Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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. Panduit also offers custom marking service for embossed and laser etched marker plates, tags, and ties to speed installation time, reduce labor costs and keep projects on schedule.

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

Key Features

Benefits

Panduit Custom Marking Service

Custom marking service	Creates embossed or laser etched metal plates, tags, and ties to speed installation time and reduce labor costs
Rapid shipment worldwide	Provides quick product availability to the job site to keep projects on schedule
Embossing capability	Creates raised characters for maximum visibility in applications that are exposed to dirt and paint
Laser etching capability	Provides crisp, high quality text and graphics for improved visibility

Applications

Cable Identification
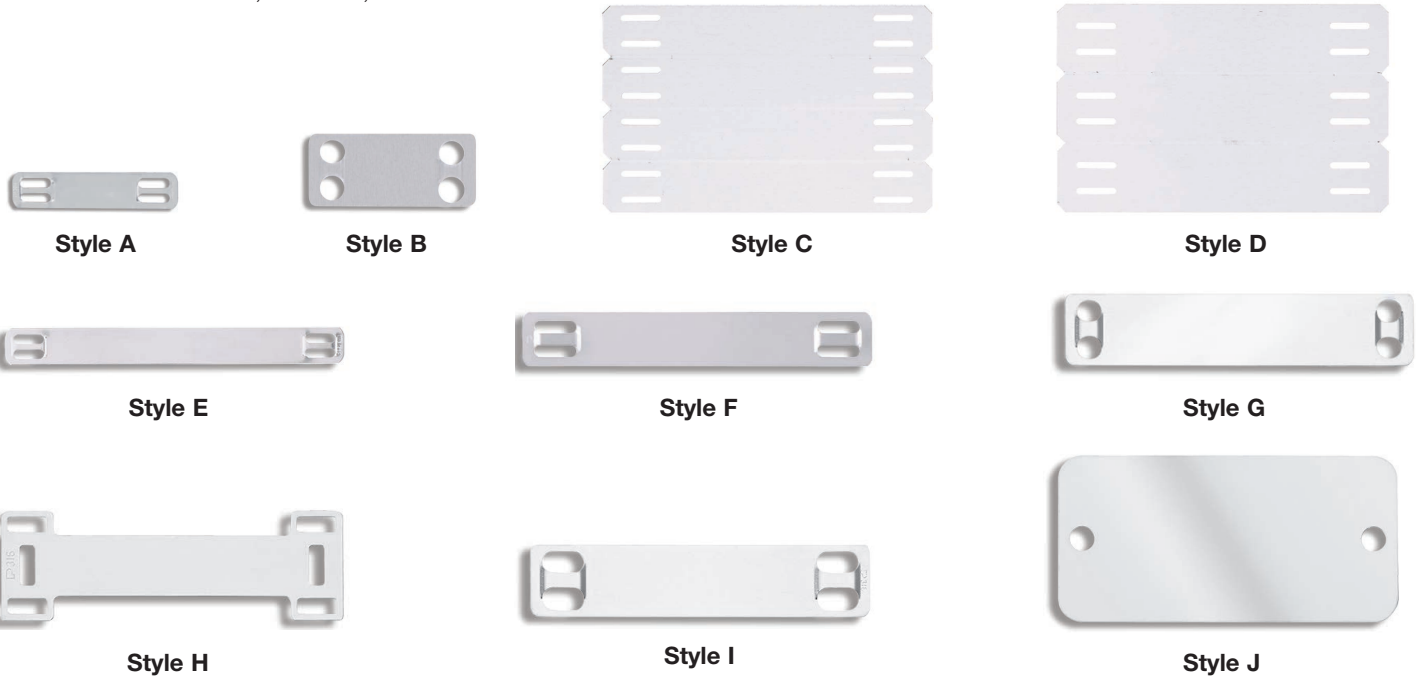

Pipe Identification

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

Style A

Style B

Style C

Style D

Style E

Style F

Style G

Style H

Style I

Style J

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
MMP350DB-C	H	304 Stainless Steel	3.50	89.0	1.12	29.0	0.015	0.38	MLT-H	✓			100	1000
MMP350DB-C316	H	316 Stainless Steel	3.50	89.0	1.12	29.0	0.015	0.38	MLT-H	✓			100	1000
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-CAL	I	Aluminum	3.50	89.0	0.75	19.0	0.012	0.30	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

