2021

DSG-CANUSA PRODUCTS

HEAT AND COLD SHRINK PRODUCTS

SHAWCOR

SHAWCOR

Shawcor is a growth-oriented, global material sciences company with its three segments of Pipeline and Pipe Services, Composite Systems and Automotive and Industrial, serving the sectors of the Infrastructure, Energy and Transportation markets. The Company operates through a global network of fixed and mobile manufacturing and service facilities and is valued for its integrity, technology and proven capability to execute.

PIPELINE SERVICES - Providing pipeline protection and inspection solutions as well as integrity and engineering services.

COMPOSITE SYSTEMS - Manufacturer of flexible and environmentally-friendly composite systems and solutions.

AUTOMOTIVE AND INDUSTRIAL - Supplying integrated heat shrink systems and engineered wire and cable solutions.

AUTOMOTIVE & INDUSTRIAL

SHAWCOR'S AUTOMOTIVE AND INDUSTRIAL SEGMENT COMBINES THE RESOURCES, EXPERTISE AND TECHNOLOGIES OF DSG-CANUSA AND SHAWFLEX TO OFFER A COMPLETE RANGE OF CUSTOM CABLE AND CABLE ACCESSORIES

Backed by the strengths of Shawcor, the Automotive and Industrial Segment includes ShawFlex and DSG-Canusa. Shawcor has manufactured and developed ShawFlex wire and cable products and DSG-Canusa cable accessories for over a half-century with innovation, precision and dependability. We have built and maintained a reputation for excellence that stems from our unparalleled customer service and catalog of top quality products that meet the high-performance needs of today in a wide variety of industries and markets.

DSG-CANUSA

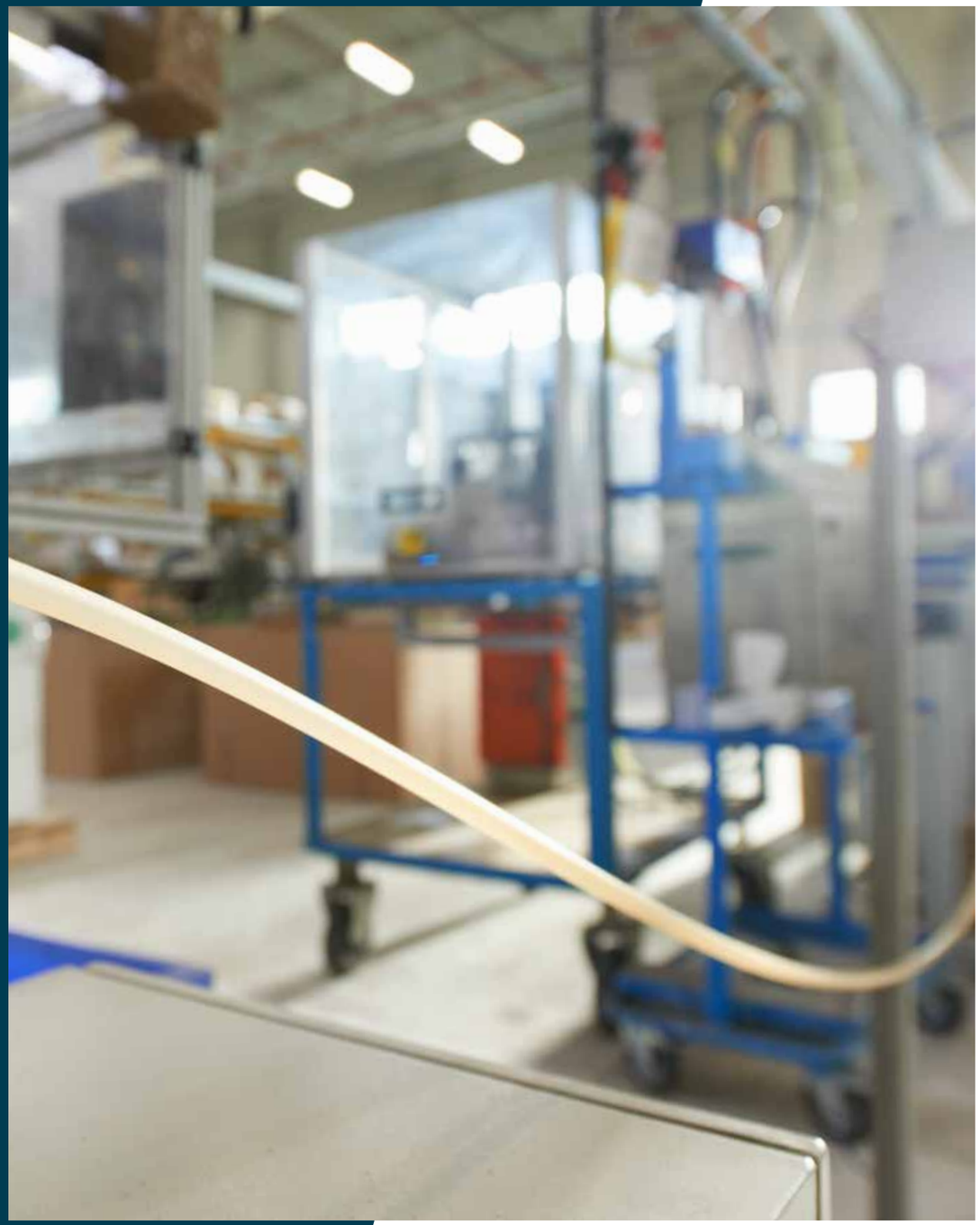
HEAT SHRINK AND COLD SHRINK TECHNOLOGIES

The leading global manufacturer of heat shrink tubing, cold shrink products and application equipment for protection and sealing in automotive, electrical utility, industrial, and oil and gas applications.

SHAWFLEX

CUSTOM INSTRUMENTATION, CONTROL AND LOW VOLTAGE POWER CABLES

A world-class manufacturer of specialty wire and cable products for use in severe service industrial environments.



SPECIALIST FOR HEAT SHRINK AND COLD APPLIED TECHNOLOGY

For more than 45 years, DSG-Canusa is known for developing and producing high-quality heat shrink tubing and cold-applied accessories. Our growing portfolio of heat shrink products includes thin, medium and heavy wall products made of e.g. polyolefin, fluoropolymer and elastomer with or without adhesive. Our mission is to lead the industry in manufacturing superior heat and cold shrink products.

In addition to the heat and cold shrink tubing product lines, we provide a full range of technically advanced shrink appliances. Years of experience in processing heat shrink materials have resulted in the creation of a variety of processing devices, from a simple heat gun to customer specific, process-integrated high-performance shrink equipment.

Being part of the energy services provider Shawcor with over 6,000 employees in over 20 countries, we combine the resources, expertise and technologies to maintain a reputation for excellence that stems from our unparalleled customer service and catalog of top quality products.

INTEGRATED SYSTEMS

We are more than just a supplier of standard heat and cold shrink products, as we also supply the tools and application equipment to reliably apply our products in your factory or at your work site.

Our focused teams on machine development, applications engineering, product engineering and research and development are dedicated professionals from electrical engineering to materials science. They have the skills and experience to design and execute technology and customer specific solutions from concept to commercial reality.

When these teams work side by side with you they can provide advanced integrated solutions using our superior heat shrink tubing and our high-performance application equipment.

Working with our teams provides you with access to custom products, new materials, and application specific shrink appliances for integrated systems that address your needs for efficiency, safety, quality and performance.

OUR HSE STANDARD

Shawcor's vision is an Incident and Injury-Free (IIF) workplace, with no harm to people and no damage to the environment. We view Health, Safety and Environment (HSE) as a core value and an integral part of all business activities, and are committed to achieving HSE excellence at all of our locations around the world.

As a member of Shawcor, we share these values and promote safety awareness with a number of features and programs. Some of these activities are a monthly focus on a high-risk activity to contribute to an incident and injury-free workplace, Advanced Safety Audits (ASA) to enhance the ability of managers and supervisors to engage in positive interactions with workers regarding safety and the Take 5 for Safety initiative to improve safety performance and to reduce incidents when performing non-routine tasks.

SERVING GLOBALLY

LOCAL PRODUCTION FOR LOCAL DEMAND

To deliver the best performing products to all our customers on-time and to meet their expectation, we are organized globally and have chosen our sites strategically. We produce locally to serve local demand while optimizing lead times, transport time and cost.

Our global team utilizes resources from our different locations to support our customer's needs. We embrace customer driven supply chain development and increasing customer service expectations as an opportunity to show our strengths.

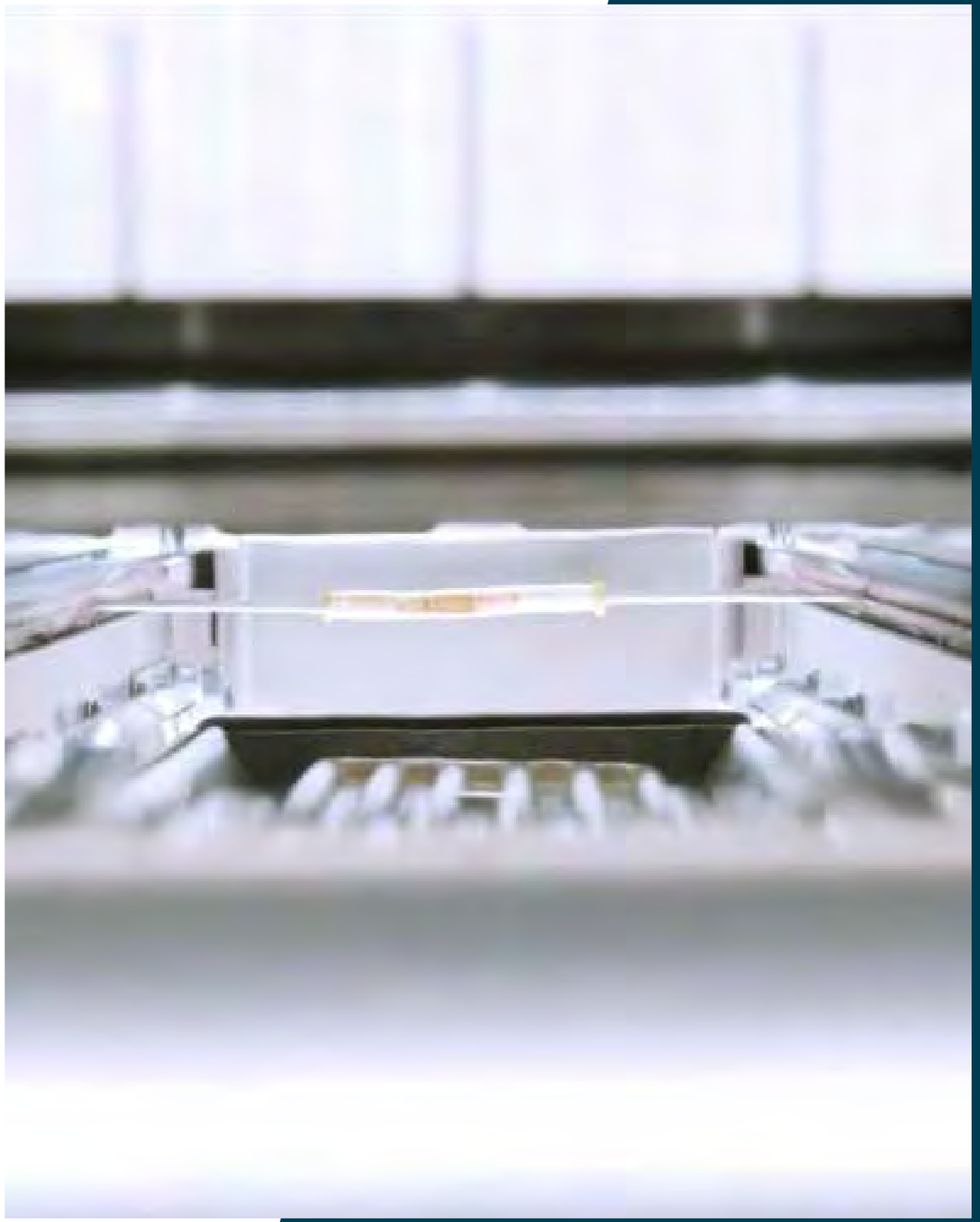
R&D, Application Engineering, Marketing

Production

Distribution Centre

CONTENT

CONTENT



HEAVY AND MEDIUM WALL PRODUCTS

SEALING AND PROTECTING ELECTRICAL CONNECTIONS

Our specially designed medium and heavy wall heat shrink and cold shrink tubing and accessories provide superior insulation, sealing and mechanical protection for cable splices, wire harnesses, busbars and connectors for the electrical utility, industrial, automotive, and oil and gas markets.

Our products have been rigorously tested to internationally recognized standards and are supplied to our customers and end users following a lean based quality manufacturing system that ensures the entire supply chain, from design, procurement, production, and shipping follow strict production and quality system requirements.

Heat shrink end caps are a simple yet effective method for sealing cable ends, pipe, conduit or other similar objects.

FEATURES AND BENEFITS

- Superior resistance to weathering, moisture contamination and adverse environmental conditions
- Resistant to common fluids and solvents
- Standard adhesive liner provides complete environmental protection and insulation
- Coated hot melt adhesive resists pull-off
- Heat indicating lines
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C

TYPICAL APPLICATIONS

- Watertight sealing of cable ends and pipe conduit

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial, Mining, OEM, Utility

STANDARDS:

Medium wall crosslinked polyolefin end cap

DIMENSIONS

ORDER NUMBER	EXPANDED LENGTH (NOM)		EXPANDED		RECOVERED				GENERAL USE DIAMETER		CABLE RANGE
			Internal Diameter (min) D		Internal Diameter (max) d		Wall Thickness (nom) W				
	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	AWG/MCM
0400-RL	50.8	2.0	10.2	0.40	3.8	0.15	2.0	0.080	4.5 - 8.5	.18 - .34	#8 - #1
0750-RL	63.5	2.5	19.1	0.75	5.6	0.22	2.0	0.080	6 - 16.5	.24 - .65	#2 - 4/0
1100-RL	76.2	3.0	27.9	1.10	10.2	0.40	2.4	0.095	11.5 - 25	.45 - 1	2/0 - 500
1300-RL	76.2	3.0	33.0	1.30	10.2	0.40	2.4	0.095	11.5 - 30	.45 - 1.2	300 - 1000
1500-RL	88.9	3.5	38.1	1.50	12.7	0.50	2.4	0.095	14 - 35	.55 - 1.4	500 - 1500
1700-RL	88.9	3.5	43.2	1.70	12.7	0.50	2.5	0.100	14 - 40	.55 - 1.6	650 - 1750
2050-RL	88.9	3.5	52.1	2.05	19.0	0.75	2.5	0.100	21 - 45	.82 - 1.8	900 - 2500
2750-RL	101.6	4.0	69.8	2.75	25.4	1.00	2.5	0.100	30 - 63	1.2 - 2.5	2000 - 2500
3500-RL	114.3	4.5	88.9	3.50	30.0	1.18	2.5	0.100	33 - 83.8	1.3 - 3.3	
4700-RL	139.7	5.5	119.4	4.70	39.9	1.57	2.7	0.105	40.6 - 114.3	1.6 - 4.5	

Length is measured from shoulder to open end of cap

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Printing: Printed or unprinted
  - Adhesive lining: Lined (D) or unlined (U)
- Please specify the product name, order number and options you require
- *Example: CCAP, 1300-RL, black, unprinted, lined*

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heat shrink end caps provide a simple yet effective method for sealing cable ends, pipe, conduit or other similar objects where maximum flame retardancy is required.

FEATURES AND BENEFITS

- Flame retardant
- Superior resistance to weathering, moisture contamination and adverse environmental conditions
- Resistant to common fluids and solvents
- Standard adhesive liner provides complete environmental protection and insulation
- Heat indicating lines
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C

TYPICAL APPLICATIONS

- Watertight sealing of cable ends and pipe conduit

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial, Power Distribution, Utility

STANDARDS:

RoHS

Heavy wall crosslinked polyolefin end cap

DIMENSIONS

ORDER NUMBER	EXPANDED LENGTH (NOM)		EXPANDED		RECOVERED				GENERAL USE DIAMETER		CABLE RANGE
			Internal Diameter (min) D		Internal Diameter (max) d		Wall Thickness (nom) W				
	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	AWG/MCM
0350-RL	50.8	2.0	8.9	0.35	3.0	0.12	1.8	0.07	3.5 - 8	.15 - .300	#14 - #10
0500-RL	63.5	2.5	13.0	0.51	4.1	0.16	2.4	0.09	4.5 - 11	.20 - .450	#8 - #6
0750-RL	63.5	2.5	19.0	0.75	6.1	0.24	2.4	0.09	6 - 16.5	.24 - .650	#6 - #2
1100-RL	76.2	3.0	27.9	1.10	8.9	0.35	3.0	0.12	10 - 24	.40 - .950	#1 - 3/0
1500-RL	88.9	3.5	38.1	1.50	11.9	0.47	4.1	0.16	13 - 35	.55 - 1.40	2/0 - 350
2000-RL	88.9	3.5	50.8	2.00	16.0	0.63	4.1	0.16	17.5 - 44	.70 - 1.75	250 - 500
2700-RL	101.6	4.0	68.1	2.70	22.1	0.87	4.1	0.16	24 - 59	.95 - 2.30	600 - 1000
3500-RL	114.3	4.5	89.9	3.50	30.0	1.18	4.1	0.16	33 - 80	1.3 - 3.30	800 - 1250
4700-RL	139.7	5.5	119.4	4.70	39.9	1.57	4.2	0.17	44 - 104	1.7 - 4.10	1500 - 2500
4700-RL	139.7	5.5	119.4	4.70	39.9	1.57	2.7	0.105	40.6 - 114.3	1.6 - 4.5	

Length is measured from shoulder to open end of cap

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Printing: Printed or unprinted
  - Adhesive lining: Lined (D) or unlined (U)
- Please specify the product name, order number and options you require
- *Example: CCAP-FR, 1500-RL, black, unprinted, lined*

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Semi-conductive tubing components are used in medium voltage joints to rebuild the semi-con screen layer on electrical power cable. CCON sleeves are typically applied over the insulation layer to provide effective shield continuity over the joint.

FEATURES AND BENEFITS

- Excellent conductive properties
- Shrink ratio: >3:1
- Continuous operating temperature: -40°C to 130°C
- Shrink temperature: 120°C min.

STANDARDS

- IEC 60684-3-281
- IEEE 404

TYPICAL APPLICATIONS

- Conductive layer in a splice or PILC terminations to replicate the cables conductive layer

>3:1

SHRINK RATIO

-40°C to 130°C
(-40°F to 266°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Electrical, Industrial

STANDARDS:

RoHS

Semi-conductive heat shrink sleeve

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				LENGTHS	
	Internal Diameter (Min) D		Internal Diameter (Max) d		Wall Thickness (Nom) W			
	MM	IN	MM	IN	MM	IN	M	FT
CCON 36/10	36	1.42	10	0.39	3.0	0.122	1.22	4.0
CCON 51/14	51	2.00	14	0.55	3.0	0.122	1.22	4.0
CCON 63/18	63	2.48	18	0.71	3.0	0.122	1.22	4.0
CCON 70/23	70	2.76	23	0.91	3.0	0.122	1.22	4.0
CCON 85/22	85	3.35	22	0.87	3.0	0.122	1.22	4.0
CCON 95/29	95	3.74	29	1.14	3.0	0.122	1.22	4.0
CCON 120/34	120	4.72	34	1.34	3.0	0.122	1.22	4.0

ORDERING

Select a dimension which will shrink snugly over the component to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select Options:
  - Color: Black (BK)
  - Lengths: 48 in (1.2 m) continuous reels or cut pieces
- Please specify the product name, order number and options you require
- *Example*: CCON 36/10

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Adhesive-lined heat shrinkable end cap which enables easy protection and sealing of cables terminations from environmental effects.

FEATURES AND BENEFITS

- UV stabilized
- Good chemical and solvent resistance
- Thermoplastic liner provides complete environmental seal
- Shrink ratio: >2:1
- Continuous operating temperature: -40°C to 100°C
- Shrink temperature: 125°C min.

STANDARDS

- IEC 62677
- ESI 09-11

TYPICAL APPLICATIONS

- Sealing of cables against moisture
- Rated to 1000V for stop ends under load

>2:1

SHRINK RATIO

-40°C to 100°C
(-40°F to 212°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Renewables, Industrial, Power Distribution, Utility

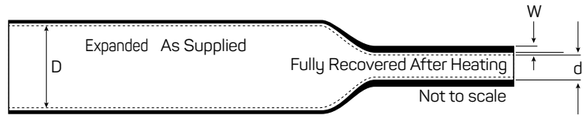
STANDARDS:

RoHS

Crosslinked polyolefin end cap

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED								DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Length (min)		Recommended Diameter Range		Pieces
	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	
CEC 10/4	10.0	0.394	4.0	0.157	2.00	0.079	35	1.378	4.5-8.0	0.18-0.31	200
CEC 15/4.5	15.0	0.591	4.5	0.177	2.00	0.079	45	1.772	5.0-12.0	0.20-0.47	150
CEC 20/6	20.0	0.787	6.0	0.236	2.70	0.106	60	2.362	7.0-17.5	0.28-0.69	150
CEC 25/9	25.0	0.984	9.0	0.354	2.70	0.106	70	2.756	10.0-22.0	0.39-0.87	100
CEC 36/15	36.0	1.417	15.0	0.591	2.80	0.110	95	3.740	17.0-30.0	0.67-1.18	100
CEC 63/24	63.0	2.480	24.0	0.945	3.60	0.142	110	4.331	28.0-55.0	1.10-2.17	50
CEC 80/40	80.0	3.150	40.0	1.575	3.60	0.142	130	5.118	45.0-70.0	1.77-2.76	30
CEC 102/60	102.0	4.016	60.0	2.362	3.60	0.142	152	5.984	68.0-90.0	2.68-3.54	20
CEC 124/60	124.0	4.882	60.0	2.362	3.60	0.142	152	5.984	75.0-110.0	2.95-4.33	20
CEC 148/57	148.0	5.827	57.0	2.244	4.50	0.177	152	5.984	80.0-135.0	3.15-5.31	10



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
- Please specify the product name, order number and options you require
- *Example*: CEC 36/15, black, 1.000 pcs

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

High shrink ratio heat shrink tubing accommodates extreme differences between cables, connectors and backshells.

FEATURES AND BENEFITS

- Flame retardant
- Accommodates a wide variety of connector shapes and configurations
- Optional thermoplastic adhesive liner for complete environmental protection and insulation
- Shrink ratio: 6:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C min.

STANDARDS

- UL-94-V-0 - UL file # E132914
- IEC 60684-3-247

TYPICAL APPLICATIONS

- Wire harnesses
- Abrasion and impact resistance
- Strain relief and protection of cables and connectors

6:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Electrical Utility, Industrial, Commercial, Mass Transit

STANDARDS:

High shrink ratio crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths
	MM	IN	MM	IN	MM	IN	1.22 M / 48 IN
0750	19.0	0.750	3.2	0.125	3.2	0.123	35
1300	33.0	1.300	5.5	0.220	3.4	0.135	60
1750	44.4	1.750	7.4	0.290	3.6	0.140	40
2000	50.8	2.000	8.3	0.330	4.3	0.170	25
2750	69.8	2.750	11.7	0.460	4.8	0.190	15
3500	88.9	3.500	17.1	0.673	4.3	0.170	10
4700	119.4	4.700	22.9	0.900	4.8	0.190	5

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Printing: Printed or unprinted
  - Adhesive Lining: Lined (D) or unlined (U)
  - Lengths: 1.22 m or 7.62 m spool (unlined only)
- Please specify the product name, order number and options you require
- *Example*: CFHR, 0750, U, black, unprinted, 1.22 m length

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Medium wall heat shrink tubing suitable for a variety of low voltage electrical and mechanical applications where lighter weight and greater flexibility are important.

FEATURES AND BENEFITS

- Seals and protects cable splices and terminations
- UV resistant
- Rugged mechanical protection
- Complete moisture sealing
- Strain relief for delicate wire connections
- High resistance to impact and abrasion
- Optional thermoplastic adhesive liner for complete environmental protection and insulation
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C min.

STANDARDS

- IEC 60684-3-247

TYPICAL APPLICATIONS

- Strain relief and environmental protection
- Splice covers for electrical cables
- HVAC systems for pipes and ducts
- Insulation cover or jacket repair on low voltage cables

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial, Commercial, Utility

STANDARDS:

RoHS

Medium wall crosslinked polyolefin tubing

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				APPLICATION RANGE		DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		General use		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	1.22 M / 48 IN
0400	10.2	0.40	3.8	0.15	2.0	0.080	4.5-8.5	.18-.34	100
0750	19.1	0.75	5.6	0.22	2.0	0.080	6.0-16.5	.24-.65	75
1100	27.9	1.10	10.2	0.40	2.4	0.095	11.5-25	.45-1.0	35
1300	33.0	1.30	10.2	0.40	2.4	0.095	11.5-30	.45-1.2	75
1500	38.1	1.50	12.7	0.50	2.4	0.095	14.0-35	.55-1.4	40
1700	43.2	1.70	12.7	0.50	2.5	0.100	14.0-40	.55-1.6	25
2050	52.1	2.05	19.1	0.75	2.5	0.100	21.0-45	.82-1.8	15
2750	69.9	2.75	25.4	1.00	2.5	0.100	30.0-63	1.2-2.5	10
3500	88.9	3.50	29.9	1.18	2.5	0.100	33-83.8	1.3-3.3	5
4700	119.4	4.70	39.9	1.57	2.7	0.105	40.6-114	1.6-4.5	5
6000	152.4	6.00	50.8	2.00	3.0	0.120	53.3-147	2.1-5.8	5
6700	170.2	6.70	58.4	2.30	3.0	0.120	70.0-165	2.4-6.5	5
9000	228.6	9.00	77.0	3.00	3.3	0.130	71.0-220	2.8-8.7	5

All colors except clear are UV resistant

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
  - Printing: Printed or unprinted
  - Adhesive lining: Lined (D) or unlined (U)
  - Lengths: 1 m or 1.22 m, or 7.62 m spool on request (only unlined)
- Please specify the product name, order number and options you require
- *Example*: CFM, 1100, U, black, unprinted, 1.22 m length

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heavy wall heat shrinkable tubing provides maximum reliability for insulating and protecting cable joints and terminations.

FEATURES AND BENEFITS

- Withstands severe mechanical requirements of U.R.D., submersible and direct burial installations
- UV resistant
- High impact, abrasion, corrosion and chemical resistance
- Optional thermoplastic adhesive liner for complete environmental protection and insulation
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C, cable emergency overload temperature to 130°C
- Shrink temperature: 120°C min.

STANDARDS

- UL 486D - UL file # E132914
- CSA C22.2 No. 198.2
- ANSI C119-1
- ICEA and NEMA insulation thickness requirements
- DIN EN 60684-3-247

TYPICAL APPLICATIONS

- Strain relief and mechanical protection
- Insulation of primary low voltage cables

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial Construction, Automation, Mining, Transit, Utility, Power Distribution

STANDARDS:

Heavy wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED						DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (min) W		Application Range		Lengths	
	MM	IN	MM	IN	MM	IN	MM	IN	1.22 M / 48 IN	1 M / 39 IN
0350	8.9	0.350	3.0	0.118	1.80	0.071	3.5 - 8	0.15 - 0.3	100	100
0500	13.0	0.512	4.1	0.161	2.40	0.094	4.5 - 11	0.2 - 0.45	75	75
0750	19.1	0.752	6.1	0.240	2.40	0.094	6.5 - 16.5	0.25 - 0.65	35	35
1100	27.9	1.098	8.9	0.350	3.00	0.118	10 - 24	0.4 - 0.95	75	75
1500	38.1	1.500	11.9	0.469	4.00	0.157	13 - 35	0.5 - 1.4	40	40
2000	50.8	2.000	16.0	0.630	4.10	0.161	17.5 - 44	0.7 - 1.75	25	25
2700	68.1	2.681	22.1	0.870	4.10	0.161	24 - 59	0.95 - 2.3	15	15
3500*	89.9	3.539	29.9	1.181	4.10	0.161	33 - 80	1.3 - 3.1	10	10
4700*	119.9	4.720	39.9	1.571	4.30	0.169	44 - 104	1.75 - 4.1	5	5
5100*	129.5	5.098	39.9	1.571	4.30	0.169	43 - 109	1.7 - 4.3	5	5
6000*	152.4	6.000	50.8	2.000	4.30	0.169	56 - 130	2.2 - 5.1	5	5
6700*	170.2	6.701	56.6	2.228	4.30	0.169	61 - 145	2.4 - 5.7	5	5

All colors except clear are UV resistant
*CFW sizes 3500 to 6700 are not UL or CSA listed

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK) or red (RD)
  - Printing: Printed or unprinted
  - Adhesive lining: Lined (D) or unlined (U)
  - Lengths: 1 m or 1.22 m or 7.62 m spool on request (unlined only)
- Please specify the product name, order number and options you require
- *Example:* CFW, 1500, U, black, unprinted, 1.22 m length

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Medium wall heat shrinkable non tracking tubing for use in MV joints & terminations up to 36kV.

FEATURES AND BENEFITS

- Non-tracking
- UV stabilized
- Flame retardant
- Exceptional electrical and weathering properties
- Suitable for outdoor & indoor terminations
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 125°C
- Shrink temperature: 120°C min.

STANDARDS

- HD 629.1 S2
- IEC 60502-4
- IEC 60055-1
- IEEE 48-1996
- Salt fog test IEC 1109

TYPICAL APPLICATIONS

- Medium voltage joints and terminations up to 36kV
- Bus bar outdoor application
- Bus bars in harsh environments, e.g. nuclear application

3:1

SHRINK RATIO

-55°C to 125°C
(-67°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial Construction, Automation, Mining, Transit, Utility, Power Distribution

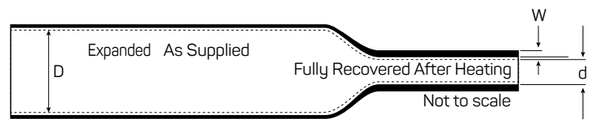
STANDARDS:

RoHS

Medium Voltage Crosslinked Polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	M	FT
CNTT 33/10	33.0	1.299	10.0	0.394	2.80	0.110	15	50
CNTT 45/15	45.0	1.772	15.0	0.591	2.80	0.110	15	50
CNTT 60/19	60.0	2.362	19.0	0.748	3.10	0.122	15	50
CNTT 80/25	80.0	3.150	25.0	0.984	2.90	0.114	15	50



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Red-brown (RD-BN)
- Please specify the product name, order number and options you require
- *Example*: CNTT 45/15, red-brown, 150m

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heavy wall heat shrink tubing insulates and protects electrical splices and terminations where maximum flame retardancy and exceptional insulating and sealing characteristics are required.

FEATURES AND BENEFITS

- Flame retardant
- UV Resistant
- High impact and abrasion resistance - capable of withstanding severe mechanical abuse of U.R.D., submersible and direct burial installations
- Optional thermoplastic adhesive liner provides complete environmental protection and insulation
- Rated for up to 2 kV
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C min.

STANDARDS

- UL 486D - UL file # E132914
- UL 94 V-0 - UL file # E167396
- CSA C22.2 No. 198.2
- IEC 60684-3-247
- ICEA S-19-81 and NEMA insulation thickness requirements
- QPL SAE AS23053/15, Class 1

TYPICAL APPLICATIONS

- Insulation of low voltage cables
- Flame retardant system

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Mass Transit, Electrical, Industrial, Solar

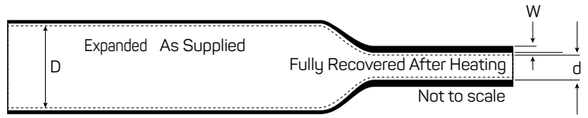
STANDARDS:

Heavy wall crosslinked polyolefin tubing

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				APPLICATION RANGE		SINGLE CONDUCTOR SIZE	DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		General Use			Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	AWG/MCM	1.22M / 48IN
0300	7.6	0.30	2.5	0.10	1.8	0.07	3.5 - 6	.15 - .25	#16 - #14	100
0350	8.9	0.35	3.0	0.12	1.8	0.07	3.5 - 8	.15 - .3	#14 - #10	100
0400	10.2	0.40	3.3	0.13	1.8	0.07	3.5 - 9	.15 - .35	#10 - #8	80
0500	13.0	0.51	4.1	0.16	2.0	0.08	4.5 - 11	.2 - .45	#8 - #6	70
0750	19.1	0.75	6.1	0.22	2.5	0.09	6.5 - 16.5	.25 - .65	#6 - #2	35
1100	27.9	1.10	8.9	0.35	3.0	0.12	10 - 24	.4 - .95	#1 - 3/0	75
1500	38.1	1.50	11.9	0.47	4.1	0.16	13 - 35	.5 - 1.4	2/0 - 350	40
2000	50.8	2.00	16.0	0.63	4.1	0.16	17.5 - 44	.7 - 1.75	250 - 500	25
2700	68.1	2.70	22.1	0.87	4.1	0.16	24 - 59	.95 - 2.3	600 - 1000	15
3500	89.9	3.54	29.9	1.18	4.1	0.16	33 - 80	1.3 - 3.1	800 - 1250	10
4700	119.9	4.72	39.9	1.57	4.2	0.17	44 - 104	1.75 - 4.1	1500 - 2500	10

Compliance for specific sizes may vary, please inquire for more details.



