

## (0431167281)

Part Number: 0431167281

31 ROUND CABLE CORE ASSEMBLY

Explanation of Part Numbers:

- Digits 1 & 2 = Product Class
- Digits 3 & 4 = Material Grade

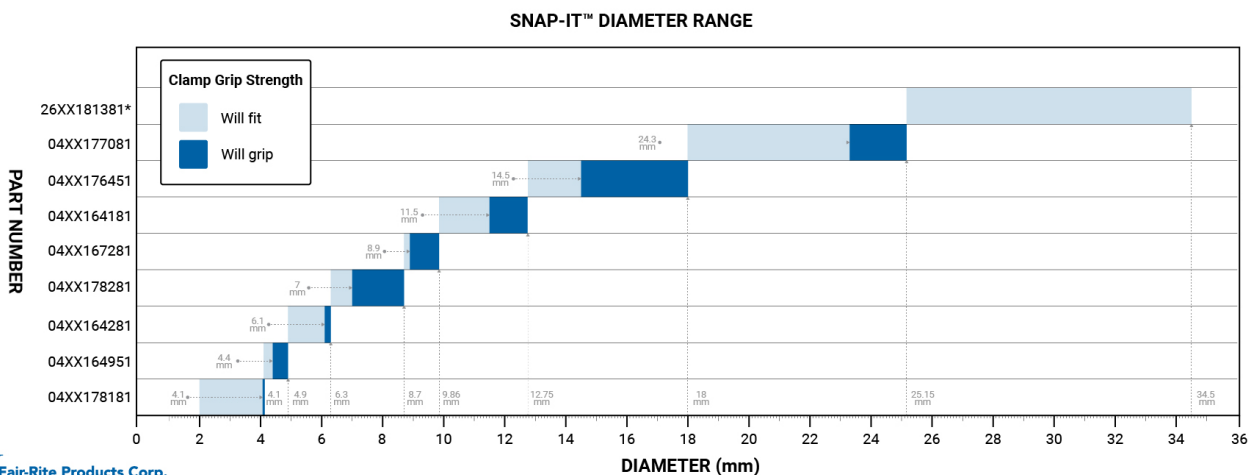
**Round cable snap-it™ can easily accommodate round cables or bundled wires with diameters from 2.5 mm (0.100) to 25.4 mm (1.000). These assemblies are available in four ferrite material classes to suppress differential or common-mode conducted EMI from 1 MHz into the GHz region. The polypropylene cases are meeting the RoHS restrictions of hazardous substances and have a flammability rating of UL 94 V-0.**

Many of the snap-it™ parts have round core equivalents. See Round Cable EMI Suppression Cores.

Round Cable Snap-It™ Kits are available for each of the four suppression materials. 31 Snap-It™ Kit (0199000030), 43 Snap-It™ Kit (0199000031), 46 Core and Snap-It™ Kit (0199000032) and 61 Snap-It™ Kit (0199000033).

[Catalog Drawing](#)

[3D Model](#)



The B dimension is the core inside diameter.

Weight: 33 (g)

| Dim | mm    | mm tol     | nominal inch | inch misc. |
|-----|-------|------------|--------------|------------|
| A   | 23.0  | mm +/- 1.5 | 0.906        | -          |
| B   | 9.85  | />         | 0.388 min    |            |
| C   | 39.50 | +/- 2.0    | 1.55         | -          |
| D   | 11.7  | +/- .50    | 0.461        | -          |

| Cable Information |               |                  |                  |
|-------------------|---------------|------------------|------------------|
| Max Diameter      | Max Dimension | Solid Equivalent | Flat Cable Cores |
| 9.85<br>0.388     | -             | 2631626402       | -                |

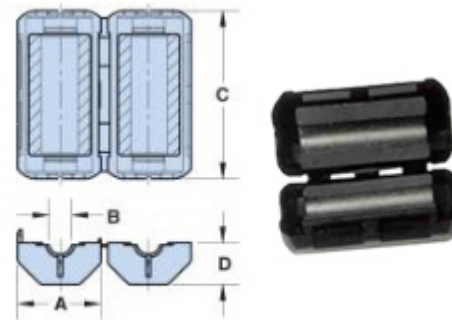


Figure 1

### Chart Legend

+ Test frequency

•For solid cable cores, see Round Cable EMI Suppression Cores

| Typical Impedance ( $\Omega$ ) |      |
|--------------------------------|------|
| 1 MHz                          | 17.7 |
| 5 MHz                          | 65   |
| 10 MHz <sup>+</sup>            | 88   |
| 25 MHz <sup>+</sup>            | 136  |
| 100 MHz <sup>+</sup>           | 239  |
| 250 MHz                        | 284  |

