TECHNICAL DATA

DesignMax DM6C
in-ceiling loudspeaker

PROFESSIONAL

Product Overview

With coaxial two-way drivers, the 125-watt DesignMax DM6C loudspeaker offers rich lows and clear, intelligible highs — along with premium aesthetics that complement any commercial sound installation. The DM6C features a 6.5-inch woofer and a 1.25-inch coaxial tweeter mounted within the Dispersion Alignment system, delivering a frequency range of 59 Hz – 20 kHz. The in-ceiling DM6C is installed easily via QuickHold mounting arms.



Key Features

Combine DesignMax models to complete any design, big or small — 12 loudspeakers to mix and match, from 2-inch, low-profile models to 8-inch, high-SPL compression-driver loudspeakers and outdoor-rated options.

Deliver rich lows and clear, intelligible highs with coaxial two-way drivers — no DSP or EQ required. For even better sound, use select Bose DSPs and amplifiers to enable Bose loudspeaker EQ and SmartBass processing, which expands performance and response at any listening level.

Ensure a consistent listening experience throughout the room with the Dispersion Alignment system, which matches the acoustic pattern of the woofer to the pattern of the tweeter.

Blend with any room design with elegant form factors, minimum-bezel grilles available in black or white, and removable logos.

Reduce installation time with the patented QuickHold mounting system, which also reduces strain, hassle, and the chance of product damage.

Install easily with industry-standard accessories — all models include Euroblock connectors; in-ceiling models include plenum-rated backcans, tile bridges, and front-access audio wiring that makes installation and troubleshooting easier.

Technical Specifications

SINGLE LOUDSPEAKER PERFORMANCE		
Frequency Response (–3 dB) [1]	70 – 20,000 Hz	
Frequency Range (–10 dB) [1]	59 – 20,000 Hz	
Nominal Coverage Angle (1 – 4 kHz)	120° conical	
Nominal Coverage Angle (1 – 10 kHz)	125° conical	
	AES component test [4]	**Bose extended-lifecycle test [5]**
Power Handling, long-term continuous	125 W	100 W
Power Handling, peak	500 W	400 W
Sensitivity (SPL/ 1W @ 1 m) [2]	88 dB	88 dB
Calculated Maximum SPL @ 1 m [3]	109 dB	108 dB
Calculated Maximum SPL @ 1 m, peak	115 dB	114 dB
Crossover	1.7 kHz (passive 2-way crossover)	
Loudspeaker EQ	Not Required, Bose EQ voicing and SmartBass processing available	
Recommended High-Pass protection	60 Hz with recommended 24 dB / octave filter	
Transformer taps	70V: 2.5, 5, 10, 20, 40, 80 W, bypass 100V: 5, 10, 20, 40, 80 W, bypass	
TRANSDUCERS		
Low Frequency	1 x 6.5-inch woofer (165 mm)	
High Frequency	1 x 1.25-inch (32 mm) neodymium dome tweeter, coaxially-mounted	
Technology	Dispersion Alignment System, 197 mm (7.75 in) system diameter	
Nominal Impedance	8 ohms (transformer bypass)	

