Speedmount I

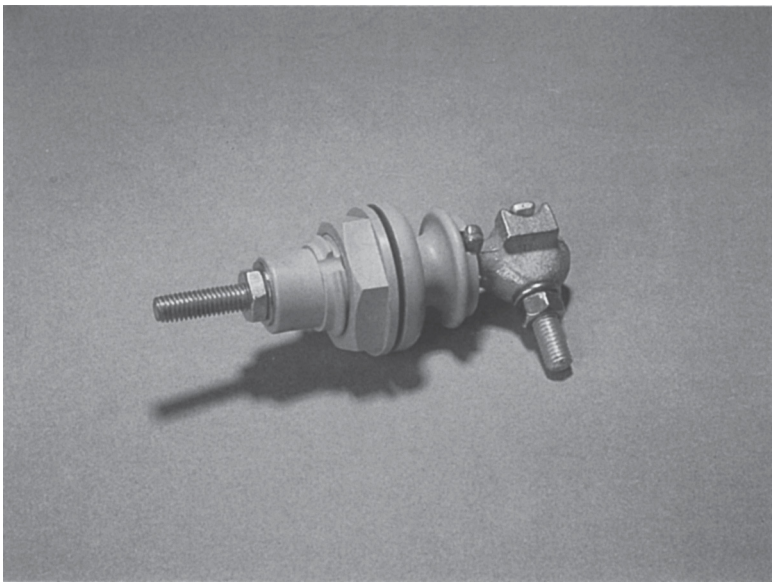
Pole Type Secondary Bushing

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

Product Data Sheet

File No.	PDS1002	Revised:	April 6, 2006
Availability:	Immediate	Supercedes::	8/96

Improved Reliability Through Components Innovation Is Here Today . . .



The Central Moloney Components Operation has built an established record through incredible growth in advanced manufacturing technology. Since its inception in 1970, the Components Operation has been constantly searching for new ways to improve the performance and reliability of our products. Innovation, design quality, flexibility, and delivery are all a part of the continuing story of our Components Operation.

Speedmount I Advantages

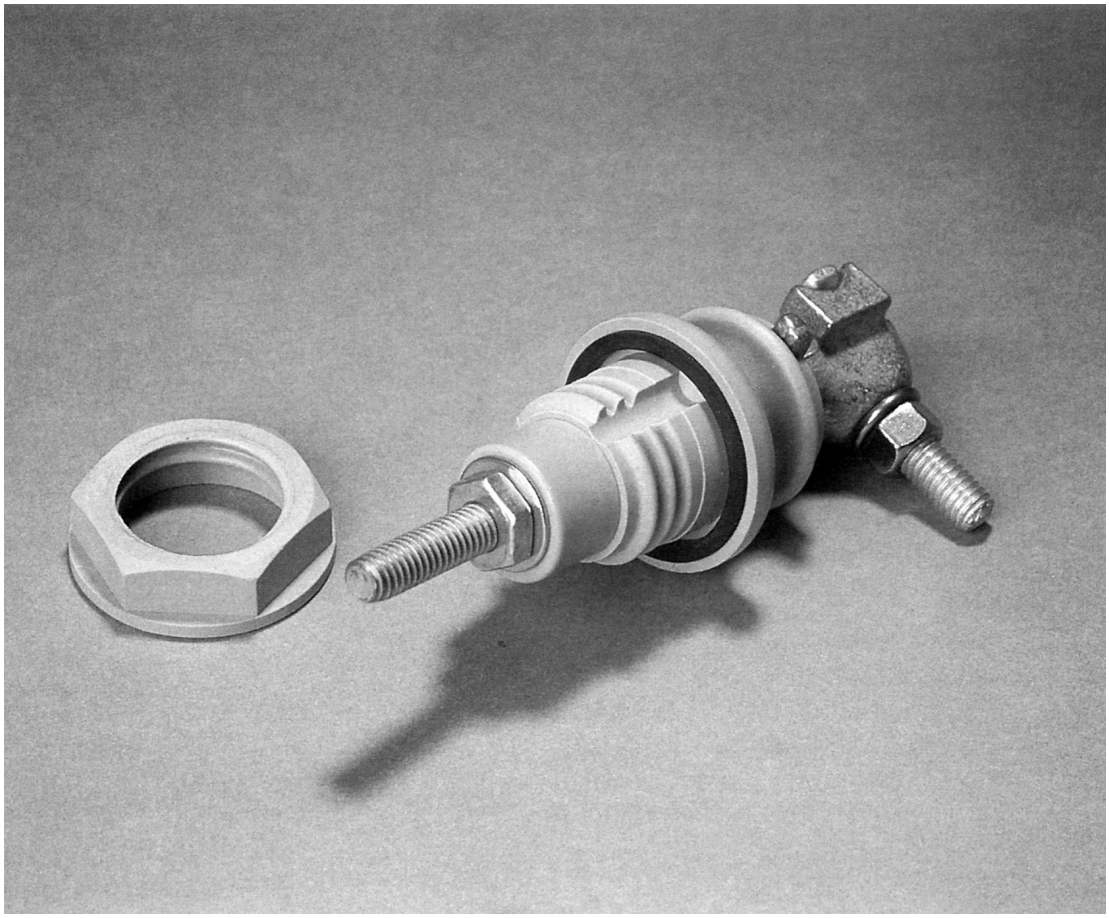
- **Fully retained gaskets with controlled compression**
- **Completely UV shielded gasket construction**
- **Superior cantilever strength – 100 ft-lbs**
- **High impact resistant engineered material**
- **Molded mounting nut**

