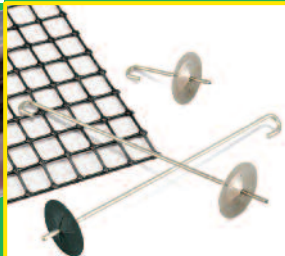
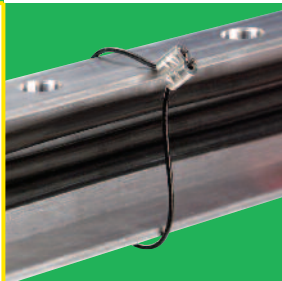


Heyco®
Sun Products
Catalog
– 2017 –



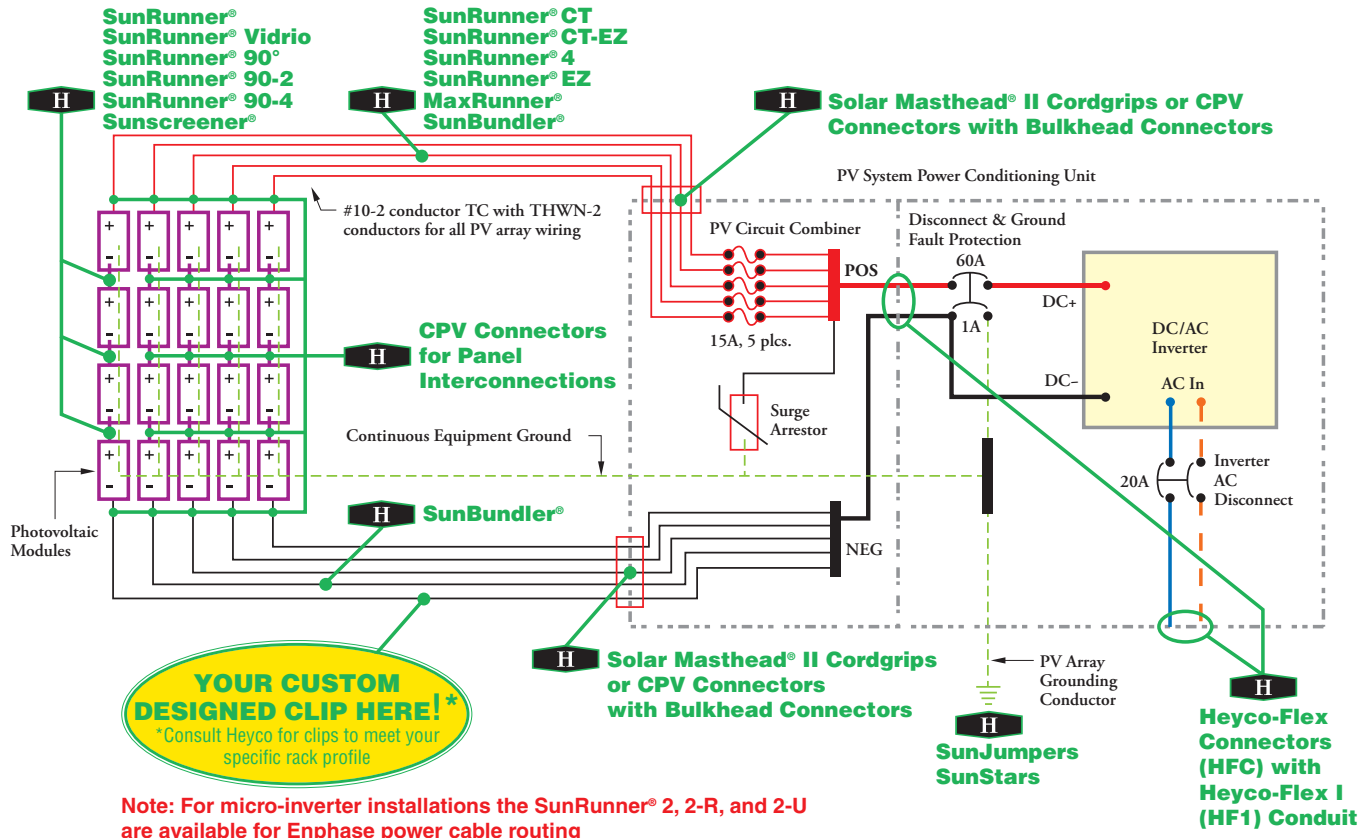
a PennEngineering® Company



Contents:

- 1 Wire Management, Grounding and Screening Solutions, pages 1-0 thru 1-31
- 2 Enclosures and Module Components, pages 2-0 thru 2-39
- 3 Electrical Accessories, pages 3-0 thru 3-20

Heyco® Solar Power Components Used in Typical Grid-Tied PV System



Heyco Solar Products Warranty – Applies to all products in Section 1 (except NTMP, page 1-13 and pages 1-15 through 1-24) and products found on pages 2-33 through 2-38 only.

Heyco manufactures and sells products of the highest quality and stands behind them. In light of those facts, Heyco sells its products with the understanding and on the condition that the purchaser will test them in actual use and make his own determination as to their suitability and acceptability for his intended use, and the purchaser agrees to such condition. Use of Heyco products other than for the applications or environments illustrated herein constitutes a misuse for which the purchaser bears all responsibility.

Heyco warrants to the original purchaser that for a period of twenty (20) years from date of purchase the Heyco solar products shall be free from defects in material and workmanship. Except as set forth in the prior sentence, Heyco makes no other warranty, express or implied, and all other warranties are expressly disclaimed by Heyco. Heyco's obligation under this warranty and that of the seller is limited to the replacement of the defective product or the provision of new components at no charge. Under no circumstances are Heyco or the seller liable for any consequential, special, indirect, incidental, punitive or exemplary losses, damages or expenses, or for lost profits, lost business, or for lost opportunities, arising out of the use and/or inability to use the Heyco solar products, regardless of whether Heyco has been advised of the possibility of such damages.

In order to qualify for this warranty, the original purchaser must have installed the Heyco solar products in accordance with the appropriate Heyco installation instructions and all commercial building wiring standards and must not have subjected the Heyco solar products to abuse or mishandling.

Force Majeure—Heyco shall not be responsible or liable in any way to the purchaser for any failure or delay in performance under this warranty due to any cause beyond its control such as war, riots, strikes, natural disaster, acts of God, acts of terrorism, flood, fire, accident, delay in transportation, intervention by governmental entities, change in laws or regulations or any other unforeseen event beyond its control.

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



Heyco®-Tite Solar Masthead® II Liquid Tight Cordgrips

Multi-Hole, NPT Hubs with Integral Sealing Ring - IP 68 Rated

The Ultimate in Liquid Tight Strain Relief Protection

Small Packs Available

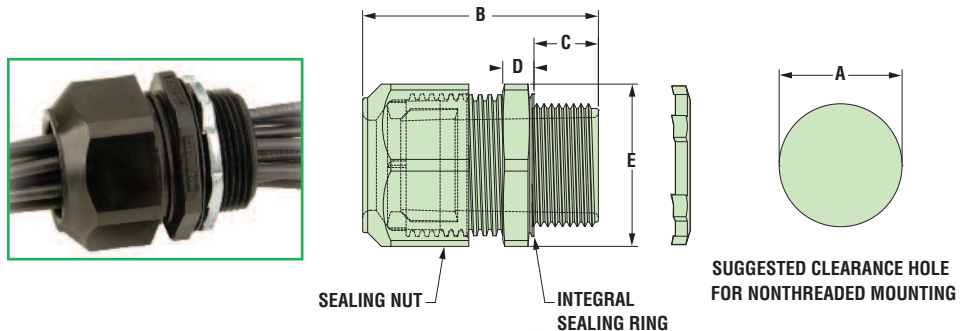
GLAND CONFIGURATION Conductors Size mm.	PART NO. Black No.	DESCRIPTION with NPT Thread	PACKAGING		UL/CS or cULus	PART DIMENSIONS										
			Std. Pack	Small Pack †		A Clearance Hole Dia. in. mm.		B Max. O.A. Length in. mm.		C Thread Length in. mm.		D Wrenching Nut Thickness in. mm.		E Flat Size in. mm.		
5,5	5	M3234GBR-SM	SMCG 3/4	100	25	UL/CS	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
	9	M8437GBK-SM	SMCG 1	100	25	cULus	1.326	33,8	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
	13	M4524GBM-SM	SMCG 1-1/4	50	10	cULus	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
	21	M3317GBQ-SM	SMCG 1-1/2	50	5	cULus	1.920	48,8	2.81	71,3	.76	19,3	.36	9,1	2.46	62,5
	31	M3321GBY-SM	SMCG 2	50	5	cULus	2.400	60,8	2.93	74,3	.79	20,1	.42	10,7	2.73	69,3
5,6	3	M3200GAH-SM	SMCG LL 1/2	200	25	UL/CS	.875	22,2	1.68	42,7	.44	11,2	.25	6,4	1.06	26,9
7,7	3	M3234GBS-SM	SMCG 3/4	100	25	UL/CS	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
	5	M8437GBT-SM	SMCG 1	100	25	UL/CS	1.326	33,8	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
	9	M4524GBW-SM	SMCG 1-1/4	50	10	UL/CS	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
	11	M3317GBZ-SM	SMCG 1-1/2	50	5	cULus	1.920	48,8	2.81	71,3	.76	19,3	.36	9,1	2.46	62,5
	19	M3321GBX-SM	SMCG 2	50	5	UL/CS	2.400	60,8	2.93	74,3	.79	20,1	.42	10,7	2.73	69,3
8,9	7	M4524GCJ-SM	SMCG 1-1/4	50	10	UL/CS	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
	9	M3317GCK-SM	SMCG 1-1/2	50	5	cULus	1.920	48,8	2.81	71,3	.76	19,3	.36	9,1	2.46	62,5
	12	M3321GCM-SM	SMCG 2	50	5	UL/CS	2.400	60,8	2.93	74,3	.79	20,1	.42	10,7	2.73	69,3

*AWG 10 and 12 for both USE-2 and PV Cable.

**For 8 AWG USE-2 Wire.

† To order **Small Packs**, please add the suffix **-P** to Part No.; e.g., M3234GBR-SM-P.

- **Break-Thru Skinned-Over glands** in the Solar Masthead II Cordgrips offer flexibility to use from 1 to 31 of the available holes while still providing a liquid tight seal around the wire.
- **IP 68 rated.**
- Approved for **NEMA 4, 4X, 6 and 6P** applications.
- **Integral Sealing Ring** ensures a superior seal at the clearance or threaded mounting hole location, every time.
- Provide a watertight seal for PV module output leads to inverters.
- Designed for solar rooftop or combiner box installations.
- Secure input PV leads from solar panel array strings to fuse holder hookup within solar combiner boxes.
- Suitable for use with USE-2 and PV Cable.
- UV resistant nylon construction with TPE Sealing Gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents.
- No disassembly required for installation.
- Generous wrenching flats for ease of assembly.
- **Solar Masthead II Cordgrips provided with assembled metal locknut.**
- Contact Heyco for other sizes and gland configurations.



See page 3-7 for details

Use a Heyco-Flex I Conduit Adapter to join a Heyco Solar Masthead to Heyco-Flex I or Rigid PVC Conduit, through which the solar installer can run PV wire from the roof to the field level inverter.

Material	Nylon 6/6 with TPE Sealing Glands
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E51579 cULus Recognized under the Component Program of Underwriters' Laboratories File E51579 to both Canadian and U.S. requirements CS 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

“Stay Connected” with



Solar Power Components

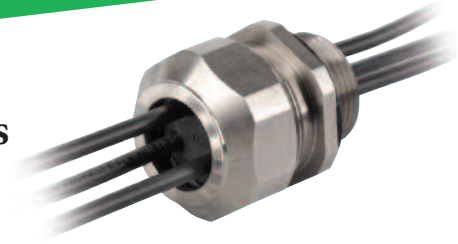
a PennEngineering® Company



Heyco®-Tite Solar Masthead® Metal Liquid Tight Cordgrips

Multi-Hole, NPT Hubs - IP 68 Rated

The Ultimate in Liquid Tight Strain Relief Protection

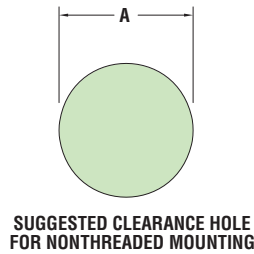
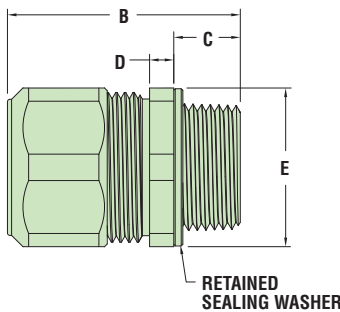


GLAND CONFIGURATION		PART NO.	DESCRIPTION	PACKAGING	UL or RV	A		B		C		D		E	
Size mm.	Conductors No.					Clearance Hole Dia.	Max. O.A. Length	Thread Length	Thickness	Wrenching Nut Flat Size					
Stainless Steel															
5,5	9	M6013GBK-SM	SSMCG 1	25	UL or RV	1.375	34,9	2.22	56,4	.69	17,5	.20	5,1	1.75	44,5
	13	M6016GBM-SM	SSMCG 1-1/4	10	UL or RV	1.734	44,0	2.61	65,0	.71	18,0	.25	6,4	2.25	57,2
	21	M6018GBQ-SM	SSMCG 1-1/2	5	UL or RV	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5
	31	M6020GBY-SM	SSMCG 2	5	UL or RV	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9
7,7	5	M6013GBT-SM	SSMCG 1	25	UL or RV	1.375	34,9	2.22	56,4	.69	17,5	.20	5,1	1.75	44,5
	9	M6016GBW-SM	SSMCG 1-1/4	10	UL or RV	1.734	44,0	2.61	65,0	.71	18,0	.25	6,4	2.25	57,2
	11	M6018GBZ-SM	SSMCG 1-1/2	5	UL or RV	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5
	19	M6020GBX-SM	SSMCG 2	5	UL or RV	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9
8,9	7	M6016GCJ-SM	SSMCG 1-1/4	10	UL or RV	1.734	44,0	2.61	65,0	.71	18,0	.25	6,4	2.25	57,2
	9	M6018GCK-SM	SSMCG 1-1/2	5	UL or RV	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5
	12	M6020GCM-SM	SSMCG 2	5	UL or RV	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9
Aluminum															
5,5	9	M6113GBK-SM	ALMCG 1	25	UL or RV	1.375	34,9	2.22	56,4	.69	17,5	.20	5,1	1.75	44,5
	13	M6116GBM-SM	ALMCG 1-1/4	10	UL or RV	1.734	44,0	2.61	65,0	.71	18,0	.25	6,4	2.25	57,2
	21	M6118GBQ-SM	ALMCG 1-1/2	5	UL or RV	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5
	31	M6120GBY-SM	ALMCG 2	5	UL or RV	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9
7,7	5	M6113GBT-SM	ALMCG 1	25	UL or RV	1.375	34,9	2.22	56,4	.69	17,5	.20	5,1	1.75	44,5
	9	M6116GBW-SM	ALMCG 1-1/4	10	UL or RV	1.734	44,0	2.61	65,0	.71	18,0	.25	6,4	2.25	57,2
	11	M6118GBZ-SM	ALMCG 1-1/2	5	UL or RV	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5
	19	M6120GBX-SM	ALMCG 2	5	UL or RV	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9
8,9	7	M6116GCJ-SM	ALMCG 1-1/4	10	UL or RV	1.734	44,0	2.61	65,0	.71	18,0	.25	6,4	2.25	57,2
	9	M6118GCK-SM	ALMCG 1-1/2	5	UL or RV	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5
	12	M6120GCM-SM	ALMCG 2	5	UL or RV	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9

* AWG 10 and 12 for both USE-2 and PV Cable.

** For 8 AWG USE-2 Wire, use Solar Mastheads for 7,7 mm conductors.

Assembled Metal Locknuts INCLUDED.



Material	SSMCG: 303 Stainless Body and sealing nut with Nylon 6/6 finger and TPE Gland ALMCG: 6061 Aluminum body and sealing nut with Nylon 6/6 finger and TPE Gland
Certifications	UL or RV Certified by UL for Compliance with both Canadian and US requirements under File E51579 RV or UL Recognized under the Component Program of Underwriters' Laboratories File E51579 to both Canadian and US requirements
Flammability Rating	94V-2
Temperature Range	-40°F (-40°C) to 212°F (100°C)
IP Rating	IP 68 (70 PSI, 5 BAR)

- Break-Thru Skinned-Over glands offer flexibility to use from 1 to 31 of the available holes while still providing a liquid tight seal around the wire.
- Rolled grease-free threads prevent galling and allow for multiple assemblies and disassemblies.
- Approved for NEMA 4, 4X, 6 and 6P applications.
- Self-retaining sealing washers eliminate the need for an O-Ring groove, thus reducing cost.
- Stainless Steel ideal for corrosive environments.
- Aluminum a less costly solution for robust environments.
- Suitable for use with USE-2 and PV Cable.
- Secure input PV leads from solar panel array strings to fuse holder hookup within solar combiner boxes.
- No disassembly required for installation.
- Sealing washer required for through hole applications only.
- DFARS Compliant.



Heyco® -Tite UL Listed/Recognized and CSA Certified Liquid Tight Cordgrips for Solar Applications

Multi-Hole, NPT Hubs with Integral Sealing Ring - IP 68 Rated

The Ultimate in Liquid Tight Strain Relief Protection

- Integral Sealing Ring ensures a superior seal at the clearance or threaded mounting hole location, every time.
- IP 68 rated.
- Widest range of approved cable diameters.
- Cordgrips with an -SM suffix have Skinned-Over Break-thru glands that offer the flexibility to use from 1 to 31 of the available holes while still providing a liquid tight seal around the wire.
- All accompanying Cordgrips are made of nylon construction with TPE sealing glands that resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL.)
- Suitable for use with USE-2 and PV Cable.
- For locknut specifications or to order locknuts separately, see pages 3-17 & 3-18.
- Multi-hole glands are only to be used with Heyco Liquid Tight Cordgrips and are not sold separately.
- For our complete range of Heyco Cordgrips, see Section 3 in Heyco Catalog 117.

GLAND CONFIGURATION	PART NUMBER	DESCRIPTION	UL/CSA or cRU/US	PART DIMENSIONS										
				A Clearance Hole Dia.	B Max. O.A. Length	C Thread Length	D Wrenching Nut Thickness	E Wrenching Nut Flat Size						
Size mm.	No.	Black		in.	mm.	in.	mm.	in.	mm.	in.	mm.			
Standard Multi-Hole Gland - Assembled Metal Locknuts INCLUDED														
4,5	9	M8437GBF	LTCG 1	cRU/US	1.326	33,8	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
	13	M4524GBG	LTCG 1-1/4	cRU/US	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
5,2	2	M3231GAE	LTCG 1/2	UL/CSA	.875	22,2	1.70	43,2	.61	15,5	.21	5,3	.98	24,9
	3	M3234GAF	LTCG 3/4	UL/CSA	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
	4	M3234GAG	LTCG 3/4	UL/CSA	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
5,6	3	M3200GAH	LTCG LL 1/2	UL/CSA	.875	22,2	1.68	42,7	.44	11,2	.25	6,4	1.06	27,0
Skinned-Over Break-thru Solar Masthead Gland - Assembled Metal Locknuts INCLUDED														
5,5	5	M3234GBR-SM	SMCG 3/4	cRU/US	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
	9	M8437GBK-SM	SMCG 1	cRU/US	1.326	33,8	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
	13	M4524GBM-SM	SMCG 1-1/4	cRU/US	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
	21	M3317GBQ-SM	SMCG 1-1/2	cRU/US	1.920	48,8	2.81	71,4	.76	19,3	.36	9,1	2.48	63,0
5,6	31	M3321GBY-SM	SMCG 2	cRU/US	2.400	60,8	2.92	74,2	.79	20,1	.42	10,7	2.73	69,3
	3	M3200GAH-SM	SMCG LL 1/2	UL/CSA	.875	22,2	1.68	42,7	.44	11,2	.25	6,4	1.06	27,0
7,7	3	M3234GBS-SM	SMCG 3/4	UL/CSA	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
	5	M8437GBT-SM	SMCG 1	UL/CSA	1.326	33,8	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
	9	M4524GBW-SM	SMCG 1-1/4	UL/CSA	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
	11	M3317GBZ-SM	SMCG 1-1/2	cRU/US	1.920	48,8	2.81	71,4	.76	19,3	.36	9,1	2.48	63,0
8,9	19	M3321GBX-SM	SMCG 2	UL/CSA	2.400	60,8	2.92	74,2	.79	20,1	.42	10,7	2.73	69,3
	7	M4524GCJ-SM	SMCG 1-1/4	UL/CSA	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
	9	M3317GCK-SM	SMCG 1-1/2	cRU/US	1.920	48,8	2.81	71,3	.76	19,3	.36	9,1	2.48	63,0
12		M3321GCM-SM	SMCG 2	UL/CSA	2.400	60,8	2.93	74,3	.79	20,1	.42	10,7	2.75	69,9
	Other Configurations with Approval Potential - Locknuts not included													
6,0	2	M3200GAJ	LTCG LL 1/2	-	.875	22,2	1.68	42,7	.44	11,2	.25	6,4	1.06	27,0
	4	M3234GBC	LTCG 3/4	-	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
6,5	6	M8437GAL	LTCG 1	-	1.326	33,8	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9
		M4524GAL	LTCG 1-1/4	-	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1
7,0	3	M3234GAM	LTCG 3/4	-	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
7,4	2	M3234GAN	LTCG 3/4	-	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0

*AWG 10 and 12 for both USE-2 and PV Cable except 4,5 mm Conductors Recognized for AWG 12 only.

**8 AWG USE-2 Wire

***Depends on actual wire: 10 AWG USE-2 or 12 AWG PV 1000.



Use Heyco Multi-Hole Cordgrips with Heyco Female Threaded Couplings and Heyco-Flex III Tubing to insulate exposed PV wiring when making complete liquid tight connections to solar combiner or inverter enclosures. **See page 3-1 for details.**

Quick Specs

Material	Nylon 6/6 with TPE sealing gland
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E51579 cRU/US Recognized under the Component Program of Underwriters' Laboratories File E51579 to both Canadian and U.S. requirements CSA Certified by the Canadian Standards Association File 93876
Flammability Rating	94-V2
Temperature Range	Static -40°F (-40°C) to 239°F (112°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

“Coined”
edges prevent
cable damage

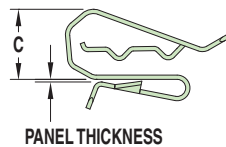
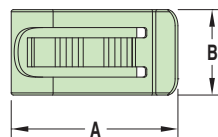


HEYClip™ SunRunner® Cable Clips for 1-2 Cables

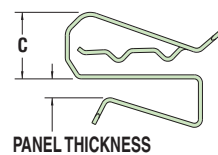
Double-Compression, Straight-thru Design

PANEL THICKNESS CLAMPING RANGE				WIRE DIAMETER RANGE	PART NO.		DESCRIPTION	FOOTPRINT		OVERALL HEIGHT	
Minimum	Maximum				304	316		A x B		C	
in.	mm.	in.	mm.		Stainless	Stainless			in.	mm.	
SunRunner Clip - for panels up to .090" (2,3 mm) thick											
.06	1,4	.09	2,3	.20" (5,1 mm)- .33" (8,3 mm) each cable	S6405	S6490	SunRunner® Clip 100 Pack	.97 x .50	24,6 x 12,7	.39	9,9
					S6445	S6495	SunRunner® Clip Bulk				
SunRunner Vidrio™ Clip - for GLASS panels up to .250" (6,4 mm) thick NEW PRODUCTS											
.13	3,2	.25	6,4	.20" (5,1 mm)- .33" (8,3 mm) each cable	S6460	-	SunRunner® Vidrio™ Clip 100 Pack	.99 x .52	25,1 x 13,2	.45	11,4
					S6500	-	SunRunner® Vidrio™ Clip Bulk				
SunRunner EZ Clip - for panels up to .250" (6,4 mm) thick											
.09	2,3	.25	6,4	.20" (5,1 mm)- .33" (8,3 mm) each cable	S6407	-	SunRunner® EZ Clip 100 Pack	.97 x .50	24,6 x 12,7	.41	10,4
					S6447	-	SunRunner® EZ Clip Bulk				

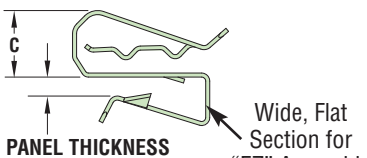
*Can accommodate up to three .33" (8,3 mm) diameter cables.



SunRunner®



SunRunner® Vidrio™



SunRunner® EZ

SunRunner® EZ with
(optional) UL Approved
SunBundler (page 1-11) looped through slot

- Heyco's SunRunner and SunRunner EZ's robust "double-compression" design securely holds from (1) 12 gauge USE-2 to (2) 10 gauge PV-1000V solar wires.
- Also for use with other cables from .20" (5,1 mm) to .33" (8,3 mm) in diameter.
- Heyco SunRunner Clips are designed to provide a better method for PV module wire management **and may be used wherever single or multiple cable management is needed.**
- Smooth clip edges prevent damage to cable insulation.
- Locking tabs securely fasten clips to module extrusions, **or other panels.**
- Generous lead-in for installation without tools.
- Screwdriver slot for easy removal or movement of clips if necessary.
- Neatly dresses cables on PV panel frames or along mounting channels.
- Constructed from corrosion resistant 304 stainless steel, not for use in a marine salt water environment.
- 316 stainless steel now available for marine and other harsh environments.
- **SunRunner Vidrio™ is designed to mount directly onto the glass panel with compression force only.** Will not harm the glass surface, and the black color meets many HOA requirements!
- The TPE coating on the SunRunner Vidrio™ provides an electrically insulated surface.
- **SunRunner EZ's are designed for thicker module frames** as well as racking – accommodates profiles up to .250" (6,4 mm) thick!

Material .025" thick 304 or 316 stainless steel
 Certifications Certified by UL for Compliance with both Canadian and US Requirements under File E54523
 Temperature Range -40°F (-40°C) to 572°F (300°C)

Quick
Specs



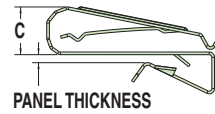
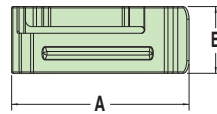
HEYClip™ SunRunner® Cable Clips for 4 Cables

Double-Compression, Straight-thru Design

- Heyco’s SunRunner and SunRunner EZ’s robust "double-compression" design securely holds from (1) 12 gauge USE-2 to (2) 10 gauge PV-1000V solar wires.
- Also for use with other cables from .20" (5,1 mm) to .33" (8,3 mm) in diameter.
- Heyco SunRunner Clips are designed to provide a better method for PV module wire management **and may be used wherever single or multiple cable management is needed.**
- Smooth clip edges prevent damage to cable insulation.
- Locking tabs securely fasten clips to module extrusions, **or other panels.**
- Generous lead-in for installation without tools.
- Screwdriver slot for easy removal or movement of clips if necessary.
- Neatly dresses cables on PV panel frames or along mounting channels.
- **SunRunner 4 designed to hold up to (4) 12 gauge USE-2 or (4) 10 gauge PV-1000V solar wires.**
- SunRunner 4 is constructed from heat treated 410 stainless steel for excellent strength and corrosion protection for outdoor exposure.
- **SunRunner EZ’s are designed for thicker module frames** as well as racking – accommodates profiles up to .250" (6,4 mm) thick!
- DFARS Compliant.

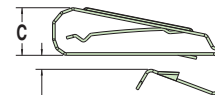
PANEL THICKNESS CLAMPING RANGE				WIRE DIAMETER RANGE	PART NO. 410 Stainless	DESCRIPTION	FOOTPRINT		OVERALL HEIGHT	
Minimum		Maximum					A x B		C	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	
SunRunner 4 Clip - for panels up to .125" (3,2 mm) thick										
.06	1,4	.13	3,2	.20" (5,1 mm) - .30" (7,6 mm) each cable*	S6443	SunRunner® 4 Clip 100 Pack	1,34 x	33,8 x	.36	9,1
					S6483	SunRunner® 4 Clip Bulk	.50	12,7		
SunRunner 4 EZ Clip - for panels up to .250" (6,4 mm) thick										
.13	3,2	.25	6,4	.20" (5,1 mm) - .30" (7,6 mm) each cable*	S6400	SunRunner® 4 EZ Clip 100 Pack	1,33 x	33,8 x	.36	9,1
					S6440	SunRunner® 4 EZ Clip Bulk	.50	12,7		

*Can accommodate up to three .33" (8,3 mm) diameter cables.



PANEL THICKNESS

SunRunner® 4



PANEL THICKNESS

SunRunner® 4 EZ

Quick Specs

Material	.020" thick 410 stainless steel
Certifications	Certified by UL for Compliance with both Canadian and US Requirements under File E54523
Temperature Range	-40°F (-40°C) to 572°F (300°C)

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

HEYClip™ SunRunner® 90° Cable Clips

Double-Compression, Right Angle Design

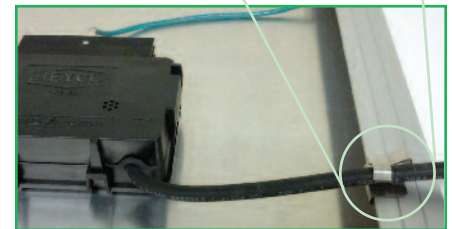
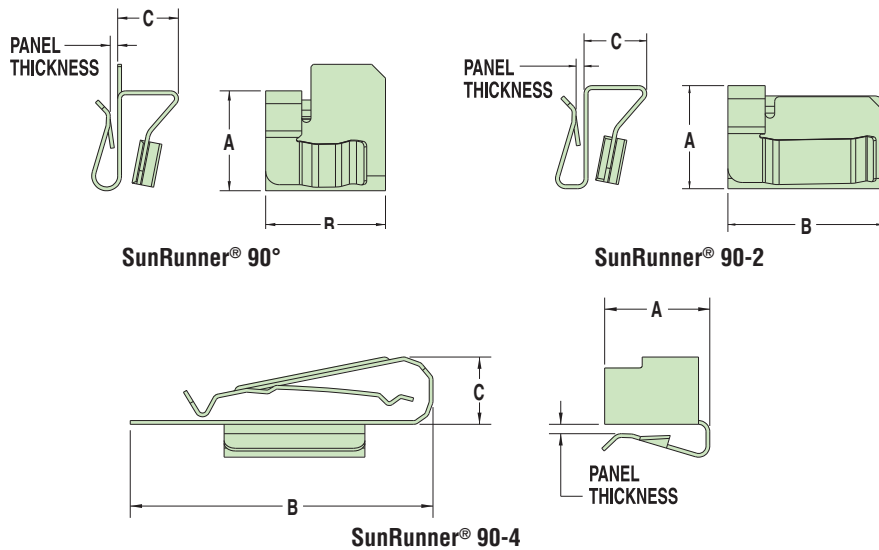
PANEL THICKNESS CLAMPING RANGE				WIRE DIAMETER RANGE Maximum	PART NO.	DESCRIPTION	FOOTPRINT		OVERALL HEIGHT	
Minimum		Maximum					A x B		C	
in.	mm.	in.	mm.				in.	mm.	in.	mm.
Single Wire Clip - for panels up to .125" (3,2 mm) thick										
.06	1,4	.13	3,2	.20" (5,1 mm)- .33" (8,3 mm) each cable	S6406	SunRunner® 90° Clip 100 Pack	.82 x .78	20,8 x 19,8	.39	9,9
					S6446	SunRunner 90° Clip Bulk				
Double Wire Clip - for panels up to .125" (3,2 mm) thick										
.06	1,4	.13	3,2	.20" (5,1 mm)- .33" (8,3 mm) each cable	S6436	SunRunner® 90°-2 Clip 100 Pack	.65 x .98	16,5 x 24,9	.39	9,9
					S6476	SunRunner® 90°-2 Clip Bulk				
Double Wire SunRunner Vidrio™ 90-2 Clip - for GLASS panels up to .090" (2,3 mm) thick										
.13	3,2	.25	6,4	.20" (5,1 mm)- .33" (8,3 mm) each cable	S6430	SunRunner® Vidrio 90° Clip 100 Pack	.99 x .52	25,1 x 13,2	.45	11,4
					S6470	SunRunner® Vidrio 90° Clip Bulk				
Four Wire Clip - for panels up to .125" (3,2 mm) thick										
.06	1,4	.13	3,2	.20" (5,1 mm)- .30" (7,6 mm) each cable*	S6439**	SunRunner® 90°-4 Clip 100 Pack	.56 x 1.63	14,2 x 41,4	.36	9,1
					S6479**	SunRunner® 90°-4 Clip Bulk				

*Can accommodate up to three .33" (8,3 mm) diameter cables.

**SunRunner 90-4 parts are not cULus



- SunRunner 90° Cable Clips are designed to mount at a 90° angle to the original SunRunner®.
- The SunRunner 90° will accommodate a single cable from .20" (5,1 mm) to .30" (7,6 mm); SunRunner 90°-2 will accommodate (2) of these cables; SunRunner 90°-4 will accommodate (4) of these cables.
- SunRunner 90° Series is designed for use with PV modules mounted in the “landscape” mode. PV modules with shorter than normal junction box cables cannot be dressed out to the sides of the module. The SunRunner 90° Series will also allow the junction box cables to be run to the adjacent modules across the short side of the PV module frame.
- Not for use in a marine salt water environment. Contact Heyco for alternative materials.
- DFARS Compliant.



Material .025" thick 304 stainless steel (SunRunner 90° and SunRunner 90-2)
.020" thick heat treated 410 stainless steel (SunRunner 90-4)

Certifications Certified by UL for Compliance with both Canadian and US Requirements under File E54523

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

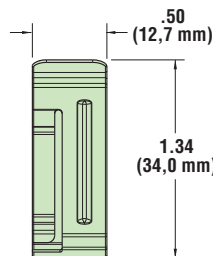


HEYClip™ Stainless Steel SunRunner® 4-2 and 4-2U Cable Clips

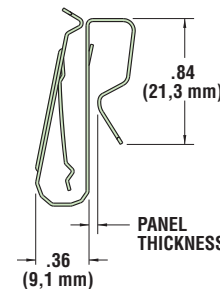
For Oval Micro-Inverter Cables

- Designed to hold Micro-Inverter oval cables .250" (6,3 mm) x .385" (9,8 mm).
- Constructed from heat treated 410 stainless steel for excellent strength and corrosion protection for outdoor exposure.
- Smooth clip edges prevent damage to cable insulation.
- “S” hook clip design will fit a wide variety of extruded aluminum profiles.
- SunRunner 4-2 is designed for solar mounting frames such as the ones used by with Everest, SnapNrack and similar extrusions.
- SunRunner 4-2U features a shorter S hook for Unirac, IronRidge and similar frame profiles.
- Neatly dresses cables on PV panels or along mounting frame channels from .080" (2,5 mm) to .250" (6,4 mm) thick.
- See page 1-11 for typical rack profile applications.

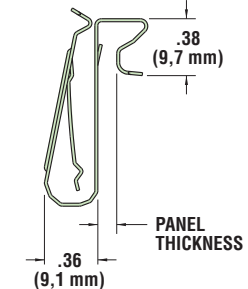
PANEL THICKNESS CLAMPING RANGE				WIRE CAPACITY		PART NO.	DESCRIPTION	FOOTPRINT		REAR TAB LENGTH	
Minimum	Maximum	Minimum	Maximum	in.	mm.			in.	mm.	in.	mm.
SunRunner 4-2											
.08	2,0	.25	6,4	.25 x 1,00	6,4 x 25,4	S6504	SunRunner 4-2 100 Pack	.50 x 1,34	12,7 x 34,0	.84	21,3
						S6544	SunRunner 4-2 Bulk				
SunRunner 4-2U											
.25	6,4	.25	6,4	.25 x 1,00	6,4 x 25,4	S6505	SunRunner 4-2U 100 Pack	.50 x 1,34	12,7 x 34,0	.38	9,7
						S6545	SunRunner 4-2U Bulk				



SunRunner 4-2



SunRunner 4-2U



Quick Specs

Material .020" thick 410 stainless steel
 Certifications Certified by UL for Compliance with both Canadian and US Requirements under File E54523
 Temperature Range -40°F (-40°C) to 572°F (300°C)

“Stay Connected” with



Solar Power Components

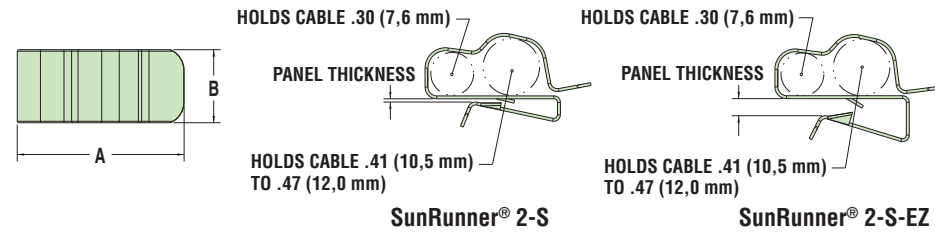
a PennEngineering® Company

ALL NEW PRODUCTS!

HEYClip™ Stainless Steel SunRunner® 2-S Series Cable Clips

For Rail-less Systems

PANEL THICKNESS CLAMPING RANGE				WIRE DIA. RANGE		PART NO.	DESCRIPTION	FOOTPRINT A x B		REAR TAB LENGTH	
Minimum		Maximum		in.	mm.			in.	mm.	in.	mm.
in.	mm.	in.	mm.			in.	mm.				
SunRunner 2-S											
.05	1,3	.12	3,0	.30 - .47	7,6-12,0	S6448	SunRunner 2-S 100 Pack	1.14 x .50	29,0 x 12,7	.68	17,3
						S6488	SunRunner 2-S Bulk				
SunRunner 2-S-EZ											
.12	3,0	.25	6,4	.30 - .47	7,6-12,0	S6449	SunRunner 2-S-EZ 100 Pack	1.14 x .50	29,0 x 12,7	.68	17,3
						S6489	SunRunner 2-S-EZ Bulk				

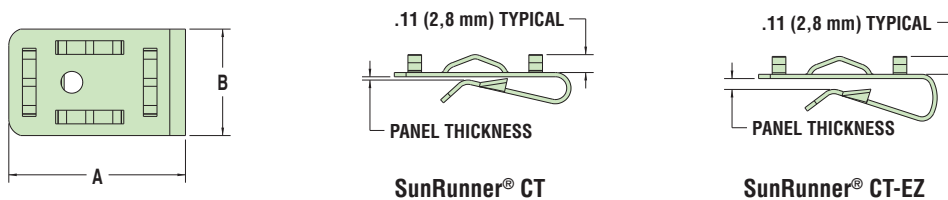


HEYClip™ SunRunner® CT Cable Tie Mounting Platforms

Stainless Steel Edge Clip

NEW and IMPROVED

MAX CABLE TIE WIDTH		PANEL THICKNESS CLAMPING RANGE				INSERT POINTS	PART NO.	DESCRIPTION	FOOTPRINT A x B		REAR TAB LENGTH	
Minimum		Maximum		in.	mm.				in.	mm.	in.	mm.
in.	mm.	in.	mm.			in.	mm.	in.				
SunRunner CT												
.31	8,0	.06	1,5	.12	3,0	4	S6434	SunRunner CT 100 Pack	1.05 x .63	26,7 x 16,0	.77	19,5
							S6474	SunRunner CT Bulk				
SunRunner CT-EZ												
.31	8,0	.12	3,0	.25	6,4	4	S6435	SunRunner CT-EZ 100 Pack	1.06 x .63	26,9 x 16,0	.77	19,5
							S6475	SunRunner CT-EZ Bulk				



Material .020" thick heat treated 410 stainless steel (2-S & 2-S-EZ)
 .025" Thick 304 stainless steel (CT & CT-EZ)

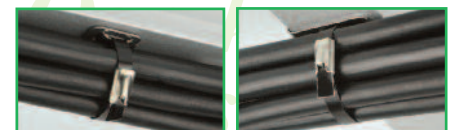
Certifications Certified by UL for Compliance with both Canadian and US Requirements under File E54523



- Designed to hold Micro-Inverter Cables .413" (10,5 mm) to .472" (12,0 mm) and Module Cables up to .300" (7,6 mm) in diameter for rail-less mounting systems.
- Constructed from heat treated 410 stainless steel for excellent strength and corrosion protection for outdoor exposure.
- Smooth clip edges prevent damage to cable installation.
- Designed for panel and cable retention up to 15 lbs.
- Neatly dress cables on PV panels or module frames from .050" (1,3 mm) to .250" (6,4 mm) thick.



- Designed to easily mount to module or frame extrusions without the need for mounting holes or adhesives.
- Designed to be used with Heyco Stainless Steel Cable Ties up to .31" (8,0 mm) width or Heyco SunBundler Stainless Steel Wire Cable Ties.
- **Can now accommodate Nylon 6 & 12 cable ties.**
- Hold cable bundles parallel or perpendicular to the mounting frame.
- Generous lead-in for installation without tools.
- Constructed from corrosion resistant 304 stainless steel.
- SunRunner CT-EZ designed for thicker module frames as well as racking systems - accommodates profiles up to .250" (6,4 mm) thick.
- UL Listed per UL 1565.



Mount Parallel or Perpendicular



HEYClip™ Stainless Steel SunRunner® 2 Series Cable Clips for Micro-Inverter Cables

- **Designed to hold Micro-Inverter cables** .413" (10,5 mm) to .472" (12,0 mm) in diameter.
- Constructed from heat treated 410 stainless steel for excellent strength and corrosion protection for outdoor exposure.
- Smooth clip edges prevent damage to cable insulation.
- “S” hook clip design will fit a wide variety of extruded aluminum profiles.
- **SunRunner 2** is designed for solar mounting frames such as the ones used by Unirac, Solar Mount and Mounting Systems.
- **SunRunner 2-R** is designed for racking systems such as the ones used by Haticon Solar and S:FLEX.
- **SunRunner 2-U** features a shorter S hook for Unirac and other similar frame profiles.
- Neatly dresses cable on PV panels or along mounting frame channels from .080" (2,0 mm) to .250" (6,4 mm) thick.
- See page 1-11 for typical rack profile applications.
- Not for use in a marine salt water environment. Contact Heyco for alternative materials.
- DFARS Compliant.

PANEL THICKNESS CLAMPING RANGE				WIRE DIA. RANGE		PART NO.	DESCRIPTION	FOOTPRINT		REAR TAB LENGTH	
Minimum		Maximum		in.	mm.			in.	mm.	in.	mm.
SunRunner® 2											
.08	2,0	.25	6,4	.30 - .47	7,6-12,0	S6404	SunRunner® 2 100 Pack	.50 x 1.30	12,7 x 33,0	.84	21,3
SunRunner® 2-R											
.38	9,7	.38	9,7	.30 - .47	7,6-12,0	S6402	SunRunner® 2-R 100 Pack	.50 x 1.30	12,7 x 33,0	.41	10,4
SunRunner® 2-U											
.25	6,4	.25	6,4	.30 - .47	7,6-12,0	S6401	SunRunner® 2-U 100 Pack	.50 x 1.30	12,7 x 33,0	.38	9,7



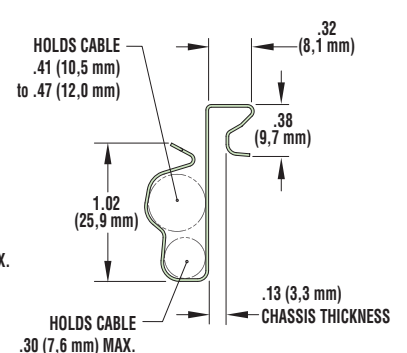
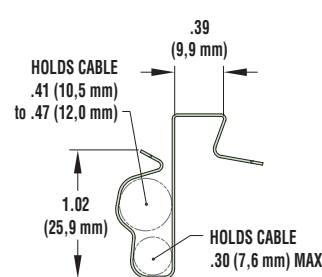
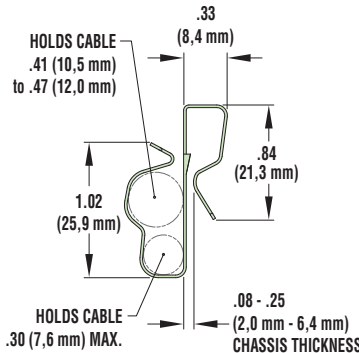
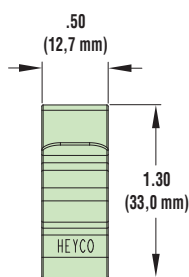
SunRunner 2



SunRunner 2-R



SunRunner 2-U



Quick Specs

Material .020" thick heat treated 410 stainless steel

HEYClip™ Nylon UVX* SunRunner® 2 Series Cable Clips for Micro-Inverter Cables

*Extended UV Protection

PANEL THICKNESS CLAMPING RANGE				WIRE DIA. RANGE		PART NO.	DESCRIPTION	FOOTPRINT		REAR TAB LENGTH	
Minimum		Maximum		in.	mm.			in.	mm.	in.	mm.
in.	mm.	in.	mm.			in.	mm.				
SunRunner 2 UVX											
.08	2,0	.25	6,4	.30 - .47	7,6-12,0	S6463	SunRunner 2 UVX 100 Pack	.50 x 1.44	12,7 x 36,6	.94	23,9
						S6473	SunRunner 2 UVX Bulk				
SunRunner 2-R UVX											
.38	9,7	.38	9,7	.30 - .47	7,6-12,0	S6462	SunRunner 2-R UVX 100 Pack	.50 x 1.44	12,7 x 36,6	.56	14,2
						S6472	SunRunner 2-R UVX Bulk				
SunRunner 2-U UVX											
.25	6,4	.25	6,4	.30 - .47	7,6-12,0	S6461	SunRunner 2-U UVX 100 Pack	.50 x 1.44	12,7 x 36,6	.53	13,5
						S6471	SunRunner 2-U UVX Bulk				



- Designed to hold Micro-Inverter cables .413" to .472" (10,5 to 12,0 mm) in diameter.
- Constructed from extended protection nylon UV material for **lower cost**, excellent strength, and corrosion protection from outdoor exposure.
- Smooth clip edges prevent damage to cable insulation.
- “S” hook clip design will fit a wide variety of extruded aluminum profiles.
- **SunRunner 2 UVX** is designed for solar mounting frames such as the ones used by Unirac, Solar Mount and Mounting Systems.
- **SunRunner 2-R UVX** is designed for racking systems such as the ones used by Haticon Solar and S:FLEX.
- **SunRunner 2-U UVX** features a shorter “S” hook for Unirac and other similar frame profiles.
- Neatly dresses cables on PV panels or along mounting frame channels from .080" (2,0 mm) to .250" (6,4 mm) thick.
- Molded from UV/Heat Stabilized Nylon.
- See page 1-11 for typical rack profile applications.



