag}} / 3,5\right)$, where $\mathrm{L}_{\mathrm{vc}}$ is the voice coil length and $\mathrm{H}_{\mathrm{ag}}$ is the air gap height. www.beyma.com


Note: On axis frequency response measured with loudspeaker
standing on infinite baffle in anechoic chamber, 1W @ 1m

## MOUNTING INFORMATION

Overall diameter
Bolt circle diameter

## Baffle cutout diameter:

| - Front mount | $349,5 \mathrm{~mm}$ | $13,8 \mathrm{in}$ |
| :--- | ---: | ---: |
| Depth | 170 mm | $6,7 \mathrm{in}$ |
| Net weight | $6,2 \mathrm{~kg}$ | $13,7 \mathrm{lb}$ |
| Shipping weight | $7,2 \mathrm{~kg}$ | $15,9 \mathrm{lb}$ |

DIMENSION DRAWING



[^0]:    Notes:
    ${ }^{1}$ The power capaticty is determined according to AES2-1984 (r2003) standard.
    ${ }^{2}$ Program power is defined as power capacity +3 dB .