DesignMax DM6C
in-ceiling loudspeaker

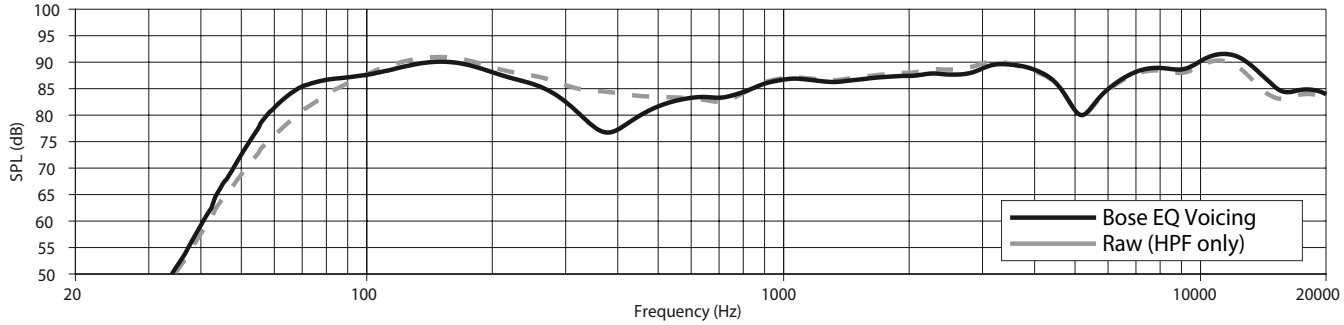
PHYSICAL	
Enclosure Material	Engineered-plastics front baffle with integrated steel formed back can
Grille	Magnetically attached perforated steel, powder-coated finish, paintable, with safety-tether
Logo	Rotatable, removable
Color	Black: RAL 9005, White: Bose Arctic White, similar to RAL 9003, Paintable
Environmental	Indoor only
Safety Agency	UL-1480A, S5591/ UL Listed, in compliance with UL2043 for plenum-space installation, NFPA70 & NFPA90-A, CE compliant
Operating Temperature Range	0 °C to 50 °C (32 °F to 122 °F)
Connectors	Euroblock 6-pin connector with loop-through, front-baffle mounted. Accepts 18 AWG (0.8 mm^2) to 14 AWG (2.5 mm^2) size wire.
Wire/Conduit Entry	Single top wire entry point for 3/8 in conduit
Suspension / Mounting	Three (3) QuickHold, spring-loaded long travel mounting arms plus three (3) safety cable tabs
Maximum Ceiling Thickness	57 mm (2.3 in)
Product Dimensions (Grille Diameter × Depth)	356 × 239 mm (14.0 × 9.4 in)
Backcan Dimensions (Diameter × Depth)	287 × 223 mm (11.3 × 8.8 in)
Ceiling Cutout	292 mm (11.5 in)
Net Weight, Loudspeaker with grille (single)	6.5 kg (14.3 lb)
Net Weight, Tile Bridge (single)	0.8 kg (1.8 lb)
Shipping Weight (pair)	17.7 kg (39.1 lb)
Included Accessories	Adjustable Tile-Bridge, Template
Optional Accessories	Rough-in 6-pack
PRODUCT CODES	
829679-0110	DESIGNMAX DM6C PAIR BLK
829679-0210	DESIGNMAX DM6C PAIR WHT

Footnotes
(1) Frequency response and range measured on-axis in half-space environment with Bose EQ voicing
(2) Sensitivity measured on-axis in half-space environment averaged 100 Hz – 10 kHz using recommended High-Pass protection
(3) Maximum SPL calculated from sensitivity and power handling specifications, exclusive of power compression.
(4) AES standard 2-hour duration with IEC system noise
(5) Bose extended-lifecycle test using pink noise filtered to meet IEC268-5, 6-dB crest factor, 500-hour duration.
(6) Measured in whole-space conditions

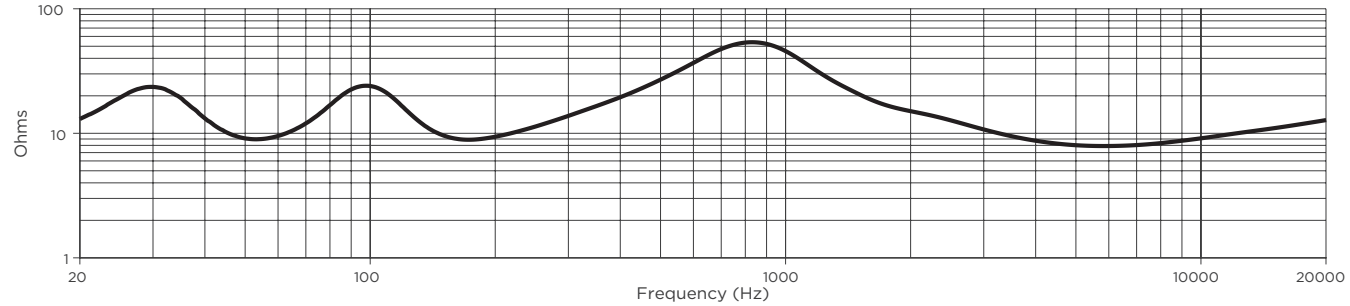
For additional specifications and application information, please visit PRO.BOSE.COM.
Specifications subject to change without notice. 09/2020