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Colour: Black (BK) or red (RD)
  - Printing: Printed or unprinted
  - Adhesive Lining: Lined (D) or unlined (U)
  - Approval: Standard, VG or QPL
- Please specify the product name, order number and options you require
- *Example*, FCFW, 1500, U, black, unprinted, 1.22 m lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heavy wall flame retardant heat shrinkable tubing suitable for use in a nuclear environment, insulates and protects electrical splices and terminations.

FEATURES AND BENEFITS

- Functional after 850 kGy cumulative dose
- Flame retardant
- UV Resistant
- Rated for up to 2 kV
- High resistance to impact and abrasion, lined with thermoplastic adhesive
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C min.

STANDARDS

- UL 486D - UL file # E132914
- UL 94 V-0 - UL file # E167396
- CSA C22.2 No. 198.2
- IEC 60684-3-247
- ICEA S-19-81 and NEMA insulation thickness requirements
- NF M 64-001
- IEC 60068
- LOCA/POSTLOCA in accordance with RCC-E 2007 NF M64-001

TYPICAL APPLICATIONS

- Continuous use in a nuclear environment, strain relief, sealing, insulable protection on LV cable
- The sleeves according NF M 64-001, are qualified for use in zones K1, K2 and K3

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Electrical, Nuclear Power Generation

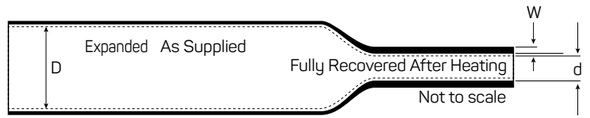
STANDARDS:

Heavy wall flame retarded heat shrink tube

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				APPLICATION RANGE		600 / 1000 V SINGLE CONDUCTOR SIZE	DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		General Use			Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	AWG/MCM	1.22M / 48IN
0300	7.6	0.30	2.5	0.10	1.8	0.07	3.5 - 6	.15 - .25	#16 - #14	100
0350	8.9	0.35	3.0	0.12	1.8	0.07	3.5 - 8	.15 - .3	#14 - #10	100
0400	10.2	0.40	3.3	0.13	1.8	0.07	3.5 - 9	.15 - .35	#10 - #8	80
0500	13.0	0.51	4.1	0.16	2.4	0.08	4.5 - 11	.2 - .45	#8 - #6	75
0750	19.1	0.75	6.1	0.22	2.5	0.09	6.5 - 16.5	.25 - .65	#6 - #2	35
1100	27.9	1.10	8.9	0.35	3.0	0.12	10 - 24	.4 - .95	#1 - 3/0	75
1500	38.1	1.50	11.9	0.47	4.1	0.16	13 - 35	.5 - 1.4	2/0 - 350	40
2000	50.8	2.00	16.0	0.63	4.1	0.16	17.5 - 44	.7 - 1.75	250 - 500	25
2700	68.1	2.70	22.1	0.87	4.1	0.16	24 - 59	.95 - 2.3	600 - 1000	15
3500	89.9	3.54	29.9	1.18	4.1	0.16	33 - 80	1.3 - 3.1	800 - 1250	10
4700	119.9	4.72	39.9	1.57	4.2	0.17	44 - 104	1.75 - 4.1	1500 - 2500	5

Compliance for specific sizes may vary, please inquire for more details.



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Colors: Black (BK), red (RD)
  - Printing: Printed or unprinted
  - Adhesive Lining: Lined (D) or unlined (U)
- Please specify the product name, order number and options you require
- *Example*: FCFW-N 0350, D, black, 200 pieces, 1.22 m lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heavy wall, flame retardant, heat shrink wraparound sleeve with adhesive for complete environmental sealing without the need for disconnection. Ideal for retrofit protection of exposed connectors and the repair of damaged cable.

FEATURES AND BENEFITS

- Fast and simple installation without interruption of service
- Repair damaged cable jackets
- Suitable for low voltage electrical and mechanical applications
- Proven thermoplastic adhesive ensures an absolutely waterproof seal
- High impact and abrasion resistance
- Flame retardant
- UV resistant
- FCFW QuickWrap can be cut to size in field to suit application
- Rated for 1 kV, 90°C continuous use
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C

TYPICAL APPLICATIONS

- Connectorized cable repair
- Retrofit protection of connectors
- Cable jacket repairs

INSTALLATION NOTES

FCFW QuickWrap is a one size fits all solution that can accommodate all sizes of cable and connectors. QuickWrap sleeves can be cut to length and width in the field to fit the specific application. Simply wrap the sleeve around the cable or connector, ensuring adequate overlap (allow for a minimum of 3 in or 76 mm), and then firmly apply the closure to hold FCFW QuickWrap together during the heat shrinking process. Please refer to the installation instructions included with each FCFW QuickWrap for more detailed information.

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Railway, Electrical, Industrial

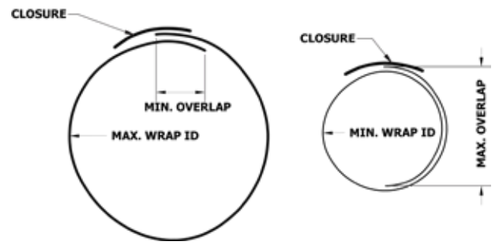
STANDARDS:

RoHS

Heat shrink wraparound sleeve

DIMENSIONS

ORDER NUMBER	LENGTH		WIDTH		RECOMMENDED OVERLAP				EXPANDED SLEEVE I.D. WITH OVERLAP				APPLICATION RANGE		CONDUCTOR SIZE
					MIN		MAX		MIN		MAX		MIN - MAX		AWG/MCM
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	600/1000V
1500	12	305	5.7	145	1.13	28.6	2.36	59.8	0.75	19.1	1.14	29.0	0.50 - 1.00	13 - 25	#2/0 - 350
2000	12	305	7.3	185	1.13	28.6	3.14	79.8	1.00	25.4	1.64	41.7	0.70 - 1.50	18 - 38	250 - 500
2700	12	305	9.5	241	1.20	30.5	4.24	107.7	1.35	34.3	2.32	58.9	1.00 - 2.00	25 - 58	600 - 1000



ORDERING

- Please specify the product name plus the options you require
- *Example*, FCFW QuickWrap 1500, 12 in length

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

CSEC Series cold shrink end caps are designed to provide a reliable, moisture proof method of sealing exposed cable ends without the use of additional tools, tapes or mastics.

Made of EPDM rubber, the end caps are pre-expanded over a rip cord that is simple and easy to install.

FEATURES AND BENEFITS

- Quick and easy installation
- Accommodates a wide range of electrical cables, pipes and conduits in four different sizes
- Excellent insulation, sealing and abrasion resistance
- No tapes, mastics or heat source required
- Protects cables and pipes from exposure to moisture, contamination and corrosion
- UV, ozone and water resistant
- Easily removable
- Shrink ratio: 2:1
- Continuous operating temperature: -20°C to 105°C

STANDARDS

- Qualified to ANSI C119.1 600V
- Rated to ICEA electrical withstand test for 1000V
- RoHS directive 2011/65/EU
- Regulation (EC) No. 1907/2006 - REACH

TYPICAL APPLICATIONS

- Physical protection of cable ends, pipes, tubes, and any similar objects.
- Not recommended for use in contact with mineral oils, fluids, or solvents.

2:1

SHRINK RATIO

-20°C to 105°C
(-4°F to 221°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Industrial, Utility

STANDARDS:

RoHS

Cold shrink end caps

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS
	Application Range Use		Application Range Use		Lengths		Pieces
	MM	IN	MM	IN	MM	IN	
CSEC-1	20.9	0.82	11.6	0.46	50.8	2	10
CSEC-2	30.1	1.18	15.9	0.63	57.15	2.25	10
CSEC-3	49.2	1.94	26.0	1.02	69.85	2.5	10
CSEC-4	84.3	3.32	45.5	1.79	88.9	3.5	10

ORDERING

Select a dimension which will shrink snugly over the application to be covered.

- Please specify the product name, order number and options you require
- *Example*, CSEC-1, black, 20 pieces

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.

Cold shrink splice insulators for inline splices of low voltage cables.

CSS series cold applied splice sealing products are made of specially formulated silicone rubber that offers excellent insulation and moisture proof sealing for in-line cable connector systems or elbow to cable jacket applications. The rubber sleeves are factory expanded and held over a removable, plastic rip cord housing, that installs quickly and easily. The kit contains expanded cold shrink tubes and an installation guide, with options of adding end sealant mastics for added protection.

FEATURES AND BENEFITS

- Ease of installation
- Suitable for a wide range of cable sizes
- UV resistance
- 1000V rating as a primary insulation cover
- No special tools or training required for installation
- Shrink ratio: >2:1
- Continuous operating temperature: -40°C to 105°C

STANDARDS

- ANSI C119.1-1986

TYPICAL APPLICATIONS

- Primary insulation for splices up to 1kV
- Complete environmental protection for inline connector covers
- Elbow to cable jacket sealing
- Cable jacket repair
- Suitable for indoor or outdoor locations

>2:1

SHRINK RATIO

-40°C to 105°C
(-40°F to 221°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Industrial, Utility, Power Distribution

STANDARDS:

RoHS

Cold seal splice insulators for inline splices of low voltage cables

IN-LINE SPLICE SEALING KITS

ORDER NUMBER	CONDUCTOR SIZE RANGE	APPLICATION RANGE (MIN-MAX)	RELAXED TUBE LENGTH
	AWG/MCM	IN	IN
CSS-0750-8	#2 - 1/0	0.37-0.68	8.0
CSS-1500-9	2/0 - 400	0.51-1.18	9.0
CSS-2000-9	500 - 800	0.97- 1.95	9.0
CSS-2000-12	500 - 800	0.97- 1.95	12.0
CSS-3000-9	900 - 1000	1.25-2.65	9.0
CSS-4000-9	1250 - 2000	1.63-3.67	9.0

Option is available to add end sealing mastics for added environmental protection

Cold seal splice kits for jacketed concentric neutral cables

CABLE JACKET SEALING KITS (JCN CABLES)

ORDER NUMBER	MIN SEAL DIAMTER	MAX INSTALL DIAMETER	SUPPLIED TUBE LENGTH	RELAXED TUBE LENGTH	15KV CABLE	25KV CABLE	35KV CABLE
	IN	IN	IN	IN	AWG/MCM	AWG/MCM	AWG/MCM
CSS-K1	0.97	1.95	4.5	6.0	#2-4/0	#2-2/0	1/0
CSS-K2	1.25	2.65	6.5	8.0	2/0-1000	1/0-750	1/0-500
CSS-K3	1.63	3.67	7.5	9.0	750-1500	600-1250	350-1000

Cold seal splice kits for tape shielded cables

CABLE JACKET SEALING KITS (TAPE SHIELDED CABLES)

ORDER NUMBER	MIN SEAL DIAMTER	MAX INSTALL DIAMETER	SUPPLIED TUBE LENGTH	RELAXED TUBE LENGTH	8KV CABLE	15KV CABLE	25KV CABLE	35KV CABLE
	IN	IN	IN	IN	AWG/MCM	AWG/MCM	AWG/MCM	AWG/MCM
CSS-K0G	0.51	1.18	4.5	6.0	#8-#1	-	-	-
CSS-K1G	0.97	1.95	4.5	6.0	1/0-350	#2-250	#1-250	1/0
CSS-K2G	1.25	2.65	6.5	8.0	500-1000	350-1000	350-750	2/0-350
CSS-K3G	1.63	3.67	7.5	9.0	-	1250-1500	1000-1500	500-1500

INSTALLATION NOTES

- Allow 2.0" min coverage on either side of connector during installation of sleeve
- Tube length dimensions are nominal

ORDERING

- *Example*, CSS-0750-8
- Please contact us for availability of non-standard cut-lengths

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.

CSS-EP Series cold shrink splice kits are designed to provide a reliable, moisture proof method of sealing and protecting low voltage in-line cable connections and premolded splice kits without the use of additional tools.

Made of EPDM rubber, the product is ideal for splice sealing and protection in submersible and direct burial applications and harsh environments. The cold shrink tubes are pre-expanded over a rip cord that is simple and easy to install.

FEATURES AND BENEFITS

- Quick and easy installation
- Accommodates a wide range of electrical cable sizes
- Excellent insulation, sealing and abrasion resistance
- Protects cables and pipes from exposure to moisture, contamination and corrosion
- UV, Ozone and water resistant
- 1000V rating as a primary insulation cover
- Shrink ratio: 2:1
- Continuous operating temperature: -20°C to 105°C
- Option to include end sealing mastic for added environmental protection

STANDARDS

- ANSI C119.1-2011

TYPICAL APPLICATIONS

- Submersible or direct buried cable connections
- In-line connector covers
- Environmental sealing for general, non electrical applications
- Cable jacket repairs
- Suitable for indoor and outdoor application

2:1

SHRINK RATIO

-20°C to 105°C
(-4°F to 221°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Electrical Utility, Industrial, Renewables

STANDARDS:

RoHS

CSS-EP - Insulation and cable splice protection

DIMENSIONS

ORDER NUMBER	APPLICATION USE RANGE		CONDUCTOR SIZE RANGE		RECOVERED TUBE LENGTH	
	Minimum - Maximum		(AWG-KCMIL)		Nominal	
	MM	IN	MIN	MAX	MM	IN
CSS-EP 0750-6	7.8-14.3	0.31-0.56	#6	#4	152	6
CSS-EP 1000-8	9.9-20.9	0.39-0.82	#2	1/10	203	8
CSS-EP 1300-9	13.9-30.1	0.55-1.18	2/0	300	229	9
CSS-EP 1300-11	13.9-30.1	0.55-1.18	2/0	300	279	11
CSS-EP 1500-6*	17.5-35.1	0.69-1.38	-	-	152	6
CSS-EP 1500-12	17.5-35.1	0.69-1.38	250	250	305	12
CSS-EP 1500-16	24.0-49.3	0.69-1.38	250	250	406	16
CSS-EP 2000-6*	24.0-49.3	0.95-1.94	-	-	152	6
CSS-EP 2000-12	24.0-49.3	0.95-1.94	500	800	305	12
CSS-EP 2000-18	24.0-49.3	0.95-1.94	500	800	457	18
CSS-EP 2750-6*	32.2 - 66.0	1.27-2.60	-	-	152	6
CSS-EP 2750-9	32.2 - 66.0	1.27-2.60	900	1000	229	9
CSS-EP 2750-12	32.2 - 66.0	1.27-2.60	900	1000	305	12
CSS-EP 2750-15	32.2 - 66.0	1.27-2.60	900	1000	381	15
CSS-EP 2750-18	32.2 - 66.0	1.27-2.60	900	1000	457	18
CSS-EP 4000-9*	42.6-93.7	42.6-93.7	-	-	229	9
CSS-EP 4000-18	42.6-93.7	42.6-93.7	1250	2000	457	18

*Recommended for use in terminal lug sealing

Confirm minimum and maximum cable insulation/jacket and connector dimension are within range.

CSS-EPRS - Protective outer jacket for MV premolded splice kits

DIMENSIONS

ORDER NUMBER	APPLICATION USE RANGE		CONDUCTOR SIZE RANGE		RECOVERED TUBE LENGTH	
	Minimum - Maximum		(AWG-KCMIL)		Nominal	
	MM	IN	MIN	MAX	MM	IN
CSS-EPRS1	7.8-14.3	0.31-0.56	#6	#4	152	6
CSS-EPRS2	9.9-20.9	0.39-0.82	#2	1/10	203	8
CSS-EPRS3	13.9-30.1	0.55-1.18	2/0	300	229	9

INSTALLATION NOTES

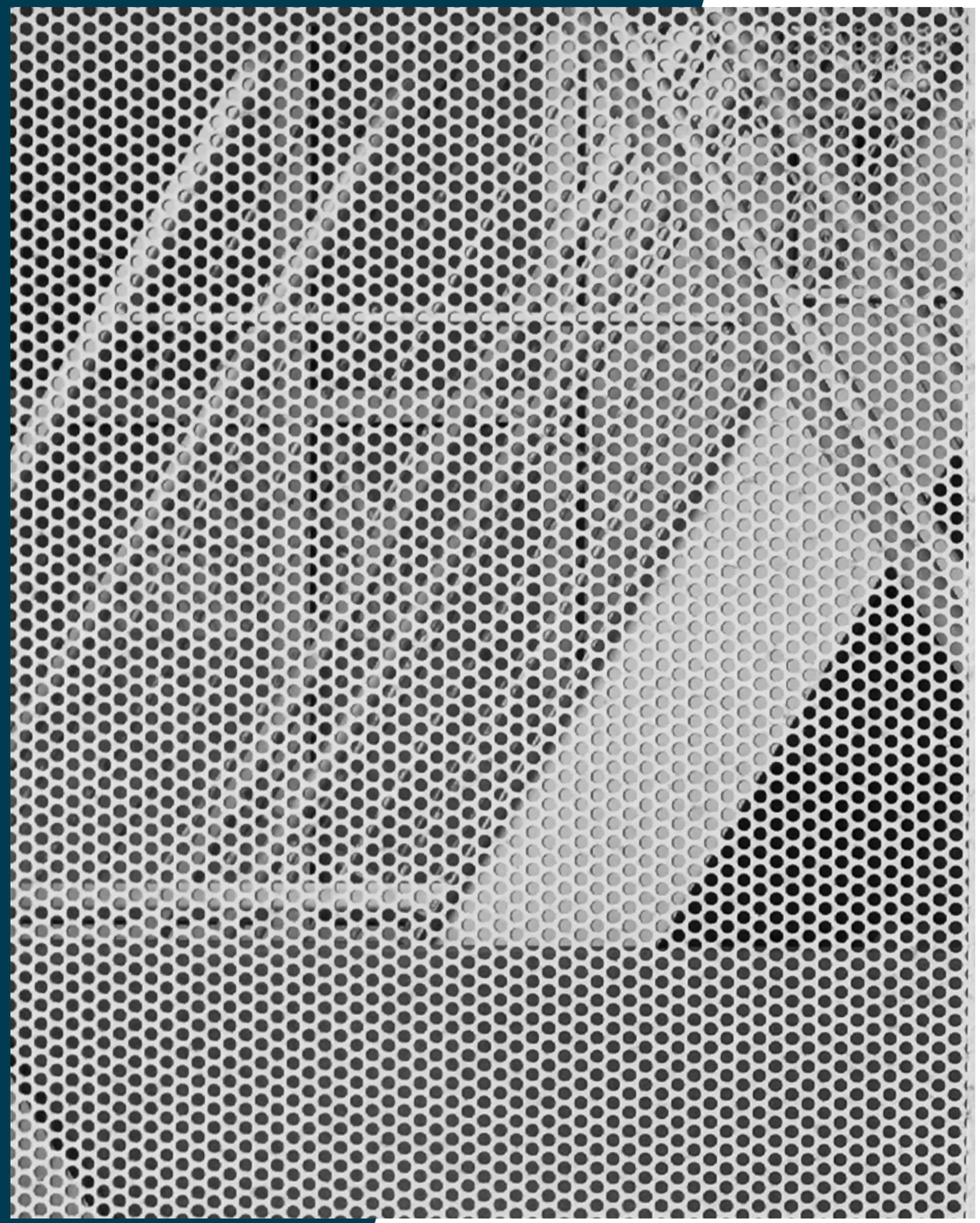
- Allow a minimum of 50 mm coverage on either side of connector during installation of sleeve
- Tube length dimensions are nominal

ORDERING

Select a dimension which will shrink snugly over the application to be covered.

- Please specify the product name, order number and options you require.
- *Example*: CSS-EP 0750-6"

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.



SPECIALTY PRODUCTS AND KITS

RELIABLE SOLUTIONS FOR INDUSTRY SPECIFIC APPLICATIONS

Our operational flexibility and strong customer focused approach has enabled us to provide specialty products and kits tailored for specific customer applications or end use. DSG-Canusa's offering of specialty products include heat shrink kits for use in airport lighting, mining, cable repair or street lighting applications or specialty tapes used in automotive, oil and gas or general light or heavy-duty industrial applications.

Airport Lighting Kits providing excellent insulation and environmental sealing protection for FAA approved L-823 plug and receptacle connectors.

FEATURES AND BENEFITS

- Protects against water intrusion and accidental disconnection
- Provides added strain relief for the connector/cable assembly
- Heat indicating lines disappear upon correct shrink temperature
- High impact and abrasion resistance
- Installs in minutes
- Adhesive free over connector allowing for ease of removal for connector maintenance
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C

STANDARDS

- Airfield lighting systems
- Sealing L-823 type plug and receptacle connectors

NOTE

- When heated above 120°C, CAPL Airport Lighting Kit sleeves shrinks rapidly to seal and encapsulate electrical connections, providing a fast, simple and clean insulation system that can also be easily removed.

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Aerospace Defense, Industrial, OEM

STANDARDS:

RoHS

Airport lighting kit

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				SLEEVE LENGTH	
	Internal Diameter (min) D		Internal Diameter (max) d		Wall Thickness (nom) W			
	MM	IN	MM	IN	MM	IN	MM	IN
1500	38.1	1.5	9.53	0.375	2.0	0.08	406	16

ORDERING

- Please specify the product name plus the options you require
- *Example:* CAPL, 1500, 16 in

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Airport Lighting Kits providing excellent insulation and environmental sealing protection for FAA approved L-823 plug and receptacle connectors.

FEATURES AND BENEFITS

- Protects against water intrusion and accidental disconnection
- Provides added strain relief for the connector/cable assembly
- Heat indicating lines disappear upon correct shrink temperature
- High impact and abrasion resistance
- Installs in minutes
- Full lenth adhesive
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C

STANDARDS

- Airfield lighting systems
- Sealing L-823 type plug and receptacle connectors

NOTE

- When heated above 120°C, CAPL-F Airport Lighting Kit sleeves shrinks rapidly to seal and encapsulate electrical connections, providing a fast, simple and clean insulation system.

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Aerospace Defense, Industrial, OEM

STANDARDS:

RoHS

Airport lighting kit

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				SLEEVE LENGTH	
	Internal Diameter (min) D		Internal Diameter (max) d		Wall Thickness (nom) W			
	MM	IN	MM	IN	MM	IN	MM	IN
1500	38.1	1.5	9.53	0.375	2.0	0.08	406	16

ORDERING

- Please specify the product name plus the options you require
- *Example*: CAPL-F, 1500, 16 in

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heat shrink boots seal and protect multi-conductor cable and conduit breakouts.

FEATURES AND BENEFITS

- Shrink ratio accommodates a wide range of cables
- Flame retardant
- Boots for 2, 3 and 4 way cable breakouts
- Strain relief and mechanical protection
- Thermoplastic adhesive liner provides complete environmental protection and insulation
- Shrink ratio: >2:1
- Continuous operating temperature: -55°C to 100°C
- Shrink temperature: 135°C

STANDARDS

- IEC 62677
- ESI 09-11

TYPICAL APPLICATIONS

- Strain relief for multi-core cables
- Moisture sealing and environmental protection

>2:1

SHRINK RATIO

-55°C to 100°C
(-67°F to 212°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Renewables, Industrial, Power Distribution, Utility

STANDARDS:

RoHS

Crosslinked polyolefin cable breakout boots

DIMENSIONS

ORDER NUMBER	LEG	EXPANDED				RECOVERED										APPLICATION LEGS
		Diameter (Min) D		Diameter (Min) d		Diameter (Max) D		Diameter (Max) d		Length (Nom) L		Wall Thickness of Body (Nom) TB		Wall Thickness of Leg (Nom) TL		600 V Conductor
	No	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	AWG/MCM
0120	2	30	1.18	15	0.59	9.4	0.37	4.1	0.16	94	3.7	1.5	0.06	1.2	0.05	#10 - 2/0
0200	2	50	1.97	21	0.83	22.9	0.9	7.6	0.3	119	4.69	3.2	0.13	3.2	0.13	#3 - 300
0340	2	87	3.43	43	1.69	38.1	1.5	12.7	0.5	141.5	5.57	3.8	0.15	3.8	0.15	3/0 - 1000
0150	3	38.1	1.5	16.5	0.65	12.7	0.5	4	0.16	113.5	4.47	2.9	0.11	2.9	0.11	#8 - 3/0
0170	3	43.2	1.7	20.8	0.82	22.9	0.9	7.6	0.3	99	3.9	3.8	0.15	3.8	0.15	#3 - 300
0220	3	55.8	2.2	30.4	1.2	22.5	0.89	9	0.35	180	7.09	3	0.12	2	0.12	#1 - 600
0240	3	61	2.4	31.8	1.25	35.6	1.4	12.6	0.5	144.5	5.69	3.8	0.15	3.8	0.15	3/0 - 750
0280	3	100	3.94	39.9	1.57	27.9	1.1	12.9	0.51	210	8.27	3.6	0.14	2.5	0.1	300 - 1000
0350	3	90	3.54	35	1.38	34	1.34	14	0.55	200	7.87	3	0.12	2	0.08	4/0 - 1000
0430	3	110	4.33	40	1.57	35	1.38	17.5	0.69	178	7.01	4	0.16	3	0.12	300 - 1000
0490	3	125	4.92	50.8	2	59	2.32	25.4	1	283	11.14	3.8	0.15	3.8	0.15	750 - 1000
0140	4	35	1.38	15	0.59	12	0.47	3	0.12	95	3.74	2.5	0.1	2	0.08	#12 - 2/0
0190	4	47.4	1.87	21.5	0.85	22.9	0.9	6.4	0.25	165.1	6.5	4.1	0.16	3.3	0.13	#6 - 350
0240	4	60	2.36	30	1.18	22.9	0.9	6.4	0.25	202	7.95	4.1	0.16	3.3	0.13	#4 - 600
0310	4	78.7	3.1	35	1.5	35.6	1.4	12.5	0.49	240	9.45	3.3	0.13	3.3	0.13	3/0 - 1000
0525	4	133.4	5.25	35	1.35	76.2	3.00	14.00	0.55	254.4	10.02	4.1	0.13	4.1	0.16	4/0 - 1000

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Legs: 2, 3 or 4
- Please specify the product name, order number and options you require
- *Example:* CCB, 0120, 2 legs

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heat shrinkable boots, suitable for use in a nuclear environment, insulate and protect electrical splices and termination on multi-core cables.

FEATURES AND BENEFITS

- Functional after 850 kGy cumulative dose
- Flame retardant
- Strain relief and mechanical protection
- High resistance to impact and abrasion, lined with thermoplastic adhesive
- Boots for 2, 3, and 4 way breakouts
- Shrink ratio: >2:1
- Continuous operating temperature: -55°C to 100°C
- Shrink temperature: 135°C

STANDARDS

- IEEE 383
- IEC 62677-3-101
- NF M 64-001
- IEC 60068
- LOCA/POST LOCA in accordance with RCC-E 2007 NF M64-001

TYPICAL APPLICATIONS

- Continous use in a nuclear environment for strain relief, sealing, insulable protection on LV cable
- Boots are qualified for for use in zones K1, K2 and K3 according to NF M 64-001

>2:1
SHRINK RATIO

-55°C to 100°C
(-67°F to 212°F)
CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Electrical, Nuclear Power Generation

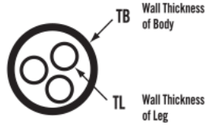
STANDARDS:

RoHS

Crosslinked polyolefin cable breakout boots

DIMENSIONS

ORDER NUMBER	LEG	EXPANDED				RECOVERED										APPLICATION LEGS
		Diameter (Min) D		Diameter (Min) d		Diameter (Max) D		Diameter (Max) d		Length (Nom) L		Wall Thickness of Body (Nom) TB		Wall Thickness of Leg (Nom) TL		600 V Conductor
	No	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	AWG/MCM
0120	2	30	1.18	15	0.59	9.4	0.37	4.1	0.16	94	3.7	1.5	0.06	1.2	0.05	#10 - 2/0
0200	2	50	1.97	21	0.83	22.9	0.9	7.6	0.3	119	4.69	3.2	0.13	3.2	0.13	#3 - 300
0340	2	87	3.43	43	1.69	38.1	1.5	12.7	0.5	141.5	5.57	3.8	0.15	3.8	0.15	3/0 - 1000
0150	3	38.1	1.5	16.5	0.65	12.7	0.5	4	0.16	113.5	4.47	2.9	0.11	2.9	0.11	#8 - 3/0
0170	3	43.2	1.7	20.8	0.82	22.9	0.9	7.6	0.3	99	3.9	3.8	0.15	3.8	0.15	#3 - 300
0220	3	55.8	2.2	30.4	1.2	22.5	0.89	9	0.35	180	7.09	3	0.12	2	0.12	#1 - 600
0240	3	61	2.4	31.8	1.25	35.6	1.4	12.6	0.5	144.5	5.69	3.8	0.15	3.8	0.15	3/0 - 750
0280	3	100	3.94	39.9	1.57	27.9	1.1	12.9	0.51	210	8.27	3.6	0.14	2.5	0.1	300 - 1000
0350	3	90	3.54	35	1.38	34	1.34	14	0.55	200	7.87	3	0.12	2	0.08	4/0 - 1000
0430	3	110	4.33	40	1.57	35	1.38	17.5	0.69	178	7.01	4	0.16	3	0.12	300 - 1000
0490	3	125	4.92	50.8	2	59	2.32	25.4	1	283	11.14	3.8	0.15	3.8	0.15	750 - 1000
0140	4	35	1.38	15	0.59	12	0.47	3	0.12	95	3.74	2.5	0.1	2	0.08	#12 - 2/0
0190	4	47.4	1.87	21.5	0.85	22.9	0.9	6.4	0.25	165.1	6.5	4.1	0.16	3.3	0.13	#6 - 350
0240	4	60	2.36	30	1.18	22.9	0.9	6.4	0.25	202	7.95	4.1	0.16	3.3	0.13	#4 - 600
0310	4	78.7	3.1	35	1.5	35.6	1.4	12.5	0.49	240	9.45	3.3	0.13	3.3	0.13	3/0 - 1000
0525	4	133.4	5.25	35	1.35	76.2	3.00	14.00	0.55	254.4	10.02	4.1	0.13	4.1	0.16	4/0 - 1000

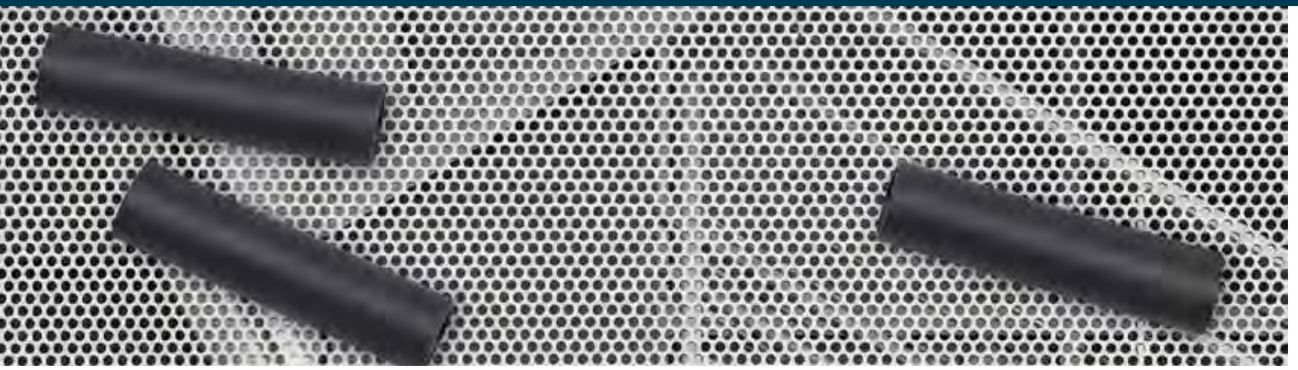


ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Legs: 2, 3 or 4
- Please specify the product name, order number and options you require
- *Example*: CCB-N, 0120, 2 legs

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.



Mining Cable Splice Kits permanently insulate and seal cable splices to 2kV.

