



MATERION

PRODUCT BRIEF

## TRUEXTENT® BEX4008/4016

### REPLACEMENT DIAPHRAGMS FOR LARGE FORMAT COMPRESSION DRIVERS

The Truextent® BeX4008/4016 precision replacement diaphragm is engineered to fit a variety of large format compression drivers including JBL and Radian models (see table). Each diaphragm provides high efficiency and clarity of sound with extended bandwidth compared to the factory original or other aftermarket diaphragms. All Truextent BeX diaphragms deliver superior reliability, repeatability and value.

The diaphragm domes are formed from Genuine Truextent brand Acoustic Beryllium bonded to pure aluminum edgewound voicecoils with a Kapton® former utilizing proprietary bonding methods. Truextent Acoustic Beryllium is the lightest and stiffest of all commercially available dome materials giving the diaphragm a low overall moving mass, greatly improving responsiveness while remaining rigid over a wide frequency range. Additionally the BeX has the highest speed of sound through the dome, and thus the highest break-up mode.

The Truextent BeX suspension is constructed from PEEK rather than a one-piece metal dome and surround, enhancing the reliability and eliminating metal fatigue that can destroy traditional driver products. The PEEK surround is designed to provide excellent damping for smooth low distortion linear output with excellent transient response.

#### Truextent Brand Acoustic Beryllium Is Available For:

- JBL
- Radian
- Other 4" Voicecoil Compression Drivers

#### Truextent Acoustic Beryllium Offers:

- Precision Tolerances
- Superior Reliability and Repeatability
- Consistency – Easy to Match Sets
- Extended Lifespan
- Clarity of Sound

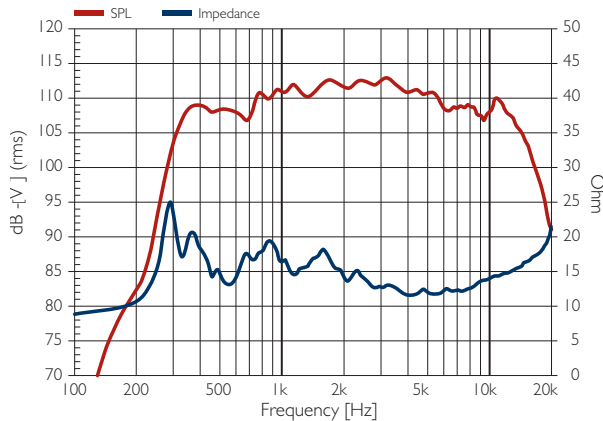


## APPLICATIONS

MAKE	DRIVER MODEL	BEX REPLACEMENT	ORIGINAL FACTORY DIAPHRAGM
JBL	2440	BeX4016	D16R2440
JBL	2441	BeX4016	D16R2441
JBL	2445H/J	BeX4008/16	D8/DI6R2445
JBL	2446H/J	BeX4008/16	D8/DI6R2450
JBL	2447H/J	BeX4008/16	D8/DI6R2450
JBL	2450H/J	BeX4008/16	D8/DI6R2450
JBL	2451H/J	BeX4008/16	D8/DI6R2450
JBL	375H	BeX4016	D16R2440
JBL	376H	BeX4016	No Longer Available
JBL	5A360	BeX4016	D16R2440
JBL	5P350	BeX4016	D16R2440
JBL	5P360	BeX4016	D16R2440
JBL	M111427	BeX4016	D16R2440
RADIAN	950-PB/8,16	BeX4008/16	I245-8,-16

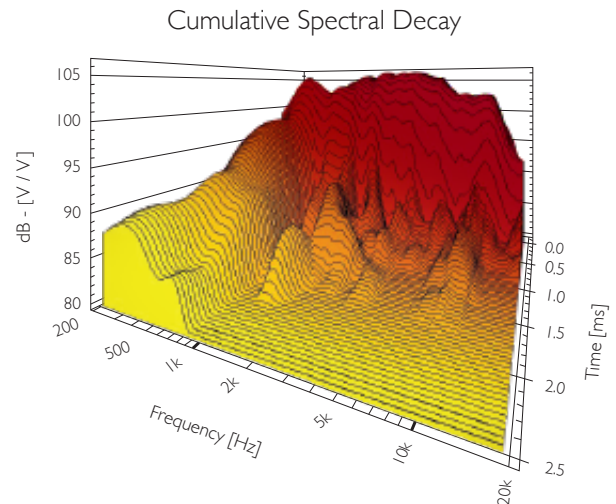
## SPECIFICATIONS

Frequency Range	500Hz - 20kHz
AES Power *	100W
Program Power	200W
Sensitivity **	111dB SPL @ 1W/1m
Recommended Crossover	1,000Hz, 12dB/octave
Nominal Impedance (BeX4016 / BeX4008)	16 / 8 ohms
Minimum Impedance (BeX4016 / BeX4008)	12 / 6.5 ohms @ 4kHz
D.C. Resistance (BeX4016 / BeX4008)	8.1 / 4.2 ohms (± 8%)
Voice Coil Diameter	4" (100mm)
Voice Coil Material	Edgewound Aluminum
Diaphragm Material	Genuine Truextent Acoustic Beryllium
Diaphragm Suspension	PEEK
Polarity	Positive voltage at + terminal moves diaphragm away from phase plug***
Dimensions	5" (127mm) outside diameter 8 Screw Holes on 4.625" (117.5mm) bolt circle



SPL and Impedance vs Frequency of BeX4016 diaphragm measured on a JBL 2450J driver and 2386 horn at 1W/1m.

- \* AES2-1984-r2003 1kHz - 10kHz
- \*\* Measured on a JBL 2450J compression driver with a JBL 2386 horn
- \*\*\* Radian 950-PB compression drivers are magnetized with opposite polarity



**HEALTH & SAFETY NOTE:** Handling beryllium in solid form poses no special health risk. Like many industrial materials, beryllium-containing materials may pose a health risk if recommended safe handling practices are not followed. Inhalation of airborne beryllium may cause a serious lung disorder in susceptible individuals. The Occupational Safety and Health Administration (OSHA) has set mandatory limits on occupational respiratory exposures. Read and follow the guidance in the Safety Data Sheet (SDS) before working with this material. For additional information on safe handling practices or technical data on beryllium, contact Materion Electrofusion at +1 510.623.1500.

### ELECTROFUSION

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### MATERION CORPORATION

www.materion.com/electrofusion

Truextent is a registered trademark and BeX is a trademark of Materion Brush Inc.

Kapton is a registered trademark of E.I. DuPont de Nemours and Company

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