The seal geometry of the Speedmount I low voltage bushing assembly features a fully retained gasket with controlled compression, independent of the force on the bushing body caused by cable loading. The bushing body design provides positive stops to limit gasket compression. The bushing flange protects the gasket from ultraviolet exposure. Since the Speedmount I's body is in direct contact with the tank surface, cantilever loads are transferred to the tank without disturbing the seal.

Speedmount I Fills Your Rating Requirements

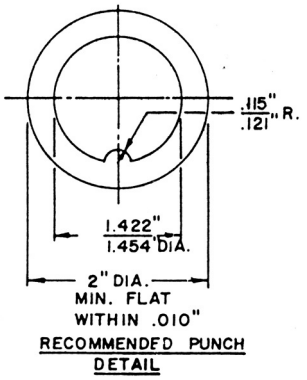
Since the inception of the molded bushing, significant improvements have been made in the design of the bushing assembly. The bushing body is molded from a high strength, engineered, heat resistant material that exhibits exceptional weathering characteristics. Central Moloney Components has been manufacturing and using molded pole type secondary bushings since 1975. The present assemblies are interchangeable with most commonly used molded and porcelain designs in the industry. The conductor assemblies are the same as those used in porcelain and epoxy bushings and are available in either 3/8", 1/2" copper studs, 2-hole or 4-hole NEMA spade terminals.

Speedmount I - The Preferred Industry Standard



SECONDARY BUSHING APPLICATION CHART

KVA	LV	EXTERNAL TERMINATION	STUD
10 & 15 10, 15, & 25 10, 15, & 25	120/240 240/480 277/480Y	Single Eyebolt Range: .128" - .625" Dia.	.375" Dia. Copper Stud
25 37.5 & 50 KVA	120/240 240/480	Single Eyebolt Range: .162" - .750" Dia.	.375" Dia. Copper Stud
37.5 & 50 KVA 75 & 100 KVA 37.5, 50, 75 & 100 KVA	120/240 240/480 277/480 Y	Single Eyebolt Range: .258" - .813" Dia.	.500" Dia. Copper Stud



RECOMMENDED PUNCH DETAIL

Electrical Ratings

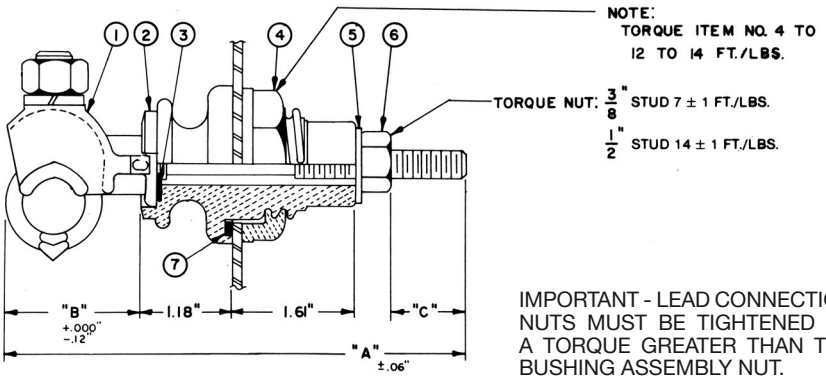
Voltage Class – 1.2kV
AC Withstand – 10kV
Impulse – 30kV BIL

Maximum Continuous Current Ratings:

