

SOLAR PRODUCTS



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HeliosFuse

Amphenol Technical Products International (ATPI) offers products and solutions for all segments of the solar electric system. ATPI understands the need for efficient (low loss) power transfer, highly reliable, and cost effective solutions that are required to be competitive in this industry. We can provide panel manufactures, installer, and OEM's with connectivity products for both thin film and crystalline silicon technologies.

ATPI's molded in-line fuse, HeliosFuse, provides a quick solution for installing in-line solar fuses. The molded construction provides weather tight housing preventing moisture from getting to the fuse construction. The in-line fuse provides the needed electrical protection to prevent damage to the solar array should a ground fault occur. HeliosFuse is currently offered in our custom wire harnesses.

Amphenol Technical Products International can help you power the planet with the sun. The HeliosFuse is just one of the solar solutions Amphenol Technical Products International has to offer.

HeliosFuse

Features

- 1A to 30A current rating
- 1500V (1000V compatible)
- IP68 protection degree
- Meets UL94-0V0 flammability rating
- UL4248-1 & UL4248-19 recognized
- UL9703 listed
- RETIE compliance

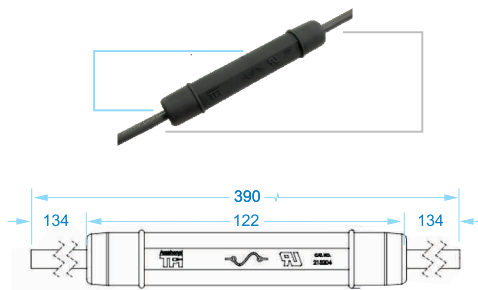


1500V HeliosFuse

Specifications

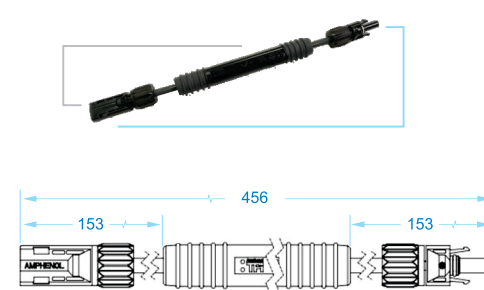
Description	1500V HeliosFuse
Rated Voltage Fuse	1500V
Rated Current Fuse	2.5A, 3.5A, 4A, 6A, 8A, 10A, 12A, 15A, 20A, 25A, 30A
Connector Options	UL Listed Connectors: H4, H4 Plus, MC4, EVO2, PV4-S1
Cable Size Options	12AWG or 10AWG or 8AWG 2kV PV Wire
Ingress Protection Degree	IP68 (1 Meter, 1 Hour)
Ambient Temperature Range	-40°C to 50°C
Material Safety	RoHS2 Compliant
Flammability Classifications	UL94-V0
Outdoor Suitability	UV Resistance, F1 Rated
Approvals	UL4248-1; UL4248-18 Recognized (File#: E352863) UL9703 Listed (File#: E498904)

1500V 2.5A-4A FUSE



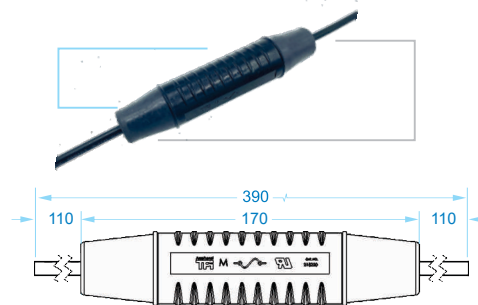
1500V FUSE/4A/12AWG/BLUNT CUT
END TO END CABLE LENGTH 390MM
(PART NUMBER: **2421000**)

1500V 5A-15A FUSE



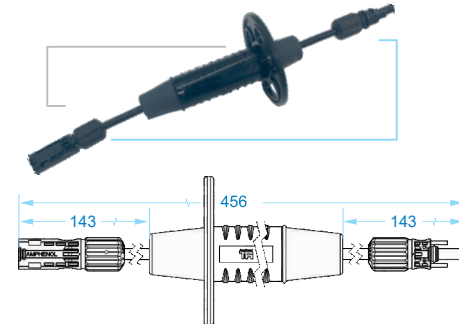
1500V FUSE/15A/10AWG/H4 M-F
END TO END CABLE LENGTH 390MM
(456MM REF OVERALL W/CONNECTORS)
(PART NUMBER: **2470020**)

