



The VA Series Aluminium Column Loudspeaker have been carefully designed to meet professional standards for performance and intelligibility. Providing superb speech and music reproduction, they are particularly suitable for applications where sound projection is necessary due to reverberant conditions. Its wide horizontal coverage angle is perfect for large listening areas while its narrow vertical angle directs sound to the listening area while minimising reflections from the ceiling and floor to improve speech intelligibility.

Its aluminium extruded body, die-casted end covers and front mesh grille, made from perforated electro-galvanised sheets are epoxy coated for added protection. The VA Series utilises full range long excursion loudspeaker components which further enhances its frequency response and providing music quality output which is never heard from ordinary column speakers. All models in this range are supplied with a multiple tapping line matching transformer, suitable for 70 V / 100 V line distributed speaker system. Swivel mounting brackets are provided for simple and immediate installation.

Models are available for outdoor installations (VA 415W / VA 430W / VA 450W) where its exterior is polyester coated to withstand prolonged exposure to rain, heat and UV. The cone of the speaker components are impregnated with water repellent chemical while water splash is kept out by a layer of acoustically transparent water shield at the mesh grille.

- Suitable for applications where sound projection is required due to reverberant conditions.
- Wide horizontal angle improves coverage while narrow vertical angle increases directivity.
- Aluminium construction for added protection and aesthetic appeal.
- Utilizes full range long excursion loudspeaker components which enhances frequency response and sound quality.
- Integrated with a line matching transformer suitable for 70 V / 100 V line distributed speaker system.
- Swivel mounting brackets are provided for easy installation.
- Outdoor models (VA 415W / VA 430W / VA 450W) are able to withstand exposure to rain, heat and UV.

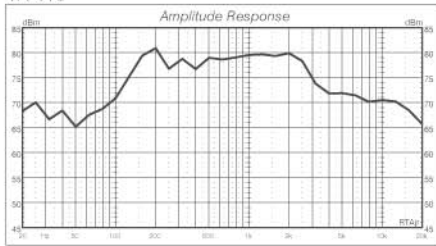


### Technical Specifications

	VA 415 / VA 415W	VA 430 / VA 430W	VA 450 / VA 450W
Rated Input (100 V)	15 W (15 - 7.5 - 3.8 W)	30 W (30 - 15 - 7.5 W)	50 W (50 - 25 - 12.5 W)
Rated Input (70 V)	7.5 W (7.5 - 3.8 - 1.9 W)	15 W (15 - 7.5 - 3.8 W)	25 W (25 - 12.5 - 6.3 W)
Rated Impedance	670 Ω (670 - 1330 - 2700 Ω)	330 Ω (330 - 670 - 1330 Ω)	200 Ω (200 - 400 - 800 Ω)
Sensitivity (1 W / rated at 1 m)	90 / 102 dB	92 / 107 dB	93 / 110 dB
Frequency Response	85 Hz ~ 15 kHz	80 Hz ~ 17 kHz	75 Hz ~ 20 kHz
Distribution Pattern	164° (H) x 87° (V)	155° (H) x 64° (V)	186° (H) x 46° (V)
Speaker Component	2 nos. 100 mm Full Range	4 nos. 100 mm Full Range	6 nos. 100 mm Full Range
Safety	Acc. to EN 60065	Acc. to EN 60065	Acc. to EN 60065
Finish	Electrostatic Epoxy Coated Pebble Grey (RAL 7032) - Body Agate Grey (RAL 7038) - Mesh	Electrostatic Epoxy Coated Pebble Grey (RAL 7032) - Body Agate Grey (RAL 7038) - Mesh	Electrostatic Epoxy Coated Pebble Grey (RAL 7032) - Body Agate Grey (RAL 7038) - Mesh
Dimension ( W x H x D )	132 x 377 x 128 mm	132 x 687 x 128 mm	132 x 1029 x 128 mm
Weight	3.8 kg	6.2 kg	8.7 kg

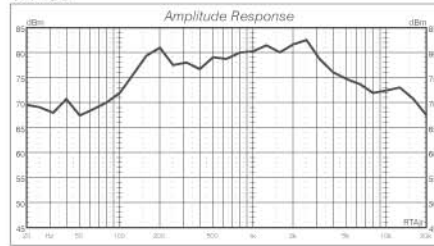
### Frequency Response

VA 415



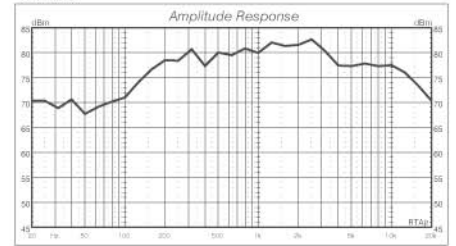
\* at 1 W / 1 m

VA 430



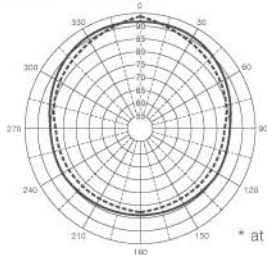
\* at 1 W / 1 m

VA 450



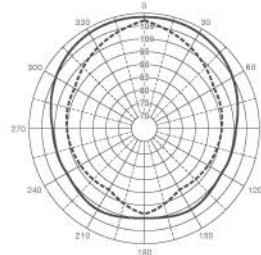
\* at 1 W / 1 m

### SPL Polar Plot



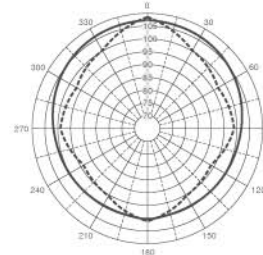
\* at 1 W / 1 m

— Horizontal  
- - - Vertical



\* at 1 W / 1 m

— Horizontal  
- - - Vertical



\* at 1 W / 1 m

— Horizontal  
- - - Vertical

### Engineers' Specifications

The aluminium column loudspeaker shall be constructed from an extruded aluminium body and epoxy coated in pebble grey (RAL 7032) with a fine metal mesh front in agate grey (RAL 7038). Its aluminium die casted end pieces are epoxy coated in pebble grey (RAL 7032) and shall have a provision to cluster the loudspeaker units at a 30 deg. angle. M8 threaded slots shall be provided at the top and bottom of the enclosure to secure the unit to the wall mounting brackets provided and padded with acoustic damping material to reduce echoing. The aluminium column loudspeaker shall be incorporated with 2 nos. (VA 415) / 4 nos. (VA 430) / 6 nos. (VA 450) of 100 mm dynamic full range loudspeaker driver. A line matching transformer shall be provided with multiple tapplings of 15, 7.5 and 3.8 W (VA 415) / 30, 15, 7.5 W (VA 430) / 50, 25, 12.5 (VA 450) rated at 100 V line suitable for distributed speaker system. The loudspeaker unit shall have a useable frequency range of 85 Hz ~ 15 kHz (VA 415) / 80 Hz ~ 17 kHz (VA 430) / 75 Hz ~ 20 kHz (VA 450)

at 1 W / m with a coverage angle of ( H x V ) 164 x 87 deg. (VA 415) / 155 x 64 deg. (VA 430) / 186 x 46 deg. (VA 450). The weight of the loudspeaker unit shall not exceed 3.8 kg (VA 415) / 6.2 kg (VA 430) / 8.7 kg (VA 450) and its dimensions shall be ( W x H x D ) 132 x 377 x 128 mm (VA 415) / 132 x 687 x 128 mm (VA 430) / 132 x 1029 x 128 mm (VA 450).