FEATURES AND BENEFITS

- Flame retardant
- Quick and easy installation
- Covers many types of mining cables including round, flat, W, G, G-GC, PG and PCG cable types
- Outer sleeves will not split or rupture during normal installation, even on overheating
- Thermoplastic adhesive liner proves complete environmental protection and insulation
- Shrink ratio: 3:1
- Installation at temperature as low as -40°C
- Continuous operating temperature: -55°C to 110°C

STANDARDS

- MSHA approved, #P-252-1

TYPICAL APPLICATIONS

- Mining cable splices

3:1
SHRINK RATIO

-55°C to 110°C
(-67°F to 212°F)
CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Mining, Industrial, OEM, Oil & Gas

STANDARDS:

RoHS

Mining cable splice kit

TYPE G ROUND

ORDER NUMBER	CABLE DIAMETER SIZE RANGE	TYPE G ROUND, POWER CONDUCTOR SIZE RANGE (AWG/MCM)			
		(G) 2/C	(G) 3/C	(G) 4/C	(G-GC) 3/C
046	08 - 1.2	#8 - #4	#8 - #6	#8 - #6	#8 - #6
047	1.2 - 2.0	#3 - 4/0	#4 - 1/0	#4 - 1/0	#4 - 1/0
058	1.5 - 3.0	-	2/0 - 500	2/0 - 4/0	2/0 - 500

TYPE P ROUND

ORDER NUMBER	CABLE DIAMETER SIZE RANGE	TYPE P ROUND, POWER CONDUCTOR SIZE RANGE (AWG/MCM)			
		(PG) 2/C	(PG) 3/C	(PCG) 4/C	(PCG) 3/C
046	08 - 1.2	#8 - #4	#8 - #6	#8 - #4	#8 - #6
047	1.2 - 2.0	#3 - 4/0	#4 - 1/0	-	-
058	1.5 - 3.0	-	2/0 - 500	-	-

TYPE W ROUND

ORDER NUMBER	CABLE DIAMETER SIZE RANGE	TYPE W ROUND, POWER CONDUCTOR SIZE RANGE (AWG/MCM)			
		(W) 1/C	(W) 2/C	(W) 3/C	(W) 4/C
046	08 - 1.2	Contact Factory	#6 - #2	#6 - #3	#8 - #6
047	1.2 - 2.0	-	#1 - 2/0	#2 - 4/0	#4 - 1/0
058	1.5 - 3.0	-	-	-	2/0 - 4/0

FLAT

ORDER NUMBER	CABLE DIAMETER SIZE RANGE	TYPE W ROUND, POWER CONDUCTOR SIZE RANGE (AWG/MCM)			
		(W) 2/C	(G) 2/C	(G) 3/C	(G-GC) 3/C
046	08 - 1.2	#4 - #1	#4 - #1	-	-
047	1.2 - 2.0	1/0 - 4/0	1/0 - 4/0	#6 - #2	#6 - #2
058	1.5 - 3.0	-	-	#1 - 2/0	#1 - 2/0

ORDERING

Select the appropriate CMSK Mining Cable Splice Kit based on your cable conductor size. Check the cable dimensions to be sure they conform to the selected kit size.

- Please specify the product name, order number and options you require
- *Example*, CMSK, 046-C

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Adhesive lined, heat shrink wraparound sleeve that is closed with a flexible stainless-steel locking channel.

Used for general re-jacketing and sealing applications, protection of damaged cable or repair of cable joints. Installs easily in splice applications that are longer in length. The reinforced armor (RA) option features an aluminum mesh layered within the jacket for added mechanical protection.

FEATURES AND BENEFITS

- Provides water tight seal upon recovery
- Offers mechanical durability
- Application procedure is quick, simple and clean
- Sleeve and channel can be cut to suit short application requirements
- Steel channel provides permanent closure system
- For insulation purposes, rated for 1kV, for rejacketing purposes rated for all voltages
- Reinforced Armor (RA) option includes interwoven fiber mesh and aluminum layer for additional reinforcement and protection in harsh environmental applications
- Shrink ratio: >3:1
- Continuous operating temperature: -35°C to 100°C

TYPICAL APPLICATIONS

- Cable jacket repair
- Primary insulation cover on low voltage cables
- Re-jacketing cover for power cables
- Reinforced Armor (RA) option for added mechanical protection in harsh conditions

>3:1

SHRINK RATIO

-35°C to 100°C
(-31°F to 212°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Civil & Commercial Construction, Utility, Industrial, OEM, Mining

STANDARDS:

RoHS

CRDW Heat shrink cable repair sleeve – general sealing and protection

DIMENSIONS

ORDER NUMBER	EXPANDED ID		RECOVERED ID		RECOVERED WALL THICKNESS		RECOMMENDED CABLE DIAMETER	
	MM	IN	MM	IN	MM	IN	MM	IN
CRDW-1	43	1.69	10	0.39	2.3	0.09	12 - 30	0.5 - 1.2
CRDW-2	75	2.95	15	0.59	2.4	0.10	25 - 50	1.0 - 2.0
CRDW-3	93	3.66	25	0.98	2.4	0.10	30 - 65	1.2 - 2.6
CRDW-4	137	5.39	34	1.34	2.5	0.10	40 - 85	1.6 - 3.3
CRDW-5	160	6.30	48	1.65	2.5	0.10	55 - 105	2.2 - 4.1
CRDW-6	200	7.87	48	1.89	2.7	0.11	55 - 125	2.2 - 4.9

CRDW-RA Heat shrink cable repair sleeve – reinforced for harsh environment

DIMENSIONS

ORDER NUMBER	EXPANDED ID		RECOVERED ID		RECOVERED WALL THICKNESS		RECOMMENDED CABLE DIAMETER	
	MM	IN	MM	IN	MM	IN	MM	IN
CRDW-RA1	42	1.65	8	0.31	3.0	0.12	10 - 30	0.4 - 1.2
CRDW-RA2	75	2.95	15	0.59	3.0	0.12	20 - 50	0.8 - 2.0
CRDW-RA3	95	3.74	22	0.87	3.0	0.12	30 - 65	1.2 - 2.6
CRDW-RA4	122	4.80	35	1.38	3.0	0.12	40 - 80	1.6 - 3.1
CRDW-RA5	160	6.30	45	1.77	3.0	0.12	50 - 105	2.0 - 4.1
CRDW-RA6	200	7.87	55	2.17	3.0	0.12	60 - 125	2.4 - 4.9

ORDERING

- Select a dimension which will shrink snugly over the application to be covered. Allow for a minimum of 76 mm (3 in) length overlap beyond each end of the area to be covered.
- Please specify the product name plus the options you require
- *Example*, CRDW-1, or CRDW-RA1
- Standard product: Black, 1219 mm (48 inches) length

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.

Adhesive lined, heat shrink wraparound sleeve that is closed with a flexible stainless-steel locking channel. Used for making in-line Y or H parallel splices on cable up to 1000 V without cutting the main or run cable.

FEATURES AND BENEFITS

- Provides water tight seal upon recovery
- Offers mechanical durability
- Suitable for connecting Main and Tap runs to 500 kcmil size
- Accommodates compression and split bolt connectors
- High shrink ratio covers irregular shapes
- High impact and abrasion resistance
- Application procedure is quick, simple and clean
- Steel channel provides permanent closure system
- Installation temperature range: -15°C to 50°C

TYPICAL APPLICATIONS

- Cable tap splicing
- General re-jacketing and sealing of electrical cables

-15°C to 50°C
(5°F to 122°F)

INSTALLATION TEMPERATURE RANGE

MARKETS:

Electrical Utility, Industrial

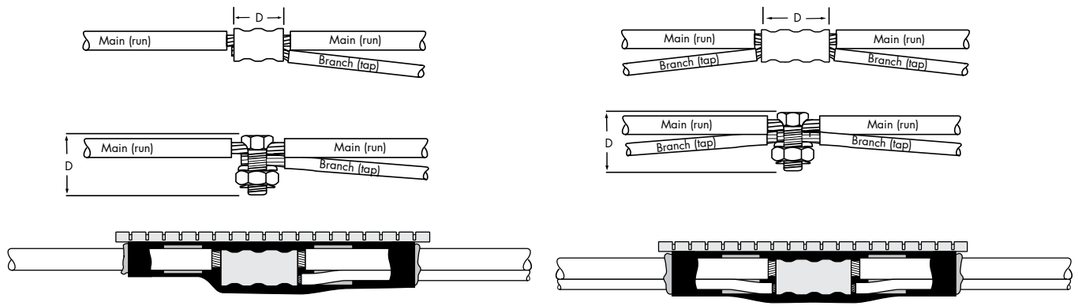
STANDARDS:

RoHS

1 kV cable tap splice kit

DIMENSIONS

ORDER NUMBER	MAIN (RUN) CABLE SIZE	BRANCH (TAP) CABLE SIZE	CONNECTOR DIMENSIONS	SLEEVE LENGTH
	AWG/Kcmil	AWG/Kcmil	(Max) D	IN
CRDW-CT1	#8 - #2	#10 - #2	2	6
CRDW-CT2	#2 - 4/0	#10 - 4/0	4	8
CRDW-CT3	4/0 - 500	#2 - 500	6	10



NOTE

- Split bolts can only be used up to #2 AWG Main and Branch cable sizes

ORDERING

- Select the cable run and tap combination and confirm that the connector dimensions are not exceeded.
- Please specify the product name plus the options you require
- *Example*: CRDW-CT1

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Street Lighting Kits are a convenient method for the installation, maintenance and repair of street lighting systems.

FEATURES AND BENEFITS

- Excellent insulation, sealing and strain relief for splice repairs or cable extensions
- Thermoplastic adhesive liner provides complete environmental protection and insulation
- High impact and abrasion resistance
- Kits can be installed at temperature as low as -40°C
- Tubing will not split or rupture during normal installation, even when overheated
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C
- Also available as a wrap-around sleeve

TYPICAL APPLICATIONS

- Street lighting cable splices

CONTENTS

- Each kit includes adhesive coated heat shrink sleeves and compression connectors

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 212°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Pwer Distribution, Power Distribution - LV, Utility

STANDARDS:

RoHS

Street Lighting Kit

DIMENSIONS

ORDER NUMBER	KIT DESCRIPTION	CONNECTOR TYPE
1	12 AWG, 2 Conductor, Solid 10 AWG, 2 Conductor, Stranded	2 each, "C" Type/Crimp
1A	12 AWG, 2 Conductor, Solid 10 AWG, 2 Conductor, Stranded (with ground)	3 each, "C" Type/Crimp

ORDERING

- Select the appropriate CSLK Street Lighting Kit.
- Please specify the product name plus the options you require
- *Example*, CSLK 1A

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.

Tape Sealant.

CTSB-2: Specially designed, rubber based, black sealant tape for use with heat shrink tubing
CTSG-1: Crosslinked, grey butyl tape suitable for continuous high temperature applications

FEATURES AND BENEFITS

CTSB-2

- Excellent adhesion to PVC, PE and steel
- Softens to fill voids
- Remains flexible over time
- Non-conductive
- Superior waterproof seal when used with other DSG-Canusa products
- Continuous operating temperature: -20°C to 88°C

CTSG-1

- Protects sharp edges and smooths out transitions
- Environmentally seals areas and tubing
- Non-conductive
- Excellent high temperature performance
- Resistant to common fluids and solvents
- High dielectric strength (310 V/mil)
- Continuous operating temperature: -40°C to 107°C

TYPICAL APPLICATIONS

- Insulating and sealing electrical connections
- Padding over irregular surfaces

-40°C to 107°C
(-40°F to 255°F)
CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Industrial, Utility, Power Distribution

STANDARDS:

RoHS

Tape sealant

DIMENSIONS

ORDER NUMBER	WIDTH		THICKNESS		ROLL LENGTH	
	MM	IN	MM	IN	MM	IN
CTSB-2 (Black)	50.8	2.0	1.5	0.06	7620	300
CTSG-1 (Grey)	25.4	1.0	1.5	0.06	7620	300

ORDERING

- Select the appropriate tape sealant.
- Please specify the product name plus the options you require
- *Example*, CTSG-1

Please contact your Customer Service Representative for information on tape sealant and material data sheet.

Adhesive lined, heat shrink duct and vacuum tape specifically designed for sealing joints on spiral, flexible or flat oval ducts used in heating, ventilating, air conditioning and exhaust recovery systems.

FEATURES AND BENEFITS

- Eliminates air leakage in vacuum and ventilation systems
- Seals against moisture ingress and other contaminants
- Powerful adhesive bonds to galvanized steel, aluminum and stainless steel
- Effective, reproducible seal allows for resistance to bending, vibrations and other mechanical stresses over a wide range of temperatures
- Application procedure is quick, simple and clean
- Shrink ratio: 1.1:1
- Continuous operating temperature: -25°C to 45°C
- Shrink temperature: 120°C

TYPICAL APPLICATIONS

- Sealing HVAC duct systems

INSTALLATION NOTES

Cut the DV Tape to the circumference of the duct plus the recommended overlap noted in the Dimensions table. DV Tape is supplied with the adhesive side face up on the roll. Wrap around the joint and hold in place. Upon application of heat using a propane gas torch, the tape shrinks tightly around the joint, forcing the melted adhesive to flow in surface contours, spiral seams or corrugations. After cooling, the adhesive solidifies and bonds tenaciously to galvanized steel, aluminum or stainless steel. The ducting can be handled immediately after cooling.

1.1:1

SHRINK RATIO

-25°C to 45°C
(-13°F to 113°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Civil & Commercial Construction, Industrial, Mining

STANDARDS:

RoHS

Adhesive lined crosslinked polyolefin tape

DIMENSIONS

DV TAPE WIDTH		DUCT DIA APPLICATION RANGE		STANDARD LENGTH		RECOMMENDED MINIMUM JOINT OVERLAP	
MM	IN	MM	IN	M	FT	MM	IN
50	2	50 - 250	2 - 10	25	82	50	2.0
75	3	280 - 500	11 - 20	25	82	63	2.5
100	4	550 - 1000	22 - 40	25	82	75	3.0
100	4	1050 - 1500	42 - 60	25	82	100	4.0

ORDERING

Select a dimension which will shrink snugly over the application to be covered.

- Please specify the product name, order number and options you require
- *Example*, DV Tape, 2 in width

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

UF Cable Splice Kits are used to provide a reliable yet simple method of connecting 600 V rated UF cables ranging from #14/2 with ground up to #8/3 with ground. Heavy wall, adhesive lined heat shrink tubing provides an effective, moisture proof seal that is suitable for submersible and direct burial splice applications.

3:1

SHRINK RATIO

FEATURES AND BENEFITS

- Outer tubing sleeve provides excellent abrasion resistance
- Accommodates #14 to #8 AWG UF type cables
- Heat activated seal ensures maximum protection against moisture ingress
- Quick and easy installation
- Rated for 600V
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C min.

STANDARDS

- UL 486D listed for direct burial applications

TYPICAL APPLICATIONS

- Irrigation systems
- Splicing of underground feeder cables

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Electrical Construction

STANDARDS:

Underground feeder cable splice kits

INSTALLATION INSTRUCTIONS

1. Remove 2 in. of jacket from UF cable.
2. Strip 5/8 in. of insulation from conductors
3. Clean cable surface and wipe dry
4. Insert wires into the brass connector making sure that the wires are inserted an equal length into the brass sleeve so that the set screw can engage into the copper of each wire.

5. Slide the enclosed heat shrink tubing over one end of the wire.

6. Tighten screws with 8 in pounds of torque.
7. Slide the heat shrink tubing over the connection so that it is centered over the brass connector assembly.
8. Apply heat to the shrink tube with a torch or heat gun from the middle of the shrink tubing moving out to each end.
9. Apply heat until adhesive flows out on both ends of the tube.

10. Properly installed, shrink tube will be smooth and conform to the cable.

KIT CONTENTS

- Heavy Wall Tubing
- Four (4) position Barrel Connector
- Instruction Sheet

ORDERING

- Please specify the product name
- *Example:* UF Splice Kit

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Superior all weather Professional grade quality tapes that provide excellent performance in a wide range of commercial and industrial applications.

FEATURES AND BENEFITS

- Highly elastic
- Cold and weather resistant
- High dielectric strength
- Highly resistant to sun, water, oil, acids, alkalies, corrosive chemicals
- Flame retardant
- Abrasion resistant

STANDARDS

- ASTM D 3005, Type I
- ASTM D 1000
- HH-I-595C/A-A-55809A
- EN 60454-3-1, Type 11
- UL 510
- CSA C22.2 no.197
- Federal Specification L-T-1512A

TYPICAL APPLICATIONS

- Insulation and jacketing of splices
- Wrapping of wire harnesses
- Insulation of degaussing coils
- Quick identification of e.g. electrical phases, circuits, feeders and branches
- Corrosion protection
- Fire protection of cable conduits

-18°C to 105°C
(-.4°F to 221°F)
OPERATING TEMPERATURE

MARKETS:
Industrial, Utility, Power Distribution, Automotive

STANDARDS:

RoHS

The information given is not generally valid for all DSG-Canusa brand tapes, but reflects a selection of characteristics of the product range.

CET33
PROFESSIONAL GRADE VINYL ELECTRICAL TAPE

All weather, professional grade, pressure sensitive vinyl tape which applies easily and gives excellent performance over a wide range of temperatures. Cold and weather resistant. Flame retardant. CET33 can be used as primary insulation for splices up to 600 volts. Use as protective outer jacket over splices and for all low temperature applications.

CET35
PROFESSIONAL GRADE COLOR CODING VINYL ELECTRICAL TAPE

All-weather, professional grade, pressure sensitive vinyl tape that is available in nine colors for color coding and insulating. Cold resistant and weatherproof. Flame retardant. Used for quick identification of electrical circuits, containers, and conduit systems, as well as primary insulation for splices at not more than 600 volts.

CET77
ARC & FIRE PROOFING TAPE

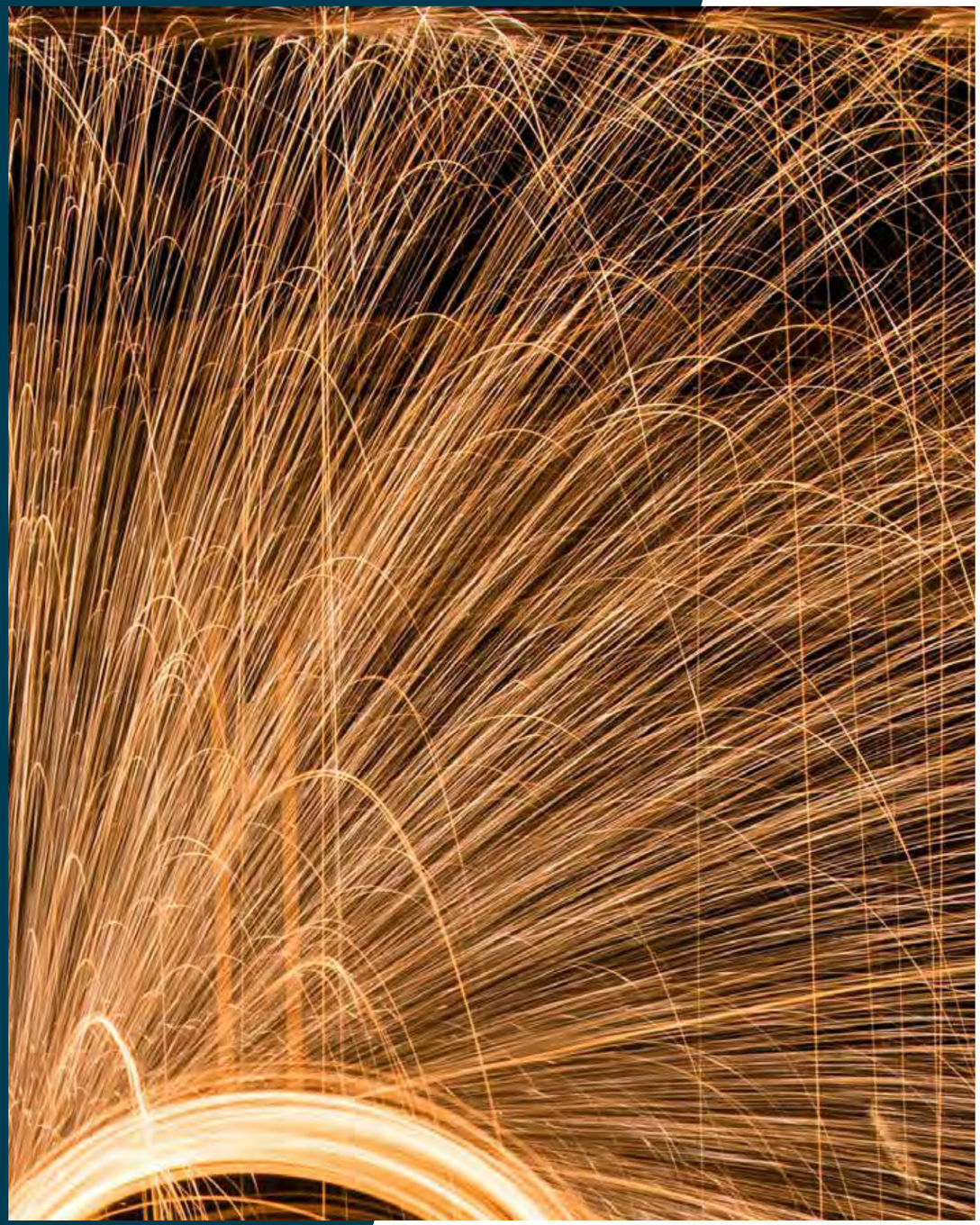
An unsupported, linerless elastomeric tape for arc and fire proofing high voltage & communication cables and splices. The unsupported construction offers excellent flexibility and conformability for easy application. When subjected to severe flame conditions, CET77 will generate a thermally insulating residue for cable protection.

CET130C
LINERLESS EPR HIGH VOLTAGE INSULATING AND JACKETING TAPE

EPR, self bonding, high voltage tape for insulating and jacketing splices through 69kV. The linerless feature permits much quicker taping speeds than tape with a liner and yield a uniform, void-free build-up. CET130C is compatible with all extruded cable insulations and the excellent stretch allows conformance to the most complex shapes and contours.

CET1700
ECONOMY GRADE VINYL ELECTRICAL TAPE

General purpose economy grade, pressure sensitive vinyl tape which applies easily and gives excellent performance over a wide range of temperatures. Cold and weather resistant. Flame retardant. CET1700 can be used as primary insulation for splices up to 600 volts. Use as protective outer jacket over splices and for all low temperature applications.



HEAT SHRINK MEDIUM VOLTAGE PRODUCTS

COMPLETE RANGE OF TERMINATION KITS

DSG-Canusa's heat shrink medium voltage termination kits, designed and manufactured in our North American facilities are independently tested to IEEE 48 performance standards and are rated for applications ranging from 5 kV to 35 kV. These terminations are used in networks to connect power direct from the electric grid or a generator via transformer or switchgear to control pumps, lighting, motor drives, measuring instruments and a wide array of production equipment. The kits are supplied with accessories for a complete and hassle-free field installation that helps users meet requirements for performance, schedule and cost.

Heat shrink cable terminations for 1/C and 3/C, 5 kV to 35 kV shielded and non-shielded power cables for the electrical utility, commercial and industrial markets.

The CT series heat shrink cable terminations rated 5 kV through 35 kV are designed for single and three core, non- shielded, metal tape, drain wire shield, bare and jacketed concentric neutral and Longitudinally Corrugated (LC) type shielded cables. The terminations use heat activated mastic seals that unequivocally bond to plastics and metal to provide excellent protection against moisture ingress. The electrical stresses at the semicon cutback point are controlled with the use of a proven, stress control tube and stress control sealant that provide a smooth, void-free interface and a redundant seal. CT series terminations are designed with a non-tracking outer insulating material that offers resistance to UV degradation and a self-cleaning outer surface that prevents build up of environmental contaminants to eliminate sources of tracking.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Custom tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant non-tracking outer covering
- Slim profile allows installation in confined switch gear cubicles

STANDARDS

- IEEE 48-1996, Class 1

STANDARD 3 - 1/C KIT		3/C CONVERSION KIT		1 - 3/C KIT
CT 51N	+	CT3M0DA	=	CT 51N3
CT 52N	+	CT3M0DA	=	CT52N3
CT 53N	+	CT3M0DB	=	CT 53N3

5 to 35kV

VOLTAGE RATING

EXCELLENT TRACK AND EROSION RESISTANCE

QUICK AND EASY INSTALLATION

MARKETS:

Industrial, Power Distribution, Utility

TEST REPORTS

The CT 080 series through CT 350 series terminations were tested to the requirements of IEEE 48-1996, Class 1 at an independent laboratory.

- CT 080 series: Report # HVS020075
- CT 150 series: Report # HVS020076
- CT 250 series: Report # HVS020077 and Report # HVS020083
- CT 350 series: Report # HVS020078

PRODUCT LINE

CT 50N Series: 5 kV through 8 kV non-shielded extruded dielectric (XLPE or EPR) fixed power cable terminations.

- Available as single core and three core configurations.
- Standard Packaging:
  - CT 50N three, single core kits per box
  - CT 50N3 one, three core kit per box

CT LC Series: 15 kV through 35 KV, longitudinally corrugated shield (LC), extruded dielectric (XLPE or EPR) fixed power cable, indoor and outdoor terminations

- Available as a single core kit packaged: one single core kit per box
- Comes complete with solder less external grounding kit
- Available with optional cable preparation/cleaning kit

CT UD Series: 15 kV through 35 kV, bare and jacketed concentric neutral, extruded dielectric (XLPE or EPR) under- ground distribution cable, indoor and outdoor terminations

- Available as single core kit packaged one single core kit per box
- Optional cable preparation/cleaning kit can be included

CT G Series: 5 kV through 35 kV, copper tape, drain wire, UniShield® and lead sheath shielded, extruded dielectric (XLPE or EPR) cable terminations

- Available in single core kits packaged three kits per box and as three core kits packaged as one, three core kit per box

Connectors are not supplied in the kits because of the different connector types (copper or aluminum), terminal type (pin or pad), type of pad (1 hole, 2 hole or 4 hole, etc.), and the hole size and spacing required for the pads. Ask your local DSG-Canusa stocking distributor to add connectors to your kits or consult the DSG-Canusa factory.

TEST DATA

	TEST SEQUENCE	VOLTAGE CLASS			
		5 - 8 kV	15 kV	25 kV	35 kV
Partial discharge (corona) extinction voltage <5 pC	↓	7.5 kV	13 kV	21.5 kV	30 kV
Power frequency voltage 1 min dry withstand	↓	35 kV	50 kV	65 kV	90 kV
Power frequency voltage 6 hr dry withstand	↓	25 kV	35 kV	55 kV	75 kV
Power frequency voltage 10 sec wet withstand	↓	30 kV	45 kV	60 kV	80 kV
Direct voltage 15 min dry withstand	↓	65 kV	75 kV	105 kV	140 kV
Lightning impulse voltage withstand (1.2 x 50 µs wave)	↓	95 kV	110 kV	150 kV	200 kV
Partial discharge (corona) extinction voltage <5 pC	↓	7.5 kV	13 kV	21.5 kV	30 kV
Cyclic Aging: 30 cycles; 130°C for 6 hr/day at:	↓	15 kV	26 kV	43 kV	60 kV
Lightning impulse voltage withstand (1.2 x 50 µs wave)	↓	95 kV	110 kV	150 kV	200 kV
Partial discharge (corona) extinction voltage <5 pC	↓	7.5 kV	13 kV	21.5 kV	30 kV
Pressure leak test: 30 psig for 1 hr, 15 psig for 2 hr, 7.5 psig for 6 hr and 67 Pa to <670 Pa for 30 min	■	Pass	Pass	Pass	Pass
Continuous current rating	Equal to cable ampacity				

Heat shrink terminations for single and three core, 5 kV through 8 kV XLPE and EPR non-shielded cables for the utility and construction markets.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated sealant for weather tight seals
- Light weight construction requires no additional support
- UV resistant, non-tracking outer tube for long life even under adverse conditions. No sheds are required for outdoor use
- Tough abrasion resistant outer covering
- Slim profile allows installation in confined switch gear cubicles

PRODUCT LINE

CT 50N Series

- 1/C, 5 - 8 kV non-shielded extruded dielectric (XLPE or EPR) fixed power cable terminations. They are available as three each single core kits per box for XLPE and EPR insulated cables.

CT 50N3 Series

- 3/C, 5 - 8 kV non-shielded extruded dielectric (XLPE or EPR) fixed power cable terminations. They are available in one, three core kit per box. As an option, the 1/C, CT 50N series kits can be converted to 3/C kits by purchasing a CT3M0DA or CT3M0DB conversion kit. The following is the selection criteria for the 3/C conversion kits:

STANDARD 3 - 1/C KIT		3/C CONVERSION KIT		1 - 3/C KIT
CT 51N	+	CT3M0DA	=	CT 51N3
CT 52N	+	CT3M0DA	=	CT52N3
CT 53N	+	CT3M0DB	=	CT 53N3

5 to 8kV
VOLTAGE RATING

#4 - 1500kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Energy, Industrial, Power Distribution, Utility

Heat shrink medium voltage cable terminations

DIMENSIONS

INDOOR/OUTDOOR KIT ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION DIAMETER (MIN)		JACKET DIAMETER (MAX)		STANDARD PACKAGE
		IN	MM	IN	MM	Kits/Box
1/C Cable, 5 - 8 kV						
CT 51N	#4 - 2/0 AWG	0.40	10	0.94	24	3 - 1/C
CT 52N	3/0 - 500 kcmil	0.70	18	1.30	33	3 - 1/C
CT 53N	750 - 1500 kcmil	1.10	28	2.15	55	3 - 1/C
3/C Armored and Unarmored Cable, 5 - 8 kV						
CT 51N3	#4 - 2/0 AWG	0.40	10	3.00	76	1 - 3/C
CT 52N3	3/0 - 500 kcmil	0.70	18	3.31	84	1 - 3/C
CT 53N3	750 - 1500 kcmil	1.10	28	5.00	127	1 - 3/C

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select the termination kit size for the non-shielded cable to be terminated.
- Confirm that the minimum and maximum cable dimensions are not exceeded. When at the high end of the conductor range it may be necessary to select the next larger kit size. Size range dimensions are based on the cable dimensions in the ICEA cable standards.
- To include a cable preparation kit with the termination kit, add the suffix to the end of the order number. FOR EXAMPLE: a 5 kV termination for 2/0 cable with a cable preparation kit would be CT 51NP.

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.

Heat shrink cable terminations for single core, 15 kV to 35 kV, bare and jacketed concentric neutral underground distribution cable for the electrical utility market.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Heat activated seals ensure maximum protection against moisture ingress
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Lightweight construction requires no additional support
- UV resistant, non-tracking outer tube for long life, even under adverse conditions
- Slim profile allows installation in confined switch gear cubicles

STANDARDS

- IEEE 48-1996, Class 1

TEST REPORTS

- The CT 150 series through CT 350 series terminations were tested to the requirements of IEEE 48-1996 Class 1 at an independent laboratory.
  - CT 150 series: Report # HVS 020076
  - CT 250 series: Report # HVS020077 and Report # HVS020083
  - CT 350 series: Report # HVS020078

15 to 35kV
VOLTAGE RATING

#4 - 2500kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Power Distribution, Utility

Heat shrink medium voltage cable terminations

DIMENSIONS

INDOOR KIT ORDER NUMBER	OUTDOOR KIT ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION DIAMETER MIN - MAX		JACKET DIAMETER MAX		STANDARD PACKAGE
			IN	MM	IN	MM	Kits/Box
15 kV							
CT 151UD	CT 151UDE	#4 - 3/0 AWG	0.60 - 1.00	16 - 25	1.30	33	1
CT 152UD	CT 152UDE	3/0 - 350 kcmil	0.80 - 1.25	21 - 35	1.75	45	1
CT 153UD	CT 153UDE	400 - 1000 kcmil	1.10 - 1.65	28 - 42	2.10	55	1
CT 154UD	CT 154UDE	1250 - 2500 kcmil	1.60 - 2.45	41 - 63	2.75	70	1
25 - 28 kV							
CT 251UD	CT 251UDE	#2 - 350 kcmil	0.80 - 1.40	21 - 35	1.80	46	1
CT 252UD	CT 252UDE	350 - 1000 kcmil	1.10 - 1.80	28 - 46	2.50	64	1
CT 253UD	CT 253UDE	1000 - 1750 kcmil	1.60 - 2.45	41 - 63	2.75	70	1
35 kV							
CT 351UD	CT 351UDE	#1 - 250 kcmil	0.95 - 1.40	24 - 35	1.90	48	1
CT 352UD	CT 352UDE	250 - 1000 kcmil	1.25 - 2.10	32 - 53	2.60	66	1

ORDERING

- Select the termination kit size for the bare or jacketed concentric neutral cable to be terminated.
- Confirm that the minimum and maximum cable dimensions are not exceeded. When at the high end of the conductor range it may be necessary to select the next larger kit size. Size range dimensions are based on the cable dimensions in the AEIC CS5 and AEIC CS6 cable standards.
- For terminations that will be exposed to direct precipitation, select the outdoor termination by adding the suffix to the part number.
- To include a cable preparation kit with the termination add the suffix to the end of the order number.
- *Example*, a 15 kV outdoor termination for a 2/0 cable with a cable preparation kit would be CT 151UDEP.

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.

Heat shrink medium voltage cable terminations.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Heat activated seals ensure maximum protection against moisture ingress
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Light weight construction requires no additional support
- UV resistant, non-tracking outer tube for long life, even under adverse conditions
- Slim profile allows installation in confined switch gear cubicles

STANDARDS

- Rated to IEEE 48-1996, Class 1

TEST REPORTS

- The CT 080 series through CT 350 series terminations were tested to the requirements of IEEE 48-1996 Class 1 at an independent laboratory.

