



HEYClip™ Unscrewing Snap Rivets

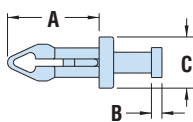
WILL FIT THESE PANELS						PART NO.	DESCRIPTION	PART DIMENSIONS						STYLE
MOUNTING HOLE DIA.		ASSEMBLED PANEL THICKNESS						A Length		B Head Height		C Head Diameter		
in.	mm.	in.	mm.	Min.	Max.			in.	mm.	in.	mm.	in.	mm.	
HUSR Series														
.197	5,0	.059	1,5	.236	6,0	4330	HUSR 197-158	.43	11,0	.15	3,9	.47	12,0	1
.236	6,0	.059	1,5	.236	6,0	4331	HUSR 236-059	.43	11,0	.15	3,9	.63	16,0	
.315	8,0	.118	3,0	.394	10,0	4332	HUSR 315-118	.55	14,0	.16	4,0	.79	20,0	
		.276	7,0	.315	8,0	4333	HUSR 315-276	.80	20,3	.14	3,6	.79	20,0	3

Standard color black.

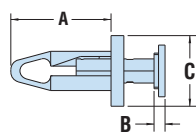
HEYClip™ Tough Rivets

WILL FIT THESE PANELS								PART NO.	DESCRIPTION	PART DIMENSIONS					
MOUNTING HOLE DIAMETER		ASSEMBLED PANEL THICKNESS				A Length Below Panel				B Head Height		C Head Diameter			
Minimum in.	Maximum mm.	Minimum in.	Maximum mm.	Minimum in.	Maximum mm.	in.	mm.			in.	mm.	in.	mm.		
Mini - MTR Series															
.122	3,1	.128	3,3	.155	3,9	.180	4,6	12475	MTR 180-125	.37	9,4	.05	1,3	.22	5,5
.144	3,7	.154	3,9	.265	6,7	.290	7,4	12477	MTR 290-150	.47	11,9	.05	1,3	.30	7,6
Standard - TR Series															
.193	4,9	.205	5,2	.059	1,5	.181	4,6	12466	TR 181-199	.45	11,3	.08	2,1	.28	7,2
.250	6,4	.276	7,0	.098	2,5	.315	8,0	12468	TR 315-263	.90	22,8	.11	2,8		
.315	8,0	.325	8,3	.118	3,0	.315	8,0	12469	TR 315-320	.83	21,1	.09	2,3	.59	15,0

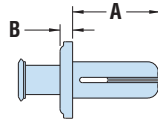
Standard color black.



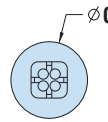
MTR Series



TR Series



HRR Series



HEYClip™ Removable Rivets

ALL NEW PRODUCTS

WILL FIT THESE PANELS				PART NO.	DESCRIPTION	PART DIMENSION					
Mounting Hole Diameter		Assembled Panel Thickness				A Length Below Panel		B Head Height		C Head Diameter	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.
.188	4,8	.062	1,6	12220	HRR 062-188	.50	12,7	.07	1,8	.38	9,5
		.125	3,2	12221	HRR 125-188						
		.062	1,6	12222*	HRR 062-250						
.250	6,4	.125	3,2	12223	HRR 125-250	.50	12,7	.07	1,8	.44	11,1
		.187	4,7	12224	HRR 187-250						

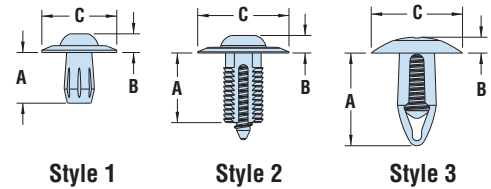
Standard color natural.

*Will also fit .210" x .218" square hole (for Darling Shelves).

	HUSR & HRR	MTR	TR
Material	Nylon 6/6	Heat stabilized Nylon 6	Impact Modified Nylon 6/6
Flammability Rating	94V-2	94 V-2	94HB
Temperature Range	32°F (0°C) to 185°F (85°C)	32°F (0°C) to 230°F (110°C)	-40°F (-40°C) to 185°F (85°C)



- Phillips head screw driver required for removal.



