



MANUFACTURERS OF
ELECTRICAL INSULATION MATERIALS

INSULATING COMPONENTS FOR
POWER SYSTEMS EQUIPMENT

The Gund Company, Inc
St. Louis, Missouri – USA

TEL - 314.423.5200
FAX - 314.423.9009

MATERIAL DATA SHEET

Item: Standoff Insulators

Description: Standoff Insulators are molded of UL recognized flame-resistant and fiberglass reinforced thermoset polyester molding compound. They feature shatter resistance and closer height tolerances than commonly available in porcelain insulators. Moisture and heat resistance properties of standoff insulators are higher than those of conventional plastic insulators.

Voltage Rating:

This is intended to be a guide for indoor service. Insulators mounted within a suitable electrical cabinet are considered indoors even though the cabinet itself is outdoors. An insulator will withstand its rated voltage continuously by industry standards or other specifications may require a different spacing from conductor to ground for a particular voltage. Wet or dirty conditions may require derating an insulator.

Outdoor Use:

Standoff Insulators are primarily intended to be used indoors. Insulators 1642 and 2450 should not be used upside down if there is a possibility of the center hole filling with water.

Short Time Electrical Strength:

For most insulator designs, this is the external flashover voltage in air. A few insulators will puncture instead. The value given is an average of 15 parts tested.

Cantilever Strength:

One end of the insulator is bolted to a flat plate and force is applied to the insert on the other end in a direction parallel to the end at a distance from the plate equal to the insulator height.

Torque Strength:

One end of the insulator is bolted to a flat plate and a normal steel bolt is tightened into the insert on the other end with a torque wrench. The bolt will fail before the insulator and the values published are approximately the values at which the bolt fails. If you use high tensile steel bolts, the insert threads will strip before the bolts fail, but at higher torque values than we publish. 5kV and 15kV insulators are tested differently.

Key Characteristics	1641	2710	2781	3061	5405	5420	5612
Tensile Strength (lbs.)	2,500	7,000	3,500	1,800	6,500	6,500	1,000
Cantilever Strength (lbs.)	2,000	10,000	1,500	800	2,000	1,500	675
Height Tolerance (in.)	± 0.015	± 0.015	± 0.015	± 0.015	± 0.015	± 0.015	± 0.015
Voltage Rating ¹ (V)	2,500	3,400 - 5,500	3,200 - 5,500	600 - 2,700	5,000	15,000	600
Arc Resistance (Seconds)	180	195	180	180	180	180	180
Tracking Index (V)	500+	500+	500+	500+	500+	500+	500+
Creep Distance ² (in.)	3.25	H+0.50	H+0.313	H+0.25	4.0	7.0	H
Basic Impulse Level (V)	n/a	n/a	n/a	n/a	60,000	90,000	n/a
Dielectric Strength (V)	20,000	20,000	20,000	18,000	20,000	20,000	500
Water Absorption (%)	0.14	0.14	0.14	0.14	0.14	0.14	0.14
UL Flame Resistance	94 V-O	94 V-O	94 V-O	94 V-O	94 V-O	94 V-O	94 V-O

¹ Voltage rating increases with insulator height

² H = insulator height

All of the information, suggestions, and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the use contemplated, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.



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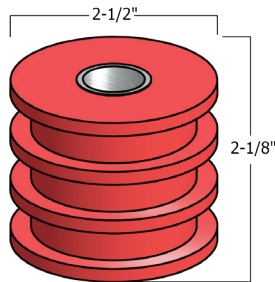
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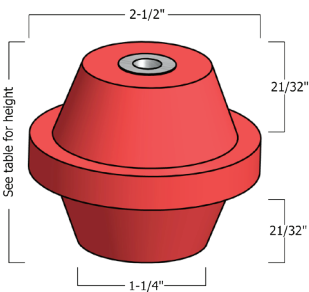
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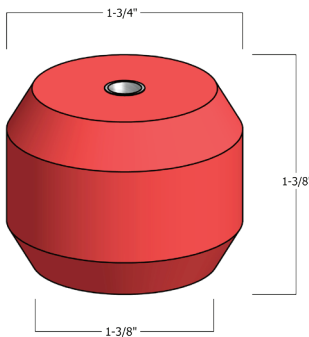
Part No.	Cross Reference Part No.	Height	Thread Size	Pieces Per Case	Weight Per Case, lbs.
*AR-1641-16A	1461-1A	2.125"	3/8-16 x 5/8 DEEP	48	34
*AR-1641-13A	1461-1B	2.125"	1/2- 13 x 5/8 DEEP	48	30
AR-1641-14A	--	2.125"	7/16-14 x 5/8 DEEP	48	33

*UL recognized components under UL Standard 891 File No. E79967



Part No.	Cross Reference Part No.	Height	Thread Size	Pieces Per Case	Weight Per Case, lbs.
*AR-2781-16A	1872-1A	2.50"	3/8-16 x 5/8 DEEP	48	27
*AR-2781-13A	1872-2A	2.50"	3/8-13 x 5/8 DEEP	48	24
*AR-2781-11S	--	2.625"	5/8-11 x 3/4 DEEP (Steel or Alum.)	48	26
*AR-2781-16B	1872-1B	2.75"	3/8-16 x 5/8 DEEP	48	31
*AR-2781-16C	1872-1C	3"	3/8-16 x 5/8 DEEP	48	35
*AR-2781-16D	1872-1D	3.25"	3/8-16 x 5/8 DEEP	48	31
AR-2781-16E	1872-1E	3.50"	3/8-16 x 5/8 DEEP	36	33
AR-2781-16F	--	3.50"	8m x 1.25 – 8 Thread	36	31

