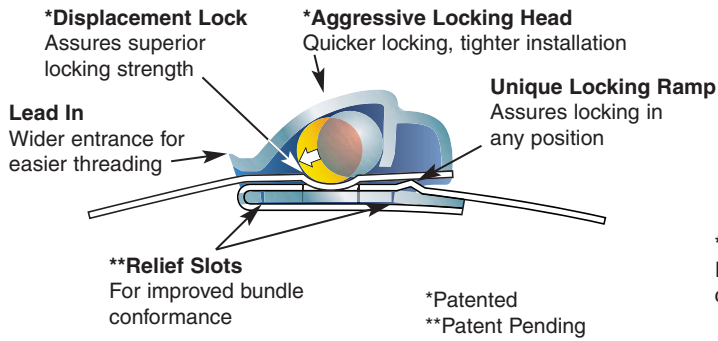


Features and Benefits – Pan-Steel® Retained Tension Ties – MRT/MRS Series

Panduit® Pan-Steel® Retained Tension Ties are engineered for safety, productivity, and durability by providing round edges and smooth surfaces, easy threading, high loop tensile strength and tight clamping.

Panduit Retained Tension Tie Technology

Features of Retained Tension Ties (MRT and MRS Series)



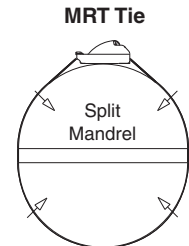
Additional Features of 360° Radial Seal Retained Tension Ties (MRS Series Only)



Retained Tension Performance Comparison**



**Representative sample, actual results may vary.



Retained Tension
Split mandrel test fixture measures retained tension of installed tie

- A. System Overview
- B1. Cable Ties
- B2. Cable Accessories
- B3. Stainless Steel Ties
- C1. Wiring Duct
- C2. Surface Raceway
- C3. Abrasion Protection
- C4. Cable Management
- D1. Terminals
- D2. Power Connectors
- D3. Grounding Connectors
- E1. Labeling Systems
- E2. Labels
- E3. Pre-Printed & Write-On Markers
- E4. Permanent Identification
- E5. Lockout/Tagout & Safety Solutions
- F. Index

A. System Overview

Part Number System for Pan-Steel® Retained Tension Ties – MRT Series

B1. Cable Ties

MRT

Type

MRT = Metal Retained Tension Tie

6

Bundle Diameter Reference (In.)

S

Cross Section

S = Standard
LH = Light-Heavy
H = Heavy

—

C

Package Qty.

L = 50
C = 100

4

Material

4 = 304

B2. Cable Accessories

B3. Stainless Steel Ties



Pan-Steel® Retained Tension Ties – MRT Series

- Provide tight bundling of armored cables, pipes, conduit and other rigid materials in harsh conditions for a reliable, easy to install fastening solution
- Self-locking cable tie design locks into place at any length along the tie body, unlike fixed diameter band clamps
- Available in AISI 304 stainless steel with a thickness of 0.010" (0.25mm)



C1. Wiring Duct

C2. Surface Raceway

C3. Abrasion Protection

C4. Cable Management

D1. Terminals

Part Number	Max. Bundle Diameter		Length		Min. Loop Tensile Strength		Min. Bundle Diameter		Width		Recommended Installation Tool***	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	Lbs.	N	In.	mm	In.	mm			

AISI 304 Stainless Steel – For General Purpose

Standard Cross Section

MRT1S-C4	1.0	25	9.0	229	180	800	0.75	19.1	0.18	4.4	MTRTLS	100	500
MRT2S-C4	2.0	51	12.2	310	180	800	0.75	19.1	0.18	4.4		100	500
MRT4S-C4	4.0	102	18.5	470	180	800	0.75	19.1	0.18	4.4		100	500
MRT6S-C4	6.0	152	24.8	630	180	800	0.75	19.1	0.18	4.4		100	500

Light-Heavy Cross Section

MRT1.5LH-L4	1.5	38	10.6	269	225	1000	1.00	25.4	0.25	6.4	MTRTLS	50	250
MRT2LH-L4	2.0	51	12.2	310	225	1000	1.00	25.4	0.25	6.4		50	250
MRT4LH-L4	4.0	102	18.5	470	225	1000	1.00	25.4	0.25	6.4		50	250
MRT6LH-L4	6.0	152	24.8	630	225	1000	1.00	25.4	0.25	6.4		50	250

Heavy Cross Section

MRT1.5H-L4	1.5	38	10.6	269	400	1780	1.00	25.4	0.31	7.9	MTRTH	50	250
MRT2H-L4	2.0	51	12.2	310	400	1780	1.00	25.4	0.31	7.9		50	250
MRT4H-L4	4.0	102	18.5	470	400	1780	1.00	25.4	0.31	7.9		50	250
MRT6H-L4	6.0	152	24.8	630	400	1780	1.00	25.4	0.31	7.9		50	250

Double Wrapped – For Additional Strength

Standard Cross Section

MRT1.5DS-C4	1.5	38	14.4	366	250	1112	1.00	25.4	0.17	4.4	MTRTLS	100	500
MRT2.5DS-C4	2.5	63	20.7	526	250	1112	1.00	25.4	0.17	4.4		100	500