15 to 35kV

VOLTAGE RATING

#4 - 2500kcmil

CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:

Industrial, Power Distribution, Utility

Heat shrink medium voltage cable terminations

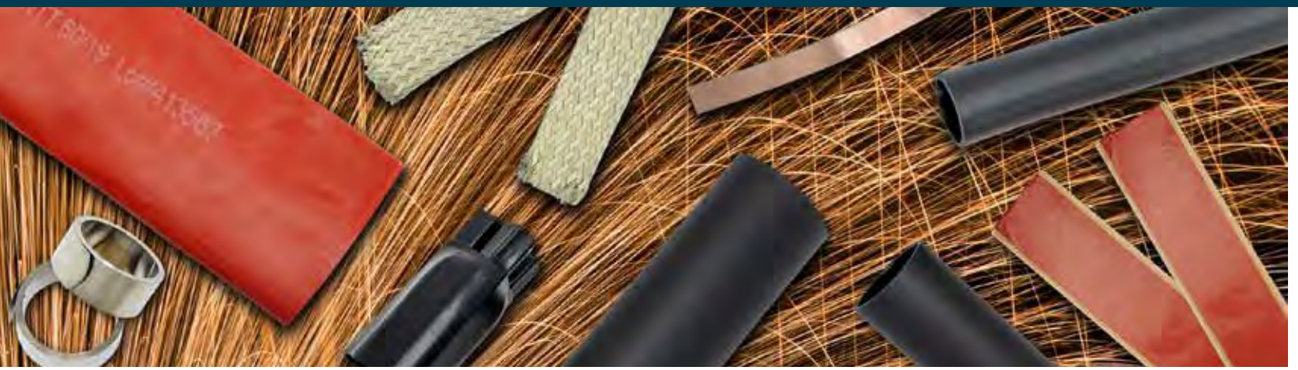
DIMENSIONS

INDOOR KIT ORDER NUMBER	OUTDOOR KIT ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION DIAMETER MIN - MAX		JACKET DIAMETER MAX	
			IN	MM	IN	MM
5 kV						
CT 081(G)	CT 081E(G)	#4 - #1 AWG	0.40 - 0.60	11 - 16	0.95	24
CT 082(G)	CT 082E(G)	1/0 - 250 kcmil	0.60 - 0.95	16 - 24	1.20	30
CT 083(G)	CT 083E(G)	300 - 500 kcmil	0.80 - 1.25	21 - 35	1.50	38
CT 084(G)	CT 084E(G)	600 - 1750 kcmil	1.10 - 1.75	28 - 45	2.10	55
CT 085(G)	CT 085E(G)	1500 - 2500 kcmil	1.60 - 2.45	41 - 62	2.75	70
8 kV						
CT 081(G)	CT 081E(G)	#6 - #2 AWG	0.40 - 0.60	11 - 16	0.95	24
CT 082(G)	CT 082E(G)	#1 - 4/0 AWG	0.60 - 0.95	16 - 24	1.20	30
CT 083(G)	CT 083E(G)	250 - 500 kcmil	0.80 - 1.25	21 - 35	1.50	38
CT 084(G)	CT 084E(G)	600 - 1750 kcmil	1.10 - 1.75	28 - 45	2.10	55
CT 085(G)	CT 085E(G)	1500 - 2500 kcmil	1.60 - 2.45	41 - 62	2.75	70
15 kV						
CT 151(G)	CT 151E(G)	#4 - 4/0 AWG	0.60 - 1.05	16 - 27	1.45	37
CT 152(G)	CT 152E(G)	3/0 - 350 kcmil	0.80 - 1.25	21 - 35	1.75	45
CT 153(G)	CT 153E(G)	400 - 1000 kcmil	1.10 - 1.65	28 - 42	2.10	55
CT 154(G)	CT 154E(G)	1250 - 2500 kcmil	1.60 - 2.45	41 - 63	2.75	70
25 - 28 kV						
CT 251(G)	CT 251E(G)	#2 - 350 kcmil	0.80 - 1.40	21 - 35	1.80	46
CT 252(G)	CT 252E(G)	350 - 1000 kcmil	1.10 - 1.80	28 - 46	2.50	64
CT 253(G)	CT 253E(G)	1000 - 1750 kcmil	1.60 - 2.45	41 - 63	2.75	70
35 kV						
CT 351(G)	CT 351E(G)	#1 - 250 kcmil	0.95 - 1.40	24 - 35	1.90	48
CT 352(G)	CT 352E(G)	250 - 1000 kcmil	1.25 - 2.10	32 - 53	2.60	66

ORDERING

- Select the termination kit size for the copper tape, drain wire, lead sheathed or UniShield® shielded power cable to be terminated.
- Confirm the cable dimensions. At the high end of the conductor range it may be necessary to select the next larger size kit. Dimensions are based on cable information from AEIC CS5 and CS6 cable standards.
- For terminations that will be exposed to direct precipitation select the outdoor termination by adding the suffix to the order number. To add an external grounding kit for tape shielded cables add to the order number. To include a cable preparation kit add the suffix to the end of the order number.
  Example, a 15 kV outdoor termination for 2/0 cable with an external ground kit and cable preparation kit would be CT 151EGP.

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.



Heat shrink cable terminations for three core armored and unarmored 5 kV to 35 kV, copper tape, drain wire and UniShield® XLPE and EPR power cables for the electrical construction market.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Heat activated seals ensure maximum protection against moisture ingress
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Light weight construction requires no additional support
- UV resistant, non-tracking outer tube for long life, even under adverse conditions
- Slim profile allows installation in confined switch gear cubicles

STANDARDS

- IEEE 48-1996, Class 1

TEST REPORTS

- The CT 3G series terminations were tested to the requirements of IEEE 48-1996 Class 1 at an independent laboratory.

TEST REPORTS ARE AS FOLLOWS:

- CT 080 series: HVS020075
- CT 150 series: HVS 020076
- CT 250 series: HVS020077 and HVS020083
- CT 350 series: HVS020078

15 to 35kV
VOLTAGE RATING

#4 - 1750kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Industrial, Power Distribution, Utility

Heat shrink medium voltage cable terminations

DIMENSIONS

INDOOR KIT ORDER NUMBER	OUTDOOR KIT ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION DIAMETER MIN - MAX		JACKET DIAMETER MAX	
No Boot	Boot		MM	IN	MM	IN
		5 kV				
CT 3X081	CT 3B081	#4 - #1 AWG	0.40 - 0.60	11 - 16	3.00	76
CT 3X082	CT 3B082	1/0 - 250 kcmil	0.60 - 0.95	16 - 24	3.00	76
CT 3X083	CT 3B083	300 - 500 kcmil	0.80 - 1.25	21 - 35	3.00	76
CT 3X084	CT 3B084	600 - 1750 kcmil	1.10 - 1.75	28 - 45	5.00	127
		8 kV				
CT 3X081	CT 3B081	#6 - #2 AWG	0.40 - 0.60	11 - 16	3.00	76
CT 3X082	CT 3B082	#1 - 4/0 AWG	0.60 - 0.95	16 - 24	3.00	76
CT 3X083	CT 3B083	250 - 500 kcmil	0.80 - 1.25	21 - 35	3.00	76
CT 3X084	CT 3B084	600 - 1750 kcmil	1.10 - 1.75	28 - 45	5.00	127
		15 kV				
CT 3X151	CT 3B151	#4 - 4/0 AWG	0.60 - 1.05	16 - 27	3.00	76
CT 3X152	CT 3B152	3/0 - 350 kcmil	0.80 - 1.25	21 - 35	3.00	76
CT 3X153	CT 3B153	400 - 1000 kcmil	1.10 - 1.65	28 - 42	5.00	127
		25 - 28 kV				
CT 3X251	CT 3B251	#2 - 350 kcmil	0.80 - 1.40	21 - 35	3.00	76
CT 3X252	CT 3B252	350 - 1000 kcmil	1.10 - 1.80	28 - 46	5.00	127
		35 kV				
CT 3X351	CT 3B351	#1 - 250 kcmil	0.95 - 1.40	24 - 35	5.00	127
CT 3X352	CT 3B352	250 - 1000 kcmil	1.25 - 2.10	32 - 53	5.00	127

ORDERING

- Select the 3/C termination kit size for the 3/C copper tape, drain wire or UniShield® shielded power cable to be terminated. The CT 3X kits are for use with armor terminators or whenever a complete seal to the cable jacket is not required. The CT 3B series kits include a breakout boot and sealant to seal the termination to the 3/C cable jacket.
- Confirm the cable dimensions. At the high end of the conductor range it may be necessary to select the next larger size kit. Dimensions are based on cable information from AEIC CS5 and CS6 cable standards.
- For terminations that will be exposed to direct precipitation select the outdoor termination and add the suffix to the order number. To add an external grounding kit for tape shielded cables add to the end of the order number. To include a cable preparation kit add the suffix to the end of the order number.
- FOR EXAMPLE: a 3/C, 15 kV outdoor termination with a boot for 350 kcmil cable with an external ground kit and cable preparation kit would be CT 3B152EGP. The same cable terminated indoors with a boot and cable preparation kit would be CT 3B152GP.

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heat shrink cable terminations for single core, 15 kV to 35 kV, longitudinally corrugated shielded cable for the electrical utility market.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Heat activated seals ensure maximum protection against moisture ingress
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Lightweight construction requires on additional support
- UV resistant, non-tracking outer tube for long life, even under adverse conditions
- Slim profile allows installation in confined switch gear cubicles

STANDARDS

- Rated to IEEE 48-1996 Class 1

TEST REPORTS

- The CT 150 series through CT 350 series terminations were tested to the requirements of IEEE 48-1996 at an independent laboratory.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CT 150 series: HVS 020076
- CT 250 series: HVS020077 and HVS020083
- CT 350 series: HVS020078

15 to 35kV
VOLTAGE RATING

#4 - 2500kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage cable terminations

DIMENSIONS

INDOOR KIT ORDER NUMBER	OUTDOOR KIT ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION DIAMETER MIN - MAX		JACKET DIAMETER MAX		STANDARD PACKAGE
			IN	MM	IN	MM	Kits/Box
15 kV							
CT 151LC	CT 151LCE	#4 - 3/0 AWG	0.60 - 1.00	16 - 25	1.30	33	1
CT 152LC	CT 152LCE	3/0 - 350 kcmil	0.80 - 1.25	21 - 35	1.75	45	1
CT 153LC	CT 153LCE	400 - 1000 kcmil	1.10 - 1.65	28 - 42	2.10	55	1
CT 154LC	CT 154LCE	1250 - 2500 kcmil	1.60 - 2.45	41 - 63	2.75	70	1
25 - 28 kV							
CT 251LC	CT 251LCE	#2 - 350 kcmil	0.80 - 1.40	21 - 35	1.80	46	1
CT 252LC	CT 252LCE	350 - 1000 kcmil	1.10 - 1.80	28 - 46	2.50	64	1
CT 253LC	CT 253LCE	1000 - 1750 kcmil	1.60 - 2.45	41 - 63	2.75	70	1
35 kV							
CT 351LC	CT 351LCE	#1 - 250 kcmil	0.95 - 1.40	24 - 35	1.90	48	1
CT 352LC	CT 352LCE	250 - 1000 kcmil	1.25 - 2.10	32 - 53	2.60	66	1

ORDERING

- Select the termination kit size for the type LC, longitudinally corrugated shielded cable to be terminated.
- Confirm that the minimum and maximum cable dimensions are not exceeded. When at the high end of the conductor range it may be necessary to select the next larger kit size. Size range dimensions are based on the cable dimensions in the AEIC CS5 and CS6 cable standards.
- To include a cable preparation kit with the termination add the suffix "P" to the end of the order number. For example, a 15 kV outdoor termination for 2/0 cable with a cable preparation kit would be CT 151LCEP.

Please contact your Customer Service Representative for information on custom sizes, lengths and material data sheet.

HEAT SHRINK MEDIUM VOLTAGE PRODUCTS

INDEPENDENTLY QUALIFIED PRODUCTS TO EFFECTIVELY SEAL MEDIUM VOLTAGE SPLICE APPLICATIONS

DSG-Canusa offers high performance splicing sealing and protection solutions for power cables rated 5kV - 35 kV. The ready-made splice kits make for a fast, reliable cable system upgrade or new installation and have been factory designed and independently tested to IEEE 404 performance standards.

Our heat shrink splices feature continuously extruded components that restore specific mechanical and electrical performance of various types of power cables, using heat shrinkable tubing and heat activated sealants, to provide exceptional moisture sealing with rugged mechanical protection.

Heat shrink cable joints for 1/C and 3/C, 5 kV - 35 kV shielded and non-shielded power cables for the electrical utility and industrial markets.

The CJ series heat shrink cable joints rated 5 kV through 35 kV are designed for reliable splicing of single core and three core non-shielded, metallic tape, wire shielded, concentric neutral, jacketed concentric neutral and LC type shielded cables. Individual designs cover both extruded dielectric (XLP/EPR) and laminated dielectric (PILC/VCLC) power cables.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Custom tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Accommodates wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- The CJ 820 series through CJ 3500 series joints were tested to the requirements ofIEEE 404-2000 at an independent laboratory.

TEST REPORTS

- CJ 820 series: HVS020079
- CJ 1500 series: HVS020080
- CJ 2500 series: HVS020081 and HVS020083
- CJ 3500 series: HVS020082.

5 to 35kV

VOLTAGE RATING

PROTECTION AGAINST MOISTURE INGRESS

QUICK AND EASY INSTALLATION

MARKETS:

Power Distribution, Generation, Utility

Heat shrink cable joints

TEST DATA

Joint tests to IEEE 404-2000 standards for Extruded and Laminated Dielectric Shielded Cable Joints Rated 2500 V to 500 000 V

	TEST SEQUENCE NUMBER OF SAMPLES			VOLTAGE CLASS				
	3	3	3	5 - 8 kV	15 kV	25 kV	28 kV	35 kV
Partial discharge (corona) extinction voltage <3 pC	↓			7 kV	13 kV	22 kV	24.5 kV	30 kV
Power frequency voltage 1 min withstand	↓			23 kV	35 kV	52 kV	58 kV	69 kV
Direct voltage 15 min dry withstand	↓			45 kV	70 kV	100 kV	112 kV	125 kV
Impulse withstand at 25°C (1.2 x 50 µs wave)	↓			95 kV	110 kV	150 kV	168 kV	200 kV
Impulse withstand at 130°C (1.2 x 50 µs wave)	↓			95 kV	110 kV	150 kV	168 kV	200 kV
Partial discharge (corona) extinction voltage <3 pC	▪	↓	↓	7 kV	13 kV	22 kV	24.5 kV	30 kV
Cyclic aging: 30 cycles, 130°C for 6 hr/d while at		↓	↓	14 kV	26 kV	44 kV	48 kV	61 kV
Partial discharge (corona) extinction voltage <3 pC		↓	↓	7 kV	13 kV	22 kV	24.5 kV	30 kV
High voltage time test: 5 hr while submerged		↓	↓	16 kV	31 kV	50 kV	58 kV	71 kV
High voltage time test: 5 min while submerged		▪	▪	21 kV	39 kV	65 kV	87 kV	91 kV

PRODUCT LINE

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- CJ N50 series: 5 to 8 kV non-shielded extruded dielectric (XLPE or EPR) fixed power cable splices. Available as follows:
  - CJ N50 - three, single core kits per box
  - CJ N350 - one, three core kit per box
  - CJ N3A50 - one, three core armored kit per box
- CJ 10 series: 1/C, 15 to 35 kV bare and jacketed concentric neutral, extruded dielectric (XLPE or EPR) fixed power cable joints. Available as single core kit, packaged with one single core kit per box. Optional cable preparation/ cleaning kit can be included (suffix).
- CJ 20 series: 1/C, 5 to 35 kV metal tape, drain wire, UniShieldÂ® and lead sheath shielded, extruded dielectric (XLPE or EPR) cable joints. Available as single core kits packaged one kit per box. Comes with solderless external grounding kit. Available with optional cable preparation/cleaning kit (suffix).
- CJ 320 series: 3/C, 5 to 35 kV metal tape, drain wire, UniShield® and lead sheath shielded, extruded dielectric (XLPE or EPR) cable joints. Available in three core kits packaged one kit per box.
- CJ 3A20 series: 3/C armored 5 to 35 kV metal tape, drain wire, UniShield® shielded, extruded dielectric (XLPE or EPR) cable joints. Available in three core kits packaged one kit per box.
- CJ LC series: 15 to 35 kV longitudinally corrugated shield (LC), extruded dielectric (XLPE or EPR) fixed power cable joints. Available as single core kit packaged one kit per box. Comes complete with solderless external grounding kit. Available with optional cable preparation/cleaning kit (suffix).

Connectors are not supplied in the kits because of the different connector types (copper or aluminum), barrel length (long or short), and kits wide conductor size range. Ask you local DSG-Canusa stocking distributor to add connectors to your kits or consult the DSG-Canusa factory.

Heat shrink splices for single, three core and three core armored, 5 kV through 8 kV, XLPE and EPR non-shielded cables for the utility and construction markets.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Customer tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

5 to 8kV
VOLTAGE RATING

#4 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Industrial, Mining, Transit

Heat shrink medium voltage joints

VOLATAGE CLASS 5 - 8 KV

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAX		CONNECTOR DIMENSIONS				STANDARD PACKAGE
						O.D. Max		Length Max		
		IN	MM	IN	MM	IN	MM	IN	MM	Kits/Box
1/C Cable										
CJ N51	#4 - 2/0 AWG	0.35 - 0.75	9 - 19	0.85	22	0.65	17	3.00	76	3 - 1/C
CJ N52	1/0 - 350 kcmil	0.55 - 1.05	14 - 27	1.20	30	1.00	26	4.00	102	3 - 1/C
CJ N53	300 - 1000 kcmil	0.95 - 1.65	24 - 47	1.85	47	1.85	47	6.00	154	3 - 1/C
3/C Cable										
CJ N351	#4 - 2/0 AWG	0.35 - 0.75	9 - 19	2.5	64	0.65	17	3.00	76	1 - 3/C
CJ N352	1/0 - 350 kcmil	0.55 - 1.05	14 - 27	3.5	89	1.00	26	4.00	102	1 - 3/C
CJ N353	300 - 1000 kcmil	0.95 - 1.65	24 - 47	4.5	114	1.85	47	6.00	154	1 - 3/C
3/C Armored Cable										
CJ N3A51	#4 - 2/0 AWG	0.35 - 0.75	9 - 19	2.5	64	0.65	17	3.00	76	1 - 3/C
CJ N3A52	1/0 - 350 kcmil	0.55 - 1.05	14 - 27	3.5	89	1.00	26	4.00	102	1 - 3/C
CJ N3A53	300 - 1000 kcmil	0.95 - 1.65	24 - 47	4.5	114	1.85	47	6.00	154	1 - 3/C

PRODUCT LINE

CJ N50 SERIES

- 1/C, 5 - 8 kV non-shielded extruded dielectric (XLPE or EPR) fixed power cable splices. They are available as three each single core kits per box for XLPE and EPR insulated cables.

CJ N350 SERIES

- 3/C, 5 - 8 kV non-shielded extruded dielectric (XLPE or EPR) fixed power cable splices. They are available in one, three core kit per box.

CJ N3A50 SERIES

- 3/C armored, 5 - 8 kV non-shielded extruded dielectric (XLPE or EPR) fixed power cable splices. They are available in one, three core kit per box.

ORDERING

- Select the splice kit size for the non-shielded cable to be spliced.
- Confirm that the minimum and maximum cable dimensions are not exceeded. When at the high end of the conductor range it may be necessary to select the next larger kit size. Dimensions are based on the cable dimensions in the ICEA cable standards.
- To include a cable preparation kit with the splice kit add the suffix to the end of the order number. FOR EXAMPLE: a 5 kV splice for 2/0 cable with a cable preparation kit would be CJ N51

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

CJ series joints are single core, 15 kV to 35 kV, heat shrink joints for XLPE and EPR extruded dielectric, bare and jacketed concentric neutral cables. The CJ 10J series joints use the same joint components as the CJ 10 series joints but are supplied with a wraparound jacketing sleeve to seal from cable jacket to cable jacket on jacketed concentric neutral cables.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Custom tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- The CJ 10 series joints were design tested to IEEE 404- 2000 at an independent laboratory as single core unjacketed joints. This represents the worst case condition as the joints submerged under water were not afforded the added protection of the CJ 10J series joints with jackets.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJ 1510 series: HVS020080
- CJ 2510 series: HVS020081 and HVS020083
- CJ 3510 series: HVS020082

15 to 35kV
VOLTAGE RATING

#4 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Generation, Power Distribution, Utility

Heat shrink medium voltage joints

BARE CONCENTRIC NEUTRAL

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
15 kV (175 - 220 mils)											
CJ 1511	#4 - 4/0 AWG	0.60 - 1.05	15 - 23	n/a	n/a	0.90	23	4.25	108	17.5	445
CJ 1512	3/0 - 350 kcmil	0.80 - 1.25	20 - 32	n/a	n/a	1.15	29	5.50	140	20.0	508
CJ 1513	400 - 750 kcmil	1.05 - 1.75	27 - 44	n/a	n/a	1.60	41	8.00	203	22.0	559
CJ 1514	750 - 1000 kcmil	1.30 - 1.85	33 - 47	n/a	n/a	1.85	47	8.00	203	22.0	559
25 - 28 kV (260 - 280 mils)											
CJ 2511	#1 - 250 kcmil	0.80 - 1.20	20 - 30	n/a	n/a	1.50	38	4.00	102	20.0	508
CJ 2512	4/0 - 500 kcmil	1.05 - 1.60	27 - 41	n/a	n/a	1.95	50	6.00	152	22.0	559
CJ 2513	600 - 1000 kcmil	1.40 - 1.85	36 - 47	n/a	n/a	2.40	61	8.00	203	24.0	610
35 kV (345 mils)											
CJ 3511	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	n/a	n/a	1.00	25	5.00	127	24.0	610
CJ 3512	4/0 - 600 kcmil	1.30 - 1.75	33 - 44	n/a	n/a	1.50	38	8.00	203	30.0	762
CJ 3513	600 - 1000 kcmil	1.55 - 2.15	39 - 55	n/a	n/a	1.85	47	10.00	254	30.0	762

JACKETED CONCENTRIC NEUTRAL

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
15 kV (175 - 220 mils)											
CJ 1511J	#4 - 4/0 AWG	0.60 - 1.05	15 - 23	1.25	32	0.90	23	4.00	102	28.0	711
CJ 1512J	3/0 - 350 kcmil	0.80 - 1.25	20 - 32	1.50	38	1.15	29	5.50	140	32.0	813
CJ 1513J	400 - 750 kcmil	1.05 - 1.75	27 - 44	1.85	47	1.60	41	8.00	203	35.0	889
CJ 1514J	750 - 1000 kcmil	1.30 - 1.85	33 - 47	2.10	53	1.85	47	8.00	203	35.0	889
25 - 28 kV (260 - 280 mils)											
CJ 2511J	#1 - 250 kcmil	0.80 - 1.20	20 - 30	1.55	39	1.50	38	4.00	102	32.0	813
CJ 2512J	4/0 - 500 kcmil	1.05 - 1.60	22 - 41	1.95	50	1.95	50	6.00	152	35.0	889
CJ 2513J	600 - 1000 kcmil	1.40 - 1.85	27 - 41	2.40	61	2.40	61	8.00	203	45.0	1143
35 kV (345 mils)											
CJ 3511J	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	1.55	39	1.00	25	5.00	127	39.0	991
CJ 3512J	4/0 - 600 kcmil	1.30 - 1.75	33 - 44	2.10	53	1.50	38	8.00	203	45.0	1143
CJ 3513J	600 - 1000 kcmil	1.55 - 2.15	39 - 55	2.80	71	1.85	47	10.0	254	48.0	1220

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit part number that covers the conductor size range.
- Confirm the dimensional data; particularly when the conductor size is at the extremes of the range. The CJ 1510 - CJ 3510 series joints are for BARE, non-jacketed concentric neutral cables. The CJ 1510J - CJ 3510J series joints are for JACKETED, concentric neutral cables. The overlap in size range allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter maximum is not exceeded.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number.

CJ R10 series joints are single core, 15 kV to 35 kV, heat shrink repair joints for bare and jacketed concentric neutral cable. They are designed to repair faulted cables or joints by replacing the damaged area with a longer make-up connection. The CJ 10J series joints use the same joint components as the CJ R10 joints but are supplied with a wraparound jacketing sleeve to seal from cable jacket to cable jacket on jacketed concentric neutral cables.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Custom tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- The CJ 10 series joints were design tested to IEEE 404-2000 at an independent laboratory as single core unjacketed joints. This represents the worst case condition as the joints submerged under water were not afforded the added protection of the CJ R10J series joints with jackets.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJ 1510 series: HVS020080
- CJ 2510 series: HVS020081 and HVS0 20083
- CJ 3510 series: HVS020082

15 to 35kV

VOLTAGE RATING

#4 - 1000kcmil

CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:

Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage joints

BARE CONCENTRIC NEUTRAL

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
15 KV (175 - 220 mils)											
CJ R1511	#4 - 4/0 AWG	0.60 - 1.05	15 - 23	n/a	n/a	0.90	23	10.0	254	24.0	610
CJ R1512	3/0 - 350 kcmil	0.80 - 1.25	20 - 32	n/a	n/a	1.15	29	10.0	254	24.0	610
CJ R1513	400 - 750 kcmil	1.05 - 1.75	27 - 44	n/a	n/a	1.60	41	12.0	300	26.0	660
CJ R1514	750 - 1000 kcmil	1.30 - 1.85	33 - 47	n/a	n/a	1.85	47	12.0	300	26.0	660
25 - 28 kV (260 - 280 mils)											
CJ R2511	#1 - 250 kcmil	0.80 - 1.20	20 - 30	n/a	n/a	1.50	38	9.0	229	28.0	711
CJ R2512	4/0 - 500 kcmil	1.05 - 1.60	27 - 41	n/a	n/a	1.95	50	11.0	279	30.0	762
CJ R2513	600 - 1000 kcmil	1.40 - 1.85	36 - 47	n/a	n/a	2.40	61	16.0	400	32.0	813
35 kV (345 mils)											
CJ R3511	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	n/a	n/a	1.00	25	10.0	254	30.0	762
CJ R3512	4/0 - 600 kcmil	1.30 - 1.75	33 - 44	n/a	n/a	1.50	38	10.0	254	30.0	762
CJ R3513	600 - 1000 kcmil	1.55 - 2.15	39 - 55	n/a	n/a	1.85	47	12.0	300	32.0	813

JACKETED CONCENTRIC NEUTRAL

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
15 kV (175 - 220 mils)											
CJ R1511J	#4 - 3/0 AWG	0.60 - 1.05	15 - 23	1.25	32	0.90	23	10.0	254	48.0	1220
CJ R1512J	3/0 - 400 kcmil	0.80 - 1.25	20 - 32	1.50	38	1.15	29	10.0	254	48.0	1220
CJ R1513J	400 - 750 kcmil	1.05 - 1.75	27 - 44	n/a	n/a	1.60	41	12.0	300	26.0	660
CJ R1514J	750 - 1000 kcmil	1.30 - 1.85	33 - 47	n/a	n/a	1.85	47	12.0	300	26.0	660
25 - 28 kV (260 - 280 mils)											
CJ R2511J	#1 - 250 kcmil	0.80 - 1.20	20 - 30	1.50	38	1.50	38	9.0	229	48.0	1220
CJ R2512J	4/0 - 500 kcmil	1.05 - 1.60	22 - 41	1.95	50	1.95	50	11.0	279	48.0	1220
CJ R2513J	600 - 1000 kcmil	1.40 - 1.85	36 - 47	2.40	61	2.40	61	16.0	400	52.0	1320
35 kV (345 mils)											
CJ R3511J	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	n/a	n/a	1.00	25	10.0	254	30.0	762
CJ R3512J	4/0 - 600 kcmil	1.30 - 1.75	33 - 44	n/a	n/a	1.50	38	10.0	254	30.0	762
CJ R3513J	600 - 1000 kcmil	1.55 - 2.15	39 - 55	n/a	n/a	1.85	47	12.0	300	32.0	813

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range.
- Confirm the dimensional data particularly when the conductor size is at the extremes of the range. The CJ R10 series joints are for bare concentric neutral cables. The CJ R10J series joints are for repairing jacketed concentric neutral cables. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter maximum is not exceeded.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number.

CJ 20 series joints are single core, 5 kV to 35 kV, heat shrink joints for XLPE and EPR extruded dielectric, metal tape, wire and lead sheath shielded power cables. The CJ 20 series joints are supplied with all of the hardware required to shield and externally ground the joint without soldering. Most of the joints can be supplied with either a tube or a wraparound sleeve for the outer jacket.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Wraparound jacket sleeve option (W) allows for reduced installation space
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- The CJ 20 series joints were design tested to IEEE404- 2000 at an independent laboratory as single core unjacketed joints. This represents the worst case condition as the joints submerged under water were not afforded the added protection of the CJ 20 series joints with tubular or wraparound jackets.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJ820 series: HVS020079
- CJ1520 series: HVS020080
- CJ2520 series: HVS020081 and HVS020083
- CJ3520 series: HVS020082

5 to 35kV
VOLTAGE RATING

#1 - 1750kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Industrial, Commercial
Construction Projects, Mining

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
5 KV (90 - 110 mils)											
CJ 821(W)	#8 - 2/0 AWG	0.35 - 0.65	9 - 17	0.85	22	0.50	13	3.00	76	24.0	610
CJ 822(W)	3/0 - 300 kcmil	0.55 - 0.90	14 - 23	1.20	29	0.75	19	4.25	108	26.0	660
CJ 823(W)	350 - 750 kcmil	0.80 - 1.15	20 - 30	1.80	46	1.10	28	6.00	152	28.0	711
CJ 824(W)	1000 - 1500 kcmil	1.00 - 1.60	25 - 41	2.30	58	1.45	37	8.00	203	30.0	762
8 kV (115 mils)											
CJ 821(W)	#6 - #2 AWG	0.35 - 0.65	9 - 17	0.85	22	0.50	13	3.00	76	24.0	610
CJ 822(W)	#1 - 4/0 kcmil	0.55 - 0.90	14 - 23	1.20	29	0.75	19	4.25	108	26.0	660
CJ 823(W)	250 - 350 kcmil	0.80 - 1.25	20 - 32	1.80	46	1.10	28	6.00	152	28.0	711
CJ 824(W)	500 - 750 kcmil	1.00 - 1.60	25 - 41	2.30	58	1.45	37	8.00	203	30.0	762
CJ 825(W)	750 - 1000 kcmil	1.30 - 2.10	33 - 53	2.50	64	1.85	47	8.00	203	30.0	762
15 kV (175 - 220 mils)											
CJ 1521(W)	#4 - 4/0 AWG	0.60 - 1.05	15 - 27	1.25	32	1.05	26	4.25	108	28.0	711
CJ 1522(W)	4/0 - 500 kcmil	0.80 - 1.25	20 - 32	1.50	38	1.25	32	5.50	140	30.0	762
CJ 1523(W)	400 - 750 kcmil	1.05 - 1.60	27 - 41	1.85	47	1.75	44	8.00	203	32.0	813
CJ 1524(W)	750 - 1750 kcmil	1.30 - 2.15	33 - 55	2.45	62	2.15	55	8.00	203	32.0	813
5 - 28 kV (260 - 280 mils)											
CJ 2521(W)	#1 - 250 kcmil	0.80 - 1.25	20 - 32	1.50	38	1.10	28	4.00	102	30.0	762
CJ 2522(W)	4/0 - 500 kcmil	1.05 - 1.55	27 - 39	1.95	50	1.30	33	6.00	152	34.0	864
CJ 2523 W	600 - 1000 kcmil	1.40 - 1.85	33 - 47	2.40	61	1.85	47	8.00	203	36.0	915
35 kV (345 mils)											
CJ 3521 W	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	1.55	39	1.00	25	5.00	127	39.0	991
CJ 3522 W	250 - 600 kcmil	1.30 - 1.75	33 - 44	2.10	53	1.50	38	8.00	203	42.0	1067
CJ 3523 W	600 - 1000 kcmil	1.55 - 2.15	39 - 55	2.80	71	1.85	47	10.00	254	46.0	1168

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range.
- Confirm the dimensional data particularly when the conductor size is at the extremes of the range. The installation space required for joints with tube jackets (CJ 820, CJ 1520, etc.) is approximately two times that of the installed joint length. This installation space can be reduced to the installed length plus six inches by adding the suffix to the end of the order number. FOR EXAMPLE a CJ 1523 needs approximately 64 in for installation. The CJ 1523W with wraparound jacket sleeve takes only 38 in of free space. CJ 2523W - CJ 3523W are not available with tube jackets. The overlap in size range allows for size transitions when splicing different cable sizes. The determining factors for selection are the dimension ranges for the primary insulation and connector dimensions, and the jacket diameter.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number.

CJ 320 series joints are three core, 5 kV to 35 kV heat shrink joints for XLPE and EPR extruded dielectric, metal tape and wire shielded power cables. The CJ 320 series joints are supplied with three single core joints plus a railed wraparound sleeve with stainless steel channels to form a tube.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Custom tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- The CJ 320 series joints were design tested to IEEE 404-2000 at an independent laboratory as single core unjacketed joints. This represents the worst case condition as the joints submerged under water were not afforded the added protection of the CJ 320 series joints with wraparound outer jackets.