- Molded from impact modified nylon for vibration resistance.
- One-piece design requires no tools for installation.
- Provide solid, vibration-resistant connections by means of front mount, blind side fixing.
- Provide neat and smooth finishes for fastening applications.
- Removable by pulling the pin out of the grommet; reusable.



- Two-piece rivet can be removed by retracting the pin then the body.
- Slot in line with pin for pin removal with small screw driver, fingernail or other sharp edge underneath the head of the pin.

"Stay Connected" with



Liquid Tight Cordgrips

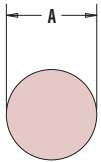
a PennEngineering® Company



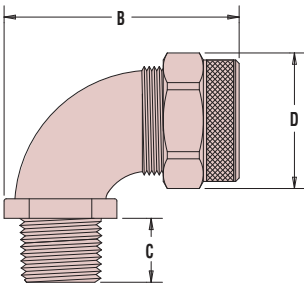
Heyco®-Tite Cast Aluminum Liquid Tight Cordgrips Right Angle, NPT Hubs

The Ultimate in Liquid Tight Strain Relief Protection

- **Aluminum construction** provides excellent durability and performance for most **industrial applications**.
- For use in both indoor and outdoor applications to prevent cable pull-out, control arc of bend, and to provide a tight seal against environmental elements such as dirt, moisture, and coolants.
- IP 67 rated.
- Protect cable from damage and pull-out and are used in conduit hubs or knock-outs at the point where the electrical cable is to be terminated.
- Unique design with a combination tightening surface that includes both a hex area and a knurled surface.
- Anti-friction washer allows for easier compression.
- DFARS Compliant



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING



CABLE DIA. RANGE				PART NO. Cast Aluminum	THREAD SIZE	UL	PART DIMENSIONS							
Minimum		Maximum					A Clearance Hole Dia.		B Max. O.A. Length		C Thread Length		D Wrenching Flat Size	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.	
Sweep Design														
.125	3,2	.188	4,8	M5230	NPT 3/8	UL	.68	17,3	2.00	50,8	.44	11,2	.88	23,4
.188	4,8	.250	6,4	M5231										
.250	6,4	.312	7,9	M5232										
.312	7,9	.375	9,5	M5233										
.375	9,5	.438	11,1	M5234	NPT 1/2	UL	.88	22,3	2.39	60,7	.56	14,2	1.13	28,7
.125	3,2	.188	4,8	M5235										
.188	4,8	.250	6,4	M5236										
.250	6,4	.312	7,9	M5237										
.312	7,9	.375	9,5	M5238										
.375	9,5	.438	11,1	M5239										
.438	11,1	.500	12,7	M5240										
.500	12,7	.562	14,3	M5241										
.562	14,3	.625	15,9	M5242	NPT 3/4	UL	1.09	27,7	2.88	73,2	.59	15,0	1.37	31,8
.438	11,1	.500	12,7	M5243										
.500	12,7	.562	14,3	M5244										
.500	12,7	.625	15,9	M5245										
.562	14,3	.688	17,5	M5246										
.625	15,9	.750	19,1	M5247										
.688	17,5	.812	20,6	M5248	NPT 1	UL	1.38	35,0	3.13	79,5	.60	15,2	1.56	39,6
.500	12,7	.562	14,3	M5249										
.500	12,7	.625	15,9	M5250										
.562	14,3	.688	17,5	M5251										
.625	15,9	.750	19,1	M5252										
.688	17,5	.812	20,6	M5253										
.750	19,1	.875	22,2	M5254										
.812	20,6	.938	23,8	M5255										
.875	22,2	1.000	25,4	M5256										

O-ring not included - See pages 2-19 through 2-20 for Sealing Washers, Foam Washers & Thermoplastic O-rings.
Locknut not included - See page 3-48 for Metal Locknuts.

