# PANDUIT®

# PRODUCT BULLETIN

# Harness Board Accessories

Panduit harness board accessories allow an installer to quickly configure a specific arrangement of wires, to aid in required wire bundling and termination. Panduit's comprehensive line of harness board accessories can significantly reduce the labor input required for field installation of wires and cables and simplify harness board operations. These products hold wire bundles at a uniform height from a harness board to ease manual or automatic cable tie installation. These accessories help maintain end product consistency, reduce costly rework and maximize workplace safety.

Key Features	Benefits
Large selection of board-mounted accessories	Comprehensive and versatile offering ensures there is a product to fit virtually every harness board application
A wide range of sizes	Panduit harness board accessories can be used to manage wire configurations up to 2 inches bundle diameter for maximum flexibility
Uniform standoff height	Accessories space the wire bundle at a uniform distance and height from the harness board to allow simple cable tie application using manual or automatic tooling to speed installation
Mounts designed to work with harness board accessories	Panduit mounts can be integrated into the wiring harness at the harness board to simplify deploying the harness onto the finished assembly to speed installation
Snap-in, snap-out functionality	Harness board accessories hold the wires in a tight bundle, yet allow completed harness to be easily removed by lifting upward on the harness
Spring wire breakout and wire end holders	Individual wires are held in the bundle to maintain harness structure while allowing consistent termination of wires



#### **Elastic Retainers**

- · Cable bundles are formed as individual wires are inserted
- Completed bundles can be easily removed



RER.50 - 1.25





**RER2.0** 

#### • The elastic band is replaceable

RER2.0E-X

**Replacement Elastic** For economy, the Part Pkg. elastic band can Number Qty. RER.5E-X RER.75E-X RER1.25E-X 10 10

10

10

be replaced in the RER Elastic Retainers without removing the RER base.

		Bundle neter	Len /	igth A	Wi	dth 3	Height C		Height C				Mounting	Std. Pkg.	Std. Ctn.
Part Number	In.	mm	In.	mm	In.	mm	In.	mm	Material	Color	Method	Qty.	Qty.		
RER.5-S6-X	0.50	12.7	1.18	30.0	0.84	21.3	1.89	48.0				10	50		
RER.75-S6-X	0.75	19.0	1.18	30.0	1.12	28.4	2.21	56.1		Black Base, White Arm	Two #6 (M3)	10	50		
RER1.25-S6-X	1.25	31.8	1.18	30.0	1.64	41.7	2.86	72.6	Nylon 6.6	writte Affi	Screws	10	50		
RER2.0-S6-X	2.00	50.8	1.31	33.3	2.81	71.4	3.94	100.2	1	Natural		10	50		

### Elastic Retainers - Low Profile

- · Cable bundles are formed as cable bundles are inserted
- · Completed bundles can be easily removed





		Bundle neter		igth A	Width Height B C				Mounting	Std. Pkg.	Std. Ctn.		
Part Number	In.	mm	In.	mm	In.	mm	In.	mm	Material	Color	Method	Qty.	Qty.
ER.5-E4-X	.50	12.7	1.96	49.8	.56	14.2	1.00	25.4	Nulan C.C.	Diask	Two #6 (M3)	10	100
ER1.25-E4-X	1.25	31.8	2.90	73.7	.95	24.1	2.00	50.8	Nylon 6.6	Black	Screws	10	100

### Bundle Retainers

- Funnel entry allows fast cable insertion
- Completed bundles can be easily removed





BR.5 and BR.75



Color: Black

BR2



				ndoff ight A		Mounting	Std. Pkg.	Std. Ctn.
Part Number	In.	mm	In.	mm	Material	Method	Qty.	Qty.
BR.5-E6-C	0.50	12.7	1.07	27.2	Impact Resistant	Tue #C (MO) Correspond	100	500
BR.75-E6-C	0.75	19.0	0.95	24.1	Nylon 6.6	Two #6 (M3) Screws	100	500
BR2-1.3-X	2.00	50.8	1.32	33.5		Two 1/4" (M6) Screws	10	10
BR2-1.3-A-X	2.00	50.8	1.35	34.3		Rubber Adhesive Tape	10	10
BR2-1.5-X	2.00	50.8	1.59	40.4	Glass Filled Nylon 6.6		10	10
BR2-4-X	2.00	50.8	4.06	103.1	-	Two 1/4" (M6) Screws	10	10
BR2-6-X	2.00	50.8	6.02	152.9		. ,	10	10