DesignMax DM6C
in-ceiling loudspeaker

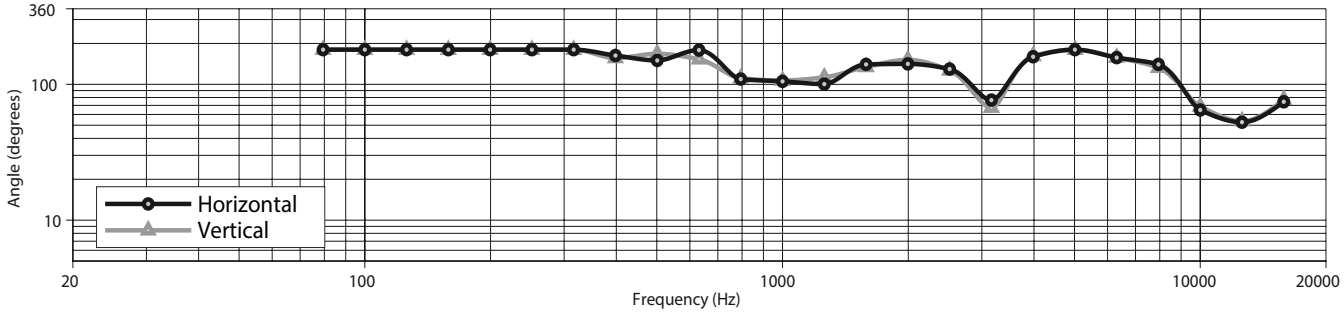
On-Axis Frequency Response



Impedance



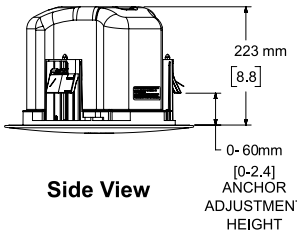
Beamwidth [6]



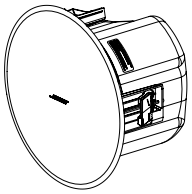
For additional specifications and application information, please visit PRO.BOSE.COM.
Specifications subject to change without notice. 09/2020

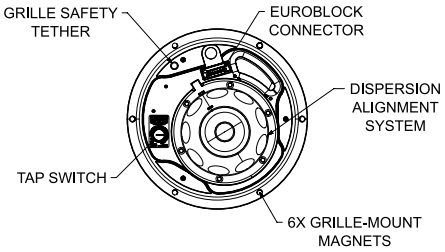
DesignMax DM6C
in-ceiling loudspeaker

Dimensions

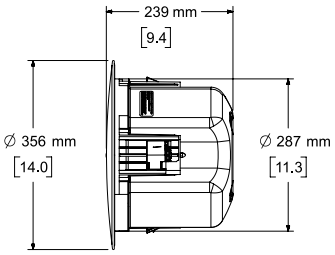


Side View

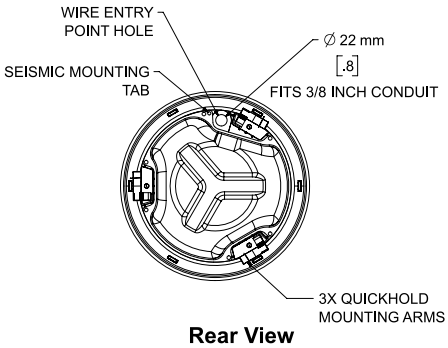




Front View
GRILLE REMOVED FOR CLARITY

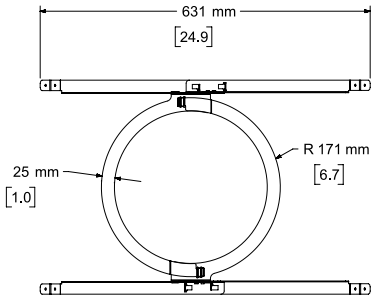


Right View
DIMENSIONS APPLY TO BOTH SIDES

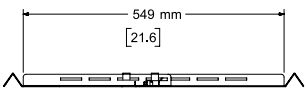


Rear View

NOTES:
1. DIMENSIONS ARE IN MILLIMETERS OVER INCHES
2. WEIGHT APPROX 6.50kg [14.3lbs]



Top View



Front View

For additional specifications and application information, please visit PRO.BOSE.COM.
Specifications subject to change without notice. 09/2020