

Panduit Permanent Identification System



Permanent identification solutions enable reliable, comprehensive identification in harsh and industrial environments. The Panduit permanent identification system delivers long-term durability and legibility for optimum identification of pipes, conduit, cables and equipment. Featuring on-site custom marking tools, these systems offer portability for permanent identification on demand.

Key Features

Benefits

Stainless Steel and Aluminum Marker Plates, Tags, and Cable Ties

| | |
|---|---|
| Broad offering of metal materials available for marker plates and cable ties | Choose the best metal material to meet the requirements of the application |
| Easy feed cable tie slot | Raised slot provides easy cable tie insertion to speed installation (available on select marker plates) |
| Patented Self-locking cable tie design | Reduces the number of installation steps required to provide lowest installed cost |
| Smooth cable tie cut-off | Eliminates burrs and sharp edges after installation to protect installer and adjacent bundles |
| Smooth surfaces and rounded edges | Protects the cable bundle and the installer for improved productivity, job site safety, and reliability |

On-Site Custom Marking Tools

| | |
|--|--|
| Automatic embossing system | The system automatically creates raised characters on stainless steel and aluminum marker plates and tags, quickly and easily using Easy-Mark Plus™ Labeling Software, to deliver maximum visibility for applications that are exposed to dirt and paint |
| Metal embossing hand tool and tape system (MEHT187) | Multi-functional cutting die design creates embossed marker plates with raised cable tie slot in one step instead of three, for faster installation Lightweight and portable, easily moves from one job site to another; this system embosses 3/16" characters onto stainless steel or aluminum tape, to improve visibility in applications that are subjected to dirt or paint |
| Metal indenting machine | Stable bench top tool safely indents on a wide variety of marker plates, tags, ties and straps to provide quick identification |