• Top arm rotates upward for easy removal of completed harness

#### **Corner Posts**

- Designed to pre-form tight bundles at harness corners and breakouts





		Bundle neter				Std. Pkg.	Std. Ctn.
Part Number	nber In. mm		Material	Color	Mounting Method	Qty.	Qty.
CPH.75-S8-X	75	10.0	Nylon	Disala	T., 10 (MA) O.,	10	100
CPL.75-S8-X	.75	19.0	6.6	Black	Two #8 (M4) Screws	10	100

## **T-Junction Fixture**

• Fixture moves down for easy harness removal

3

• Forms cable junctions



1.12 (28.4) (Dia)	
0	)

	Max. Bundle Diameter				Mounting	Std. Pkg.	Std. Ctn.
Part Number	In.	mm	Material	Color	Method	Qty.	Qty.
TJF-X	1.34	34.0	Nylon 6.6 and Nickel Plated Steel	Black	Nail	10	100

#### Harness Board Nails

• Speed routing of wires

• Uniform driving depth is insured by a collar stop





	Length A		A		Overall Length Thickness B C			Mounting	Std. Pkg.	Std. Ctn.
Part Number	In.	mm	In.	mm	In.	mm	Material	Method	Qty.	Qty.
HBN.75-T	.75	19.1	1.40	35.56	.07	1.9			200	1000
HBN1-T	1.00	25.4	1.65	41.91	.07	1.9		Hammered into	200	1000
HBN1.5-T	1.50	38.1	2.16	54.86	.08	2.1	-		200	1000
HBN2-T	2.00	50.8	2.66	67.56	.09	2.4	Nickel Plated		200	1000
HBN2.5-T	2.50	63.5	3.16	80.26	.11	2.8	Steel	harness board	200	1000
HBN3-T	3.00	76.2	3.67	93.22	.12	3.0	_		200	1000
HBN4-T	4.00	101.6	4.67	118.62	.14	3.7	-		200	1000

- Harness
- Smooth finish on nails prevents abrasion to wire jackets

#### Wire End Holder

- Secures wire ends while harness is being fabricated
- Used with #28 thru #16 AWG wires





· For indoor use only

Part Number	Material	Color	Mounting Method	Std. Pkg. Qty.	Std. Ctn. Qty.
WEH-E8-C	Acetal	Black	Two #8 (M4) Screws	100	1000

## Spring Wire Breakout System

- Harness board spring and spring holder holds wire ends secure while harness is being fabricated
- Wires simply pull out from spring when harness is removed







(4.6)



	Hole S	pacing A				Std. Pkg.	Std. Ctn.
Part Number	In.	mm	Material	Color	Mounting Method	Qty.	Qty.
PBSC1-X	1.00	25.4		—	SHH1 Spring Holder	10	100
PBSC3-X	3.00	76.2	Oteral	_	Two #8 (M4) Screws	10	100
PBSC6-X	6.00	152.4	Steel	_	SHH3 Spring Holder	10	100
PBSC12-X	12.00	304.8		_	Two #8 (M4) Screws	10	100
SHH1-S8-X	1.85	47.0			Two #8 (M4) Screws	10	100
SHH3-S8-X	6.80	172.7	Nylon 6.6	Natural	Two #8 (M4) Screws	10	100

#### Fanning Strip System

- · Holds wires in a specific orientation
- No sharp edges to damage wire insulation

• Will accept wires up to 18 AWG

• Fanning strip can remain as part of completed harness



Part Number Material Color Mounting Method Pkg.	Ctn. Qty.
FS156-C Nylon 6.6 Natural FSH Holder 100	1000
FSH40-X Four #8 (M4) Screws 10	100
FSHH-X ABS Black Two #8 (M4) Screws 10	100