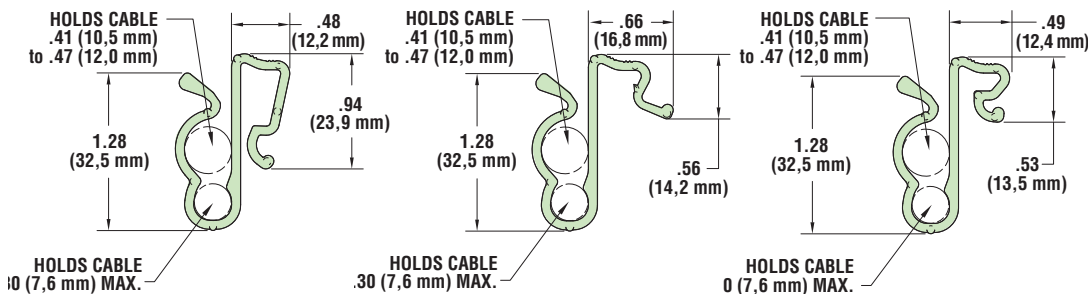
SunRunner 2 UVX



SunRunner 2-R UVX



SunRunner 2-U UVX



Material: Nylon 6/6 with extended UV capabilities
 Flammability Rating: 94V-2
 Temperature Range: -4°F (-18°C) to 185°F (85°C)

Quick Specs

“Stay Connected” with



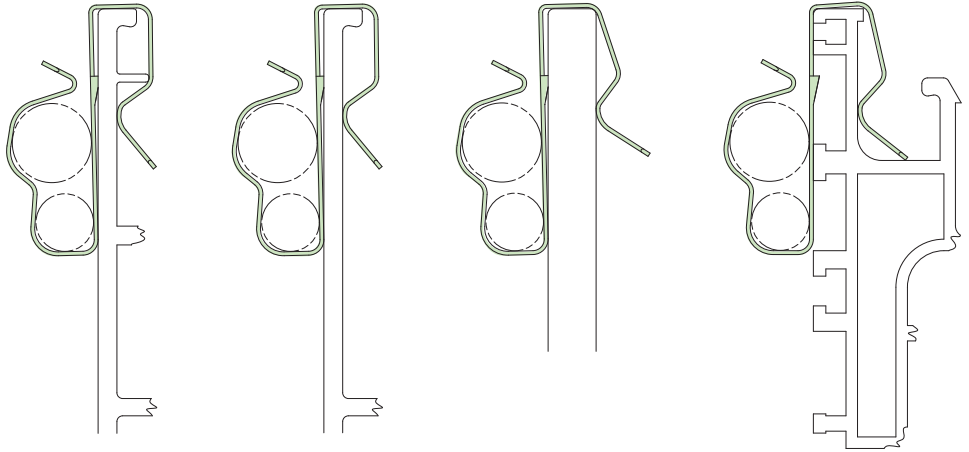
Solar Power Components

a PennEngineering® Company

HEYClip™ Stainless Steel and Nylon UVX SunRunner® 2 and SunRunner® 4-2 Series Cable Clips for Micro-Inverter Cables (Stainless Steel shown below)

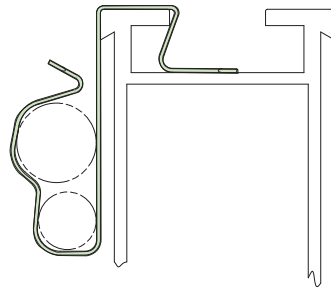
“Where Used” Rack Profiles

SunRunner 2
SunRunner 4-2
fits Everest, SnapRack,
and similar rack profiles

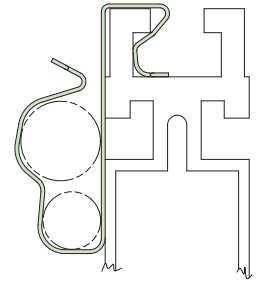


Consult Heyco
for clips to meet
your specific
rack profile

SunRunner 2-R
fits Haticon Solar, S-FLEX
and similar rack profiles



SunRunner 2-U
SunRunner 4-2U
fits Unirac Solar Mount
Standard Rail and similar
rack profiles

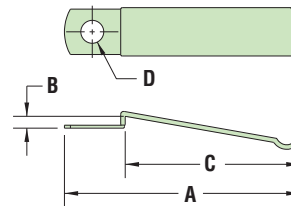


- This vinyl coated spring steel clamp secures round cable, ribbon cable, and tubing.
- Vinyl coating protects and insulates.
- Mounts with a #6 (M3,5) screw, yet cable can be inserted and removed without removing the clip.

HEYClip™ Vinyl Coated Spring Clamps

**ALL NEW
PRODUCT!**

PART NO.	DESCRIPTION	PART DIMENSIONS							
		A Length		B Clamping Height		C Clamping Length		D Mounting Hole	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.
12710	VCSP-161-09	1.61	40,9	.09	2,3	1.19	30,2	.156	4,0
12711	VCSP-263-09	2.63	66,8	.09	2,3	2.24	56,9		



Material VCSP Body: Stainless steel, w/vinyl coating .02" (0,5 mm) thick
Coating: Soft, PVC, .032" (0,8 mm) minimum thickness

HEYClip™ SunRunner® Solar Cable Clips Quick Reference Ordering Guide

Description		Application	Style	100 Pack	Bulk Pack	
	SunRunner Vidrio™ Clip 1 or 2 cable PV	for frameless modules 	Frameless Clips	\$6460	\$6500	
	SunRunner Clip 1 or 2 cable PV	for standard applications	Module Clips	\$6405	\$6445	
	SunRunner 316 Clip 1 or 2 cable PV	316 Stainless Steel for high salt air applications		\$6490	\$6495	
	SunRunner EZ Clip 1 or 2 cable PV	designed for thicker panels		\$6407	\$6447	
	SunRunner 4 Clip 4 cable PV, Solaredge or flat trunk cable	for standard applications		\$6443	\$6483	
	SunRunner 90 Clip 90° single cable PV	90° single cable		\$6406	\$6446	
	SunRunner 90-2 90° two cable PV	90° two cable			\$6436	\$6476
	SunRunner 90-4 Clip 90° four cable PV or flat trunk cable	90° four cable			\$6439	\$6479
	SunRunner 2-S Clip Round trunk cable clip	Ecolibrium Solar & other similar rail-less systems		\$6448	\$6488	
	SunRunner 2 Clip Round trunk cable	Everest, SnapNRack, Solar Mount, & similar rack profiles	Top Rail Clips	\$6404	\$6444	
	SunRunner 4-2 Clip Enphase Q cable	Everest, SnapNRack, Solar Mount, & similar rack profiles			\$6504	\$6544
	SunRunner 2-U Clip Round trunk cable	Unirac, Ironridge, & similar rack profiles		\$6401	\$6441	
	SunRunner 4-2U Clip Enphase Q cable	Unirac, Ironridge, & similar rack profiles			\$6505	\$6545
	SunRunner 2-R Clip Round trunk cable	S:Flex, Mounting Systems, Renusol, & similar rack profiles		\$6402	\$6442	
	SunRunner 2-UVX Clip Nylon round trunk cable	Everest, SnapNRack, Solar Mount, & similar rack profiles		\$6463	\$6473	
	SunRunner 2-U-UVX Clip Nylon round trunk cable	Unirac, Ironridge, & similar rack profiles		\$6461	\$6471	
	SunRunner 2-R-UVX Clip Nylon round trunk cable	S:Flex, Mounting Systems, Renusol, & similar rack profiles		\$6462	\$6472	

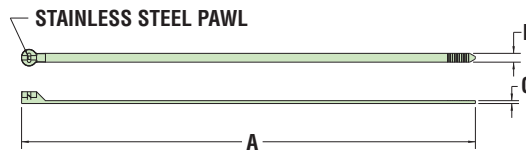


- Feature metal pawl for high strength and better durability.
- Self-locking head design speeds installation and locks into place at any length along the tie body.
- Provide a strong, durable method of cable bundling.
- Can be used in a wide range of indoor, outdoor, and underground (including direct burial) applications.
- Smooth surfaces and rounded edges assure cable protection and worker safety.
- Part Description Key: NTMP-XXX-YYY where XXX = tensile (foot pounds) and YYY = length (inches x 10).
- These parts are not covered under Heyco's solar warranty.

Heyco® Nytyes® with Stainless Steel Locking Device

PART SPECIFICATIONS				PART NO.		DESCRIPTION	PART DIMENSIONS					
Min. Tensile Strength		Max. Bundle Diameter		Natural	Black		A Length		B Width		C Thickness	
Lbs.	N	in.	mm.			in.	mm.	in.	mm.	in.	mm.	
18	80	.87	22,0	13000	13000B	NTMP-018-039	3.90	100	.12	3,0	.04	1,1
35	160	1.42	36,0	13001	13001B	NTMP-036-059	5.90	150	.16	4,0	.05	1,2
		2.09	53,0	13002	13002B	NTMP-036-079	7.90	200				
45	200	2.56	65,0	13003	13003B	NTMP-045-098	9.80	250	.20	5,0		
		2.99	76,0	13004	13004B	NTMP-045-118	11.80	300				
56	250	2.09	53,0	13008	13008B	NTMP-056-079	7.90	200	.31	8,0	.06	1,5
		2.60	66,0	13009	13009B	NTMP-056-094	9.40	240				
112	500	2.99	76,0	13011	13011B	NTMP-112-118	11.80	300				
		3.74	95,0	13012	13012B	NTMP-112-138	13.80	350				
124	550	4.45	113,0	13013	13013B	NTMP-112-157	15.70	400	.39	10,0	.07	1,7
		4.72	120,0	13014	13014B	NTMP-124-177	17.70	450				
		6.22	158,0	13015	13015B	NTMP-124-197	19.70	500				

Standard colors natural and UV Black.



Material: Nylon 6/6 wire tie with a stainless steel locking pawl
 Flammability Rating: 94V-2
 Temperature Range: -40°F (-40°C) to 185°F (85°C)

For Heyco's complete line of Nylon Cable Ties & Platforms, see pages 7-64 thru 7-69 in Heyco Catalog 117



- **Extremely durable, vinyl jacketed Stainless Steel Cable Tie.**
- Smooth vinyl jacketing prevents damage to installation cable insulation.
- Stainless steel crimp sleeve for easy field installation with electrician linesman pliers, or wire cutters.
- **Certified by UL Specification 62275 for indoor and outdoor usage.**
- UV protected vinyl jacket is excellent for solar installation where product durability is required.
- Use standard wire cutters to both crimp the sleeve and cut the excess wire.
- Not for use in a marine salt water environment. Contact Heyco for alternative materials.
- DFARS Compliant.

Heyco® SunBundler®

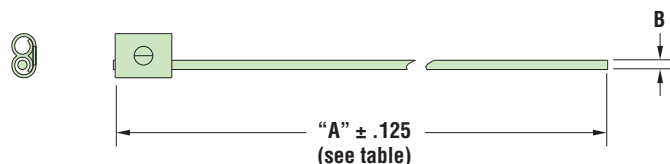
Crimp Lock PVC Coated Stainless Steel Wire Cable Ties



PART SPECIFICATIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Max. Tensile Strength		Max. Bundle Diameter		100 Pack	Bulk		A Length		B Diameter	
Lbs.	N	in.	mm.			in.	mm.	in.	mm.	
100	440	2.30	58,4	S6408	S6409	SunBundler® 8	8	203	.06	1,6
		2.92	74,2	S6410	S6411	SunBundler® 10	10	254		
		3.88	98,6	S6412	S6413	SunBundler® 12	12	305		
		4.20	106,7	S6414	S6415	SunBundler® 14	14	356		
		6.36	161,5	S6420	S6421	SunBundler® 20	20	508		

Black vinyl jacketed 302/304 stainless steel wire

Standard color Black.



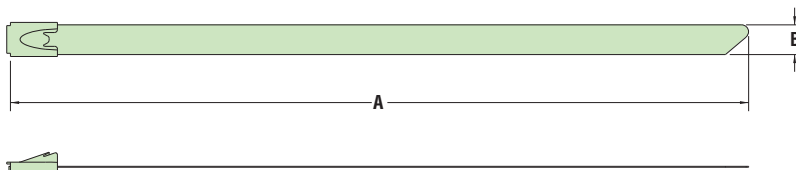
Material: Commercial Aircraft Grade 302/304 stainless wire w/UV protected vinyl jacket
 Certifications: Certified by Underwriters' Laboratories for Compliance to both Canadian and U.S. Requirements under File E54523
 Temperature Range: -40°F (-40°C) to 221°F (105°C)

For Heyco's complete line of Nylon Cable Ties & Platforms, see pages 7-64 thru 7-69 in Heyco Catalog 117

Heyco® Stainless Steel Cable Ties

Ball Lock Stainless Steel Strip Cable Ties – Standard and PVC Coated

PART SPECIFICATIONS				PART NO.		DESCRIPTION	PART DIMENSIONS			
Min. Tensile Strength		Max. Bundle Diameter		Standard Steel	PVC Coated Black		A Length		B Width	
Lbs.	N	in.	mm.			in.	mm.	in.	mm.	
AISI 304										
112	500	1.18	30,0	12801	12801B	NTSS-0150-46A	5.91	150,0	.18	4,6
		2.05	52,0	12802	12802B	NTSS-0200-46A	7.87	200,0		
		2.68	68,0	12803	12803B	NTSS-0250-46A	9.84	250,0		
		3.23	82,0	12805	12805B	NTSS-0300-46A	11.81	300,0		
		3.86	98,0	12806	12806B	NTSS-0350-46A	13.78	350,0		
		4.33	110,0	12808	12808B	NTSS-0400-46A	15.75	400,0		
		5.75	146,0	12810	12810B	NTSS-0500-46A	19.69	500,0		
		7.09	180,0	12812	12812B	NTSS-0600-46A	23.62	600,0		
		9.50	240,0	12814	12814B	NTSS-0800-46A	31.50	800,0		
		250	1115	2.05	52,0	12821	12821B	NTSS-0200-79A		
2.68	68,0			12822	12822B	NTSS-0250-79A	9.84	250,0		
3.23	82,0			12824	12824B	NTSS-0300-79A	11.81	300,0		
3.86	98,0			12825	12825B	NTSS-0350-79A	13.78	350,0		
4.33	110,0			12827	12827B	NTSS-0400-79A	15.75	400,0		
5.75	146,0			12829	12829B	NTSS-0500-79A	19.69	500,0		
7.09	180,0			12831	12831B	NTSS-0600-79A	23.62	600,0		
8.27	210,0			12833	12833B	NTSS-0700-79A	27.56	700,0		
9.50	240,0			12834	12834B	NTSS-0800-79A	31.50	800,0		
12.09	307,0			12836	12836B	NTSS-1000-79A	39.37	1000,0		
AISI 316										
NEW PRODUCT										
112	500	1.18	30,0	12851	12851B	NTSS-0150-46B	5.91	150,0	.18	4,6
		2.05	52,0	12852	12852B	NTSS-0200-46B	7.87	200,0		
		2.68	68,0	12853	12853B	NTSS-0250-46B	9.84	250,0		
		3.23	82,0	12855	12855B	NTSS-0300-46B	11.81	300,0		
		3.86	98,0	12856	12856B	NTSS-0350-46B	13.78	350,0		
		4.33	110,0	12858	12858B	NTSS-0400-46B	15.75	400,0		
		5.75	146,0	12860	12860B	NTSS-0500-46B	19.69	500,0		
		7.09	180,0	12862	12862B	NTSS-0600-46B	23.62	600,0		
		9.50	240,0	12864	12864B	NTSS-0800-46B	31.50	800,0		
		250	1115	2.05	52,0	12871	12871B	NTSS-0200-79B		
2.68	68,0			12872	12872B	NTSS-0250-79B	9.84	250,0		
3.23	82,0			12874	12874B	NTSS-0300-79B	11.81	300,0		
3.86	98,0			12875	12875B	NTSS-0350-79B	13.78	350,0		
4.33	110,0			12877	12877B	NTSS-0400-79B	15.75	400,0		
5.75	146,0			12879	12879B	NTSS-0500-79B	19.69	500,0		
7.09	180,0			12881	12881B	NTSS-0600-79B	23.62	600,0		
8.27	210,0			12883	12883B	NTSS-0700-79B	27.56	700,0		
9.50	240,0			12884	12884B	NTSS-0800-79B	31.50	800,0		
12.09	307,0			12886	12886B	NTSS-1000-79B	39.37	1000,0		



Materials AISI 304 or 316 stainless steel with PVC coating



- For ease of assembly, position locking head so that the widest end is down.
- Part Description Key: NTSS-XXXX-YYA where XXXX = length (mm) and YYA = width (mm) with A indicating AISI 304 stainless steel and B indicating AISI 316 stainless steel.
- Stainless steel cable ties have more strength and better durability than nylon cable ties.
- Locking ball design for maximum holding strength and ease of installation.
- Coated ties offer additional protection and separation of dissimilar metals for improved corrosion resistance.
- Suitable for harsh outdoor environments; conform to standard IEC92 for Marine Electrical Appliances and the requirements of CB1113-85 “Plastic Covered Metal Cable Ties”, “Steel Sea Boats Construction Level Standard.”
- Secure bundles in moist and high temperature environments with decay, fire, corrosion, and radio resistance.
- Widely used in shipping, communication, and flight applications.
- .010" (0,25 mm) thick.
- Custom lengths available.
- 100 pack standard.



For SunRunner CT Mounting Platform details, see page 1-8.

Quick Specs

“Stay Connected” with

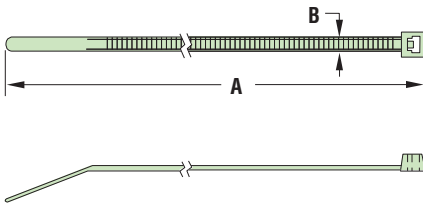


Solar Power Components

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.
- Close, evenly spaced teeth permit fine adjustment—from .025" (0,6 mm) on the smallest Nytyes to .063" (1,6 mm) on the largest.
- 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.

*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.	
50	222	1.97	50,0	13343B	13343B-P	NT-50-078-12	7.87	200	.19	4,8
		2.76	70,0	13345B	13345B-P	NT-50-110-12	11.02	280		
		3.54	90,0	13346B	13346B-P	NT-50-137-12	13.78	350		
		3.98	101,0	13347B	13347B-P	NT-50-149-12	14.96	380		

Standard color UV Black.

Material	Nylon 6/6 or Nylon 12
Certifications	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) -58°F (-50°C) to 302°F (150°C) (Nylon 12)

“Stay Connected” with



Solar Power Components

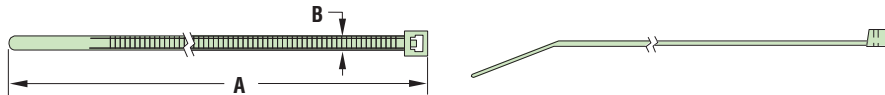
a PennEngineering® Company

ALL NEW PRODUCTS!

Heyco® Nytye® Heavy Duty and Extra Heavy Duty/HVAC 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.	
Heavy Duty										
120	534	1.30	33,0	13172	13172B	NT-120-059	5.91	150	.30	7,6
		1.97	50,0	13175	13175B	NT-120-078	7.87	200		
		2.48	63,0	13178	13178B	NT-120-098	9.84	250		
		3.23	82,0	13181	13181B	NT-120-118	11.81	300		
		3.54	90,0	13183	13183B	NT-120-137	13.78	350		
		3.98	101,0	13185	13185B	NT-120-149	14.96	380		
		4.13	105,0	13186	13186B	NT-120-157	15.75	400		
6.10	155,0	13190	13190B	NT-120-216	21.65	550				
Extra Heavy Duty/HVAC										
175	778	7.48	190,0	13208	13208B	NT-175-256	25.59	650	.35	9,0
		9.65	245,0	13215	13215B	NT-175-315	31.50	800		
		10.67	271,0	13217	13217B	NT-175-362	36.22	920		
		11.42	290,0	13218	13218B	NT-175-394	39.37	1000		
		14.49	368,0	13220	13220B	NT-175-482	48.23	1225		

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



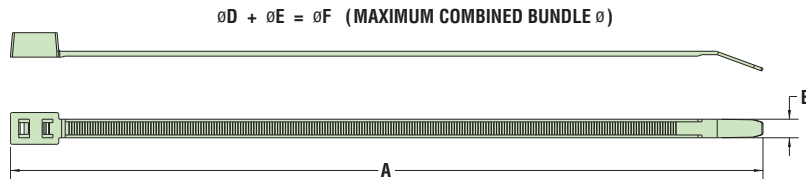
- Smooth, radiused edges ensure that Nytyes won't cut into the cable's insulation—or the installer's hand.
- One-piece design reduces cost and installation time.
- Nytyes feature a bent tip for ease of pickup and insertion around small bundles. V-shaped raised ridges on the tip provide a sure grip.
- Close, evenly spaced teeth permit fine adjustment—from .025" (0,6 mm) on the smallest Nytyes to .063" (1,6 mm) on the largest.
- Compliant with MS3367 and MIL-S-23190E

ALL NEW PRODUCTS!

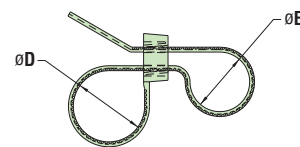
Heyco® Nytye® Double Loop Cable Ties

PART SPECIFICATIONS				PART NO.	DESCRIPTION	PART DIMENSIONS			
Max. Tensile Strength		Max. Combined Bundle Diameter F				A Length		B Width	
Lbs.	N	in.	mm.	Natural	in.	mm.	in.	mm.	
50	222	1.77	45,0	13320	NTDL-050-076	7.68	195	.19	4,8
		2.05	52,0	13321	NTDL-050-088	8.86	225		
		2.99	76,0	13323	NTDL-050-118	11.81	300		
		3.86	98,0	13324	NTDL-050-145	14.56	370		

Standard color natural.



- Cost-effective way to secure and separate two bundles with one cable tie
- Quickly and easily pulls through increasing productivity
- Single part covers multiple bundle sizes resulting in reduced part number inventory



Material
Certifications

Nylon 6/6
Certified by UL for Compliance with both Canadian and U.S. requirements under File E54523 (NT parts only)

Flammability Rating
Temperature Range

94V-2
-40°F (-40°C) to 185°F (85°C)

Quick Specs

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



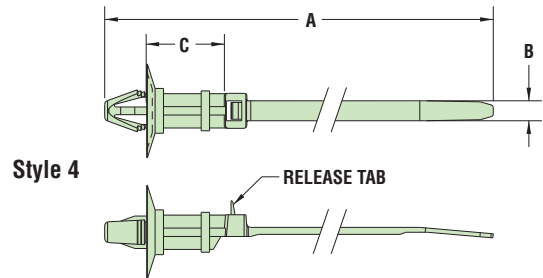
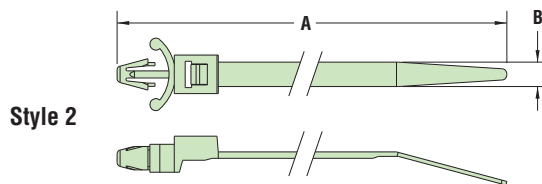
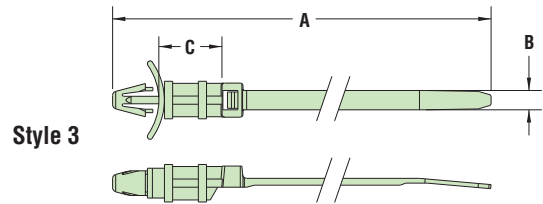
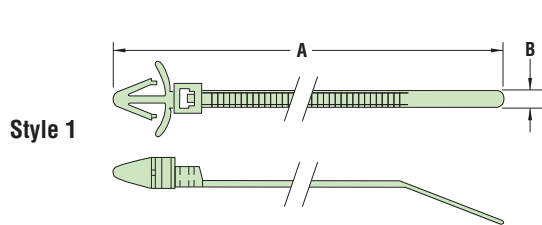
Heyco® Nytye® Push Mount Nylon Cable Ties

PART SPECIFICATIONS				PART NO.		DESCRIPTION	PART DIMENSIONS										STYLE
Max. Tensile Strength		Max. Bundle Diameter		Natural	UV Black		A Length		B Width		C Spacer Height		Max. Panel Thickness		Mounting Hole Dia.		
Lbs.	N	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
Tension Wings																	
40	178	1.42	36,0	-	3907†	PWMS-155-HSB	6.23	158	.14	3,5	-	-	.09	2,3	.187	4,7	1
50	222	1.57	40,0	13254	13254B	PMT-50-070	7.09	180	.19	4,8	-	-	.09	2,4	.187	4,7	2
		1.75	44,5	3904	3905	PMT 150	8.00	203	.19	4,8	-	-	.13	3,2	.250	6,4	1
Tension Wings, Standoff																	
18	80	.75	19,1	13262	13262B	PMST-18-050-156	5.04	128	.10	2,5	.24	6,1	.08	2,0	.156	4,0	3
40	178	1.38	35,0	13267	13267B	PMST-40-066-197	6.69	170	.14	3,6	.51	13,0	.08	2,0	.197	5,0	
		1.25	31,8	13268	13268B	PMST-40-068-187	6.81	173	.14	3,6	.78	19,8	.08	2,0	.187	4,7	
Cupped Base, Standoff, Releasable																	
30	133	1.25	31,8	13273	13273B	PMRS-30-066	6.63	168	.14	3,6	.53	13,5	.023 - .098	0,6 - 2,5	.236 - .255	6,0 - 6,5	4

NEW!

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

† cURus



Quick Specs

Material Nylon 6/6
 Flammability Rating 94V-2
 Temperature Range -40°F (-40°C) to 185°F (85°C)

“Stay Connected” with



Solar Power Components

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		UV		A		B	
Lbs.	N	in.	mm.		Black	Length	Width	in.	mm.	

Low Profile

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

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
100	444	2.87	73,0	13302	13302B	RNT-100-098	9.84	250	.30	7,5

Screw Mount

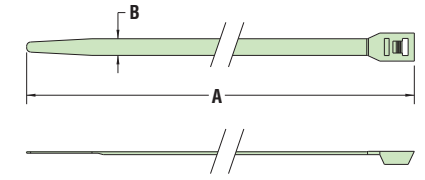
Screw Mount		Screw Size									
18	80	.87	22,0	13307	-	MNT-18-044	4.41	112	.10	2,5	#4 screw
40	178	1.38	35,0	13308	-	MNT-40-067	6.69	170	.14	3,6	#8 screw
50	222	1.75	44,4	13309*	-	MNT-150	8.00	203	.19	4,8	#10 screw
		1.97	50,0	13309	-	MNT-50-086	8.66	220	.17	4,3	

Identification

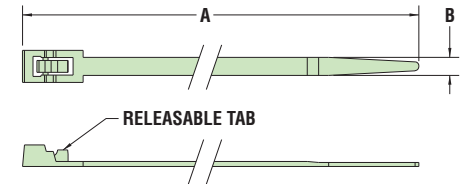
											Marking Area W x L			
											in.	mm.	in.	mm.
18	80	.87	22,0	13316	-	NTID-18-039	3.94	100	.10	2,5	.31	8,0	1.00	25,4

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

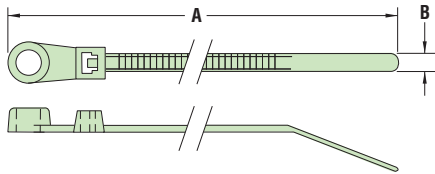
*cURus



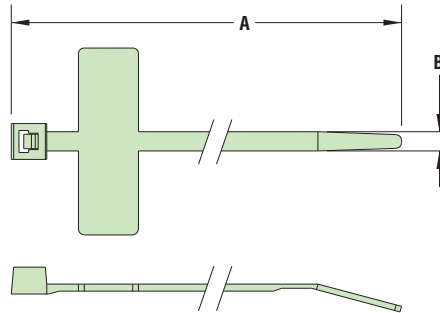
Low Profile



Releasable



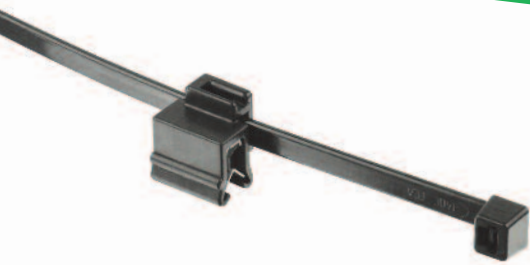
Screw Mount



Identification

Material	Nylon 6/6
Certifications	c(UL)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



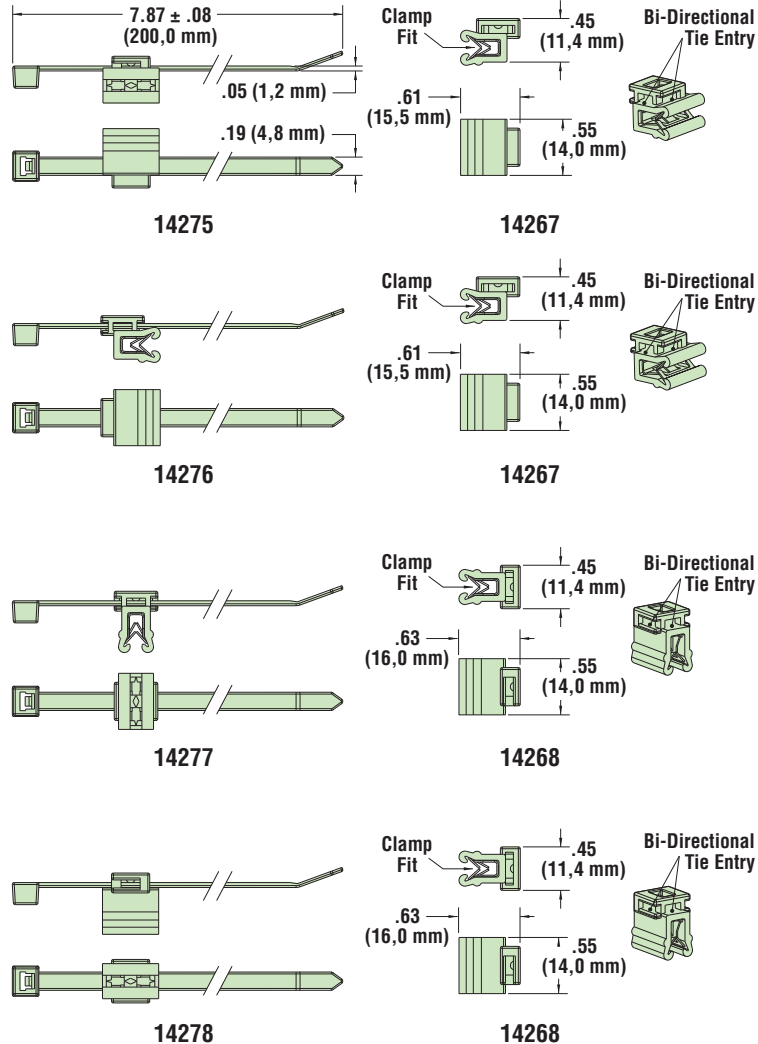
Heyco® Edge Clips

Edge Clips Unassembled or Assembled with 8" Cable Tie

- Ideal for use where holes cannot be used or where adhesives are unacceptable due to temperature issues.
- Applies easily to plastic and metal without the need for a mounting hole.
- Ideal for assembly usage. Clip provides low insertion force and high extraction.
- Two piece assembly allows the clip to slide along the strap ensuring proper orientation.

UNASSEMBLED EDGE CLIP			EDGE CLIP ASSEMBLED WITH CABLE TIE			ASSEMBLED NYTYE CABLE TIE					
Fixing	Part No. Black	Desc.	Cable Tie Orientation	Part No. Black	Description	Tensile Strength		Max. Bundle Diameter		Overall Length	
						Lbs.	N	in.	mm.	in.	mm.
For Panels from .04" (1,0 mm) to .12" (3,0 mm) Thick											
Top	14267	NTEC1-TB	Parallel	14275	NTEC1-TL-50-078	50	222	1.77	45.0	7.87	200
			Perpendicular	14276	NTEC1-TP-50-078						
Side	14268	NTEC1-SB	Perpendicular	14277	NTEC1-SP-50-078						
			Parallel	14278	NTEC1-SL-50-078						

Standard color black.



Quick Specs

Material	Clip: Nylon 6/6 high impact modified, heat and UV stabilized Cable Tie: Nylon 6/6 high impact modified, heat and UV stabilized or Nylon 12
Flammability Rating	94V-2
Temperature Range	-40°F (-40°C) to 221°F (105°C)

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



HEYClip™ MaxRunner® Cable Clip Arrays

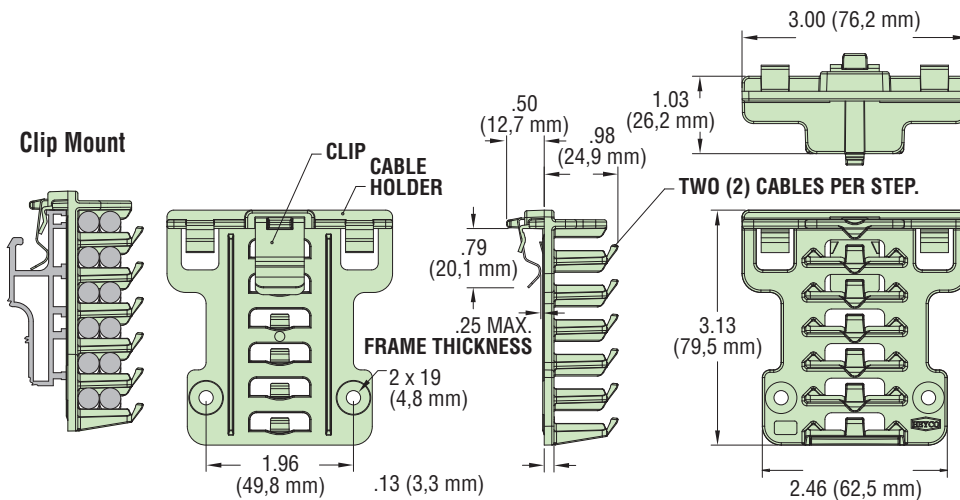
Clip Mount or Flush Mount with Screws*, accommodates up to **12 Cables**

PANEL THICKNESS CLAMPING RANGE		WIRE DIA. RANGE		PART NO.	DESCRIPTION	FOOTPRINT		OVERALL HEIGHT			
Minimum	Maximum	Maximum (12) Wires				in.	mm.	in.	mm.		
in.	mm.	in.	mm.			in.	mm.	in.	mm.		
Clip Mount											
.06	1,5	.25	6,4	.20 - .28	5,2 - 7,2	S6403	MaxRunner 12 Clip Mount	3.00 x 3.13	76,2 - 79,5	.98	24,9
Flush Mount											
N/A: designed for flat mount				.20 - .28	5,2 - 7,2	S6433	MaxRunner 12 Flush Mount	3.00 x 3.13	76,2 - 79,5	1.00	25,4

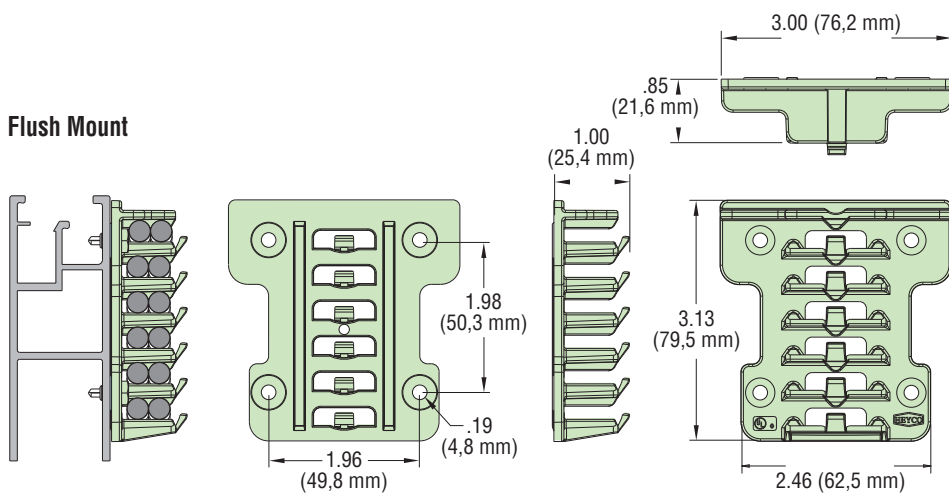
*Screws not included

- Hold up to 12 cables with wire diameters ranging from .20" (5,2 mm) to .28" (7,2 mm).
- Patent Pending design is the ultimate in solar wire management.
- Molded internal locking tabs securely hold the cables in place **preventing side-to-side movement or slippage** of the cables.
- Constructed from PPE+PS flame retardant “Noryl” material with a **V-0 flame rating** and a **UV (f1) rating** for excellent resistance to outdoor exposure.
- **Clip Mount** features a versatile, 301 stainless steel mounting clip.
- Clip is designed to secure the holder to a wide variety of aluminum extruded mounting rails of various profiles with thicknesses up to .250" (6,4 mm).
- **Flush Mount** designed to mount on flat panels or extrusions without mounting ledges.
- Easily attaches to any flat surface with four mounting screws.
- Recommended spacing is 4 feet.
- Load Rating not to exceed 15 lbs.
- US Patent No. 8950712B2

Clip Mount



Flush Mount



Materials
Certifications

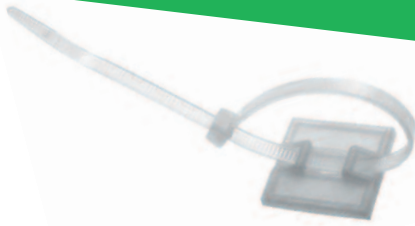


PPE & PS Noryl (Clipmount includes a 301 stainless steel mounting clip)
Certified by UL for Compliance with both Canadian and U.S. requirements under File E54523

Flammability Rating
Temperature Range

94V-0
-40°F (-40°C) to 203°F (95°C)

Quick
Specs



Heyco® Nytye® Mounting Platforms

Flat Platforms – Adhesive Back Mount

- Multiple sizes, strengths, and mounting options anchor Nytyes® securely.
- Five Types:
 - 1) Flat - Adhesive-Back and Screw Mounts
 - 2) Saddle - Screw Mount only
 - 3) Push Mount - Arrowhead and Blind Mounts
 - 4) Snap Over Bolt
 - 5) Stainless Steel Edge Clip “SunRunner Series”
- Rubber based adhesive effective up to 158°F (70°C).
- Acrylic based adhesive effective up to 167°F (75°C).
- Apply Adhesive-Backed parts to a clean, dry surface.

MAX. TENSILE STRENGTH	ADHESIVE	INSERT POINTS	RELEASE TAB?	PART NO.	DESCRIPTION	PART DIMENSIONS					
						A		B		C	
Lbs. N				Natural	in. mm.	in. mm.	in. mm.	in. mm.	in. mm.		
18 80	Rubber Acrylic	4	yes	3591 3591A	MP-050x050-ABR MP-050x050-ABA	.50 12,7	.50 12,7	.17 4,3			
40 178	Rubber Acrylic	4	yes	3595 3595A	MP-075x075-ABR MP-075x075-ABA	.75 19,1	.75 19,1	.28 7,0			
				3594 3594A	MP-080x080-ABR MP-080x080-ABA	.80 20,3	.80 20,3	.19 4,8			
	Rubber Acrylic	4	yes	3599 3599A	MP-100x100-ABR MP-100x100-ABA	1.00 25,4	1.00 25,4	.32 8,1			
				3590* 3593*	MP-110x110-ABA MP-115x115-ABA	1.10 27,9 1.15 29,2	1.10 27,9 1.15 29,2	.24 6,0 .26 6,6			

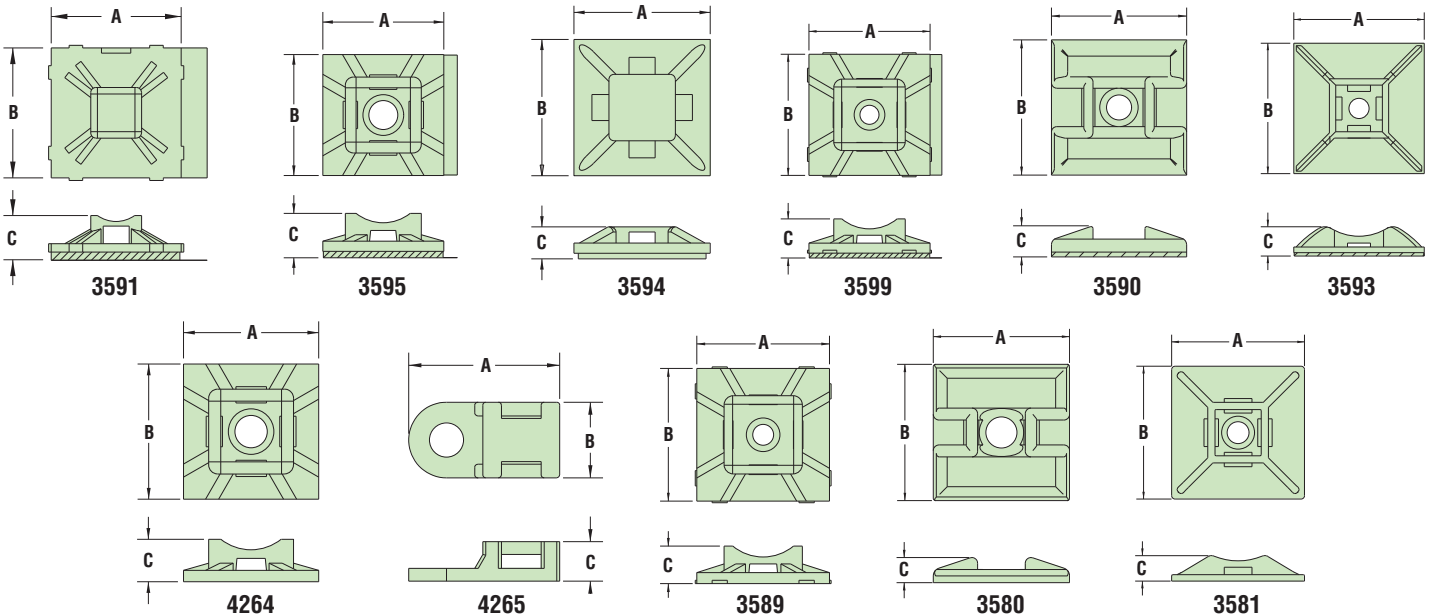
Standard color natural. *These adhesive-backed parts are also screw mountable.

Flat Platforms – Screw Mount

MAX. TENSILE STRENGTH	SCREW SIZE	INSERT POINTS	PART NO.	DESCRIPTION	PART DIMENSIONS					
					A		B		C	
Lbs. N	in. mm.		Natural		in. mm.	in. mm.	in. mm.	in. mm.	in. mm.	
40 178	#6 3,5	4	4264	MP-075x075-S6	.75 19,1	.75 19,1	.24 6,0			
50 222	#8 4,0	4	4265	MP-038x075-S8	.38 9,5	.75 19,1	.20 5,0			
			3589	MP-100x100-S8	1.00 25,4	1.00 25,4	.28 7,1			
	#6 3,5	4	3580	MP-110x110-S8	1.10 27,9	1.10 27,9	.20 5,1			
			3581	MP-115x115-S6	1.15 29,2	1.15 29,2	.22 5,6			

Standard color natural.

Tensile Lbs.	Width in.	Width mm.
18	.10	2,5
40	.14	3,6
50	.19	4,8
120	.30	7,6



Quick Specs

Material	Nylon 6/6
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E54523 (Adhesive-Back Mount parts only)
Flammability Rating	94V-2
Temperature Range	-32°F (0°C) to 158°F (70°C) (Rubber adhesive backed) -32°F (0°C) to 167°F (75°C) (Acrylic adhesive backed) 32°F (0°C) to 185°F (85°C) (Non-adhesive backed)

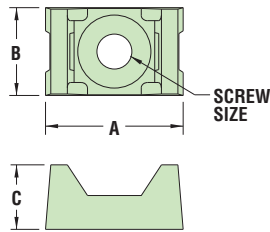


Heyco® Nytye® Mounting Platforms

Saddle Platforms – Screw Mount

MAX. TENSILE STRENGTH		SCREW SIZE		INSERT POINTS	PART NO.	DESCRIPTION	PART DIMENSIONS					
Lbs.	N	in.	mm.				A		B		C	
18	80	#4	3,0	2	4269	MP S-4	.51	13,0	.33	8,3	.24	6,1
50	222	#8	4,0	2	3759	MP S-8	.60	15,2	.38	9,7	.28	7,0
120	534	#10	5,0	2	3753	MP S-10	.87	22,2	.62	15,7	.39	9,9

Standard color natural.



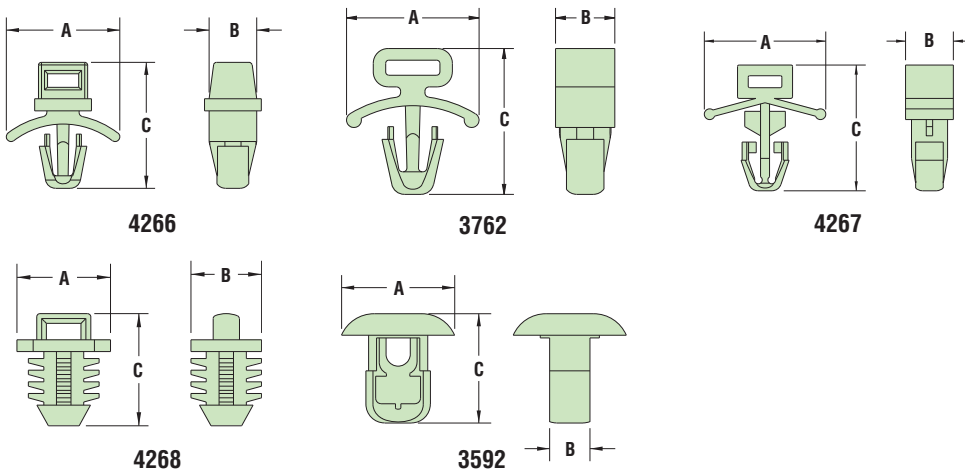
Saddle Platforms

- Multiple sizes, strengths, and mounting options anchor Nytyes® securely.
- Five Types:
 - 1) Flat - Adhesive-Back and Screw Mounts
 - 2) Saddle - Screw Mount only
 - 3) Push Mount - Arrowhead and Blind Mounts
 - 4) Snap Over Bolt
 - 5) Stainless Steel Clip
- Rubber based adhesive effective up to 126°F (52°C).
- Apply Adhesive-Backed parts to a clean, dry surface.