TEST REPORTS ARE AVAILABLE AS FOLLOWS

- CJ 3820 series: HVS020079
- CJ 31520 series: HVS020080
- CJ 32520 series: HVS020081 and HVS020083
- CJ 33520 series: HVS020082

5 to 35kV
VOLTAGE RATING

#1 - 1750kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Civil & Commercial Construction Projects, Transit, Mining

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
5 kV (90 - 110 mils)											
CJ 3821	#8 - 2/0 AWG	0.35 - 0.65	9 - 17	0.90	23	0.50	13	3.00	76	40.0	1015
CJ 3822	3/0 - 300 kcmil	0.55 - 0.90	14 - 23	1.30	33	0.75	19	4.25	108	48.0	1220
CJ 3823	350 - 750 kcmil	0.80 - 1.15	20 - 30	1.57	40	1.10	28	6.00	152	48.0	1220
CJ 3824	1000 - 1500 kcmil	1.00 - 1.60	25 - 41	2.40	61	1.45	37	8.00	203	60.0	1525
8 kV (115 mils)											
CJ 3821	#6 - #2 AWG	0.35 - 0.65	9 - 17	0.90	23	0.50	13	3.00	76	40.0	1015
CJ 3822	#1 - 4/0 AWG	0.55 - 0.90	14 - 23	1.30	33	0.75	19	4.25	108	48.0	1220
CJ 3823	250 - 350 kcmil	0.80 - 1.25	20 - 32	1.57	40	1.10	28	6.00	152	48.0	1220
CJ 3824	500 - 750 kcmil	1.00 - 1.60	25 - 41	2.40	61	1.45	37	8.00	203	60.0	1525
CJ 3825	750 - 1000 kcmil	1.30 - 2.10	33 - 53	2.40	61	1.85	47	8.00	203	60.0	1525
15 kV (175 - 220 mils)											
CJ 31521	#4 - 4/0 AWG	0.60 - 1.05	15 - 27	1.57	40	1.05	26	4.25	108	60.0	1525
CJ 31522	4/0 - 500 kcmil	0.80 - 1.25	20 - 32	2.40	61	1.25	32	5.50	140	60.0	1525
CJ 31523	400 - 750 kcmil	1.05 - 1.60	27 - 41	2.40	61	1.75	44	8.00	203	72.0	1829
CJ 31524	750 - 1750 kcmil	1.30 - 2.15	33 - 55	2.40	61	2.15	55	8.00	203	72.0	1829
25 - 28 kV (260 - 280 mils)											
CJ 32521	#1 - 250 kcmil	0.80 - 1.25	20 - 32	1.65	42	1.10	28	4.00	102	60.0	1525
CJ 32522	250 - 600 kcmil	1.05 - 1.55	27 - 39	2.40	61	1.30	33	6.00	152	72.0	1829
CJ 32523	600 - 1000 kcmil	1.40 - 1.85	33 - 47	2.40	61	1.85	47	8.00	203	72.0	1829
35 kV (345 mils)											
CJ 33521	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	2.40	61	1.00	25	5.00	127	72.0	1829
CJ 33522	250 - 600 kcmil	1.30 - 1.75	33 - 44	2.40	61	1.50	38	8.00	203	72.0	1829
CJ 33523	600 - 1000 kcmil	1.55 - 2.15	39 - 55	2.40	61	1.85	47	10.00	254	72.0	1829

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range.
- Confirm the dimensional data particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are the dimension ranges for the primary insulation and connector dimensions, and the jacket diameter.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number. FOR EXAMPLE: CJ 31522P.

CJ 3A20 series joints are three core armored, 5 kV to 35 kV heat shrink joints for XLPE and EPR extruded dielectric, metal tape and wire shielded power cables. The CJ 3A20 series joints are supplied with three single core joints, a galvanized steel wraparound armoring system and a railed wraparound sleeve with stainless steel channels to form the outer jacket.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Custom tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- The CJ 3A20 series joints were design tested to IEEE 404- 2000 at an independent laboratory as single core unjacketed joints. This represents the worst case condition as the joints submerged under water were not afforded the added protection of the CJ 3A20 series joints with wraparound outer jackets.

TEST REPORTS ARE AVAILABLE AS FOLLOWS

- CJ 3A820 series: HVS020079
- CJ 3A1520 series: HVS020080
- CJ 3A2520 series: HVS020081 and HVS020083
- CJ 3A3520 series: HVS020082

5 to 35kV
VOLTAGE RATING

#1 - 1750kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Civil & Commerical Construction, Industrial, Mining

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
5 kV (90 - 110 mils)											
CJ 3A821	#8 - 2/0 AWG	0.35 - 0.65	9 - 17	0.90	23	0.50	13	3.00	76	48.0	1220
CJ 3A822	3/0 - 300 kcmil	0.55 - 0.90	14 - 23	1.30	33	0.75	19	4.25	108	55.0	1397
CJ 3A823	350 - 750 kcmil	0.80 - 1.15	20 - 30	1.57	40	1.10	28	6.00	152	55.0	1397
CJ 3A824	1000 - 1500 kcmil	1.00 - 1.60	25 - 41	2.40	61	1.45	37	8.00	203	72.0	1829
8 kV (115 mils)											
CJ 3A821	#6 - #2 AWG	0.35 - 0.65	9 - 17	0.90	23	0.50	13	3.00	76	40.0	1015
CJ 3A822	#1 - 4/0 AWG	0.55 - 0.90	14 - 23	1.30	33	0.75	19	4.25	108	55.0	1397
CJ 3A823	250 - 350 kcmil	0.80 - 1.25	20 - 32	1.57	40	1.10	28	6.00	152	55.0	1397
CJ 3A824	500 - 750 kcmil	1.00 - 1.60	25 - 41	2.40	61	1.45	37	8.00	203	72.0	1829
CJ 3A825	750 - 1000 kcmil	1.30 - 2.10	33 - 53	2.40	61	1.85	47	8.00	203	72.0	1829
15 kV (175 - 220 mils)											
CJ 3A1521	#4 - 4/0 AWG	0.60 - 1.05	15 - 27	1.57	40	1.05	26	4.25	108	60.0	1525
CJ 3A1522	4/0 - 500 kcmil	0.80 - 1.25	20 - 32	2.40	61	1.25	32	5.50	140	60.0	1525
CJ 3A1523	400 - 750 kcmil	1.05 - 1.60	27 - 41	2.40	61	1.75	44	8.00	203	72.0	1829
CJ 3A1524	750 - 1750 kcmil	1.30 - 2.15	33 - 55	2.40	61	2.15	55	8.00	203	72.0	1829
25 - 28 kV (260 - 280 mils)											
CJ 3A2521	#1 - 250 kcmil	0.80 - 1.25	20 - 32	1.65	42	1.10	28	4.00	102	60.0	1525
CJ 3A2522	4/0 - 500 kcmil	1.05 - 1.55	27 - 39	2.40	61	1.30	33	6.00	152	72.0	1829
CJ 3A2523	600 - 1000 kcmil	1.40 - 1.85	33 - 47	2.40	61	1.85	47	8.00	203	84.0	2134
35 kV (345 mils)											
CJ 3A3521	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	2.40	61	1.00	25	5.00	127	72.0	1829
CJ 3A3522	250 - 600 kcmil	1.30 - 1.75	33 - 44	2.40	61	1.50	38	8.00	203	84.0	2134
CJ 3A3523	600 - 1000 kcmil	1.55 - 2.15	39 - 55	2.40	61	1.85	47	10.00	254	84.0	2134

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range.
- Confirm the dimensional data particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter maximum is not exceeded.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number. FOR EXAMPLE: CJ 3A1522P.

CJ LC series joints are single core, 15 kV to 35 kV heat shrink joints for XLPE and EPR extruded dielectric longitudinally corrugated, type LC cables. The joints are supplied with all of the hardware required to shield and externally ground the joint without soldering. Dual moisture blocked tinned copper braids with constant force springs make the connection of the LC shield across the joint and to ground. The wraparound jacketing sleeve allows for reduced installation space.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seal ensures maximum protection against moisture ingress
- Custom tailored with options to your exacting needs
- Lightweight construction requires no additional support
- Wide cable ranges for reduced inventory requirements
- Tough abrasion resistant outer covering protects against damage from improper backfill
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- The CJ LC series joints were design tested to IEEE 404-2000 at an independent laboratory as single core unjacketed joints. This represents the worst case condition as the joints submerged under water were not afforded the added protection of the CJ LC series joints with jackets.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJ 1530LC series: HVS020080
- CJ 2530LC series: HVS020081 and HVS 020083
- CJ 3530LC series: HVS020082

15 to 35kV
VOLTAGE RATING

#1 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
15 kV (175 - 220 mils)											
CJ 1531LC	#4 - 3/0 AWG	0.06 - 1.05	15 - 23	1.25	32	0.90	23	4.25	108	28.0	711
CJ 1532LC	3/0 - 350 kcmil	0.80 - 1.25	20 - 32	1.50	38	1.15	29	5.50	140	32.0	813
CJ 1533LC	400 - 750 kcmil	1.05 - 1.75	27 - 44	1.85	47	1.60	41	8.00	203	35.0	889
CJ 1534LC	750 - 1000 kcmil	1.30 - 1.85	33 - 47	2.10	53	1.85	47	8.00	203	35.0	889
25 - 28 kV (260 - 280 mils)											
CJ 2531LC	#1 - 250 kcmil	0.80 - 1.20	20 - 30	1.50	38	1.50	38	4.00	102	32.0	813
CJ 2532LC	4/0 - 500 kcmil	1.05 - 1.60	27 - 41	1.95	50	1.95	50	6.00	152	35.0	889
CJ 2533LC	600 - 1000 kcmil	1.40 - 1.85	36 - 47	2.40	61	2.40	61	8.00	203	45.0	1143
35 kV (345 mils)											
CJ 3531LC	1/0 - 250 kcmil	0.95 - 1.35	24 - 34	1.55	39	1.00	25	5.00	127	39.0	1000
CJ 3532LC	4/0 - 600 kcmil	1.30 - 1.75	33 - 44	2.10	53	1.50	38	8.00	203	45.0	1143
CJ 3533LC	600 - 1000 kcmil	1.55 - 2.15	39 - 55	2.80	71	1.85	47	10.00	254	48.0	1220

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range.
- Confirm the dimensional data particularly when the conductor size is at the extremes of the range. The CJ LC series joints are longitudinally corrugated, type LC shielded cables. The overlaps in size range allow for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter maximum is not exceeded.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number, e.g. CJ 3532LCP.

The CJ 80 series joints are single core, heat shrink joints for splicing 15 kV and 25 kV jacketed or unjacketed paper and lead laminated dielectric cable (PILC or VCLC) to itself or to XLP or EPR extruded dielectric, tape, wire shielded or concentric neutral cable.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- No lead wiping required for positive oil stops
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seals ensure maximum protection against moisture ingress
- Reinforced wraparound sleeve with aluminum foil liner provides rugged protection and a moisture vapor barrier
- Wide cable ranges reduce inventory
- Pressure tested for continuous operation at 15 psig at 110°C
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- CJ 80 series joints were design tested to IEEE 404-2000 at an independent laboratory.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJ 1580 series: HVS031103
- CJ 2580 series: HVS040423

15 to 25kV
VOLTAGE RATING

#4 - 2100kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

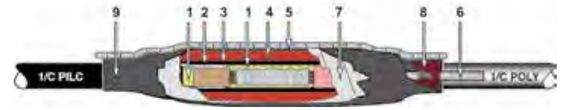
MARKETS:
Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	PILC/POLY CONDUCTOR SIZE	INSULATION DIAMETER		CONNECTOR DIMENSIONS MAX			INSTALLED LENGTH (NOM)
		PILC Range	Poly Range	O.D. Both	PILC-PILC Length	PILC-Poly Length	
	AWG/Kcmil	IN	IN	IN	IN	IN	IN
15 kV, 1/C PILC to 1/C PILC Straight Joint or 1/C PILC to Poly Transition Joint (165 - 225 mils insulation)							
CJ 1581	#4 - 4/0	0.55 - 1.00	0.60 - 1.05	0.90	3.50	4.25	31.0
CJ 1582	4/0 - 400	0.75 - 1.20	0.80 - 1.25	1.15	4.00	5.50	35.0
CJ 1583	500 - 750	1.00 - 1.70	1.05 - 1.75	1.60	5.00	7.00	37.0
CJ 1584	750 - 1000	1.20 - 1.80	1.30 - 1.85	1.85	6.00	8.00	40.0
25 kV, 1/C PILC to 1/C PILC Straight Joint or 1/C PILC to Poly Transition Joint (260 - 320 mils insulation)							
CJ 2581	4/0 - 400	0.75 - 1.20	0.80 - 1.25	1.15	4.00	4.25	40.0
CJ 2582	500 - 750	1.00 - 1.70	1.05 - 1.75	1.60	5.00	5.50	48.0
CJ 2583	750 - 1000	1.20 - 1.80	1.30 - 1.85	1.85	6.00	8.00	48.0

15 - 25 KV, 1/C PAPER-LEAD TO 1/C POLY CABLE JOINTS



1. SCS stress control/oil block sealant
2. OSTC oil stop tube
3. CSCR stress control tube
4. CFXB insulating tube(s)
5. CCON conductive shielding tube
6. Tinned copper braid
7. Tinned copper mesh
8. Red environmental sealant
9. CRDW-RA reinforced wraparound with aluminum foil moisture barrier

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range. Confirm the dimensional data; particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter(s) maximums are not exceeded.
- For size transitions outside the listed range consult the factory.

The CJT 80 series joints are trifurcating transition, heat shrink joints for splicing three conductor 15 kV and 25 kV jacketed or unjacketed paper and lead laminated dielectric cable (PILC or VCLC) to three each, single conductor XLP and EPR extruded dielectric, tape, wire shielded, bare or jacketed concentric neutral cables.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- No lead wiping required for positive oil stops
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seals ensure maximum protection against moisture ingress
- Reinforced wraparound sleeve with aluminum foil liner provides rugged protection and a moisture vapor barrier
- Wide cable ranges reduce inventory
- Pressure tested for continuous operation at 15 psig at 110°C
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- CJT 80 series joint qualification is based on the testing of the 15 kV trifurcating transition joints where the oil stop was proven, and the dielectric tests in the 15 kV and 25 kV single conductor joint tests respectively, as tested to IEEE 404-2000 at an independent laboratory.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJT 1580 series: HVS031104
- CJ 1580 series: HVS031103
- CJ 2580 series: HVS040423

15 to 25kV
VOLTAGE RATING

#4 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	PILC/POLY CONDUCTOR SIZE	INSULATION DIAMETER RANGE	JACKET DIAMETER (MAX)		CONNECTOR DIMENSIONS (MAX)		INSTALLED LENGTH (NOM)
			1/C PILC Range	1/C Poly Range	O.D. Both	Length	
	AWG/Kcmil	IN	IN	IN	IN	IN	IN
15 kV, 3/C PILC to 3 - 1/C PILC Trifurcating Joint or 3/C PILC to 3-1/C POLY Cable Transition Joint (165 - 220 mils insulation)							
CJT 1581	#4 - 4/0	0.55 - 0.90	0.60 - 1.05	0.80 - 1.85	1.05	4.50	40.0
CJT 1582	4/0 - 350	0.80 - 1.20	0.85 - 1.30	0.90 - 1.85	1.25	5.50	40.0
CJT 1583	400 - 750	1.00 - 1.30	1.05 - 1.60	1.10 - 2.15	1.75	7.00	48.0
CJT 1584	750 - 1000	1.15 - 1.50	1.25 - 1.85	1.10 - 2.15	1.85	8.00	48.0
25 kV, 3/C PILC to 3 - 1/C PILC Trifurcating Joint or 3/C PILC to 3-1/C POLY Cable Transition Joint (260 - 320 mils insulation)							
CJT 2581	#1 - 300	0.80 - 1.25	0.85 - 1.25	0.90 - 1.85	1.25	5.50	40.0
CJT 2582	350 - 500	1.00 - 1.45	1.05 - 1.50	1.10 - 2.15	1.60	7.00	48.0
CJT 2583	600 - 1000	1.35 - 1.70	1.40 - 1.90	1.10 - 2.15	1.85	8.00	48.0

15 - 25 KV, 3/C PAPER-LEAD TO 3-1/C POLY CABLE JOINTS

1. OSTC oil stop tube
2. CCON conductive shielding tube
3. CCB conductive breakout boot
4. SCS stress control/oil block sealant
5. CSCR stress control tube
6. CFXB insulating tube(s)
7. CCON conductive shielding tube
8. Tinned copper mesh and braid
9. CCB insulating breakout boot
10. CRDW-RA reinforced wraparound with aluminum foil moisture barrier

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range. Confirm the dimensional data; particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter(s) maximums are not exceeded.
- For size transitions outside the listed range consult the factory.

The CJT 90 series joints are trifurcating heat shrink joints for splicing three conductor 15 kV and 25 kV jacketed or unjacketed paper and lead laminated dielectric cable (PILC or VCLC) to three each, single conductor jacketed or unjacketed paper and lead laminated dielectric (PILC or VCLC) cables.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- No lead wiping required for positive oil stops
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seals ensure maximum protection against moisture ingress
- Reinforced wraparound sleeve with aluminum foil liner provides rugged protection and a moisture vapor barrier
- Wide cable ranges reduce inventory
- Pressure tested for continuous operation at 15 psig at 110°C
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- CJT 90 series joint qualification is based on the testing of the 15 kV trifurcating transition joints where the oil stop was proven, and the dielectric tests in the 15 kV and 25 kV single conductor joint tests respectively, as tested to IEEE 404-2000 at an independent laboratory.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJT 1580 series: HVS031104
- CJ 1580 series: HVS031103
- CJ 2580 series: HVS040423

15 to 25kV
VOLTAGE RATING

#4 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

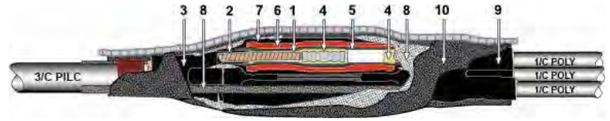
MARKETS:
Power Distribution, Power Distibution - MV, Utility

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE	INSULATION DIAMETER 1/C PILC RANGE	JACKET DIAMETER 1/C PILC RANGE	CONNECTOR DIMENSIONS (MAX)		INSTALLED LENGTH (NOM)
				O.D. Both	Length	
	AWG/kcmil	IN	IN	IN	IN	IN
15 kV, 3/C PILC to 3-1/C PILC Trifurcating Joint (165 - 220 mils insulation)						
CJT 1591	#4 - 4/0	0.55 - 0.90	0.80 - 1.85	1.05	4.50	40.0
CJT 1592	4/0 - 350	0.80 - 1.20	0.90 - 1.85	1.25	5.50	40.0
CJT 1593	400 - 750	1.00 - 1.30	1.10 - 2.15	1.75	7.00	48.0
CJT 1594	750 - 1000	1.15 - 1.50	1.10 - 2.15	1.85	8.00	48.0
25 kV, 3/C PILC to 3-1/C PILC Trifurcating Joint (260 - 320 mils insulation)						
CJT 2591	#1 - 300	0.80 - 1.25	0.90 - 1.85	1.25	5.50	40.0
CJT 2592	350 - 500	1.00 - 1.45	1.10 - 2.15	1.60	7.00	48.0
CJT 2593	600 - 1000	1.35 - 1.70	1.10 - 2.15	1.85	8.00	48.0

15 - 25 KV, 3/C PAPER-LEAD TO 3-1/C POLY CABLE JOINTS



1. OSTC oil stop tube
2. CCON conductive shielding tube
3. CCB conductive breakout boot
4. SCS stress control/oil block sealant
5. CSCR stress control tube
6. CFXB insulating tube(s)
7. CCON conductive shielding tube
8. Tinned copper mesh and braid
9. CCB insulating breakout boot
10. CRDW-RA reinforced wraparound with aluminum foil moisture barrier

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range. Confirm the dimensional data; particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter(s) maximums are not exceeded.
- For size transitions outside the listed range consult the factory.

The CJ 390 series joints are straight heat shrink joints for splicing three conductor 15 kV and 25 kV jacketed or unjacketed paper and lead laminated dielectric cable (PILC or VCLC) to three conductor jacketed or unjacketed paper and lead laminated dielectric (PILC or VCLC) cables.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- No lead wiping required for positive oil stops
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seals ensure maximum protection against moisture ingress
- Reinforced wraparound sleeve with aluminum foil liner provides rugged protection and a moisture vapor barrier
- Wide cable ranges reduce inventory
- Pressure tested for continuous operation at 15 psig at 110°C
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- CJ 390 series joint qualification is based on the testing of the 15 kV trifurcating transition joints where the oil stop was proven, and the dielectric tests in the 15 kV and 25 kV single conductor joint tests respectively, as tested to IEEE 404-2000 at an independent laboratory.

TEST REPORTS ARE AVAILABLE AS FOLLOWS

- CJT 1580 series: HVS031104
- CJ 1580 series: HVS031103
- CJ 2580 series: HVS040423

15 to 25kV
VOLTAGE RATING

#1 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

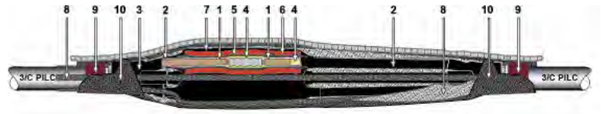
MARKETS:
Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE	INSULATION DIAMETER 1/C PILC RANGE	JACKET DIAMETER 1/C PILC RANGE	CONNECTOR DIMENSIONS (MAX)		INSTALLED LENGTH (NOM)
				O.D. Both	Length	
	AWG/Kcmil	IN	IN	IN	IN	IN
15 kV, 3/C PILC to 3/C PILC Cable Straight Joint (165 - 220 mils insulation)						
CJ 31591	#4 - 4/0	0.55 - 0.90	0.80 - 1.85	1.05	4.50	63.0
CJ 31592	4/0 - 350	0.80 - 1.20	0.90 - 1.85	1.25	5.50	63.0
CJ 31593	400 - 750	1.00 - 1.30	1.10 - 2.15	1.75	7.00	72.0
CJ 31594	750 - 1000	1.15 - 1.50	1.10 - 2.15	1.85	8.00	72.0
25 kV, 3/C PILC to 3/C PILC Cable Straight Joint (260 - 320 mils insulation)						
CJ 32591	#1 - 300	0.80 - 1.25	0.90 - 1.85	1.25	5.50	72.0
CJ 32592	350 - 500	1.00 - 1.45	1.10 - 2.15	1.60	7.00	72.0
CJ 32593	600 - 1000	1.35 - 1.70	1.10 - 2.15	1.85	8.00	72.0

15 - 25 KV, 3/C PAPER-LEAD TO 3/C PAPER-LEAD CABLE STRAIGHT JOINTS



1. OSTC oil stop tube
2. CCON conductive shielding tube
3. CCB conductive breakout boot
4. SCS stress control/oil block sealant
5. CSCR stress control tube
6. CFXB insulating tube(s)
7. CCON conductive shielding tube
8. Tinned copper mesh and braid
9. CRDW-RA reinforced wraparound with aluminum foil moisture barrier

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range. Confirm the dimensional data; particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter(s) maximums are not exceeded.
- For size transitions outside the listed range consult the factory.

The CLES 1580 and CLES 2580 series joints are heat shrink live end seals for single conductor 15 kV and 25 kV jacketed or unjacketed paper and lead, laminated dielectric cable (PILC or VCLC) or extruded dielectric (XLP or EPR) power cables.

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- No lead wiping required for positive oil stops
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seals ensure maximum protection against moisture ingress
- Reinforced wraparound sleeve with aluminum foil liner provides rugged protection and a moisture vapor barrier
- Wide cable ranges reduce inventory
- Pressure tested for continuous operation at 15 psig at 110°C
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- CLES 80 series joint qualification is based on the testing of the 15 kV trifurcating transition joints where the oil stop was proven, and the dielectric tests in the 15 kV and 25 kV single conductor joint tests respectively, as tested to IEEE 404-2000 at an independent laboratory.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJT 1580 series: HVS031104
- CJ 1580 series: HVS031103
- CJ 2580 series: HVS040423

15 to 25kV
VOLTAGE RATING

#1 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

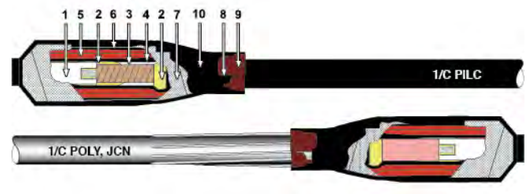
MARKETS:
Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage live end seals

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE	INSULATION DIAMETERS 1/C PILC OR POLY RANGE	INSTALLED LENGTH (NOM)
	AWG/kcmil	IN	IN
15 kV PILC Live End Seal for 1/C PILC or Poly Cable (165 - 220 mils insulation)			
CLES 1581	#4 - 4/0	0.55 - 1.05	16.0
CLES 1582	4/0 - 500	0.80 - 1.35	16.0
CLES 1583	500 - 1000	1.35 - 1.85	16.0
25 kV PILC Live End Seal for 1/C PILC or Poly Cable (260 - 320 mils insulation)			
CLES 2581	#1 - 300	0.80 - 1.25	24.0
CLES 2582	350 - 500	1.00 - 1.45	24.0
CLES 2583	600 - 1000	1.50 - 1.70	24.0

15 - 25 KV, 1/C PAPER-LEAD OR POLY CABLE LIVE END SEALS



1. HDPEP and seal plug
2. SCS stress control/oil block sealant
3. OSTC oil stop tube (PILC only)
4. CSCR stress control tube
5. CFXB insulating tube(s)
6. CCON conductive shielding tube
7. Tinned copper mesh
8. Tinned copper braid
9. CTSR red environmental sealant
10. CCAP insulating end cap

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range. Confirm the dimensional data; particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter(s) maximums are not exceeded.
- For size transitions outside the listed range consult the factory.

The CLES 31590 and CLES 32590 series joints are heat shrink live end seals for three conductor 15 kV and 25 kV jacketed or unjacketed paper and lead, laminated dielectric cable (PILC or VCLC).

FEATURES AND BENEFITS

- Fast, consistent installation means lower installed costs
- No lead wiping required for positive oil stops
- Installation environment: use of torch adds flexibility to cable preparation in any climate
- Heat activated seals ensure maximum protection against moisture ingress
- Reinforced wraparound sleeve with aluminum foil liner provides rugged protection and a moisture vapor barrier
- Wide cable ranges reduce inventory
- Pressure tested for continuous operation at 15 psig at 110°C
- Slim profile allows installation in confined areas

STANDARDS

- IEEE 404-2000

TEST REPORTS

- CLES 390 series joint qualification is based on the testing of the 15 kV trifurcating transition joints where the oil stop was proven, and the dielectric tests in the 15 kV and 25 kV single conductor joint tests respectively, as tested to IEEE 404-2000 at an independent laboratory.

TEST REPORTS ARE AVAILABLE AS FOLLOWS:

- CJT 1580 series: HVS031104
- CJ 1580 series: HVS031103
- CJ 2580 series: HVS040423

15 to 25kV
VOLTAGE RATING

#1 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Power Distribution, Power Distribution - MV, Utility

Heat shrink medium voltage live end seals

DIMENSIONS

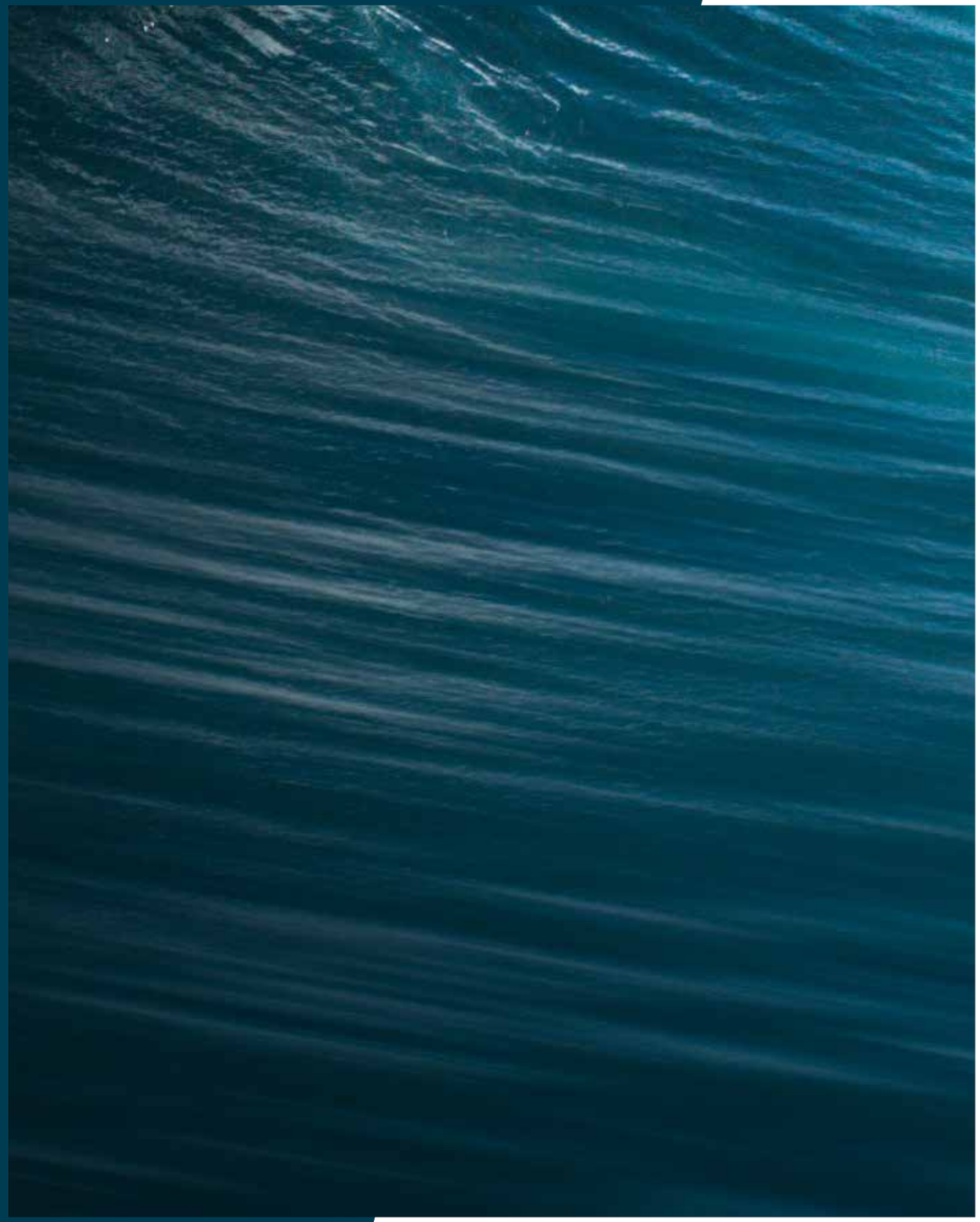
ORDER NUMBER	CONDUCTOR SIZE	INSULATION DIAMETERS 1/C PILC OR POLY RANGE	INSTALLED LENGTH (NOM)
	AWG/kcmil	IN	IN
15 kV PILC Live End Seal for 3/C PILC Cable Only (165 - 220 mils insulation)			
CLES 31591	#4 - 4/0	0.55 - 1.05	27.0
CLES 31592	4/0 - 500	0.80 - 1.35	27.0
CLES 31593	500 - 1000	1.35 - 1.85	27.0
25 kV PILC Live End Seal for 3/C PILC Cable Only (260 - 320 mils insulation)			
CLES 32591	#1 - 300	0.80 - 1.25	28.0
CLES 32592	350 - 500	1.00 - 1.45	31.0
CLES 32593	600 - 1000	1.50 - 1.70	32.0

15 - 25 KV, 3/C PAPER-LEAD CABLE LIVE END SEALS

1. OSTC oil stop tube
2. CCON conductive shielding tube
3. CCB conductive breakout boot
4. SCS stress control/oil block sealant
5. CSCR stress control tube
6. CFXB insulating tube(s)
7. CCON conductive shielding tube
8. Tinned copper mesh and braid
9. CTSR red environmental sealant
10. CCAP end cap

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range. Confirm the dimensional data; particularly when the conductor size is at the extremes of the range. The overlap in size ranges allows for size transitions when splicing different cable sizes. The determining factors for selection are that the minimum and maximum dimensions for the primary insulation and connector dimensions are met and that the jacket diameter(s) maximums are not exceeded.
- For size transitions outside the listed range consult the factory.



MEDIUM VOLTAGE PRODUCTS

ALL IN ONE SOLUTION FOR THE MOST DEMANDING MEDIUM VOLTAGE SPLICING REQUIREMENTS

The cold shrink splice kits, CSJ Series for 5-15 kV power cables feature a geometric stress control system that is offered as a one-piece compact design for quick and easy installation.

These kits are independently tested to meet IEEE 404 performance standards and demonstrate consistent electrical performance with superior environmental sealing.