### Harness Board Standoff Posts and Adapter

• Used to hold a push mount accessory or cable tie at a specific location on a harness board



		ight A	Dian	ole neter 3		igth C		dth D			Mounting	Std. Pkg.	Std. Ctn.
Part Number	In.	mm	In.	mm	In.	m	In.	mm	For Use With	Material	Method	Qty.	Qty.
HB2SP19-X	2.00	50.8	.20	5.2	2.00	50.8	.50	12.7	PLWP, PRWP, WS, VWS, HWS, TPM	Aluminum	M6 Screw	10	100
HB2SP25-X	2.00	50.8	.30	7.5	4.00	101.6	.50	12.7	PLWP, PRWP, PLP, THMS, HCMP, PMCC	Aluminum	M6 Screw	10	100
HBUA-X	.31	7.9	.28	7.1	3.00	76.2	1.00	25.4	HB2SP19-X, HB2SP25-X	Nylon 6.6	#10 (M5) Screw	10	100

# N° Tie Harness Mounts – Nylon and Heat Stabilized Nylon 6.6

- Designed to be attached to the wire harness during assembly
- Cable ties can be installed by hand or with Panduit automatic cable tie tools
- Used with harness board standoff posts

- · Available with or without corrugated tubing location tab
- Natural nylon material for indoor use
- Heat stabilized nylon material (30) for high temperature applications indoor use





Part Number Ties* In. mm In. mm Material Color Method Qty. Qty.			Used with Cable	Maximum Panel Thickness		Ho	nel ole neter			Mounting	Std. Pkg.	Std. Ctn.
	Part N	umber	Ties*	In.	mm	ln.	mm	Material	Color	Method		Qty.

FOR CORRUGATED TUBING – A location tab on the mount shelf aligns with the corrugated tubing grooves to ensure proper mount location during assembly

						• •						
THMSP20-C	M, I, S	.160	4.1	.244 – .283	6.2 – 7.2	Nylon 6.6	Natural	Push barb	100	1000		
THMSP20-C30	M, I, S	.160	4.1	.244 – .283	6.2 – 7.2	Heat Stabilized Nylon 6.6	Black	Push barb	100	1000		
THMSP25-C	M, I, S	.230	5.8	.244 – .283	6.2 – 7.2	Nylon 6.6	Natural	Push barb	100	1000		
THMSP25-C30	M, I, S	.230	5.8	.244 – .283	6.2 - 7.2	Heat Stabilized Nylon 6.6	Black	Push barb	100	1000		
FOR DISCRETE WIRING – No location tab												

THMSP20F-C	M, I, S	.160	4.1	.244 – .283	6.2 – 7.2	Nylon 6.6	Natural	Push barb	100	1000
THMSP20F-C30	M, I, S	.160	4.1	.244 – .283	6.2 – 7.2	Heat Stabilized Nylon 6.6	Black	Push barb	100	1000
THMSP25F-C	M, I, S	.230	5.8	.244 – .283	6.2 – 7.2	Nylon 6.6	Natural	Push barb	100	1000
THMSP25F-C30	M, I, S	.230	5.8	.244 – .283	6.2 – 7.2	Heat Stabilized Nylon 6.6	Black	Push barb	100	1000

\*Cable tie cross section sizes: M = Miniature, I = Intermediate, S = Standard.

#### Automatic Cable Tie Mounts



- Multiple sizes work with industry standard panel thickness and hole diameters for greater application flexibility
- Low profile design keeps bundle close to mounting surface saving space where tight assemblies are required, and providing greater protection for bundles in high vibration applications

**≜** B

 Load rating of mounts supports compatible BT1.5M-XMR and PLT1.5M-XMR cable ties





	Used with Cable Ties	A Length		B Width		C Height		Maximum Panel Thickness		Panel Hole Diameter Range				Std.	Std. Ctn.	
Part Number		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	Material	Color	Pkg. Qty.	Qty.	
ATM-W187-M													Natural	1000	5000	
ATM-W187-M20							.58	14.6			.17 – .20	4.3 – 4.9	Nylon 6.6	Black	1000	5000
ATM-W187-M30		3T1.5M-XMR, .80 20.5 PLT1.5M-XMR	80				.50	14.0	.12			1.0 1.0	Heat Stabilized Nylon 6.6	Black	1000	5000
ATM-W250-M	PLT1.5M-XMR			20.5	.35	9.0				3.0				Natural	1000	5000
ATM-W250-M20						.66	6 16.6			23 - 26	5.7 – 6.6	Nylon 6.6	Black	1000	5000	
ATM-W250-M30							. 5.0				0.0	Heat Stabilized Nylon 6.6	Black	1000	5000	