Push Mount Platforms

MAX. TENSILE STRENGTH		MOUNTING HOLE DIA.		MAX. PANEL THICKNESS*		INSERT POINTS	PART NO.	DESCRIPTION	PART DIMENSIONS					
Lbs.	N	in.	mm.	in.	mm.				A		B		C	
Arrowhead Mount														
50	222	.19	4,8	.08	2,0	2	4266	MP PM-19	.56	14,3	.24	6,1	.63	15,9
		.25	6,4	.11	2,8	2	3762	MP PM-25	.63	15,9	.28	7,1	.69	17,5
		.26	6,7	.35	9,0	2	4267	MP PM-26	.80	20,2	.31	7,9	.82	20,9
Blind Head Mount*														
40	178	.31	7,9	.25	6,4	2	4268	MP PMB-31	.43	11,0	.33	8,3	.52	13,1
Reverse Button Mount														
50	222	.25	6,4	.13	3,2	2	3592	MP R-2	.42	10,7	.15	3,8	.41	10,3

*Minimum Panel Thickness for Blind Mount Platforms



Material	Nylon 6/6
Flammability Rating	94V-2
Temperature Range	32°F (0°C) to 185°F (85°C)

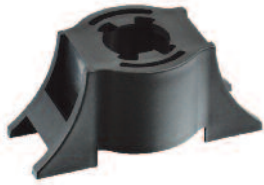
Quick Specs

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



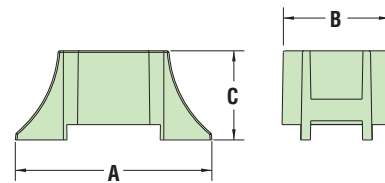
Heyco® Nytye® Mounting Platforms

Snap Over Bolt Platforms

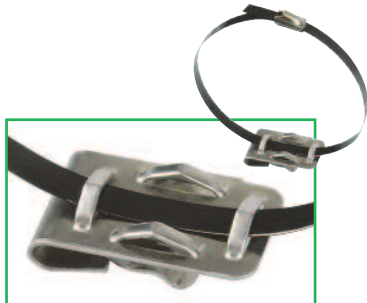
- Multiple sizes, strengths, and mounting options anchor Nytyes® securely.
- Five Types:
 - 1) Flat - Adhesive-Back and Screw Mounts
 - 2) Saddle - Screw Mount only
 - 3) Push Mount - Arrowhead and Blind Mounts
 - 4) Snap Over Bolt
 - 5) Stainless Steel Clip
- Rubber based adhesive effective up to 126°F (52°C).
- Apply Adhesive-Backed parts to a clean, dry surface.

MAX. TENSILE STRENGTH	INSERT POINTS	BOLT SIZE		PART NO.	DESCRIPTION	PART DIMENSIONS							
		in.	mm.			A		B		C			
Lbs.	N			Black			in.	mm.	in.	mm.	in.	mm.	
NEW!													
NEW!	120	534	2	1/2	12,0	3710	MP S-1/2	2.31	58,7	1.25	31,8	1.05	26,7
				9/16	14,0	3711	MP S-9/16						
				5/8	16,0	3754	MP S-5/8						

Standard color black.



Snap Over Bolt

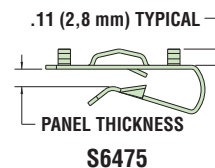
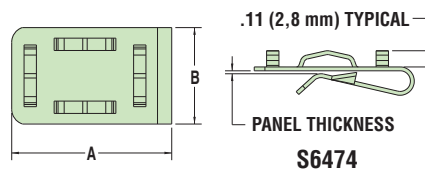


Stainless Steel Edge Clip Platforms

ALL NEW PRODUCTS

MAX. CABLE TIE WIDTH*	PANEL THICKNESS RANGE				INSERT POINTS	PART NO.	DESCRIPTION	PART DIMENSIONS						
	Minimum	Maximum	C					B		A				
in.	mm.	in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	
.31	8,0	.06	1,5	.12	3,0	4	S6474	SunRunner CT	1.03	26,2	.63	16,0	.77	19,5
		.12	3,0	.25	6,4	4	S6475	SunRunner CT-EZ						

*Edge Clip Platforms SunRunner CT and CT-EZ fit all Heyco Stainless Steel Cable Ties, see page 7-69



Quick Specs

Material Nylon 6/6 (Snap Over Bolts)
 .025" Thick 304 stainless steel (CT & CT-EZ)

Certifications Certified by UL for Compliance with both Canadian and US Requirements under File E54523 (CT & CT-EZ)

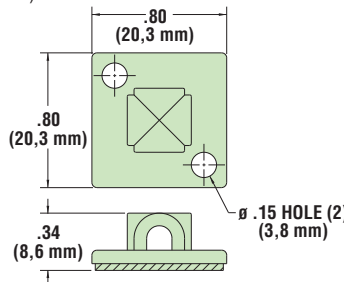
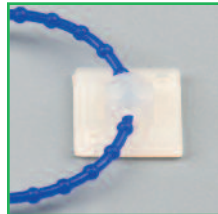
Heyco® Beaded Ties

TENSILE STRENGTH		MAXIMUM BUNDLE DIAMETER		DESC.	PART NUMBERS						
Lbs.	N	in.	mm.		NYLON		POLYETHYLENE				
					Black	Natural	Black	Natural	Blue	Red	Yellow
Standard											
10	45	1-1/8	28,6	BT 4	3509	3490	3419	3420	3421	3422	3423
		1-3/8	35,0	BT 5	3519	3491	3424	3425	3426	3427	3428
18	80	1-7/8	48,0	BT 6	3523	3492	3429	3430	3431	3432	3433
		2-1/2	64,0	BT 8	3524	3493	3434	3435	3436	3437	3438
		3	76,0	BT 10	3495	3494	3439	3440	3441	3442	3443
		4	101,6	BT 14	3498	3496	3484	3480	3476	3482	3483
Nylon Push Mount*											
40	180	1-3/8	35,0	PBT 5	3499B	3499					

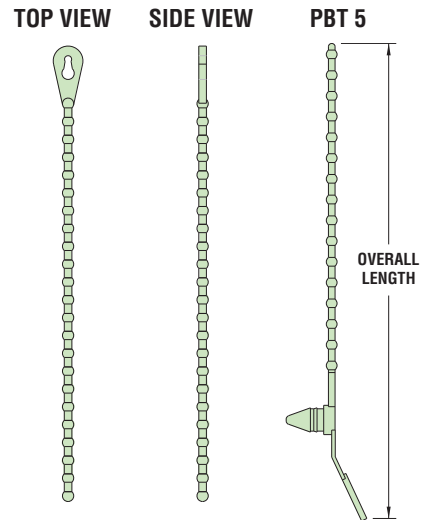
Standard colors: PE-black, natural, blue, red, and yellow. N-Black and natural.
 *Mounts into a .250" (6,4 mm) diameter hole, maximum panel thickness .142" (3,6 mm).

Mounting Platform for Beaded Ties

- Part No. **3750**
- Adhesive backed
- May also be screw mounted
- Molded of natural nylon.



- **Releasable and reusable** ties for easy bundling, closing, bagging, holding, and tying.
- Polyethylene for high flexibility and moderate strength.
- Multiple sizes for bundles up to 4" (101,6 mm) diameter.



Heyco® Braided Sleeving

BUNDLE RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS			
Minimum Diameter		Maximum Diameter		Black	FR Black		Nominal Diameter		Quantity Per Spool	
in.	mm.	in.	mm.			in.	mm.	ft.	mtrs.	
.09	2,3	.25	6,4	8980	8983	BS 125	.13	3,2		
.13	3,2	.44	11,1	8985	8988	BS 250	.25	6,4	1000	305
.25	6,4	.75	19,1	8990	8993	BS 500	.50	12,7	500	152
.50	12,7	1.25	31,8	8995	8998	BS 750	.75	19,1		
.75	19,1	1.75	44,5	9000	9003	BS 1250	1.25	31,8	250	76
1.25	31,8	2.75	69,9	9005	9008	BS 1750	1.75	44,5		
1.50	38,1	3.50	88,9	9010	9013	BS 2.0	2.00	50,8	200	61

Standard color black.
 FR sleeving flammability rating-UL VW-1.



Beaded Ties		Braided Sleeving	
Material	Polyethylene or Nylon	Materials	Polyester Monofilament Yarns or Flame Retardant Polyester Yarn
Flammability Rating	94V-2	Certifications	Recognized under the Component Program of Underwriters' Laboratories File E173954
Temperature Range	40°F (0°C) to 221°F (85°C)	Monofilament Dia.	.010"
		Temperature Range	-103°F (-75°C) to 257°F (125°C)

- **Braided sleeve slips on quickly and is self-fitting** over irregular shapes and contours. No wire pulling compounds are required due to its low surface friction. Slight tensioning after application makes for an even tighter fit.
- Expandable up to three times its own diameter, the open-weave construction can fit many applications, simplifying inventory. The open-weave allows for easy inspection of sleeved components and easy break out of individual cables.
- Full cable flexibility is maintained in any direction, even at low temperatures. Wires encased in Heyco Braided Sleeving can flex and bend as readily as if they had no protective oversleeving. Bundles can be flexed repeatedly without damage.
- Tough, cut-resistant sleeving is designed for protecting wire bundles and harnesses, hoses, tubing, and cable assemblies from mechanical damage and environmental hazards.
- Preferred cutting method: hot knife.

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



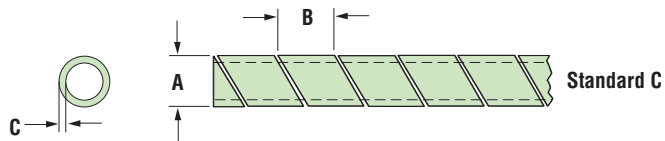
- **Easy to use: Just twist on wire!**
- Allows breakouts of single/multiple wires and re-routing of replacement wires.
- Absorbs vibration, insulates cables, and resists abrasion.
- Multiple sizes bundle and protect cables, wires, tubing, and hoses from .13" (3,2 mm) to 7.00" (177,8 mm) diameters.
- For hose and cable **clamps**, see pages 7-36 through 7-43 in Heyco Catalog 117.

Heyco® SunWrap™ - Polyethylene

BUNDLE RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS					
Minimum Diameter		Maximum Diameter		UV Black	Natural		A Outside Diameter		B Pitch		C Thickness	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	
.13	3,2	1.50	38,1	8904	8905	CW 187 PE*	.19	4,8	.25	6,3	.03	0,8
.19	4,8	2.00	50,8	8908	8909	CW 250 PE	.25	6,3	.38	9,5	.05	1,1
.31	7,9	3.00	76,2	8912	8913	CW 375 PE	.38	9,5	.44	11,1	.05	1,3
.38	9,5	4.00	101,6	8916	8917	CW 500 PE	.50	12,7	.50	12,7	.06	1,6
.50	12,7	4.50	114,3	8920	8921	CW 625 PE*	.63	15,9	.63	15,9	.06	1,6
		5.00	127,0	8924	8925	CW 750 PE	.75	19,1	.75	19,1	.07	1,7
1.00	25,4	7.00	177,8	8928	8929	CW 1000 PE	1.00	25,4	1.00	25,4	.08	2,0

Standard colors UV black or natural.

* Parts are not UR recognized.



Quick Specs

Material Certifications



Polyethylene
Recognized under the Component Program of Underwriters' Laboratories File E173954

Conforms to:
Temperature Range

Fed Spec LP390, Mil I-631D, Mil P-21922B
-76°F (-60°C) to 190°F (88°C) - UL rated temp not to exceed 122°F (50°C)



Heyco® SunWrap™ -Nylon

BUNDLE RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS					
Minimum Diameter		Maximum Diameter		UV Black	Natural		A Outside Diameter		B Pitch		C Thickness	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.
.13	3,2	1.50	38,1	8936	8937	CW 187 N*	.19	4,8	.25	6,3	.02	0,5
.19	4,8	2.00	50,8	8940	8941	CW 250 N	.25	6,3	.38	9,5	.03	0,6
.31	7,9	3.00	76,2	8944	8945	CW 375 N	.38	9,5	.44	11,1		
.38	9,5	4.00	101,6	8948	8949	CW 500 N	.50	12,7	.50	12,7	.04	0,9
.50	12,7	4.50	114,3	8952	8953	CW 625 N*	.63	15,9	.63	15,9		
		5.00	127,0	8956	8957	CW 750 N	.75	19,1	.75	19,1	.03	0,8
1.00	25,4	7.00	177,8	8960	8961	CW 1000 N	1.00	25,4	1.00	25,4		

Standard colors UV black or natural.

* Parts are not UR recognized.

Material	Nylon
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E173954
Temperature Range	-40°F (-40°C) to 250°F (121°C) - UL rated temp not to exceed 149°F (65°C)

- **Easy to use: Just twist on wire!**
- Allows breakouts of single/multiple wires and re-routing of replacement wires.
- Absorbs vibration, insulates cables, and resists abrasion.
- Multiple sizes bundle and protect cables, wires, tubing, and hoses from .13" (3,2 mm) to 7.00" (177,8 mm) diameters.
- Conforms to: ASTM D 4066, Group 2; Fed Spec LP410.
- For hose and cable **clamps**, see pages 7-36 through 7-43 in Heyco Catalog 117.



Heyco-Flex™ V Nylon Slit Tubing

NOMINAL DIAMETER	PART NO.	DESCRIPTION	PART DIMENSIONS						ROLL LENGTH
			A Outside Diameter		B Inside Diameter		Wall Thickness Range		
			in.	mm.	in.	mm.	in.	mm.	
1/8	1634A	HF5 1/8	.26	6,6	.17	4,3			
1/4	1635A	HF5 1/4	.39	9,9	.29	7,3			
11/32	1636A	HF5 11/32	.51	13,0	.35	8,8			
3/8	1637A	HF5 3/8	.53	13,5	.42	10,5			
7/16	1638A	HF5 7/16	.63	15,9	.44	11,2			
1/2	1639A	HF5 1/2	.64	16,2	.53	13,3	.01-.02	0,2-0,5	100
5/8	1641A	HF5 5/8	.81	20,5	.66	16,8			
3/4	1642A	HF5 3/4	.93	23,6	.79	20,1			
1	1643A	HF5 1	1.12	28,5	.92	23,3			
1-1/16	1644A	HF5 1-1/16	1.22	30,9	1.01	25,6			
1-1/4	1646A	HF5 1-1/4	1.49	37,9	1.28	32,6			
1-1/2	1649A	HF5 1-1/2	1.73	43,9	1.47	37,2			

Standard color black.

Material	Polyamide 6 Nylon
Flammability Rating	94HB
Temperature Range	-40°F (-40°C) to 239°F (115°C) Continuous -40°F (-40°C) to 374°F (190°C) Intermittent

- **Slit design allows side entry** and encirclement of preassembled harnesses and capillary tubes.
- Unique slit design allows for wire breakouts.
- Heyco-Flex V is lightweight and flexible, yet durable enough to meet your wire management requirements.
- Multiple sizes 1/8" to 1-1/2".
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents.
- Quick installation; cuts with utility knife, PVC cutter or Heyco cutting tool #8340. See page 3-8.

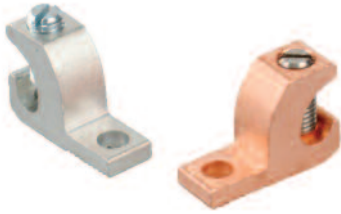
Quick Specs

“Stay Connected” with



Solar Power Components

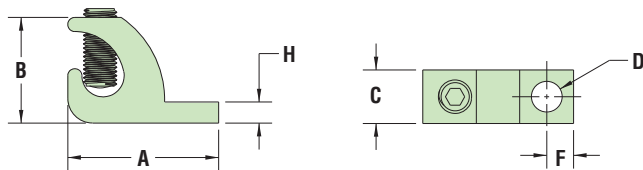
a PennEngineering® Company



- For continuous grounding wire runs often found in solar applications.
- Available in plated and unplated versions.
- UL/CSA approved for direct burial; suitable for both indoor and outdoor use.
- Least expensive aluminum option suitable for indoor use only.
- Recommended wire range AWG 4 thru AWG 14.
- DFARS Compliant.

Heyco® Copper and Aluminum LugRunners™

Wire Range AWG	PART NO.	DESCRIPTION	CONSTRUCTION	PART DIMENSIONS (in.)					
				A	B	C	D	F	H
4-14	S6525	LC 14-4 1-Pole Cu Tinned	Tinned Copper with Stainless Steel Set Screw	1.07	.75	.38	.22	.19	.15
	S6526	LC 14-4 1-Pole Cu	Copper with Stainless Steel Set Screw						
	S6527	LC 14-4 1-Pole Al	Aluminum with Steel Set Screw						



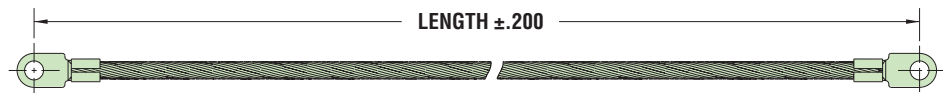
Material	Tinned copper or High Strength, High Conductive Aluminum Alloy 606/T6 with stainless steel set screw
Certifications	UL Listed under Underwriters' Laboratories File E467246



Heyco® SunJumpers™

- .250" hole diameter tinned copper Heavy Duty Ring Terminals at both ends.
- Terminals accept a #10 screw.
- Approved to UL 467 Grounding and Bonding standard.
- DFARS Compliant.

LENGTH		PART NO.	DESCRIPTION
in.	mm.		
6	152.4	S6506	SunJumper 6
11	279.4	S6511	SunJumper 11
18	457.2	S6518	SunJumper 18



Quick Specs

Material	6 AWG tinned copper braided wire
Certifications	UL Listed under Underwriters' Laboratories File E467246

“Stay Connected” with



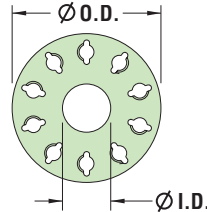
Solar Power Components

a PennEngineering® Company

Heyco® SunStars™

Grounding Spacers for Module to Rack Applications

PART DIMENSIONS				PART NO.	DESCRIPTION
Inside Dia.		Outside Dia.			
in.	mm.	in.	mm.		
		.75	19,1	S6480	SSGS 750-320
.32	8,1	1.00	25,4	S6481	SSGS 1000-320
		1.25	31,8	S6482	SSGS 1250-320



- Create bond between PV module and racking system.
- UL Recognized to UL Standard 2703
- Universal design for quick installation. Extrusions are symmetrically opposed for maximum strength.
- Stainless steel construction for maximum durability.
- DFARS Compliant.

Material: 304 Stainless Steel
 Certifications: Recognized under the Component Program of Underwriters' Laboratories File E467241

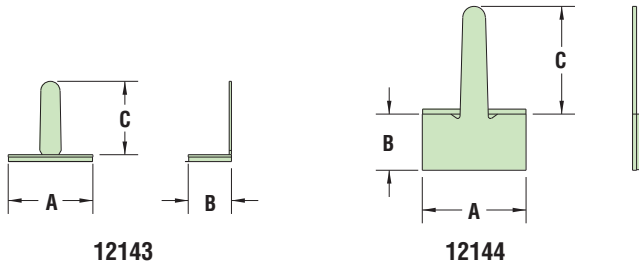
Heyco® Steel Cable Stays

Adhesive Back Mount



PART DIMENSIONS						PART NO.	DESCRIPTION
Base Length		Base Width		Tongue Length			
in.	mm.	in.	mm.	in.	mm.		
.59	15,1	.30	7,7	.52	13,1	12143	CS-5930A
.73	18,5	.39	10,0	.76	19,2	12144	CS-7339A

- Provide a secure, yet simple fastening for cables.
- Adhesive back mount results in a very secure attachment.



Material: Electrolytic Tin-Plated Steel with 3M Adhesive Tape
 Temperature Range: Application Temperature: 70°F (21°C) to 100°F (38°C)
 Operating Temperature: -40°F (-40°C) to 176°F (80°C)

Quick Specs



- For clamping cable or tubing securely into place, especially in **harsh environments**.
- Smooth "coined" clamp edges prevent damage to cable insulation.
- Constructed from corrosion resistant 304 stainless steel.
- Insulated parts are constructed from 304 stainless steel and coated with polyolefin, a thermoplastic co-polymer that provides a durable non-toxic, odorless coating that has very good low temperature flexibility and excellent electrical properties. This coating also has FDA food contact approval.
- Consult Heyco for larger sizes.
- Not for use in a marine salt water environment. Contact Heyco for alternative materials.
- All parts require a .203" (5,2 mm) mounting hole suitable for a #10 screw.
- DFARS Compliant.

Heyco® SunClamp™ Stainless Steel Cable Clamps

MOUNTING HOLE DIAMETER		SCREW SIZE	PART DIMENSION A		PART NO.	DESCRIPTION
in.	mm.		in.	mm.		
Standard – "P Clamp" Design						
.203	5,2	10	.19	4,7	S3373	CC H 3/16 SS
			.25	6,3	S3374	CC H 1/4 SS
			.38	9,5	S3376	CC H 3/8 SS
			.50	12,7	S3378	CC H 1/2 SS
			.63	15,9	S3380	CC H 5/8 SS
			.75	19,1	S3382	CC H 3/4 SS
			.88	22,2	S3384	CC H 7/8 SS
Standard – Coated						
.203	5,2	10	.19	4,7	S3323	CC H 3/16 SSC
			.25	6,3	S3324	CC H 1/4 SSC
			.38	9,5	S3326	CC H 3/8 SSC
			.50	12,7	S3328	CC H 1/2 SSC
			.63	15,9	S3330	CC H 5/8 SSC
			.75	19,1	S3332	CC H 3/4 SSC
			.88	22,2	S3334	CC H 7/8 SSC

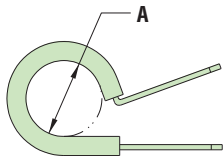


Heyco® Steel Cushion Clamps



- Light to heavy duty steel clamp.
- E.P.D.M. cushion for electrical insulation and vibration absorption.
- Steel clamps are zinc electroplated for corrosion resistance.
- Color - Silver with durable black cushion.

MOUNTING HOLE DIA.		SCREW SIZE	PART DIMENSION A		PART NO.	DESCRIPTION
in.	mm.		in.	mm.		
.650 (16,5 mm) Overall Width, .031 (0,8 mm) Steel Thickness						
.265	6,7	1/4	.187	4,7	12300	CCSC L 3/16
			.250	6,3	12301	CCSC L 1/4
			.312	7,9	12302	CCSC L 5/16
			.375	9,5	12303	CCSC L 3/8
			.437	11,1	12304	CCSC L 7/16
			.500	12,7	12305	CCSC L 1/2
			.562	14,3	12306	CCSC L 9/16
			.625	15,9	12307	CCSC L 5/8
			.687	17,4	12308	CCSC L 11/16
			.750	19,1	12309	CCSC L 3/4
			.875	22,2	12310	CCSC L 7/8
			1.000	25,4	12311	CCSC L 1
			1.125	28,6	12312	CCSC L 1-1/8
			1.250	31,8	12313	CCSC L 1-1/4
.750 (19,1 mm) Overall Width, .047 (1,2 mm) Steel Thickness						
.406	10,3	7/16	.250	6,3	12331	CCSC H 1/4
			.312	7,9	12332	CCSC H 5/16
			.375	9,5	12333	CCSC H 3/8
			.437	11,1	12334	CCSC H 7/16
			.500	12,7	12335	CCSC H 1/2
			.625	15,9	12337	CCSC H 5/8
			.687	17,4	12338	CCSC H 11/16
			.875	22,2	12340	CCSC H 7/8
			1.000	25,4	12341	CCSC H 1
			1.250	31,8	12343	CCSC H 1-1/4



Quick Specs

Material 304 Stainless Steel (Stainless Steel Cable Clamps)
Zinc Plated Steel with an EPDM Sleeve (Steel Cushion Clamps)

Heyco® Vinyl Coated Steel Clamps

Screw Mount

PART NO.	DESCRIPTION	PART DIMENSIONS									
		A		B		C		D		Coating Length	
		Overall Length	Flange Diameter	Arm Width	Mounting Hole Dia.	in.	mm.	in.	mm.	in.	mm.
12067	VCSC 087-18	.87	22,1	.32	8,1	.18	4,6	.18	4,6	.47	11,9
12068	VCSC 110-12	1.10	27,9	.32	8,1	.12	3,0	.12	3,0	.71	18,0
12069	VCSC 134-12	1.34	34,0	.24	6,1	.08	2,0	.12	3,0	.94	23,9
12070	VCSC 137-14	1.38	35,1	.32	8,1	.20	5,1	.14	3,6	.98	24,9
12071	VCSC 157-14	1.57	39,9	.32	8,1	.12	3,0	.14	3,6	1.18	30,0
12072	VCSC 177-17	1.77	45,0	.35	8,9	.16	4,1	.17	4,3	1.38	35,1
12073	VCSC 189-12	1.89	48,0	.24	6,1	.08	2,0	.12	3,0	1.57	39,9
12074	VCSC 213-13	2.13	54,1	.24	6,1	.14	3,6	.13	3,3	1.81	46,0
12075	VCSC 213-18	2.13	54,1	.32	8,1	.19	4,8	.18	4,6	1.65	41,9
12076	VCSC 252-17	2.52	64,0	.32	8,1	.20	5,1	.17	4,3	2.09	53,1
12077	VCSC 260-13	2.60	66,0	.31	7,9	.18	4,6	.13	3,3	2.17	55,1
12078	VCSC 299-18	2.99	75,9	.32	8,1	.18	4,6	.18	4,6	2.56	65,0
12079	VCSC 299-28	2.99	75,9	.43	10,9	.20	5,1	.28	7,1	2.44	62,0
12080	VCSC 331-18	3.31	84,1	.32	8,1	.18	4,6	.18	4,6	2.83	71,9
12081	VCSC 496-18	4.96	126,0	.32	8,1	.24	6,1	.18	4,6	4.41	112,0

Adhesive Back Mount

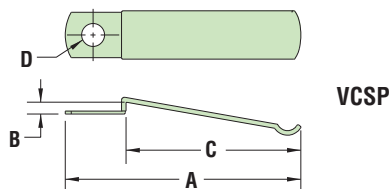
PART NO.	DESCRIPTION	PACKAGING		PART DIMENSIONS							
		Std. Pack	Small Pack	A		B		C		D	
		in.	mm.	Arm Length	Arm Width	Base Width	Base Length	in.	mm.	in.	mm.
12082	VCSC 71-08A	5000	10	.71	18,0	.08	2,0	.31	7,9	.35	8,9
12083	VCSC 98-14A	5000	10	.98	24,9	.14	3,6	.55	14,0	.55	14,0
12084	VCSC 157-16A	3000	10	1.57	39,9	.16	4,1	.75	19,1	.79	20,1

† To order Small Packs, please add the suffix -P to Part No.; e.g., 12082-P

Spring Clamps



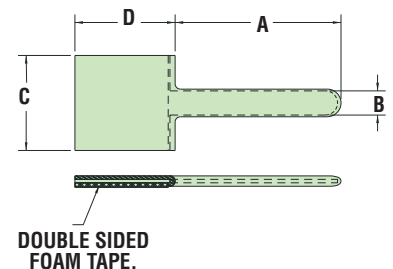
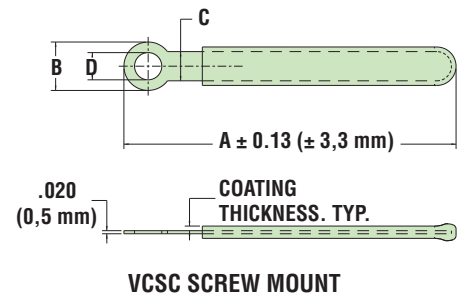
PART NO.	DESCRIPTION	PART DIMENSIONS							
		A		B		C		D	
		Length	Clamping Height	Clamping Length	Mounting Hole	in.	mm.	in.	mm.
12710	VCSP-161-09	1.61	40,9	.09	2,3	1.19	30,2	.156	4,0
12711	VCSP-263-09	2.63	66,8	.09	2,3	2.24	56,9		



Material VCSC Body: Soft steel, electrogalvanized .02" (0,5 mm) thick
 VCSP Body: Stainless steel, w/vinyl coating .02" (0,5 mm) thick
 Coating: Soft, PVC, .032" (0,8 mm) minimum thickness



- Flexible soft steel easily bends and forms to desired shape and holding diameter.
- Vinyl coating both grips and insulates the cable or wire bundle.



VCSC ADHESIVE BACK MOUNT



- This vinyl coated spring steel clamp secures round cable, ribbon cable and tubing.
- Vinyl coating protects and insulates.
- Mounts with a #6 (M3.5) screw, yet cable can be inserted and removed without removing the clip.

Quick Specs

“Stay Connected” with



Solar Power Components

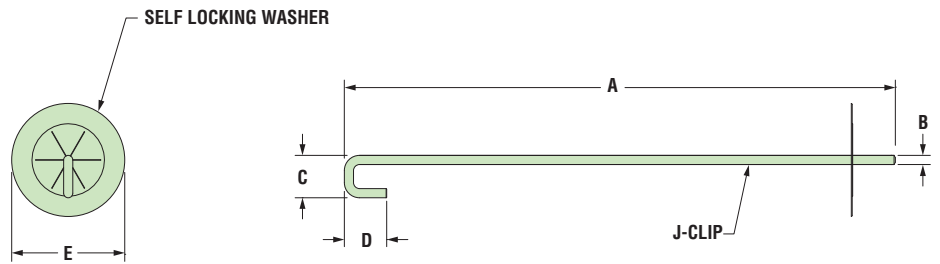
a PennEngineering® Company



Heyco® SunScreener® Wire Mesh Clip

- **Helps protect solar panels from rodents and nesting birds with wire mesh screening** (screening not included). See Heyco Sunscreen below.
- Constructed from 303 and 304 Stainless Steel for maximum endurance to outdoor elements.
- 303 Stainless Steel J-Hook easily attaches to the solar panel frames and can easily be trimmed or bent after assembly.
- 304 Stainless Steel Washers will firmly hold wire mesh screen to the module assembly preventing squirrels and rodents from damaging the interconnection wires and birds from building nests under the solar panel.
- Does not violate panel integrity.
- Installs quickly and easily with standard linesman pliers
- Black color available for those applications subject to **HOA appearance restrictions**.
- Stainless Steel Washers are offered in both steel color and black painted versions.
- Not for use in a marine salt water environment. Contact Heyco for alternative materials.
- DFARS Compliant

PART NO.		PART DIMENSIONS									
Steel Gray	Black	A		B		C		D		E	
		Overall Length		Diameter		Width		Height		Washer Diameter	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
Stainless Steel											
S6437	S6438	4.87	124,0	.08	2,0	.38	9,7	.38	9,7	1.00	25,4

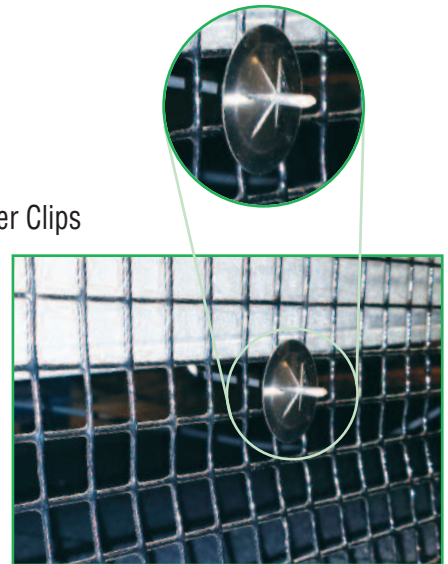


Heyco® SunScreen™

Wire Mesh - For use with Heyco SunScreener Clips

PART NO.	PART DIMENSIONS	
	Black	Length
	Width	feet
	in.	
S6464	4	100'
S6466	6	Rolls
S6468	8	

- Mesh dimension is 1/2" x 1/2".
- DFARS Compliant
- For SunScreener Clips and SunScreen Mesh bundled in **Kit** form, see back cover.



Quick Specs

SunScreener Wire Mesh Clip
 Material J-Hook 303 Stainless steel
 Washer 304 Stainless steel

SunScreen Wire Mesh
 PVC Coated, galvanized welded steel mesh

Enclosure and Module Components



2-1 Original Series-35 Liquid Tight Cordgrips - Straight-thru, NPT & PG



2-2 Original Series-35 Liquid Tight Cordgrips - Pigtail, NPT & PG



2-3 Heyco-Tite Liquid Tight Cordgrips - Straight-thru, NPT



2-4 Heyco-Tite Liquid Tight Cordgrips - Split Gland for Pre-assembled Cables



2-5 Heyco-Tite Liquid Tight Cordgrips - Pigtail, NPT



2-6 Heyco-Tite Liquid Tight Cordgrips - Right Angle, NPT



2-7 Heyco-Tite Snap-In-2 Liquid Tight Cordgrips - Straight-thru, Snap-In



2-8 Heyco-Tite Snap-In-2 Liquid Tight Cordgrips - Pigtail, Snap-In



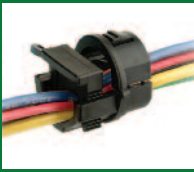
2-9 - 2-11 Heyco-Tite Aluminum Liquid Tight Cordgrips - Straight-thru, NPT



2-12 HEYbrid Aluminum Liquid Tight Cordgrips - Straight-thru, NPT



2-13 HEYbrid Stainless Steel Liquid Tight Cordgrips - Straight-thru, NPT



2-14 Nylon Removable Snap-In Ratcheting Strain Reliefs



2-15 Heyco-Tite Nylon Liquid Tight Cordgrips - Romex® and Oval Holes



2-16 Zinc Die-Cast Box Connectors



2-17 Nylon Snap-In Bushings for American Electrical Knock Out Holes



2-18 Nylon & Polyethylene Bushings for American Electrical Knock Out Holes



2-19 HEYCo-molded Liquid Tight Break-Thru Plugs



2-20 EPDM Snap-In Liquid Tight Bushings - Pg and Metric



2-21 TPE Liquid Tight Hole Plugs



2-22 Nylon Liquid Tight Threaded Plugs



2-22 Nylon Threaded Smooth Bore Bushings



2-23 HEYClean Nylon Liquid Tight Threaded Vent Plugs



2-23 HEYClean Nylon Liquid Tight Snap-In Vent Plugs



2-24 HEYClean Brass Pressure Equalization and Drain Plugs & Locknuts



2-25 Nylon Snap-In Vent and Louvered Plugs for American Electrical Knock-Out Holes



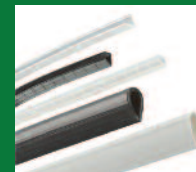
2-26 Nylon Knock-Out Seals, Thick Panel & V-0 Knock-Out Seals



2-27 HEYClip Nylon Tension Wire Clips - Adhesive-Backed



2-28 HEYClip Nylon Releasable Wire Clips Adhesive-Backed & Adjustable



2-29 & 2-30 Grommet Rolls and Channels



2-31 Aluminum Solderless Connectors and Copper Lug Connectors



2-32 Copper & Aluminum Lay-In Connectors



2-32 Aluminum Neutral Bars



2-33 PVB 101 Single Diode Solar Junction Box



2-34 PVB 301 Multi-Diode Solar Junction Box



2-35 PVB 001 Diodeless Solar Junction Boxes



2-36 CPV Solar Bulkhead Connectors



2-37 CPV Solar Connectors



2-38 CPV Solar Connector Sets



2-39 Wire Connectors

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



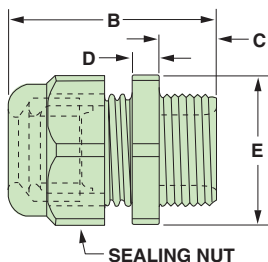
Heyco® Original Series-35 Liquid Tight Cordgrips

Straight-Thru, in HEYConvenient Small Packs

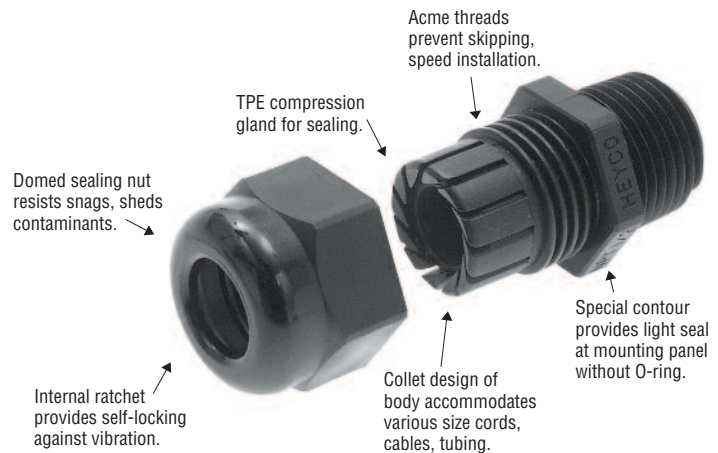
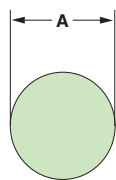
- **Wide range of approved cable diameters.**
- IP 68 rated.
- Acme threads on body prevent skipping and speed installation.
- For use in clearance or threaded holes.
- All nylon construction with TPE sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL.)
- Multiple sizes for flexible cord diameters ranging from .06" (1,8 mm) to 1.00" (25,4 mm). For variations and larger sizes, see Heyco-Tite Liquid Tight Cordgrips on pages 2-3 thru 2-6.
- PG hub threads are steel conduit threads per DIN 40430, see Section 3 of Heyco Catalog 117.
- We recommend using the cordgrip with the smallest maximum diameter that will fit your application. Cable ranges listed are for the maximum IP68 sealing range. Contact Heyco for UL approved 514B cable ranges.
- For Heyco Liquid Tight Threaded Plugs, see page 2-22.
- For our complete range of Heyco Locknuts, see pages 3-17 & 3-18.

CABLE DIA. RANGE		PART NO.		DESC.	UL or RA	SMALL PACK QTY	PART DIMENSIONS											
Minimum	Maximum	Black	Gray *				A	B	C	D		E						
in.	mm.	in.	mm.				Clearance Hole Dia.	Max. O.A. Length	Thread Length	Wrenching Thk.	Wrenching Flat Size	in.	mm.	in.	mm.			
NPT Hubs - Black locknuts not included Gray see footnote*																		
.069	1,8	.187	4,7	4080	4081WN	RLTF 3/8	RA	100	.670	17,0	1.49	37,8	.53	13,5	.20	5,1	.75	19,1
.115	2,9	.312	7,9	4082	4083WN	LTF 3/8												
.170	4,3	.450	11,4	4086	4087WN	LTF 1/2	UL	100	.875	22,2	1.72	43,7	.62	15,7	.20	5,1	.95	24,1
.230	5,8	.546	13,9	4088	4089WN	LTF 1/2	UL	50	.875	22,2	1.83	46,5	.62	15,7	.23	5,8	1.05	26,7
.250	6,4	.485	12,3	4090	4091WN	RLTF 3/4	UL	50	1.068	27,1	1.97	50,0	.63	16,0	.23	5,8	1.30	33,0
.450	11,4	.709	18,0	4092	4093WN	LTF 3/4												
.590	15,0	1.000	25,4	4096	4097WN	LTF 1	UL	25	1.350	34,3	2.42	61,5	.75	19,1	.28	7,1	1.65	41,9
PG Hubs - Unassembled nylon locknuts included																		
.064	1,6	.210	5,3	4040	4041	RLTF 7	RA	100	.492	12,5	1.17	29,7	.33	8,4	.20	5,1	.59	15,0
.114	2,9	.250	6,4	4042	4043	LTF 7												
.069	1,8	.187	4,7	4044	4045	RLTF 9	RA	100	.599	15,2	1.30	33,0	.34	8,6	.20	5,1	.75	19,1
.181	4,6	.312	7,9	4046	4047	LTF 9												
.069	1,8	.260	6,6	4048	4049	RLTF 11	RA	100	.733	18,6	1.46	37,1	.39	9,9	.20	5,1	.86	21,8
.230	5,8	.395	10,0	4050	4051	LTF 11												
.170	4,3	.450	11,4	4054	4055	LTF 13.5	UL	100	.804	20,4	1.53	38,9	.41	10,4	.20	5,1	.95	24,1
.230	5,8	.546	13,9	4058	4059	LTF 16	UL	50	.886	22,5	1.66	42,2	.45	11,4	.23	5,8	1.05	26,7
.250	6,4	.485	12,4	4060	4061	RLTF 21	UL	50	1.115	28,3	1.87	47,5	.52	13,2	.23	5,8	1.30	33,0
.450	11,4	.709	17,9	4062	4063	LTF 21												
.590	15,0	.990	25,1	4066	4067	LTF 29	UL	25	1.470	37,3	2.23	56,6	.59	15,0	.28	7,1	1.66	42,2

Standard colors black and gray. For variations and larger sizes see pages 2-3 thru 2-6.
*Gray NPT cordgrips provided with assembled metal locknut.



SUGGESTED CLEARANCE HOLE FOR NONTHEADED MOUNTING



Consult Heyco for your alternate material requirements!

Quick Specs

Material	Nylon 6/6 with TPE Sealing Gland
Certifications	UL Listed under Underwriters' Laboratories File E51579 RA Recognized Under the Component Program of Underwriters' Laboratories File E51579 CS Certified by Canadian Standards Association File 93876C
Flammability Rating	94V-2
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 (70 PSI, 5 BAR)



Heyco® Original Series-35 Liquid Tight Cordgrips

Pigtail, in HEYConvenient Small Packs

CABLE DIA. RANGE		PART NO.		DESCRIPTION	SMALL PACK QTY	PART DIMENSIONS							
Minimum	Maximum	Black	Gray*			UL or RA	A Clearance Hole Dia.	B Max. O.A. Length	C Thread Length	D Wrenching Nut Thk.		E Flat Size	
in.	mm.	in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.

NPT Hubs - Black locknuts not included Gray see footnote*

.069	1.8	.187	4.7	4134	4135WN	FLEX RLTF 3/8	RA	50	.670	17.0	2.97	75.4	.53	13.5	.20	5.1	.75	19.1
.181	4.6	.312	7.9	4136	4137WN	FLEX LTF 3/8												
.170	4.3	.470	11.9	4140	4141WN	FLEX LTF 1/2	UL	50	.875	22.2	4.09	103.9	.62	15.7	.20	5.1	.95	24.1
.230	5.8	.546	13.9	4142	4143WN	FLEX LLTF 1/2	UL	50	.875	22.2	4.54	115.3	.62	15.7	.23	5.8	1.05	26.7
.250	6.4	.485	12.3	4144	4145WN	FLEX RLTF 3/4	UL	25	1.068	27.1	5.14	130.6	.63	16.0	.23	5.8	1.30	33.0
.450	11.4	.709	18.0	4146	4147WN	FLEX LTF 3/4												

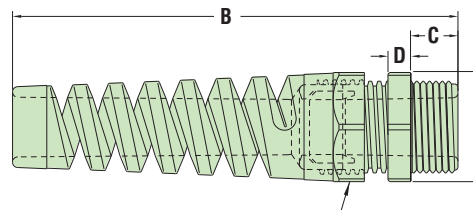
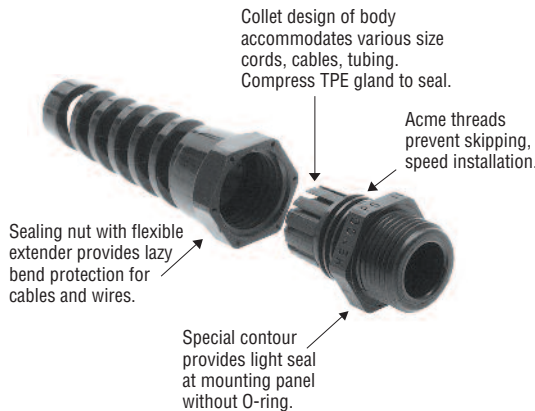
PG Hubs - Unassembled nylon locknuts included

.064	1.6	.210	5.3	4110	4111	FLEX RLTF 7	RA	100	.492	12.5	2.44	62.0	.33	8.4	.20	5.1	.59	15.0
.114	2.9	.250	6.4	4112	4113	FLEX LTF 7												
.069	1.8	.187	4.7	4114	4115	FLEX RLTF 9	RA	50	.599	15.2	2.77	70.4	.34	8.6	.20	5.1	.75	19.1
.181	4.6	.312	7.9	4116	4117	FLEX LTF 9												
.069	1.8	.260	6.6	4118	4119	FLEX RLTF 11	RA	50	.733	18.6	3.44	87.4	.39	9.9	.20	5.1	.86	21.8
.230	5.8	.395	10.0	4120	4121	FLEX LTF 11												
.170	4.3	.450	11.4	4124	4125	FLEX LTF 13.5	UL	50	.804	20.4	3.88	98.6	.41	10.4	.20	5.1	.95	24.1
.230	5.8	.546	13.9	4128	4129	FLEX LTF 16	UL	50	.886	22.5	4.36	110.7	.45	11.4	.23	5.8	1.05	26.7
.250	6.4	.485	12.3	4130	4131	FLEX RLTF 21	UL	25	1.115	28.3	5.03	127.8	.52	13.2	.23	5.8	1.30	33.0
.450	11.4	.709	18.0	4132	4133	FLEX LTF 21												

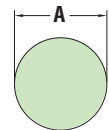
Standard colors black and gray. For variations and larger sizes see pages 2-3 thru 2-6.

*Gray NPT cordgrips provided with assembled metal locknut.

- Flexible Pigtail™ extender prevents sharp bends and extends cable life.
- IP 68 rated.
- Widest range of approved cable diameters.
- Acme threads on body prevent skipping and speed installation.
- For use in clearance or threaded holes.
- All nylon construction with TPE sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL.)
- Multiple sizes for flexible cord diameters ranging from .06" (1,8 mm) to .71" (18,0 mm). For variations and larger sizes, see Heyco-Tite Liquid Tight Cordgrips on pages 2-3 thru 2-6.
- PG hub threads are steel conduit threads per DIN 40430, see Section 3 of Heyco Catalog 117.
- We recommend using the cordgrip with the smallest maximum diameter that will fit your application. Cable ranges listed are for the maximum IP68 sealing range. Contact Heyco for UL approved 514B cable ranges.
- For Heyco Liquid Tight Threaded Plugs, see page 2-22.
- For our complete range of Heyco Locknuts, see pages 3-17 & 3-18.