Permanent Identification System

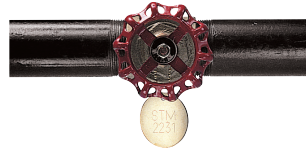
Applications



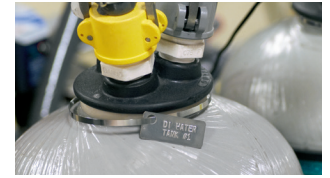
Cable Identification



Pipe Identification



Valve/Device Identification



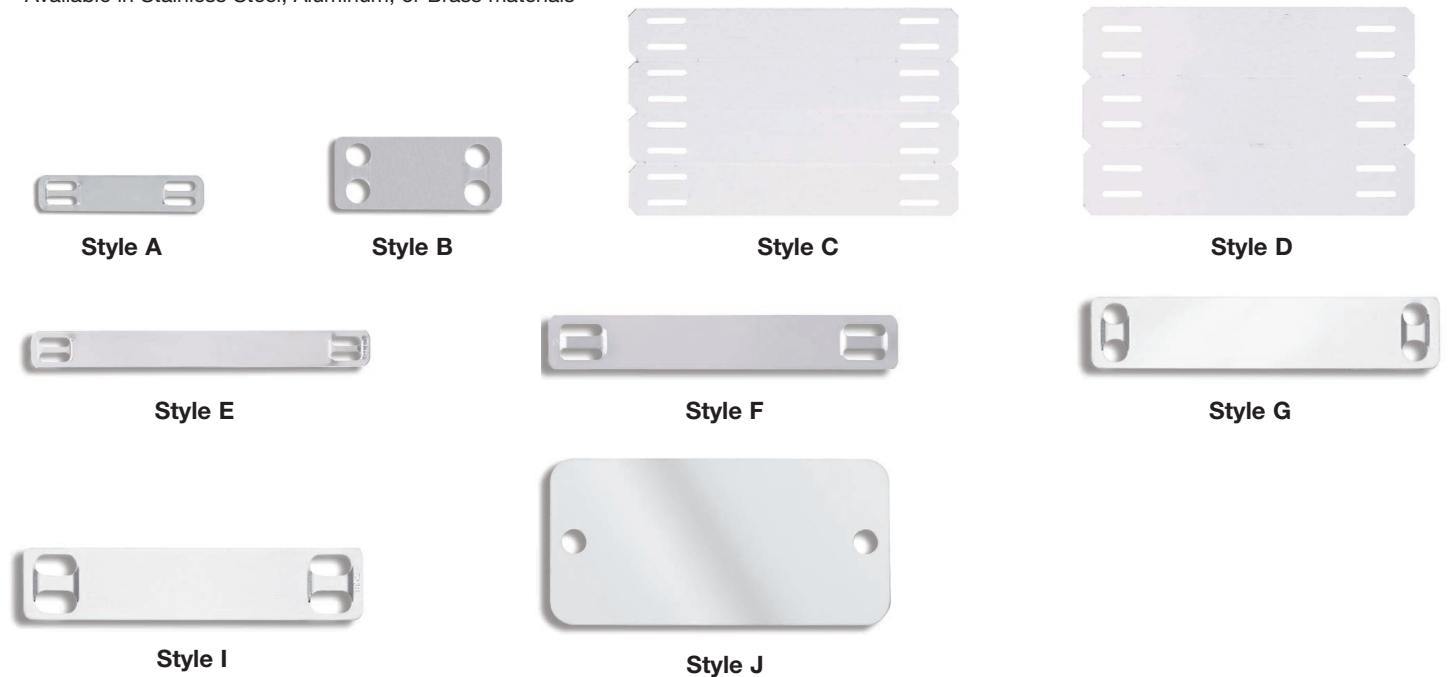
General Mechanical Identification

Technical Information

| | Pan-Steel® Stainless Steel, Marker Plates, Tags, and Cable Ties | Pan-Alum™ Aluminum Marker Plates and Cable Ties | Brass Tags |
|--|---|---|-------------------|
| Material: | 304 and 316 Grade Stainless Steel | Aluminum – Natural and Anodized | Brass |
| Maximum temperature rating: | 538°C (1000°F) | 100°C (212°F) | 150°C (302°F) |
| Minimum temperature rating: | -80°C (-112°F) | -80°C (-112°F) | -80°C (-112°F) |
| RoHS: | Compliant | Compliant | Compliant |
| Flammability: | Non-flammable | Non-flammable | Non-flammable |
| Ultraviolet light resistance: | Excellent | Good | Excellent |

Marker Plates and Tags

- Provides permanent identification of pipes, conduit, valves, cables, and equipment in harsh environments
- Delivers long life when exposed to chemicals, vibration, radiation, weathering, and extreme temperatures
- Available in Stainless Steel, Aluminum, or Brass materials
- Designed for use with Pan-Steel® Stainless Steel Cable Ties for fast installation at lowest installed cost
- For on-site custom marking use with Panduit embossing or indenting systems