1500V 20A FUSE



1500V FUSE/20A/10AWG/BLUNT CUT
END TO END CABLE LENGTH 390MM
(PART NUMBER: **2480000**)

1500V 25A-30A FUSE



1500V FUSE/30A/10AWG/H4 PLUS M-F
END TO END CABLE LENGTH 390MM
FUSE SPACER INCLUDED
(456MM REF OVERALL W/CONNECTORS)
(PART NUMBER: **24A0050**)

Ordering Information

PRODUCT TYPE	RATED CURRENT	PV WIRE SIZE	END TERMINATION / CONNECTORS	END TO ENDCABLE LENGTH	CUSTOM LENGTH
24 1500V HeliosFuse	0 2.5 A	0 10AWG	00 BLUNT CUT BOTH ENDS	0 STANDARD (390 MM)	
	1 3.5 A		01 BOTH END PRESTRIPPED (8MM, SLUGS ON)		
	2 4 A		02 AMPHENOL H4 MALE TO H4 FEMALE (M-F)		
	3 6 A	03 MULTI CONTACT MC4 MALE TO FEMALE (M-F)			
	4 8 A	04 MULTI CONTACT EVO2 MALE TO FEMALE			
	5 10 A	1 12AWG	05 AMPHENOL H4 PLUS MALE TO FEMALE (M-F)		
	6 12 A		06 TYCO ELECTRONIC PV4-S1 MALE TO FEMALE (M-F) (12AWG/10AWG)		
	7 15 A		07 OTHER CONNECTORS		
	8 20 A				
	9 25 A				
	A 30 A	2 8AWG			

OVERMOLDED SOLAR JUNCTIONS

Amphenol Technical Products International (ATPI) offers products and solutions for all segments of the solar electric system. ATPI understands the need for efficient (low loss) power transfer, highly reliable, and cost effective solutions that are required to be competitive in this industry.

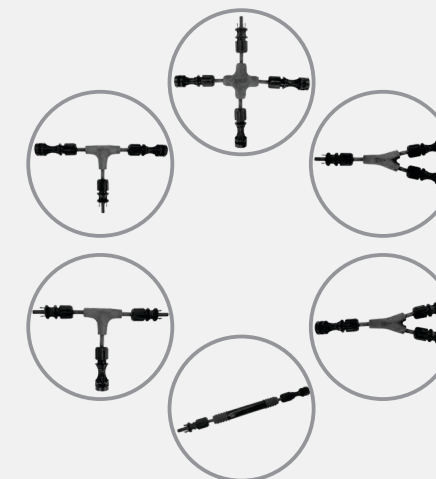
ATPI's overmolded solar junctions provides the ideal low cost, high quality solution for commercial photovoltaic installations. The molded construction provides weather tight housing preventing moisture from getting to the cable joints and provides the needed electrical protection with a rugged design. They can be pre-fabricated with various lengths, number of branches, distance between branches and cable options according to customer specifications.

Amphenol Technical Products International maintains the highest standards for excellence. The 1500V overmolded solar junctions is just one of the cost effective solar solutions Amphenol Technical Products International has to offer.