Quick Specs

Material
Certifications

Flammability Rating
Temperature Range
IP Rating

Aluminum with Neoprene Sealing Gland and Viton® O-Ring
 UL Listed under Underwriters' Laboratories File E51579
 SP Certified by Canadian Standard Association File 258093
 94V-2
 -40°F (-40°C) to 250°F (121°C)
 IP 67



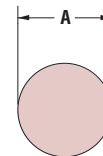
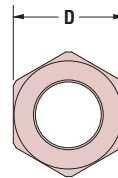
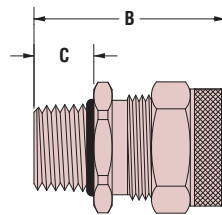
Heyco® -Tite Aluminum Liquid Tight Cordgrips Straight-Thru, NPT Hubs

The Ultimate in Liquid Tight Strain Relief Protection

- **Aluminum construction** provides excellent durability and performance for most **industrial applications**.
- For use in both indoor and outdoor applications to prevent cable pull-out, control arc of bend, and to provide a tight seal against environmental elements such as dirt, moisture, and coolants.
- IP 67 rated.
- Protect cable from damage and pull-out and are used in conduit hubs or knock-outs at the point where the electrical cable is to be terminated.
- Unique design with a combination tightening surface that includes both a hex area and a knurled surface.
- Anti-friction washer allows for easier compression.
- DFARS Compliant

CABLE DIA. RANGE				PART NO. Machined Aluminum	THREAD SIZE	UL	PART DIMENSIONS							
Minimum		Maximum					A Clearance Hole Dia.		B Max. O.A. Length		C Thread Length		D Wrenching Flat Size	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.
.125	3,2	.188	4,8	M5000*	NPT 1/4	UL	.54	13,7	1.38	35,1	.44	11,2	.88	22,4
.188	4,8	.250	6,4	M5001										
.250	6,4	.312	7,9	M5002										
.312	7,9	.375	9,5	M5003										
.125	3,2	.188	4,8	M5005*	NPT 3/8	UL	.68	17,3	1.38	35,1	.44	11,2	.88	22,4
.188	4,8	.250	6,4	M5006										
.250	6,4	.312	7,9	M5007										
.312	7,9	.375	9,5	M5008										
.125	3,2	.188	4,8	M5010*	NPT 1/2	UL	.88	22,4	1.38	35,1	.44	11,2	.88	22,4
.188	4,8	.250	6,4	M5011										
.250	6,4	.312	7,9	M5012										
.312	7,9	.375	9,5	M5013										
.375	9,5	.438	11,1	M5014										
.125	3,2	.188	4,8	M5015*	NPT 1/2	UL	.88	22,4	1.62	41,1	.56	14,2	1.13	28,7
.188	4,8	.250	6,4	M5016										
.250	6,4	.312	7,9	M5017										
.312	7,9	.375	9,5	M5018										
.375	9,5	.438	11,1	M5019										
.438	11,1	.500	12,7	M5020										
.500	12,7	.562	14,3	M5021										
.562	14,3	.625	15,9	M5022										

Assembled O-ring **INCLUDED**. *Not UL Listed or CSA Certified.
Locknut not included - See page 3-48 for Metal Locknuts.



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Quick Specs

Material
Certifications

Flammability Rating
Temperature Range
IP Rating

Aluminum with Neoprene Sealing Gland and Viton® O-Ring
 UL Listed under Underwriters' Laboratories File E51579
 SR Certified by Canadian Standard Association File 258093
 94V-2
 -40°F (-40°C) to 250°F (121°C)
 IP 67

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



Heyco®-Tite Liquid Tight Cordgrips for Enphase Q Cables

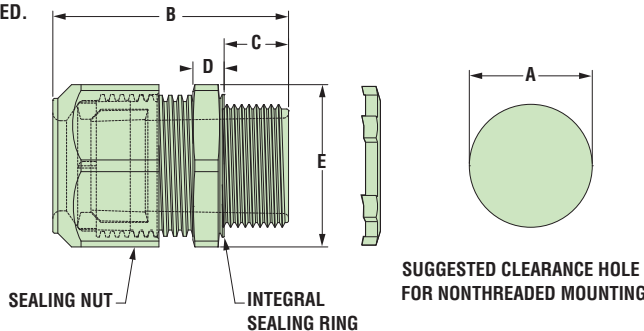
Straight-Thru, NPT Hubs with Integral Sealing Ring