SEALING NUT WITH FLEX-PROTECTOR EXTENDER



SUGGESTED CLEARANCE HOLE FOR NONTHREADED MOUNTING

Material	Nylon 6/6 w/TPE Sealing Gland
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E51579 RA Recognized under the Component Program of Underwriters' Laboratories File E51579 SF Certified by Canadian Standards Association File 93876C
Flammability Rating	94V-2
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 (70 PSI, 5 BAR)

Quick Specs

**NO O-RING
REQUIRED!**



Heyco® -Tite Liquid Tight Cordgrips

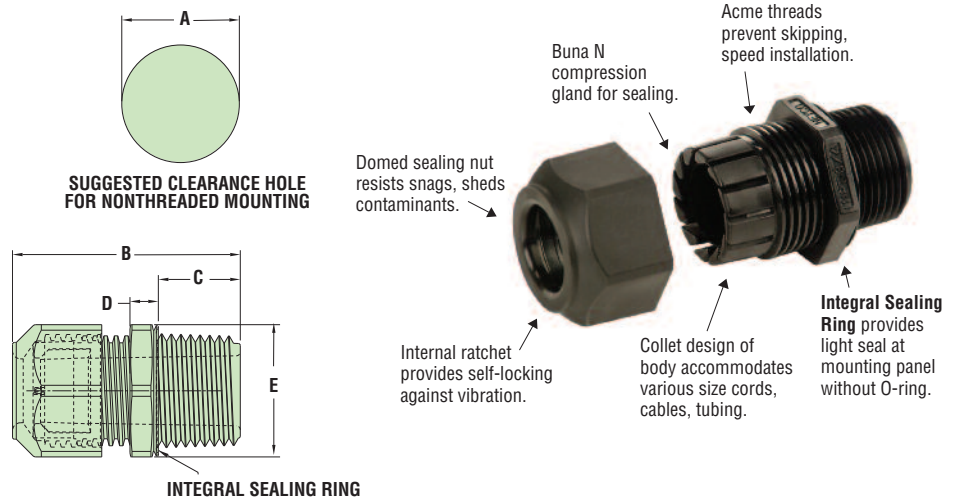
Straight-Thru, NPT Hubs with Integral Sealing Ring

The Ultimate in Liquid Tight Strain Relief Protection

- Integral Sealing Ring ensures a superior seal at the clearance or threaded mounting hole location, every time.
- Widest range of approved cable diameters. Cable ranges listed are for the maximum IP68 sealing range. Contact Heyco for UL approved 514B cable ranges.
- IP 68 rated.
- Approved for **NEMA 4, 4X, 6 and 6P** applications.
- Ratchet design of sealing nut assembly provides superior anti-vibration protection and ensures a firm grip on the cable.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N or TPE sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL.)
- Multiple sizes for flexible cord diameters ranging from .065" (1,7 mm) to 1.730" (44,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- **Locknuts not included.** For nylon locknut specifications or to order locknuts separately, see page 3-18.
- For Heyco Liquid Tight Threaded Plugs, see page 2-22.
- Consult Heyco for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO.		DESCRIPTION	UL or IEC	PART DIMENSIONS										
Minimum		Maximum		Black	Gray			A	B	C	D		E					
in.	mm.	in.	mm.			Clearance Hole Dia.	Max. O.A. Length	Thread Length	Wrenching Nut Thk.		Flat Size							
						in.	mm.	in.	mm.	in.	mm.	in.	mm.					
.065	1,7	.210	5,3	M4514	M4515	RLTCG 1/4	UL	.540	13,7	1,29	32,8	.45	11,4	.21	5,3	.63	16,0	
.115	2,9	.250	6,4	M4516	M4517	LTGC 1/4												
.065	1,7	.230	5,8	M3458	M3459	RLTCG 3/8	UL	.680	17,3	1,41	35,8	.49	12,4	.21	5,3	.82	20,8	
.105	2,7	.315	8,0	M3228	M3229	LTGC 3/8												
.095	2,4	.290	7,4	M4518	M4519	RLTCG 1/2	UL	.875	22,2	1,70	43,2	.61	15,5	.21	5,3	.98	24,9	
.170	4,3	.450	11,4	M3231	M3232	LTGC 1/2												
.180	4,6	.400	10,2	M4520	M4521	RLTCG LL 1/2	UL	.875	22,2	1,68	42,7	.44	11,2	.25	6,4	1,06	26,9	
.260	6,6	.545	13,8	M3200	M3201	LTGC LL 1/2												
.250	6,4	.490	12,4	M3460	M3461	RLTCG 3/4	UL	1,040	26,4	2,00	50,8	.62	15,7	.25	6,4	1,30	33,0	
.420	10,7	.630	16,0	M3234GA	M3235GA	LTGC 3/4												
.435	11,0	.705	17,9	M3234	M3235													
.490	12,4	.785	19,9	M8439	M8440	RLTCG 1	UL	1,326	33,7	2,41	61,2	.76	19,3	.30	7,6	1,73	43,9	
.590	15,0	1,000	25,4	M8437	M8438	LTGC 1												
.787	20,0	1,020	25,9	M4522	M4523	RLTCG 1-1/4	UL	1,680	42,7	2,69	68,3	.78	19,8	.30	7,6	2,05	52,1	
.865	22,0	1,260	32,0	M4524	M4525	LTGC 1-1/4												
1,000	25,4	1,240	31,5	M3319	M3320	RLTCG 1-1/2	UL	1,920	48,8	2,81	71,3	.77	19,6	.36	9,1	2,46	62,5	
1,230	31,2	1,560	39,6	M3317	M3318	LTGC 1-1/2												
1,160	29,5	1,350	34,3	M3323	M3324	RLTCG 2	UL	2,400	60,8	2,93	74,3	.79	20,1	.42	10,7	2,73	69,3	
1,450	36,8	1,730	43,9	M3321	M3322	LTGC 2												

Standard colors black and gray.



*Quick
Specs*

Material	Nylon 6/6 w/Buna N or TPE Sealing Gland
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E51579 Recognized under the Component Program of Underwriters' Laboratories File E51579 CS Certified By Canadian Standard Association File 93876C
Flammability Rating	Approved for NEMA 4, 4X, 6 and 6P Applications
Temperature Range	94V-2-Consult factory for V0 material Static -40°F (-40°C) to 239°F (115°C) Dynamic -4°F (-20°C) to 212°F (100°C)
IP Rating	IP 68 (70 PSI, 5 BAR)

**NO O-RING
REQUIRED!**

Heyco® -Tite Liquid Tight Cordgrips
Split Gland for Pre-assembled Cables with Integral Sealing Ring
The Ultimate in Liquid Tight Strain Relief Protection

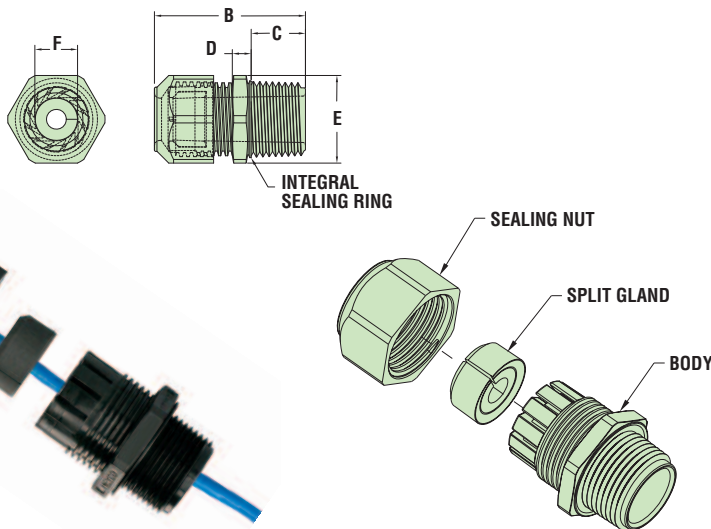


CABLE DIAMETER RANGE				PART NUMBER		DESCRIPTION	UL or RV	PART DIMENSIONS											
Minimum	Maximum	Black	Gray	A	B			C	D		E		F						
in.	mm.			Clearance Hole Dia.	Max. O.A. Length	Thread Length	Thickness	Wrenching Nut Flat Size		Sealing Nut Inside Dia.									
in.	mm.			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.						
NPT Hubs																			
.210	5,3	.334	8,5	M3200GBH	M3201GBH	LTCG LL 1/2 NPT 8.5 MM Split	cRV _{us}	.875	22,2	1.68	42,7	.44	11,2	.25	6,4	1.06	27,0	.56	14,2
.210	5,3	.334	8,5	M3234GBH	M3235GBH	LTCG 3/4 NPT 8.5 MM Split	cRV _{us}	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0	.72	18,3
.138	3,5	.610	15,5	M3234GBJ	M3235GBJ	LTCG 3/4 NPT Split Oval*	cRV _{us}												
.250	6,4	.334	8,5	M8437GBH	M8438GBH	LTCG 1 NPT 8.5 MM Split	cRV _{us}	1.326	33,7	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9	1.01	25,7
				M4524GBH	M4525GBH	LTCG 1-1/4 NPT 8.5 MM Split	cRV _{us}	1.680	42,7	2.69	68,3	.78	19,8	.30	7,6	2.05	52,1	1.27	32,3
PG Hubs																			
.210	5,3	.334	8,5	M3219GBH	M3220GBH	LTCG 16 8.5MM Split	cRV _{us}	.886	22,5	1.68	42,7	.44	11,2	.25	6,4	1.06	27,0	.56	14,2
				M3222GBH	M3223GBH	LTCG 21 8.5MM Split	cRV _{us}	1.115	28,3	1.89	48,0	.52	13,2	.25	6,4	1.30	33,0	.72	18,3
.250	6,4	.334	8,5	M3225GBH	M3226GBH	LTCG 29 8.5MM Split	cRV _{us}	1.470	37,3	2.23	56,6	.57	14,5	.30	7,6	1.73	43,9	1.01	25,7
				M3204GBH	M3203GBH	LTCG 36 8.5MM Split	cRV _{us}	1.875	47,6	2.39	60,7	.47	11,9	.31	7,9	2.05	52,7	1.27	32,3
Metric Hubs																			
.210	5,3	.334	8,5	M3198GBH	M3199GBH	LTCG LL M20 8.5MM Split	cRV _{us}	.787	20,0	1.65	41,9	.41	10,4	.25	6,4	1.06	26,9	.56	14,2
				M4344GBH	M4345GBH	LTCG M25 8.5MM Split	cRV _{us}	.985	25,0	1.89	48,0	.52	13,2	.25	6,4	1.30	33,0	.72	18,3
.250	6,4	.334	8,5	M4348GBH	M4349GBH	LTCG M32 8.5MM Split	cRV _{us}	1.260	32,0	2.23	56,6	.58	14,7	.30	7,6	1.73	43,9	1.01	25,7
				M4352GBH	M4353GBH	LTCG M40 8.5MM Split	cRV _{us}	1.575	40,0	2.39	60,7	.47	11,9	.31	7,9	2.05	52,7	1.27	32,3

Standard color black.

*Oval shaped gland opening; not UL Recognized.

- Split Glands are designed for application to the cable **after the cable has passed through the LTCG**; e.g., RJ45 cable with Cat5e termination.
- Simply pass the cable termination through the LTCG body, apply Split Gland to the cable, and insert the gland/cable assembly into the LTCG fingers. Then tighten the Sealing Nut to achieve a **liquid tight seal**.
- Approved for **NEMA 4, 4X, 6 and 6P** applications.
- For other cable/termination configuration sizes, and Pg and Metric hub threads, please consult Heyco.
- Integral Sealing Ring ensures a superior seal at the clearance or threaded mounting hole location, every time.



Material	Nylon 6/6 w/TPE Sealing Gland
Certifications	cRV _{us} Recognized under the Component Program of Underwriters' Laboratories File E51579 to both Canadian and U.S. Requirements
Flammability Rating	94V-2—Consult factory for V0 material
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 (70 PSI, 5 BAR)

*Quick
Specs*

NO O-RING
REQUIRED!



Heyco® -Tite Liquid Tight Cordgrips

Pigtail™, NPT Hubs with Integral Sealing Ring

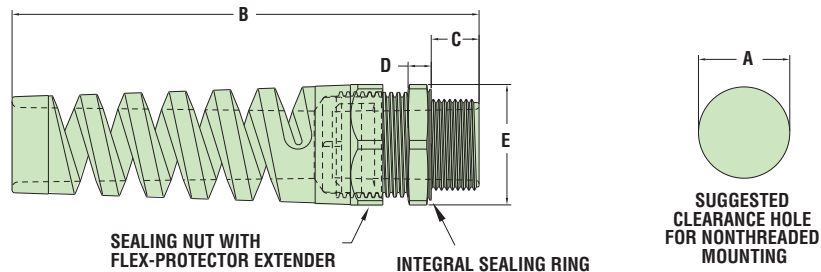
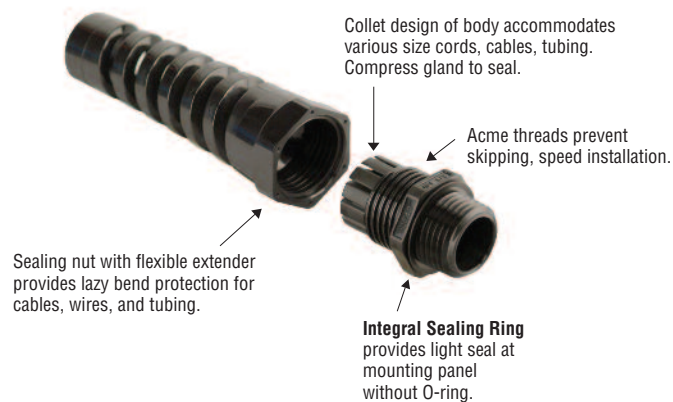
The Ultimate in Liquid Tight Strain Relief Protection

- Flexible Pigtail extender prevents sharp bends and extends cable life.
- Integral Sealing Ring ensures a superior seal at the clearance or threaded mounting hole location, every time.
- Widest range of approved cable diameters.
- IP 68 rated.
- Approved for **NEMA 4, 4X, 6 and 6P** applications.
- Ratchet design of sealing nut assembly provides superior anti-vibration protection and ensures a firm grip on the cable.
- Acme threads on body prevent skipping and speed installation.
- All nylon construction with Buna N or TPE sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL.)
- Multiple sizes for flexible cord diameters ranging from .065" (1,7 mm) to .705" (17,9 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- **Locknuts not included.** For nylon locknut specifications or to order locknuts separately, see page 3-18.
- For Heyco Liquid Tight Threaded Plugs, see page 2-22.
- Consult Heyco for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO. Locknuts Not Included*		DESCRIPTION	UL or IEC	PART DIMENSIONS									
Minimum		Maximum		Black	Gray			A Clearance Hole Dia.		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Nut Flat Size	
in.	mm.	in.	mm.				in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	
.065	1,7	.210	5,3	M4536	M4537	Flex RLTCG 1/4	UL	.540	13,7	2.57	65,3	.45	11,4	.21	5,3	.63	16,0
.115	2,9	.250	6,4	M4538	M4539	Flex LTCG 1/4	UL	.680	17,3	2.94	74,7	.49	12,4	.21	5,3	.82	20,8
.065	1,7	.230	5,8	M3474	M3475	Flex RLTCG 3/8	UL	.875	22,2	4.09	103,9	.61	15,5	.21	5,3	.98	24,9
.105	2,7	.315	8,0	M3254	M3255	Flex LTCG 3/8	UL	.875	22,2	4.37	111,0	.44	11,2	.25	6,4	1.06	26,9
.095	2,4	.290	7,4	M4540	M4541	Flex RLTCG 1/2	UL	1.040	26,4	5.15	130,8	.62	15,7	.25	6,4	1.30	33,0
.170	4,3	.450	11,4	M3251	M3252	Flex LTCG 1/2	UL										
.260	6,6	.546	13,9	M3266	M3267	Flex LTCG LL 1/2	UL										
.250	6,4	.490	12,4	M3462	M3463	Flex RLTCG 3/4	UL										
.435	11,0	.705	17,9	M3239	M3242	Flex LTCG 3/4	UL										

Standard colors black and gray.

*To order Nylon or Metal Locknuts separately, see pages 3-17 and 3-18.



Material	Nylon 6/6 w/Buna N or TPE Sealing Gland
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E51579 Recognized under the Component Program of Underwriters' Laboratories File E51579 SP Certified by Canadian Standard Association File 93876C
Flammability Rating	94V-2
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 (70 PSI, 5 BAR)

Quick
Specs



Heyco® -Tite Liquid Tight Cordgrips

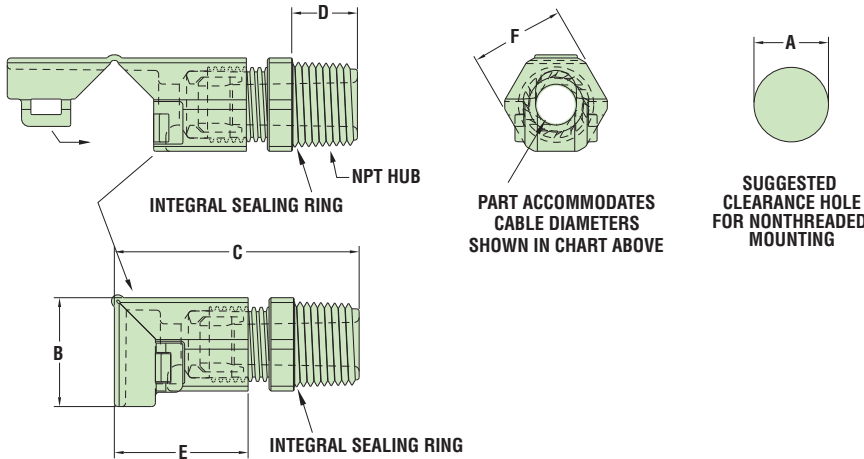
Right Angle, NPT Hubs with Integral Sealing Ring

The Ultimate in Liquid Tight Strain Relief Protection

Patented Fold Over Design

CABLE DIA. RANGE		PART NO.		DESCRIPTION	UL or RA	PART DIMENSIONS											
in.	mm.	Black	Gray			A Clearance Hole Dia.	B Right Angle Height	C Max O.A. Length (Closed)	D Thread Length	E Sealing Nut Length	F Wrenching Nut Flat Size	in.	mm.	in.	mm.	in.	mm.
.065 - .210	1,7 - 5,3	M4560	M4561	RLTCG 1/4 90	RA	.540	13,7	.69	17,5	1.67	42,5	.45	11,4	.86	22,0	.63	16,0
.115 - .250	2,9 - 6,4	M4562	M4563	LTCG 1/4 90	RA	.540	13,7	.69	17,5	1.67	42,5	.45	11,4	.86	22,0	.63	16,0
.065 - .230	1,7 - 5,8	M8560	M8561	RLTCG 3/8 90	RA	.680	17,3	.88	22,3	1.93	48,9	.49	12,4	1.07	27,1	.82	20,8
.105 - .315	2,7 - 8,0	M8562	M8563	LTCG 3/8 90	RA	.680	17,3	.88	22,3	1.93	48,9	.49	12,4	1.07	27,1	.82	20,8
.095 - .290	2,4 - 7,4	M4564	M4565	RLTCG 1/2 90	UL	.875	22,2	1.06	26,9	2.41	61,2	.61	15,5	1.38	35,1	.98	24,9
.170 - .450	4,3 - 11,4	M8564	M8565	LTCG 1/2 90	UL	.875	22,2	1.06	26,9	2.41	61,2	.61	15,5	1.38	35,1	.98	24,9

Standard colors black and gray.



- Cordgrip is molded in the open position for ease of installation. After cable insertion, the fitting snaps closed, bending the cable without damage. This assembly method saves considerable time and money.
- Part design provides liquid tight integrity even in the open position.
- Integral Sealing Ring ensures a superior seal at the clearance or threaded mounting hole location, every time.
- Widest range of approved cable diameters.
- IP 68 rated.
- Approved for **NEMA 4, 4X, 6 and 6P** applications.
- Acme threads on body prevent skipping and speed installation.
- Multiple sizes for flexible cord diameters ranging from .065" (1,7 mm) to .450" (11,4 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- **Patented.**
- **Locknuts not included.** For nylon locknut specifications or to order locknuts separately, see page 3-18.
- For Heyco Liquid Tight Threaded Plugs, see page 2-22.
- Consult Heyco for cordgrips molded in other colors.

Material	Nylon 6/6 w/Buna N or TPE Sealing Gland
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E51579 RA Recognized under Components Program of Underwriters' Laboratories File E51579 SP Certified by Canadian Standard Association File 93876C
Flammability Rating	94V-2
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 (70 PSI, 5 BAR)

Quick Specs

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



Heyco® -Tite Snap-In-2® Liquid Tight Cordgrips

Straight-Thru, Snap-In Hubs

For Panels from .062" (1,6 mm) to .125" (3,2 mm) Thick

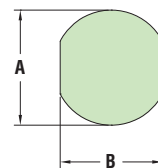
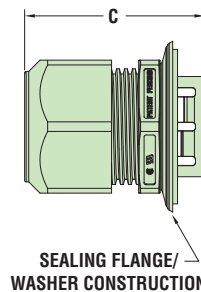
The Ultimate in Liquid Tight Strain Relief Protection



- Easy installation—unique fingers securely snap into a range of panel thicknesses – up to .125" (3,2 mm) – with no tools or locknuts required.
- Sealing flange prevents sealing washer displacement due to water velocity to ensure a liquid tight IP 65 seal.
- Eliminate need for locknut or threaded hole to achieve liquid tight seal at panel; perfect for low clearance installation where locking nut access is limited.
- Ratchet design of sealing nut assembly provides superior anti-vibration and ensures a firm grip on the cable.
- Foam washer included.
- Rotation prevented when used in Double D mounting holes.
- For Double D Mounting Hole Punches, see page 4-30 in Heyco Catalog 117.
- Available in multiple sizes for flexible cord diameters ranging from .065" (1,7 mm) to 1.000" (25,4 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Consult Heyco for cordgrips molded in other colors.

CABLE DIA. RANGE				PART NO.	DESCRIPTION	UL or IEC	PANEL DIMENSIONS					
Minimum		Maximum					Black	A Mounting Hole Dia.		B To Prevent Rotation		C Max. O.A. Length
in.	mm.	in.	mm.			in.		mm.	in.	mm.	in.	mm.
.065	1,7	.210	5,3	M3802	LTRSCG 500	UL	.500	12,7	.450	11,4	1.21	30,7
.115	2,9	.250	6,4	M3800	LTSCG 500							
.065	1,7	.230	5,8	M3808	LTRSCG 625	UL	.625	15,9	.550	14,0	1.30	33,0
.105	2,7	.315	8,0	M3806	LTSCG 625							
.069	1,8	.250	6,4	M3814	LTRSCG 750	UL	.750	19,1	.660	16,8	1.48	37,6
.230	5,8	.395	10,0	M3812	LTSCG 750							
.095	2,4	.260	6,6	M3820	LTRSCG 875	UL	.875	22,2	.770	19,6	1.46	37,1
.170	4,3	.450	11,4	M3818	LTSCG 875							
.180	4,6	.440	11,2	M3826	LTRSCG 1000	UL	1.000	25,4	.875	22,2	1.62	41,1
.260	6,6	.546	13,9	M3824	LTSCG 1000							
.250	6,4	.485	12,3	M3838	LTRSCG 1125	UL	1.125	28,6	1.000	25,4	1.75	44,5
.485	12,3	.709	18,0	M3836	LTSCG 1125							
.490	12,4	.787	20,0	M3844	LTRSCG 1250	UL	1.250	31,8	1.125	28,6	2.05	52,1
.590	15,0	.920	23,4	M3842	LTSCG 1250							
.490	12,4	.787	20,0	M3850	LTRSCG 1375	UL	1.375	34,9	1.250	31,8	2.05	52,1
.590	15,0	1.000	25,4	M3848	LTSCG 1375							

Standard color black.



SUGGESTED CLEARANCE HOLE FOR NONTHEADED MOUNTING

Quick Specs

Material	Nylon 6/6 w/Buna N or TPE Sealing Gland
Certifications	UL Recognized under Components Program of Underwriters' Laboratories File E51579 CSA Certified by Canadian Standard Association File 93876C
Flammability Rating	94V-2
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 65

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

Heyco® -Tite Snap-In-2® Liquid Tight Cordgrrips

Pigtail™, Snap-In Hubs

For Panels from .062" (1,6 mm) to .125" (3,2 mm) Thick

The Ultimate in Liquid Tight Strain Relief Protection

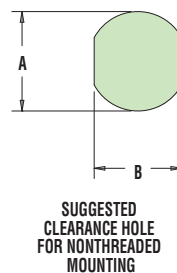
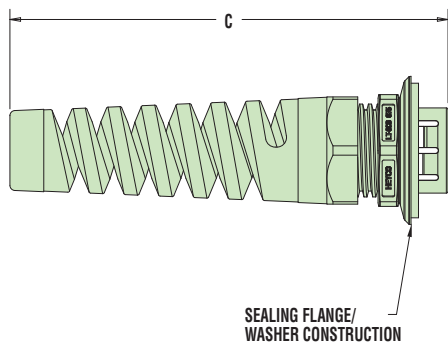
**NO LOCKNUT
REQUIRED!**



CABLE DIA. RANGE				PART NO.	DESCRIPTION	UL or RU	PANEL DIMENSIONS					
Minimum		Maximum					Black	A Mounting Hole Dia.		B To Prevent Rotation		C Max. O.A. Length
in.	mm.	in.	mm.			in.		mm.	in.	mm.	in.	mm.
.065	1,7	.210	5,3	M3862	Flex LTRSCG 500	RU	.500	12,7	.450	11,4	2.50	63,5
.115	2,9	.250	6,4	M3860	Flex LTSCG 500							
.065	1,7	.230	5,8	M3868	Flex LTRSCG 625	RU	.625	15,9	.550	14,0	2.83	71,9
.105	2,7	.315	8,0	M3866	Flex LTSCG 625							
.069	1,8	.250	6,4	M3874	Flex LTRSCG 750	RU	.750	19,1	.660	16,8	3.46	87,9
.230	5,8	.395	10,0	M3872	Flex LTSCG 750							
.095	2,4	.260	6,6	M3880	Flex LTRSCG 875	RU	.875	22,2	.770	19,6	3.86	98,0
.170	4,3	.450	11,4	M3878	Flex LTSCG 875							
.180	4,6	.440	11,2	M3886	Flex LTRSCG 1000	RU	1.000	25,4	.875	22,2	4.32	109,7
.260	6,6	.546	13,9	M3884	Flex LTSCG 1000							
.485	12,3	.709	18,0	M3896	Flex LTSCG 1125	RU	1.125	28,6	1.000	25,4	4.90	124,5

Standard color black.

- Integral nylon spring eases the cable into a lazy bend; prevents kinking and assures longest cable and product life.
- Easy installation—unique fingers securely snap into a range of panel thicknesses – up to .125" (3,2 mm) – with no tools or locknuts required.
- Sealing flange prevents sealing washer displacement due to water velocity to ensure a liquid tight IP 65 seal.
- Eliminate need for locknut or threaded hole to achieve liquid tight seal at panel; perfect for low clearance installation where locking nut access is limited.
- Ratchet design of sealing nut assembly provides superior anti-vibration and ensures a firm grip on the cable.
- Foam washer included.
- Rotation prevented when used in Double D mounting holes.
- For Double D Mounting Hole Punches, see page 4-30 in Heyco Catalog 117.
- Available in multiple sizes for flexible cord diameters ranging from .065" (1,7 mm) to .709" (18,0 mm).
- We recommend using the fitting with the smallest maximum diameter that will fit your application.
- Consult Heyco for cordgrrips molded in other colors.



Material
Certifications

Nylon 6/6 w/Buna N or TPE Sealing Gland
 Recognized under Components Program of Underwriters' Laboratories File E51579

Flammability Rating
Temperature Range

Certified by Canadian Standard Association File 93876C
94V-2

IP Rating

Static -40°F (-40°C) to 239°F (115°C)
Dynamic -4°F (-20°C) to 212°F (100°C)
IP 65

Quick
Specs



Heyco® -Tite Aluminum Liquid Tight Cordgrips

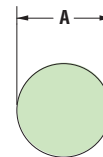
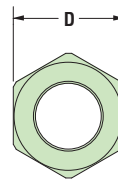
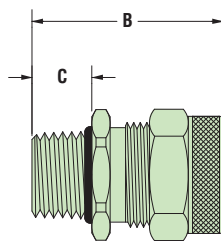
Straight-Thru, NPT Hubs

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.
- Approved for NEMA 6 applications.
- 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.		
.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 3-17 for Metal Locknuts.



SUGGESTED CLEARANCE HOLE FOR NONTHEADED MOUNTING

Quick Specs

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



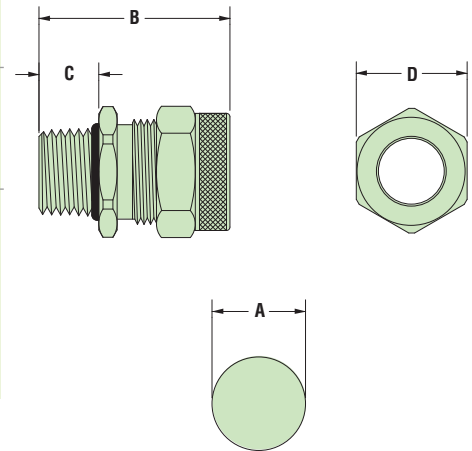
Heyco® -Tite Aluminum Liquid Tight Cordgrips

Straight-Thru, NPT Hubs

The Ultimate in Liquid Tight Strain Relief Protection

CABLE DIA. RANGE				PART NO.	THREAD SIZE	UL	PART DIMENSIONS									
Minimum		Maximum					Machined Aluminum	A		B		C		D		
in.	mm.	in.	mm.		Clearance Hole Dia.	in.		mm.	Max. O.A. Length	in.	mm.	Thread Length	in.	mm.	Wrenching Flat Size	in.
.125	3,2	.188	4,8	M5029	NPT 3/4	UL	1.09	27,7	1.62	41,1	.56	14,2	1.13	28,7		
.188	4,8	.250	6,4	M5030												
.250	6,4	.312	7,9	M5031												
.312	7,9	.375	9,5	M5032												
.375	9,5	.438	11,1	M5033												
.438	11,1	.500	12,7	M5034												
.500	12,7	.562	14,3	M5035	NPT 3/4	UL	1.09	27,7	1.82	46,2	.56	14,2	1.37	34,8		
.562	14,3	.625	15,9	M5036												
.438	11,1	.500	12,7	M5037												
.500	12,7	.562	14,3	M5038												
.562	14,3	.625	15,9	M5039												
.562	14,3	.688	17,5	M5040												
.625	15,9	.750	19,1	M5041	NPT 1	UL	1.38	35,1	2.03	51,6	.62	15,7	1.56	39,6		
.688	17,5	.812	20,6	M5042												
.438	11,1	.562	14,3	M5050												
.562	14,3	.625	15,9	M5051												
.562	14,3	.688	17,5	M5052												
.625	15,9	.750	19,1	M5053												
.688	17,5	.812	20,6	M5054	NPT 1	UL	1.38	35,1	2.50	63,5	.69	17,5	2.25	57,2		
.750	19,1	.875	22,2	M5055												
.812	20,6	.938	23,8	M5056												
.875	22,2	1.000	25,4	M5057*												
.875	22,2	1.000	25,4	M5058												
1.000	25,4	1.125	28,6	M5059												
1.125	28,6	1.250	31,8	M5060	NPT 1-1/4	UL	1.72	43,7	2.50	63,5	.69	17,5	2.25	57,2		
1.250	31,8	1.375	34,9	M5061												
.562	14,3	.688	17,5	M5062												
.688	17,5	.812	20,6	M5063												
.750	19,1	.875	22,2	M5064												
.875	22,2	1.000	25,4	M5065												
1.000	25,4	1.125	28,6	M5066	NPT 1-1/4	UL	1.72	43,7	2.50	63,5	.69	17,5	2.25	57,2		
1.125	28,6	1.250	31,8	M5067												
1.250	31,8	1.375	34,9	M5068												

- **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 NONTHEADED MOUNTING

Assembled O-ring **INCLUDED**. *Not UL Listed or CSA Certified.
Locknut not included - See page 3-17 for Metal Locknuts.

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

“Stay Connected” with

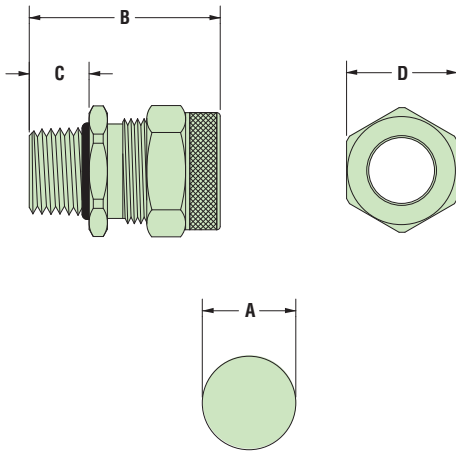


Solar Power Components

a PennEngineering® Company



- **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

Heyco® -Tite Aluminum Liquid Tight Cordgrips

Straight-Thru, NPT Hubs

The Ultimate in Liquid Tight Strain Relief Protection

CABLE DIA. RANGE				PART NO.	THREAD SIZE	UL	PART DIMENSIONS							
Minimum		Maximum					Machined Aluminum	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.
Machined Aluminum														
.562	14,3	.688	17,5	M5069*										
.688	17,5	.812	20,6	M5070										
.750	19,1	.875	22,2	M5071		UL								
.875	22,2	1.000	25,4	M5072	NPT 1-1/2		1.97	50,0	2.50	63,5	.69	17,5	2.25 57,2	
1.000	25,4	1.125	28,6	M5073										
1.125	28,6	1.250	31,8	M5074										
1.250	31,8	1.375	34,9	M5075										
1.250	31,8	1.375	34,9	M5080										
1.312	33,3	1.437	36,5	M5081		UL								
1.438	36,5	1.562	39,7	M5082	NPT 2		2.46	62,5	3.12	79,2	.80	20,3	2.83 71,9	
1.562	39,7	1.688	42,9	M5083										
1.688	42,9	1.812	46,0	M5084										
Cast Aluminum														
1.688	42,9	1.812	46,0	M5091		UL								
1.812	46,0	1.938	49,2	M5092										
1.938	49,2	2.062	52,4	M5093	NPT 2-1/2		2.96	75,2	4.20	106,7	1.28	32,5	4.00 101,6	
2.062	52,4	2.188	55,6	M5094										
2.188	55,6	2.312	58,7	M5095										
2.312	58,7	2.438	61,9	M5096										
1.688	42,9	1.812	46,0	M5097		UL								
1.812	46,0	1.938	49,2	M5098										
1.938	49,2	2.062	52,4	M5099	NPT 3		3.58	90,9	4.20	106,7	1.31	33,3	4.00 101,6	
2.062	52,4	2.188	55,6	M5100										
2.188	55,6	2.312	58,7	M5101										
2.312	58,7	2.438	61,9	M5102										
2.437	61,9	2.625	66,7	M5103										
2.625	66,7	2.812	71,4	M5104	NPT 3	*	3.50	88,9	4.85	123,2	1.39	35,3	4.75 120,7	
2.812	71,4	3.000	76,2	M5105										
3.000	76,2	3.250	82,6	M5106										

Assembled O-ring **INCLUDED**. *Not UL Listed or CSA Certified.
Locknut not included - See page 3-17 for Metal Locknuts.

Quick Specs

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



HEYbrid™ Aluminum Liquid Tight Cordgrips

Straight-Thru, NPT Hubs

Don't get SKU'ed: More Cable Range, Fewer SKU's!
Genetically engineered to destroy your inventory monster!
The Ultimate in Liquid Tight Strain Relief Protection

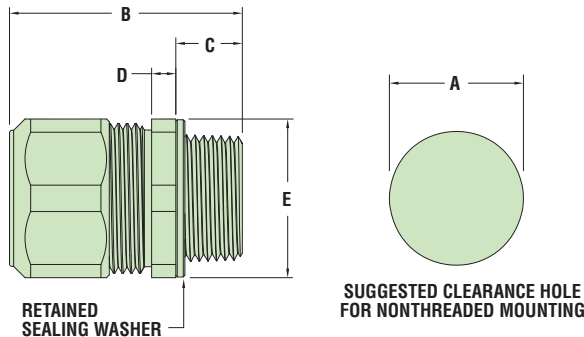
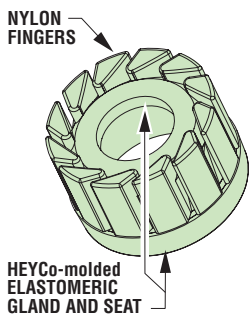


CABLE DIA. RANGE				PART NO.	DESCRIPTION	UL or RA	PART DIMENSIONS												
Minimum		Maximum					Machined Aluminum	A		B		C		D		E			
in.	mm.	in.	mm.					Clearance Hole Dia.	in.	mm.	Max. O.A. Length	in.	mm.	Thread Length	in.	mm.	Wrenching Nut Thickness	in.	mm.
HEYCo-molded Finger/Gland																			
.065	1,7	.210	5,3	M6100	RALCG 1/4	c RA US	.540	13,7	1.29	32,8	.40	13,2	.20	5,1	.75	19,1			
.115	2,9	.250	6,4	M6101	ALCG 1/4														
.065	1,7	.230	5,8	M6102	RALCG 3/8	c RA US	.680	17,3	1.39	35,3	.41	10,4	.20	5,1	.88	22,4			
.105	2,7	.315	8,0	M6103	ALCG 3/8														
.095	2,4	.290	7,4	M6106	RALCG 1/2	c UL US	.875	22,2	1.69	42,9	.53	13,5	.20	5,1	1.06	26,9			
.170	4,3	.450	11,4	M6107	ALCG 1/2														
.180	4,6	.400	10,1	M6108	RALCG LL 1/2	c UL US	.875	22,2	1.81	46,0	.53	13,5	.20	5,1	1.25	31,8			
.260	6,6	.545	13,8	M6109	ALCG LL 1/2														
.250	6,4	.490	12,4	M6110	RALCG 3/4	c UL US	1.109	28,2	1.93	49,0	.55	14,0	.20	5,1	1.31	33,3			
.435	11,0	.705	17,9	M6111	ALCG 3/4														
.490	12,4	.785	19,9	M6112	RALCG 1	c UL US	1.375	34,9	2.29	58,1	.69	17,5	.20	5,1	1.75	44,5			
.590	15,0	1.000	25,4	M6113	ALCG 1														
Discrete Finger & Gland																			
.787	20,0	1.02	26,0	M6115	RALCG 1-1/4	c UL US	1.734	44,0	2.56	65,0	.71	18,0	.25	6,4	2.25	57,2			
.865	22,0	1.26	32,0	M6116	ALCG 1-1/4														
1.00	25,4	1.24	31,5	M6117	RALCG 1-1/2	c UL US	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5			
1.23	31,2	1.56	39,6	M6118	ALCG 1-1/2														
1.16	29,5	1.35	34,3	M6119	RALCG 2	c UL US	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9			
1.45	36,8	1.73	44,0	M6120	ALCG 2														

Assembled O-ring **INCLUDED**.
Locknut not included - see page 3-17 for Metal Locknuts

- HEYCo-molded gripping finger/gland technology accommodates the **widest cable range** over the **fewest sku's**.
- Rolled grease-free threads **prevent galling** and allow for multiple assemblies and disassemblies. No messy, unsightly thread lubrication required.
- Approved for **NEMA 4, 4X, 6 and 6P**.
- Self-retaining sealing rings eliminate the need for an O-Ring groove, thus **reducing cost**.
- **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.
- Sealing washer required for through hole applications only.
- DFARS Compliant

The HEYCo-molded Finger, Gland & Seat



Material	6061 Aluminum Body and sealing nut with nylon 6/6 and TPE co-molded finger/gland assembly SBR Sealing Washer
Certifications	c UL US Listed under Underwriters' Laboratories File E51579 to both Canadian and U.S. requirements c RA US Recognized under Underwriters' Laboratories File E51579 to both Canadian and U.S. requirements
Flammability Rating	94V-2
Temperature Range	-40°F (-40°C) to 221°F (105°C)
IP Rating	IP68 (70 PSI, 5 BAR)

Quick Specs



- HEYCo-molded gripping finger/gland technology accommodates the **widest cable range** over the **fewest sku's**.
- Rolled grease-free threads **prevent galling** and allow for multiple assemblies and disassemblies. No messy, unsightly thread lubrication required.
- Approved for **NEMA 4, 4X, 6 and 6P**.
- Self-retaining sealing rings eliminate the need for an O-Ring groove, thus **reducing cost**.
- Sealing washer required for through hole applications only.
- Typical applications: Control cabinets, marine, car washes, hot tubs, instrumentation, carpet cleaning machines, food processing equipment, underground for direct burial or submersed up to 130 ft. (70 PSIG).
- Ideal for corrosive environments.
- Constructed from corrosion resistant 303 stainless steel.
- Resistant to salt water, acids and most chemicals.
- Locknuts not included. To order locknuts separately, see page 3-17.
- Patent pending.
- DFARS Compliant

HEYbrid™ Stainless Steel Liquid Tight Cordgrips

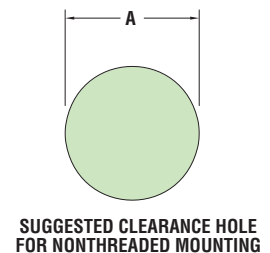
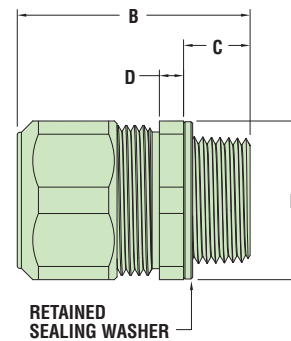
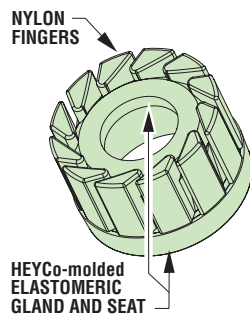
Straight-Thru, NPT Hubs

Don't get SKU'ed: More Cable Range, Fewer SKU's – Genetically engineered to destroy your inventory monster!

The Ultimate in Liquid Tight Strain Relief Protection

CABLE DIA. RANGE		PART NO.	DESCRIPTION	UL or IEC	PART DIMENSIONS											
Minimum	Maximum				A	B	C	D	E	Clearance Hole Dia.	Max. O.A. Length	Thread Length	Wrenching Nut Thickness	Flat Size		
in.	mm.	in.	mm.		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.		
HEYCo-molded Finger/Gland																
.065	1,7	.210	5,3	M6000	RSSCG 1/4	cULus	.540	13,7	1.29	32,8	.40	10,2	.20	5,1	.75	19,1
.115	2,9	.250	6,4	M6001	SSCG 1/4											
.065	1,7	.230	5,8	M6002	RSSCG 3/8	cULus	.680	17,3	1.39	35,3	.41	10,4	.20	5,1	.88	22,4
.105	2,7	.315	8,0	M6003	SSCG 3/8											
.095	2,4	.290	7,4	M6006	RSSCG 1/2	cULus	.875	22,2	1.69	42,9	.53	13,5	.20	5,1	1.06	26,9
.170	4,3	.450	11,4	M6007	SSCG 1/2											
.180	4,6	.400	10,1	M6008	RSSCG LL 1/2	cULus	.875	22,2	1.81	46,0	.53	13,5	.20	5,1	1.25	31,8
.260	6,6	.545	13,8	M6009	SSCG LL 1/2											
.250	6,4	.490	12,4	M6010	RSSCG 3/4	cULus	1.109	28,2	1.93	49,0	.55	14,0	.20	5,1	1.31	33,3
.435	11,0	.705	17,9	M6011	SSCG 3/4											
.490	12,4	.785	19,9	M6012	RSSCG 1	cULus	1.375	34,9	2.29	58,1	.69	17,5	.20	5,1	1.75	44,5
.590	15,0	1.000	25,4	M6013	SSCG 1											
Discrete Finger & Gland																
ALL NEW PRODUCTS																
.787	20,0	1.02	26,0	M6015	RSSCG 1-1/4	cULus	1.734	44,0	2.56	65,0	.71	18,0	.25	6,4	2.25	57,2
.865	22,0	1.26	32,0	M6016	SSCG 1-1/4											
1.00	25,4	1.24	31,5	M6017	RSSCG 1-1/2	cULus	1.984	50,4	2.69	67,1	.73	18,5	.25	6,4	2.50	63,5
1.23	31,2	1.56	39,6	M6018	SSCG 1-1/2											
1.16	29,5	1.35	34,3	M6019	RSSCG 2	cULus	2.469	62,7	2.92	74,2	.76	19,3	.25	6,4	2.75	69,9
1.45	36,8	1.73	44,0	M6020	SSCG 2											

The HEYCo-molded Finger, Gland & Seat



Quick Specs

Material	303 Stainless Steel Body and sealing nut with nylon 6/6 and TPE co-molded finger/gland assembly SBR Sealing Washer
Certifications	cULus Listed under Underwriters' Laboratories File E51579 cULus Recognized under Underwriters' Laboratories File E51579
Flammability Rating	94V-2
Temperature Range	-40°F (-40°C) to 221°F (105°C)
IP Rating	IP68 (70 PSI, 5 BAR)

Heyco® Nylon Removable Snap-In Ratcheting Strain Reliefs

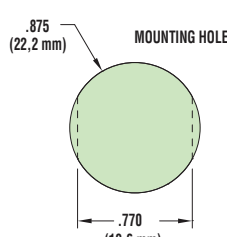
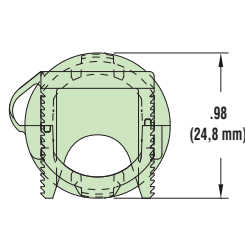
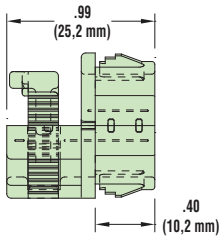
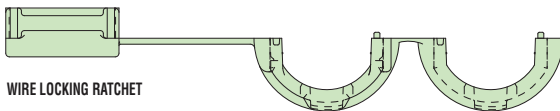
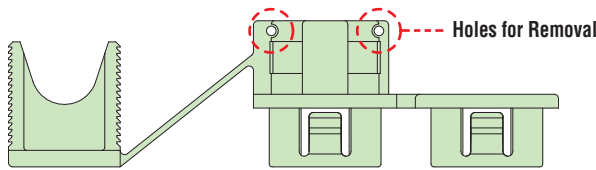
For Round and Double D Mounting Holes

WILL FIT THESE CABLES Cross Section	Approximate Size		Mounting Hole Size		Maximum Thickness		PART NO. Black	DESCRIPTION	BODY LENGTH		Corresponding Mounting Hole Plug	
	in.	mm.	in.	mm.	in.	mm.			in.	mm.	PART NO.	DESC.
Round, Flat or Multiple	.12-.58	2,9-14,6	.875 w/.770 flats	22,2 w/19,6 flats	.13	3,2	1280	RSR 875	1.00	25,4	2509	DD 875 -770
Round, Flat or Multiple	.12-.75	2,9-19,1	1.109 w/1.000 flats	28,2 w/25,2 flats	.13	3,2	1282	RSR 1109	1.00	25,4	2717	DD 1109 -1000

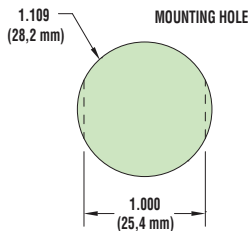
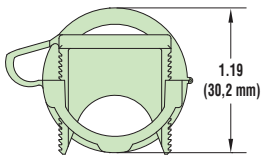
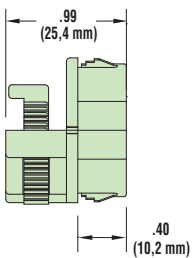
Standard color black. Consult Heyco for white and other colors.



