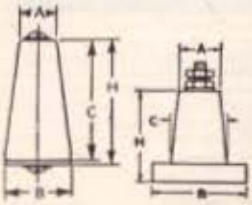


JOHNSON insulators were introduced in the early twenties, and soon established the sort of dominance that occurs occasionally when one line offers more in choice of style and size; in advanced but practical design; and in mass production economy than others. This position has been maintained through the years by careful attention to the product, the line, and the needs of the user.

JOHNSON insulators are specifically designed for high R.F. Insulating materials were selected after exhaustive laboratory tests. Superior grade, low absorption, well glazed electrical porcelain, and Grade L 4 or better steatite are used.



135-20 135-22J 135-22

135-60 135-65

135-62 135-68

135-67 135-66

135-500 135-501 135-502 135-503 135-504

## STAND-OFF AND CONE INSULATORS

The stand-off insulators feature heavy, breakage-resistant bases and adequate "glaze grooves" around mounting screw holes. Numbers 135-65, 135-66, 135-67 and 135-68 have unbreakable, etched aluminum bases.

The No. 500 cone insulator series are steatite for better high frequency insulation. Threads are tapped directly into the ceramic. Furnished complete with machine screws, brass and cushion washers.

### STAND-OFF INSULATORS

| Cat. No. | Dimensions A | B | M* | H | Hardware |
|---|---|---|---|---|---|
| **Steatite** | | | | | |
| 135-20 | ¾ | 1¾ | 1⅛ | 1⅛ | 10-32 |
| 135-20J | ¾ | 1¾ | 1⅛ | 1⅛ | 74 Jack |
| 135-22 | ⅝ | 1⅛ | 1⅛ | 1 | 8-32 |
| 135-22J | ⅝ | 1⅛ | 1⅛ | 1 | 74 Jack |
| 135-24 | ⅜ | 1 | ⅝ | ⅝ | 6-32 |
| **Porcelain** | | | | | |
| 135-60 | 1⅛ | 2½ | 1⅞ | 4½ | ¼-20 |
| 135-62 | ⅞ | 1⅞ | 1⅜ | 2¾ | ¼-20 |
| **Metal Base Types** | | | | | |
| 135-65 | ⅜ | 1⅞ | 1½ | 1⅜ | 10-32 |
| 135-65J | ⅜ | 1⅞ | 1½ | 1⅜ | 74 Jack |
| 135-66 | ⅝ | 1¾ | 1⅜ | 2¾ | ¼-20 |
| 135-66J | ⅝ | 1¾ | 1⅜ | 2¾ | 74 Jack |
| 135-67 | 1⅛ | 2¼ | 1¾ | 4½ | ¼-20 |
| 135-67J | 1⅛ | 2¼ | 1¾ | 4½ | 74 Jack |
| 135-68 | ⅝ | 1¾ | 1⅜ | 2 | 10-32 |
| 135-68J | ⅝ | 1¾ | 1⅜ | 2 | 74 Jack |

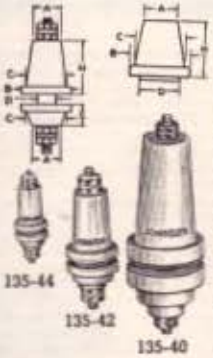
* Mounting centers.

### STEATITE CONE INSULATORS

| | | | | |
|---|---|---|---|---|
| 135-500 | ⅛ | ⅜ | ⅜ | 6-32 |
| 135-501 | ½ | ¾ | 1 | 8-32 |
| 135-502 | ½ | 1 | 1½ | 8-32 |
| 135-503 | ⅝ | 1½ | 2 | 10-32 |
| 135-504 | ¾ | 1½ | 3 | 10-32 |

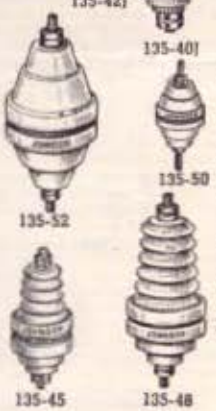
Of the insulators appearing under the headings "Steatite" all but the 500 series and the 135-55 are offered in this finer material for the first time. Their dielectric losses are but a fraction of those for the same parts in porcelain, and they are particularly recommended for high frequency work.

In addition to fine quality insulating materials the JOHNSON line distinguishes itself with a perfection of ceramic design; logical proportions; clean-cut accurate molding; and high grade nickel plated brass hardware, with milled (not stamped) nuts.