The Ultimate in Liquid Tight Strain Relief Protection



GLAND CONFIGURATION	PART NO.	DESCRIPTION	UL/CSA or cULus	PART DIMENSIONS											
				A Clearance Hole Dia.		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thickness		E Flat Size			
Type	Size	No.	Black		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	
Oval Gland															
Q Cable	6,1 x 9,7	1	M3231GCZ	LTCG 1/2 6.1x9.7MM	UL/CSA	.875	22,2	1.70	43,2	.61	15,5	.21	5,3	.98	24,9
Break-Thru Skinned Over Gland															
Q Cables plus Ground	6,1 x 9,7 3,3	2 1	M3234GDA-SM	SMCG 3/4 2-6.1x9.7MM 1-3.3MM	UL/CSA	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0

Metal Locknuts INCLUDED.



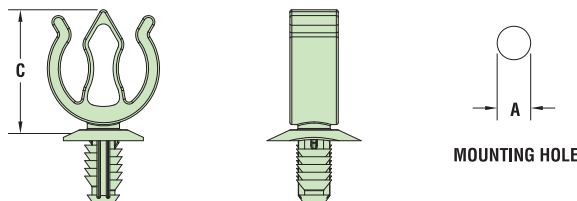
- Two new cordgrips now accommodate the Enphase Q Cable – M3231GCZ (1/2" NPT) and M3234GDA-SM (3/4" NPT).
- The 1/2" version provides liquid tight entry for one Enphase Q Cable – .24 x .38" (6,1 x 9,7 mm).
- The 3/4" version provides liquid tight entry for up to two Enphase Q Cables – .24 x .38" (6,1 x 9,7 mm) and an additional .130" (3,3 mm) dia. hole for a #8 solid grounding cable.
- The 3/4" version utilizes our skinned-over technology so any unused holes will retain a liquid tight seal.

Material	Nylon 6/6 with TPE Sealing Gland
Certifications	UL Listed under Underwriters' Laboratories File E51579 CSA Certified by the Canadian Standards Association File 93876
Flammability Rating	94-V2
Temperature Range	Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68

Heyco® Helios® UVX Clip – Blind Mount



PANEL THICKNESS RANGE		WIRE DIAMETER RANGE		PART NO.	DESCRIPTION	MOUNTING HOLE DIA. A		OVERALL HEIGHT C	
Minimum	Maximum	1-2 Wires				in.	mm.	in.	mm.
.028	0,7	.250	6,4	S6520 S6560	Helios UVX Clip 100 Pack Helios UVX Clip Bulk	.260	6,6	.96	24,4



Material	Nylon 6/6 with extended UV Capabilities
Flammability Rating	94V-2
Temperature Range	Dynamic -4°F (-20°C) to 185°F (85°C)



- The jersey pine tree mounting style installs easily with superior holding power.
- UVX nylon protects from corrosion due to outdoor exposure.
- Installs into .260" (6,6 mm) mounting hole.
- Holds up to 2 cables between .230 - .315" (5,8 - 8,0 mm) each.
- Cables install with fingertip pressure.
- Molded from our robust UVX nylon 6/6 with extended UV capabilities for our Solar 20 Year Warranty.

To request a quote, please email releases@dbroberts.com, or call us at 800-773-5388.

“Stay Connected” with

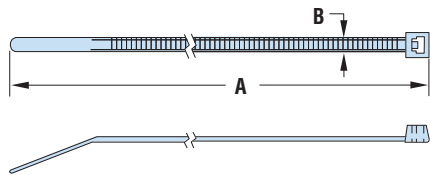


HEYware Products

a PennEngineering® Company



- Smooth, radiused edges ensure that Nytyes won't cut into the cable's insulation—or the installer's hand.
- One-piece design reduces cost and installation time.
- Nytyes feature a bent tip for ease of pickup and insertion around small bundles. V-shaped raised ridges on the tip provide a sure grip.
- Nylon 12 cable ties are weather/UV resistant and suitable for high moisture, corrosive and low temperature indoor or outdoor applications.
- Close, evenly spaced teeth permit fine adjustment—from .025" (0,6 mm) on the smallest Nytyes to .063" (1,6 mm) on the largest.
- Standard UV Black Nytyes are available in 100 packs; add -P to Part No.; eg. 13140B-P
- Compliant with MS3367 and MIL-S-23190E



Heyco® Cable Tie Tensioning Tool



Part No. 0998 fits all standard duty Nytyes. Metal construction, has three tension settings, and automatically trims excess.