| Part Number | Style | Material | Length/ Diameter | | Width/ Diameter | | Thickness | | Used with Pan-Steel® Cable Ties** | For Use With | | | Std. Pkg. Qty.^ | Std. Ctn. Qty. |
|-----------------|-------|---------------------|---------------------|------|--------------------|------|-----------|------|---|--------------|--------|--------|-----------------------|----------------------|
| | | | In. | mm | In. | mm | In. | mm | | MIM | PES197 | PES400 | | |
| MMP172W38-M | A | 304 Stainless Steel | 1.72 | 44.0 | 0.38 | 10.0 | 0.010 | 0.25 | MLT-S | | | ✓ | 1000 | 4000 |
| MMP172-C | B | 304 Stainless Steel | 1.72 | 44.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | | | 100 | 1000 |
| MMP172-M | B | 304 Stainless Steel | 1.72 | 44.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | | ✓ | 1000 | 4000 |
| MMP337W53-MAL-4 | C | Aluminum | 3.37 | 85.6 | 2.12 | 53.8 | 0.016 | 0.41 | MLT-S | ✓ | | ✓ | 1000 | 4000 |
| MMP337W71-MAL-3 | D | Aluminum | 3.37 | 85.6 | 2.12 | 53.8 | 0.016 | 0.41 | MLT-S | ✓ | | ✓ | 1000 | 4000 |
| MMP350W38-C | E | 304 Stainless Steel | 3.50 | 89.0 | 0.38 | 10.0 | 0.010 | 0.25 | MLT-S | | | | 100 | 1000 |
| MMP350W38-C316 | E | 316 Stainless Steel | 3.50 | 89.0 | 0.38 | 10.0 | 0.010 | 0.25 | MLT-S | | | | 100 | 1000 |
| MMP350W38-M | E | 304 Stainless Steel | 3.50 | 89.0 | 0.38 | 10.0 | 0.010 | 0.25 | MLT-S | | ✓ | ✓ | 1000 | 4000 |
| MMP350W38-M316 | E | 316 Stainless Steel | 3.50 | 89.0 | 0.38 | 10.0 | 0.010 | 0.25 | MLT-S | | ✓ | ✓ | 1000 | 4000 |
| MMP350HW54-MAL | F | Aluminum | 3.50 | 89.0 | 0.54 | 13.7 | 0.012 | 0.30 | MLT-H | ✓ | ✓ | ✓ | 1000 | 4000 |
| MMP350-C | G | 304 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | | | 100 | 1000 |
| MMP350-C316 | G | 316 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | | | 100 | 1000 |
| MMP350-M | G | 304 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | ✓ | ✓ | 1000 | 4000 |
| MMP350-M316 | G | 316 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | ✓ | ✓ | 1000 | 4000 |
| MMP350H-C | I | 304 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | | | 100 | 1000 |
| MMP350H-C316 | I | 316 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | | | 100 | 1000 |
| MMP350H-M | I | 304 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | ✓ | ✓ | 1000 | 4000 |
| MMP350H-M316 | I | 316 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | ✓ | ✓ | 1000 | 4000 |
| MMP350H-MAL | I | Aluminum | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | ✓ | ✓ | 1000 | 4000 |
| MMP350W17-Q-M | J | 304 Stainless Steel | 3.50 | 89.0 | 1.73 | 44.0 | 0.015 | 0.38 | MLT-S | ✓ | | ✓ | 1000 | 4000 |

Marker Plates and Tags (continued)



| Part Number | Style | Material | Length/ Diameter | | Width/ Diameter | | Thickness | | Used with Pan-Steel® Cable Ties** | For Use With | | | Std. Pkg. Qty.^ | Std. Ctn. Qty. |
|----------------|-------|---------------------|---------------------|------|--------------------|------|-----------|------|---|--------------|--------|--------|-----------------------|----------------------|
| | | | In. | mm | In. | mm | In. | mm | | MIM | PES197 | PES400 | | |
| MT172W38-M | L | 304 Stainless Steel | 1.72 | 44.0 | 0.38 | 10.0 | 0.010 | 0.25 | MLT-H | | | ✓ | 1000 | 4000 |
| MT172-C | M | 304 Stainless Steel | 1.72 | 44.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | | | 100 | 1000 |
| MT172-C316 | M | 316 Stainless Steel | 1.72 | 44.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | | | 100 | 1000 |
| MT172-M | M | 304 Stainless Steel | 1.72 | 44.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-S | ✓ | | ✓ | 1000 | 4000 |
| MT206W119A-Q | N | 304 Stainless Steel | 2.06 | 52.0 | 1.19 | 30.0 | 0.015 | 0.38 | MLT-H | ✓ | | | 25 | 250 |
| MT350W38-M316 | O | 316 Stainless Steel | 3.50 | 89.0 | 0.38 | 10.0 | 0.010 | 0.25 | MLT-S | | | ✓ | 1000 | 4000 |
| MT350-C | P | 304 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | | | 100 | 1000 |
| MT350-C316 | P | 316 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | | | 100 | 1000 |
| MT350-M | P | 304 Stainless Steel | 3.50 | 89.0 | 0.75 | 19.0 | 0.010 | 0.25 | MLT-H | ✓ | | ✓ | 1000 | 4000 |
| MT350W17-Q | Q | 304 Stainless Steel | 3.50 | 89.0 | 1.73 | 44.0 | 0.015 | 0.38 | MLT-S | ✓ | | | 25 | 250 |
| MT350W17-D-4HL | Q | 304 Stainless Steel | 3.50 | 89.0 | 1.73 | 44.0 | 0.015 | 0.38 | MLT-S | ✓ | | ✓ | 500 | 500 |
| MT350W17-Q-M | Q | 304 Stainless Steel | 3.50 | 89.0 | 1.73 | 44.0 | 0.015 | 0.38 | MLT-S | ✓ | | ✓ | 1000 | 4000 |

