Speedmount II Pole Type Secondary Bushing

Central Moloney, Inc. Components Operation An ISO 9001:2000 Certified Company

Product Data Sheet

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Availability:	Immediate		Supercedes::	8/96

Leakage Problems and the Speedmount II Solution

Leaks around secondary bushing are typically caused by the tremendous cantilever forces exerted by heavy cable loading. Costly changeouts of bushings unable to withstand 400 foot pounds of cantilever loading without leakage were prevalent in the industry until Central Moloney developed the Speedmount II

Speedmount II Advantages

- Will withstand up to 400 ft-lbs. of cantilever force without breakage or leakage at 10 PSI, 100°C
- Fully retained gaskets with controlled compression
- Completely UV shielded gasket construction
- Superior cantilever strength
- High impact and weather resistant engineered material

molded secondary bushing with superior strength and seal integrity. The large diameter insulator design, featuring controlled compression for both tank and terminal gaskets, provides greatly improved cantilever strength.

Speedmount II Innovation

The seal geometry of the Speedmount II low voltage bushing assembly features a fully retained gasket with controlled compression, independent of the force on the bushing body caused by cable loading. Since the Speedmount II's body is in direct contact with the tank surface, cantilever loads are transferred to the tank wall without disturbing the seal. This innovative design eliminates leakage problems associated with heavy cable loading.

Electrical Ratings

Voltage Class – 1.2kV AC Withstand – 10kV Impulse – 30kV BIL

Maximum Continuous Current Ratings:

.75 inch conductor – 1100 amps 1.0 inch conductor – 1230 amps 1.25 inch conductor – 1430 amps

These current ratings are based on the use of adequately sized external and internal leads connected properly to the bushing terminals.

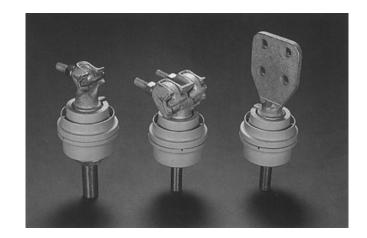
Speedmount II - The Preferred Industry Standard

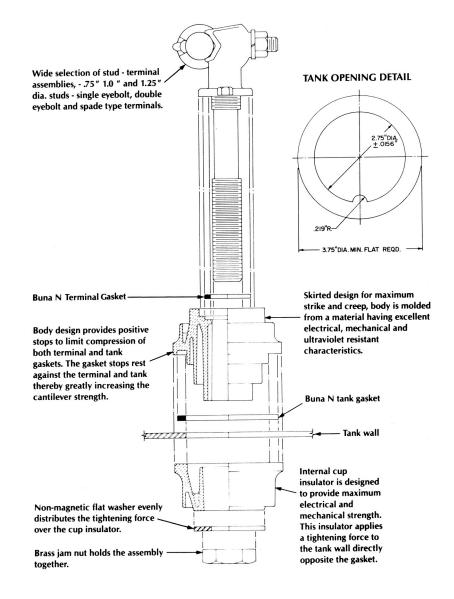
Choose From a Variety of Speedmount II Terminals . . .

The Central Moloney Speedmount II bushing is available with .75", 1.0" and 1.25" diameter #110 alloy copper conductors. The .75" and 1.0" diameter conductors are available with the following terminals:

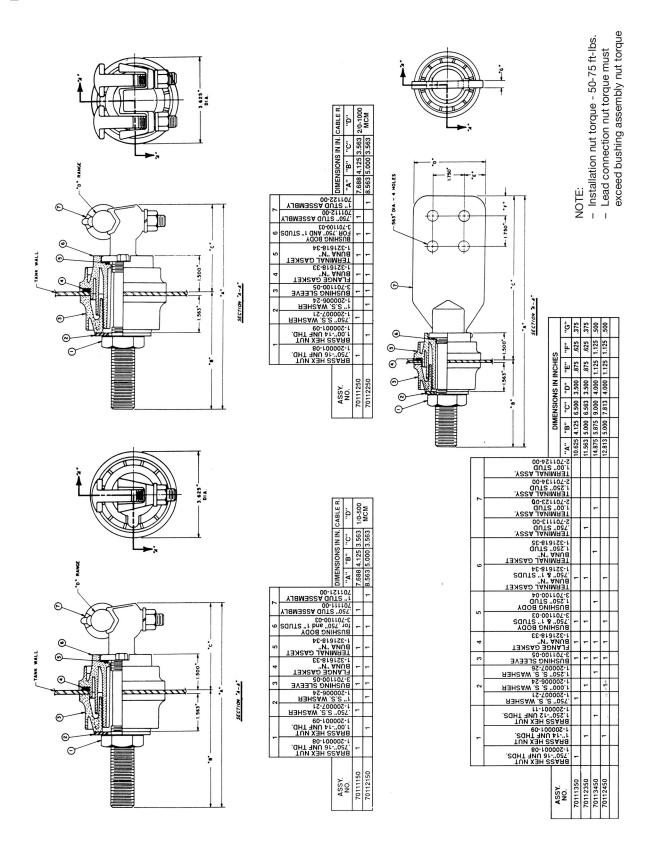
■Single Eyebolt	Cable Range #1/0 - 500 MCM
Double Eyebolt	Cable Range #2/0 - 1000 MCM
■Spade Terminal	NEMA "H"
■Spade Terminal	NEMA "J"

The 1.25" diameter conductor is available with a NEMA "J" spade terminal. We can also provide extended spades for extension beyond radiators. All spades are made of CDA 833 alloy (32% conductivity).





Speedmount II - Mechanical Characteristics



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Speedmount II - Design Tests

UV Exposure Test

Test samples molded from a routine production lot were exposed on a natural sunlight concentrator in Arizona. A daily water spray cycle was included to simulate the effects of dew and rainfall. The exposure time simulated 8-10 years of typical outdoor use.

At the conclusion of the test, the only exposure was a slight color shift. There was no change in surface appearance or tensile strength.

Lighting Impulse Withstand

When tested in accordance with IEEE Std. 4, each bushing withstood three positive and three negative 30kV BIL impulse waves without disruptive discharge or flashover.

AC Withstand - Dry

Each bushing withstood 10kV for one minute without flashover or failure.

AC Withstand - Wet

Each bushing withstood 6kV for ten seconds without flashover or failure.

Temperature Rise

When conducting maximum rated current, the temperature rise of each bushing was not more than 15°C above top oil. The bushings also conducted 150% of the rated current without damage or excessive temperature rise.

Cantilever Strength

On a tank pressurized to 10 psi, the cantilever force required to cause a leak at the gasket was greater than 600 ft-lbs.

Seal Integrity

After exposure to 10 temperature cycles from -40°C to +130°C, each bushing withstood 20 psi without leaks.



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