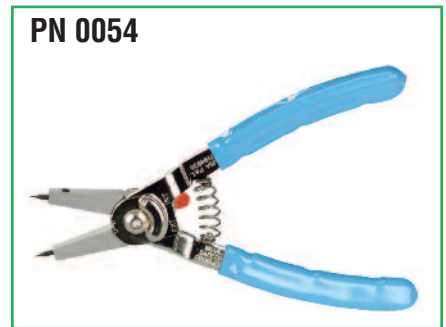
- **Assembly friendly!** Independent of insertion into the panel, the Ratcheting Strain Relief **self-locks** onto the cable. Thus, it may be preassembled offline for final assembly at a later time or remote location, for lower installed cost!
- Unique wire locking ratchet allows for generous wire range from .12" (2,9 mm) to .75" (19,1 mm).
- Can be used for one cable or multiple cables (round or flat wire).
- Installs easily with fingertip pressure into a standard round or Double D hole.
- Ratcheting Strain Relief can be easily removed by inserting standard snap ring pliers with .04" tips (Heyco PN 0054) into the two holes on the part (see drawing) and spreading part open.
- Ideal solution for managing internal wire bundles such as wire harnesses.
- PN 1280 UL Recognized for multiple cables/conductors.
- Consult Heyco for other wire types and sizes.
- For Double D Mounting Hole Punches, see page 4-30 in Heyco Catalog 117.



1280



1282



PN 0054

Material: Nylon 6/6
 Certifications: Recognized under the Component Program of Underwriters' Laboratories File E15331; Certified by Canadian Standards Association File 8919
 Flammability Rating: 94V-2
 Temperature Range: -04°F (-18°C) to 221°F (105°C)

Quick Specs

**NO O-RING
REQUIRED!**

Heyco® -Tite Nylon Liquid Tight Romex® and Other Oval Hole Connectors

Straight-Thru, NPT Hubs with Integral Sealing Ring

For Romex® NM-B and UF-B Cables. For use in clearance or threaded holes, electrical conduit couplings and adapters.

The Ultimate in Liquid Tight Strain Relief Protection

- **Multiple gland sizes for 12/2 through 14/3 Romex® NM-B and UF-B cable.** Consult Heyco for additional cable sizes.
- Hub sizes for 1/2 NPT and 3/4 NPT electrical knock-outs or threaded couplings. Consult Heyco for PG and Metric threaded hubs.
- Ratchet design of sealing nut assembly provides superior anti-vibration protection and ensures a firm grip on this cable.
- Integral Sealing Ring ensures a superior seal at mounting locations every time.
- All nylon construction with TPE sealing gland resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL.)
- **Assembled Metal Locknuts INCLUDED.**

WILL FIT THESE CABLES			PART NO.	DESCRIPTION	UL	PART DIMENSIONS									
Romex® Type	AWG/ Conds.	Approximate Size				Black	A Clearance Hole Dia.	B Max. O.A. Length	C Thread Length	D Wrenching Nut Thickness		E Flat Size			
		in. mm.			in. mm.	in. mm.	in. mm.	in. mm.	in. mm.	in. mm.	in. mm.	in. mm.	in. mm.		

Romex® Connectors – assembled steel locknuts included

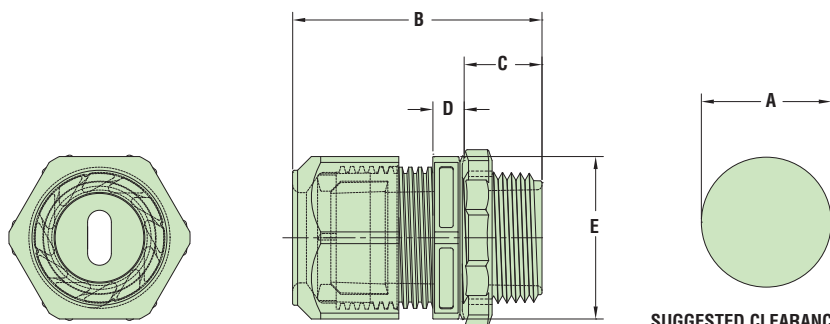
NM-B	14/2	.19 x .39	4,9 x 9,9	M3231GZA*	LTCG 1/2	UL	.875	22,2	1.70	43,2	.61	15,5	.21	5,3	.98	24,9
				M3234GZA	LTCG 3/4	-	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
NM-B	12/2	.21 x .42	5,3 x 10,7	M3231GZB*	LTCG 1/2	UL	.875	22,2	1.70	43,2	.61	15,5	.21	5,3	.98	24,9
				M3234GZB	LTCG 3/4	UL	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
UF-B	14/2	.18 x .35	4,5 x 8,9	M3234GZE	LTCG 3/4	-										
	12/2	.19 x .42	4,8 x 10,7	M3234GZF	LTCG 3/4	UL	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
		14/3	.19 x .63	4,8 x 16,1												

Other Oval Hole LTCGs – locknuts not included

n/a	n/a	.45 x .21	11,4 x 5,3	M3234GZK	LTCG 3/4	-	1.040	26,4	2.00	50,8	.62	15,7	.25	6,4	1.30	33,0
		.31 x .19	7,9 x 4,8	M3234GZM	LTCG 3/4											
		.69 x .19	17,5 x 4,8	M8437GZH	LTCG 1	-	1.326	33,7	2.41	61,2	.76	19,3	.30	7,6	1.73	43,9

Standard color black.

* Certified by Canadian Standard Association for NMD-90 wire-File 93876.



SUGGESTED CLEARANCE HOLE FOR NON - THREADED MOUNTING

*Quick
Specs*

Material	Nylon 6/6 with TPE Sealing Gland
Certifications	Listed under Underwriters' Laboratories File E103540
Flammability Rating	94V-2
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

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

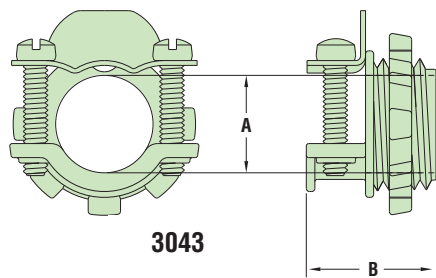
Heyco® Zinc Die-Cast Box Connectors

TRADE SIZE	NOMINAL MOUNTING HOLE DIAMETER		WILL FIT THESE CABLES*			PART NO.	DESCRIPTION	PART DIMENSIONS					
	in.	mm.	Flexible Metallic Conduit	Armored ***	Non-Metallic Sheathed			A		B			
								Minimum Wire	Maximum Wire	Overall Length			
								in.	mm.	in.	mm.		
Clamp-Type Connector													
3/8**	.875	22,2	–	14/2, 14/3, 12/2, 12/3, 10/2, 10/3	14/2, 12/2, 12/3	3043	751 aka Romex® Connector	.18	4,6	.64	16,3	.81	20,6
90° Angle Connectors													
3/8**	.875	22,2	3/8	14/2, 14/3, 14/4, 12/2, 12/3, 12/4, 10/2, 8/1, 6/1, 4/1	–	3030	561	.45	11,4	.63	16,0	1.81	46,0
1/2	.875	22,2	1/2	8/2	–	3031	563	.65	16,5	.97	24,6	2.05	52,1
Combination Connectors													
3/8**	.875	22,2	3/8	14/2, 14/3, 14/4, 12/2, 12/3, 12/4	14/2, 14/3, 12/2, 12/3	3029 3040	551 551 No Nut	.35	9,0	.43	11,0	.79	20,0
Box Connector													
1/2	.875	22,2	n/a	n/a	n/a	9840	SP1	.40	10,2	1.12	28,4	.31	7,9

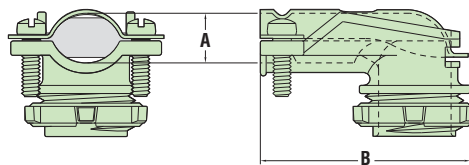
*Gauge/Conductors, except FMC.

**1/2" K.O.

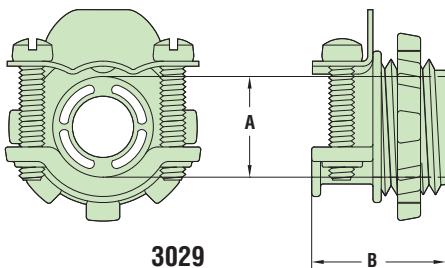
***Not UL Rated for armored cable.



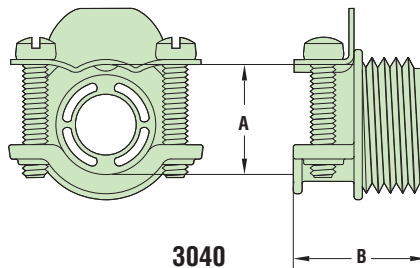
3043



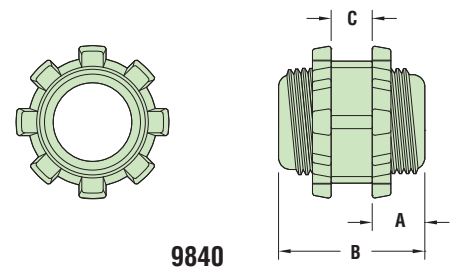
3030/3031



3029



3040



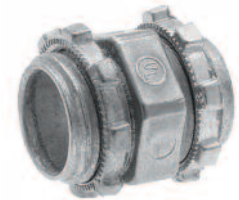
9840



3043

Part No. 3043 (751) commonly known as a Romex® Connector.

- Also fits corrugated MC at .51" (13,0 mm) diameter, smooth MC at .35" (8,8 mm) to .53" (13,3 mm) diameter.
- DFARS Compliant



9840

- Provides a connecting link between boxes, panels or chassis.
- Space boxes 5/16" (7,9 mm) apart.
- Die-cast locknut included.
- DFARS Compliant

Material
Certifications

Zamak 3

UL Listed under Underwriters' Laboratories File E103541

CS Certified by the Canadian Standards Association File 88539

Quick
Specs

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



Heyco® Nylon Snap-In Bushings for American Electrical Knock Out Holes

Heyco® K. O. Snap Bushings

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	INSIDE DIAMETER	
	in.	mm.			in.	mm.
Multiple Locking Steps for Box Thickness up to .125" (3,2 mm)						
1/2	.875	22,2	2126	SB 875-11	.69	17,5
3/4	1.093-1.125	27,8-28,6	2166	SB 1093-15	.94	23,8
1	1.375	34,9	2210	SB 1375-16	1.01	25,8
1-1/4	1.750	44,5	2300	SB 1750-22	1.38	34,9
1-1/2	2.000	50,8	2406	SB 2000-28	1.75	44,5
Multiple Locking Steps for Box Thickness up to .250" (6,4 mm)						
1/2	.875	22,2	3104	SBT 875-11	.69	17,5
3/4	1.093-1.125	27,8-28,6	3128	SBT 1093-15	.94	23,8
1	1.375	34,9	3110	SBT 1375-16	1.00	25,4
1-1/4	1.750	44,5	3114	SBT 1750-22	1.38	34,9
1-1/2	2.000	50,8	3116	SBT 2000-26	1.63	41,3
2	2.500	63,5	2420	SB 2.500-31	1.97	50,0

Standard color black. Consult Heyco for other colors.

Heyco® K. O. Universal Bushings

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	INSIDE DIAMETER	
	in.	mm.			in.	mm.
Multiple Locking Steps for Panel Thickness up to .125" (3,2 mm)						
1/2	.875	22,2	2119	UB 875	.56	14,3
3/4	1.093-1.125	27,8-28,6	2157	UB 1093	.81	20,6
1	1.375	34,9	2184	UB 1375	1.00	25,4
1-1/4	1.750	44,5	2298	UB 1750	1.38	34,9
1-1/2	2.000	50,8	2422	UB 2000	1.64	41,6
Multiple Locking Steps for Panel Thickness up to .250" (6,4 mm)						
1/2	.875	22,2	3120	UBT 875	.56	14,3
3/4	1.093-1.125	27,8-28,6	3002	UBT 1093	.81	20,6
1	1.375	34,9	3003	UBT 1375	1.00	25,4
2	2.500	63,5	2440	UB 2.500	1.97	50,0

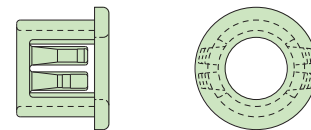
Standard color black. Consult Heyco for other colors.

Heyco® K. O. Reducer Bushings

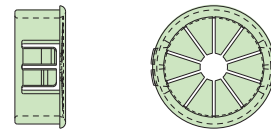
Multiple Locking Steps for Panel Thickness up to .125" (3,2 mm)

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	INSIDE DIAMETER	
	in.	mm.			in.	mm.
1/2	.875	22,2	2110	SB 875-6	.38	9,5
			2113	SB 875-7	.44	11,1
			2116	SB 875-8	.50	12,7
			2120	SB 875-9	.56	14,3
			2123	SB 875-10	.63	15,9
3/4	1.093 - 1.125	27,8-28,6	2160	SB 1093-13	.81	20,6
			2163	SB 1093-14	.88	22,2
1	1.375	34,9	2207	SB 1375-14	.88	22,2
1-1/2	2.000	50,8	2400	SB 2000-26	1.64	41,6

Standard color black. Consult Heyco for other colors.



K.O. Snap and Reducer Bushings



K.O. Universal Bushings

Quick Specs

Material
Certifications



Nylon 6/6
Recognized under the Component Program of Underwriters' Laboratories, File E15331



Certified by Canadian Standards Association, File 8919

Flammability Rating
Temperature Range

94V-2
-04°F (-18°C) to 221°F (105°C)



Heyco® Nylon Snap-In Bushings for American Electrical Knock Out Holes

Heyco® K. O. Open/Closed Universal Bushings

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	INSIDE DIAMETER	
	in.	mm.			in.	mm.
Multiple Locking Steps for Panel Thickness up to .125" (3,2 mm)						
1/2	.875	22,2	2119SP	OCUB 875	.56	14,3
3/4	1.093-1.125	27,8-28,6	2157SP	OCUB 1093	.81	20,6
1	1.375	34,9	2184SP	OCUB 1375	1.00	25,4
1-1/2	2.000	50,8	2422SP	OCUB 2.000	1.64	41,7
Multiple Locking Steps for Panel Thickness up to .250" (6,4 mm)						
2	2.500	63,5	2440SP	OCUB 2.5	1.97	43,2

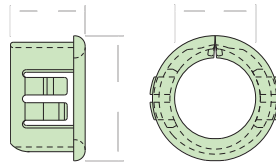
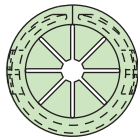
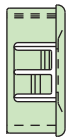
Standard color black. Consult Heyco for other colors.

Heyco® K. O. Smooth Bore Bushings*

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	INSIDE DIAMETER	
	in.	mm.			in.	mm.
Single Locking Step for Panel Thickness up to .062" (1,6 mm)						
1/2	.875	22,3	2540	S 87	.52	13,2
Multiple Locking Steps for Panel Thickness up to .125" (3,2 mm)						
1/2	.875	22,3	2552	S 875-9	.56	14,2
3/4	1.093-1.125	27,8-28,6	2555	S 1093-10	.63	16,0

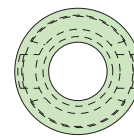
Standard color black. Consult Heyco for other colors.

*For NPT Threaded Smooth Bore Bushings, see page 2-22.

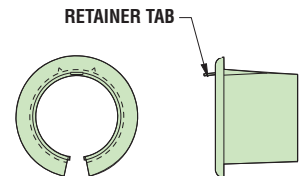


K.O. Open/Closed Universal Bushings

K.O. Open/Closed Bushings



K.O. Smooth Bore Bushings



Armor Bushings

Heyco® K. O. Open/Closed Bushings

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	INSIDE DIAMETER	
	in.	mm.			in.	mm.
Multiple Locking Steps for Panel Thickness up to .125" (3,2 mm)						
1/2	.875	22,2	2874	OCB 875	.67	17,0
3/4	1.093-1.125	27,8-28,6	2879	OCB 1093	.88	20,6
1	1.375	34,9	2882	OCB 1375	1.17	29,8
1-1/2	2.000	50,8	2900	OCB 2.000	1.73	43,9
Multiple Locking Steps for Panel Thickness up to .250" (6,4 mm)						
2	2.500	63,5	2909	OCB 2.5	2.00	50,8

Standard color black. Consult Heyco for other colors.

Heyco® Polyethylene* Armor Bushings

WILL FIT THESE ARMORED CABLES AWG/Conductors	PART NO.	DESC.	PART DIMENSIONS			
			Inside Diameter		Head Diameter	
			in.	mm.	in.	mm.
14/2, 14/3, 12/2, 12/3	2264	AB 0	.37	9,4	.68	17,3
14/4, 6/1, 4/1	2265	AB 1	.44	11,2	.70	17,8
12/4, 10/2, 10/3, 2/1	2266	AB 2	.57	14,0	.85	21,6
10/4, 8/2, 8/3, 1/1	2267	AB 3	.73	18,5	1.02	25,9

Standard color red.

*High dielectric polyethylene.

Material	OCUB & OCB Nylon 6/6
Certifications	Recognized under the Component Program of Underwriters' Laboratories, File E15331 Certified by Canadian Standards Association, File 8919
Flammability Rating	94V-2
Temperature Range	-04°F (-18°C) to 221°F (105°C)

Armor Bushings
High Dielectric Polyethylene
Listed under Underwriters' Laboratories, File E51579
Certified by Canadian Standards Association, File 213253

94-HB
-04°F (-18°C) to 221°F (105°C)

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



HEYCo-molded™ Liquid Tight Break-Thru Plugs

Mounting Hole Diameter Range: .500" (12,7 mm) to 1.500" (38,1 mm)

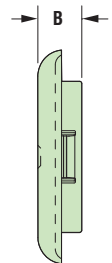
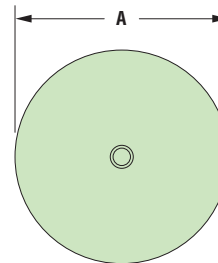
PANEL DIMENSIONS				CABLE DIAMETER RANGE		PART NO. Black	PACKAGING		DESCRIPTION	PART DIMENSIONS			
Thickness at Locking Finger Steps		Mounting Hole Diameter*		in.	mm.		BULK (Std)	SMALL PACK** NEW		A Head Diameter		B Overall Height	
in.	mm.	in.	mm.			in.			mm.	in.	mm.	in.	mm.
With Five Locking Finger Steps for Panels up to .063" (1,6 mm) Thick													
.020	0,5	.500	12,7	.080 - .200	2,0 - 5,1	C2008	1000	10	LTBP 500-063	.92	23,4	.32	8,1
.032	0,8	.625	15,9	.130 - .375	3,3 - 9,5	C2012	1000	10	LTBP 625-063	1.03	26,2		
.040	1,0	.750	19,1	.175 - .400	4,4 - 10,2	C2016	1000	10	LTBP 750-063	1.15	29,2		
.048	1,2	.875	22,2	.130 - .450	3,3 - 11,4	C2020	1000	10	LTBP 875-063	1.28	32,5		
.063	1,6	1.000	25,4	.200 - .715	5,1 - 18,2	C2022	1000	10	LTBP 1000-063	1.43	36,3		
		1.093	27,8	.250 - .765	6,4 - 19,4	C2024	1000	10	LTBP 1093-063	1.53	38,9		
With Seven Locking Finger Steps for Panels from .063" (1,6 mm) to .250" (6,4 mm) Thick													
.063	1,6	.500	12,7	.080 - .200	2,0 - 5,1	C2058	1000	10	LTBP 500-250	.92	23,4	.63	15,9
.080	2,0	.625	15,9	.130 - .375	3,3 - 9,5	C2062	1000	10	LTBP 625-250	1.03	26,2		
.094	2,4	.750	19,1	.175 - .400	4,4 - 10,2	C2066	1000	10	LTBP 750-250	1.15	29,2		
.125	3,2	.875	22,2	.130 - .450	3,3 - 11,4	C2070	1000	10	LTBP 875-250	1.28	32,5		
.157	4,0	1.000	25,4	.200 - .715	5,1 - 18,2	C2072	1000	10	LTBP 1000-250	1.43	36,3		
.200	5,1	1.093	27,8	.250 - .765	6,4 - 19,4	C2074	1000	10	LTBP 1093-250	1.53	38,9		
.250	6,4	1.375	34,9	.300 - .950	7,6 - 24,1	C2080	1000	10	LTBP 1375-250	1.80	45,7	.67	17,0
		1.500	38,1	.375 - 1.060	9,5 - 26,9	C2082	1000	10	LTBP 1500-250	1.93	49,0		

Standard color black. Consult Heyco for other colors.

*Consult Heyco for other Mounting Hole Diameters. Our Axcell Rapid Response Team is ready to meet your requirements.

**To order Small Packs, please add the suffix -P to Part No., e.g., C2008-P

- These **co-molded** nylon and elastomer parts function as **Liquid Tight Plugs** with an IP 67/68 rating, yet can be pierced by **round wire, cable or tubing** to function as **Liquid Tight Bushings** with the same resulting IP 67/68 rating.
- **Certified by UL under UL 635**
- For use in panels as thin as .020" (0,5 mm) and as thick as .250" (6,4 mm).
- Provide liquid tight closure when used as a plug. When pierced, function as a liquid tight bushing that convert raw edged holes to smooth, neat, insulated holes.
- Used as a liquid tight bushing, HEYCo-molded Liquid Tight Break-Thru Plugs insulate and mechanically protect electrical and telecommunications cable, tubing, hose, rope, and utility lines.
- Locking fingers snap into holes with fingertip pressure.
- Locking fingers in fractional increments up to the maximum panel thickness.
- Withstand a push back force of greater than 35 pounds.
- Available in multiple sizes for use in .500" (12,7 mm) to 1.500" (38,1 mm) diameter holes.



Materials	Nylon 6/6 and TPE
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E15331
Flammability Rating	HB
Temperature Range	-40°F (-40°C) to 212°F (100°C)
IP Rating	IP 67/68



Heyco® EPDM Snap-In Liquid Tight Bushings

Mounting Hole Diameter Range: .492" (12,5 mm) to 1.988" (50,2 mm)

MOUNTING HOLE DIAMETER		CABLE DIAMETER RANGE		PART NO.		DESCRIPTION	Hole Size	PART DIMENSIONS					
in.	mm.	in.	mm.	Black	Gray			D Head Diameter	L Overall Length		H Head Thickness		

PG Sizes for Panel Thickness from .04" (1,0 mm) to .16" (4,0 mm)

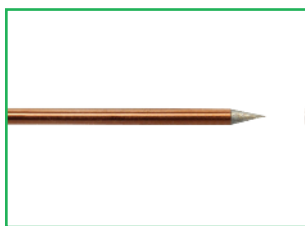
.519	13,2	.12-.20	3,0-5,0	4014B	4014	LTB 30-50/PG7	PG7	.77	19,5	.53	13,5		
.630	16,0	.20-.28	5,0-7,0	4015B	4015	LTB 50-70/PG9	PG9	.81	20,5	.77	19,5	.28	7,0
.750	19,0	.28-.39	7,0-10,0	4016B	4016	LTB 70-100/PG11	PG11	.98	25,0	.83	21,0		
.906	23,0	.31-.55	8,0-14,0	4017B	4017	LTB 80-140/PG16	PG16	1.10	28,0	.89	22,5	.26	6,5
1.142	29,0	.55-.79	14,0-20,0	4018B	4018	LTB 140-200/PG21	PG21	1.37	34,7	1.04	26,5	.30	7,5
1.500	38,0	.79-1.02	20,0-26,0	4019B	4019	LTB 200-260/PG29	PG29	1.80	45,7	1.10	28,0	.28	7,0
1.890	48,0	1.02-1.38	26,0-35,0	4020B	4020	LTB 260-350/PG36	PG36	2.26	57,5	1.44	36,5	.30	7,7

Metric Sizes for Panel Thickness from 1,3 mm (.05") to 5,1 mm (.20")

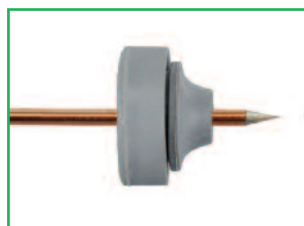
.492	12,5	.16-.28	4,0-7,0	4007B	4007	LTB 30-50/M12*	M12	.79	20,0	.50	12,7		
.650	16,5	.20-.35	5,0-9,0	4008B	4008	LTB 50-70/M16	M16	.83	21,0	.71	18,0		
.807	20,5	.32-.51	8,0-13,0	4009B	4009	LTB 70-100/M20	M20	1.00	25,5	.79	19,5	.26	6,5
1.004	25,4	.43-.67	11,0-17,0	4010B	4010	LTB 100-140/M25	M25	1.20	30,5	.85	21,5		
1.280	32,5	.59-.79	15,0-20,0	4011B	4011	LTB 140-200/M32	M32	1.52	38,5	.98	24,8		
1.594	40,5	.75-1.10	19,0-28,0	4012B	4012	LTB 200-260/M40	M40	1.91	48,5	1.18	30,0		
1.988	50,2	1.06-1.38	27,0-35,0	4013B	4013	LTB 260-350/M50	M50	2.38	60,5	1.38	35,0	.32	8,1

*Panel thickness from 0,5 mm (.02") to 2,0 mm (.08").

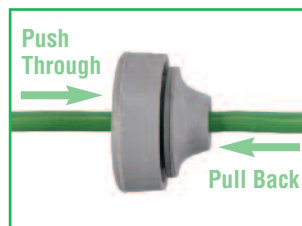
- **Simple to install**—snap LTB into place, cut cable end at a 45° angle, pierce thin LTB membrane then insert and pull back cable to form a liquid tight seal.
- Available in Black and Gray color.
- Provide light strain relief to the cable.
- Can be used as a liquid tight plug. Offers protection to IP 67.
- Ozone and weather resistant.
- For outdoor and indoor applications.
- Sizes available to fit cable diameters ranging from .12" (3,0 mm) up to 1.38" (35,0 mm).



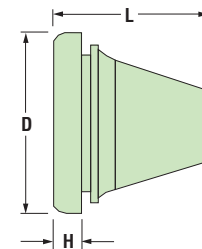
1. A sharpened dowel pin is selected—slightly smaller than the wire diameter



2. The dowel pin is inserted into the opening on the front of the LTB and pushed through the membrane



3. Wire is inserted through the LTB and then pulled back to create a seal



Material	EPDM
Temperature Range	-40°F (-40°C) to 200°F (93°C)
IP Rating	IP 67

Quick Specs



Heyco® TPE Liquid Tight Hole Plugs

Standard 85 Durometer Plugs

Maximum Panel Thickness .125" (3,2 mm)

Mounting Hole Diameter Range: .500" (12,7 mm) to 1.375" (34,9 mm)

- Oil tight, rain tight, submersible.
- UL certified for outdoor applications.
- Install with fingertip pressure (no tool required).
- Multiple nominal sizes fit .500" (12,7 mm) to 1.000" (25,4 mm) true size mounting holes.
- Three trade sizes fit 1/2" to 1" knock-out holes.
- Lock firmly in boxes from .03" (0,8 mm) to .13" (3,2 mm) thick.
- True sizes are UL recognized under Underwriters' Laboratories File E51579 and CSA certified by Canadian Standard Association File 8919.
- Trade sizes are UL listed under Underwriters' Laboratories File E51579 and CSA certified by Canadian Standard Association File 081067C. Now certified for **NEMA 4 and 4X applications.**

MOUNTING HOLE DIAMETER		PART NO.	DESCRIPTION	UL or RA	PART DIMENSIONS					
					A Head Diameter		B Overall Height		C Head Thickness	
in.	mm.	Black			in.	mm.	in.	mm.	in.	mm.
.500	12,7	3830	KOS LT 500	RA	.91	23,1	.45	11,4	.29	7,4
.625	15,9	3834	KOS LT 625	RA	1.03	26,2	.47	11,9	.31	7,9
.750	19,1	3831	KOS LT 750	RA	1.15	29,2	.51	13,0	.35	8,9
.875	22,2	3833	KOS LT 1/2	UL	1.23	32,5	.50	13,5	.36	9,1
1.000	25,4	3832	KOS LT 1000	RA	1.41	35,8	.56	14,2	.40	10,2
1.093	27,8	3835	KOS LT 3/4	UL	1.53	38,6	.55	14,0		
1.375	34,9	3837	KOS LT 1	UL	1.78	45,2	.57	14,5	.42	10,7

Available in black only.

Low 75 Durometer Plugs

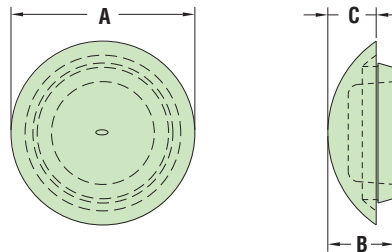
Maximum Panel Thickness .125" (3,2 mm)

Mounting Hole Diameter Range: .875" (22,2 mm) to 1.375" (34,9 mm)

MOUNTING HOLE DIAMETER*		PART NO.		DESCRIPTION	UL or RA	PART DIMENSIONS*					
		Black	Gray			A Head Diameter		B Overall Height		C Head Thickness	
in.	mm.					in.	mm.	in.	mm.	in.	mm.
.875	22,2	3833FN	3833FP	KOS LT 1/2 LD	UL	1.23	32,5	.53	13,5	.36	9,1
1.093	27,8	3835FN	3835FP	KOS LT 3/4 LD	UL	1.53	38,6	.55	14,0	.40	10,2
1.375	34,9	3837FN	3837FP	KOS LT 1 LD	UL	1.80	45,2	.56	14,3	.42	10,7

Standard colors black and gray.

*Consult Heyco for other Liquid Tight Hole Plug sizes in Low Durometer material.



Quick Specs

Material	85 Durometer 75 Durometer	TPE-Hardness 85 Shore A TPE-Hardness 75 Shore A
Certifications	Trade Sizes (1/2, 3/4, 1)	UL Listed under Underwriters' Laboratories File E51579 CSA Certified by Canadian Standard Association File 081067C
	True Sizes (all others)	RA Recognized under Underwriters' Laboratories File E51579 CSA Certified by Canadian Standard Association File 8919
Flammability Rating	94V-0	
Temperature Range	-81°F (-60°C) to 275°F (135°C)	

Heyco® Nylon Liquid Tight Threaded Plugs

Liquid Tight, with Integral Sealing Ring
Hex Head with Slot

**NO O-RING
REQUIRED!**

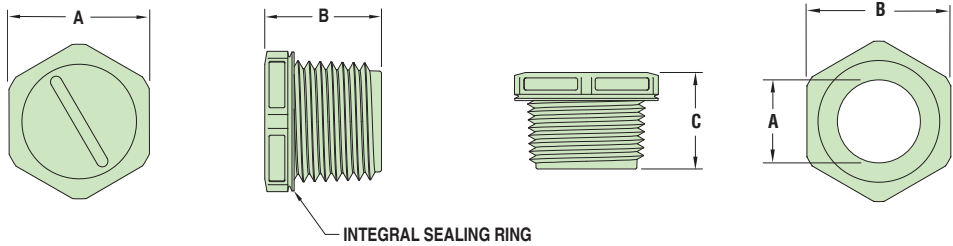


THREAD TYPE/SIZE	PART NO.			DESCRIPTION	PART DIMENSIONS			
	Black	Gray	V-0 Black		A Wrenching Flats		B Overall Length	
					in.	mm.	in.	mm.
NPT**								
NPT 1/4	3544B	3544	-	LTPP NPT 1/4	.63	16,0	.66	16,8
NPT 3/8	3545B	3545	-	LTPP NPT 3/8	.83	21,1	.69	17,5
NPT 1/2	3546B	3546	V3546*	LTPP NPT 1/2	.98	24,9	.81	20,6
NPT 3/4	3547B	3547	V3547*	LTPP NPT 3/4	1.29	32,8	.86	21,8
NPT 1*	3548B	3548	V3548	LTPP NPT 1	1.74	44,2	1.05	26,7
NPT 1-1/4*	3549B	3549	V3549	LTPP NPT 1-1/4	2.06	52,3	1.08	27,4

Standard color black. Consult Heyco for other colors, and sizes in V-0 material.

*Not cULus

**Consult Heyco for PG and Metric threaded LTPP's.



Liquid Tight Threaded Plugs

Smooth Bore Bushings

Heyco® Nylon Threaded Smooth Bore Bushings

WILL FIT THESE INTERNALLY THREADED NPT PIPE ENDS OR PORTS	PART NO.		DESCRIPTION	PART DIMENSIONS					
	Black	Gray		A Inside Diameter		B Wrenching Flats		C Overall Height	
				in.	mm.	in.	mm.	in.	mm.
1/4	3621B	3621	TSB 1/4	.31	7,9	.63	16,0	.66	16,8
3/8	3622B	3622	TSB 3/8	.43	10,9	.83	21,0	.69	17,5
1/2	3623B	3623	TSB 1/2	.58	14,7	.98	24,9	.81	20,6
3/4	3624B	3624	TSB 3/4	.74	18,8	1.30	33,0	.86	21,8

Standard colors black and gray.



- Convert raw-edged threaded holes to smooth insulated through holes.
- Used to protect threaded holes. Eliminate sharp edges so wires are protected.
- Insulate and mechanically protect electrical and communication cables, tubing, rope, and utility lines.
- Molded from electrically non-conductive Nylon 6/6.

Material	Nylon 6/6
Certifications	cULus Recognized under the Component Program of Underwriters' Laboratories, File E330194 to both Canadian and U.S. Requirements (LTPP only)
Flammability Rating	94V-2
Temperature Range	-40°F (-40°C) to 221°F (105°C)
IP Rating	IP 68 (70 PSI, 5 BAR) (LTPP only)

*Quick
Specs*



HEYClean™ Liquid Tight Threaded Vent Plugs

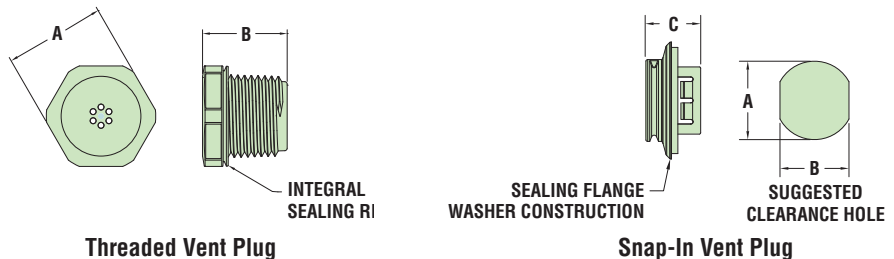
With Integral Sealing Ring and Liquid Tight Filter

- Integral sealing ring ensures a **superior seal** at mounting hole location, every time; **IP 65, 67 and 68 Rated**.
- Allow the passage of air for ventilation and heat dissipation, yet prevent moisture intrusion, remain liquid tight.
- Maximum airflow: ≥ 16.6 LPM/3.7cm² @ 13.5 psi.
- UL Rated for Type NEMA 3R, 4, and 4X applications.
- Filter membrane prevents moisture and particulate contamination in electronic enclosures.
- Pressure compensating seal prevents buildup of pressure inside of electronic enclosures due to environmental temperature cycling.
- Quick and easy installation into Threaded (LTTVP) and Clearance (LTSV) holes.
- Membrane seal is ultrasonically welded to nylon body.
- Lower cost option over metal or steel plugs.
- Approximate Head Thickness: .21" (5,3 mm). Thickness may vary.
- Hex shaped head for wrench installation (LTTVP only).
- Electrically non-conductive Nylon 6/6.
- Quick and easy **Snap-in** installation into Clearance Holes.
- All sizes and types feature (9) .094" (2,4 mm) diameter vent holes.
- **Snap-In** plugs for panel and housing applications.
- Lower cost option over brass or steel plugs.
- Snap into a range of panel thicknesses up to .125" (3,2 mm) with no tools (LTSV only).

THREAD Type/Size	PART NO.		DESCRIPTION	PART DIMENSIONS			
	Black	Gray		A Wrenching Flats		B Overall Length	
				in.	mm.	in.	mm.
NPT							
NPT 1/4	3544VB	3544V	LTTVP NPT 1/4	.63	16,0	.66	16,8
NPT 3/8	3545VB	3545V	LTTVP NPT 3/8	.83	21,0	.69	17,5
NPT 1/2	3546VB	3546V	LTTVP NPT 1/2	.98	24,9	.81	20,6
NPT 3/4	3547VB*	3547V*	LTTVP NPT 3/4	1.29	32,8	.86	21,8
PG - For PG Thread specifications, see page 3-49							
Pg 7	3574VB	3574V	LTTVP Pg 7	.63	16,0	.53	13,5
Pg 9	3575VB	3575V	LTTVP Pg 9	.83	21,0		
Pg 13.5	3576VB	3576V	LTTVP Pg 13.5	.98	24,9	.62	15,8
Pg 21	3401VB	3401V	LTTVP Pg 21	1.29	32,8	.76	19,3
Metric							
M12	3582VB	3582V	LTTVP M12	.63	16,0	.53	13,5
M16	3583VB	3583V	LTTVP M16	.83	21,0		
M20	3584VB	3584V	LTTVP M20	.98	24,9	.62	15,8

Standard color Black. Consult Heyco for other colors.

*IP 65 rated.



HEYClean™ Liquid Tight Snap-In Vent Plugs

With Integral Sealing Flange/Washer and Liquid Tight Filter

Mounting Hole Diameter Range: .500" (12,7 mm) to 1.125" (28,6 mm)

A Mounting Hole Dia.*	PART NO.	DESCRIPTION	PART DIMENSIONS			
			B To Prevent Rotation		C Max. O.A. Length	
	Black		in.	mm.	in.	mm.
.500	3481VB	LTSV 500	.45	11,4	.600	15,2
.875	3486VB	LTSV 875	.77	19,6	.620	15,7
1.125	3488VB	LTSV 1125	1.00	25,4	.660	16,8

Standard color black. Consult Heyco for other colors.

* Consult Heyco for additional sizes.

Quick Specs

Material	Nylon 6/6 bodies with an Acrylic Copolymer Filter
Certifications	Recognized under the Component Program of Underwriters' Laboratories, File E330194 to both Canadian and U.S. Requirements
Flammability Rating	94V-2
Temperature Range	-40°F (-40°C) to 221°F (105°C)
IP Rating	IP 65/67/68



HEYClean® Brass Pressure Equalization and Drain Plugs

For Pressure Equalization and Drainage Applications

THREAD Type/Size	PART NO.		DESCRIPTION	PART DIMENSIONS								PROTECTION CLASS
	STD.	EXP*		A Clearance Hole		B Overall Length		C Thread Length		D Wrenching Flats		
		NEW		in.	mm.	in.	mm.	in.	mm.	in.	mm.	

Liquid Tight Pressure Equalization Plugs – Ultimate in Liquid Tight Pressure Equalization

M12 x 1.5	4350	14350	BRASS LTPEP M12	.47	12,0	.69	17,5	.31	8,0	.71	18,0	IP 66,67,68
M16 x 1.5	4351	14351	BRASS LTPEP M16	.63	16,0	.71	18,0	.31	8,0	.87	22,0	
M20 x 1.5	4352	14352	BRASS LTPEP M20	.79	20,0	.71	18,0	.31	8,0	.87	22,0	

Liquid Resistant Pressure Equalization Plugs – Maximize Airflow for Extreme Pressure and Moisture Fluctuations

M12 x 1.5	4354	–	BRASS LRPEP M12	.47	12,0	.69	17,5	.31	8,0	.71	18,0	IP 55, x9K
M16 x 1.5	4355	–	BRASS LRPEP M16	.63	16,0	.71	18,0	.31	8,0	.87	22,0	
M20 x 1.5	4356	–	BRASS LRPEP M20	.79	20,0	.71	18,0	.31	8,0	.87	22,0	

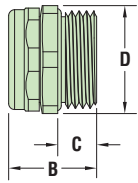
Threaded Drain Plug – For Applications Where Condensation Is Expected**

M12 x 1.5	4357	–	BRASS TDP M12	.47	12,0	.77	19,5	.39	10,0	.71	18,0	IP 4x
M16 x 1.5	4358	–	BRASS TDP M16	.63	16,0	.77	19,5	.39	10,0	.87	22,0	
M20 x 1.5	4359	–	BRASS TDP M20	.79	20,0	.77	19,5	.39	10,0	.87	22,0	

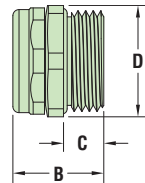
Stainless Steel available. Consult Heyco.

*Certified in accordance with IECEx and ATEX

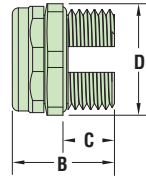
**Heyco Drainage Plug Brass Locknuts sold separately



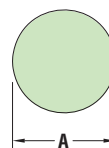
4350



4354



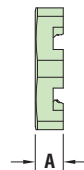
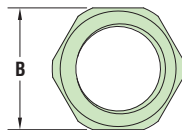
4357



HEYClean® Drain Plug Brass Locknuts

For Use with HEYClean™ Threaded Drain Plugs

THREAD Type/Size	PART NO.	DESCRIPTION	PART DIMENSIONS			
			A Thickness		B Wrenching Flats	
			in.	mm.	in.	mm.
M12 x 1.5	4360	BRASS DPLN M12	.18	4,5	.59	15,0
M16 x 1.5	4361	BRASS DPLN M16	.22	5,5	.75	19,0
M20 x 1.5	4362	BRASS DPLN M20	.22	5,5	.94	24,0



Material	Nickel-Plated Brass
Temperature Range	-40°F (-40°C) to 230°F (110°C)
IP Rating	Membrane - IP66/IP68/IP69 Filter Disc - IP55/ IPX9K Drainage Element - IP4X

Pressure Equalization Plugs

- Allow the passage of air for ventilation and heat dissipation, yet prevent moisture intrusion.
- Filter membrane prevents moisture and particulate contamination in electronic enclosures.
- Pressure compensating seal prevents buildup of pressure inside of electronic enclosures due to environmental temperature cycling.
- Quick and easy installation into Clearance or Threaded Holes.
- **Nickel-plated finish over brass provides excellent corrosion resistance and durability.**

- Head Thickness: .37" (9,5 mm) to .39" (10 mm).
- Hex shaped body for wrench installation.
- Filter element:
Liquid Tight Membrane: Polyethersulfone (PES)
Sintered Disc: Bronze
- DFARS Compliant

Drain Plugs

- Drainage Plugs are ideal for applications where condensation is expected.
- Stainless steel mesh allows water to drain quickly, but protects enclosure from bugs and dust.
- Drainage Plugs feature a “cutout” section to allow water to completely drain from enclosure, and should be installed at enclosure’s lowest point.
- Head Thickness: .37" (9,5 mm) to .39" (10 mm).

- Hex shaped body for wrench installation.

Drain Plug Locknuts

- DFARS Compliant
- Quick and easy installation into Clearance Holes only.
- Locknuts feature special “cutout” to allow water to completely drain from enclosure, when used with HEYClean™ Threaded Drain Plugs.
- DFARS Compliant

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

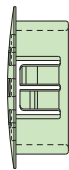
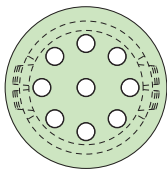
Heyco® Snap-in Nylon Vent and Louvered Plugs for American Electrical Knock Out Holes



Heyco® K. O. Vent Plugs

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	PART DIMENSIONS		
	in.	mm.			No. of Vent Holes	Head Diameter	
					in.	mm.	
Multiple Locking Steps for Box Thickness up to .125" (3,2 mm)							
1/2	.875	22,2	2697	VP 875	9	1.02	25,8
3/4	1.093-1.125	27,8-28,6	2726	VP 1093	9	1.22	30,9
1	1.375	34,9	2756	VP 1375	11	1.50	38,1
1-1/4	1.750	44,5	2776	VP 1750	13	1.91	48,4
1-1/2	2.000	50,8	2786	VP 2000	19	2.14	54,4
Multiple Locking Steps for Box Thickness up to .250" (6,4 mm)							
1/2	.875	22,2	3152	VPT 875	9	1.02	25,8
3/4	1.093-1.125	27,8-28,6	3032	VPT 1093	9	1.22	30,9
1	1.375	34,9	3036	VPT 1375	11	1.50	38,1
1-1/4	1.750	44,5	3038	VPT 1750	13	1.91	48,4
1-1/2	2.000	50,8	3158	VPT 2000	19	2.14	54,4
2	2.500	63,5	2793	VP 2.5	19	2.72	69,0

Standard color black. Consult Heyco for other colors.



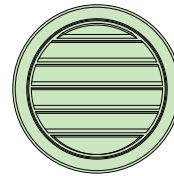
Vent Plugs

Heyco® K. O. Filter Insert Vent Plugs

Polyurethane foam filters particle sizes 30 microns and larger

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	PART DIMENSIONS		
	in.	mm.			No. of Vent Holes	Head Diameter	
					in.	mm.	
Multiple Locking Steps for Box Thickness up to .125" (3,2 mm)							
1/2	.875	22,2	4919	FIVP 875	9	1.02	25,8
3/4	1.093-1.125	27,8-28,6	4923	FIVP 1093	9	1.22	30,9
1	1.375	34,9	4931	FIVP 1375	11	1.50	38,1
1-1/4	1.750	44,5	*	FIVP 1750	13	1.91	48,4
1-1/2	2.000	50,8	4937	FIVP 2000	19	2.14	54,4
Multiple Locking Steps for Box Thickness up to .250" (6,4 mm)							
1/2	.875	22,2	4973	FIVPT 875	9	1.02	25,8
3/4	1.093-1.125	27,8-28,6	4977	FIVPT 1093	9	1.22	30,9
1	1.375	34,9	4983	FIVPT 1375	11	1.50	38,1
1-1/4	1.750	44,5	*	FIVPT 1750	13	1.91	48,4
1-1/2	2.000	50,8	4989	FIVPT 2000	19	2.14	54,4
2	2.500	63,5	4939	FIVP 2.5	19	2.72	69,0

Standard color black. *Consult Heyco for 1-1/4 KO part.



Louvered Plugs

Heyco® K. O. Louvered Plugs

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	HEAD DIAMETER	
	in.	mm.			in.	mm.
Multiple Locking Steps for Box Thickness up to .125" (3,2 mm)						
1/2	.875	22,2	2557	LP 875	1.02	25,8
3/4	1.093-1.125	27,8-28,6	2561	LP 1093	1.22	30,9
1	1.375	34,9	2567	LP 1375	1.50	38,1
1-1/4	1.750	44,5	*	LP 1750	-	-
1-1/2	2.000	50,8	2594	LP 2000	2.17	55,1
Multiple Locking Steps for Box Thickness up to .250" (6,4 mm)						
2	2.500	63,5	2596	LP 2.5	2.72	69,0

Standard color black. *Consult Heyco for 1-1/4 KO part.

HEYClean™ K. O. Filter Insert Louvered Plugs

Polyurethane foam filters particle sizes 30 microns and larger

TRADE SIZE	MOUNTING HOLE DIAMETER		PART NO. Black	DESCRIPTION	HEAD DIAMETER	
	in.	mm.			in.	mm.
Multiple Locking Steps for Box Thickness up to .125" (3,2 mm)						
1/2	.875	22,2	4947	FILP 875	1.02	25,8
3/4	1.093-1.125	27,8-28,6	4951	FILP 1093	1.22	30,9
1	1.375	34,9	4957	FILP 1375	1.50	38,1
1-1/4	1.750	44,5	*	FILP 1750	-	-
1-1/2	2.000	50,8	4963	FILP 2000	2.17	55,1
Multiple Locking Steps for Box Thickness up to .250" (6,4 mm)						
2	2.500	63,5	4965	FILP 2.5	2.72	69,0

Standard color black. *Consult Heyco for 1-1/4 KO part.