Circular Tags

| | | | | | | | | | | | | | | |
|-----------|---|---------------------|---|---|------|------|-------|------|-------|---|--|--|----|-----|
| MT1D-Q | R | 304 Stainless Steel | - | - | 1.00 | 25.0 | 0.035 | 0.89 | MLT-H | ✓ | | | 25 | 250 |
| MT150D-Q | R | 304 Stainless Steel | - | - | 1.50 | 38.0 | 0.035 | 0.89 | MLT-S | ✓ | | | 25 | 250 |
| MTB150D-Q | R | Brass | - | - | 1.50 | 38.0 | 0.040 | 1.02 | MLT-S | ✓ | | | 25 | 250 |

Panduit Embossing System*

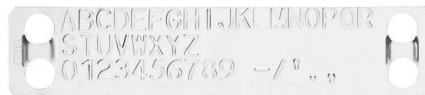


- To deliver a permanent identification solution on-site and on demand when it's needed
- Creates raised characters on stainless steel and aluminum marker plates, to deliver maximum visibility for medium to high volume applications that are exposed to dirt and paint
- Fast embossing speed of up to 300 plates per hour
- Includes both 3 mm and 5 mm characters
- Compatible with numerous sizes and styles of metal plates and tags
- Input hopper allows for easy stacking of plates, saving time and money
- Output hopper keeps plates neatly stacked in the order that they are embossed
- Includes Easy-Mark Plus™ Labeling Software
- Easy-Mark Plus™ Labeling Software allows for a quick print legend and exact preview, saving time and reducing print costs

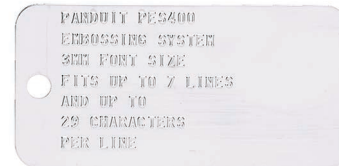
| Part Number | Description | Std. Pkg. Qty. |
|-------------|--|----------------|
| PES400 | Panduit Embossing System, .188" (5mm) and .118" (3mm) characters, 35.8" x 23.6" x 16.5", 154lb (75kg), 100 to 240 VAC, 50/60Hz | 1 |

Characters include: ABCD...Z, 0123...9, @ # % & * () - + : , . / ' "

*For use with 1000 pack marker plates only.



5 mm font on MMP350-M



3 mm font on MT350W17-Q-M

Easy-Mark Plus™ Labeling Software

Patented



- Powerful, easy-to-use, and affordable software that provides innovative features and functionality to address unique labeling needs
- Quickly create simple or complex labels with text boxes, lines, frames, or tables, and other useful tools
- Marker plate formats for use with PES400 are included
- Design detailed labels with multiple zones and objects for applications such as rating plates, arc flash labels, and fiber optic enclosures
- Upgrades available at www.panduit.com

System Requirements:

- 300 MB hard drive space and 2 GB Memory
- Windows, Vista, 7, 8, 8.1 or 10
- 32 or 64 bit operating systems
- Microsoft.NET Framework 2.0 or higher
- Mouse or compatible pointing device
- Keyboard Optical Disc Drive or USB Port

| Part Number | Description | Std. Pkg. Qty. | Std. Ctn. Qty. |
|---------------|--|----------------|----------------|
| EMPLUS-CD | Easy-Mark Plus™ Labeling Software, CD-ROM. | 1 | 10 |
| EMPLUS-DL | Easy-Mark Plus™ Labeling Software, online download. | | |
| EMPLUS-2GO | Easy-Mark Plus™ Portable Application, USB flash drive. | | |
| EMPLUS-SERVER | Easy-Mark Plus™ Labeling Software, networkable server based version. | | |

^Windows is a registered trademark of Microsoft Corp. in the United States and/or other countries.