.375 inch copper conductor – 300 amps
.500 inch copper conductor – 530 amps

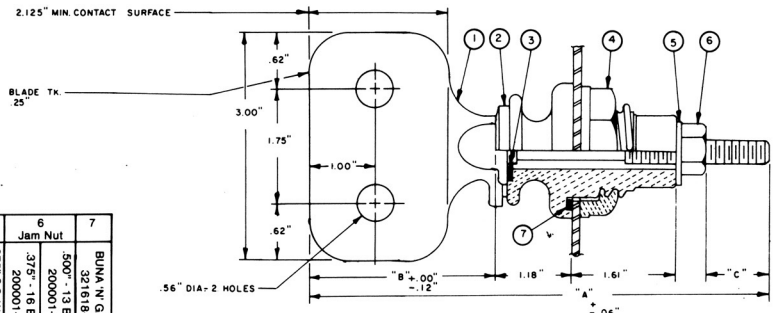
These current ratings are based on the use of adequately sized external and internal leads connected properly to the bushing terminals.

Speedmount I - Choose From a Variety of Terminals

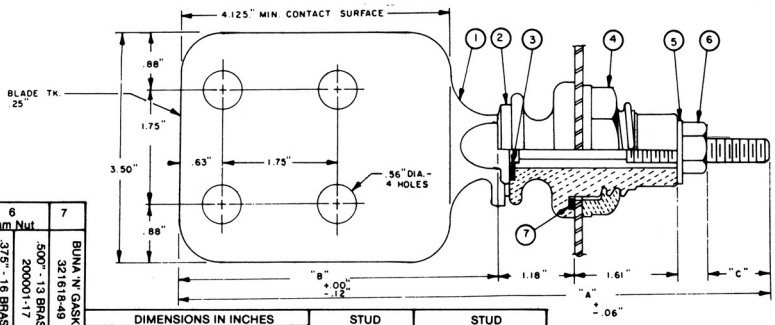


IMPORTANT - LEAD CONNECTION NUTS MUST BE TIGHTENED TO A TORQUE GREATER THAN THE BUSHING ASSEMBLY NUT.

ASSY. NO.	1 Stud-Term Assy. 70101-00	70101-00	70103-00	70102-00	2 BUSHING BODY 701000-76	3 FLAT GASKET .375" 321618-50	FLAT GASKET .500" 321618-51	4 MOUNTING NUT 701000-00	5 .375" S.S. WASHER 200007-51	6 Jam Nut .375"-16 BRASS 200001-16	.500"-13 BRASS 200001-17	7 BUNA 'N' GASKET 321618-49	DIMENSIONS IN INCHES A	B	C	CABLE RANGE	STUD THREAD	STUD MATERIAL
70101153	1				1	1		1	1	1		1	5.94	1.69	1.11	#6 So. - 4/0 Str.	.375"-16 UNC-2A	#110 COPPER
70101253		1			1	1		1	1	1		1	5.89	1.70	1.05	#2 Sol.-350MCM	.375"-16UNC-2A	
70103253			1		1		1	1			1	1	6.39	1.70	1.51	#2 Sol.-350MCM	.500"-13UNC-2A	



ASSY. NO.	1 Stud-Term Assy. 701013-00	701033-00	701023-00	2 BUSHING BODY 701000-76	3 FLAT GASKET .375" 32161850	FLAT GASKET .500" 321618-51	4 MOUNTING NUT 701000-00	5 .375" S.S. WASHER 200007-51	6 Jam Nut .375"-16 BRASS 200001-16	.500"-13 BRASS 200001-17	7 BUNA 'N' GASKET 321618-49	DIMENSIONS IN INCHES A	B	C	STUD THREAD	STUD MATERIAL
70101353	1			1	1		1	1	1		1	7.00	2.81	1.09	.375"-16 UNC-2A	#110 COPPER
70103353		1		1		1	1			1	1	7.50		1.65	.500"-13UNC-2A	



ASSY. NO.	1 Stud Term Assy. 701014-00	701034-00	701024-00	2 BUSHING BODY 701000-76	3 FLAT GASKET .375" 321618-50	FLAT GASKET .500" 321618-51	4 MOUNTING NUT 701000-00	5 .375" S.S. WASHER 200007-51	6 Jam Nut .375"-16 BRASS 200001-16	.500"-13 BRASS 200001-17	7 BUNA 'N' GASKET 321618-49	DIMENSIONS IN INCHES A	B	C	STUD THREAD	STUD MATERIAL
70101453	1			1	1		1	1	1		1	9.00	4.81	1.09	.375"-16 UNC-2A	#110 COPPER
70103453		1		1		1	1			1	1	9.50		1.65	.500"-16UNC-2A	

Speedmount I - 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 evidence of 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 > 150 ft-lbs. on each bushing. At this level, no cracks or visible damage to the bushing body occurred.

Molded Thread Strength

The torque required to damage the threads on each bushing/mounting nut was greater than 50 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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