Quick Specs

Material
Certifications (VP only)

Flammability Rating
Temperature Range

Nylon 6/6



Recognized under the Component Program of Underwriters' Laboratories, File E51579



Certified by Canadian Standards Association, File 8919

94V-2

-40°F (-40°C) to 221°F (105°C)

Heyco® Nylon Knock Out Seals and Thick Panel Knock Out Seals

Consult Heyco for our Complete Line of Dome Plugs



Mounting Hole Diameter Range: 1/2" to 2" Electrical Knock-outs (.875" to 2.500" nominal)

MOUNTING HOLE DIAMETER		TRADE SIZE	PART NO. Silver Gray	DESCRIPTION	PART DIMENSIONS			
in.	mm.				A Head Diameter		B Overall Height	

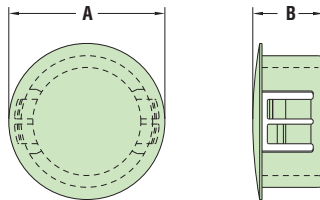
Multiple Locking Steps for Panel Thickness up to .125" (3,2 mm)

.875	22,2	1/2	3997	KOS 1/2	1.02	25,8		
1.093	27,8	3/4	3998	KOS 3/4	1.22	31,0	.45	11,5
1.375	34,9	1	3999	KOS 1	1.50	38,1		
1.750	44,5	1-1/4	4000	KOS 1-1/4	1.91	48,4	.47	12,0
2.000	50,8	1-1/2	4001	KOS 1-1/2	2.16	54,9	.45	11,5

Multiple Locking Steps for Panel Thickness up to .250" (6,4 mm)

.875	22,2	1/2	3991	KOST 1/2	1.02	25,8		
1.093	27,8	3/4	3992	KOST 3/4	1.22	31,0	.56	14,3
1.375	34,9	1	3993	KOST 1	1.50	38,1		
1.750	44,5	1-1/4	3994	KOST 1-1/4	1.91	48,4		
2.000	50,8	1-1/2	3995	KOST 1-1/2	2.16	54,9	.58	14,7
2.500	63,5	2	4002	KOS 2	2.73	69,3	.75	19,1

Standard color silver gray.



- **Plug electrical knock-outs.**
- Molded in silver gray color to resemble galvanized steel.
- Install quickly with fingertip pressure (no tool required).
- Economical.
- Multiple trade sizes fit 1/2" to 2" knock-out holes.
- Lock firmly in boxes up to 1/8" thick, except for Part Number 4002 (KOS 2) and Thick Panel Knock-Out Seals (KOST's) which lock firmly in boxes up to 1/4" thick.
- Locking fingers in fractional increments up to the maximum panel thickness.
- Approximate Head Thickness: .06" (1,6 mm). Thickness may vary.
- To adapt a Knock-Out to accept a Heyco Strain Relief, see page 4-37 for Knock-Out Adapters in Heyco Catalog 117.

Heyco® Nylon V-0 Knock Out Seals

Multiple Locking Steps for Panel Thickness up to .13" (3,2 mm)

Mounting Hole Diameter Range: 1/2" to 1-1/2" Electrical Knock-outs (.875" to 2.000" nominal)

MOUNTING HOLE DIAMETER		TRADE SIZE	PART NO. Black	DESCRIPTION	PART DIMENSIONS			
in.	mm.				A Head Diameter		B Overall Height	

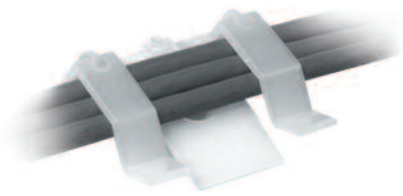
Standard color black.

Material	Nylon 6/6
Certifications	Recognized under the Component Program of Underwriters' Laboratories, File E51579 Certified by Canadian Standards Association, File 8919
Flammability Rating	KOS: 94V-2, HFP 94V-0
Temperature Range	-40°F (-40°C) to 221°F (105°C)



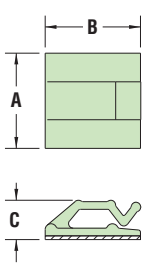
- **Molded from a nylon material which, in the event of a fire, will not burn and will not produce toxic gases.** Also formulated for sunlight resistance.

Quick Specs

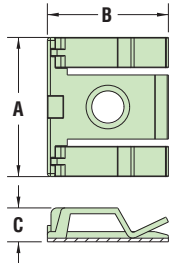


HEYClip™ Tension Wire Clips - Nylon Adhesive-Back Mount

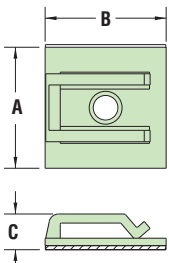
- Gather and direct cables singly or in groups smaller than those accommodated by other Heyco Wire Holders.
- Part No. 3639 (WCA-5) may also be screw mounted. #8 screws not included.
- Apply to a clean, dry surface.



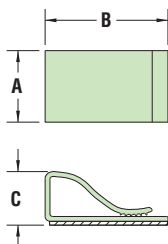
Style 1



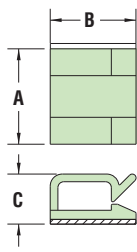
Style 2



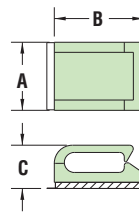
Style 3



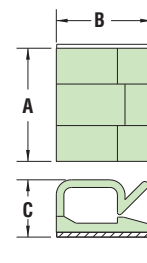
Style 4



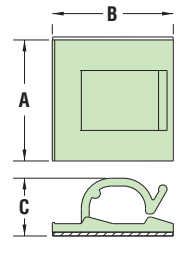
Style 5



Style 6



Style 7



Style 8

WIRE CAPACITY				PART NO.	DESCRIPTION	RELEASE TAB?	PART DIMENSIONS						STYLE
Length		Width					Natural *	A		B		C	
in.	mm.	in.	mm.		in.	mm.		in.	mm.	in.	mm.		
.13	3,2	.25	6,4	3638	WC A-4	no	.63	15,9	.63	15,9	.25	6,4	1
.13	3,2	.50	12,7	3639	WC A-5 **	no	1.15	29,2	1.00	25,4	.28	7,1	2
.12	3,0	.62	15,8	3649	TCN3-801 **	yes	1.00	25,4	1.00	25,4	.29	7,4	3
Bundle Dia. - 1.9 in, 4,8 mm				3628	WC A-42	no	.63	16,0	.63	16,0	.29	7,4	9
.25	6,4	.88	22,4	12950	TCN4-804 Gray	yes	.59	15,0	1.02	25,8	.41	10,3	4
				12951	TCN4-805	yes							
.24	6,0	.19	4,7	12953	TCN5-2419	yes	.63	16,0	.45	11,4	.32	8,1	5
.31	8,0	.19	4,7	12954	TCN5-3119	yes	.63	16,0	.53	13,4	.32	8,1	
.32	8,2	.20	5,2	12955	TCN5-3220	yes	.63	16,0	.15	14,4	.34	8,7	
.35	9,0	.19	4,8	12956	TCN5-3519	yes	.63	16,0	.57	14,4	.33	8,3	
.35	9,0	.20	5,2	12957	TCN5-3520	yes	.55	14,0	.51	13,0	.34	8,7	
.40	10,2	.26	6,7	12959	TCN5-4026	yes	.63	16,0	.67	16,9	.40	10,2	
.17	4,3	.10	2,5	12961	TCN6-1710	yes	.39	10,0	.37	9,5	.23	5,9	6
.25	6,3	.10	2,5	12962	TCN6-2510	yes	.47	12,0	.37	9,5	.25	6,3	
.33	8,4	.10	2,5	12963	TCN6-3310	yes	.49	12,5	.37	9,5	.24	6,0	
.32	8,2	.10	2,5	12964	TCN6-3210	yes	.50	12,7	.50	12,7	.25	6,3	
.41	10,3	.10	2,5	12965	TCN6-4110	yes	.57	14,5	.37	9,5	.25	6,4	
.46	11,6	.12	3,1	12966	TCN6-4612	yes	.66	16,7	.51	13,0	.26	6,6	
.31	7,9	.24	6,0	12968	TCN7-3124	yes	.59	14,9	.75	19,0	.37	9,5	7
.35	9,0	.24	6,0	12969	TCN7-3524	yes	.63	16,0	.75	19,0	.37	9,5	
.46	11,8	.31	7,9	12971	TCN7-4631	yes	.75	19,0	.75	19,0	.46	11,8	
.54	13,7	.33	8,3	12972	TCN7-5433	yes	.82	20,9	.75	19,0	.48	12,1	
Bundle Dia. - 1.9 in, 4,8 mm				3629	WC A-43	no	.63	15,9	.63	15,9	.31	7,9	
.22	5,5	.24	6,1	3636	WC A-44	no	.63	15,9	.63	15,9	.38	9,5	8
.35	8,9	.36	9,1	3637	WC A-46	yes	.75	19,1	.75	19,1	.50	12,7	
.46	11,7	.31	7,9	12974	TCN8-4631	yes	1.00	25,4	.61	15,6	.48	12,2	
.46	11,8	.31	7,9	12975	TCN8-4631-1	yes	1.00	25,4	1.00	25,4	.48	12,1	

* Standard color natural except Part No. 12950 color is Gray.

** Part Nos. 3639 and 3649 may also be #8 (M4) screw mounted.

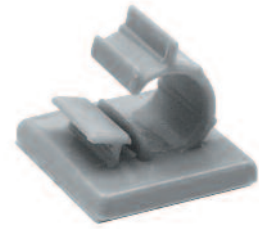
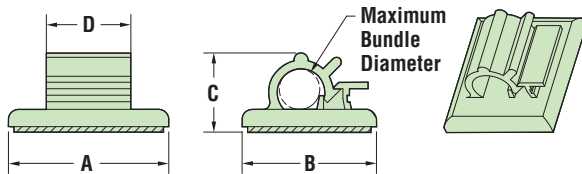
Quick Specs

Material	Nylon 6/6
Flammability Rating	94V-2
Temperature Range	-40° F (-40° C) to 185° F (85° C)
Temperature Range	Adhesive-Back: 1/16" (1,6 mm)
	32° F (0° C) to 185° F (85° C)

HEYClip™ Locking Releasable Wire Clips - Adhesive-Back Mount

MAXIMUM BUNDLE DIAMETER	RATED STATIC LOAD	PART NO. Adhesive	DESCRIPTION			FOOTPRINT		OVERALL HEIGHT		CLAMP WIDTH		
			Standard	Black	Super Black	A x B	C	D				
in. mm.	lb.	Gray	Black	Black		in.	mm.	in.	mm.	in.	mm.	
WCA Series												
.19	4,7	1/2	3857	3917	-	WCA 187-500	.74 x .62	18,8 x 15,7	.34	8,6	.39	9,9
.25	6,4	3/4	3858	3918	3918A	WCA 250-750	1.00 x .87	25,4 x 22,1	.42	10,7	.63	16,0
.38	9,5	1	3859	3919	3919A	WCA 375-1000	1.00 x 1.00	25,4 x 25,4	.50	12,7	.63	16,0
.50	12,7	1-1/4	3860	3920	3920A	WCA 500-1250	1.00 x 1.21	25,4 x 30,7	.68	17,3	.64	16,3
.75	19,1	1-3/4	3861	3921	-	WCA 750-1750	1.15 x 1.45	29,2 x 36,8	.99	25,1	.64	16,3
1.00	25,4	4	3867	3923	-	WCA1000-4000	1.98 x 2.24	50,3 x 56,9	1.37	34,8	1.26	32,0
1.50	38,1	6	3868	3930	-	WCA 1500-6000	2.42 x 2.95	61,5 x 74,9	1.77	45,0	1.31	33,3

Standard color gray or black. Super duty adhesive backing available as shown.

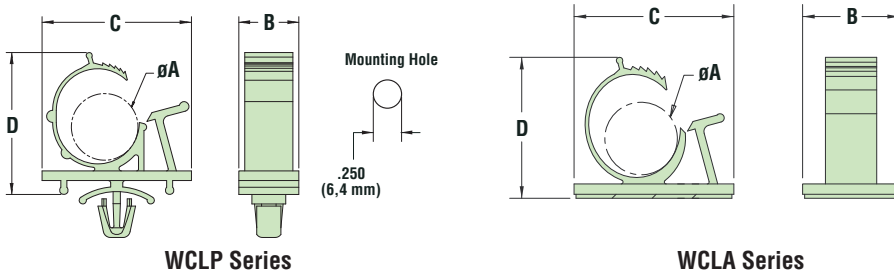


- Adhesive backing on part has a tab for easy removal.
- Releasable and reusable clips for easy wire bundle routing.
- Quick and easy installation—simply peel off backing and press into place.
- Multiple sizes for bundles from .19" (4,7 mm) to 1.50" (38,1 mm) in diameter.
- Static Loads pertain to parts fastened to a flat, clean, and dry surface.
- Three sizes in Super Adhesive Black.

HEYClip™ Locking Releasable Wire Clips - Adjustable

MAXIMUM BUNDLE DIAMETER RANGE	PART NO.	DESCRIPTION	OVERALL HEIGHT		FOOTPRINT				
			D *	B x C					
Minimum Maximum	Natural		in.	mm.	in.	mm.			
in. mm. in. mm.									
WCLP Series - Arrowhead Mount									
.47	11,9	.55	14,0	4335	WCLP 562	1.17	29,8	.50 x 1.24	12,7 x 31,5
.58	14,7	.75	19,1	4336	WCLP 750	1.36	34,5	.50 x 1.48	12,7 x 37,6
WCLA Series - Adhesive Mount**									
.22	5,5	.26	6,5	4323	WCLA 258	.74	18,8	.65 x .85	16,5 x 21,6
.31	7,9	.41	10,3	4324	WCLA 406	.90	22,8	.75 x 1.00	19,1 x 25,4
.47	11,9	.56	14,3	4325	WCLA 562	1.12	28,5	.75 x 1.24	19,1 x 31,5
.58	14,7	.75	19,1	4326	WCLA 750	1.32	33,6	.75 x 1.50	19,1 x 38,1
.87	22,2	1.00	25,4	4327	WCLA 1000	1.78	45,3	1.00 x 1.97	25,4 x 50,1

Standard color natural. *At maximum wire capacity. **Adhesive-Back is 1/16" (1,6 mm) thick.



Material	Nylon 6/6
Flammability Rating	94V-2
Temperature Range	-20°F (-29°C) to 150°F (66°C) (Adhesive-Back) -40°F (-40°C) to 185°F (85°C) (Adjustable)



WCLP Series:

- Gather and route wires.
- Adjust to diameter needed to bundle.
- Push mount design allows for fast installation.

WCLA Series:

- Lock securely and easily. Re-open for routing changes.
- Ratcheting clip holds bundle securely in place.
- Good for high vibration applications. Once closed the clip will not open until tab is released.

Quick Specs



Heyco® Continuous Grommet Rolls

Polyethylene 100' (30.5 M) Roll

- Grommet Strips protect against damage from sharp panel edges.
- Ideal for tight radii or irregular panel holes and cut-outs.



Unserrated



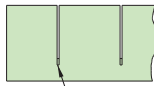
Serrated

FIT PANEL THICKNESS RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS					
Minimum		Maximum		Natural	Black		A		B		C	
in.	mm.	in.	mm.			Overall Height	Bottom Thickness	Bottom Width	in.	mm.	in.	mm.
Unserrated												
.037	0,9	.071	1,8	12391	12391B	PGS-071-100'	.172	4,4	.031	0,8	.109	2,8
.072	1,8	.105	2,7	12392	12392B	PGS-105-100'	.172	4,4	.031	0,8	.109	2,8
.106	2,7	.164	4,2	12393	12393B	PGS-164-100'	.188	4,8	.047	1,2	.156	4,0
Unserrated, with Adhesive												
.037	0,9	.071	1,8	12395	12395B	PGSG-071-1-100'	.160	4,1	.025	0,6	.060	1,5
.072	1,8	.105	2,7	12396	12396B	PGSG-071-2-100'	.172	4,4	.031	0,8	.109	2,8
.072	1,8	.105	2,7	12397	12397B	PGSG-105-100'	.172	4,4	.031	0,8	.109	2,8
.106	2,7	.164	4,2	12398	12398B	PGSG-164-100'	.188	4,8	.047	1,2	.156	4,0
Serrated												
.026	0,7	.036	0,9	12399	12399B	SPGS-036-100'	.125	3,2	.031	0,8	.031	0,8
.037	0,9	.071	1,8	12400	12400B	SPGS-071-100'	.172	4,4	.031	0,8	.109	2,8
.072	1,8	.105	2,7	12401	12401B	SPGS-105-100'	.172	4,4	.031	0,8	.109	2,8
.106	2,7	.164	4,2	12402	12402B	SPGS-164-100'	.188	4,8	.047	1,2	.156	4,0
Serrated, with Adhesive												
.037	0,9	.071	1,8	12405	12405B	SPGSG-071-1-100'	.160	4,1	.025	0,6	.060	1,5
.072	1,8	.105	2,7	12406	12406B	SPGSG-071-2-100'	.172	4,4	.031	0,8	.109	2,8
.072	1,8	.105	2,7	12407	12407B	SPGSG-105-1-100'	.172	4,4	.031	0,8	.109	2,8

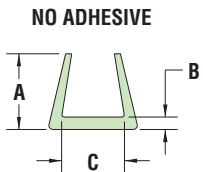
Nylon 100' (30.5 M) Roll



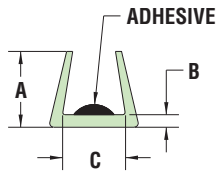
UNSERRATED



SERRATED



NO ADHESIVE



ADHESIVE

FIT PANEL THICKNESS RANGE				PART NO.		DESCRIPTION	PART DIMENSIONS					
Minimum		Maximum		Natural	Black		A		B		C	
in.	mm.	in.	mm.			Overall Height	Bottom Thickness	Bottom Width	in.	mm.	in.	mm.
Unserrated												
.026	0,7	.036	0,9	12411	12411B	NGS-036-100'	.13	3,2	.03	0,8	.03	0,8
.037	0,9	.071	1,8	12412	12412B	NGS-071-100'	.17	4,4	.03	0,8	.11	2,8
Unserrated, with Adhesive												
.037	0,9	.071	1,8	12416	12416B	NGSG-071-100'	.17	4,4	.03	0,8	.11	2,8
.072	1,8	.105	2,7	12417	12417B	NGSG-105-100'	.17	4,4	.03	0,8	.11	2,8
.106	2,7	.164	4,2	12418	12418B	NGSG-164-100'	.19	4,8	.05	1,2	.16	4,0
Serrated												
.026	0,7	.036	0,9	12419	12419B	SNGS-036-100'	.13	3,2	.03	0,8	.01	0,8
.037	0,9	.071	1,8	12420	12420B	SNGS-071-100'	.17	4,4	.03	0,8	.11	2,8
.072	1,8	.105	2,7	12421	12421B	SNGS-105-100'	.17	4,4	.03	0,8	.11	2,8
.106	2,7	.164	4,2	12422	12422B	SNGS-164-100'	.19	4,8	.05	1,2	.16	4,0
Serrated, with Adhesive												
.037	0,9	.071	1,8	12426	12426B	SNGSG-071-100'	.17	4,4	.03	0,8	.11	2,8
.072	1,8	.105	2,7	12427	12427B	SNGSG-105-100'	.17	4,4	.03	0,8	.11	2,8

Standard color natural. Black available by special order only.

Quick Specs

Material	Polyethylene or Nylon
Flammability Rating	94HB
Temperature Range	-40°F (-40°C) to 149°F (65°C) (Polyethylene) -40°F (-40°C) to 185°F (85°C) (Nylon)

Heyco® Grommet Channel

TPE "DS" Channel - Unserrated, MDS* Filled

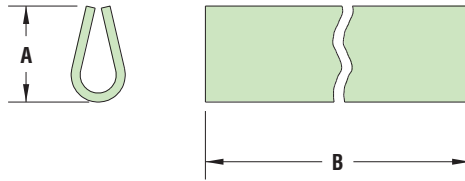


FIT PANEL THICKNESS RANGE				PART NO.	DESCRIPTION	PART DIMENSIONS					
Minimum		Maximum				A Overall Height	B Length				
in.	mm.	in.	mm.				in.	M.			
48" (122 cm) Strip											
.031	0,8	.062	1,6	12430	DS-062-48"	.30	7,6				
.020	0,5	.125	3,2	12431	DS-125-48"	.38	9,5				
.031	0,8	.188	4,8	12432	DS-188-48"	.50	12,7	48		1.22	
.045	1,1	.250	6,4	12433	DS-250-48"	.63	15,9				
100' (30.5 M) Roll											
.031	0,8	.062	1,6	12430R	DS-062-1200"	.30	7,6			1200	30.5
.020	0,5	.125	3,2	12431R	DS-125-1200"	.38	9,5				

- This flexible Grommet Channel is ideal for protecting panel edges from being damaged.
- For use as wear strips, non-abrasive edging, noise-reducing conveyor strips, framing, or to protect from sharp edges.
- Good durability; MDS glue filling adheres to rubber, most plastics, wood and metal.
- Features built-in lubricant for reduced friction and longer part life.

Standard color gray.

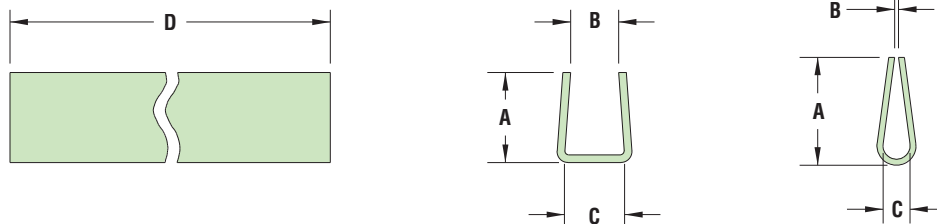
*Cyanoacrylate adhesive, also known as "super glue", features rapid setup time.



Polystyrene Channel - 4' (122 cm) Lengths

FIT PANEL THICKNESS	PART NO. White	DESCRIPTION	PART DIMENSIONS								STYLE	
			A Overall Height		B Top Width		C Bottom Width		D Length			
in.	mm.		in.	mm.	in.	mm.	in.	mm.	in.	cm.		
.050	1,3	12443	PCH-015X050-48"	.44	11,1	.02	0,4	.05	1,3			1
.141	3,6	12444	PCH-020X141-48"	.56	14,3	.02	0,5	.14	3,6	48	122	2
.250	6,4	12445	PCH-200X250-48"	.38	9,5	.20	5,1	.25	6,4			1

Standard color white.



- Binds and frames sharp edges.
- May be cut to desired lengths.
- Available by special order only, consult Heyco.

Material	PA66/6 MDS Filled Nylon or High Impact Polystyrene
Flammability Rating	94HB
Temperature Range	-40°F (-40°C) to 149°F (65°C) (DS Series) -4°F (-20°C) to 122°F (50°C) (PCH Series)

Quick Specs

“Stay Connected” with



Solar Power Components

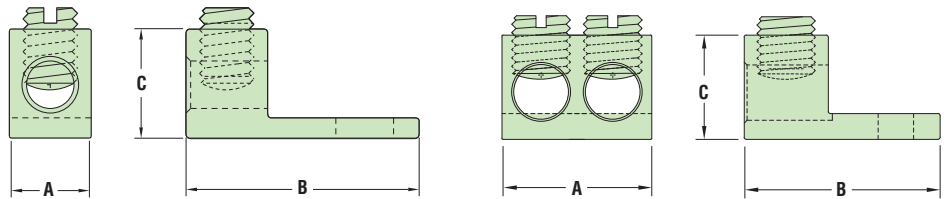
a PennEngineering® Company



- Compact design—lightweight yet strong.
- Electro-tin plated for low contact resistance and corrosion protection when used with copper conductors.
- Require no special installation tools.
- UL and CSA certified for use with copper and aluminum conductors.
- Ports are marked with catalog description and conductor range.
- DFARS Compliant

Heyco® Aluminum Solderless Connectors

WIRE RANGE (AWG)	PART NO.	DESCRIPTION	PART DIMENSIONS							
			A Width		B Length		C Height		Bolt Size	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.
Single Conductor										
4-14	1863	A35	.50	12,7	1.06	26,9	.50	12,7		
2-14	1864	A90	.50	12,7	1.16	29,5	.56	14,2	1/4	6,4
1/0-14	1884	A125	.63	15,9	1.47	37,3	.78	19,8		
Two Conductors										
2-14	1864-2	A90-2	.91	23,0	1.16	29,5	.56	14,2	1/4	6,4
1/0-14	1884-2	A125-2	1.12	28,4	1.47	37,3	.78	19,8		

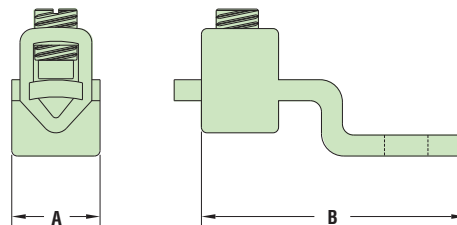


- 100% conductivity for highest efficiency.
- Completely reuseable.
- Requires no special installation tools.
- UL listed and CSA certified for use with copper conductors.
- Marked with catalog description and conductor range.
- DFARS Compliant

Heyco® Copper Lug Connector

Copper Single Hole Offset Lugs

WIRE RANGE (AWG)	PART NO.	DESCRIPTION	CURRENT RATING AMPS	HEIGHT WITH MAX. WIRE		PART DIMENSIONS					
				in.	mm.	A Tang Width		B Length		Bolt Size	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.
6-14	1851	CB 35	50	3/4	19,1	3/8	9,5	1-3/16	30,2	3/16	4,8



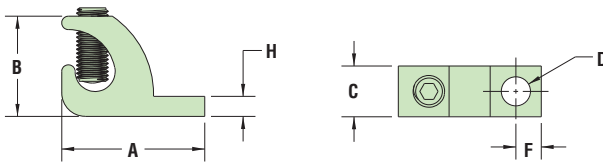
Quick Specs

Materials
Certifications
Flammability Rating

6061-T6 aluminum alloy; electrolytic copper
 Listed under Underwriters' Laboratories File E80121
 Certified by the Canadian Standards Association File 242954 & 246619
 94V-0

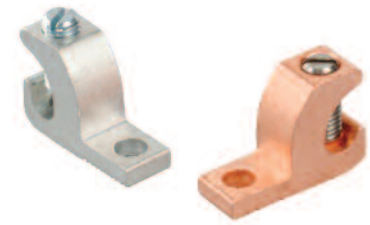
Heyco® Copper and Aluminum Lay-In Connectors

Wire Range AWG	PART NO.	DESCRIPTION	CONSTRUCTION	PART DIMENSIONS (in.)					
				A	B	C	D	F	H
4-14	S6525	LC 14-4 1-Pole Cu Tinned	Tinned Copper with Stainless Steel Set Screw	1.07	.75	.38	.22	.19	.15
	S6526	LC 14-4 1-Pole Cu	Copper with Stainless Steel Set Screw						
	S6527	LC 14-4 1-Pole Al	Aluminum with Steel Set Screw						



LCC and LCA Series

Material	Tinned copper or copper with stainless steel set screw; or High Strength, High Conductive Aluminum Alloy 6061T6 with steel set screw
Certifications	Listed under Underwriters' Laboratories File E467246

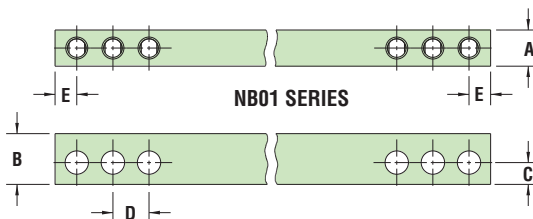


- Copper construction parts available in plated and unplated versions.
- Copper construction parts UL/CSA approved for direct burial and suitable for both indoor and out door use.
- Least expensive aluminum option suitable for indoor use only.
- **Recommended wire range AWG 4 thru AWG 14.**
- DFARS Compliant

Heyco® Aluminum Neutral Bars

WIRE RANGE AWG	CIRCUITS No.	MOUNTING HOLE(S)		LENGTH in.	PART NO.	DESCRIPTION	UL/CSA	PART DIMENSIONS (in.)				
		No.	Pos(s).					Width A	Height B	C	Pitch D	E
4-14 Cu or 4-12 Al	2	1	2	1.00	S6535	NB 14-4 2-Pole	CU9AL	.312	.437	.187	.312	.187
	3	2	1 & 5	1.63	S6536	NB 14-4 3-Pole						
	5	2	1 & 7	2.25	S6537	NB 14-4 5-Pole						
	6	1	4	2.25	S6538	NB 14-4 6-Pole						
		2	1 & 8	2.56	S6539							
	10	2	1 & 12	3.81	S6540	NB 14-4 10-Pole						
12	2	1 & 14	4.44	S6541	NB 14-4 12-Pole							

Other wire ranges, bar sizes, materials and configurations are available, consult Heyco



Materials	High strength tempered aluminum Alloy 6061, tin plated to resist oxidation and galvanic corrosion and with conductivity of approximately 43% IACS. Zinc plated steel screws with trivalent (Cr+3) chromate conversion top layer.
Certifications	UL Recognized Class ZMVV2.E80121 and CSA Certified File 8919



- Neutral bar for ground or power; **not** for power distribution.
- Rated at **85 Amps for Copper** wire and **70 Amps for Aluminum** wire.
- Wire range: AWG 4-14 CU (copper wire), 4-12 Al (aluminum wire) Dual Rated, Solid & Stranded, rigid or semi rigid stranding.
- Set screws are slotted, headless, zinc plated steel and will hold the smaller wires when the appropriate torque is fully applied.
- Use #10 mounting screw.
- DFARS Compliant

Quick
Specs

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



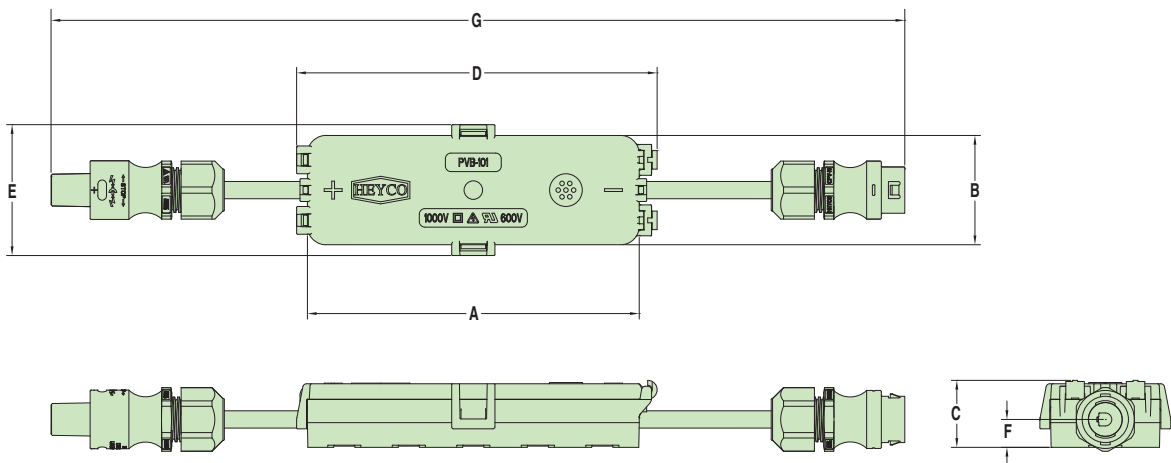
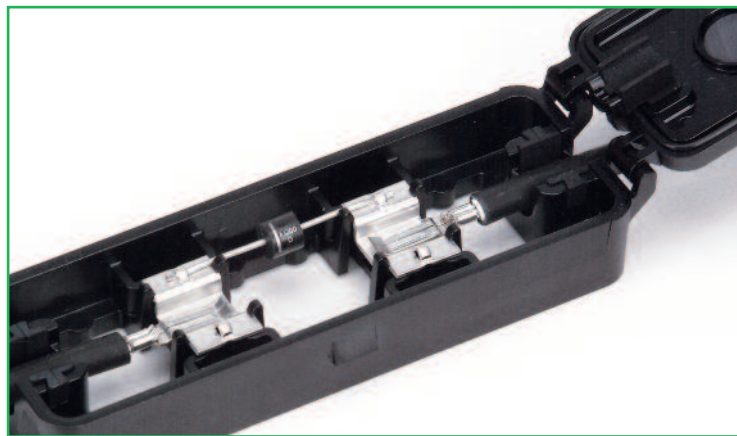
Heyco® PVB 101 Single Diode Solar Junction Box

For Single Diode, Double Ribbon Photovoltaic Panels

- **Highest performance rated axial diode on the market** for a single diode box application.
- Low insertion force connection of PV ribbons for quick and easy assembly with no soldering.
- Low profile single panel design to accommodate a two ribbon panel.
- Cable strain relief incorporated in box.
- Practical internal volume and venting for good thermal dissipation and low interior temperatures.
- RoHS and REACH compliant eco-friendly solderless internal connections.
- Sizeable opening for conductor ribbons.
- **Ambient temperature range of -40°F (-40°C) to 221°F (105°C) (UL).**

PART NO.	DESCRIPTION	PART DIMENSIONS													
		A Box Length		B Box Width		C Max O.A. Height		D Max O.A. Length		E Max O.A. Width		F Centerline of Leads		G* O.A. Length inc. Leads	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
S6115	PVB 101	5.38	136,6	1.77	45,0	1.09	27,6	5.84	148,3	2.14	54,3	.50	12,7	78.00	1981,2

*Junction boxes supplied with positive and negative cables in 3 ft. length—contact Heyco for different lengths.



Quick
Specs

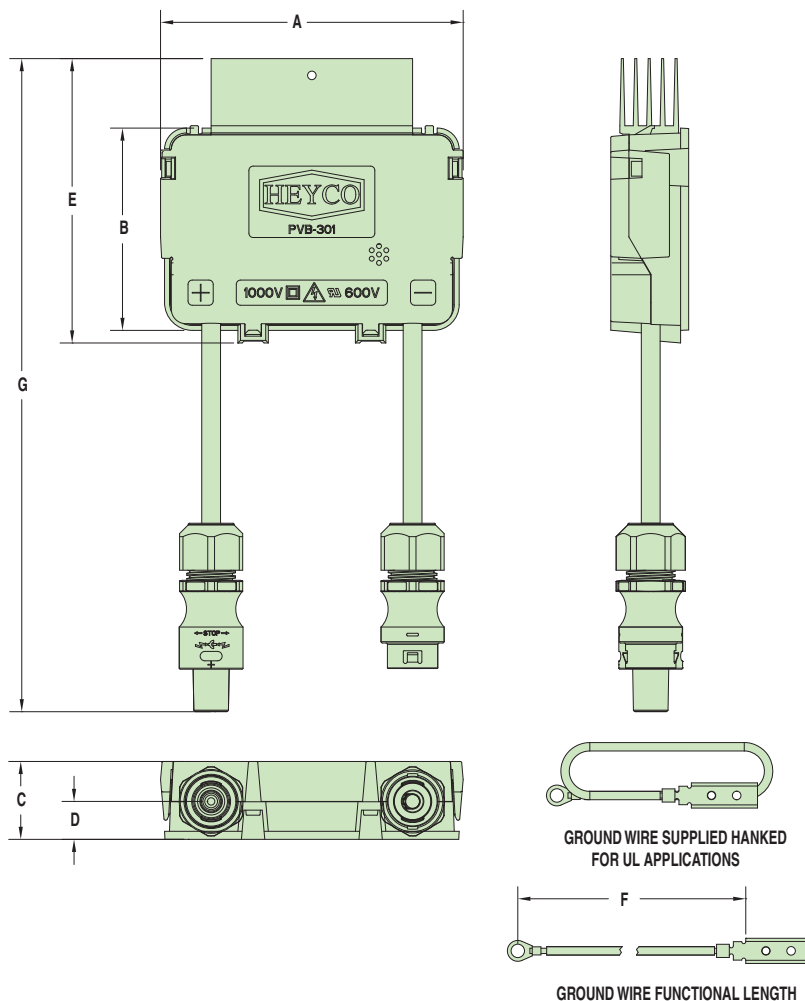
Material	Polycarbonate housing with UV stability
Certifications	Recognized under Underwriters' Laboratories File E325860
Flammability Rating	VO, 5VA
Temperature Range	-40°F (-40°C) to 221°F (105°C)
IP Rating	IP 65

Heyco® PVB 301 Multi-Diode Solar Junction Box

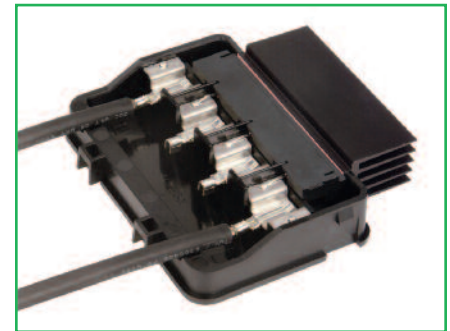
For Larger, Multiple Diode, Four Ribbon Photovoltaic Panels
Robust Design for Temperature Sensitive Applications

PART NO.	DESCRIPTION	PART DIMENSIONS													
		A		B		C		D		E		F		G*	
		Box Width		Box Length		Max O.A. Height		Centerline of Leads		Max O.A. Length		Ground Lead Length		O.A. Length inc. Leads	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
S6135	PVB 301	4.50	114,3	3.01	76,5	1.16	29,5	.57	14,4	4.24	107,7	36.0	914,4	40.0	1016,0

*Junction boxes supplied with positive and negative cables in 3 ft. length—contact Heyco for different lengths.



- Robust built-in heat sink guards against heat buildup and allows the use of higher current TO-220 bypass diodes. **Excellent for temperature sensitive applications.**
- Low insertion force connection of PV Ribbons for quick and easy assembly with no soldering.
- Practical internal volume and venting for good thermal dissipation and low interior temperatures.
- Maximum Voltage Rating: 600VDC UL/1000VDC IEC
- RoHS and REACH compliant eco-friendly solderless internal connections.
- Sizeable opening for conductor ribbons.
- Ground wire (included) required for UL applications.
- **U.S. Patent No. 8113853B2.**



Material	Polycarbonate housing with UV stability
Certifications	Recognized under Underwriters' Laboratories File E325860 Certification Number R72111836
Flammability Rating	VO, 5VA
Temperature Range	-40°F (-40°C) to 221°F (105°C)
IP Rating	IP 65

Quick Specs

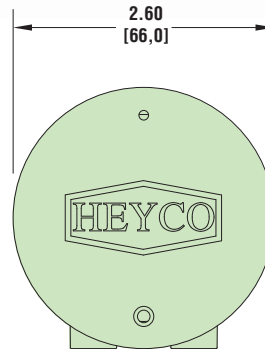


Heyco® PVB 001 Diodeless Solar Junction Boxes

For Use in Applications Which Require a Diodeless Junction Box

- **Low profile design** minimizes use of potting material while permitting ample access for electrical connections.
- Low cost two piece construction for potted applications.
- Durably constructed of high temperature polycarbonate with 5VA and UL f1 ratings to withstand outdoor exposure with excellent cold impact capabilities.
- Lid securely snaps on without use of tools—speeds panel fabrication.
- Designed for USE-2 and 1000V PV wire.
- Housing only—for custom connection needs, please consult Heyco.
- For special applications, please contact Heyco.

PART NO.	DESCRIPTION	PART DIMENSIONS				WIRE TYPE
		A		B		
		Hole Diameter		Maximum Cable Diameter		
		in.	mm.	in.	mm.	
S6194	PVB 001 Set (4,7 mm)	.19	4,7	.18	4,7	12 AWG USE-2
S6190	PVB 001 Set (5,1 mm)	.22	5,6	.20	5,1	10 AWG USE-2
S6192	PVB 001 Set (7,6 mm)	.31	7,9	.30	7,6	10 AWG PV-Wire



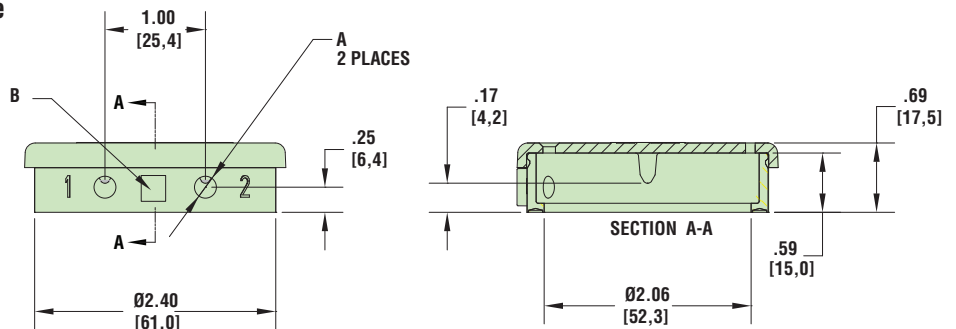
PN S6199



Optional mounting plate for use with flexible panel applications for added secureness



Junction Box attaches to plate clips on opposite side of panel



Quick Specs

Material	Polycarbonate housing with UV stability
Flammability Rating	VO, 5VA
Temperature Range	-40°F (-40°C) to 221°F (105°C)



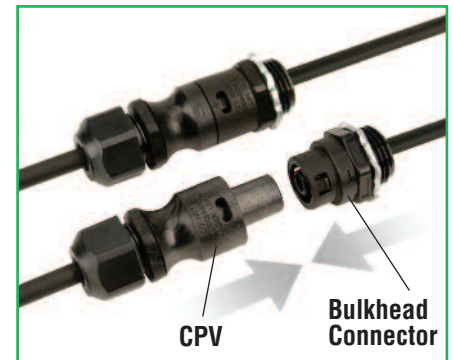
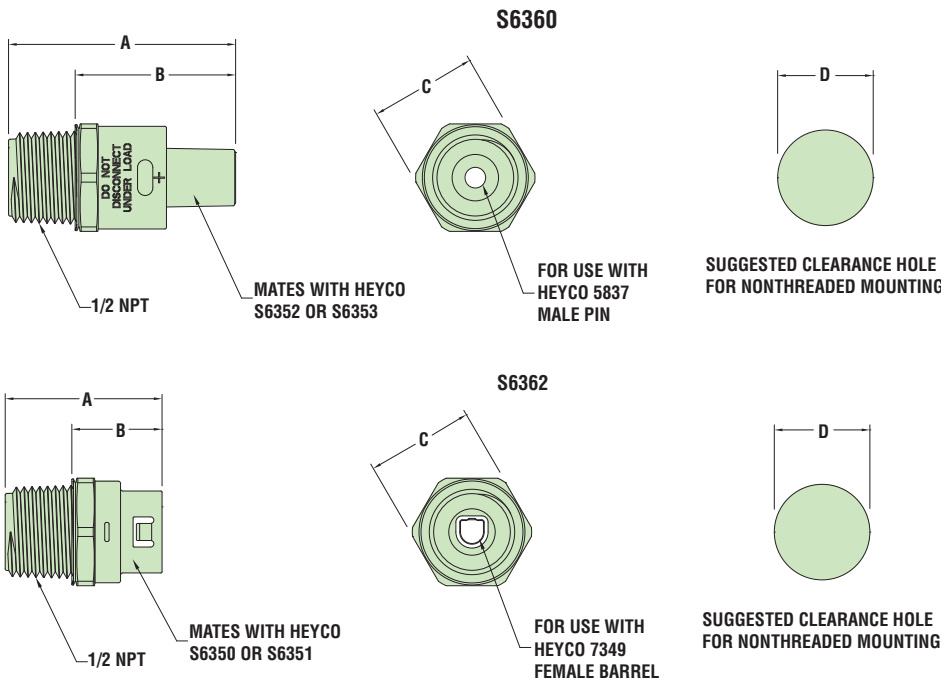
Heyco® CPV Solar Bulkhead Connectors

With Integral Sealing Ring for Creating a Liquid Tight Seal Through a Panel

PART NO.	DESCRIPTION	PART DIMENSIONS							
		A		B		C		D	
Black		Max O.A. Length		Mounted Length		Wrenching Flats		Clearance Hole	
		in.	mm.	in.	mm.	in.	mm.	in.	mm.
S6360	CPV-P-BH	2.08	52,8	1.47	37,3	.98	24,9	.875	22,2
S6362	CPV-N-BH	1.44	36,5	.83	21,0				



- Bulkhead connectors mate with Heyco CPV Solar Connectors **creating a liquid tight seal through the panel.**
- Provided with an assembled metal locknut.
- Integral sealing ring ensures a superior seal at the mounting hole location, every time.
- Crimp to stranded wire 14 to 10 gauge for internal connections.
- 1/2" NPT thread for installation into 1/2" knock-out hole.
- Polycarbonate construction for good chemical and impact resistance.
- Disconnection (PN S6390) and crimping tools (PN S6392 for 10 & 12 AWG wire) available, See page 2-37.
- Maximum Voltage Rating: 600VDC UL/1000VDC IEC
- RoHS and REACH compliant.
- **U.S. Patent No. 8398419B2.**



Material	Polycarbonate
Certifications	cULus Recognized under the Component Program of Underwriters' Laboratories File E344722.
Flammability Rating	VO
Temperature Range	-40°F (-40°C) to 221°F (105°C)
IP Rating	IP 65 & IP 67

Quick Specs



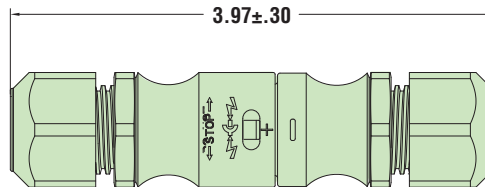
Heyco® CPV Solar Connectors

For Photovoltaic Wire Interconnections

- **Large cable diameter range** covers a wide range of USE-2 and 1000V PV cables.
- CPV Solar Connectors mate with Heyco Bulkhead Connectors (page 2-36) creating a liquid tight seal through the panel.
- Acme threads on cap to prevent skipping and speed install.
- **Connectors meet all UL cold impact requirements of -35°C test.**
- **Connectors meet all NEC requirements for solar installations.**
- Polycarbonate construction for good chemical and impact resistance.
- Rated Current: 22A (2,5 mm²), 30A (4 mm²-6 mm²).
- Rated Voltage, 1kV DC.
- Overvoltage category III.
- Pollution degree, 3.
- Crimped terminal connections.
- Non-rewireable conductor connections.
- Reference to DIN V VDE V0126-3:2006.
- RoHS and REACH compliant.
- **U.S. Patent No. 8398419B2.**

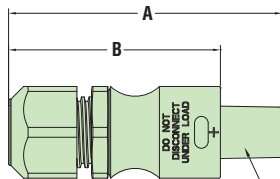
CABLE DIA. RANGE				PART NO.	DESCRIPTION	PART DIMENSIONS					
Min Dia		Max Dia				Black	A		B		C
in.	mm.	in.	mm.		Max O.A. Length		Body Length		Wrenching Flats		
					in.	mm.	in.	mm.	in.	mm.	
.26	6,6	.32	8,0	S6350	CPV-P-80	2.80	71,1	2.17	55,1	.94	23,9
.17	4,3	.23	5,8	S6351*	CPV-P-58						
.26	6,6	.32	8,0	S6352	CPV-N-80	2.16	54,9	1.78	45,2	.94	23,9
.17	4,3	.23	5,8	S6353*	CPV-N-58						

*For TUV certification, the minimum cable diameter will be .208 in (5,3 mm).