Features

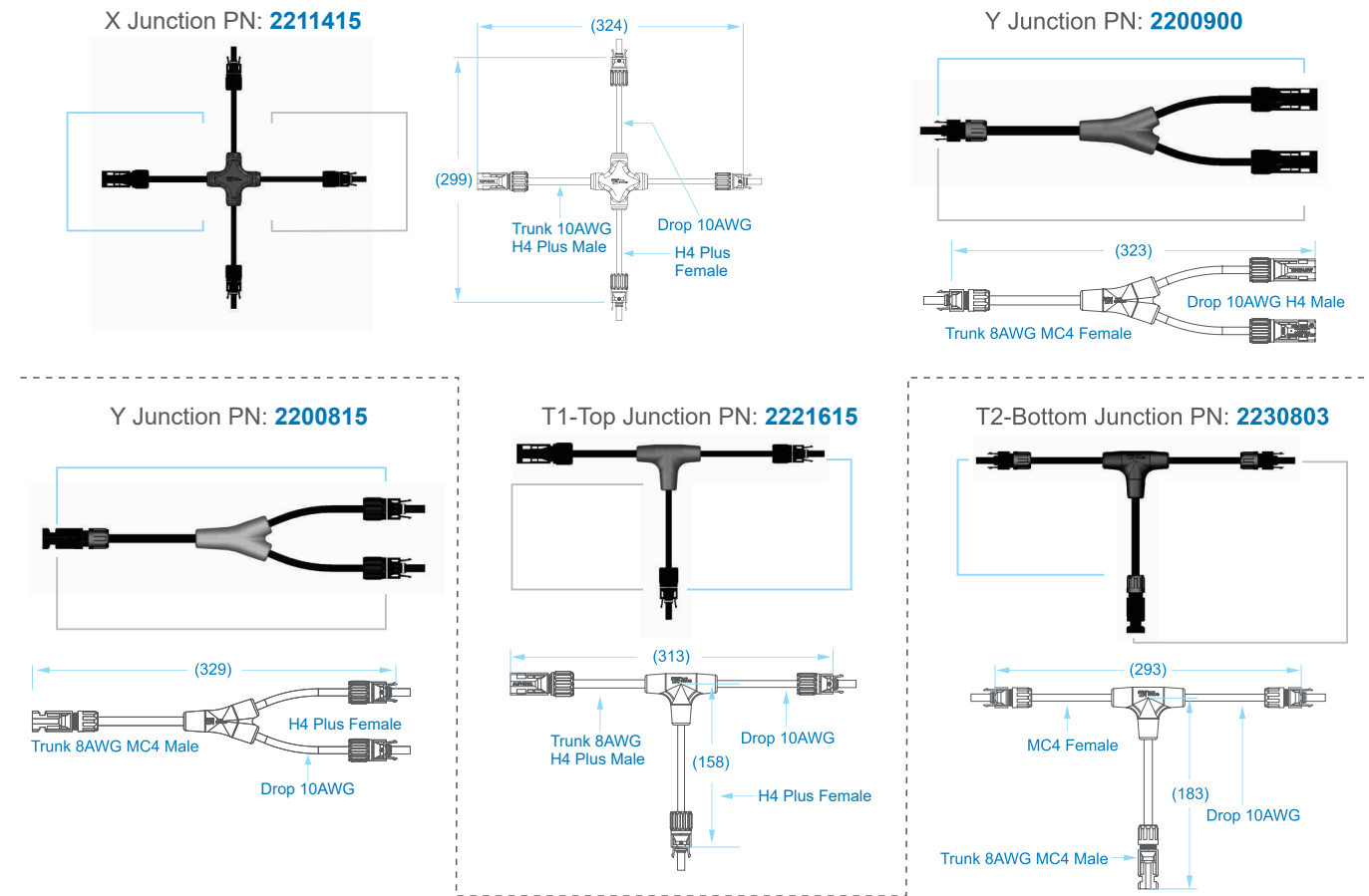
- 1500V DC Current Rating
- 4AWG, 6AWG, 8AWG, 10AWG, 12AWG, 14AWG cable options for 1500V
- IP68 ingress protection
- Long term UV resistance
- Ready for field assembly
- UL9703 listed & UL6703 approved
- Customer wiring harness services
- RETIE compliance



Specification

DC Current Rating	1500V (600V & 1000V Compatible)
Junction Current Rating	65A
Connector Options	H4/MC4/EVO2/H4 PLUS/PV4-S1
Cable Size Options	4AWG, 6AWG, 8AWG, 10AWG, 12AWG
Ingress Protection Degree	IP68 (1m Water/24hours)
Ambient Temperature Range	-40°C to 50°C
Material Safety	RoHS2 Compliant
Flammability Classifications	UL94-V0
Outdoor Suitability	UV Resistance, F1 Rated
Approvals	UL6703; UL4248-1; UL4248-18 Recognized UL9703 Listed