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Part No.	Cross Reference Part No.	Height	Thread Size	Pieces Per Case	Weight Per Case, lbs.
*AR-3061-16A	--	1.375"	3/8-16 x 3/8 DEEP (Steel or Alum.)	100	23-20
*AR-3061-16B	2015-2A	1.50"	3/8-16 x 3/8 DEEP	100	28
*AR-3061-16C	2015-2B	1.75"	3/8-16 x 3/8 DEEP	75	28
*AR-3061-16D	2015-2C	2"	3/8-16 x 5/8 DEEP	75	29
*AR-3061-16E	2015-3D	2.25"	3/8-16 x 5/8 DEEP	70	29
AR-3061-16G	--	2.75"	3/8-16 x 5/8 DEEP	50	25
AR-3061-18B	--	1.50"	5/16-18 x 0.562	100	28
AR-3061-8MA	--	1.375"	8m x 1.25 – Thread	100	22

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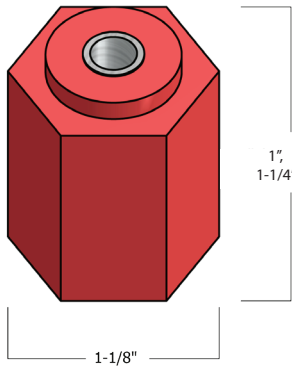
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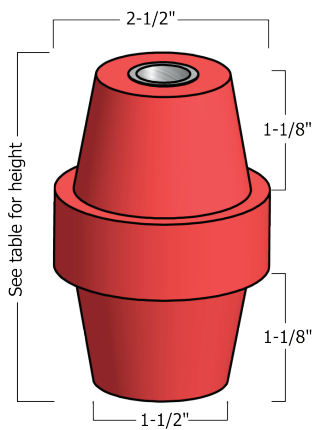
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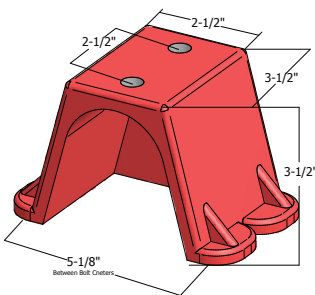
Part No.	Cross Reference Part No.	Height	Thread Size	Pieces Per Case	Weight Per Case, lbs.
*AR-5612-20A	2165-1A	1"	1/4-20 x 1/4 DEEP	300	90
*AR-5612-18A	--	1"	5/16-18 x 1/4 DEEP	150	9
*AR-5612-16A	--	1"	3/8-16 x 1/4 DEEP	150	9
*AR-5612-20B	2165-1B	1.25"	1/4-20 x 1/4 DEEP	300	23
*AR-5612-16B	--	1.25"	3/8-16 x 3/8 DEEP	100	7
AR-5612-6MA	--	1"	6M x 1.5-5 Thrd. Alum.	150	9
AR-5612-8M	--	1"	8M x 1.25-5 Thrd. Alum.	150	9

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Part No.	Cross Reference Part No.	Height	Thread Size	Pieces Per Case	Weight Per Case, lbs.
*AR-2781-16A	1872-1A	2.50"	3/8-16 x 5/8 DEEP	48	27
*AR-2781-13A	1872-2A	2.50"	3/8-13 x 5/8 DEEP	48	24
*AR-2781-11S	--	2.625"	5/8-11 x 3/4 DEEP (Steel or Alum.)	48	26
*AR-2781-16B	1872-1B	2.75"	3/8-16 x 5/8 DEEP	48	31
*AR-2781-16C	1872-1C	3"	3/8-16 x 5/8 DEEP	48	35
*AR-2781-16D	1872-1D	3.25"	3/8-16 x 5/8 DEEP	48	31
AR-2781-16E	1872-1E	3.50"	3/8-16 x 5/8 DEEP	36	33
AR-2781-16F	--	3.50"	8m x 1.25 - Thrd.	36	31

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Part No.	Height	Thread Size	Weight Per Piece, lbs.
2035-1	3.50"	2" Bolt Circle	1.13

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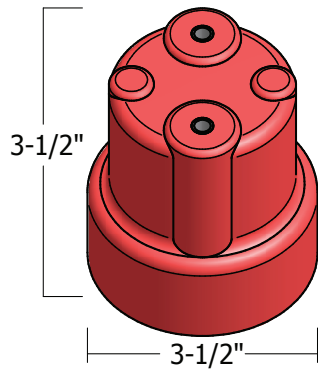
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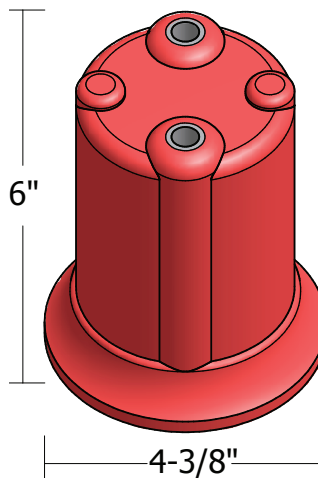
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Part No.	Cross Reference Part No.	Height	Thread Size	Pieces Per Case	Weight Per Case, lbs.
*AR-5405-16A	--	3.50"	3/8-16 x 3/4 DEEP	32	58
*NT-5404-16A	1642-10E	3.50"	3/8-13 x 3/4 DEEP	32	58

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*Offered in two-bolt or four-bolt styles



Part No.	Cross Reference Part No.	Height	Thread Size	Pieces Per Case	Weight Per Case, lbs.
*AR-5405-16A	--	6"	3/8-16 x 3/4 DEEP	16	48
*NT-5405-16A	2450-11	6"	3/8-13 x 3/4 DEEP	16	48

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