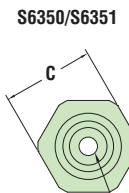


ASSEMBLED VIEW

POSITIVE CONNECTOR

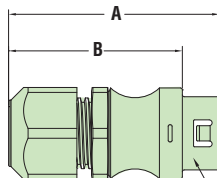


MATES WITH HEYCO
S6352 OR S6353

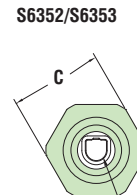


FOR USE WITH
HEYCO 5837
MALE PIN

NEGATIVE CONNECTOR



MATES WITH HEYCO
S6350 OR S6351



FOR USE WITH
HEYCO 7349
FEMALE BARREL



Heyco
CPV Solar
Disconnection
Tool S6390



Heyco CPV
Solar Crimping
Tool S6392

Material	Polycarbonate
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E344722.
Flammability Rating	V0
Temperature Range	-40°F (-40°C) to 185°F (85°C)
IP Rating	IP 65 & IP 67

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



Heyco® CPV Solar Connector Sets

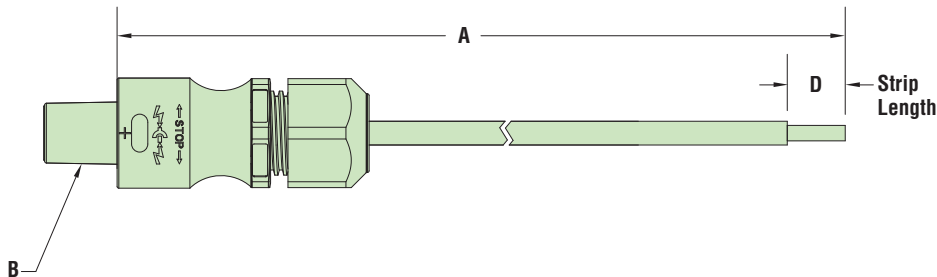
With Custom Termination Capability

TYPE	CABLE		PART NO.	TERMINATIONS		D in.	LENGTH * A ft.
	Gauge AWG	Type		B	C		
CPV-P Connection Cable	10	USE-2	S6310-6.0	CPV-P	none*	1/2	6.0
		PV 1000	S6311-6.0				
CPV-N Connection Cable	10	USE-2	S6314-6.0	CPV-N	none*	1/2	6.0
		PV 1000	S6315-6.0				
CPV-P/CPV-N Jumper Cable	10	USE-2	S6318-6.0	CPV-P	CPV-N	n/a	6.0
		PV 1000	S6319-6.0				
CPV/MC4 Conversion Cable	10	USE-2	S6322-6.0	CPV-P	MC-4-NEG	n/a	6.0
			S6323-6.0	CPV-N	MC-4-POS		
		PV 1000	S6326-6.0	CPV-P	MC-4-NEG		
			S6327-6.0	CPV-N	MC-4-POS		

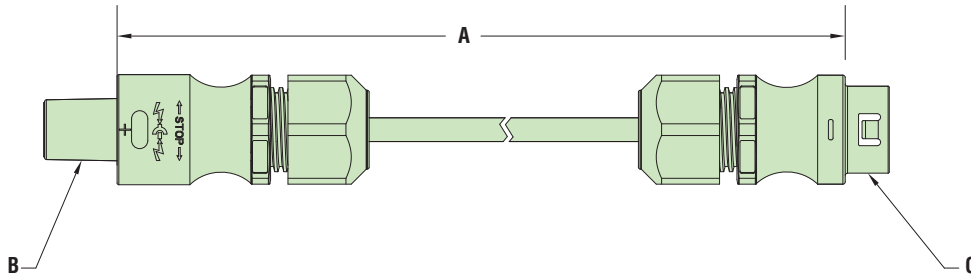
*Other lengths available. Consult Heyco for custom lengths, applied Ring/Spade Terminals and other configurations.



- **Precut and terminated CPV assemblies.**
- Constructed from UV resistant 10AWG UL/TUV approved solar cable.
- Suitable for UL and IEC solar installations.
- **Heyco Connectors are UL and TUV approved.**
- **Connectors meet UL cold impact test of -35°C.**
- **Connectors meet all NEC requirements for solar installations.**
- Maximum cable assembly current rating - 30 amps.
- MC4 conversion cables and additional cable lengths available upon request.

CPV CONNECTION CABLES



CPV JUMPER & CONVERSION CABLES

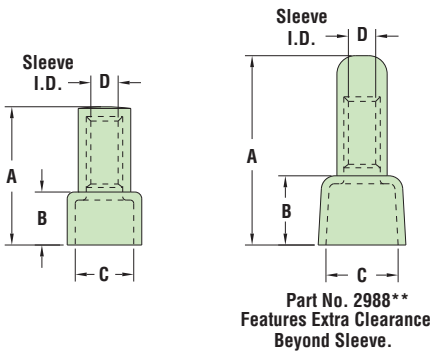


Material	Polycarbonate
Certifications	 Recognized under the Component Program of Underwriters' Laboratories File E344722.  Certification Number R60033714.
Flammability Rating	V0
Temperature Range	-40°F (-40°C) to 185°F (85°C)
IP Rating	IP 65 & IP 67

Quick Specs



- **Quick, permanent and secure installation** with recommended crimp tool.
- Five sizes for #10 AWG thru #22 AWG.
- UL rated at 600 volts except as noted.
- Closed-end nylon shell with plated copper internal sleeve.



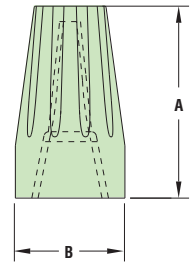
- Gray, Blue, Orange, Yellow, and Red colors for easy size and capacity identification.
- Square wire spring insert bites into and securely connects #10 AWG thru #22 AWG.
- Fluted body for easy assembly.
- 81-G and 82-B UL rated 300 volts. 83-0 and 84-Y UL rated at 600 volts.

Heyco® Wire Connectors

WIRE COMBINATIONS (AWG)	PART NO.	DESCRIPTION	USE CRIMP TOOL	PART DIMENSIONS							
				A		B		C		D	
				in.	mm.	in.	mm.	in.	mm.	in.	mm.

Crimp-On											
JOINS: 1#16 & 1#20 Thru 2-5#22	2986	1622N	0992 (YS-7)	.60	15,2	.23	5,9	.24	6,2	.09	2,4
JOINS: 1#14 & 1#18 Thru 2-7#22	2988**	1422DN	0992 (YS-7)	.79	20,1	.31	7,9	.32	8,1	.12	3,0
JOINS: 1#14 & 1#18 Thru 2-7#22	2990	1422N	0992 (YS-7)	.60	15,2	.23	5,9	.26	6,5		
JOINS:* 1#10 & 1#14 Thru 4#20	2992	1022N	0992 (YS-7)	.70	17,1	.32	8,0	.37	9,4	.16	4,0
JOINS:* 1#10&1#12 Thru 4#16	2994	1020N	n/a	.87	22,2	.40	10,2	.47	12,0	.20	5,1

Color Coded				Color							
JOINS #22 Thru #14 Min. 3#22 Max. 2#16	2937	81-G	Gray	.57	14,5	.33	8,4				
JOINS #22 Thru #14 Min. 3#20 Max. 3#16	2940	82-B	Blue	.70	17,8	.39	9,9				
JOINS #22 Thru #14 Min. 2#18 Max. 2#14	2949	83-0	Orange	.84	21,3	.45	11,4				
JOINS #22 Thru #10 Min. 3#20 Max. 2#12	2952	84-Y	Yellow	.94	23,9	.54	13,7				
JOINS #20 Thru #8 Min. 2#14 Max. 4#12	2955	86-R	Red	1.05	26,7	.64	16,3				



*Only suitable for stranded #10 AWG (6,0 mm) wire.
**Extra clearance beyond sleeve.

Quick Specs

Materials	Crimp-On – Nylon 6/6 and brass	Color Coded – Polypropylene and steel
Certifications	UL Listed under Underwriters' Laboratories File E80121	CS Certified by the Canadian Standards Association File 211101 (Color Coded only)
Flammability Rating	Crimp-On – 94V-0	Color Coded – 94V-2
Temperature Range	-4°F (-18°C) to 221°F (105°C)	

3 Electrical Accessories



3-1 Heyco-Flex[®] III Liquid Tight Tubing



3-1 Female Threaded Couplings



3-2 Heyco-Flex[®] III Liquid Tight Fittings – Straight-Thru, NPT



3-2 Heyco-Flex[®] III Fitting – Straight-Thru, Snap-In



3-2 Heyco-Flex[®] III Liquid Tight Fittings – 90° Sweep, NPT



3-3 Nylon Corrugated Conduit/Tubing



3-4 Nylon Corrugated Conduit/Tubing Mounting Clips



3-4 Nylon Corrugated Conduit/Tubing Unions



3-5 Nylon Conduit Fittings – Straight-Thru, NPT, Metric



3-6 Nylon Conduit Fittings – 90° Sweep, NPT & Metric



3-7 Heyco-Flex[®] I Liquid Tight Conduit



3-7 Heyco-Flex[®] I Female Conduit Adapters



3-8 Heyco-Flex[®] II Liquid Tight Flexible Nonmetallic Electrical Tubing



3-9 Heyco-Flex[®] Liquid Tight Conduit Fittings – Straight-Thru, NPT



3-10 Heyco-Flex[®] Liquid Tight Conduit Fittings – Straight-Thru, Snap-In



3-11 Heyco-Flex[®] Liquid Tight Conduit Fittings – 90° Sweep, NPT



3-12 Heyco-Flex[®] Zinc Die-Cast Liquid Tight Conduit Fittings



3-13 Heyco-Flex[®] Quick Twist Conduit Fittings – Straight-Thru, Snap-In & NPT



3-13 Heyco-Flex[®] Quick Twist Finishing Collars



3-14 Heyco-Flex[®] Quick Twist Conduit Fittings – 90° Sweep, Snap-In & NPT



3-14 Quick Twist Assembly Tool



3-15 Heyco-Flex[®] VI Liquid Tight Conduit



3-16 Heyco-Flex[®] VI Liquid Tight Conduit Fittings – Straight-Thru, NPT



3-16 Heyco-Flex[®] VI Liquid Tight Conduit Fittings – 90° Sweep, NPT



3-17 Metal Locknuts – NPT (NPS), PG & Metric



3-18 Nylon Locknuts – NPT (NPS), PG & Metric



3-19 Heyco-Flex[®] Mounting Brackets



3-19 Sealing Washers



3-20 Foam Washers



3-20 Thermoplastic Rubber O-Rings



Solar Power Components LabKit – See back cover

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



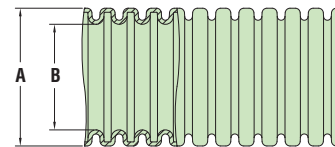
Heyco-Flex™ III Nylon 94V-0 Corrugated Liquid Tight Tubing

Flexible, Nonmetallic Liquid Tight Electrical Tubing

- Corrugated tubing for trade sizes 3/8" through 1".
- Flame retardant, won't burn.
- Nontoxic and UV resistant.
- **Rated for NEMA 4 and 4X applications when used with Heyco-Flex III Liquid Tight Fittings.**
- Rated for NEMA Type 3R applications.
- Maximum flexibility, can be used in extremely tight quarters. Bend radius of Heyco-Flex III is equal to its outside diameter.
- No threading of the tubing required to install. This eliminates the possibility of cutting the tubing and creating leak paths.
- Easy, permanent assembly between the tubing and fittings: push the tubing over the fitting ferrule until the tubing clicks into place.
- Lightweight and lower installed cost.
- Quick and easy installation.
- For use with Heyco-Flex III Fittings, See page 3-2.
- Resists corrosion, oil, and water.
- For use in both wet and dry applications.
- Suitable for use in high vibration or flexing applications (automotive equipment, fiber optics, computer and peripherals, lab equipment, robotics, etc.).
- **Voltage Rating: 300V.**
- **Mounting brackets are available, see page 3-19.**
- **Order Part No. 8340**, HF-28 Cutting Tool, for cutting Heyco-Flex Tubing cleanly and evenly. See page 3-8.
- For additional nylon conduit sizes, see page 3-3.

TRADE SIZE	PART NO. Black	DESCRIPTION	PART DIMENSIONS				STANDARD COIL LENGTH*
			A Outside Diameter		B Inside Diameter		
			in.	mm.	in.	mm.	ft/coil
3/8	8478	HF3 3/8 FR	.71	18,0	.51	13,1	100
1/2	8479	HF3 1/2 FR	.85	21,6	.65	16,5	
3/4	8480	HF3 3/4 FR	1.12	28,3	.87	22,0	
1	8481	HF3 1 FR	1.35	34,3	1.10	28,0	

Standard color black. Consult Heyco for gray and other colors.
*Consult Heyco for “cut to length” and slit tubing availability.



Material	Halogen Free Nylon 6
Certifications	cULus Certified to both Canadian and U.S. Requirements under File E121095
Flammability Rating	94V-0
Temperature Range	-4°F (-18°C) to 221°F (105°C)



Heyco® Female Threaded Couplings

For Heyco HF3C and other NPT Hub Components

- Both ends feature female NPT threads for joining various male NPT hub parts.
- Facilitate the connection between Heyco-Flex III Fittings (HF3C – page 3-2), Conduit (HF3 – above), and the various Heyco Liquid Tight Cordgrips (Section 3 in Heyco Catalog 117) typically used in solar installations.

TRADE SIZE	PART NO. Gray	DESCRIPTION
1/2	8665	FTC 1/2
3/4	8666	FTC 3/4
1	8667	FTC 1
1-1/4	8668	FTC 1-1/4
1-1/2	8669	FTC 1-1/2
2	8670	FTC 2

Quick Specs

Material	Schedule 80 PVC
----------	-----------------

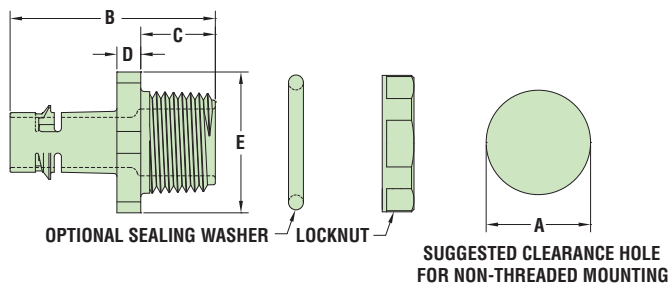


Heyco-Flex™ III Liquid Tight Fittings

For Flexible, Nonmetallic Liquid Tight Tubing
Straight-Thru, Snap-In and NPT Hubs

FITS TUBING TRADE SIZE	PART NO.	DESCRIPTION	THREAD SIZE	PART DIMENSIONS									
				A		B		C		D		E	
				Clearance Hole	Max O.A. Length	Thread Length	Wrenching Nut Thk.	Flat Size	in.	mm.	in.	mm.	in.
Snap-in Hub*													
1/2	1952	HF3C 1/2-S	N/A	.875	22,2	1.38	35,1	.39	9,9	.09	2,3	.97	24,6
NPT Hubs													
3/8	9146	HF3C 3/8	3/8	.875	22,2	1.72	43,7	.63	16,0	.20	5,1	1.16	29,5
1/2	9147	HF3C 1/2	1/2	1.109	28,2	1.84	46,7	.63	16,0	.20	5,1	1.36	34,5
3/4	9148	HF3C 3/4	3/4	1.375	34,9	1.99	50,6	.78	19,8	.20	5,1	1.62	41,1
1	9149	HF3C 1	1										

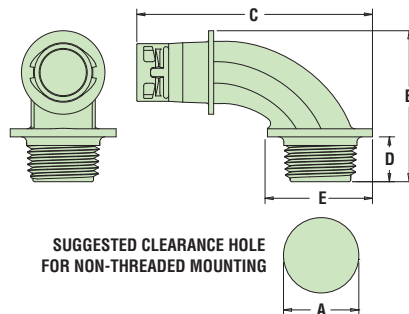
*Part is not liquid tight or UL Recognized. "Thread Length" indicates length below flange.



90° Sweep, NPT Hubs

FITS TUBING TRADE SIZE	PART NO.	DESCRIPTION	THREAD SIZE	PART DIMENSIONS									
				A		B		C		D		E	
				Clearance Hole	Max O.A. Height	Max O.A. Length	Thread Length	Flange Dia.	in.	mm.	in.	mm.	in.
3/8	1955	HF3C 3/8-90R	3/8	.875	22,2	1.75	44,5	2.74	69,6	.52	13,2	1.23	31,2
1/2	1956	HF3C 1/2-90R	1/2	1.109	28,2	2.10	53,3	3.08	78,2	.52	13,2	1.50	38,1
3/4	1957	HF3C 3/4-90R	3/4	1.375	34,9	2.67	67,8	3.66	93,0	.69	17,5	1.80	45,7
1	1958	HF3C 1-90R	1										

Standard color black.



Material	Nylon 6/6
Certifications	Certified to both Canadian and U.S. Requirements File E121095
Flammability Rating	94V-2
Temperature Range	-22°F (-30°C) to 221°F (105°C)
IP Rating	IP 64

- For use with Heyco-Flex III Corrugated Tubing in trade sizes 3/8" through 1". See page 3-1.
- Nontoxic and UV resistant.
- **Rated for NEMA 4 and 4X applications when used with Heyco-Flex III Tubing.**
- Rated for NEMA Type 3R applications.
- Easy, permanent assembly between the tubing and fittings: push the tubing over the fitting ferrule until the tubing clicks into place.
- Lightweight and lower installed cost.
- Quick and easy installation.
- Suitable for use in high vibration or flexing applications (automotive equipment, fiber optics, computer and peripherals, lab equipment, robotics, etc.).
- Resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. This feature is not assessed by UL certification or testing.
- For use in both wet and dry applications.
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- Use of an O-ring may be required for a complete liquid tight system with a non-threaded mounting hole. See page 3-20.
- Locknuts **included** with Straight-Thru fittings.
- To order metal or nylon locknuts separately, see pages 3-17 & 3-18.
- Patented.

Quick Specs



Heyco® Nylon Corrugated Conduit/Tubing – HPAS Series



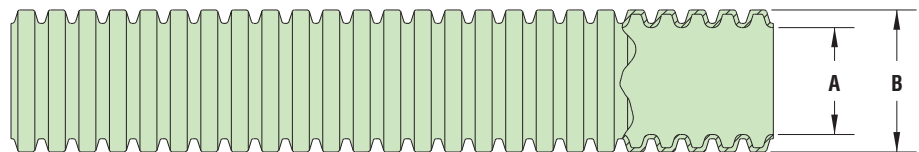
Highly Flexible Polyamide Nylon 6

Type HPAS

- Low fire hazard.
- Low smoke and toxicity.
- Halogen, sulphur, and phosphorus free.
- Highly flexible and high fatigue life.
- High impact strength and recovers if crushed.
- Lightweight and low installed cost.
- Use with Heyco Nylon Fittings. See pages 3-5 through 3-6.
- UV resistant.
- For use with all types of equipment, machinery, pumps, motors, and HVAC equipment.
- 10 mm thru 54 mm nominal sizes.
- Highly resistant to abrasion, oil, and solvents.
- Voltage Rating: 300V.
- Suitable for use in outdoor locations.
- See Page 3-4 for mounting clips.

NOMINAL SIZE	PART NO. Black		DESCRIPTION	PART DIMENSIONS							
	94V-2	94V-0		Inside Bend Radius		A Inside Diameter		B Outside Diameter		Roll Length	
				in.	mm.	in.	mm.	in.	mm.	Ft.	M.
10 mm	F8400	F8421	HPAS 10MM 50M COIL	.59	15,0	.24	6,2	.39	10,0	164	50
13 mm	F8402	F8422	HPAS 13MM 50M COIL	.79	20,0	.38	9,6	.51	13,0		
16 mm	F8404	F8424	HPAS 16MM 50M COIL	1.18	30,0	.47	12,0	.62	15,8		
21 mm	F8406	F8426	HPAS 21MM 50M COIL	1.57	40,0	.65	16,5	.84	21,2		
28 mm	F8410	F8432	HPAS 28MM 50M COIL	2.17	55,0	.88	22,3	1.12	28,5		
34 mm	F8414	F8434	HPAS 34MM 50M COIL	2.56	65,0	1.11	28,2	1.36	34,5	82	25
42 mm	F8416	F8436	HPAS 42MM 25M COIL	3.15	80,0	1.42	36,0	1.67	42,5		
54 mm	F8418	F8438	HPAS 54MM 25M COIL	3.74	95,0	1.85	47,1	2.15	54,5		

Standard color black.



Quick Specs

Material	Nylon 6 (PA6)
Certifications	Recognized under Underwriters' Laboratories File E121095 for both U.S. and Canadian requirements
Flammability Rating	94V-2 and 94V-0 Halogen Free
Temperature Range	-4°F (-20°C) to 221°F (105°C)
IP Rating	IP 66 with HPASC Fittings Per EN60529

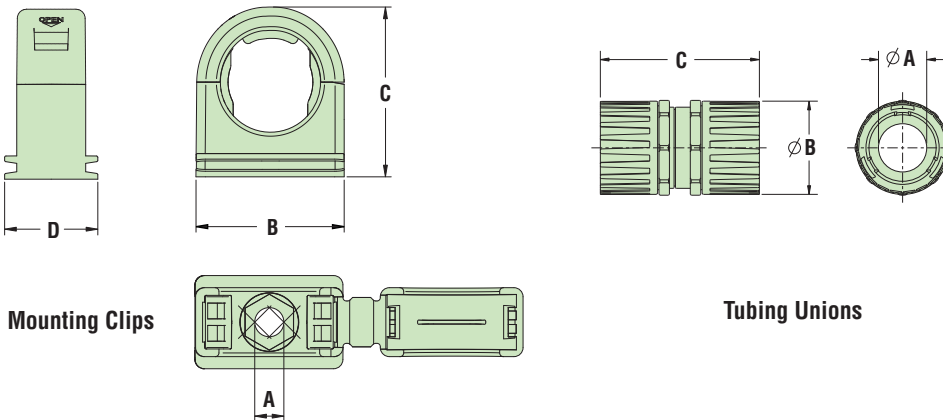


Heyco® Nylon Corrugated Conduit/Tubing Mounting Clips

With Integral Closure

FITS CONDUIT SIZE	PART NO. Black	DESCRIPTION	PART DIMENSIONS							
			A Mounting Hole Dia.		B Width		C Max O.A Height		D Max. O.A. Thickness	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.
13 mm	F8902	HCL 13	.197	5,0	.89	22,7	1.04	26,4		
16 mm	F8904	HCL 16	.205	5,2	1.04	26,4	1.17	29,8		
21 mm	F8906	HCL 21	.244	6,2	1.25	31,8	1.44	36,5	.79	20,0
28 mm	F8908	HCL 28	.244	6,2	1.61	40,8	1.75	44,5		
34 mm	F8910	HCL 34	.244	6,2	1.89	48,0	2.03	51,5		
42 mm	F8912	HCL 42	.244	6,2	2.25	57,2	2.37	60,2		

Standard color black.



- For mounting Heyco Nylon Corrugated Conduit or Tubing securely into place, vertically or horizontally. See page 3-3.
- Low profile design for space savings and pleasing appearance.
- Only fingertip pressure is required to snap conduit or tubing into bracket.
- Can be easily opened for temporary access/removal and closed again to secure conduit.
- Suitable for use with both fine and/or coarse pitch conduit/tubing.
- Suitable for use by original equipment manufacturers.
- Resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL certification or testing.)
- Recommended distance between brackets at intervals not greater than 3 feet (914 mm) as required by Article 351-27 of 1996 NEC.
- Use one standard #10 (4-5M) screw for attaching bracket to panel or chassis (screw not included).

Heyco® Nylon Corrugated Conduit/Tubing Unions

FITS CONDUIT SIZE	PART NO. Black	DESCRIPTION	PART DIMENSIONS					
			A Bore		B Max. Diameter		C Length	
			in.	mm.	in.	mm.	in.	mm.
16 mm	F8944	HPAS 16 - HPAS 16	.43	11,0	1.14	29,0	2.32	59,0
21 mm	F8946	HPAS 21 - HPAS 21	.57	14,5	1.26	32,0	2.80	71,0
28 mm	F8948	HPAS 28 - HPAS 28	.77	19,5	1.73	44,0	3.19	81,0
34 mm	F8950	HPAS 34 - HPAS 34	1.04	26,5	2.01	51,0	3.43	87,0

Standard color black.

- One piece fast fit coupler to join corrugated conduit



Material	Nylon 6/6
Certifications	CE Approved as per BS EN50086
Flammability Rating	94V-2 and Low Fire Hazard Including Low Smoke, Low Toxicity as well as Halogen, Sulphur, and Phosphorus Free
Temperature Range	-58°F (-50°C) to 275°F (135°C)

Quick Specs

"Stay Connected" with



Solar Power Components

a PennEngineering® Company



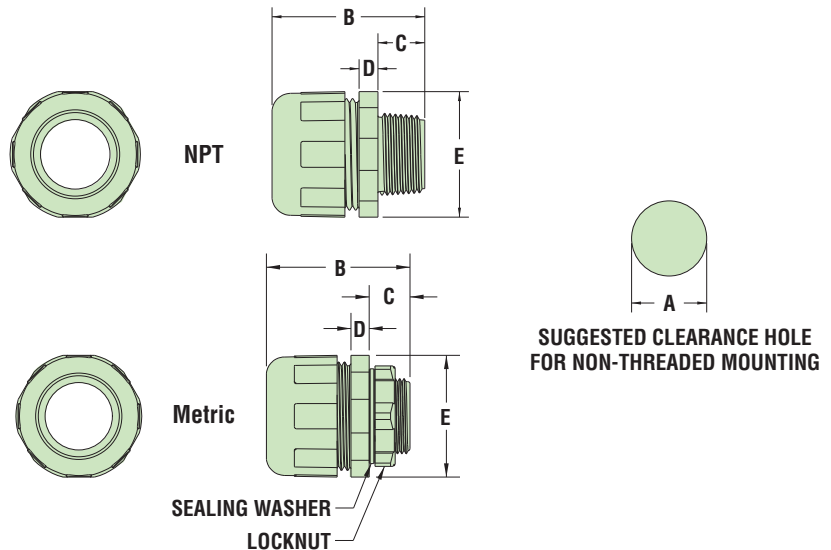
Heyco® Nylon Conduit Fittings - Straight-Thru

For Flexible, Corrugated Nylon Conduit/Tubing

FITS CONDUIT SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS - BODY AND SEALING NUT									
	Black	V-0 Black			A Clearance Hole		B Max O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Wrenching Flat	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
NPT Hubs														
10 mm	H8501	H8501F	HPASC 1/4 NPT-10mm	1/4 NPT	.540	13,7	1.58	40,0	.47	11,9	.19	4,8	.97	24,6
13 mm	H8503	H8503F	HPASC 3/8 NPT-13mm	3/8 NPT	.680	17,3	1.77	45,0	.50	12,7	.19	4,8	1.15	29,2
16 mm	H8504	H8504F	HPASC 3/8 NPT-16mm	3/8 NPT	.680	17,3	1.87	47,5	.52	13,2	.19	4,8	1.34	34,0
	H8506	H8506F	HPASC 1/2 NPT-16mm	1/2 NPT	.875	22,2	1.99	50,5	.64	16,3				
21 mm	H8510	H8510F	HPASC 1/2 NPT-21mm	1/2 NPT	.875	22,2	1.99	50,5	.63	16,0	.19	4,8	1.49	37,9
28 mm	H8516	H8516F	HPASC 3/4 NPT-28mm	3/4 NPT	1.109	28,1	2.07	52,5	.63	16,0	.19	4,8	1.80	45,7
34 mm	H8520	H8520F	HPASC 1 NPT-34mm	1 NPT	1.375	34,9	2.34	59,5	.76	19,3	.19	4,8	1.95	49,5
42 mm	H8522	H8522F	HPASC 1-1/4 NPT-42mm	1-1/4 NPT	1.734	44,0	2.44	62,0	.79	20,1	.22	5,5	2.54	64,5
	H8524	H8524F	HPASC 1-1/2 NPT-42mm	1-1/2 NPT	1.984	50,4	2.41	61,7						
54 mm	H8528	H8528F	HPASC 2 NPT-54mm	2 NPT	2.469	62,7	2.44	62,0	.80	20,3	.22	5,5	2.74	69,6
Metric Hubs														
10 mm	H8570	H8570F	HPASC M12-10mm	M12	.473	12,0	1.58	40,0	.45	11,4	.19	4,8	.98	24,9
13 mm	H8572	H8572F	HPASC M16-13mm	M16	.630	16,0	1.77	45,0	.49	12,5	.19	4,8	1.16	29,5
16 mm	H8574	H8574F	HPASC M16-16mm	M16	.630	16,0	1.87	47,5	.49	12,5	.19	4,8	1.35	34,3
	H8576	H8576F	HPASC M20-16mm	M20	.787	20,0	1.99	50,5	.61	15,5				
21 mm	H8580	H8580F	HPASC M20-21mm	M20	.787	20,0	1.99	50,5	.61	15,5	.19	4,8	1.50	38,0
28 mm	H8586	H8586F	HPASC M25-28mm	M25	.984	25,0	2.07	52,5	.62	15,8	.19	4,8	1.81	46,0
34 mm	H8590	H8590F	HPASC M32-34mm	M32	1.260	32,0	2.34	59,5	.76	19,3	.19	4,8	1.97	50,0
42 mm	H8592	H8592F	HPASC M40-42mm	M40	1.575	40,0	2.44	62,0	.78	19,8	.22	5,5	2.56	65,0
	H8594	H8594F	HPASC M50-42mm	M50	1.969	50,0	2.26	57,5	.63	16,0				
54 mm	H8598	H8598F	HPASC M63-54mm	M63	2.480	63,0	2.28	58,0	.63	16,0	.22	5,5	2.76	70,0

Standard color black.

- No disassembly required. Instead the installer simply pushes the conduit or tubing into the fitting, then tightens the domed sealing nut.
- Silicone sealing gland ensures liquid-tight seal.
- No threading of the conduit or tubing is required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Multiple sizes available for use with Heyco-Flex Conduit and Tubing. See page 3-3.



Quick Specs

Material	Nylon 6/6 with Silicone Rubber Glands
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E121095 to both U.S. and Canadian requirements
Flammability Rating	94V-2, 94V-0
Temperature Range	-22°F (-30°C) to 221°F (105°C)
IP Rating	IP 66

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

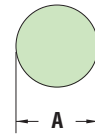
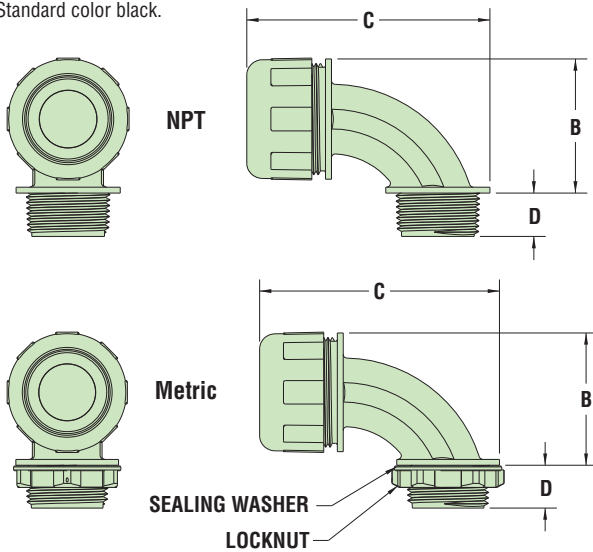


Heyco® Nylon Conduit Fittings - 90° Sweep Fittings

For Flexible, Corrugated Nylon Conduit/Tubing

FITS CONDUIT SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS - BODY AND SEALING NUT							
	Black	V-0 Black			A Clearance Hole in. mm.		B Max O.A. Height in. mm.		C Max O.A. Length in. mm.		D Thread Length in. mm.	
NPT Hubs												
10 mm	H8601	H8601F	HPASC 1/4 NPT-90-10mm	1/4 NPT	.540	13,7	1.22	31,0	2.17	55,0	.45	11,4
13 mm	H8603	H8603F	HPASC 3/8 NPT-90-13mm	3/8 NPT	.680	17,3	1.38	35,0	2.44	62,0	.49	12,5
16 mm	H8604	H8604F	HPASC 3/8 NPT-90-16mm	3/8 NPT	.680	17,3	1.66	42,2	2.56	65,0	.50	12,7
	H8606	H8606F	HPASC 1/2 NPT-90-16mm	1/2 NPT	.875	22,2	1.66	42,2	2.64	67,0	.62	15,8
21 mm	H8610	H8610F	HPASC 1/2 NPT-90-21mm	1/2 NPT	.875	22,2	1.75	44,5	2.64	67,0	.62	15,8
28 mm	H8616	H8616F	HPASC 3/4 NPT-90-28mm	3/4 NPT	1.109	28,1	2.05	52,0	2.99	76,0	.63	16,0
34 mm	H8620	H8620F	HPASC 1 NPT-90-34mm	1 NPT	1.375	34,9	2.30	58,5	3.58	91,0	.77	19,6
42 mm	H8622	H8622F	HPASC 1-1/4 NPT-90-42mm	1-1/4 NPT	1.734	44,0	3.21	81,5	4.53	115,0	.79	20,1
	H8624	H8624F	HPASC 1-1/2 NPT-90-42mm	1-1/2 NPT	1.984	50,4	3.21	81,5	4.72	120,0	.79	20,1
54 mm	H8628	H8628F	HPASC 2 NPT-90-54mm	2 NPT	2.469	62,7	3.43	87,1	4.92	125,0	.80	20,3
Metric Hubs												
10 mm	H8670	H8670F	HPASC M12-90-10mm	M12	.473	12,0	1.22	31,0	2.17	55,0	.45	11,4
13 mm	H8672	H8672F	HPASC M16-90-13mm	M16	.630	16,0	1.38	35,0	2.44	62,0	.49	12,5
16 mm	H8674	H8674F	HPASC M16-90-16mm	M16	.630	16,0	1.65	42,0	2.56	65,0	.50	12,5
	H8676	H8676F	HPASC M20-90-16mm	M20	.787	20,0	1.65	42,0	2.64	67,0	.61	15,5
21 mm	H8680	H8680F	HPASC M20-90-21mm	M20	.787	20,0	1.73	44,0	2.64	67,0	.61	15,5
28 mm	H8686	H8686F	HPASC M25-90-28mm	M25	.984	25,0	2.05	52,0	2.99	76,0	.63	16,0
34 mm	H8690	H8690F	HPASC M32-90-34mm	M32	1.260	32,0	2.31	58,7	3.58	91,0	.77	19,6
42 mm	H8692	H8692F	HPASC M40-90-42mm	M40	1.575	40,0	3.20	81,3	4.53	115,0	.76	19,3
	H8694	H8694F	HPASC M50-90-42mm	M50	1.969	50,0	3.20	81,3	4.72	120,0	.63	16,0
54 mm	H8698	H8698F	HPASC M63-90-54mm	M63	2.480	63,0	3.42	86,9	4.92	125,0	.63	16,0

Standard color black.



SUGGESTED CLEARANCE HOLE FOR NON-THREADED MOUNTING

- No disassembly required. Instead the installer simply pushes the conduit or tubing into the fitting, then tightens the domed sealing nut.
- Silicone sealing gland ensures liquid-tight seal.
- No threading of the conduit or tubing is required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Multiple sizes available for use with Heyco-Flex Conduit and Tubing. See page 3-3.

Material	Nylon 6/6 with Silicone Rubber Glands
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E121095 to both U.S. and Canadian requirements
Flammability Rating	94V-2, 94V-0
Temperature Range	-22°F (-30°C) to 221°F (105°C)
IP Rating	IP 66

Quick Specs

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



- Smooth inside for easier wire pulling; no hazardous sharp edges or burrs; will not damage conductors.
- Lightweight and lower installed cost.
- Integral rigid and flexible PVC construction.
- Use with nylon Heyco-Flex Connectors; Straight, Snap-in, or Sweep. See pages 3-9 to 3-11.
- Also use with NPT Quick Twist Fittings. See pages 3-13 and 3-14.
- May also be used with Heyco’s Metallic Fittings for Liquid Tight Conduit. See page 3-12.
- Resists corrosion, abrasion, oil, water, acid, metal shavings, and rough environments.
- Resists abuse, pull, and crushing.
- Approved for direct burial.
- Sunlight resistant.
- Suitable for indoor/outdoor use:
 - HVAC Equipment
 - Machine Tools
 - Marine Equipment
 - Motors and Controls
 - Printing Equipment
 - Pumps
 - Refrigeration Equipment
- Temperature ratings:
 - 80°C (176°F) DRY
 - 70°C (158°F) OIL Resistance
 - 60°C (140°F) WET locations
- Passes submersion test of 70 psi.
- **Voltage rating: 600V.**
- **Mounting brackets are available, see page 3-19.**
- **Order Part No. 8340**, HF-28 Cutting Tool, for cutting Heyco-Flex conduit and tubing cleanly and evenly. See page 3-8.

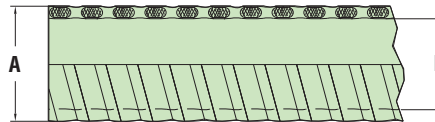
Heyco-Flex™ I Liquid Tight Conduit

Flexible, Nonmetallic Liquid Tight Electrical Conduit

TRADE SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS				STANDARD COIL LENGTH*
	Gray	Black		A Outside Diameter		B Inside Diameter		
				in.	mm.	in.	mm.	ft/coil
3/8	8430	8430B	HF1 3/8	.70	17,8	.49	12,5	100
1/2	8431	8328	HF1 1/2	.83	21,1	.63	16,1	
3/4	8432	8432B	HF1 3/4	1.04	26,4	.83	21,1	
1	8433	8433B	HF1 1	1.30	33,1	1.05	26,8	50
1-1/4	8434	8434B	HF1 1-1/4	1.65	41,8	1.40	35,4	
1-1/2	8435	8435B	HF1 1-1/2	1.88	47,8	1.59	40,3	
2	8436	8436B	HF1 2	2.36	59,9	2.03	51,6	

Standard color gray. Consult Heyco for black and other colors.

*Consult Heyco for Cut to Length Availability.



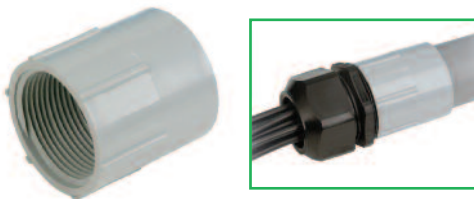
Material	PVC
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E121096 CSA Certified by Canadian Standards Association File 233010
Flammability Rating	VW1
Temperature Range	-.4°F (-18°C) to 167°F (75°C)

Heyco-Flex™ I Female Conduit Adapters

For Heyco Liquid Tight Cordgrips and other NPT Hub Components

TRADE SIZE	PART NO. Gray	DESCRIPTION
1/2	8658	FCA 1/2
3/4	8659	FCA 3/4
1	8660	FCA 1
1-1/4	8661	FCA 1-1/4
1-1/2	8662	FCA 1-1/2
2	8663	FCA 2

- Cement onto HF1 Conduit and **convert the rough cut end into an NPT threaded hub.**
- Allow for the installation of Heyco Liquid Tight Cordgrips (Section 3 in Heyco Catalog 117) as well as other NPT hub parts, onto the end of Heyco-Flex I Conduit.
- **Solar App:** The solar installer can run PV conductors through a **Heyco Solar Masthead/Heyco Flex I assembly**, using a Female Conduit Adapter, from the roof to the field level inverter.



Quick Specs

Material	Schedule 80 PVC
----------	-----------------

“Stay Connected” with



Solar Power Components

a PennEngineering® Company

Heyco-Flex™ II Liquid Tight Tubing

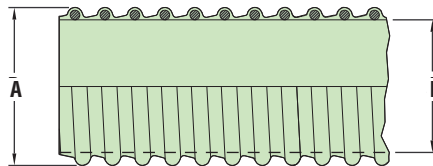
Flexible, Nonmetallic Liquid Tight Electrical Tubing



TRADE SIZE	PART NO. Black	DESCRIPTION	PART DIMENSIONS				STANDARD COIL LENGTH ft/coil
			A Outside Diameter		B Inside Diameter		
			in.	mm.	in.	mm.	
1/4	8449	HF2 1/4	.57	14,4	.40	10,0	100
3/8	8450	HF2 3/8	.70	17,8	.49	12,5	
1/2	8451	HF2 1/2	.83	21,1	.63	16,1	
3/4	8452	HF2 3/4	1.04	26,4	.83	21,1	
1	8453	HF2 1	1.30	33,1	1.05	26,8	
1-1/4	8454	HF2 1-1/4	1.65	41,8	1.40	35,4	
1-1/2	8455	HF2 1-1/2	1.88	47,8	1.59	40,3	50
2	8456	HF2 2	2.36	59,9	2.03	51,6	

Standard color black.
Consult Heyco for Cut to Length Availability.

- Maximum flexibility; can be used in extremely tight quarters.
- Smooth inside for easier wire pulling.
- Lightweight and lower installed cost.
- Integral rigid and flexible PVC construction.
- Use with nylon Heyco-Flex Connectors: Straight, Snap-in, or Sweep. See pages 3-9 to 3-11.
- Also use with Quick Twist Fittings. See pages 3-13 and 3-14.
- 1/4" thru 2" trade sizes.
- Resists corrosion, oil, and water.
- UV resistant.
- Suitable for use in high vibration or flexing applications:
 - Automotive Equipment
 - Computers and Peripherals
 - Fiber Optics
 - Lab Equipment
 - Lasers
 - Office Equipment
 - Processing Control and Monitoring Equipment
 - Robotics
 - White Goods
- Passes submersion test of 70 psi.
- **Voltage Rating: 300V.**
- **Mounting brackets are available, see page 3-19.**
- **Order Part No. 8340**, HF-28 Cutting Tool, for cutting Heyco-Flex tubing and conduit cleanly and evenly.



Material
Certifications

PVC
 Recognized under the Component Program of Underwriters' Laboratories File E121095
 Certified by Canadian Standards Association File 233010
 Flammability Rating
 Temperature Range

VW1
 -.4°F (-18°C) to 158°F (70°C)

Quick
Specs



Heyco-Flex™ Liquid Tight Conduit Fittings

For Flexible, Nonmetallic Liquid Tight Heyco-Flex™ I Conduit and Heyco-Flex™ II Tubing
Straight-Thru, NPT Hubs

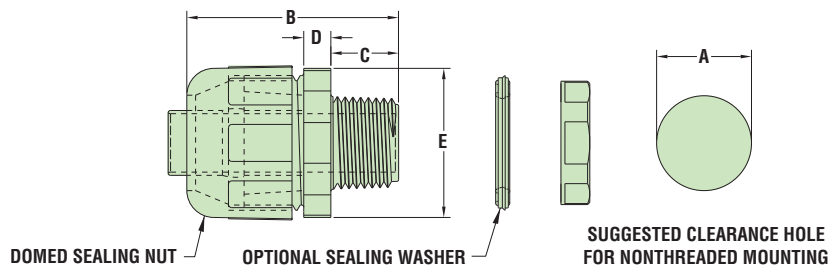
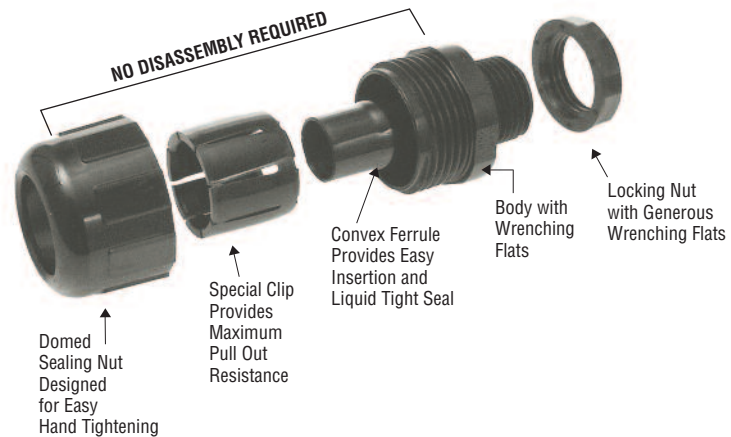
- No disassembly required. Instead, the installer simply pushes the conduit or tubing onto the ferrule, then tightens the domed sealing nut. This completed assembly can then be secured in the panel by the locknut or into an NPT threaded hole.
- Convex ferrule ensures liquid tight seal.
- No threading of the conduit or tubing is required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Complete conduit/connector system is reusable. Conduit will not wind tight onto the connector during assembly and can be easily removed by pulling while turning in a clockwise direction.
- Multiple sizes for use with Heyco-Flex Conduit and Tubing. See pages 3-7 and 3-8.
- Suitable for indoor/outdoor use; for original equipment manufacturers or field installers.
- Use of a sealing washer may be required for wet locations. See page 3-19.
- All nylon construction resists salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL certification and testing.)
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- Black connectors up to 1" provided with nylon locknut, packed separately. O-ring sold separately, see page 3-20.
- Black connectors larger than 1" and all gray connectors provided with assembled O-ring and metal locknuts.
- See pages 3-17 and 3-18 for locknuts.

FITS CONDUIT/TUBING TRADE SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT									
	Black	Gray			A		B		C		D		E	
					Clearance Hole	Max. O.A. Length	Thread Length	Nut Thk.	Wrenching Flat Size					
in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.			
1/4	8398	-	HFC 1/4-PG7*	PG7	.492	12,5	1.13	28,7	.45	11,4	.21	5,3	1.00	25,4
3/8	8400	8401	HFC 3/8	1/2" NPT	.875	22,2	1.96	49,8	.63	16,0	.25	6,3	1.33	33,7
1/2	8402	8403	HFC 1/2		**									
3/4	8404	8405	HFC 3/4	3/4" NPT	1.109	28,1	2.04	52,8	.63	16,0	.25	6,3	1.56	39,6
1	8406	8407	HFC 1	1" NPT	1.375	34,9	2.25	57,2	.78	19,8	.25	6,3	1.81	46,0
1-1/4	8638	8639	HFC 1-1/4	1-1/4" NPT	1.734	44,0	2.07	52,6	.69	17,4	.25	6,3	2.15	54,6
1-1/2	8640	8641	HFC 1-1/2	1-1/2" NPT	1.984	50,4	2.28	57,9	.78	19,8	.28	7,0	2.40	61,0
2	8642	8643	HFC 2	2" NPT	2.469	62,7	2.26	66,0	.85	21,6	.31	7,9	2.98	75,6

Standard colors black and gray.

*Standard color black. Recognized under UL file E121095. For PG 7 thread specification, see page 3-57 in Heyco Catalog 117.