Metal Embossing Hand Tool and Tape System

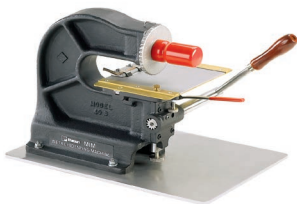
- Multi-functional cutting die design creates embossed marker plates with raised cable tie slot in one step instead of three, for faster installation
- Lightweight, compact and portable, allows user to create custom length identification on demand at remote job sites
- Embosses 3/16" characters onto stainless steel or aluminum tape, to improve visibility in applications that are subjected to dirt or paint



| Part Number | Description | Std. Pkg. Qty. |
|-------------------|---|----------------|
| Tool Kit | | |
| MEHT187 | Includes tool, additional marking wheel, carrying case, one roll each META (aluminum) and METS (stainless steel) tape. Characters included: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6 7 8 9 / () | 1 |
| TM26319B01 | Embossing Wheel Replacement Kit | 1 |
| TM26971B01 | Gray Embossing Wheel Service Assembly | 1 |
| Tape | | |
| META-X | .50" x 16' (12.7mm x 4.9m) aluminum tape*. | 10 |
| METS3-X | .50" x 21' (12.7mm x 6.4m) 316 grade stainless steel tape. | 10 |
| METS4-X | .50" x 21' (12.7mm x 6.4m) 304 grade stainless steel tape. | 10 |

*Aluminum ties are recommended for use with aluminum tape to prevent galvanic reaction (corrosion that can occur between stainless steel and aluminum in certain environments).

Metal Indenting Machine



- Provides quick, easy, and permanent identification with aluminum marker plates and cable ties and stainless steel marker plates, tags, cable ties and straps for low to medium volume applications
- Automatic table indexing advances material forward for convenience and improved productivity
- Aluminum base for tool stability and durable construction

| Part Number | Description | Std. Pkg. Qty. |
|-----------------------------------|---|----------------|
| Indenting Machine | | |
| MIM094 | Indenting machine with 3/32" (2.38mm) character wheel, 11.25" (286mm) x 16.25" (413mm) x 11.75" (298mm), 41 lbs. (18.6 kg). | 1 |
| MIM125 | Indenting machine with 1/8" (3.18mm) character wheel, 11.25" (286mm) x 16.25" (413mm) x 11.75" (298mm), 41 lbs. (18.6 kg). | 1 |
| MIM187 | Indenting machine with 3/16" (4.77mm) character wheel, 11.25" (286mm) x 16.25" (413mm) x 11.75" (298mm), 41 lbs. (18.6 kg). | 1 |
| Interchangeable Wheel Kits | | |
| MIW094 | 3/32" (2.38mm) character wheel kit (wheel and indexing gear). | 1 |
| MIW125 | 1/8" (3.18mm) character wheel kit (wheel and indexing gear). | 1 |
| MIW187 | 3/16" (4.77mm) character wheel kit (wheel and indexing gear). | 1 |

Characters include: ABC...Z, 0123...9, & / @ ' -

Pan-Steel® Stainless Steel Cable Ties



- Delivers strength, long life, and resistance to chemicals, vibration, radiation, weathering and extreme temperatures
- Use with Pan-Steel® Marker Plates and Tags for fast installation at the lowest installed cost
- Smooth surfaces and rounded edges, protects the cable bundle and the installer for improved productivity, job site safety, and reliability
- Patented self-locking head reduces installation steps for improved productivity