Quick Specs

Heyco® Nytye® Nylon Cable Ties

PART SPECIFICATIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Max. Tensile Strength		Max. Bundle Diameter		Natural	UV Black		A Length		B Width	
Lbs.	N	in.	mm.			in.	mm.	in.	mm.	
Miniature										
18	80	.63	16,0	13100	13100B	NT-18-031	3.15	80	.10	2,5
		.87	22,0	13102	13102B	NT-18-039	3.94	100		
		1.18	30,0	13105	13105B	NT-18-047	4.72	120		
		1.38	35,0	13107	13107B	NT-18-059	5.91	150		
		1.57	40,0	13108	13108B	NT-18-063	6.30	180		
		2.36	60,0	13111	13111B	NT-18-078	7.87	200		
Intermediate										
40	178	.87	22,0	13120	13120B	NT-40-039	3.94	100	.14	3,6
		1.18	30,0	13121	13121B	NT-40-047	4.72	120		
		1.30	33,0	13122	13122B	NT-40-055	5.51	140		
		1.38	35,0	13123	13123B	NT-40-059	5.91	150		
		1.65	42,0	13124	13124B	NT-40-070	7.09	180		
		1.97	50,0	13126	13126B	NT-40-078	7.87	200		
		2.56	65,0	13128	13128B	NT-40-099	9.92	252		
		3.15	80,0	13129	13129B	NT-40-110	11.02	280		
		3.35	85,0	13130	13130B	NT-40-118	11.81	300		
		4.02	102,0	13134	13134B	NT-40-145	14.57	370		
Standard										
50	222	.94	24,0	13140	13140B	NT-50-047	4.72	120	.19	4,8
		1.57	40,0	13142	13142B	NT-50-063	6.30	160		
		1.65	42,0	13143	13143B	NT-50-072	7.20	183		
		1.97	50,0	13145	13145B	NT-50-078	7.87	200		
		2.56	65,0	13147	13147B	NT-50-098	9.84	250		
		2.76	70,0	13149	13149B	NT-50-110	11.02	280		
		3.23	82,0	13151	13151B	NT-50-118	11.81	300		
		3.54	90,0	13153	13153B	NT-50-137	13.78	350		
		4.02	102,0	13155	13155B	NT-50-145	14.57	370		
		4.13	105,0	13156	13156B	NT-50-157	15.75	400		
		5.12	130,0	13158	13158B	NT-50-177	17.72	450		
		5.91	150,0	13160	13160B	NT-50-196	19.68	500		

Standard colors natural and UV Black. Consult Heyco for heat-stabilized material and colors. Standard UV Black Nytyes available in 100 packs; add -P to Part No.; eg. 13140B-P



Heyco® Nytye® Nylon 12 Cable Ties

PART SPECIFICATIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Max. Tensile Strength		Max. Bundle Diameter		UV Black Bulk	UV Black 100 Packs		A Length		B Width	
Lbs.	N	in.	mm.			in.	mm.	in.	mm.	
40	178	1.44	36,6	13340B	13340B-P	NT-40-058-12	5.84	148,3	.14	3,6
		1.87	47,5	13342B	13342B-P	NT-50-076-12	7.56	192,0		
50	222	3.06	77,7	13343B	13343B-P	NT-50-112-12	11.25	285,7	.18	4,6
		4.00	101,6	13344B	13344B-P	NT-50-145-12	14.50	368,3		
100	444	2.06	52,3	13346B	13346B-P	NT-100-087-12	8.70	220,1	.30	7,6

Standard color UV Black.