Cold Shrink Cable Joints for 1/C, 15 kV XLPE and EPR extruded dielectric bare and jacketed concentric neutral power cables for the electrical utility market.

FEATURES AND BENEFITS

- Versatile, cold shrink design
- Quick and easy installation
- Accommodates wide range of conductor sizes
- Geometric stress cone & stress controlling sealant
- Spiral ripcord housing
- Cold shrink jacketing tube
- Compact design for all types of extruded dielectric cables covering the full range from #2 AWG to 1000 kcmil
- One piece joint designed for quick, easy and cost effective installation
- Provides exceptional performance & secondary seal
- Ripcord unwinds easily to facilitate quick removal of the core
- Demonstrates superior cable sealing & voltage withstand characteristics per electrical utility industry standards
- Designed for use with in-line compression connector
- Tough rubber outer covering protects against damage from improper backfill

STANDARDS

- Rated to IEEE-404-2000

TEST REPORTS

- The CSJ Series Joints were tested to the requirements of IEEE-404-2000 at an independent laboratory.
- Test report available: HVS.290310

15kV
VOLTAGE RATING

#2 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Power Distribution, Power Distribution - MV, Utility

Cold shrink medium voltage joints

BARE CONCENTRIC NEUTRAL 15 KV (175 - 220 MILS)

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
CSJ 1510	#2 AWG	0.51-0.64	13-16.2	0.91	23	0.51	13	3.15	80	18	455
CSJ 1511	#2 AWG - #1/0	0.64-0.79	16.2-20.2	1.10	28	0.64	16.2	3.15	80	18	455
CSJ 1512	#2/0 AWG - 250 kcmil	0.79-1.04	20-26.4	1.42	36	0.79	20	3.95	100	18	455
CSJ 1513	350-500 kcmil	1.02-1.45	26-36.8	1.77	45	1.02	26	5.50	140	20	505
CSJ 1514	750 - 1000 kcmil	1.34-1.77	34-45	2.28	58	1.45	36.8	5.50	140	20	505

JACKETED CONCENTRIC NEUTRAL 15 KV (175 - 220 MILS)

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
CSJ 1510	#2 AWG	0.51-0.64	13-16.2	0.91	23	0.51	13	3.15	80	18	455
CSJ 1511	#2 AWG - #1/0	0.64-0.79	16.2-20.2	1.10	28	0.64	16.2	3.15	80	18	455
CSJ 1512	#2/0 AWG - 250 kcmil	0.79-1.04	20-26.4	1.42	36	0.79	20	3.95	100	18	455
CSJ 1513	350-500 kcmil	1.02-1.45	26-36.8	1.77	45	1.02	26	5.50	140	20	505
CSJ 1514	750 - 1000 kcmil	1.34-1.77	34-45	2.28	58	1.45	36.8	5.50	140	20	505

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range and cable insulation O.D. range.
- Confirm the dimensional data particularly when the conductor size range is at the extremes of the range. The overlap in size range allows for size transitions when splicing different cable sizes. The determining factors for selection are that the dimension ranges for the primary insulation and connector dimensions are met and the jacket diameter maximums are not exceeded.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number.

Cold Shrink Cable Joints for 1/C, 5 - 15 kV XLPE and EPR extruded dielectric metal tape, wire shielded power cables for the electrical construction markets.

FEATURES AND BENEFITS

- Versatile, cold shrink design
- Quick and easy installation
- Accommodates a wide range of conductor sizes
- Geometric stress cone & stress controlling sealant
- Spiral ripcord housing
- Cold shrink jacketing tube
- Compact design for all types of extruded dielectric cables covering the full range from #4 AWG to 1000 kcmil
- One piece joint designed for quick, easy and cost effective installation
- Provides exceptional performance & secondary seal
- Demonstrates superior cable sealing & voltage withstand characteristics per electrical utility industry standards
- Designed for use with in-line compression connector
- Tough rubber outer covering protects against damage from improper backfill

STANDARDS

- Rated to IEEE-404-2000

TEST REPORTS

- The CSJ Series Joints were tested to the requirements of IEEE-404-2000 at an independent laboratory.
- Test report available: HVS.290310

5 to 15kV
VOLTAGE RATING

#2 - 1000kcmil
CONDUCTOR SIZE RANGE

QUICK AND EASY INSTALLATION

MARKETS:
Power Distribution, Power Distribution - MV, Utility

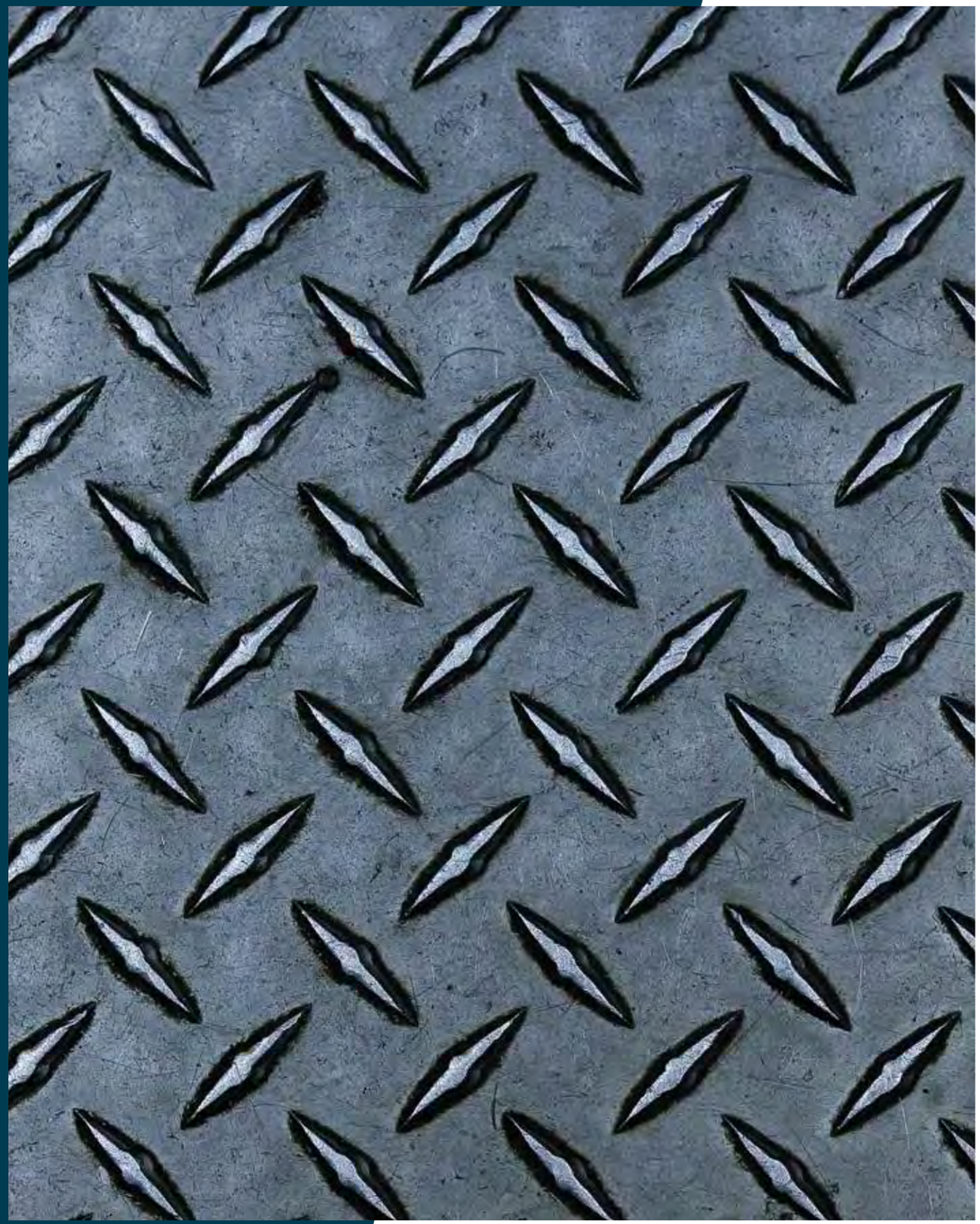
Cold shrink medium voltage joints

DIMENSIONS

ORDER NUMBER	CONDUCTOR SIZE RANGE	INSULATION O.D. RANGE		JACKET O.D. MAXIMUM		CONNECTOR DIMENSIONS				NOMINAL KIT INSTALLED LENGTH	
						Maximum O.D.		Maximum Length			
		IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
5 kV (90-110 mils)											
CSJ 820	#4 - #2/0 AWG	0.51-0.64	13-16.2	0.91	23	0.51	13	3.15	80	18	455
CSJ 821	#2/0 - 250 kcmil	0.64-0.79	16.2-20.2	1.10	28	0.64	16.2	3.15	80	18	455
CSJ 822	250 - 500 kcmil	0.79-1.04	20-26.4	1.42	36	0.79	20	3.95	100	18	455
CSJ 823	500 - 1000 kcmil	1.02-1.45	26-36.8	1.77	45	1.02	26	5.50	140	20	505
8 kV (115 mils)											
CSJ 820	#4 - #1/0 AWG	0.51-0.64	13-16.2	0.91	23	0.51	13	3.15	80	18	455
CSJ 821	#1/0 - #4/0	0.64-0.79	16.2-20.2	1.10	28	0.64	16.2	3.15	80	18	455
CSJ 822	#4/0 - 500 kcmil	0.79-1.04	20-26.4	1.42	36	0.79	20	3.95	100	18	455
CSJ 823	500 - 1000 kcmil	1.02-1.45	26-36.8	1.77	45	1.02	26	5.50	140	20	505
15kV (175-220 mils)											
CSJ 1520	#2	0.51-0.64	13-16.2	0.91	23	0.51	13	3.15	80	18	455
CSJ 1521	#2 - #1/0	0.64-0.79	16.2-20.2	1.10	28	0.64	16.2	3.15	80	18	455
CSJ 1522	#1/0 -350 kcmil	0.79-1.04	20-26.4	1.42	36	0.79	20	3.95	100	18	455
CSJ 1523	350 - 750 kcmil	1.02-1.45	26-36.8	1.77	45	1.02	26	5.50	140	20	505
CSJ 1524	750- 1000 kcmil	1.45-1.77	36.8-45	2.28	58	1.45	36.8	5.50	140	20	505

ORDERING

- Find the cables voltage class and conductor size(s) to be spliced. Select the kit order number that covers the conductor size range and cable insulation O.D. range.
- Confirm the dimensional data particularly when the conductor size range is at the extremes of the range. The overlap in size range allows for size transitions when splicing different cable sizes. The determining factors for selection are that the dimension ranges for the primary insulation and connector dimensions are met and the jacket diameter maximums are not exceeded.
- A cable preparation/cleaning kit can be included with the kit by adding the suffix to the end of the order number.



MEDIUM VOLTAGE PRODUCTS

RELIABLE AND DEPENDABLE ACCESSORIES TO ENSURE A HASSLE FREE INSTALLATION

Shawcor provides a variety of kits and accessories to complement our low and medium voltage splice and termination protection products offering.

CONNECTORS

High quality 1 or 2 hole compression lugs, stem connectors, or barrel splice connectors for aluminum, copper, or dual rated aluminum / copper conductors can be provided with any medium voltage termination or splice kit.

The connectors are UL & CSA certified, covering cable conductor size #4 AWG to 750 Kcmil, rated up to 35 kV, are manufactured from high conductivity material and tin plated to inhibit corrosion.

ORDER NUMBER	CONDUCTOR SIZE	PKG/KIT
2HLUG	#4 AWG-750 kcmil	3
1HLUG	#4 AWG-750 kcmil	3
STEM	#2 AWG - 4/0	1
BRLSL	#4 AWG-750 kcmil	3

CRSA - NON-TRACKING RAIN SHEDS

Rain sheds are used as creepage extenders on medium voltage cable termination and insulators in outdoor applications. The recommended number of sheds to be used varies according to the voltage rating of the cable.

VOLTAGE	NUMBER OF SHEDS
5 - 8 kV	1
15 kV	2
25-28 kV	3
35 kV	4

PART NUMBER	CABLE DIAMETER USE RANGE	
	MM	IN
CRSA 37/12	32 - 12	1.26 - 0.47
CRSA 57/25	52 - 25	2.05 - 0.98
CRSA 75/35	70 - 35	2.76 - 1.38

CTSR - NON-TRACKING RED SEALANT

Heat activated red sealant mastic for use in general purpose, medium voltage applications. Ideal for use in cable terminations and joints.

ORDER NUMBER	WIDTH		LENGTH		THICKNESS	
	MM	IN	MM	IN	MM	IN
CTSR 021535	53.34	2.10	381	15	1.016	0.040
CTSR 013060	26.67	1.05	762	30	1.524	0.060

CJGK - MID-SPAN EXTERNAL GROUNDING KIT

CJGK kits are used to externally ground 15kV-35kV jacketed concentric, flat strap neutral and longitudinal corrugated (type LC) power cable every 1/4 mile per RUS recomendations. Each kit contains tinned copper moisture blocked ground braid, constant force spring, sealant mastic and a wraparound rejacketing sleeve.

ORDER NUMBER	USE RANGE (NOMINAL)			RATED FAULT
	15 kV	25 kV	35 kV	
CJGK-1	#4-4/0 AWG	#1-1/0 AWG	N/A	10kA, 10 cycles
CJGK-2	250-1000 kcmil	1/0-750 kcmil	1/0-500 kcmil	15kA, 15 cycles
CJGK-3	1000-2000 kcmil	750-1750 kcmil	500-1500 kcmil	15kA, 15 cycles

BRDM - TINNED COPPER, MOISTURE BLOCKED GROUND BRAID

Used with cable terminations and joints to provide ground continuity.

ORDER NUMBER	GAUGE SIZE	WIDTH		LENGTH	
	AWG	MM	IN	MM	IN
BRDM0836	8	12.7	0.50	914.4	36
BRDM0636	6	19.5	0.75	914.4	36
BRDM0436	4	25.4	1.00	914.4	36

CFGK - FAULT GROUNDING KITS

Heat activated red sealant mastic for use in general purpose, medium voltage applications. Ideal for use in cable terminations and joints.

ORDER NUMBER	DESCRIPTION
CFGK1X36	One kit contains a constant force spring, copper foil tape and #8 AWG tinned copper braid, 36 in long
CFGK2X36	One kit contains a constant force spring, copper foil tape and #6 AWG tinned copper braid, 36 in long
CFGK3X36	One kit contains a constant force spring, copper foil tape and #4 AWG tinned copper braid, 36 in long

MESH - TINNED COPPER SHIELDING MESH

Provides shield continuity on shielded power cables.

PART NUMBER	WIDTH		LENGTH	
	MM	IN	M	FT
MESH25015	57.15	2.25	4.57	15

CFS - CONSTANT FORCE SPRINGS

Used for securing ground braids on cable terminations and joints.

ORDER NUMBER	USE RANGE	
	MM	IN
CFS0405	12.7 - 25.4	0.50 - 1.00
CFS1005	25.4 - 50.8	1.00 - 2.00
CFS1675	42.4 - 76.2	1.67 - 3.00

CPK - CABLE PREPARATION KIT

Kits contain all the necessary parts to clean and abrade single conductor or 1-3/C or 3-1/C and 1/C cable accessories. The cable prep kits can be ordered separately or as part of any MV termination or splice product by adding the suffix “P” to the order

ORDER NUMBER	DESCRIPTION
CPK0306	One kit contains 3 each of solvent wipes, dry wipes and 3 strips of abrasion paper
CPK0102	One kit contains 1 each of solvent wipe, dry wipe and strip of abrasion paper

HEAT SHRINK TORCHES AND GUNS

Heavy duty light weight portable torches provide clean burning, and allows shrinking from various angles and positions. Ideal for use on medium and heavy wall heat shrink tubing.

The torches have a heating capacity of 20,000 to 40,000 BTU, ergonomic handles, hose and regulator assembly, with option for automatic ignition

The hot air burner torch with a 6100 BUT/hr heating capacity is ideal for low voltage electrical and CATV applications, where use of open flame is not desirable

ORDER NUMBER	HEATING CAPACITY	IGNITION
Propane Torches		
CTCH-BHSK	20,000-40,000 btu/hr	Manual
CTCH-CATV	20000	Automatic
CTCH-HSK	40000	Automatic
Electronic Heat Gun		
CHGN	1500W, 120-1100°F, 3 heat levels, low noise operation, UL/CSA listed	-

CMB series cable mounting brackets provide a reliable way of securing cable terminations on overhead cable riser poles.

Made of steel and offered in four sizes, the mounting brackets are ideal for outdoor applications. The brackets are affixed below the cable terminations using a single or double clamp that can be fastened to the riser pole hardware.

FEATURES AND BENEFITS

- Made from galvanized steel for environmental protection
- Quick and easy cable fastening using wing nut and bolt supplied in kit
- Covers 4 cable size ranges
- Clamp openings can be manually adjusted for larger size cable
- Molded rubber pad provides firm grip over cable jacket

TYPICAL APPLICATIONS

- Mounting terminations on riser poles

0.8-2.4"

OD RANGE

MEDIUM VOLTAGE CABLE TERMINATION MOUNTING BRACKETS

MARKETS:
Electrical Utility, Industrial, Renewables

Cable Mounting Brackets

DIMENSIONS

ORDER NUMBER	CABLE OD RANGE		STANDARD PACKAGE
	IN	MM	PCS/BOX
CMB-3	0.80-1.25	20.3-31.8	10
CMB-4	1.10-1.50	27.9-38.1	10
CMB-5**	1.45-1.95	36.8-49.5	10
CMB-6**	1.80-2.40	45.7-61.0	10

NOTES: ***Contains double clamps*

ORDERING

Select a dimension based on the cable OD for determining proper size to be used.

- Please specify product name and size:
- *Example:* CMB-3

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heat Shrink Conversion Kits

3/C Termination Conversion Kits

3/C OUTDOOR CONVERSION KIT WITH BOOT	3/C INDOOR CONVERSION KIT WITHOUT BOOT	5 - 8 KVG OR EG SERIES	15 KVG OR EG SERIES	25 KVG OR EG SERIES	35 KVG OR EG SERIES
CT 3MODA01	CT 3MODW	CT 081/082	-	-	-
CT 3MODA	CT 3MODX	CT 083	CT 151/152	CT 251	-
CT 3MODB	CT 3MODY	CT 084/085	CT 153/154	CT 252/253	CT 351/352

- Select the 3/C conversion kit based on the voltage class, termination kit type and whether it's for indoor or outdoor use
- *Example:* for CT 151EG Outdoor Termination Kits, select CT 3MODA kit to convert 3/C to 3-1/C cable termination configuration

KIT CONTENTS:

- Outdoor kits contain rejacketing tubes, sealant, cable breakout boot
- Indoor kits contain rejacketing tubes for phase and ground conductors, sealants

3/C Joint Conversion Kits (Unarmored)

CONVERTS 3-1/C JOINT KITS INTO 1-3/C JOINT KITS

3/C JOINT CONVERSION KIT	5 - 8 KV JOINT KITS	15 KV JOINT KITS	25 KV JOINT KITS	35 KV JOINT KITS
CJ 3MOD1	CJ N51, CJ 821	-	-	-
CJ 3MOD2	CJ N52, CJ 822, CJ 823	-	-	-
CJ 3MOD3	CJ 824, CJ 825	CJ 1521, CJ 1522	CJ 2521	-
CJ 3MOD4	-	CJ 1523, CJ 1524	CJ 2522, CJ 2523	CJ 3521, CJ 3522, CJ 3523

KIT CONTENTS:

- Rejacketing wraparound sleeves and sealant strips

3/C Joint Conversion Kits (Armored)

CONVERTS 3-1/C JOINT KITS INTO 1-3/C ARMORED JOINT KITS

3/C ARMORED JOINT CONVERSION KIT	5 - 8 KV JOINT KITS	15 KV JOINT KITS	25 KV JOINT KITS	35 KV JOINT KITS
CJ 3AMOD1	CJ N51, CJ N52, CJ 821	-	-	-
CJ 3AMOD2	CJ N53, CJ 822, CJ 823	-	-	-
CJ 3AMOD3	CJ 824, CJ 825	CJ 1521, CJ 1522, CJ 1523, CJ 1524	CJ 2521, CJ 2522	CJ 3521
CJ 3AMOD4	-	-	CJ 2523	CJ 3522, CJ 3523

- Select the 3/C conversion kit based on the voltage class, joint kit type and whether it's armored or not
- *Example:* for CJ 823 Joint Kits, select CJ 3AMOD2 kit to convert 3-1/C to 3/C armored cable joint kit configuration

KIT CONTENTS:

- Galvanized steel wraparound case, rejacketing wraparound sleeves and sealant strips

Cold Shrink Conversion Kits

TITAN 3/C TERMINATION CONVERSION KITS

3/C OUTDOOR CONVERSION KIT WITH BOOT	3/C INDOOR CONVERSION KIT WITHOUT BOOT	CABLE SHIELD DIAMETER RANGE MIN	CONDUCTOR SIZE RANGE	STANDARD PACKAGE KITS/BOX
5 kV, 133% or 8kV, 100%				
TITAN 3MODB1	TITAN 3MOD1	0.61"-0.82"	#2-2/0	1
TITAN 3MODB2	TITAN 3MOD2	0.72" - 1.10"	2/0-350	1
TITAN 3MODB3	TITAN 3MOD3	1.08" - 1.45"	500-1000	1
15 kV, 100% or 133%				
TITAN 3MODB1	TITAN 3MOD1	0.74"-0.96"	#2-1/0	1
TITAN 3MODB2A	TITAN 3MOD2	0.80"-1.27"	1/0-350	1
TITAN 3MODB3	TITAN 3MOD3	1.23" - 1.52"	500-750	1
25kV, 100% or 133%; 28kV, 100%; 35kV, 100%				
TITAN 3MODB2A	TITAN 3MOD2	0.80" - 1.27"	#1 - 4/0	1
TITAN 3MODB4	TITAN 3MOD4	1.10" - 1.52"	250 - 500	1
25kV, 100% or 133%; 28kV, 100%; 35kV, 100%				
TITAN 3MODB2A	TITAN 3MOD2	0.80" - 1.27"	#1 - 4/0	1
TITAN 3MODB4	TITAN 3MOD4	1.10" - 1.52"	250 - 500	1

- The TITAN 3MOD Kits are designed to convert 3/C shielded power cables to 3-1/C cable terminations.
- The kit design provides a seal at the breakout area and rejacketing of individual phases on the three conductor cables

KIT CONTENTS

- Outdoor kits contain cold applied breakout boots, 3x1 meter tubes made of silicone rubber insulators and sealant mastics
- Indoor kits contain 3x1 meter tubes made of silicone rubber insulators and sealant mastics

EQUIPMENT INSULATION AND CONNECTION PROUDCTS

MATERIALS ENGINEERING EXPERTISE FOR SAFE AND EFFICIENT INSTALLATIONS

Specialty tubing products and accessories used for demanding applications where electrical performance and ease of installation are critical.

Medium voltage crosslinked polyolefin bus bar tubing.

Medium and heavy wall anti-track heat shrink tubing specifically designed for insulating medium voltage bus bar.

FEATURES AND BENEFITS

- Reduces bus bar clearance requirements
- Protects against accidental flashover
- Sunlight resistant
- Anti-track
- Halogen free
- CBTM medium wall tubing rated to 25 kV
- CBTH heavy wall tubing rated to 36 kV
- Shrink ratio: 3:1
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 120°C

STANDARDS

- Tested to ANSI C37.20.2 standards for medium voltage switchgear applications to 36 kV
- UL Recognized Component

TYPICAL APPLICATIONS

- Insulation of medium voltage bus bars in switchgear equipment

3:1

SHRINK RATIO

-40°C to 125°C
(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial, Power Distribution, Utility

STANDARDS:

Medium voltage crosslinked polyolefin bus bar tubing

CBTM MEDIUM WALL BUS TUBING: FOR SERVICES TO 25 KV ON UNBOLTED BUS BAR

ORDER NUMBER	EXPANDED				RECOVERED								APPLICATION RANGES			
	Internal Diameter (min) D		Wall Thickness (nom) w		Internal Diameter (max) d				Wall Thickness (nom) W				*Rectangular Bus Bar		Round Bus Bar	
	MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX	
	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
0750	19.0	0.75	1.14	0.045	5.5	0.22	2.70	0.109	6.4	1/4	6.4	1/4	6.8	0.27	15.2	0.60
1300	33.0	1.30	1.14	0.045	10.1	0.40	2.97	0.117	12.7	1/2	28.5	1 1/8	12.4	0.49	27.9	1.10
2050	52.0	2.05	1.14	0.045	19.0	0.75	2.79	0.110	31.5	1 1/4	50.8	2	22.3	0.88	43.1	1.70
2750	69.8	2.75	1.14	0.045	25.4	1.00	2.87	0.115	44.4	1 3/4	76.2	3	29.7	1.17	58.4	2.30
3500	88.9	3.50	1.14	0.045	29.9	1.18	3.09	0.122	57.1	2 1/4	101.6	4	35.8	1.41	73.6	2.90
4700	119.3	4.70	1.14	0.045	39.9	1.57	3.20	0.126	73.0	2 7/8	142.8	5 5/8	47.7	1.88	101.6	4.00
6700	170.1	6.70	1.14	0.045	58.4	2.30	3.17	0.125	114.3	4 1/2	203.2	8	69.5	2.74	144.7	5.70

CBTH HEAVY WALL BUS TUBING: FOR SERVICES TO 36 KV ON UNBOLTED BUS BAR

ORDER NUMBER	EXPANDED				RECOVERED								APPLICATION RANGES			
	Internal Diameter (min) D		Wall Thickness (nom) w		Internal Diameter (max) d				Wall Thickness (nom) W				*Rectangular Bus Bar		Round Bus Bar	
	MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX	
	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
1100	27.9	1.10	1.67	0.066	8.9	0.35	3.88	0.153	9.5	3/8	12.7	1/2	10.6	0.42	17.7	0.70
2000	50.8	2.00	1.57	0.062	16.0	0.63	4.08	0.161	22.2	7/8	34.9	1 3/8	19.3	0.76	33.0	1.30
2700	68.0	2.68	1.52	0.060	22.1	0.87	4.08	0.161	34.9	1 3/8	50.8	2	26.1	1.05	43.1	1.70
3500	89.9	3.54	1.52	0.060	29.9	1.18	4.08	0.161	50.8	2	76.2	3	35.8	1.41	58.4	2.30
4700	119.9	4.72	1.57	0.062	39.9	1.57	4.19	0.165	69.8	2 3/4	111.1	4 3/8	47.7	1.88	81.2	3.20
6600	167.6	6.60	1.67	0.066	65.0	2.56	4.19	0.165	114.3	4 1/2	177.8	6 1/2	69.5	2.74	124.4	4.90

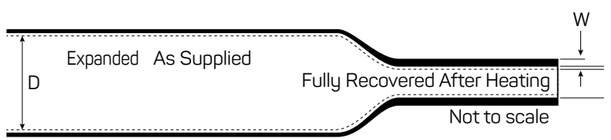
*Assume rectangular bus bars have 1/4 in thickness on min application ranges and 5/8 in thickness on max application ranges.

Application ranges noted above selected to obtain minimum insulation thickness required to meet ANSI C37.20.2 withstand requirements at bus bar spacing and operating voltages noted. These spacings were determined from a limited number of test configurations. Due to the wide variety of bus bar configurations, these spacings and recovered wall thicknesses should not be employed by the user without actual verification and testing for the intended application. Spacing based on insulation wall thickness per application range of above table.

CLEARANCES WITH INSULATION

SYSTEM VOLTAGE	BIL	CBTM MEDIUM WALL TUBING				CBTH HEAVY WALL TUBING			
	kV	P to P		P to G		P to P		P to G	
		MM	IN	MM	IN	MM	IN	MM	IN
15 kV	95	86.0	3.4	106.0	4.2	55.0	2.2	66.0	2.6
25 kV	125	114.0	4.5	152.0	6.0	71.0	2.8	101.0	4.0
36 kV	150	165.0	6.5	203.0	8.0	142.0	5.6	190.0	7.5

P to P: Phase to Phase orientation
P to G: Phase to Ground orientation
Spacing based on metal to metal dimension prior to insulation.
Spacing based on insulation wall thickness per application range of above table.

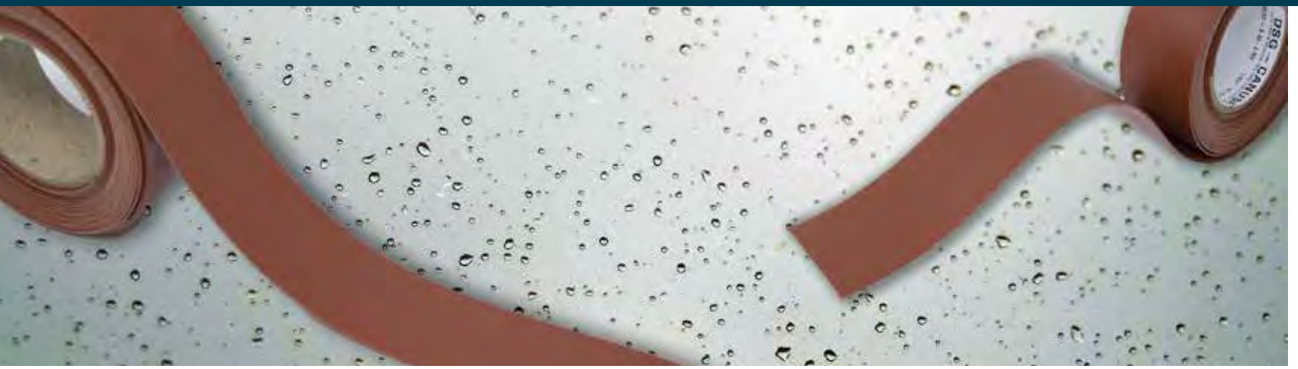


ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Please specify the product name, order reference number
- Standard is red, printed, unlined, 50 ft lengths (maximum or 1 splice allowed with minimum length of 15 ft)
- *Example*, CBTM, 1300

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.



Medium voltage crosslinked polyolefin bus bar tape.

Anti-track, adhesive coated, heat shrink tape specifically designed for insulating and protecting medium voltage bus bar.

FEATURES AND BENEFITS

- Reduces bus bar clearance requirements
- Protects against accidental flashover
- Anti-track
- Shrink ratio: 1.7:1
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 120°C

STANDARDS

- Tested to ANSI C37.20.2 standards for medium voltage switchgear applications to 25 kV

TYPICAL APPLICATIONS

- Insulation and protection of bus bar joints

1.7:1

SHRINK RATIO

-40°C to 125°C
(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Industrial, Power Distribution, Utility

STANDARDS:

RoHS

Medium voltage crosslinked polyolefin bus bar tape

FOR SERVICES TO 25 KV OVER BOLTED BUS BAR

ORDER NUMBER	ROLL WIDTH (MIN)		BACKING THICKNESS RECOVERED (NOM)		ROLL LENGTH	
	MM	IN	MM	IN	M	FT
CMVBT-1	25.4	1	1.06	0.042	7.62	25
CMVBT-2	50.8	2	1.06	0.042	7.62	25
CMVBT-4	101.6	4	1.06	0.042	7.62	25

FOR SERVICES TO 25 KV OVER BOLTED BUS BAR

ORDER NUMBER	BIL	P TO P		P TO G	
KV	KV	MM	IN	M	FT
15	95	64	2.5	74	2.9
17	110	86	3.4	106	4.2
25	125	114	4.5	152	6.0

P TO P: Phase to Phase orientation
P to G: Phase to Ground orientation
Spacing based on metal to metal dimension prior to insulation

INSTALLATION INSTRUCTIONS

- CMVBT-1 is best for short lengths
- CMVBT-2 is most commonly used and versatile
- CMVBT-4 is used for long lengths
- A 2/3 overlap is recommended
- One layer application required to 17 kV
- Two layer application required to 25 kV

ORDERING

- Select a roll width which will shrink snugly over the component to be covered.
- Standard product is red and supplied in 25 ft rolls
- For each item please specify the product name
- *Example*, CMVBT-1

SINGLE WALL PRODUCTS

SERVING A VARIETY OF APPLICATIONS IN THE AUTOMOTIVE, ELECTRONICS, MILITARY AND AEROSPACE MARKETS

Our single wall heat shrink tubing portfolio offers insulation of electrical components, protects against mechanical damage and abrasion, provides strain relief and is available in a wide range of colors and sizes.

Thin wall semi-rigid crosslinked polyolefin.

Semi-rigid heat shrink tubing for use with automatic feed equipment or other industrial, military/aerospace and commercial applications requiring exceptional strain relief.