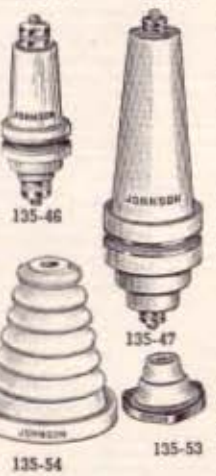


135-44 135-42 135-40

135-55 135-42J 135-40J



135-52 135-50 135-45 135-48



135-46 135-47 135-54 135-53

115-240, -241, -242

## THRU-PANEL INSULATORS AND BUSHINGS

In the thru-panel and bushing series special attention has been given to obtaining high mechanical strength through heavier construction and at the same time increasing the breakdown voltage. Flat mounting surfaces with cushion washers eliminate breakage. Bottom pieces have long internal and external portions for higher breakdown voltage rating, and grooved surfaces to increase leakage path. Jack types have terminals permitting connection above as well as below the panel.

JOHNSON lead-in bushings are designed to have even greater mechanical strength and long leakage path in proportion to size. Numbers 135-53 and 135-54 are supplied as single porcelain parts including cushion washers.

Nos. 135-50 and 135-55 are steatite and have a special interlocking feature which permits mounting on thin panels without extra spacing washers.

Nos. 20, 20J, 22, 22J and 24 are now also steatite with heavily plated brass hardware.

### THRU-PANEL INSULATORS

| Cat. No. | Dimensions A | B | D | E | H | Hardware |
|---|---|---|---|---|---|---|
| **Steatite** | | | | | | |
| 135-40 | ⅜ | ⅜ | ⅛ | ½ | 1⅛ | 10-32 |
| 135-40J | ⅜ | ⅜ | ⅛ | ½ | 1⅛ | 74 Jack |
| 135-42 | ½ | ⅝ | 400 | ⅝ | ⅞ | 10-32 |
| 135-42J | ½ | ⅝ | 400 | ⅝ | ⅞ | 74 Jack |
| 135-44 | ⅝ | ⅞ | 205 | ⅞ | ⅝ | 6-32 |
| 135-45 | ⅝ | 1¼ | ½ | ⅜ | 1⅜ | 10-32 |
| **Porcelain** | | | | | | |
| 135-45J | ⅝ | 1¼ | ½ | ⅜ | 1⅜ | 74 Jack |
| 135-46 | ⅜ | 1⅝ | ⅜ | 1 | 2¼ | ¼-20 |
| 135-46J | ⅜ | 1⅝ | ⅜ | 1 | 2¼ | 74 Jack |
| 135-47 | 1⅛ | 2½ | ⅜ | 1½ | 4½ | ¼-20 |
| 135-47J | 1⅛ | 2½ | ⅜ | 1½ | 4½ | 74 Jack |
| 135-48 | ⅝ | 1⅝ | ⅜ | ⅛ | 2 | 10-32 |
| 135-48J | ⅜ | 1⅝ | ⅜ | ⅛ | 2 | 74 Jack |

### LEAD-IN BUSHINGS

| | | | | | |
|---|---|---|---|---|---|
| **Steatite** | | | | | |
| 135-50 | ⅜ | ¾ | ⅜ | ½ | 6-32 |
| 135-55 | ½ | ¾ | ⅜ | ¼ | 6-32 |
| **Porcelain** | | | | | |
| 135-51 | ⅝ | 1¼ | ⅜ | ⅜ | 10-32 |
| 135-52 | ⅞ | 1¾ | 1⅛ | 1⅛ | ¼-20 |
| 135-53 | 1⅛ | 2½ | 1⅜ | 1¾ | |
| 135-54 | 1 | 3½ | 2⅛ | 4 | |

### MOUNTING FLANGES

Stamped aluminum Mounting Flanges cast aluminum for Lead-in Bushings 135-53 and 135-54.

| Cat. No. | For Bushing No. |
|---|---|
| 135-90 | 135-53 |
| 135-91 | 135-54 |

### THREADED BRASS ROD

Intended primarily for use with lead-in bushings 135-53 and 135-54. Accurately cut threads, heavy nickel plating, complete with 4 washers and 4 nuts, ¼" diameter, ¼-20 thread. It has many other uses in radio construction.

| Cat. No. | Length |
|---|---|
| 115-240 | 8" |
| 115-241 | 10" |
| 115-242 | 15" |