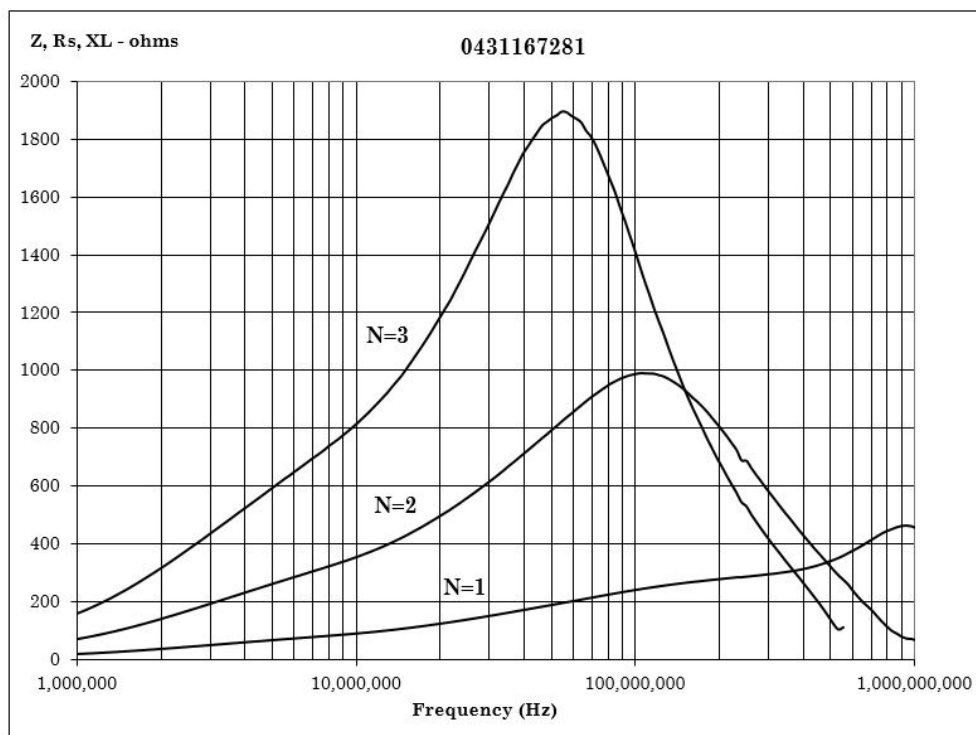
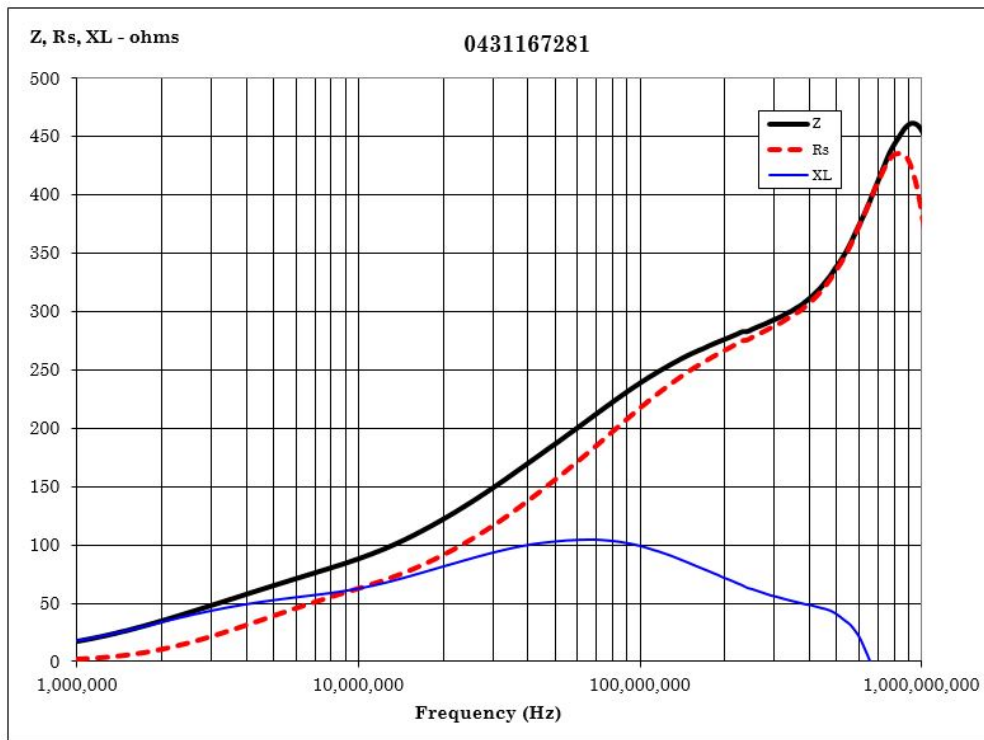
Round cable snap-it™ assemblies are controlled for impedances only. Minimum impedance values are specified for the + marked frequencies. The minimum impedance is typically the listed impedance less 20%.

### [Catalog Drawing](#)

Single turn impedance tests for 31, 43 and 46 material cores are performed on the E4991A/HP4291B Impedance Analyzer. The 61 material parts are tested on the E4991A / HP4291B Impedance Analyzer and 75 material parts are tested on the E4990A Impedance Analyzer. Cores are tested with the shortest practical wire length.

| Typical Impedance ( $\Omega$ ) |    |
|--------------------------------|----|
| 1 MHz                          | 18 |
| 5 MHz                          | 56 |
| 10 MHz <sup>+</sup>            | 81 |

| Typical Impedance ( $\Omega$ ) |     |
|--------------------------------|-----|
| 25 MHz <sup>+</sup>            | 144 |
| 100 MHz <sup>+</sup>           | 240 |
| 250 MHz                        | 270 |



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