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



ATMB (Base)

• Automatic alignment orients the tool head with the mount for reliable feeding of the cable tie through the mount to speed installation

Harness Board Fixtures

- Multiple fixture configurations allow mounting in horizontal, vertical, or 45° orientation to reduce installation time and improve ergonomics
- Color designation ensures inserts and mounts are correctly matched
- Integrated switch\* capability enables placement of a switch to detect the mount's presence providing an input to a quality control system, eliminating the need for additional inspection
- Activation device on harness board fixture prevents tool from operating unless it is properly engaged in the fixture for operator safety

	Part Number	Description	Mounting	Color	Material	Std. Pkg. Qty.*	Ctn.
	АТМВ	Base	Screw base to harness board with 1/4" screws	Black	Acetal	10	10
4	ATMI-W187-X	Insert for ATM-W187 mount	Snaps into ATMB	Yellow	Acetal	10	50
	ATMI-W250-X	Insert for ATM-W250 mount	Snaps into ATMB	Red	Acetal	10	50
	ATMI-XMR	Used for cable tie installations where mounts are NOT required	Snaps into ATMB	Black	Acetal	10	50
1.	АТМС	Clamp used to secure the ATMB (base) in a vertical or 45° position	Screw clamp to harness board with 1/4" screws	Black	Steel	10	10

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

\*The Omron Electronics D2SW-3L1HS switch is compatible with the ATM system. Similar switches from other manufacturers may also be suitable.

Omron is a registered trademark of Omron Corporation.

#### Fully Automatic Cable Tie Installation Systems

A complete single-source solution for high volume harnessing, assembly, fastening, and packaging applications. With cycle times of less than one second, the systems are up to six times faster than conventional manual cable tie installations.



**Bundling Systems** 



**Bundling and Mounting System** 



**PAT/Robot Integration Kit** 

#### Abrasion Protection Products

Panduit Abrasion protection products provide an economical and easy way to insulate, protect, bundle, and color-code components and cable. A wide variety of sizes and materials are available to meet a broad range of indoor and outdoor applications.





**Corrugated Loom Tubing** 



Braided Expandable Sleeving



Spiral Wrap

#### Pan-Wrap<sup>™</sup> Split Harness Wrap

### Terminals, Disconnects, Ferrules and Splices

Connectors are available loose piece for manual installation and continuously molded for high volume automated installation. Panduit's manual and automated installation tooling improve productivity and reliability for industrial settings.



Wide Variety of Terminals, **Disconnects**, and Splices

PANDUIT®



4-Ton Press and **Universal Applicator** 



Reel Smart<sup>™</sup> Continuously **Molded Connectors** 

Dimensions are in inches (Dimensions in parentheses are metric) WORLDWIDE SUBSIDIARIES AND SALES OFFICES

#### PANDUIT CANADA Markham, Ontario cs-cdn@panduit.com Phone: 800.777.3300

PANDUIT EUROPE LTD. London, UK cs-emea@panduit.com Phone: 44.20.8601.7200 PANDUIT SINGAPORE PTE. LTD. Republic of Singapore cs-ap@panduit.com Phone: 65.6305.7575

PANDUIT JAPAN Tokyo, Japan cs-japan@panduit.com Phone: 81.3.6863.6000 PANDUIT LATIN AMERICA Jalisco, Mexico cs-la@panduit.com Phone: 52.33.3777.6000

PANDUIT AUSTRALIA PTY. LTD. Victoria, Australia cs-aus@panduit.com Phone: 61.3.9794.9020

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 WACB20

©2010 Panduit Corp. ALL RIGHTS RESERVED. Printed in the U.S.A. Product Bulletin Number SA-WACB20 Replaces SA101N556-WA 8/2010