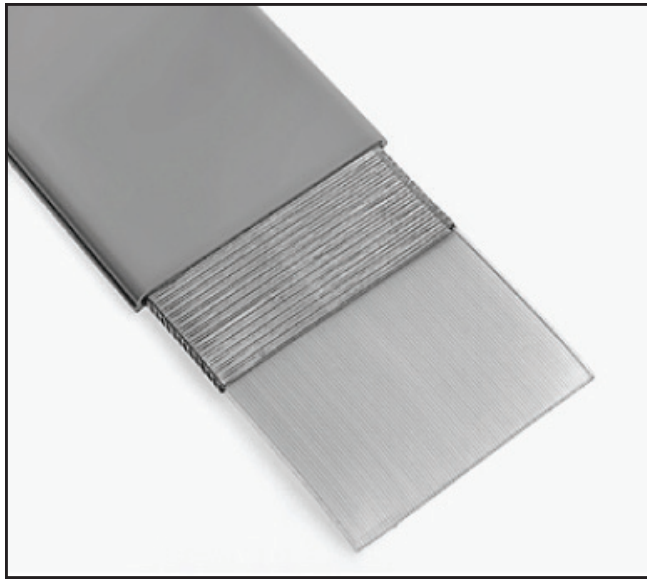


# 3M™ Pleated Foil Shielded Cable

.025" 30 AWG Stranded, TPE Primary, Thin TPE Cover

90202 Series



- Can be used with IDC mass termination connectors
- Pleated copper foil provides flexibility and 35db average shielding effectiveness
- See Regulatory Information Appendix (RIA) for chemical compliance information (RIA E1 & C1 apply)

Date Modified: September 3, 2013

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Sheet 1 of 2

## Physical

**Insulation Material:** Thermoplastic Elastomer (TPE)

Color: Gray

**Primary Material:** Thermoplastic Elastomer (TPE)

Color: Gray

**Marking Standard:** None

Canadian Option: **AWM** 20297 105C 150V VW1 3M NU C **AWM** IA 105C 150V FT1 EU <50V

**Conductors:** 30 AWG, 7 × 38 AWG [ 7 × Ø 0.102 ] Tinned Stranded Copper

Shielding: Solid, Pleated, Copper Foil

## Electrical

**Voltage Rating:** USA: 150V Canada: 150V EU: <50V

**Insulation Resistance:** (Primary) > 1 × 10<sup>10</sup> Ω/10 ft. [ 3 m ]

| <b>Characteristic Impedance:</b> | <b>Unbalanced</b> | <b>Balanced</b> |
|----------------------------------|-------------------|-----------------|
|                                  | 46.1 Ω            | 88.5 Ω          |

|                     |                         |                        |
|---------------------|-------------------------|------------------------|
| <b>Capacitance:</b> | 35.3 pF/ft [ 116 pF/m ] | 18.3 pF/ft [ 60 pF/m ] |
|---------------------|-------------------------|------------------------|

|                    |                          |                          |
|--------------------|--------------------------|--------------------------|
| <b>Inductance:</b> | 0.08 µH/ft [ 0.25 µH/m ] | 0.14 µH/ft [ 0.47 µH/m ] |
|--------------------|--------------------------|--------------------------|

|                           |                          |                          |
|---------------------------|--------------------------|--------------------------|
| <b>Propagation Delay:</b> | 1.63 ns/ft [ 5.35 ns/m ] | 1.62 ns/ft [ 5.31 ns/m ] |
|---------------------------|--------------------------|--------------------------|

|                                 |     |     |
|---------------------------------|-----|-----|
| <b>Velocity of Propagation:</b> | 62% | 62% |
|---------------------------------|-----|-----|

Note: Unbalanced is measured between ground-signal-ground conductors with shield grounded. Balanced is measured between signal conductors within a pair with the shield floating.