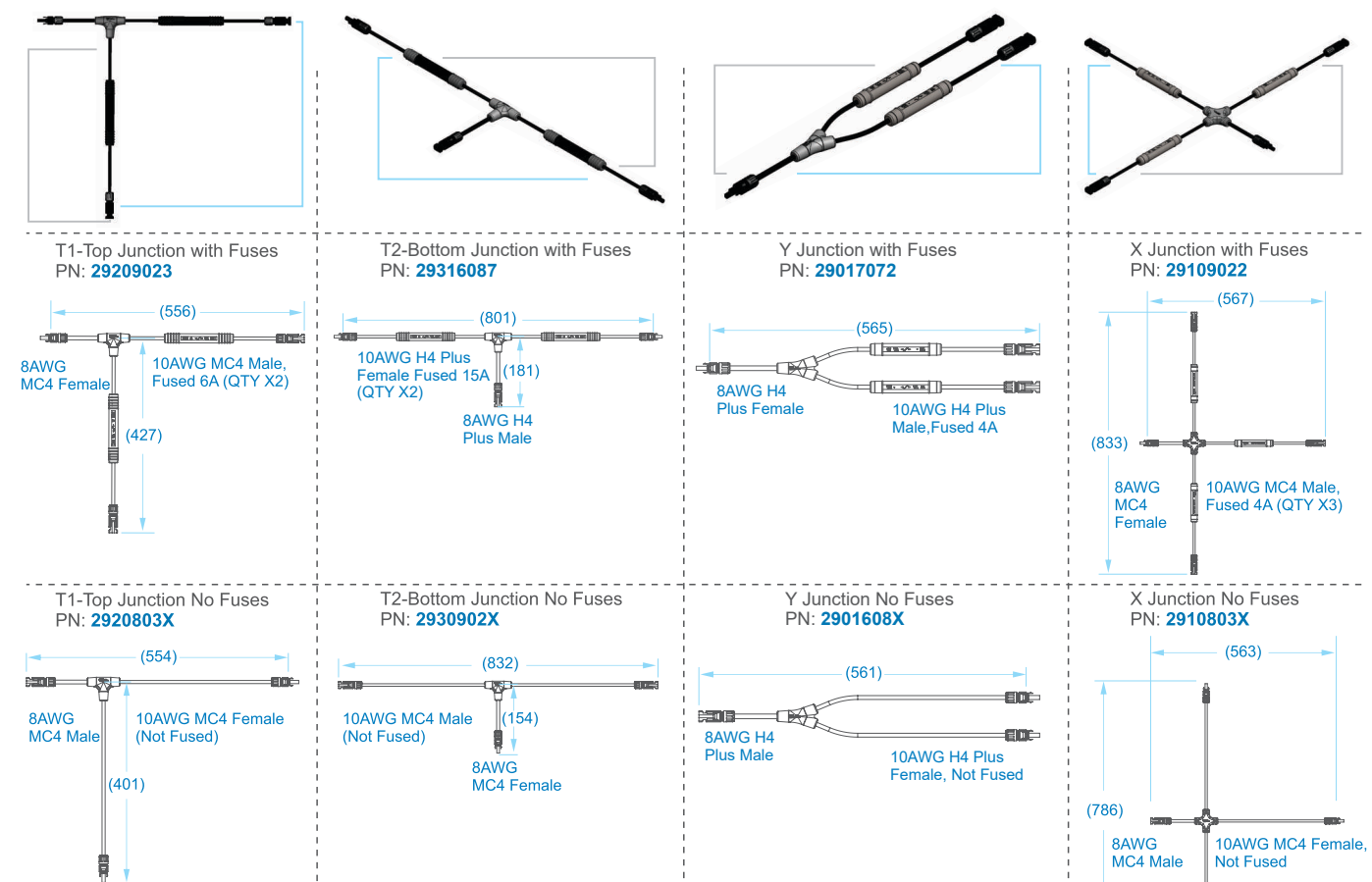
1500V Solar Junction



Ordering Information

STANDARD PRODUCT	TYPE	TRUNK SIDE		DROP SIDE			
		00	01	00	01		
22	0	Y	00	10AWG H4 MALE	00	10AWG H4 MALE	
			01	10AWG H4 FEMALE	01	10AWG H4 FEMALE	
			02	10AWG MC4 MALE	02	10AWG MC4 MALE	
			03	10AWG MC4 FEMALE	03	10AWG MC4 FEMALE	
			04	10AWG EVO2 MALE	04	10AWG EVO2 MALE	
		05	10AWG EVO2 FEMALE	05	10AWG EVO2 FEMALE		
		1	X	06	8AWG H4 MALE	06	8AWG H4 MALE
				07	8AWG H4 FEMALE	07	8AWG H4 FEMALE
				08	8AWG MC4 MALE	08	8AWG MC4 MALE
				09	8AWG MC4 FEMALE	09	8AWG MC4 FEMALE
	10			8AWG EVO2 MALE	10	8AWG EVO2 MALE	
	2	T1-TOP	11	8AWG EVO2 FEMALE	11	8AWG EVO2 FEMALE	
			12	10AWG BLUNT CUT	12	10AWG BLUNT CUT	
			13	8AWG BLUNT CUT	13	8AWG BLUNT CUT	
			14	10AWG H4 PLUS MALE	14	10AWG H4 PLUS MALE	
			15	10AWG H4 PLUS FEMALE	15	10AWG H4 PLUS FEMALE	
			16	8AWG H4 PLUS MALE	16	8AWG H4 PLUS MALE	
			17	8AWG H4 PLUS FEMALE	17	8AWG H4 PLUS FEMALE	
			18	10AWG PV4-S1 MALE	18	10AWG PV4-S1 MALE	
			19	10AWG PV4-S1 FEMALE	19	10AWG PV4-S1 FEMALE	
20			OTHER CONNECTORS	20	OTHER CONNECTORS		

1500V Solar Junction



Ordering Information

STANDARD PRODUCT	TYPE	TRUNK SIDE		DROP SIDE		DROP WITH FUSES			
		00	01	00	01	0	1		
29	0	Y	00	10AWG H4 MALE	00	10AWG H4 MALE	0	FUSED (2.5A)	