| Part Number | Max. Bundle Diameter | | Length* | | Min. Loop Tensile Strength** | | Min. Bundle Diameter | | Width | | Thickness | | Recommended Panduit Installation Tool | Std. Pkg. Qty. [^] | Std. Ctn. Qty. |
|--|----------------------|-----|---------|-----|------------------------------|------|----------------------|------|-------|-----|-----------|------|---------------------------------------|-----------------------------|----------------|
| | In. | mm | In. | mm | Lbs. | N | In. | mm | In. | mm | In. | mm | | | |
| AISI 304 Stainless Steel – For General Purpose Standard Cross Section | | | | | | | | | | | | | | | |
| MLT1S-CP | 1.0 | 25 | 5.0 | 127 | 200 | 890 | 0.50 | 12.7 | 0.18 | 4.6 | 0.010 | 0.25 | GS4MT-E, HTMT, ST2MT | 100 | 500 |
| MLT2S-CP | 2.0 | 51 | 7.9 | 201 | | | | | | | | | | | |
| MLT4S-CP | 4.0 | 102 | 14.3 | 362 | | | | | | | | | | | |
| MLT6S-CP | 6.0 | 152 | 20.5 | 521 | | | | | | | | | | | |
| Heavy Cross Section | | | | | | | | | | | | | | | |
| MLT2H-LP | 2.0 | 51 | 7.9 | 201 | 450 | 2000 | 0.50 | 12.7 | 0.31 | 7.9 | 0.010 | 0.25 | PBTMT(E), GS4MT-E, HTMT, ST2MT | 50 | 250 |
| MLT4H-LP | 4.0 | 102 | 14.3 | 362 | | | | | | | | | | | |
| MLT6H-LP | 6.0 | 152 | 20.5 | 521 | | | | | | | | | | | |
| AISI 316 Stainless Steel – For Superior Corrosion Resistance Standard Cross Section | | | | | | | | | | | | | | | |
| MLT1S-CP316 | 1.0 | 25 | 5.0 | 127 | 200 | 890 | 0.50 | 12.7 | 0.18 | 4.6 | 0.010 | 0.25 | GS4MT-E, HTMT, ST2MT | 100 | 500 |
| MLT2S-CP316 | 2.0 | 51 | 7.9 | 201 | | | | | | | | | | | |
| MLT4S-CP316 | 4.0 | 102 | 14.3 | 362 | | | | | | | | | | | |
| MLT6S-CP316 | 6.0 | 152 | 20.5 | 521 | | | | | | | | | | | |
| Heavy Cross Section | | | | | | | | | | | | | | | |
| MLT2H-LP316 | 2.0 | 51 | 7.9 | 201 | 450 | 2000 | 0.50 | 12.7 | 0.31 | 7.9 | 0.010 | 0.25 | PBTMT(E), GS4MT-E, HTMT, ST2MT | 50 | 250 |
| MLT4H-LP316 | 4.0 | 102 | 14.3 | 362 | | | | | | | | | | | |
| MLT6H-LP316 | 6.0 | 152 | 20.5 | 521 | | | | | | | | | | | |

*Other lengths available, contact customer service.
 **Tested per SAE Standard AS23190/3 (formerly MIL).
[^]Order number of pieces required, in multiples of Standard Package Quantity.
 See pages 6 and 7 for stainless steel and brass marker plates and tags.

Cable Tie Installation Tools

- Tools speed installation
- Feature high reliability, low maintenance, long life
- GS4MT-E and PBTMT feature automatic tension and cut-off capabilities for improved productivity and installer safety



| Part Number | Description | Std. Pkg. Qty. |
|--------------------------|--|----------------|
| High Volume Use | | |
| PBTMT | Battery powered installation tool, for use with Pan-Steel® Heavy, Extra-Heavy, and Super-Heavy Cross Section MLT Style Ties, and MLTD Double Wrapped Style Ties, 2 – 12 volt lithium-ion batteries and 115 volt, 60 Hz charger included. | 1 |
| Medium Volume Use | | |
| ST2MT | Used with Standard and Heavy Cross Section Pan-Steel® Type MLT Ties. | 1 |
| GS4MT-E | Used with Heavy Cross Section Pan-Alum™ Type MLT Ties and Standard and Heavy Cross Section Pan-Steel® Type MLT Ties. | 1 |

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For a copy of Panduit product warranties, log on to www.panduit.com/warranty

For more information

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Contact Customer Service by email: cs@panduit.com
or by phone: 800.777.3300 and reference SSCB35