**Fittings use same mounting hole size but attach two different conduit sizes.



Quick Specs

Material	Nylon 6/6
Certifications	<ul style="list-style-type: none"> UL Listed under Underwriters' Laboratories File E28430 CSA Certified by Canadian Standards Association File 84579 and 81067
Flammability Rating	94V-2
Temperature Range	-22°F (-30°C) to 221°F (105°C)
IP Rating	IP 68 up to 70 psi (5 bar) water pressure

“Stay Connected” with



Solar Power Components

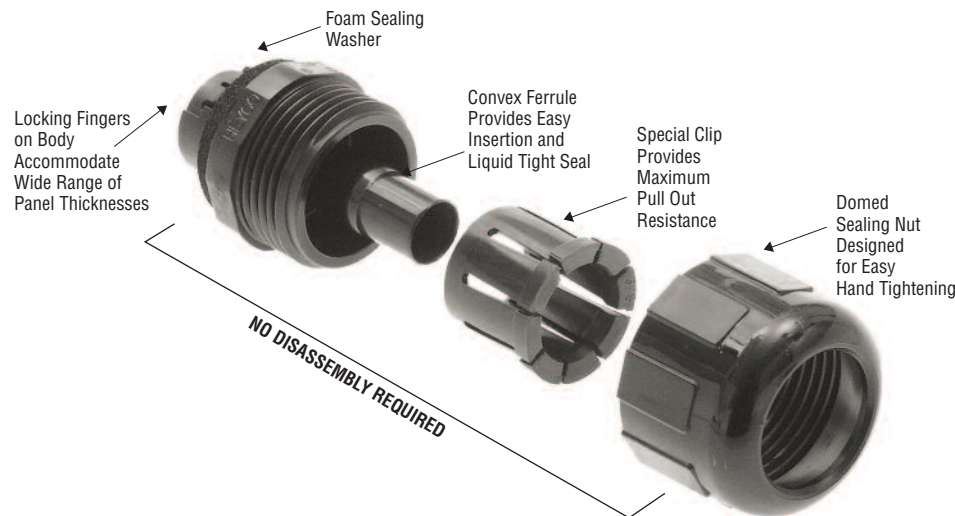
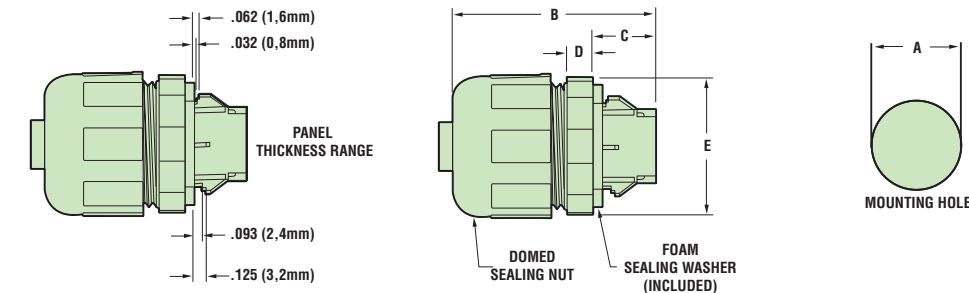
a PennEngineering® Company

Heyco-Flex™ Liquid Tight Conduit Fittings

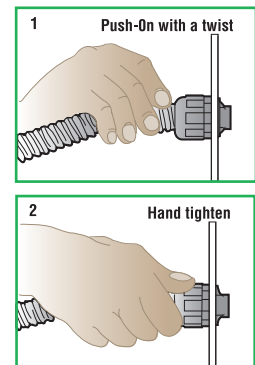
For Flexible, Nonmetallic Liquid Tight Heyco-Flex™ I Conduit and Heyco-Flex™ II Tubing
Straight-Thru, Snap-In Hubs

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS									
			A		B		C		D		E	
			Mounting Hole Dia.		Max O.A. Length		Body Length		Wrenching Nut Thk.		Flat Size	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
1/4	8382	HFC 1/4-S	.500	12,7	1.50	38,1	.45	11,3	.22	5,6	.88	22,2
3/8	8384	HFC 3/8-S	.750	19,0	2.00	50,8	.63	15,9	.25	6,3	1.33	33,7
1/2	8386	HFC 1/2-S	1.000	25,4	2.50	63,5	.75	19,0	.25	6,3	1.56	39,6
3/4	8388	HFC 3/4-S	1.375	34,9	3.00	76,2	.87	22,1	.25	6,3	1.81	45,9
1	8390	HFC 1-S	1.750	44,3	3.75	95,3	1.00	25,4	.25	6,3	2.13	54,1

Standard color black.



- Assembly friendly! The installer simply pushes the conduit or tubing onto the ferrule, then tightens the domed sealing nut. This completed assembly can then be snapped into the panel with fingertip pressure.
- Convex ferrule ensures liquid tight seal.
- No threading of the conduit or tubing required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Complete conduit/fitting system is reusable. Conduit will not wind tight onto the connector during assembly and can be easily removed by pulling while turning in a clockwise direction.
- Multiple sizes for use with Heyco-Flex Conduit and Tubing. See pages 3-7 and 3-8.
- Suitable for indoor/outdoor use; for original equipment manufacturers or field installers.
- Resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL certification or testing.)
- Foam sealing washer **included**.



Material
Certifications

Nylon 6/6

UL Listed under Underwriters' Laboratories File E28430

CS Certified by Canadian Standards Association File 84579 and 81067

Flammability Rating

94V-2

Temperature Range

-22°F (-30°C) to 221°F (105°C)

IP Rating

IP 68 up to 70 psi (5 bar) water pressure

Quick
Specs



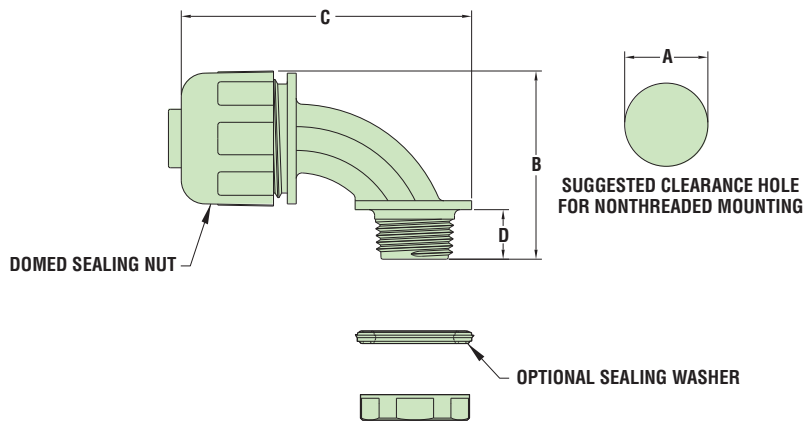
Heyco-Flex™ Liquid Tight Conduit Fittings

For Flexible, Nonmetallic Liquid Tight Heyco-Flex™ I Conduit and Heyco-Flex™ II Tubing
90° Sweep, NPT Hubs

- Smooth internal surfaces for easier wire installation around corner angles.
- **No disassembly required.** Instead, the installer simply pushes the conduit or tubing onto the ferrule, then tightens the domed sealing nut. This completed assembly can then be secured in the panel by the locknut or into an NPT threaded hole.
- Convex ferrule ensures liquid tight seal.
- No threading of the conduit or tubing is required to install. This eliminates the possibility of cutting the conduit and creating leak paths.
- Complete conduit/connector system is reusable. Conduit will not wind tight onto the connector during assembly and can be easily removed by pulling while turning in a clockwise direction.
- Lower installed cost.
- Multiple sizes for use with Heyco-Flex Conduit and Tubing. See pages 3-7 and 3-8.
- Suitable for indoor/outdoor use; for original equipment manufacturers or field installers.
- Resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL certification and testing.)
- Use of a sealing washer may be required for wet locations. See pages 3-19.
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- Black connectors up to 1” provided with nylon locknut, packed separately. O-ring sold separately, see page 3-20.
- Black connectors larger than 1” and all gray connectors provided with assembled O-ring and metal locknut.
- See pages 3-17 and 3-18 for locknuts.

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.		DESCRIPTION	THREAD SIZE	PART DIMENSIONS BODY AND SEALING UNIT							
	Black	Gray			A Clearance Hole		B Max. O.A. Height		C Max. O.A. Length		D Thread Length	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	8423	8424	HFC 3/8-90R	1/2 NPT	.875	22,2	1.98	50,3	2.91	73,9	.52	13,2
1/2	8425	8426	HFC 1/2-90R	1/2 NPT	.875	22,2	1.98	50,3	2.91	73,9	.52	13,2
3/4	8427	8428	HFC 3/4-90R	3/4 NPT	1.109	28,1	2.29	58,2	3.17	80,5	.52	13,2
1	8412	8413	HFC 1-90R	1 NPT	1.375	34,9	2.83	71,9	3.96	100,6	.69	17,5
1-1/4	8652	8653	HFC 1-1/4-90R	1-1/4 NPT	1.734	44,0	4.10	104,1	4.73	104,1	.76	19,3
1-1/2	8654	8655	HFC 1-1/2-90R	1-1/2 NPT	1.984	50,4	4.75	120,7	5.20	132,1	.80	20,3
2	8656	8657	HFC 2-90R	2 NPT	2.469	62,7	5.42	137,7	5.80	147,3	.86	21,8

Standard colors black and gray.



Quick
Specs

Material
Certifications

Nylon 6/6
 Listed under Underwriters' Laboratories File E28430
 Certified by Canadian Standards Association
 File 84579 and 81067

Flammability Rating
 Temperature Range
 IP Rating

94V-2
 -22°F (-30°C) to 221°F (105°C)
 IP 68 up to 70 psi (5 bar) water pressure

“Stay Connected” with



Solar Power Components

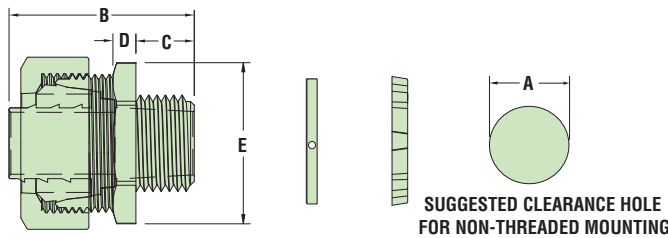
a PennEngineering® Company

Heyco-Flex™ Zinc Die-Cast Liquid Tight Conduit Fittings

For use with Nonmetallic Heyco-Flex™ I Electrical Conduit
Straight-Thru, NPT Hubs



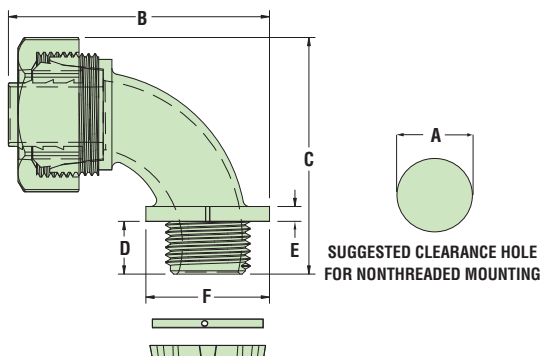
FITS CONDUIT/ TUBING TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS BODY AND SEALING UNIT									
			A Clearance Hole		B Max. O.A. Length		C Thread Length		D Wrenching Nut Thk.		E Flat Size	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
NEW! 3/8	9786	HFC-Z 3/8	.890	22,6	1.27	32,3	.49	12,3	.16	4,1	1.19	30,1
1/2	9794	HFC-Z 1/2	.890	22,6	1.27	32,3	.49	12,3	.16	4,1	1.19	30,1
3/4	9795	HFC-Z 3/4	1.109	28,1	1.37	34,8	.50	12,6	.19	4,7	1.50	38,1
1	9793	HFC-Z 1	1.375	34,9	1.67	42,4	.58	14,7	.16	4,1	1.69	42,9
NEW! 1-1/4	9787	HFC-Z 1-1/4	1.734	44,0	2.06	52,3	.61	15,5	.20	4,1	1.73	44,0
NEW! 1-1/2	9788	HFC-Z 1-1/2	1.984	50,4	2.09	53,0	.63	16,0	.21	5,2	2.20	55,9
NEW! 2	9789	HFC-Z 2	2.469	62,7	2.15	54,6	.63	16,0	.21	5,2	3.03	76,9



- Cost effective die-cast zinc construction provides durability and resists rough environments.
- Liquid Tight when used with Heyco-Flex™ I Liquid Tight Conduit. See Page 3-7.
- Provide smooth connection, no sharp edges to strip wire.
- Suitable for outside, inside, and industrial uses including transformer connections, air conditioning, and heating.
- Suitable for use in both wet and dry location.
- Fit the most common sizes of nonmetallic liquid tight conduit.
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- Supplied with locknut and plastic sealing ring.
- DFARS Compliant

90° Sweep, NPT Hubs

FITS CONDUIT/ TUBING TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS BODY AND SEALING UNIT											
			A Clearance Hole		B Max. O.A. Length		C Max. O.A. Height		D Thread Length		E Wrenching Nut Thk.		F	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
NEW! 3/8	9790	HFC-Z 3/8-90	.890	22,6	2.53	76,9	2.11	53,6	.53	13,5	.16	4,1	1.19	30,1
1/2	9796	HFC-Z 1/2-90	.890	22,6	2.35	59,6	2.12	53,8	.52	13,2	.11	2,8	1.14	30,0
NEW! 3/4	9797	HFC-Z 3/4-90	1.109	28,1	2.79	70,9	2.47	62,5	.55	14,0	.19	4,7	1.50	38,1
NEW! 1	9791	HFC-Z 1-90	1.375	34,9	3.86	98,0	3.46	87,9	.58	14,7	.16	4,1	1.69	42,9
NEW! 1-1/4	9792	HFC-Z 1-1/4-90	1.734	44,0	3.99	101,3	3.37	85,6	.67	9,4	.20	4,1	1.73	44,0
NEW! 1-1/2	9798	HFC-Z 1-1/2-90	1.984	50,4	5.04	128,0	4.28	108,7	.61	15,5	.21	5,2	2.20	55,9
NEW! 2	9799	HFC-Z 2-90	2.469	62,7	5.06	128,5	4.21	106,9	.71	18,0	.21	5,4	3.03	76,9



Material
Certifications

Die cast zinc
UL Listed under UL File E103541

Quick
Specs



Heyco-Flex™ Quick Twist Conduit Fittings

For use with Heyco-Flex™ II Tubing
Straight-Thru, Snap-In and NPT Hubs

- One-piece solution with smooth internal surfaces provides for easier wire routing, protection, and installation.
- Easy, permanent assembly: the installer twists the tubing over the connector ferrule.
- Unique locking fingers accommodate various panel thicknesses.
- All nylon construction is resistant to salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL certification and testing.)
- Suitable for a wide array of electrical applications:
 - Commercial and Industrial HVAC Systems
 - Motorized Equipment
 - Enclosed Power Sources
 - Garage Door Openers
 - Major Appliances
- Finishing collars available to neaten rough cut tubing ends.
- Assembly Tool available for assembling Quick Twist Fittings into HF1 and HF2 Conduit and Tubing (see page 3-14)

Snap-In Hubs

- Snap-in Fittings are UL recognized for use with Heyco-Flex II Tubing.
- Suitable for dry location only.

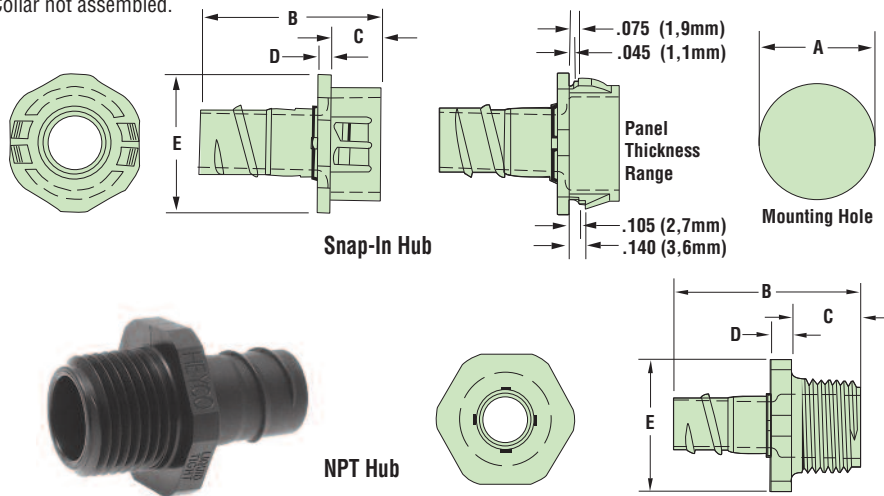
NPT Hubs

- NPT threaded fittings are UL approved for use with Heyco-Flex I & II Conduit and Tubing.
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- **Locknuts not included.** To order nylon or metal locknuts separately, see pages 3-17 and 3-18.
- See page 3-20 for O-Rings.

FITS TUBING TRADE SIZE	PART NO.			DESCRIPTION	PART DIMENSIONS									
	Black	Black w/ Finishing Collar*	Gray		A Mounting Hole Dia.		B Overall Length		C Body Length		D Wrenching Nut Thickness		E Wrenching Nut Flat Size	
					in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
Snap-In Hubs - For use with Heyco-Flex™ II Tubing														
1/4	8515	–	8516	HFC 1/4-S-Twist	.540	13,7	1.33	33,8	.34	8,7	.09	2,3	.75	19,1
3/8	8485	8485FC	8486	HFC 3/8-S-Twist	.875	22,2	1.38	35,0	.39	9,9	.09	2,3	1.00	25,4
1/2	8490	8490FC	8491	HFC 1/2-S-Twist										
3/4	8495	8495FC	8496	HFC 3/4-S-Twist	1.109	28,2	1.50	38,0	.39	9,9	.09	2,3	1.25	31,8
NPT Hubs - For use with Heyco-Flex™ I and II Conduit and Tubing														
1/4	8517	–	8518	HFC 1/4-Twist	.540	13,7	1.56	39,6	.47	11,8	.20	5,1	.75	19,1
3/8	8487	8487FC	8488	HFC 3/8-Twist	.875	22,2	1.72	43,7	.63	15,9	.20	5,1	1.18	30,0
1/2	8493	8493FC	8494	HFC 1/2-Twist										
3/4	8497	8497FC	8498	HFC 3/4-Twist	1.109	27,8	1.84	46,7	.63	15,9	.20	5,1	1.37	34,8

Standard colors black and gray.

*Collar not assembled.



Heyco-Flex™ Quick Twist Finishing Collars

For use with Heyco-Flex™ I and II Conduit



FITS CONDUIT/ TRADE SIZE	PART NO.		DESCRIPTION
	Black	Gray	
3/8	8474	8482	HFC TWIST 3/8 COLLAR
1/2	8475	8483	HFC TWIST 1/2 COLLAR
3/4	8476	8484	HFC TWIST 3/4 COLLAR

Standard colors black and gray. Consult Heyco for other colors. (Not available in 1/4”).

Material	Nylon 6/6
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E121095 (Snap-in Hubs)
	UL Listed under Underwriters' Laboratories File E28430 (NPT Hubs)
Flammability Rating	94V-2
Temperature Range	-22°F (-30°C) to 221°F (105°C)

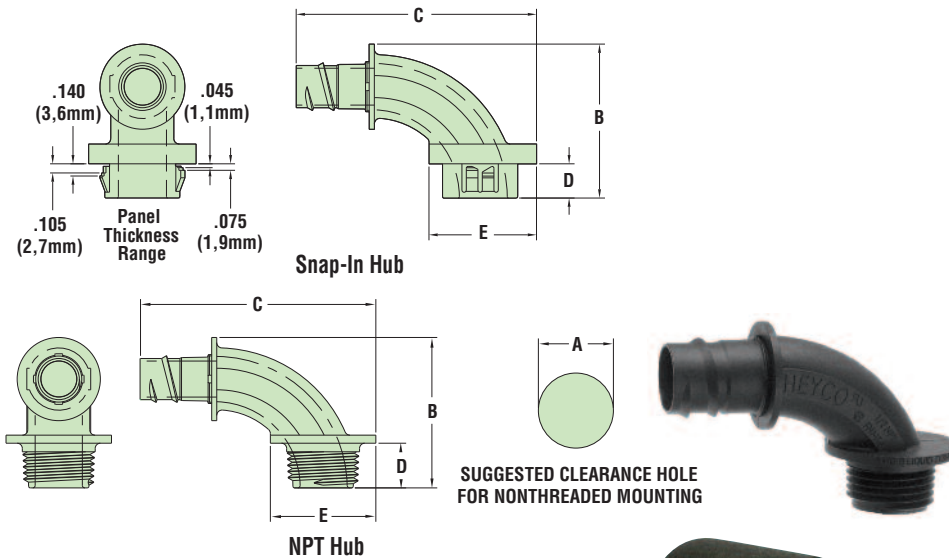
Heyco-Flex™ Quick Twist Conduit Fittings

For use with Heyco-Flex™ I and II Conduit and Tubing

90° Sweep, Snap-In and NPT Hubs

FITS TUBING TRADE SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS										
	Black	Gray		A		B		C		D		E		
				Mounting Hole Dia.	Max O.A. Height	Max O.A. Length	Hub Length	Flange Dia.	in.	mm.	in.	mm.	in.	mm.
Snap-In Hubs - For use with Heyco-Flex™ II Tubing only														
3/8	8500	8501	HFC 3/8-S-90-Twist	.875	22,2	1.75	44,6	2.75	69,8	.39	9,9	1.23	31,2	
1/2	8505	8506	HFC 1/2-S-90-Twist											
3/4	8510	8511	HFC 3/4-S-90-Twist	1.109	28,2	1.97	50,0	3.08	78,3	.39	9,9	1.50	38,1	
NPT Hubs - For use with Heyco-Flex™ I and II Conduit and Tubing														
3/8	8502	8503	HFC 3/8-90-Twist	.875	22,2	1.75	44,6	2.75	69,8	.51	13,2	1.23	31,2	
1/2	8507	8508	HFC 1/2-90-Twist											
3/4	8512	8513	HFC 3/4-90-Twist	1.109	28,2	2.11	53,5	3.08	78,3	.53	13,5	1.50	38,1	

Standard colors black and gray. Consult Heyco for other colors.



Heyco® Quick Twist Assembly Tool

For use with Heyco-Flex™ Quick Twist Fittings

PART NO.	THREAD SIZE	Hub Type
0055	3/8 & 1/2	Snap-In
0056	3/4	
0057	3/8 & 1/2	NPT
0058	3/4	

Material	Nylon 6/6
Certifications	Recognized under the Component Program of Underwriters' Laboratories File E121095 (Snap-in Hubs) UL Listed under Underwriters' Laboratories File E28430 (NPT Hubs)
Flammability Rating	94V-2
Temperature Range	-22°F (-30°C) to 221°F (105°C)



- One-piece solution with smooth internal surfaces provides for easier wire routing, protection, and installation around corner angles.
- Easy, permanent assembly: the installer twists the tubing over the connector ferrule.
- Unique locking fingers accommodate various panel thicknesses.
- All nylon construction is resistant to salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents. (This feature is not assessed by UL certification and testing.)
- Suitable for a wide array of electrical applications:
 - Commercial and Industrial HVAC Systems
 - Motorized Equipment
 - Enclosed Power Sources
 - Garage Door Openers
 - Major Appliances
- Finishing collars available to neaten rough cut tubing ends (see page 3-13).
- Assembly Tool available for assembling Quick Twist Fittings into HF1 and HF2 Conduit and Tubing.

Snap-In Hubs

- Snap-in Fittings are UL recognized for use with Heyco-Flex II Tubing.
- Suitable for dry location only.

NPT Hubs

- NPT threaded fittings are UL approved for use with Heyco-Flex I & II Conduit and Tubing.
- If using a tapped hole, Teflon® tape is needed on the threads of the connector, for all other applications an O-ring and Locknut are needed to attain liquid tight.
- **Locknuts not included.** To order nylon or metal locknuts separately, see pages 3-17 and 3-18.
- See page 3-20 for O-Rings.

Quick Specs

“Stay Connected” with



Solar Power Components

a PennEngineering® Company



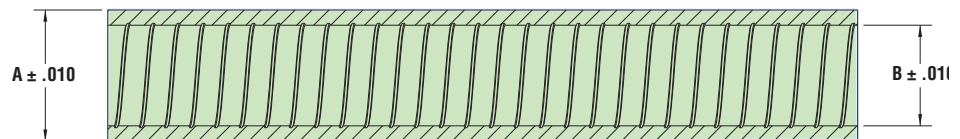
Heyco-Flex™ VI Liquid Tight Conduit

Flexible, Metal Liquid Tight Electrical Conduit (LFMC)

- Constructed of PVC jacketed, continuously interlocked hot dipped zinc galvanized steel core for exceptional crush and corrosion resistance.
- Used with standard liquid-tight fittings (page 3-16) for easy installation.
- IP 67 Rated when installed with approved connectors.
- Durable, sunlight resistant and flame retardant thermoplastic PVC jacket that resists heat, oil, and chemical breakdown.
- Approved for both exposed and concealed locations, direct burial and in concrete.
- Approved as an equipment grounding conductor if the total grounding path is 6 ft. or less and the circuit conductors are protected by over 20 amps for 3/8" and 1/2" and 60 amps or less for 3/4" through 1-1/4".
- Suitable for use in hazardous locations per NEC Articles 501 Class I Div. 2, Article 502 Class II Div. 1 & 2, Article 503 Class III Div. 1 & 2.
- Complies with UL Standard 360 File No. E18917; CSA C22.2 File No. 158897; and NEC Article 350.
- DFARS Compliant

TRADE SIZE	PART NO. Gray	DESCRIPTION	PART DIMENSIONS				STANDARD COIL LENGTH
			A Outside Diameter		B Inside Diameter		
			in.	mm.	in.	mm.	
3/8	8457	HF6 3/8 LFMC	.70	17,8	.49	12,5	100
1/2	8458	HF6 1/2 LFMC	.83	21,1	.63	16,1	
3/4	8459	HF6 3/4 LFMC	1.04	26,4	.83	21,1	
1	8460	HF6 1 LFMC	1.30	33,1	1.04	26,4	

Standard color gray. Consult Heyco for black and other colors.



Quick Specs

Material	PVC jacket with zinc galvanized steel core
Certifications	Listed under the Component Program of Underwriters' Laboratories File E469210 Certified by Canadian Standards Association File 260992
Temperature Range	-4°F (-20°C) to 140°F (60°C)

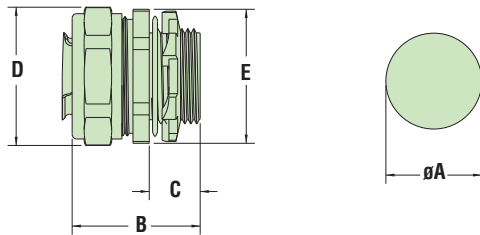
Heyco-Flex™ VI Liquid Tight Conduit Fittings

Nickel-plated Brass Construction

Straight-Thru, NPT Hubs



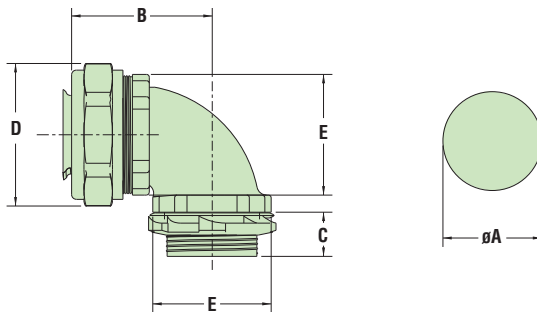
TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS									
			A Clearance Hole		B Max O.A. Length		C Thread Length		D Wrenching Nut Flat Size		E Wrenching Flat Size	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	4028	HF6C 3/8	.874	22,2	1.38	35,0	.55	14,0	1.02	26,0	.95	24,0
1/2	4029	HF6C 1/2	.874	22,2	1.42	36,0	.55	14,0	1.14	29,0	1.06	27,0
3/4	4030	HF6C 3/4	1.040	26,4	1.46	37,0	.55	14,0	1.38	35,0	1.30	33,0
1	4031	HF6C 1	1.327	33,7	1.58	40,0	.63	16,0	1.77	45,0	1.65	42,0



- Designed with an insulated throat to prevent wire damage during installation.
- Excellent corrosion resistance, strength, and durability.
- Connector is ideal for use with standard liquid-tight conduit to allow easy installation. IP 66/67 rated when installed with approved conduit.
- Approved for both exposed and concealed locations.
- Suitable for harsh industrial, food and beverage, petro-chemical, waste water, salt water, and other corrosive applications.
- Suitable for use in hazardous locations per NEC Articles 501 Class I Div. 2, Article 502 Class II Div. 1 & 2, Article 503 Class III Div. 1 & 2.
- Complies with UL Standard 360 File No. E18917; CSA C22.2 File No. 158897; and NEC Article 350.
- DFARS Compliant

90° Sweep, NPT Hubs

TRADE SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS									
			A Clearance Hole		B Max O.A. Length		C Thread Length		D Wrenching Nut Flat Size		E Wrenching Flat Size	
			in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.
3/8	4032	HF6C 3/8-90	.874	22,2	1.18	30,0	.55	14,0	1.02	26,0	.95	24,0
1/2	4033	HF6C 1/2-90	.874	22,2	1.38	32,0	.55	14,0	1.14	29,0	1.06	27,0
3/4	4034	HF6C 3/4-90	1.040	26,4	1.42	36,0	.55	14,0	1.38	35,0	1.30	33,0
1	4035	HF6C 1-90	1.327	33,7	1.93	49,0	.63	16,0	1.77	45,0	1.65	42,0



Material

Nickel Plated Brass with a PA6 clamping ring, galvanized steel ferrule and locknut and NBR rubber washer

Certifications



Certified by Underwriters' Laboratories for Compliance with both Canadian and U.S. requirements under File E234207

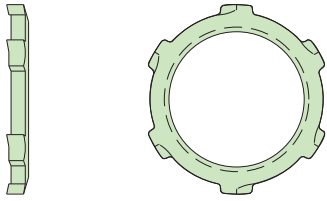
Temperature Range

-45°F (-45°C) to 221°F(105°C)

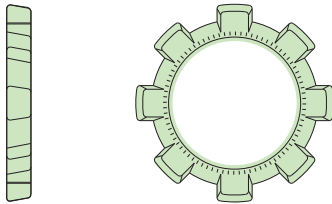
Quick Specs



• DFARS Compliant



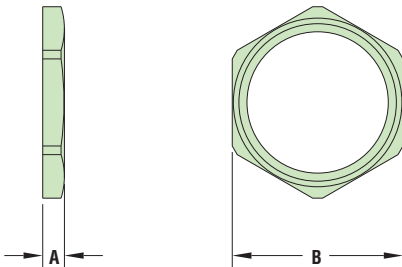
Stamped Steel Nut



Zinc Die-cast Nut



Nickel-Plated Brass



Heyco® Metal Locknuts

NPT Thread—Straight NPS Threads for use with NPT Threaded Fittings

THREAD TYPE AND SIZE	STAMPED STEEL		ZINC DIE-CAST	
	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
1/4 NPT	2238	LN 1/4*	-	-
3/8 NPT	2242	LN 3/8*	-	-
1/2 NPT	2250	LN 1/2	9800	LN 1/2 DC
3/4 NPT	2251	LN 3/4	9801	LN 3/4 DC
1 NPT	2252	LN 1	9802	LN 1 DC
1-1/4 NPT	9806	LN 1-1/4	9803	LN 1-1/4 DC
1-1/2 NPT	9807	LN 1-1/2	9804	LN 1-1/2 DC
2 NPT	9808	LN 2	9805	LN 2 DC
2-1/2 NPT	9809	LN 2-1/2	-	-
3 NPT	9810	LN 3	-	-

*Wrenching flats are not crenellated

PG Thread—Nickel-Plated Brass

THREAD TYPE AND SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS			
			A		B	
			Thickness		Wrenching Flats	
			in.	mm.	in.	mm.
PG 7	2257	Brass LN PG 7	.110	2,8	.591	15,0
PG 9	2258	Brass LN PG 9	.110	2,8	.709	18,0
PG 11	2259	Brass LN PG 11	.118	3,0	.827	21,0
PG 13.5	2260	Brass LN PG 13	.118	3,0	.906	23,0
PG 16	2261	Brass LN PG 16	.118	3,0	1.024	26,0
PG 21	2262	Brass LN PG 21	.138	3,5	1.261	32,0
PG 29	2263	Brass LN PG 29	.158	4,0	1.615	41,0
PG 36	2268	Brass LN PG 36	.197	5,0	2.009	51,0
PG 42	2269	Brass LN PG 42	.197	5,0	2.364	60,0

Metric Thread—Nickel-Plated Brass

THREAD TYPE AND SIZE	PART NO.	DESCRIPTION	PART DIMENSIONS			
			A		B	
			Thickness		Wrenching Flats	
			in.	mm.	in.	mm.
M6 x 1	2243	Brass LN M6	.110	2,8	.354	9,0
M8 x 1,25	2244	Brass LN M8	.110	2,8	.433	11,0
M10 x 1,5	2245	Brass LN M10	.110	2,8	.512	13,0
M12 x 1,5	2246	Brass LN M12	.118	3,0	.591	15,0
M16 x 1,5	2247	Brass LN M16	.118	3,0	.748	19,0
M20 x 1,5	2248	Brass LN M20	.138	3,5	.945	24,0
M25 x 1,5	2249	Brass LN M25	.138	3,5	1.181	30,0
M32 x 1,5	2253	Brass LN M32	.177	4,5	1.417	36,0
M40 x 1,5	2254	Brass LN M40	.177	4,5	1.811	46,0
M50 x 1,5	2255	Brass LN M50	.217	5,5	2.165	55,0

Heyco® Nylon Locknuts

NPT Thread—Straight NPS Threads for use with NPT Threaded Fittings

THREAD TYPE AND SIZE	PART NO. BULK		PART NO. 100 PACK		DESCRIPTION	PART DIMENSIONS			
	Black	Gray	Black	Gray		A		B	
						Thickness	Wrenching Flats	Thickness	Wrenching Flats
in.	mm.	in.	mm.	in.	mm.	in.	mm.		
1/4 NPT	M9142	M9143	3269	3270	NLN 1/4 NPT	.265	6,7	.748	19,0
3/8 NPT	8461	8462	3271	3272	NLN 3/8 NPT	.265	6,7	1.058	26,9
1/2 NPT	8463	8464	3273	3274	NLN 1/2 NPT	.265	6,7	1.058	26,9
3/4 NPT	8465	8466	3275	3276	NLN 3/4 NPT	.265	6,7	1.295	32,9
1 NPT	8467	8468	3277	3278	NLN 1 NPT	.265	6,7	1.605	40,8
1-1/4 NPT	M9144	M9145	3279*	—	NLN 1-1/4 NPT	.281	7,1	1.968	50,0
1-1/2 NPT	M9150	M9151	—	—	NLN 1-1/2 NPT	.320	8,1	2.735	69,5
2 NPT	M9156	M9157	—	—	NLN 2 NPT	.375	9,5	2.835	72,0

Standard colors black or gray.

*PN 3279 is a 50 Pack.

PG Thread

THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
	Black	Gray		A		B	
				Thickness	Wrenching Flats	Thickness	Wrenching Flats
in.	mm.	in.	mm.	in.	mm.	in.	mm.
PG 7	3165	3166	NLN PG 7	.218	5,5	.750	19,1
PG 9	3167	3168	NLN PG 9	.218	5,5	.859	21,8
PG 11	3169	3170	NLN PG 11	.218	5,5	.937	23,8
PG 13.5	3171	3172	NLN PG 13.5	.250	6,4	1.062	27,0
PG 16	3173	3174	NLN PG 16	.250	6,4	1.171	29,7
PG 21	3175	3176	NLN PG 21	.281	7,1	1.406	35,7
PG 29	3177	3178	NLN PG 29	.281	7,1	1.812	46,0
PG 36	M9146	M9147	NLN PG 36	.281	7,1	2.244	56,9
PG 42	M9152	M9153	NLN PG 42	.320	8,1	2.750	69,9
PG 48	M9158	M9159	NLN PG 48	.375	9,5	2.835	72,0

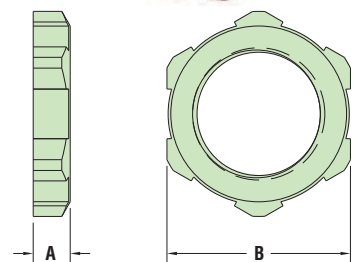
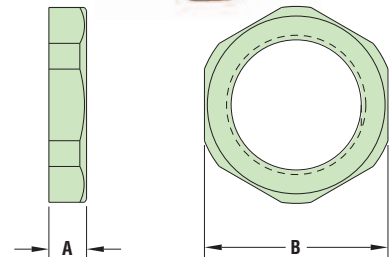
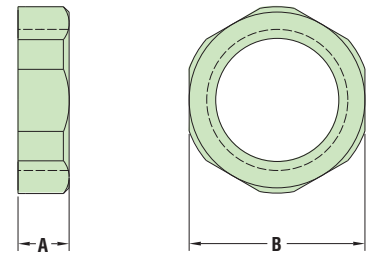
Standard colors black or gray.

Metric Thread

THREAD TYPE AND SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS			
	Black	Gray		A		B	
				Thickness	Wrenching Flats	Thickness	Wrenching Flats
in.	mm.	in.	mm.	in.	mm.	in.	mm.
M12	M9130	M9131	NLN M12	.218	5,5	.750	19,1
M16	M9132	M9133	NLN M16	.218	5,5	.870	22,1
M20	M9134	M9135	NLN M20	.245	6,2	1.062	27,0
M25	M9136	M9137	NLN M25	.281	7,1	1.378	35,0
M32	M9138	M9139	NLN M32	.281	7,1	1.614	41,0
M40	M9140	M9141	NLN M40	.281	7,1	1.968	50,0
M50	M9148	M9149	NLN M50	.320	8,1	2.750	69,9
M63	M9154	M9155	NLN M63	.375	9,5	2.850	72,4

Standard colors black or gray.

Material	Nylon 6/6
Flammability Rating	94V-2 Standard—Consult Heyco for VO material
Temperature Range	-22°F (-30°C) to 221°F (105°C)



Quick Specs

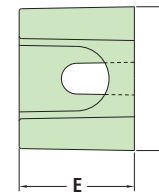
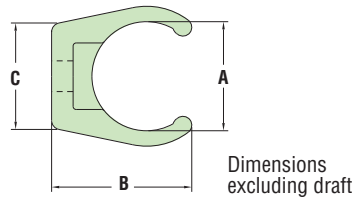


Heyco-Flex™ Mounting Brackets

- For mounting Heyco-Flex Conduit or Tubing securely into place, vertically or horizontally. See pages 3-1, 3-7, and 3-8.
- Only fingertip pressure is required to snap conduit or tubing into bracket.
- Low profile design for space savings and pleasing appearance.
- Recommended distance between brackets at intervals not greater than 3 feet (1m) as required by Article 351-27 of 1996 NEC.
- Use one standard #10 (4-5M) screw for attaching bracket to panel (screw not included).
- Resist salt water, weak acids, gasoline, alcohol, oil, grease, and common solvents.

FITS CONDUIT/TUBING SIZE	PART NO.		DESCRIPTION	PART DIMENSIONS									
	Black	Gray		A		B		C		D		E	
				Inside Dia.	mm.	Length	mm.	Height	mm.	Outside Dia.	mm.	Width	mm.
3/8	1025	1026	HFB 3/8	.66	16,9	.91	23,2	.72	18,2	.90	22,9	.75	19,1
1/2	1027	1028	HFB 1/2	.79	20,0	1.07	27,3	.71	18,0	1.06	26,8		
3/4	1029	1030	HFB 3/4	1.05	26,7	1.27	32,2	.67	17,0	1.31	33,2		
1	1031	1032	HFB 1	1.24	31,5	1.52	38,6	.84	21,3	1.53	38,9		

Standard color black or gray.



Dimensions excluding draft

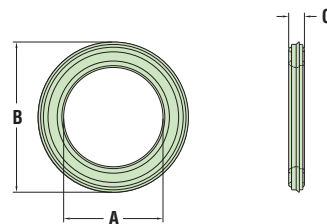


Heyco® Sealing Washers

- For use with Heyco-Flex fittings.
- Liquid tight, dust tight, and oil tight at enclosure.
- Suitable for wet locations requiring a separate gasket between the box and fitting.
- Also suitable for other panel sealing applications.
- Easy to install since washers seal off on the perimeter, not on the connector threads.
- Special double sealing ridges compensate for minor unevenness at enclosure.

Will Fit These Electrical Fitting NPT Trade Sizes	PART NO.	DESCRIPTION	PART DIMENSIONS					
			A		B		C	
			Inside Diameter	mm.	Outside Diameter	mm.	Thickness	mm.
1/4	3258	SW 1/4	.54	13,7	.80	20,2	.13	3,2
3/8	3259	SW 3/8	.67	17,0	1.01	25,5		
1/2	3260	SW 1/2	.85	21,6	1.24	31,5		
3/4	3261	SW 3/4	1.03	26,2	1.50	38,1	.14	3,4
1	3262	SW 1	1.28	32,5	1.77	45,0	.18	4,6
1-1/4	3264	SW 1-1/4	1.66	42,2	2.16	54,8	.16	4,1
1-1/2	3265	SW 1-1/2	1.86	47,2	2.44	62,0		
2	3257	SW 2	2.32	58,9	2.93	74,4	.18	4,6

Standard color black.



Quick Specs

Material	HFB - Nylon 6/6	SW - Thermoplastic Elastomer
Flammability Rating	HFB - 94V-2	SW - 94V-0
Temperature Range	-22°F (-30°C) to 221°F (105°C)	



Heyco® Foam Washers

Will Fit These Electrical Fitting NPT Trade Sizes	PART NO. Black	DESCRIPTION	PART DIMENSIONS					
			A Inside Dia.		B Outside Dia.		C Thickness	
			in.	mm.	in.	mm.	in.	mm.
.125" (3,2 mm) Thickness								
1/4	1970	HFW 500	.500	12,7	.820	20,8	.125	3,2
-	1971	HFW 625	.625	15,9	.940	23,9		
-	1972	HFW 750	.750	19,1	1.060	26,9		
1/2	1973	HFW 875	.875	22,2	1.185	30,1		
NEW!	1980	HFW 875 DD*						
-	1974	HFW 1000	1.000	25,4	1.390	35,3		
3/4	1982	HFW 1125	1.125	28,6	1.515	38,5		
NEW!	1981	HFW 1125 DD*						
-	1983	HFW 1250	1.250	31,8	1.875	47,6		
1	1998	HFW 1375	1.375	34,9	2.000	50,8		
.190" (4,8 mm) Thickness								
1/4	1975	HFW 1/4	.480	12,2	.860	21,8	.190	4,6
1/2	1977	HFW 1/2	.840	21,3	1.200	30,5		
3/4	1978	HFW 3/4	1.050	26,7	1.500	38,1		
1	1979	HFW 1	1.300	33,0	1.700	43,2		

- For use with Heyco-Flex fittings.
- Provide additional degree of protection for a variety of fittings.
- Compensate for non-ideal mounting surfaces in application.

Standard color black.

*Feature flats across ID: PN 1980 - .750" (19,1 mm), PN 1981 - .965" (24,5 mm)

Heyco® Thermoplastic Rubber O-Rings

Will Fit These Electrical Fitting NPT Trade Sizes	PART NO. Black	DESCRIPTION	PART DIMENSIONS					
			A Inside Dia.		B Outside Dia.		C Thickness	
			in.	mm.	in.	mm.	in.	mm.
1/2	1995	ROR 1/2	.860	21,8	1.140	28,9	.140	3,5
3/4	1996	ROR 3/4	1.050	26,7	1.320	33,5		
1	1997	ROR 1	1.300	32,9	1.570	39,9		

Standard color black.

Consult Heyco for 1-1/4", 1-1/2" and 2" Electrical Trade and other sizes.



- For use with Heyco-Flex fittings mounted in non-threaded holes.
- Liquid tight, dust tight and oil tight at enclosure.
- Suitable for wet locations requiring a separate gasket between the fitting and enclosure.
- Resistant to petroleum oil, mineral oil and grease, diesel fuel, weak acids, alkali, and salt solutions.

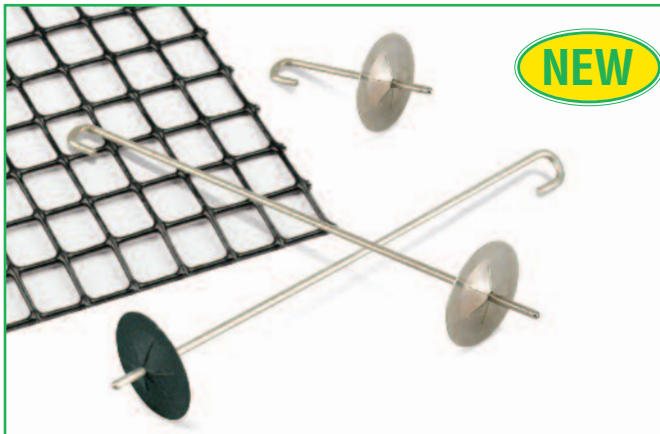
Material	HFW EPDM	ROR Buna-N (Nitrile Rubber NBR)
Temperature Range	-4°F (-20°C) to 140°F (60°C)	-30°F (-34°C) to 212°F (100°C)

Quick
Specs

Heyco® Solar Power Components LabKit #9 (Part No. 3000)

Use Heyco LabKits!

- Heyco LabKits are perfect for product design departments, experimental labs, and for all prototype work.
- The Heyco Solar Power Components LabKit #9 contains an assortment of our most popular Solar Panel Connectors, Cordgrips, Clips and other accessories.
- Heyco also offers LabKits for Liquid Tight Cordgrips, Strain Relief Bushings, Hole Plugs, HEYware, and Grommets.
- Parts in LabKits are available in various sizes and colors. Please consult Heyco for further information.



Heyco® SunScreenKit™

36 pieces of PART NO. **S6437** SunScreen Clips bundled together with one 100' Roll of SunScreen Wire Mesh

For Clip and Screen product details, see page 1-31

KIT NO.	CLIP QTY.	MESH	
		Width in.	Length ft.
S6465	36	4	100' Roll
S6467	36	6	
S6469	36	8	



Please visit heycosolar.com
for details on Heyco's Twenty Year
Solar Products Warranty

www.HeycoSolar.com



a **PennEngineering®** Company

“Stay Connected with Heyco” Power Components

Phone: 732.286.1800 • Toll Free: 800.526.4182
Fax: 732.244.8843 • Toll Free Fax: 800.358.7904

www.heyco.com
www.heycosolar.com

©Copyright, Heyco Products Corp., 2017 Rev. 8/17 Printed in USA

Heyco®-Tite, Solar Masthead®, HEYClip™, SunRunner®, SunRunner® EZ™, SunRunner 4™, MaxRunner®, SunBundler®, SunWrap™, LugRunners™, SunJumpers™, SunClamp™, SunStars™, SunScreener®, SunScreen™, Nytye®, HEYbrid™, HEYCo-molded™, HEYClean™, and Heyco-Flex™ are trademarks/registered trademarks of Heyco Products Corp.