			01	10AWG H4 FEMALE	01	10AWG H4 FEMALE	1	FUSED (3.5A)	
			02	10AWG MC4 MALE	02	10AWG MC4 MALE	2	FUSED (4A)	
			03	10AWG MC4 FEMALE	03	10AWG MC4 FEMALE	3	FUSED (6A)	
			04	10AWG EVO2 MALE	04	10AWG EVO2 MALE	4	FUSED (8A)	
		1	X	05	10AWG EVO2 FEMALE	05	10AWG EVO2 FEMALE	5	FUSED (10A)
				06	8AWG H4 MALE	06	8AWG H4 MALE	6	FUSED (12A)
				07	8AWG H4 FEMALE	07	8AWG H4 FEMALE	7	FUSED (15A)
				08	8AWG MC4 MALE	08	8AWG MC4 MALE	8	FUSED (20A)
				09	8AWG MC4 FEMALE	09	8AWG MC4 FEMALE	9	FUSED (25A)
	2	T1-TOP	10	8AWG EVO2 MALE	10	8AWG EVO2 MALE	10	10AWG PV4-S1 FEMALE	
			11	8AWG EVO2 FEMALE	11	8AWG EVO2 FEMALE	11	OTHER CONNECTORS	
			12	10AWG BLUNT CUT	12	10AWG BLUNT CUT			
			13	8AWG BLUNT CUT	13	8AWG BLUNT CUT			
			14	10AWG H4 PLUS MALE	14	10AWG H4 PLUS MALE			
			15	10AWG H4 PLUS FEMALE	15	10AWG H4 PLUS FEMALE			
			16	8AWG H4 PLUS MALE	16	8AWG H4 PLUS MALE			
			17	8AWG H4 PLUS FEMALE	17	8AWG H4 PLUS FEMALE			
			18	10AWG PV4-S1 MALE	18	10AWG PV4-S1 MALE			
			19	10AWG PV4-S1 FEMALE	19	10AWG PV4-S1 FEMALE			
20	OTHER CONNECTORS	20	OTHER CONNECTORS						

BALANCE OF SYSTEM (BOS) SOLUTION FOR PV WIRING HARNESSSES

Solar projects require custom wire harness solutions. Amphenol TPI developed and certified a configurable product line to fit your project requirements and specifications.