FEATURES AND BENEFITS

- Exceptional mechanical strength and abrasion resistance
- Semi-rigid
- Flame retardant
- Thicker wall available for additional mechanical protection
- Resistant to acids, alkalis, hydrocarbon solvents and hydraulic fluids
- 2:1 shrink ratio and 2.5:1 shrink ratio
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 135°C

STANDARDS

- UL 224 125°C
- CSA C22.2 No. 198.2
- SAE AMS-DTL-23053/6, (colors)
- AMS 3638 and 3639
- UL/CSA approval applies to Black only

TYPICAL APPLICATIONS

- Physical protection of electronic components
- Strain relief of terminals

2:1 (AND 2.5:1)
SHRINK RATIO

-55°C to 135°C
(-67°F to 275°F)
CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Aerospace Defence, Industrial, OEM

STANDARDS:

Thin wall semi-rigid crosslinked polyolefin

2:1 SHRINK RATIO (SAE-AMS-DTL-23053/6)

ORDER NUMBER	EXPANDED		RECOVERED				LENGTHS	
	Internal Diameter (Min) D		Internal Diameter (Max) d		Wall Thickness (Nom) W			
	MM	IN	MM	IN	MM	IN	M	FT
0046	1.2	3/64	0.60	0.023	0.51	0.020	300	1,000
0063	1.6	1/16	0.79	0.031	0.51	0.020	300	1,000
0093	2.4	3/32	1.20	0.046	0.51	0.020	300	1,000
0125	3.2	1/8	1.59	0.062	0.51	0.020	300	1,000
0187	4.7	3/16	2.36	0.093	0.64	0.025	300	1,000
0250	6.4	1/4	3.18	0.125	0.64	0.025	150	500
0375	9.5	3/8	4.75	0.187	0.76	0.030	150	500
0500	12.7	1/2	6.35	0.250	0.76	0.030	60	200

2.5:1 SHRINK RATIO

ORDER NUMBER	EXPANDED		RECOVERED				LENGTHS	
	Internal Diameter (Min) D		Internal Diameter (Max) d		Wall Thickness (Nom) W			
	MM	IN	MM	IN	MM	IN	M	FT
1	6.1	0.240	2.4	0.095	0.81	0.032	cut pieces	cut pieces
2	8.1	0.320	3.2	0.125	0.81	0.032	cut pieces	cut pieces
3	9.5	0.375	3.8	0.150	0.81	0.032	cut pieces	cut pieces
4	12.3	0.485	5.1	0.200	0.81	0.032	cut pieces	cut pieces

ORDERING

Select a dimension which will shrink snugly over the component to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select Options:
  - Color: Black (BK)
  - Lengths: 48 in (1.2 m) continuous reels or cut pieces
- Please specify the product name, order number and options you require
- *Example*:CHM 140, 0375, black, unprinted, 500 ft reel

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Universal heat shrink tubing with excellent physical and mechanical properties.

FEATURES AND BENEFITS

- Flame retardant (colors only)
- Resistant to common fluids and solvents
- Economical mechanical protection for terminal strain relief and wire bundling
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 90°C min.

STANDARDS

- UL 224, 125°C VW-1 (colors only) - UL file # E63390
- CSA C22.2 No. 198.1, 125°C - CSA file # 256317 & 065781_0_000
- AMS 3636, 3637 and 3587
- UL/CSA approval applies to black and colors only
- Approved to automotive OEM specifications

TYPICAL APPLICATIONS

- Electrical insulation of wire splices and terminals
- Protection against chemical strength
- Strain relief of wire terminations
- Cable marking and bundling of electrical or mechanical components
- Secures components from abrasion and fluids

2:1

SHRINK RATIO

-55°C to 135°C
(-67°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

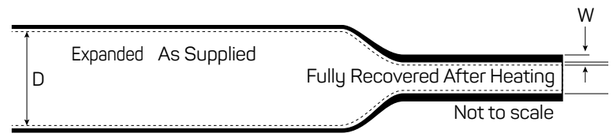
Automotive, Aerospace, Defense, Industrial OEM

STANDARDS:

Thin wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	M	FT
0047	1.2	3/64	0.6	3/128	0.41	0.016	300	1000
0063	1.6	1/16	0.8	1/32	0.43	0.017	300	1000
0094	2.4	3/32	1.2	3/64	0.51	0.020	300	1000
0125	3.2	1/8	1.6	1/16	0.51	0.020	300	1000
0187	4.8	3/16	2.4	3/32	0.51	0.020	300	1000
0250	6.4	1/4	3.2	1/8	0.64	0.025	150	500
0375	9.5	3/8	4.7	3/16	0.64	0.025	150	500
0500	12.7	1/2	6.4	1/4	0.64	0.025	60	200
0625	16.0	5/8	8.0	5/16	0.76	0.030	60	200
0750	19.0	3/4	9.5	3/8	0.76	0.030	30	100
1000	25.4	1	12.7	1/2	0.89	0.035	30	100
1250	32.0	1 ¼	16.0	5/8	0.89	0.035	30	100
1500	38.1	1 ½	19.0	3/4	1.02	0.040	30	100
2000	50.8	2	25.4	1	1.14	0.045	30	100
3000	76.2	3	38.0	1 ½	1.27	0.050	15	50
4000	101.6	4	50.8	2	1.40	0.055	15	50



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), red (RD), white (WT), clear (CL), blue (BL), yellow (YL)
  - Length: Standard stick, spool or custom lengths
- Please specify the product name, order number and options you require
- *Example:* CPX 100, 0375, black, 500 ft

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Thin wall crosslinked polyolefin for circuit ground applications. Yellow and green striped heat shrink tubing that is flexible and flame retardant.

FEATURES AND BENEFITS

- Striped color combination designates international electrical grounding
- Flame retardant
- Resistant to common fluids and solvents
- Flexible
- Rated for 1 kV, 90°C continuous use
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 90°C

STANDARDS

- UL 224, 125°C - UL file # E107857
- CSA C22.2 No. 198.1, 125°C - CSA file #065789_0_000
- AMS 3636

TYPICAL APPLICATIONS

- Identify ground wire and terminals
- Electrical insulation of in-line connections

3:1

SHRINK RATIO

-55°C to 135°C
(-67°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

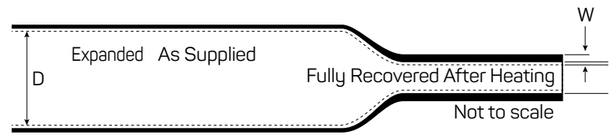
MARKETS:
Automotive, Industrial

STANDARDS:

Thin wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	M	FT
0125	3.2	1/8	1.0	0.039	0.55	0.022	150	500
0187	4.8	3/16	1.5	0.059	0.60	0.024	60	200
0250	6.4	1/4	2.0	0.079	0.65	0.026	150	500
0375	9.5	3/8	3.0	0.118	0.75	0.030	60	200
0500	12.7	1/2	4.0	0.157	0.75	0.030	60	200
0750	19.0	3/4	6.0	0.236	0.85	0.033	30	100
1000	25.4	1	8.0	0.315	1.00	0.039	30	100
1535	39.0	1.50	13.0	0.512	1.15	0.045	30	100



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Yellow/green stripes
  - Printing: Printed or unprinted
  - Length: Continuous reels
- Please specify the product name, order number and options you require
- *Example:* CPX 201, 0250, yellow/green stripes, unprinted, 500 ft lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

High shrink ratio, flexible heat shrink tubing.

FEATURES AND BENEFITS

- Resistant to common fluids and solvents
- Flame retardant
- Flexible
- Rated for 1 kV, 90°C continuous use
- High shrink ratio is ideal for covering irregularly sized objects
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 90°C min

STANDARDS

- UL 224 125°C - UL file # E63390
- CSA C22.2 No. 198.1 125°C - CSA file # 065781_0_000
- UL/CSA approval applies to black and colors only

TYPICAL APPLICATIONS

- Electrical insulation of in-line splices
- Strain relief of terminals
- Color coding of electronic components

3:1

SHRINK RATIO

-55°C to 135°C
(-67°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial

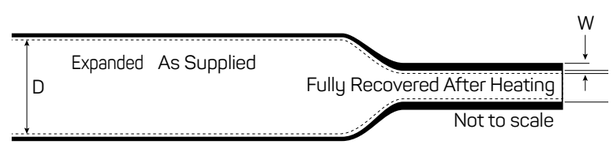
STANDARDS:

Thin wall high shrink ratio crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	M	FT
0125	3.2	1/8	1.10	0.042	0.51	0.020	150	492
0187	4.8	3/16	1.60	0.063	0.70	0.020	75	246
0250	6.4	1/4	2.10	0.083	0.66	0.026	75	246
0375	9.5	3/8	3.20	0.125	0.76	0.030	75	246
0500	12.7	1/2	4.20	0.165	0.76	0.030	50	164
0750	19.1	3/4	6.40	0.250	0.84	0.033	30	98
1000	25.4	1	8.50	0.333	0.99	0.039	30	98
1500	38.1	1½	12.70	0.500	1.14	0.045	30	98

*Spool lengths are for black only

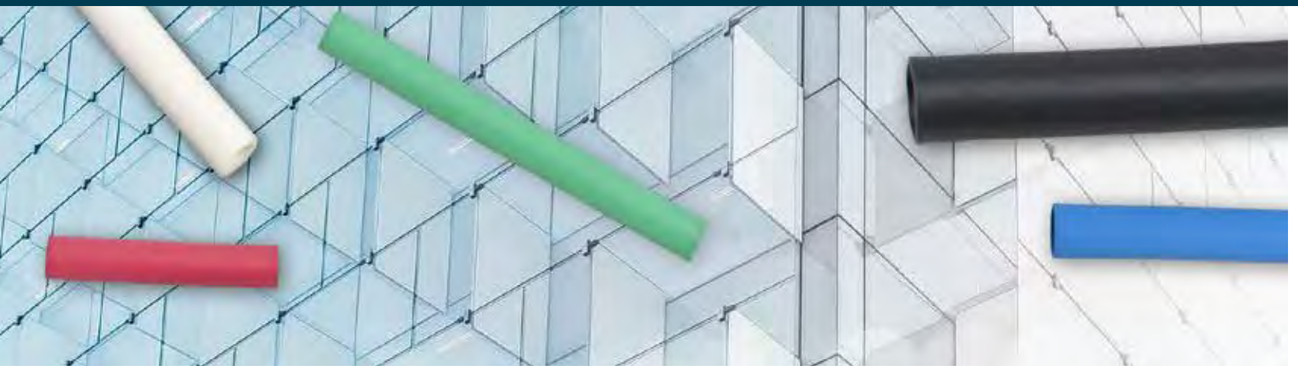


ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), red (RD), white (WT), blue (BL), yellow (YL), green (GR)
  - Printing: Printed or unprinted
  - Length: Continuous reel
- Please specify the product name, order number and options you require
- *Example:* CPX 300, 0375, black, unprinted, 246 ft lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.



Thin wall, highly flame retardant, crosslinked polyolefin.

FEATURES AND BENEFITS

- Highly flame retardant for use in consumer products
- Low shrink temperature reduces risk of damage to electronic components
- Flexible
- Resistant to common fluids and solvents
- Printable
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 85°C min.

STANDARDS

- UL 224 125°C VW-1 - UL file # E63390
- CSA 22.2 No 198.1 125°C OFT and Class 1 - CSA file # 265111
- DEF STAN 59-97, Issue 3 Type 1a

TYPICAL APPLICATIONS

- Strain relief of wire connections
- Insulation of in-line splices
- Protection and bundling of small harnesses

2:1

SHRINK RATIO

-55°C to 135°C
(-67°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

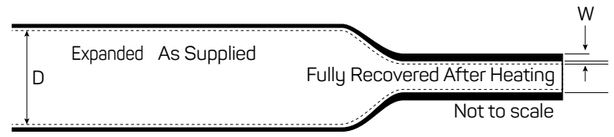
Aerospace, Defense, Industrial, Consumer electronics

STANDARDS:

Thin wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool	
	MM	IN	MM	IN	MM	IN	M	FT
0047	1.2	3/64	0.6	3/128	0.45	0.018	300	1,000
0062	1.6	1/16	0.8	1/32	0.45	0.018	300	1,000
0093	2.4	3/32	1.2	3/64	0.51	0.020	300	1,000
0125	3.2	1/8	1.6	1/16	0.51	0.020	300	1,000
0187	4.8	3/16	2.4	3/32	0.51	0.020	300	1,000
0250	6.4	1/4	3.2	1/8	0.64	0.025	150	500
0375	9.5	3/8	4.8	3/16	0.64	0.025	150	500
0500	12.7	1/2	6.4	1/4	0.64	0.025	60	200
0625	16.0	5/8	8.0	5/16	0.64	0.030	60	200
0750	19.0	3/4	9.5	3/8	0.76	0.030	30	100
1000	25.4	1	12.7	1/2	0.89	0.035	30	100
1250	32.0	1¼	16.0	5/8	0.89	0.040	30	100
1500	38.1	1½	19.0	3/4	1.02	0.040	30	100
2000	50.8	2	25.4	1	1.14	0.060	30	100
3000	76.2	3	38.1	1½	1.27	0.060	15	50
4000	101.6	4	50.8	2	1.40	0.060	15	50



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), red (RD), white (WT), blue (BL), yellow (YL), green (GR) - all (except black) with MOQ
  - Printing: Printed or unprinted
  - Length: Continuous reels
- Please specify the product name, order number and options you require
- *Example:* CPX 876, 0125, black, unprinted, 1,000 ft lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Halogen free, economical, heat shrink tubing.

FEATURES AND BENEFITS

- Flexible
- Economical
- General Purpose
- Halogen free alternative to PVC
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 125°C
- Shrink temperature: 110°C min.

TYPICAL APPLICATIONS

- Abrasion protection
- Insulation of electrical or mechanical components
- Protection against mechanical damage and corrosion

2:1

SHRINK RATIO

-55°C to 125°C
(-67°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Automotive, Industrial, Aerospace

STANDARDS:

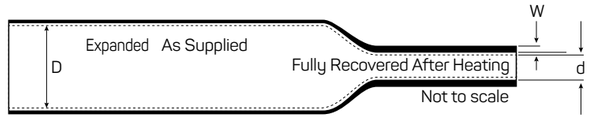
RoHS

Halogen free, thin wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS			
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool		Mini-Spool	
	MM	IN	MM	IN	MM	IN	M	FT	M	FT
0063	1.6	1/16	0.8	0.031	0.40	0.016	300*	984*	150	492
0094	2.4	3/32	1.2	0.047	0.50	0.020	300*	984*	150	492
0125	3.2	1/8	1.6	0.063	0.50	0.020	300	984	150	492
0187	4.8	3/16	2.4	0.094	0.50	0.020	300	984	75	246
0250	6.4	1/4	3.2	0.126	0.60	0.024	300	984	75	246
0375	9.5	3/8	4.8	0.189	0.60	0.024	150	492	75	246
0500	12.7	1/2	6.4	0.252	0.60	0.024	100	328	50	164
0625	16.0	5/8	8.0	0.315	0.60	0.024	-	-	50	164
0750	19.0	3/4	9.5	0.374	0.80	0.031	50	164	30	98
1000	25.4	1	12.7	0.500	0.90	0.035	50	164	30	98
1500	38.0	1 1/2	19.0	0.748	1.00	0.039	50	164	30	98
2000	51.0	2	25.4	1.000	1.10	0.043	50	164	30	98

*Items only available in black



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), clear (CL)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-HB, 0500 or 1/2 in, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Universal heat shrink tubing with excellent physical and mechanical properties.

FEATURES AND BENEFITS

- Self-extinguishing (colors only)
- Flexible
- Very good resistant to common fluids and solvents
- Excellent physical and electrical performance
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 90°C min.

STANDARDS

- UL 224 125°C ATF - UL file # E107857 (colors only)
- CSA 22.2 No 198.1 125°C - CSA file # 066150_0_000 (colors only)
- DEF STAN 59-97 Type 2b
- BS G198 Part 3 Type 11B
- VG95343 Part 5 Type A/B
- QPL SAE AS23053/5 Class 1 + 2
- CNES approved and listed in Matrex database
- ECSS-Q-ST-70-02
- Approved to major automotive OEM specifications

TYPICAL APPLICATIONS

- Electrical insulation of wire splices and terminals
- Protection against chemical strength
- Strain relief of wire terminations
- Cable marking and bundling of electrical or mechanical components
- Secures components from abrasion and fluids

2:1

SHRINK RATIO

-55°C to 135°C
(-67°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Aerospace, Defense, Industrial, Mass transit

STANDARDS:

RoHS · DEF STAN 59/97 · VG · QPL

Thin wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS				
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool		Mini-Spool*		Lengths
	MM	IN	MM	IN	MM	IN	M	FT	M	FT	1.22 M / 48 IN
0031	0.8	1/32	0.4	0.016	0.4	0.016	300	984	-	-	-
0047	1.2	3/64	0.6	0.024	0.40	0.016	300	984	150	492	25
0063	1.6	1/16	0.8	0.031	0.40	0.016	300	984	150	492	25
0094	2.4	3/32	1.2	0.047	0.50	0.020	300	984	150	492	25
0125	3.2	1/8	1.6	0.063	0.50	0.020	300	984	150	492	25
0187	4.8	3/16	2.4	0.094	0.50	0.020	300	984	75	246	25
0250	6.4	1/4	3.2	0.126	0.60	0.024	300	984	75	246	10
0375	9.5	3/8	4.8	0.189	0.60	0.024	150	492	75	246	10
0500	12.7	1/2	6.4	0.252	0.60	0.024	100	328	50	164	10
0625	16.0	5/8	8.0	0.315	0.60	0.024	100	328	50	164	10
0750	19.0	3/4	9.5	0.374	0.80	0.031	50	164	30	98	10
1000	25.4	1	12.7	0.500	0.90	0.035	50	164	30	98	10
1250	31.8	1 1/4	15.9	0.626	0.90	0.035	50	164	30	98	-
1500	38.0	1 1/2	19.0	0.748	1.00	0.039	50	164	30	98	-
2000	51.0	2	25.4	1.000	1.10	0.043	50	164	30	98	-
3000	76.0	3	38.0	1.496	1.30	0.051	25	82	15	49	-
4000	101.6	4	50.8	2.000	1.40	0.055	25	82	15	49	-

Clear items not UL or CSA listed.
*Delivery unit *spool* only available for black items

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), red (RD), white (WT), clear (CL), blue (BL), yellow (YL), green (GR), brown (BN), grey (GY)
  - Approval: Standard, VG or QPL
- Please specify the product name, order number and options you require
- *Example*: DERAY®-I, 0375 or 3/8 in, black, QPL

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Halogen free, low shrink temperature heat shrink tubing; ideal for covering sensitive electronic components.

FEATURES AND BENEFITS

- Halogen free
- Highly flexible
- Ideal for high volume production lines
- Low shrink temperature allows for physical and electrical protection of heat sensitive components
- Shrink ratio: 2:1
- Continuous operating temperature: -45°C to 125°C
- Shrink temperature: 70°C min.

TYPICAL APPLICATIONS

- Protection of heat sensitive devices
- Insulation of electrical terminations
- Offers exceptionally fast recovery for maximum efficiency in high volume commercial and automotive applications
- Mechanical protection

2:1

SHRINK RATIO

-45°C to 125°C
(-49°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial, Commercial, Aerospace, Mass Transit

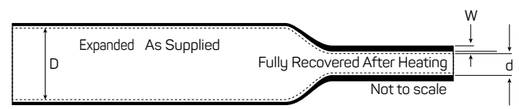
STANDARDS:

RoHS

Thin wall crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool	
	MM	IN	MM	IN	MM	IN	M	FT
0125	3.2	1/8	1.6	0.063	0.50	0.020	300	984
0187	4.8	3/16	2.4	0.094	0.50	0.020	300	984
0250	6.4	1/4	3.2	0.126	0.60	0.024	300	984
0375	9.5	3/8	4.8	0.189	0.60	0.024	150	492
0500	12.7	1/2	6.4	0.252	0.60	0.024	100	328
0625	16.0	5/8	8.0	0.315	0.60	0.024	100	328
0750	19.0	3/4	9.5	0.374	0.80	0.031	50	164
1000	25.4	1	12.7	0.500	0.90	0.035	50	164



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-LSB, 0375 or 3/8 in, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Halogen free flame retardant heat shrink tubing.

Zero halogen & low smoke heat shrink tubing. The product complies with the stringent requirements of the European rail norm EN45545-2 and the HL3 R22/R23 classification and even exceeds those.
The material is suitable for use in all classes required for the construction of locomotives and rolling stock. It is also suitable for use in underground environments as well as marine, military and aerospace applications.

FEATURES AND BENEFITS

- Low smoke generation - excellent fire safety characteristics
- Emissions of toxic fumes are well below the levels required to meet the relevant standards
- Flexible
- Flame retardant
- Good fluid resistance
- Shrink ratio: 2:1
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 120°C min.

STANDARDS

- EN45545-2 HL3 R22 & R23
- LUL E 1042 A6
- BS 6853 vehicle category 1a
- DIN 5510

TYPICAL APPLICATIONS

- Insulation of electrical components in mass transit applications
- Mechanical and environmental protection in the marine, military, aerospace and heavy industry
- General fire safety applications where there is a risk to people or equipment

2:1

SHRINK RATIO

-40°C to 125°C
(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Mass Transit, Subways, Defense, Offshore, Marine, Industrial, Commercial

STANDARDS:

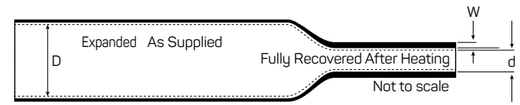
RoHS

EN 45545-2

Halogen free heat shrink tubing

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool	
	MM	IN	MM	IN	MM	IN	M	FT
0094	2.4	3/32	1.2	3/64	0.51	0.020	100	328
0125	3.2	1/8	1.6	1/16	0.51	0.020	100	328
0187	4.8	3/16	2.4	3/32	0.51	0.020	75	246
0250	6.4	1/4	3.2	1/8	0.64	0.025	75	246
0375	9.5	3/8	4.8	3/16	0.64	0.025	75	246
0500	12.7	1/2	6.4	1/4	0.64	0.025	50	164
0750	19.0	3/4	9.5	3/8	0.76	0.030	30	98
1000	25.4	1	12.7	1/2	0.89	0.035	30	98
1500	38.1	1 1/2	19.0	3/4	1.02	0.040	30	98



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), yellow (YL), white (WT)
  - Printing: Printed or unprinted
  - Length: Continuous reels
- Please specify the product name, order number and options you require
- *Example:* DERAY®-ZoH125, 0125, black, unprinted, 100 m reel

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

IDENTIFICATION SLEEVES

RELIABLE AND PERSISTENT PRODUCTS THAT ENSURE PERMANENT CABLE MARKING

Our identification sleeve portfolio helps to keep track of both new installations and maintenance, thus reducing errors and effort.

In many industries, such as mass transit, aerospace, military or the electronics industry, the clear identification of every single wire is an essential task during installation. Even after years of use, cable and wire identification must remain legible to avoid potentially costly errors during maintenance or repair.

Halogen free, flame retardant heat shrink identification sleeve.

Zero halogen & low smoke heat shrink identification sleeve. The product complies with the stringent requirements of the European rail norm EN45545-2 and the HL3 R22/R23 classification and even exceeds those.
The material is suitable for use in all classes required for the construction of locomotives and rolling stock. It is also suitable for use in underground environments as well as marine, military and aerospace applications.

FEATURES AND BENEFITS

- Low smoke generation - excellent fire safety characteristics
- Emissions of toxic fumes are well below the levels required to meet the relevant standards
- Flexible
- Flame retardant
- Good fluid resistance
- Soft surface finish supports good printability
- Shrink ratio: 2:1
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 120°C min.

STANDARDS

- EN45545-2 HL3 R22/R23
- Meets LUL E 1042 A6 & BS 6853 vehicle category 1a
- DIN 5510
- EN 50343*
- SAE AS81531 4.6.2*
- MIL-STD-202G Method 215*

TYPICAL APPLICATIONS

- Cable identification

*hardware used "XD4" printer from CAB and "RBZ11DR" ribbon from DSG-Canusa

2:1

SHRINK RATIO

-40°C to 125°C
(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Rail, Military, Aerospace, Offshore, Marine, Industrial

STANDARDS:

RoHS

EN 45545-2

Halogen free heat shrink identification sleeve

DIMENSIONS

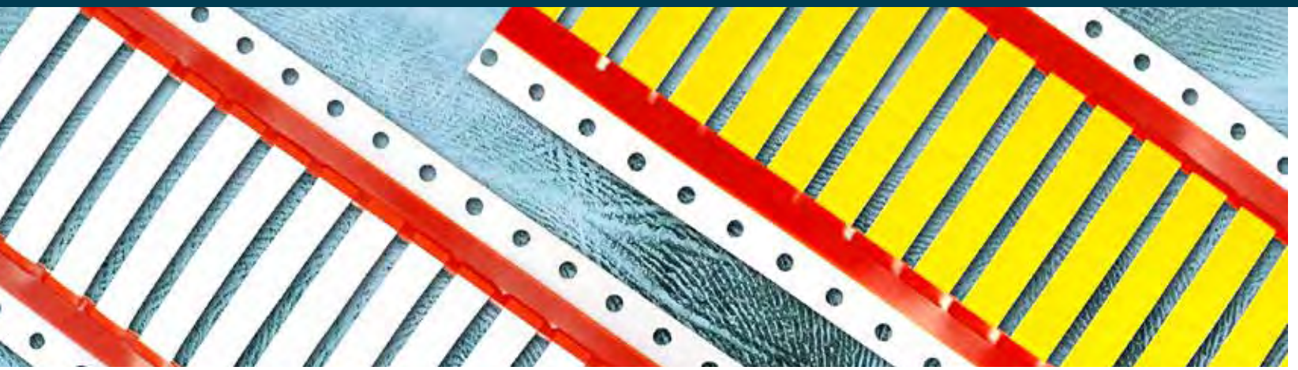
ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool	
	MM	IN	MM	IN	MM	IN	M	FT
2.4	2.4	3/32	1.2	3/64	0.51	0.020	100	328
3.2	3.2	1/8	1.6	1/16	0.51	0.020	100	328
4.8	4.8	3/16	2.4	3/32	0.51	0.020	75	246
6.4	6.4	1/4	3.2	1/8	0.64	0.025	75	246
9.5	9.5	3/8	4.8	3/16	0.64	0.025	75	246
12.7	12.7	1/2	6.4	1/4	0.64	0.025	50	164
19.0	19.0	3/4	9.5	3/8	0.76	0.030	30	98
25.4	25.4	1	12.7	1/2	0.89	0.035	30	98
38.1	38.1	1 1/2	19.0	3/4	1.02	0.040	30	98

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Yellow (YL), white (WT)
  - Printing: Printed or unprinted
  - Length: Continuous reels
- Please specify the product name, order number and options you require
- *Example:* DERAY®-ZHF125, 2.4, WT, printed, 100 m spool

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.



Halogen free flame retardant heat shrink identification sleeve.

Zero halogen & low smoke heat shrink identification sleeve. The product complies with the stringent requirements of the European rail norm EN45545-2 and the HL3 R22/R23 classification and even exceeds those.
The material is suitable for use in all classes required for the construction of locomotives and rolling stock. It is also suitable for use in underground environments as well as marine, military and aerospace applications.

FEATURES AND BENEFITS

- Low smoke generation - excellent fire safety characteristics
- Emissions of toxic fumes are well below the levels required to meet the relevant standards
- Special packing enables immediate installation on the application
- Flexible
- Flame retardant
- Good fluid resistance
- Soft surface finish supports good printability
- Shrink ratio: 2:1
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 120°C min.

STANDARDS

- EN45545-2 HL3 R22/R23
- Meets LUL E 1042 A6 & BS 6853 vehicle category 1a
- DIN 5510
- EN 50343*
- SAE AS81531 4.6.2*
- MIL-STD-202G Method 215*

TYPICAL APPLICATIONS

- Cable identification

*hardware used "XD4" printer from CAB and "RBZ11DR" ribbon from DSG-Canusa

2:1

SHRINK RATIO

-40°C to 125°C
(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Rail, Military, Aerospace, Offshore, Marine, Industrial

STANDARDS:

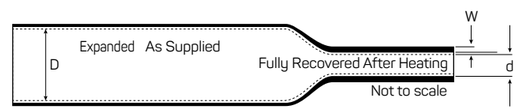
RoHS

EN 45545-2

Halogen free heat shrink identification sleeve

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		
	MM	IN	MM	IN	MM	IN	Pieces per reel
2.4	2.4	3/32	1.2	3/64	0.51	0.020	2,500
3.2	3.2	1/8	1.6	1/16	0.51	0.020	2,500
4.8	4.8	3/16	2.4	3/32	0.51	0.020	1,000
6.4	6.4	1/4	3.2	1/8	0.64	0.025	1,000
9.5	9.5	3/8	4.8	3/16	0.64	0.025	1,000
12.7	12.7	1/2	6.4	1/4	0.64	0.025	500
19.0	19.0	3/4	9.5	3/8	0.76	0.030	500
25.4	25.4	1	12.7	1/2	0.89	0.035	500
38.1	38.1	1 1/2	19.0	3/4	1.02	0.040	500

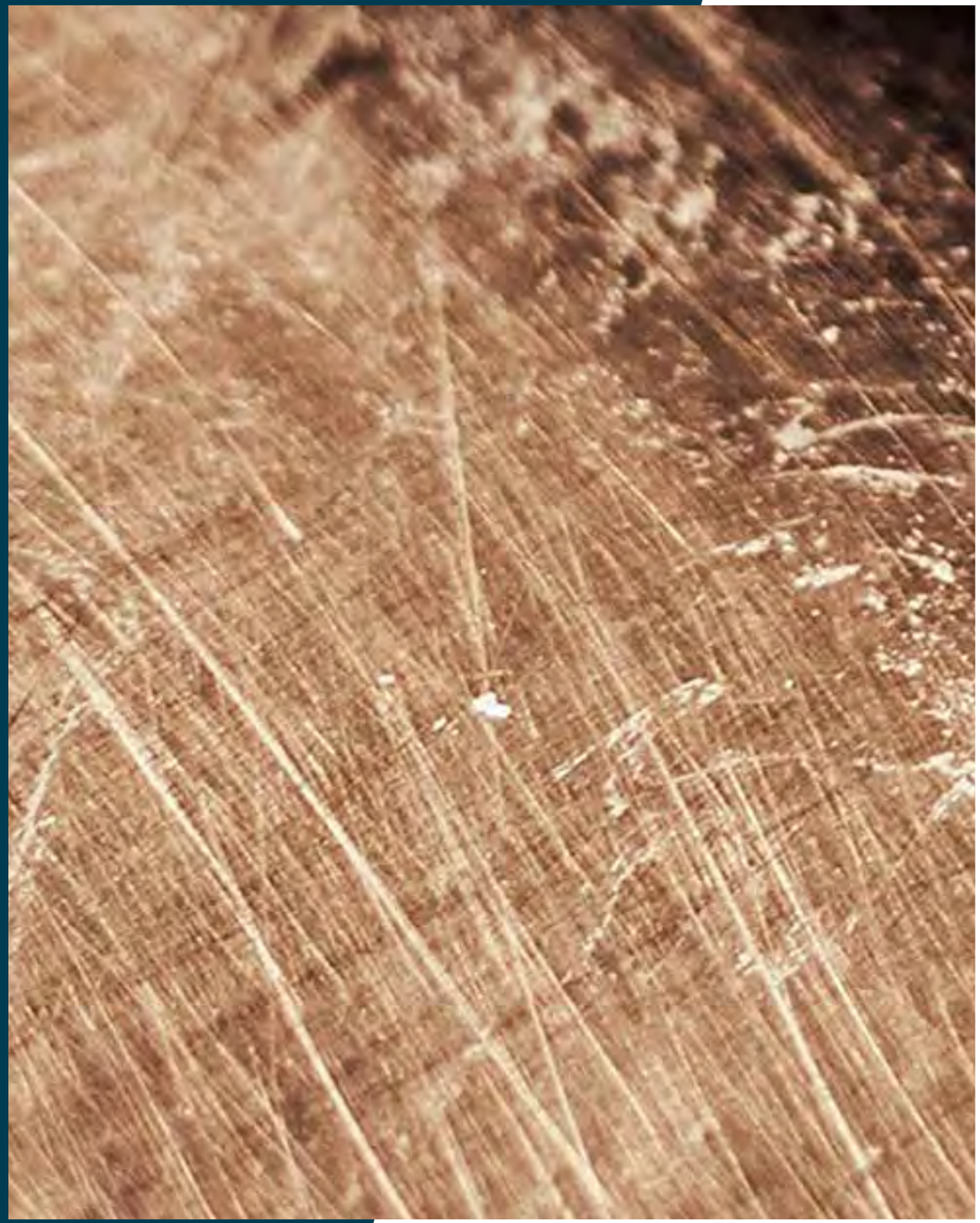


ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Yellow (YL), white (WT)
  - Perforation: no perforation (P0), 1 perforation (P1), 2 perforations (P2), 3 perforations (P3)
- Please specify the product name, order number and options you require
- *Example*: DMS NH, P1 , 4.8, yellow, 1,000 pieces

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.



DUAL WALL PRODUCTS

SEALING AND PROTECTING AGAINST MOISTURE AND CORROSION WITH HIGH-PERFORMANCE ADHESIVE LINED HEAT SHRINK TUBING

Adhesive lined heat shrink tubing is most frequently applied on terminals, connectors and splices to provide an environmental seal to prevent moisture ingress which can affect electrical performance and initiate corrosion.