Material	Nylon 6/6 or Nylon 12
Certifications	UL Certified by UL for Compliance with both Canadian and U.S. requirements under File E54523 (Nylon 6/6 only)
Flammability Rating	94V-2
Temperature Range	-40°F (-40°C) to 185°F (85°C) (Nylon 6/6) -58°F (-50°C) to 302°F (150°C) (Nylon 12)

“Stay Connected” with



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a PennEngineering® Company



Heyco® Nytye® Nylon Cable Tie Variations

PART SPECIFICATIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Max. Tensile Strength	Max. Bundle Diameter	Natural	UV Black				A	B		
Lbs.	N	in.	mm.			Length	Width			
						in.	mm.	in.	mm.	

Low Profile

65	289	5.91	150,0	13294	13294B	NTLP-65-097	19.68	500	.35	9,0
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Releasable

40	178	1.38	35,0	13297	13297B	RNT-40-059	5.94	151	.14	3,5	
50	222	1.97	50,0	13301	13301B	RNT-50-079	7.95	202	.18	4,5	
		3.00	76,0	14000	14000B	RNT-50-110	11.02	280	.19	4,8	NEW!
		1.18	30,0	14005	14005B	RNT-50-049	4.92	125	.28	7,2	NEW!
		1.38	35,0	14010	14010B	RNT-50-059	5.90	150			NEW!
		1.97	50,0	14011	14011B	RNT-50-079	7.87	200			NEW!
		2.60	66,0	14012	14012B	RNT-50-098	9.84	250	.30	7,6	NEW!
		3.27	83,0	14013	14013B	RNT-50-118	11.81	300			NEW!
3.54	90,0	14014	14014B	RNT-50-137	13.78	350			NEW!		

Screw Mount

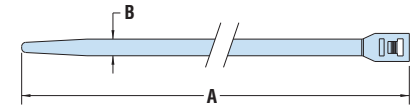
										Screw Size	
18	80	.87	22,0	13307	-	MNT-18-044	4.41	112	.10	2,5	#4 screw
40	178	1.38	35,0	13308	-	MNT-40-067	6.69	170	.14	3,6	#8 screw
50	222	1.75	44,4	3560*	-	MNT-150	8.00	203	.19	4,8	#10 screw
		1.97	50,0	13309	-	MNT-50-086	8.66	220	.17	4,3	

Identification

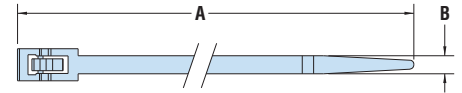
								Marking Area W x L							
								in.	mm.	in.	mm.				
18	80	.87	22,0	13316	-	NTID-18-039	3.94	100	.10	2,5	.31	8,0	1.00	25,4	
				13317	-	NTID-18-039-1	3.94	100	.10	2,5	.83	21,0	1.10	28,0	NEW!

Standard color natural and UV Black. Consult Heyco for heat-stabilized material and colors.

*cURus

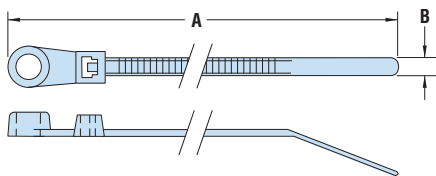


Low Profile

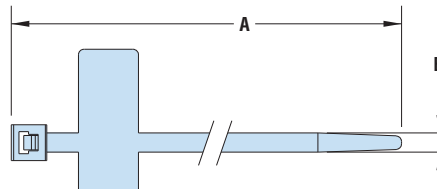


RELEASABLE TAB

Releasable



Screw Mount



Identification

Material	Nylon 6/6
Certifications	cUL _{us} Certified by Underwriters' Laboratories for compliance with both Canadian and US Requirements under File E54523 (Releasable and Screw Mount Nytyes only)
Flammability Rating	94V-2
Temperature Range	32°F (0°C) to 185°F (85°C)

Quick Specs

To request a quote, please email releases@dbroberts.com, or call us at 800-773-5388.