Certifications

- UL9703 Listed Product
- UL4703 PV Wire
- UL4248 Overmolded Fuse
- UL6703 Connectors

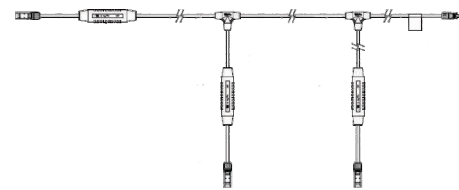
Quality Inspection

- 100% Electrically Tested Point to Point
- Ensuring Each Harness is Defect Free
- Visual Inspection, Continuity Test, Resistance Check, Water Leakage test

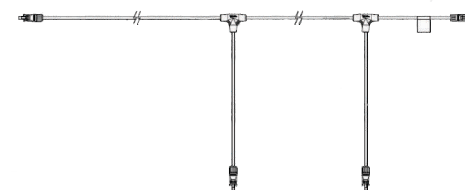
APPLICATION EXAMPLE

Cable Harness Assemblies for Solar Panels

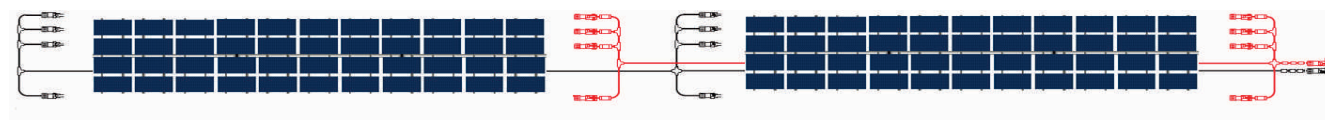
POSITIVE 3 STRING HARNESS



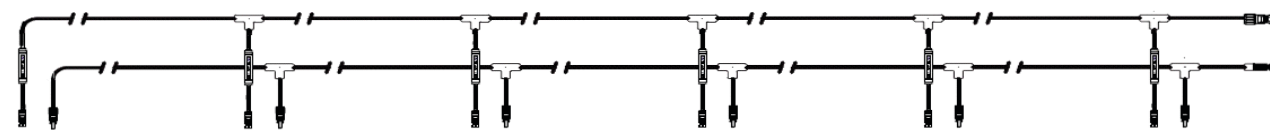
NEGATIVE 3 STRING HARNESS



SERIES 4: 8 STRING HARNESSES



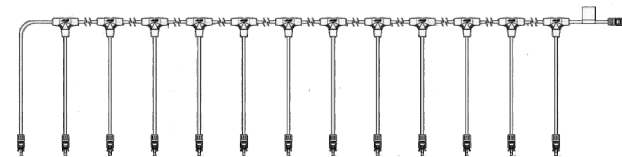
SERIES 6: 6 STRING HARNESSES



POSITIVE 13 STRING HARNESS



NEGATIVE 13 STRING HARNESS



CUSTOM HARNESSES

For custom solar wire harnesses for your project requirements, please contact ATPI's solar products team by referring to the contact information section below.

CONTACT INFORMATION:

For further information on your individual application requirements or inquiries, please contact ATPI's solar products team:

North America

Winnipeg, Manitoba, Canada
 Telephone +1 204 697-2222
 Address: 2110 Notre Dame Avenue

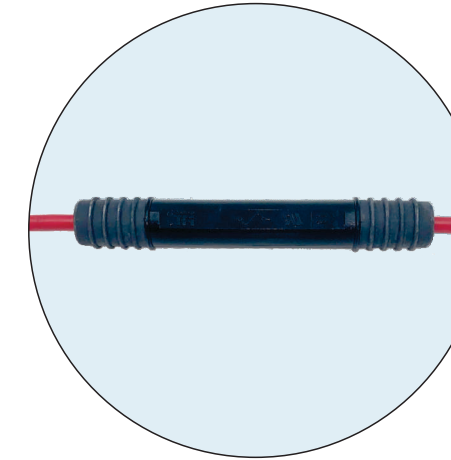
Email solar@tpil.com
 Websites www.amphenol-industrial.com
www.tpil.com
<https://downloads.tpil.com/> (Contact us for login information)