Light-Heavy Cross Section

MRT2.5DLH-L4	2.5	63	20.7	526	350	1556	1.00	25.4	0.25	6.4	MTRTLS	50	250
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Heavy Cross Section

MRT2DH-L4	2.0	51	18.5	470	550	2447	1.00	25.4	0.31	7.9	MTRTH	50	250
MRT4DH-L4	4.0	102	31.1	790	550	2447	1.00	25.4	0.31	7.9		50	250

***For information on installation tools, refer to page B3.20.

D2. Power Connectors

D3. Grounding Connectors

E1. Labeling Systems

E2. Labels

E3. Pre-Printed & Write-On Markers

E4. Permanent Identification

E5. Lockout/Tagout & Safety Solutions

F. Index

Part Number System for Pan-Steel® 360° Radial Seal Retained Tension Ties – MRS Series



Pan-Steel® 360° Radial Seal Retained Tension Ties – MRS Series



- 360° radial seal eliminates gaps under the head of the tie to provide a completely sealed installation

- Self-locking cable tie design locks into place at any length along the tie body, unlike fixed diameter band clamps
- Available in AISI 304 stainless steel with a thickness of 0.010" (0.25mm)



Part Number	Max. Bundle Diameter		Length		Min. Loop Tensile Strength		Min. Bundle Diameter		Width		Recommended Installation Tool***	Std. Pkg. Qty.	Std. Ctn. Qty.
	In.	mm	In.	mm	Lbs.	N	In.	mm	In.	mm			

AISI 304 Stainless Steel – For General Purpose

Standard Cross Section

MRS1S-C4	1.0	25	9.0	229	180	800	0.75	19.1	0.18	4.4	MTRTLS	100	500
MRS2S-C4	2.0	51	12.2	310	180	800	0.75	19.1	0.18	4.4		100	500
MRS4S-C4	4.0	102	18.5	470	180	800	0.75	19.1	0.18	4.4		100	500
MRS6S-C4	6.0	152	24.8	630	180	800	0.75	19.1	0.18	4.4		100	500

Light-Heavy Cross Section

MRS1.5LH-L4	1.5	38	10.6	269	225	1000	1.00	25.4	0.25	6.4	MTRTLS	50	250
MRS2LH-L4	2.0	51	12.2	310	225	1000	1.00	25.4	0.25	6.4		50	250
MRS4LH-L4	4.0	102	18.5	470	225	1000	1.00	25.4	0.25	6.4		50	250
MRS6LH-L4	6.0	152	24.8	630	225	1000	1.00	25.4	0.25	6.4		50	250

Heavy Cross Section

MRS1.5H-L4	1.5	38	10.6	269	400	1780	1.00	25.4	0.31	7.9	MTRTH	50	250
MRS2H-L4	2.0	51	12.2	310	400	1780	1.00	25.4	0.31	7.9		50	250
MRS4H-L4	4.0	102	18.5	470	400	1780	1.00	25.4	0.31	7.9		50	250
MRS6H-L4	6.0	152	24.8	630	400	1780	1.00	25.4	0.31	7.9		50	250

***For information on installation tools, refer to page B3.20.

A.
System
Overview

B1.
Cable
Ties

B2.
Cable
Accessories

B3.
Stainless
Steel
Ties

C1.
Wiring
Duct

C2.
Surface
Raceway

C3.
Abrasion
Protection

C4.
Cable
Management

D1.
Terminals

D2.
Power
Connectors

D3.
Grounding
Connectors

E1.
Labeling
Systems

E2.
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E3.
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E4.
Permanent
Identification

E5.
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Tagout
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F.
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A.
System
Overview

MTRT Retained Tension Manual Installation Tools

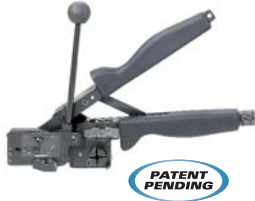
B1.
Cable Ties

- Adjustable detent mechanism provides user pre-set controlled tension for repeatable installations and maximum reliability
- Smooth cable tie cut-off eliminates burrs or sharp edges after installation to deliver added bundle protection and job site safety

- Tie tensioning mechanism provides improved durability compared to conventional gripper style tools
- Change over kits available to allow for installation of all tie cross sections with one tool

B2.
Cable
Accessories

B3.
Stainless
Steel Ties



Part Number	Part Description	Std. Pkg. Qty.
MTRTH	Retained tension installation tool for use with Pan-Steel® heavy cross section MRT and MRS style ties and MRT double wrapped style ties.	1
MTRTLS	Retained tension installation tool for use with Pan-Steel® light-heavy and standard cross section MRT and MRS style ties and MRT double wrapped style ties.	1
KMTRTH	Change over kits allow for installation of heavy cross section MRT and MRS style ties, and MRT double wrapped style ties in MTRTH tools.	1
KMTRTLS	Change over kits allow for installation of light-heavy and standard cross section MRT and MRS style ties, and MRT double wrapped style ties in MTRTLS tools.	1

C1.
Wiring
Duct

C2.
Surface
Raceway

C3.
Abrasion
Protection

C4.
Cable
Management

D1.
Terminals

D2.
Power
Connectors

D3.
Grounding
Connectors

E1.
Labeling
Systems

E2.
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