



MACLEAN SENIOR INDUSTRIES

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To: Distributors and Customers of MacLean Senior Industries

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Topic: Strandwise® and Strandlink® Connectors for 1/4" / 6.6M strand

The Strandwise and Strandlink connectors are the “original automatic connector” offered to the Communications market since the 1940’s. These connectors are “Made in the USA”, and have been a critical item for everyday line construction, and a preferred product for emergency storm restoration.

In the last few months we have observed an increased occurrence of application issues with 1/4" / 6.6M strand. In virtually every case we have determined that the **incorrect connector is being chosen.**

- **The problem is selecting the wrong connector for EHS (extra high strength) strand.**



The occurrence rate of field issues is an extremely small % of the number of units installed annually, fractions of a percentage point. The concern is that the Strandwise product serves a critical application role in pole guying and overhead construction. A failed Strandwise results in a line drop or improper pole guying.

There are two series of connectors available ---- All Grades series and Universal series. The difference between these series lies with the ability of the connector to handle EHS (extra high strength) strand:

- All Grades series = the original product from the 1940’s and is designed primarily for high strength utility grade strand.
- Universal series = designed over 20 years ago and is intended primarily to handle EHS (extra high strength) strand.

What is different about the Universal series that allows it to hold EHS strand ?

- The Universal series is physically longer in length and larger in diameter than the All Grades equivalent. The larger size reflects the use of four jaws (as opposed to three jaws on the All Grades) and a longer jaw length. This design increases the surface area contact between the jaws of the Universal Strandwise and the EHS strand.

How does this alert change my Strandwise work practice ?

- If your construction practices use only high strength utility grade strand, you can use either the All Grades or the Universal product, at your discretion.
- If you use EHS strand, the only product that is approved by MSI is the Universal series product. The recommendation from MSI is to standardize your purchasing and work practices to the Universal series.

What about product already installed using an All Grades connector and EHS strand ?

- Internal testing has shown that the All Grades (not intended for EHS strand) product can hold most EHS strand, but not 100% of the time. Strand at the low end of the ASTM diameter range, inconsistent lay of the strands, rough cuts (on splice applications), and bent strand (decreasing surface area contact) are variables that can impact the ability for a successful hold.
- Most field issues present themselves immediately upon installation, or soon after installation.

Background of the Strandvise Product Line

The Strandvise product is the “original” automatic connector, and the only product “Made in the USA”. Every product is stamped with a date code for traceability. Accept no substitute !



MacLean factory in Trenton, TN

MSI products are color coded for easy identification, and follow the existing color code system used by formed wire deadends.



Catalog information:

STRANDLINK® CONNECTOR

- Used for splicing applications with overhead or down guy wire
- Rated to hold a minimum of 90% of RBS of the strand used
- "Universal Grades" are recommended for use with Alumoweld, EHS, aluminized and galvanized steel strand
- "All Grades" are recommended for use on common grade, Siemens-Martin, high strength utility grade, galvanized and aluminized steel strand
- U.S. made versions available



Universal Grade

| Part Number | Primary Strand Application | Range | Connector Length | Connector Diameter | Carton Qty | Carton Weight |
|-------------|----------------------------|------------|------------------|--------------------|------------|---------------|
| 5039 | 3/16" | .145-.215" | 7.5" | 1.03" | 50 | 21 Lbs. |
| 5040 | 1/4" | .215-.270" | 7.62" | 1.13" | 50 | 27 Lbs. |
| 5041 | 5/16" | .270-.315" | 9.28" | 1.26" | 50 | 41 Lbs. |
| 5042 | 3/8" | .325-.392" | 10.62" | 1.45" | 25 | 30 Lbs. |
| 5043 | 7/16" | .392-.455" | 10.59" | 1.59" | 25 | 36 Lbs. |
| 5044 | 1/2" | .455-.520" | 10.75" | 1.70" | 25 | 43 Lbs. |

All Grade

| Part Number | Primary Strand Application | Range | Connector Length | Connector Diameter | Carton Qty | Carton Weight |
|-------------|----------------------------|------------|------------------|--------------------|------------|---------------|
| 4999 | 3/16" | .185-.193" | 5.10" | 0.70" | 50 | 8 Lbs. |
| 5000 | 1/4" | .240-.253" | 6.40" | 0.90" | 100 | 29 Lbs. |
| 5001 | 5/16" | .310-.335" | 7.25" | 1.04" | 50 | 24 Lbs. |
| 5002 | 3/8" | .360-.405" | 8.00" | 1.25" | 50 | 35 Lbs. |

Reducers

| Part Number | Primary Strand Application | Range Large End | Range Small End | Carton Qty | Carton Weight |
|-------------|----------------------------|-----------------|-----------------|------------|---------------|
| 5086 | 1/4" x 3/16" | .215-.270" | .145-.215" | 25 | 15 Lbs. |
| 5087 | 5/16" x 1/4" | .270-.315" | .215-.270" | 25 | 20 Lbs. |
| 5022 | 3/8" x 5/16" | .360-.450" | .310-.335" | 50 | 36 Lbs. |
| 5023 | 7/16" x 3/8" | .410-.455" | .360-.405" | 25 | 35 Lbs. |