PRODUCT GALLERY

1500V OVERMOLDED T-JUNCTION



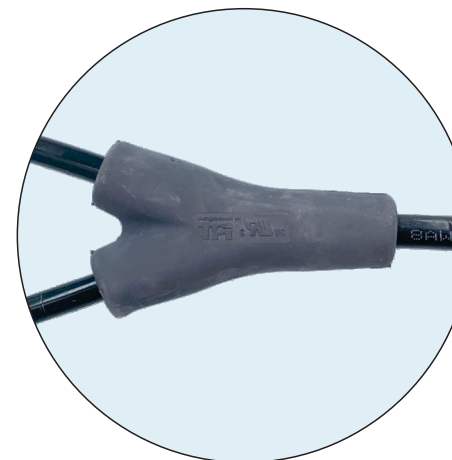
1500V OVERMOLDED 5A FUSE



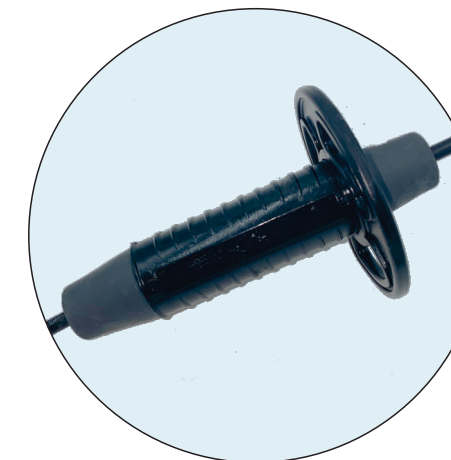
1500V OVERMOLDED BIG T-JUNCTION



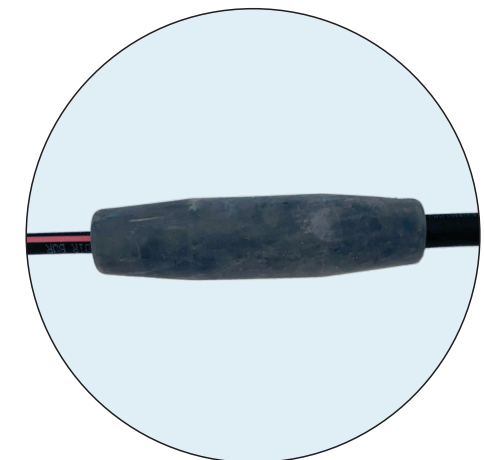
1500V OVERMOLDED Y-JUNCTION



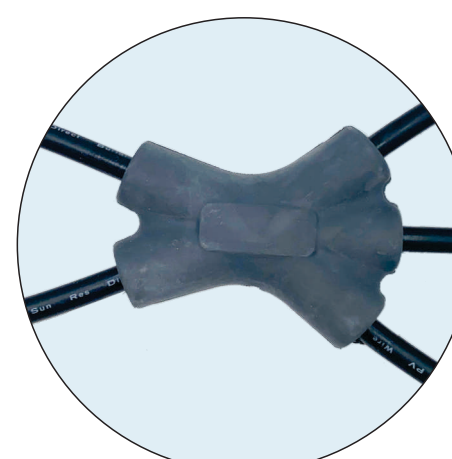
1500V OVERMOLDED 30A FUSE



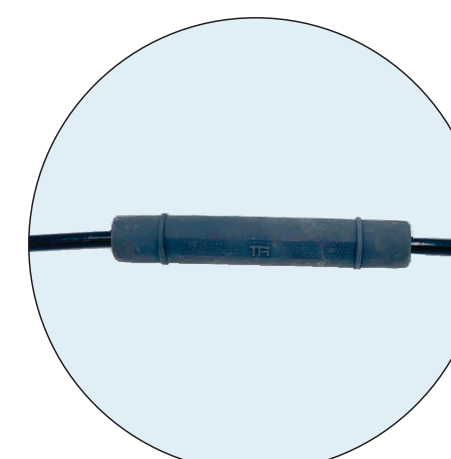
1500V IN-LINE OVERMOLD



1500V OVERMOLDED 3:2 STARR JUNCTION



1500V OVERMOLDED 4A FUSE



1500V OVERMOLDED X-JUNCTION