3

Marker Plates and Tags (continued)
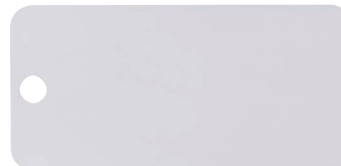
Style K

Style L

Style M

Style N

Style O

Style P

Style Q

Style R

| 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		
MT125S-Q	K	304 Stainless Steel	1.25	32.0	1.25	32.0	0.035	0.89	MLT-S	✓			25	250
MT172W38-C	L	304 Stainless Steel	1.72	44.0	0.38	10.0	0.010	0.25	MLT-S	✓			100	1000
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
MT1D-Q316	R	316 Stainless Steel	-	-	1.00	25.0	0.035	0.89	MLT-H	✓			25	250
MTB1D-Q	R	Brass	-	-	1.00	25.0	0.040	1.02	MLT-S	✓			25	250
MT150D-Q	R	304 Stainless Steel	-	-	1.50	38.0	0.035	0.89	MLT-S	✓			25	250
MT150D-Q316	R	316 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
MT213D-Q	R	304 Stainless Steel	-	-	2.13	54.0	0.015	0.38	MLT-H	✓			25	250
MT213D-Q316	R	316 Stainless Steel	-	-	2.13	54.0	0.015	0.38	MLT-H	✓			25	250
MTB213D-Q	R	Brass	-	-	2.13	54.0	0.015	0.38	MLT-S	✓			25	250

NEW! 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.
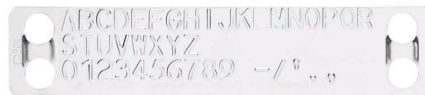
5 mm font on MMP350-M
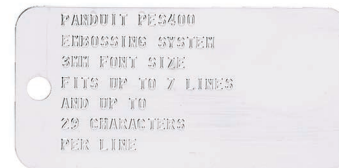
3 mm font on MT350W17-Q-M

NEW! 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 XP, 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.		
EMPLUS-DL	Easy-Mark Plus™ Labeling Software, online download.	1	10
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
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).

^Order number of pieces required, in multiples of Standard Package Quantity.

Metal Indenting Machine
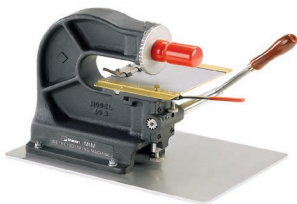
- Provides quick, easy, and permanent identification with aluminum marker plates and cable ties and stainless steel marker plates, tags, cable ties and straps for low to medium volume applications

- 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, & / @ '.-
^Order number of pieces required, in multiples of Standard Package Quantity.

Panduit Custom Marking Service

Panduit's Custom Marking Service simplifies identification with high quality, made-to-order custom embossed marker plates and tags or laser-etched cable ties, marker plates, and tags. Panduit offers rapid direct shipment with fast turn around on custom marking orders worldwide. Work with Panduit to create an effectively identified infrastructure.

Embossing Service

- Used on rectangular metal marker plates and tags which are a maximum of .020 inches (.5mm) thick, and minimum .038 inches (10mm) width
- Excellent for applications that are exposed to dirt and paint
- Upper case "raised" characters
- Alphanumeric and sequential numbering

Laser Etching Service

- Used on all metal marker plates, tags, and cable ties
- BOLD block letters
- Upper and lower case character capability
- Ability to create text and graphics
- Alphanumeric and sequential numbering

Available Character Sizes: (for laser-etched tags only)	
1/8" (3.18mm)	For high character volume tags
3/16" (4.77mm)	The most common size
1/4"* (6.35mm)	Larger font for greater visibility
5/16"* (7.94mm)	Maximum visibility for tags requiring only a few characters

* Please advise if this size is requested as it is not stated on the custom form.

Online Form!

Pan-Steel Custom Marking Order Form

Use the online order form, GA2-0218 - Pan-Steel Custom Form:

- Receive support on selecting the proper marker plate or tag best suited for your application: https://www.panduit.com/content/dam/panduit/en/support/flex-fiber-cabling/Pan-Steel-Custom-Order-Form.xls
- Obtain answers to frequently asked questions
- Gain knowledge on the various material options available

Once completed, email your order form to your authorized Panduit distributor for order placement or contact Panduit customer service for assistance.

Pan-Steel® Stainless Steel Cable Ties

MLTS

MLTH

- 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

PBTMT

ST2MT

GS4MT-E

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

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

For more information
Visit us at www.panduit.com

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

PANDUIT®