## Environmental

**Temperature Rating:** -20°C to +105°C

**Flammability Rating:** USA: VW-1 Canada: FT1

**Regulatory Classification:** EU: Not compliant, see RIA note E4

CN: , see RIA note C1

Regulatory Information Appendix (RIA) attached

UL File No.: E118773, Power Limited Circuit Cable: CL2

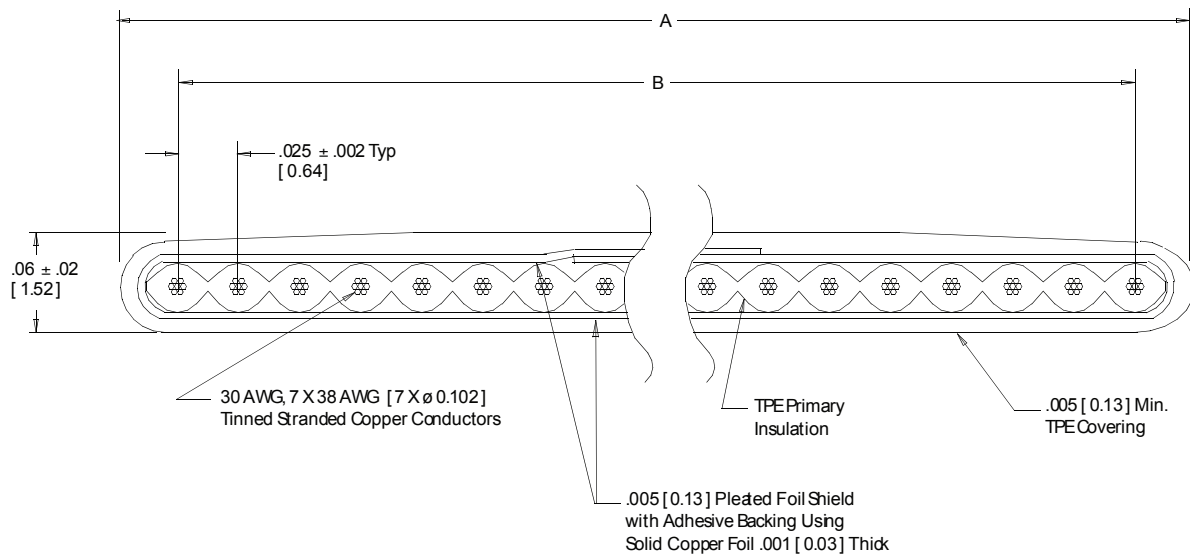
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.025" 30 AWG Stranded, TPE Primary, Thin TPE Cover

90202 Series



| Number of Conductors | 3M Part Number | Dimension A   | Dimension B            |
|----------------------|----------------|---------------|------------------------|
| 20                   | 90202/20       | 0.54 [ 13.7 ] | 0.475 ± .006 [ 12.06 ] |
| 26                   | 90202/26       | 0.69 [ 17.5 ] | 0.625 ± .006 [ 15.88 ] |
| 36                   | 90202/36       | 0.94 [ 23.9 ] | 0.875 ± .009 [ 22.23 ] |
| 40                   | 90202/40       | 1.04 [ 26.4 ] | 0.975 ± .009 [ 24.77 ] |
| 50                   | 90202/50       | 1.29 [ 32.8 ] | 1.225 ± .009 [ 31.11 ] |
| 60                   | 90202/60       | 1.54 [ 39.1 ] | 1.475 ± .012 [ 37.47 ] |
| 68                   | 90202/68       | 1.74 [ 44.2 ] | 1.675 ± .012 [ 42.55 ] |
| 80                   | 90202/80       | 2.04 [ 51.8 ] | 1.975 ± .015 [ 50.17 ] |
| 100                  | 90202/100      | 2.54 [ 64.5 ] | 2.475 ± .017 [ 62.87 ] |



Inch  
[mm]

| Tolerance Unless Noted |     |      |       |
|------------------------|-----|------|-------|
|                        | .0  | .00  | .000  |
| Inch                   | ±.1 | ±.05 | ±.010 |

[ ] Dimensions for Reference Only

Note: Blue marking on edge of primary cable designates wire #1.

## Ordering Information

90202/XX XX

Blank = Standard  
C = Canadian Certified Version

Number of Conductors  
(See Table)

Blank = Standard  
SF = Splice Free

Note: Available in standard 100 ft or 300 ft rolls, please specify when ordering. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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