STRANDWISE® CONNECTOR

- Used for deadend applications with overhead or down guy wire
- Rated to hold a minimum of 90% of RBS of the strand used
- Color indicator for easy identification
- "Universal Grades" are recommended for use with Alumoweld, EHS, aluminized and galvanized steel strand
- "All Grades" are recommended for use on common grade, Siemens-Martin, high strength utility grade, galvanized and aluminized steel strand
- U.S. made versions available



3/16" Universal Grade Strand - Red Wire range: .145 - .215"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5199 | 10.12" | 4.66" | 1.63" | A | 50 | 19 Lbs. |
| 5255 | 12.75" | 4.66" | 2.75" | E | 25 | 15 Lbs. |
| 5261 | 22.31" | 4.66" | 2.75" | E | 25 | 20 Lbs. |

1/4" Universal Grade Strand - Yellow Wire range: .215 - .270"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5200 | 10.38" | 4.88" | 1.63" | A | 50 | 27 Lbs. |
| 5250 | 13.87" | 4.88" | 2.25" | B | 50 | 37 Lbs. |
| 5200L | 13.87" | 4.88" | 1.63" | C | 50 | 37 Lbs. |
| 5262 | 22.62" | 4.88" | 2.75" | E | 25 | 20 Lbs. |
| 5268 | 28.63" | 4.88" | 2.75" | E | 25 | 22 Lbs. |

5/16" Universal Grade Strand - Black Wire range: .270 - .315"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5201 | 10.69" | 5.38" | 1.63" | A | 50 | 42 Lbs. |
| 5251 | 14.00" | 5.38" | 2.25" | B | 50 | 48 Lbs. |
| 5201L | 15.75" | 5.38" | 1.63" | C | 50 | 50 Lbs. |
| 5257 | 14.06" | 5.38" | 2.75" | E | 20 | 21 Lbs. |
| 5263 | 23.44" | 5.38" | 2.75" | E | 25 | 32 Lbs. |
| 5269 | 29.69" | 5.38" | 2.75" | E | 20 | 27 Lbs. |

3/8" Universal Grade Strand - Orange Wire range: .325 - .392"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5202 | 12.88" | 6.47" | 1.63" | A | 25 | 33 Lbs. |
| 5252 | 15.12" | 6.47" | 2.25" | B | 25 | 35 Lbs. |
| 5202L | 18.00" | 6.47" | 2.00" | C | 25 | 38 Lbs. |
| 5264 | 25.00" | 6.47" | 2.75" | E | 20 | 37 Lbs. |
| 5270 | 31.00" | 6.47" | 2.75" | E | 20 | 42 Lbs. |

7/16" Universal Grade Strand - Green Wire range: .392 - .455"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5203 | 14.75" | 6.72" | 2.06" | A | 25 | 43 Lbs. |
| 5253-6 | 17.25" | 6.72" | 2.75" | D | 25 | 46 Lbs. |
| 5203L | 21.00" | 6.72" | 2.00" | C | 25 | 54 Lbs. |

1/2" Universal Grade Strand - Blue Wire range: .455 - .520"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5204 | 16.31" | 7.09" | 2.06" | A | 20 | 48 Lbs. |
| 5254 | 17.50" | 7.09" | 2.25" | B | 20 | 48 Lbs. |
| 5254-6 | 17.38" | 7.09" | 2.75" | D | 20 | 49 Lbs. |
| 5204L | 20.50" | 7.09" | 2.00" | C | 20 | 54 Lbs. |

3/16" All Grade Strand - Red Wire range: .185 - .193"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5099 | 8.06" | 2.97" | 1.63" | A | 50 | 11 Lbs. |

1/4" All Grade Strand - Yellow Wire range: .240 - .253"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5100 | 9.56" | 3.94" | 1.63" | A | 50 | 20 Lbs. |
| 5150 | 12.82" | 3.94" | 2.25" | B | 50 | 23 Lbs. |
| 5100L | 13.10" | 3.94" | 1.63" | C | 25 | 12 Lbs. |

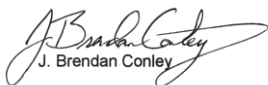
5/16" All Grade Strand - Black Wire range: .310 - .335"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5101 | 9.88" | 4.37" | 1.63" | A | 50 | 27 Lbs. |
| 5151 | 13.10" | 4.37" | 2.25" | B | 50 | 32 Lbs. |

3/8" All Grade Strand - Orange Wire range: .360 - .405"

| Part Number | Overall Length | Cartridge Length | Bail Width | Bail Type | Carton Qty | Carton Weight |
|-------------|----------------|------------------|------------|-----------|------------|---------------|
| 5102 | 11.88" | 5.00" | 1.63" | A | 50 | 41 Lbs. |
| 5152 | 13.82" | 5.00" | 2.25" | B | 50 | 45 Lbs. |
| 5152-6 | 13.50" | 5.00" | 2.75" | D | 25 | 26 Lbs. |

Sincerely,
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