Dual wall tubing is extruded with an inner layer of adhesive. Upon recovery, the inner layer of adhesive will melt and flow, encapsulating and bonding to the substrate, providing an environmental seal against moisture.

Adhesive lined heat shrink tubing with environmental sealing capability ideal for a variety of applications including general purpose automotive and marine wire harness bundles, industrial splices, breakouts and connector to cable transition.

FEATURES AND BENEFITS

- Superior sealing against water, moisture or other contaminants
- High shrink ratio allows for coverage of irregularly shaped connectors and components
- Inner adhesive bonds to plastics, rubber, neoprene, steel and polyethylene
- Rated for 1 kV, 90°C continuous use
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 90°C

TYPICAL APPLICATIONS

- Environmental sealing and strain relief of connectors and terminals
- Moisture sealing and electrical insulation of simple in-line splices
- Abrasion resistance for tubes and pipes
- Repair of damaged wire harnesses

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial,

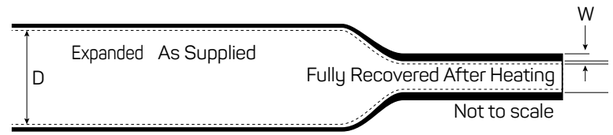
STANDARDS:

RoHS

Thin wall adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED						DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Meltable Wall Thickness (nom)		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	1.22M / 48 IN
0125	3.2	1/8	1.0	0.040	1.0	0.040	0.5	0.020	48
0187	4.7	3/16	1.5	0.060	1.0	0.040	0.5	0.020	48
0250	6.4	1/4	2.0	0.080	1.0	0.040	0.5	0.020	48
0312	7.9	5/16	2.5	0.100	1.3	0.050	0.7	0.027	48
0375	9.5	3/8	3.2	0.125	1.5	0.060	0.7	0.027	48
0500	12.7	1/2	4.1	0.160	1.8	0.070	0.8	0.030	48
0750	19.1	3/4	6.4	0.250	1.8	0.070	0.8	0.030	48
1000	25.4	1	8.1	0.320	2.5	0.100	1.0	0.040	48
1250	31.8	1¼	10.6	0.416	2.5	0.100	1.0	0.040	48
1500	39.9	1½	13.0	0.510	2.5	0.100	1.0	0.040	1.2



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), red (RD), clear (CL), blue (BL), white (WT), yellow (YW)
  - Length: Standard stick, spool or custom lengths
- Please specify the product name, order number and options you require
- *Example*, CPA 100, 0125, black, 48 in lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Adhesive lined heat shrink tubing ideal for applications where both exceptional flame retardancy and environmental sealing capabilites are required.

FEATURES AND BENEFITS

- Highly flame retardant
- High shrink ratio allows for coverage of irregularly shaped connectors and components
- Adhesive liner bonds to plastics, rubber, steel and polyethylene
- Superior sealing against water, moisture and other contaminants
- Superior protection for ring terminals without excessive adhesive flow
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 125°C
- Shrink temperature: 120°C min.

STANDARDS

- UL 224 125°C - UL file # E63390
- CSA C22.2 No 198.1 125°C OFT - CSA file # 065781_0_000
- QPL SAE AS23053/4, Class 3
- Approved to major automotive OEM specifications

TYPICAL APPLICATIONS

- Environmental sealing of simple in-line splices
- Strain relief and sealing of connectors and terminals
- Mechanical protection of components

3:1

SHRINK RATIO

-55°C to 125°C
(-67°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Aerospace, Defense, Mass Transit, Industrial, Automotive

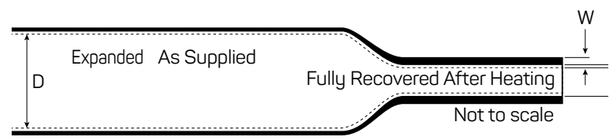
STANDARDS:

RoHS QPL

Thin wall adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED						DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Meltable Wall Thickness (nom)		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	1.22M / 48 IN
0125	3.2	1/8	1.0	0.040	1.0	0.040	0.5	0.020	25
0187	4.7	3/16	1.5	0.060	1.0	0.040	0.5	0.020	25
0250	6.4	1/4	2.0	0.080	1.0	0.040	0.5	0.020	25
0375	9.5	3/8	3.2	0.125	1.5	0.060	0.7	0.027	25
0500	12.7	1/2	4.1	0.160	1.8	0.070	0.8	0.030	25
0750	19.1	3/4	6.4	0.250	1.8	0.070	0.8	0.030	25
1000	25.4	1	8.1	0.320	2.5	0.100	1.0	0.040	25
1250	31.8	1¼	10.6	0.416	2.5	0.100	1.0	0.040	25
1500	39.9	1½	13.0	0.510	2.5	0.100	1.0	0.040	20



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), white (WT), red (RD)
  - Approval: Standard or QPL
- Please specify the product name, order number and options you require
- *Example*, CPA 300, 0125, black, 48 in lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Water clear, adhesive lined, heat shrink tubing specifically designed for water well pump applications. Provides excellent clarity on recovery while insulating and protecting electrical connections.

FEATURES AND BENEFITS

- High shrink ratio allows for a wide range of diameters
- Allows for the examination of substrate wiring
- Adhesive lined for a water tight seal
- Flexible
- Rated for 1 kV
- Shrink ratio: 4:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C min.

TYPICAL APPLICATIONS

- Environmental protection and insulation of electrical connections
- See-though over protection of labels and printing
- Irrigation and landscape lighting systems

4:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Civil Construction Projects
Industrial,

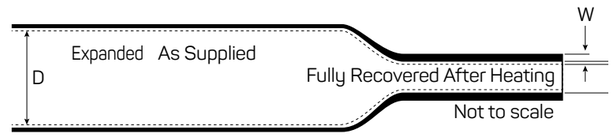
STANDARDS:

RoHS

Thin wall adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN		
0400	10.5	0.413	2.6	0.102	1.1	0.043	76.2	3

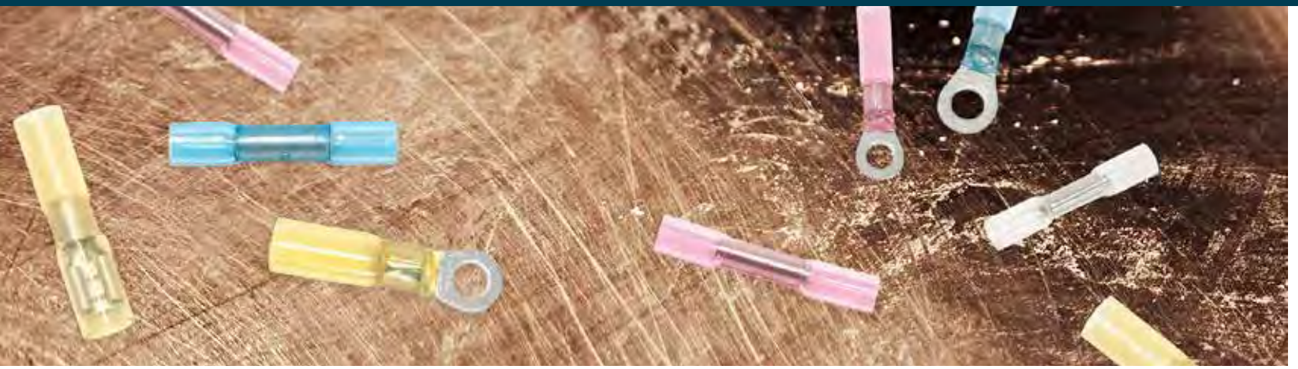


ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Clear (CL)
- Please specify the product name, order number and options you require
- *Example*: CWWT 450, 0400, clear

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.



Crystal clear, semi-rigid, adhesive lined tubing with integral solderless splice connector.

FEATURES AND BENEFITS

- Halogen-free
- Exceptional clarity for visual confirmation of seal
- Seals & protects against water, corrosive compounds, moisture & contaminants
- Tough, durable heat shrink tubing resists abrasion, crimp tool damage & splitting
- Shrinks 40% faster than nylon, preventing wire damage
- Inner adhesive bonds to plastics, rubbers & metals
- Voltage max. 600V
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 125°C
- Shrink temperature: 100°C min.

STANDARDS

- UL 486C – UL file # E470828
- Meets & conforms to OEM wiring specifications for installation & repairs

TYPICAL APPLICATIONS

- Wire to wire splicing
- Environmental protection for crimp-connections & terminals
- Automotive / trucking repair and maintenance
- Commercial, electronics & appliance wiring
- Marine electronics & fleet maintenance

3:1

SHRINK RATIO

-55°C to 125°C
(-67°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

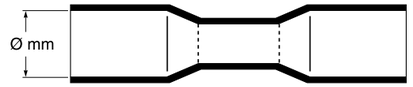
Defense, Aerospace, Industrial, Commercial, Automatic Feed Equipment, MRO and Aftermarket, Automotive Aftermarket

STANDARDS:

Butt connector

DIMENSIONS

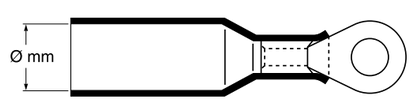
COLOR	WIRE RANGE		STUD SIZE		TUBE DIAMETER	
	AWG	MM²	IN	MM	EXPANDED MM	RECOVERED MM
Clear	28-22	0.1-0.5	n/a	n/a	3.7	1.0
Red	22-18	0.5-1.5	n/a	n/a	4.3	1.4
Blue	16-14	1.5-2.5	n/a	n/a	5.0	1.8
Yellow	12-10	4-6	n/a	n/a	6.5	2.2



Ring connector

DIMENSIONS

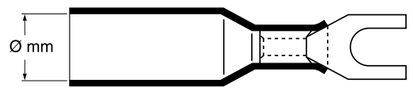
COLOR	WIRE RANGE		STUD SIZE		TUBE DIAMETER	
	AWG	MM²	IN	MM	EXPANDED MM	RECOVERED MM
Red	22-18	0.5-1.5	#8	4	4.3	1.4
Red	22-18	0.5-1.5	#10	5	4.3	1.4
Red	22-18	0.5-1.5	1/4	6	4.3	1.4
Red	22-18	0.5-1.5	5/16	8	4.3	1.4
Red	22-18	0.5-1.5	3/8	10	4.3	1.4
Blue	16-14	1.5-2.5	#8	4	5.0	1.8
Blue	16-14	1.5-2.5	#10	5	5.0	1.8
Blue	16-14	1.5-2.5	1/4	6	5.0	1.8
Blue	16-14	1.5-2.5	5/16	8	5.0	1.8
Blue	16-14	1.5-2.5	3/8	10	5.0	1.8
Yellow	12-10	4-6	#8	4	6.5	2.2
Yellow	12-10	4-6	#10	5	6.5	2.2
Yellow	12-10	4-6	1/4	6	6.5	2.2
Yellow	12-10	4-6	5/16	8	6.5	2.2
Yellow	12-10	4-6	3/8	10	6.5	2.2



Fork connector

DIMENSIONS

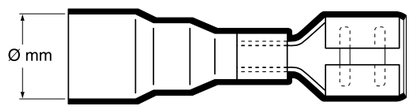
COLOR	WIRE RANGE		STUD SIZE		TUBE DIAMETER	
	AWG	MM²	IN	MM	EXPANDED MM	RECOVERED MM
Red	22-18	0.5-1.5	#8	4	4.3	1.4
Red	22-18	0.5-1.5	#10	5	4.3	1.4
Blue	16-14	1.5-2.5	#8	4	5.0	1.8
Blue	16-14	1.5-2.5	#10	5	5.0	1.8
Yellow	12-10	4-6	#8	4	6.5	2.2
Yellow	12-10	4-6	#10	5	6.5	2.2



Push connector

DIMENSIONS

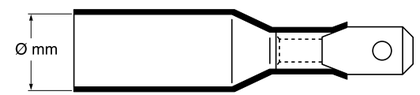
COLOR	WIRE RANGE		STUD SIZE		TUBE DIAMETER	
	AWG	MM²	IN	MM	EXPANDED MM	RECOVERED MM
Red	22-18	0.5-1.5	n/a	n/a	4.3	1.4
Blue	16-14	1.5-2.5	n/a	n/a	5.0	1.8
Yellow	12-10	4-6	n/a	n/a	6.5	2.2



Tab connector

DIMENSIONS

COLOR	WIRE RANGE		STUD SIZE		TUBE DIAMETER	
	AWG	MM²	IN	MM	EXPANDED MM	RECOVERED MM
Red	22-18	0.5-1.5	n/a	n/a	4.3	1.4
Blue	16-14	1.5-2.5	n/a	n/a	5.0	1.8
Yellow	12-10	4-6	n/a	n/a	6.5	2.2



ORDERING

- Determine the wire gauge size that you require
- Select the most appropriate connector for your application
- Please specify the product name, order number and options you require
- Order example: CrimpSeal II, butt connector, 22-18 AWG, red

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

APPLICATION NOTES

- Strip wires min 7.5 mm & insert into the crimp barrel. Crimp with a DSG-Canusa (or equivalent) hand tool
- Heat the shrink tube along the entire length, working from the centre out to the edges until a water tight seal is formed
- Allow to cool before inspection for splice integrity
- All splice assemblies will conform to most OEM & repair requirements and specifications

Please also refer to working instructions VSPZ 056.

Semi-rigid, adhesive lined, heat shrink tubing ideal for higher temperature applications and where strain relief or abrasion resistance is required.

FEATURES AND BENEFITS

- Semi-rigid jacket for excellent strain relief
- Thick adhesive liner ensures complete environmental protection
- Seals against water and other contaminants
- Inner adhesive bonds to plastics, rubbers and metals
- Controlled adhesive viscosity prevents excessive flow on terminals
- Shrink ratio: >2:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 110°C

STANDARDS

- Industrial and automotive OEM approvals

TYPICAL APPLICATIONS

- Strain relief and sealing of terminals
- Corrosion protection of high temperature components and brazed joints
- Mechanical protection of wire leads

>2:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial

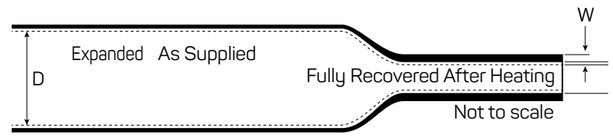
STANDARDS:

RoHS

Thin wall adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED						DELIVERY UNITS		
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Adhesive Line Thickness (nom)		Spool Lengths		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	M	FT	1.22M / 48 IN
0125	3.2	1/8	0.8	0.031	0.90	0.035	0.40	0.016	300	984	25
0187	4.8	3/16	1.5	0.059	1.40	0.055	0.80	0.031	300	984	25
0250	6.4	1/4	2.0	0.079	1.40	0.055	0.75	0.030	300	984	10
0375	9.5	3/8	3.4	0.134	1.65	0.065	1.00	0.039	150	492	10
0500	12.7	1/2	5.0	0.197	1.70	0.067	1.00	0.039	100	328	10
0750	19.0	3/4	8.0	0.315	1.95	0.077	1.20	0.047	50	164	10
1000	25.4	1	10.0	0.394	2.00	0.079	1.20	0.047	50	164	10
1250	31.8	1 1/4	10.0	0.394	2.00	0.079	1.20	0.047	50	164	10



ORDERING

- Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.
- Select options:
  - Color: Black (BK)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-HXKT, 0187 or 3/16", black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Adhesive lined heat shrink tubing ideal for effective moisture-resistant insulation.

FEATURES AND BENEFITS

- Flexible
- Adhesive bonds to plastics, rubber, steel polyethylene and other materials
- Shrink ratio: 3:1 & 4:1
- Continuous operating temperature of outer jacket: -55°C to 110°C
- Shrink temperature: 95°C min.

STANDARDS

- Industrial and automotive OEM specifications

TYPICAL APPLICATIONS

- Environmental sealing and strain relief of connectors and terminals
- Moisture sealing and electrical insulation of simple in-line splices
- Abrasion resistance for tubes and pipes
- Repair of damaged wire harnesses

3:1 & 4:1

SHRINK RATIO

-55°C to 110°C

(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial

STANDARDS:

RoHS

Thin wall adhesive lined crosslinked polyolefin

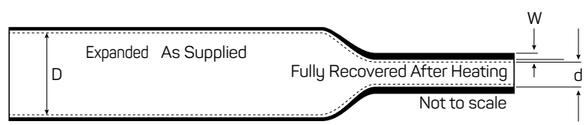
DIMENSIONS: SHRINK RATIO 3:1

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS		
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	1.22m / 48in
3.0/1.0	3.0	0.118	1.0	0.039	1.00	0.039	300	984	25
4.5/1.5	4.5	0.177	1.5	0.059	1.10	0.043	300	984	25
6.0/2.0	6.0	0.236	2.0	0.079	1.20	0.047	300	984	10
9.0/3.0	9.0	0.354	3.0	0.118	1.40	0.055	150	492	10
12.0/4.0	12.0	0.472	4.0	0.157	1.70	0.067	100	328	10
19.0/6.0	19.0	0.748	6.0	0.236	2.10	0.083	50	164	10
24.0/8.0	24.0	0.945	8.0	0.315	2.40	0.094	50	164	10
40.0/13.0	40.0	1.575	13.0	0.512	2.40	0.094	30	98	10

DIMENSIONS: SHRINK RATIO 4:1

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS		
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	1.22m / 48in
4.0/1.0	4.0	0.157	1.0	0.039	1.00	0.039	300	984	25
8.0/2.0	8.0	0.315	2.0	0.079	1.20	0.047	150	492	10
12.0/3.0	12.0	0.472	3.0	0.118	1.40	0.055	100	328	10
16.0/4.0*	16.0	0.630	4.0	0.157	1.70	0.067	50	164	10
24.0/6.0	24.0	0.945	6.0	0.236	2.10	0.083	50	164	10
32.0/8.0	32.0	1.260	8.0	0.315	2.40	0.094	50	164	10
52.0/13.0*	52.0	2.047	13.0	0.512	2.40	0.094	30	98	10

*IAKT 4:1 sizes 16.0/4.0 & 52.0/13.0 clear have different delivery units



ORDERING

- Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.
- Select options:
  - Color: Black (BK), clear (CL)
- Please specify the product name, order number and options you require
- *Example*, DERAY®-IAKT 3:1, 40.0/13.0, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Flexible heat shrink tubing with a temperature resistant polyamide adhesive inner lining; ideal for protecting components in a wide range of electrical and mechanical applications where adhesion to connector and metal substrates is critical.

FEATURES AND BENEFITS

- High shrink ratio allows for coverage of irregularly shaped connectors and components
- Flame retardant
- Specially designed polyamide adhesive protects components at elevated temperatures
- Superior sealing against water and other contaminants
- Inner adhesive bonds to plastics, rubbers and metals
- Shrink ratio: 4:1
- Continuous operating temperature: -55°C to 125°C
- Shrink temperature: 100°C min.

STANDARDS

- VG 95343 Part 12 Type D
- Approved to major automotive OEM specifications

TYPICAL APPLICATIONS

- Retrofit protection of connectors
- Repair of damaged wire harnesses
- Moisture sealing and strain relief at connectors and terminals

4:1

SHRINK RATIO

-55°C to 125°C
(-67°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial, Defense, Automotive

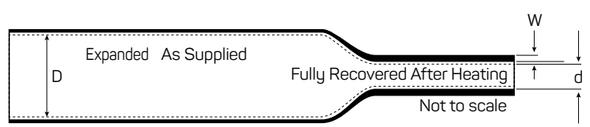
STANDARDS:

RoHS VG

Thin wall adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS		
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	1.22m / 48in
0157	4.0	0.157	1.0	0.039	1.00	0.039	300	984	25
0315	8.0	0.315	2.0	0.079	1.20	0.047	150	492	10
0472	12.0	0.472	3.0	0.118	1.40	0.055	100	328	10
0630	16.0	0.630	4.0	0.157	1.70	0.067	50	164	10
0945	24.0	0.945	6.0	0.236	2.10	0.083	50	164	10
1260	32.0	1.260	8.0	0.315	2.40	0.094	50	164	10
2047	52.0	2.047	13.0	0.512	2.40	0.094	30	98	10



ORDERING

- Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.
- Select options:
  - Color: Black (BK)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-IHKT, 0630 or 16.0/4.0, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

AUTOMOTIVE PRODUCTS

PROVIDING LEADING SOLUTIONS FOR HEAT SHRINK SYSTEMS IN THE EVOLVING AUTOMOTIVE MARKET

In the automotive market, Shawcor's DSG-Canusa utilizes expertise with radiation crosslinked polymers, environmental sealing techniques and process automation to provide unique heat shrink tubing solutions that deliver quality assurance, lowest total cost and unmatched performance.

Our DSG-Canusa automotive product line includes heat shrink tubing, adhesive lined and single wall, water-blocking materials, protection sleeves and caps and application equipment to automate the shrink process. These products serve to insulate, seal and protect electronic components, wire, terminals, hoses and pipes, cables and splices. DSG-Canusa solutions can be off-the-shelf products or custom designed heat shrink products or application equipment. Either way, we are committed to understanding the customer's application and recommending the right product, equipment and process, making every solution customer specific.

Adhesive lined heat shrink specifically designed to insulate, seal and protect aluminum-copper flat terminals.

FEATURES AND BENEFITS

- Seals and protects against water, moisture and chemicals
- Higher wall thickness prevents shrink tubing from bursting because of sharp metall edges
- Avoids corrosion on aluminum copper connections
- No drain of adhesive
- Shrink ratio: 3.5:1 to 5:1
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 145°C min.

STANDARDS

- VW 60360-3
- MBN LV 312-3
- GMW 17136

TYPICAL APPLICATIONS

- Sealing of aluminum-copper flat battery terminals and eyelet terminals

>3.5:1

SHRINK RATIO

-40°C to 125°C
(-40°F TO 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Automotive, Industrial

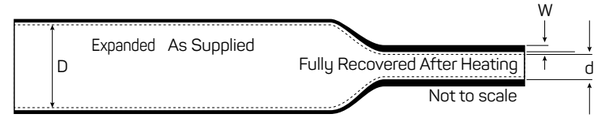
STANDARDS:

RoHS

Adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	MM	IN
DERAY®-ACT 1	14.0	0.551	2.5	0.098	2.7	0.106	50.0	1.97
DERAY®-ACT 2	23.0	0.906	4.5	0.177	2.8	0.110	67.0	2.64
DERAY®-ACT 2A	30.0	1.181	6.0	0.236	2.8	0.110	80.0	3.15
DERAY®-ACT 2B	31.0	1.220	7.0	0.276	3.3	0.130	80.0	3.15
DERAY®-ACT 3	35.0	1.378	10.0	0.394	3.1	0.122	90.0	3.45



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), clear (CL)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-ACT 3, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

DERAY®-Autoseal is a sealing solution for automotive electrical systems.

The combination of cellulose and superabsorbent polymers will protect electronic systems throughout the system's lifetime. To simplify production and cut costs, a fully automatic process is used to directly provide the cables with DERAY®-Autoseal.

FEATURES AND BENEFITS

- The system works continiously and repeatedly
- If temperature rises, the water absorbed will evaporate
- No assembly time needed due to fully automatic processing
- Absorbs up to 300 times its own weight in water
- Continuous operating temperature: -40°C to 150°C

STANDARDS

- BMW water blocking specifications

TYPICAL APPLICATIONS

- Sealing of automotive electrical systems
- Water moisture ingress elimination
- Wire harness feed-through areas

300x

ABSORPTION OF ITS OWN WEIGHT IN WATER

-40°C to 150°C
(-40°F to 302°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Automotive

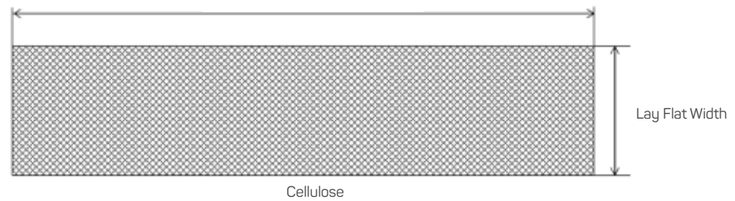
STANDARDS:

RoHS

Automatic sealing system for wire harnesses

DIMENSIONS

ORDER NUMBER	DIMENSIONS		DELIVERY UNITS	
	Lay Flat Width		Spool	
	MM	IN	M	IN
6220002100M	40.0	1.57	100	328
6220002200M	80.0	3.14	200	656



For automated application, we recommend DERAY®-Autosealman.

ORDERING

- Please specify the product name, order number and options you require
- *Example:* DERAY®-Autoseal, 6220002100M, 40mm, 100m reel

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Semi-rigid, dual wall heat shrink tubing designed to seal & environmentally protect splices in the most demanding applications.

FEATURES AND BENEFITS

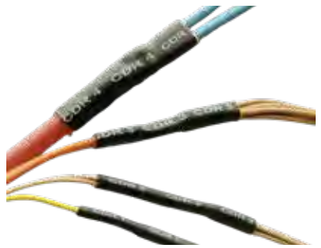
- Environmentally seal and protect splices and terminals in automotive, on highway/off road heavy equipment applications
- Highly resistant to diesel and other common automotive fluids and solvents
- Semi-rigid and mechanically tough outer jacket provides added strain relief and excellent abrasion protection
- Thick adhesive liner forms an effective barrier against fluids and moisture penetration
- Shrink ratio allows for fewer sizes to cover numerous splice configurations and diameters
- Shrink ratio: 4:1
- Continuous operating temperature: -40°C to 130°C
- Shrink temperature: 130°C min.

STANDARDS

- UL 224 125°C - UL file # E63390
- Approved to automotive OEM splice sealing specifications

TYPICAL APPLICATIONS

- Environmental sealing of in-line splices, connectors & terminals
- Strain relief
- Abrasion protection and electrical insulation
- On-highway and off-road heavy equipment
- Fleet & marine sealing & protection



4:1

SHRINK RATIO

-40°C to 130°C
(-40°F to 266°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial

STANDARDS:

RoHS

Diesel-resistant adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Pieces	
	MM	IN	MM	IN	MM	IN	MM	IN
1	6	0.236	1.27	0.050	1.27	0.050	50	1.97
2	8	0.315	1.52	0.060	1.52	0.060	50	1.97
3	12	0.472	2.03	0.080	1.91	0.075	65	2.56
4	18	0.710	3.81	0.150	2.41	0.095	75	2.95

INSTALLATION

- DSG-Canusa offers a comprehensive selection of technically advanced shrink appliances that ensure process stability and repeatability
- Minimum recovery temperature: 125°C
- Adhesive activation temperature: 110°C
- Use with DERAY®-FST shrink ovens for best performance

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
  - Length: Standard cut length, 4 ft stick or spool
- Please specify the product name, order number and options you require
- *Example*: CDR 3, black, 65 mm length

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Adhesive lined heat shrink specifically designed to insulate, seal and protect wire splices in underhood automotive wire harnesses and electronic assemblies with broad temperature range.

FEATURES AND BENEFITS

- High shrink ratio to fit varying splice configurations and substrate profiles
- Seals and protects against water, moisture and chemicals
- Adhesive bonds readily to PVC, XLPE and PP-EPDM cable jackets
- Shrinks rapidly for quick installation
- Jacket and adhesive are flame retardant
- Semi-rigid
- Shrink ratio: 4:1
- Continuous operating temperature: -40°C to 150°C
- Shrink temperature: 140°C min.

STANDARDS

- FCA: MS-DB-56 /MS:50107, CPN #5229
- GMW17136

TYPICAL APPLICATIONS

- Environmental sealing of wire splices
- Sealing and strain relief of connectors and terminals
- Abrasion protection and electrical insulation of automotive wiring harness splices

4:1

SHRINK RATIO

-40°C to 150°C
(-40°F to 302°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Industrial, Automotive

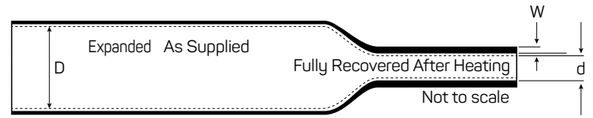
STANDARDS:

RoHS

Adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Pieces	
	MM	IN	MM	IN	MM	IN	MM	IN
CHPA 0	4.0	0.157	1.0	0.039	1.0	0.039	50	1.969
CHPA 1	6.0	0.236	1.4	0.055	1.45	0.057	50	1.969
CHPA 2	8.0	0.315	1.6	0.063	1.75	0.069	50	1.969
CHPA 3	12.0	0.472	2.5	0.098	2.35	0.093	65	2.559
CHPA 3A	14.0	0.551	3.7	0.146	2.60	0.102	65	2.559
CHPA 4	18.0	0.709	4.5	0.177	2.65	0.104	75	2.953



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
- Please specify the product name, order number and options you require
- *Example*: CHPA 3, 12.0 mm, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Flexible, durable heat shrink tubing suited for multi-element flexible bus bars and EV power distribution protection.

FEATURES AND BENEFITS

- Flame retardant
- Resistant to common automotive fluids and solvents
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 135°C
- Shrink temperature: 90°C min.

STANDARDS:

- Approved to automotive OEM specifications

TYPICAL APPLICATIONS

- Electrical insulation of bus bars and terminals
- Industry standard orange color to signify vehicle high voltage

2:1

SHRINK RATIO

-55°C to 135°C

(-67°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Aerospace, Defense, Industrial, Consumer electronics

STANDARDS:

RoHS

Thin wall crosslinked polyolefin bus bar covering

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	M	FT
0750	19.0	3/4	9.5	3/8	1.27	0.05	30	100
1000	25.4	1	12.7	1/2	1.27	0.05	30	100

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Orange
  - Length: Spool or custom lengths
- Please specify product name and size:
  - Example: CPX 100 EV, 0750, orange, 100ft

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

The DERAY®-ColdMelt I is the ultimate water blocking system for automotive wire harness feed-through locations.

FEATURES AND BENEFITS

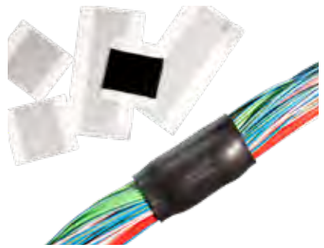
- Specially designed heat shrink tube and mastic strip that seals 100% of the time
- Low temperature installation that reduces thermal stress and protects the cable insulation
- Cables are embedded individually into the mastic strips forming a barrier against fluids and moisture penetration
- Accommodates and seals harness bundles of up to 130 cables
- Flexible installation allows adaption to the production environement
- Grommet standardization
- Good adhesion on PVC, XLPE and PP-EPDM cable insulation
- Continuous operating temperature: -40°C to 125°C

STANDARDS

- Approved to major OEM water blocking specifications

TYPICAL APPLICATIONS

- Water/moisture ingress elimination



100%

SEALING

-40°C to 125°C
(-40°F TO 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Automotive, Industrial

STANDARDS:

RoHS

Water blocking system

DIMENSIONS: DERAY®-CS HEAT SHRINK TUBE

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Cut Pieces	
	MM	IN	MM	IN	MM	IN	MM	IN
2510100951C	10.0	0.394	3.5	0.138	1.00	0.039	50	1.969
2510170951B	17.0	0.669	5.0	0.197	1.20	0.047	50	1.969
2510220951A	22.0	0.866	7.5	0.295	2.50	0.098	50	1.969
2510300951A	30.0	1.181	9.0	0.354	2.00	0.079	50	1.969
2510350951D	35.0	1.378	13.0	0.512	1.90	0.075	62	2.441
2510420951B	42.0	1.654	15.0	0.591	2.50	0.098	62	2.441
2510500952A	50.0	1.969	15.0	0.591	2.50	0.098	62	2.441
2510620955A	62.0	2.441	25.4	1.000	2.40	0.094	62	2.441

DIMENSIONS: DERAY®-COLDMELT BUTYLSTRIP

WIDTH		THICKNESS		LENGTH		DELIVERY UNITS
MM	IN	MM	IN	MM	IN	PIECES
Cut Length in Cardboard						
19.0	0.748	1.5	0.059	25 - 110	0.984 - 4.330	based on length

INSTALLATION

The DERAY®-ColdMelt I system consists of two components:

- DERAY®-CS - low shrink temperature heat shrink tube to cover the DERAY®-ColdMelt strips to maintain a tight-cylindrical bundle.
- DERAY®-ColdMelt strips - mastic strips used to embed all wires forming a water blocking barrier.

The DERAY®-WorkMan is used to shrink the tubing and form the water blocking bundle (approx. up to 20 wires) - DERAY®-ColdMelt Lite.
The DERAY®-SealMan is used to shrink the tubing and form the water blocking bundle (> 20 wires).
For detailed installation instructions refer to DSG-Canusa manual instruction VSPZ061.

ORDERING

- Select options:
  - Packaging: Lengths and pieces
- Please specify the product name, order number and options you require
- *Example*, DERAY®-CS 10-3.5 black, 2510100951C, DERAY®-ColdMelt 19-1.5 / 125°C, 3,000 pieces

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

A specially designed sealing solution to enhance and provide longitudinal water sealing in cable bundles.

FEATURES AND BENEFITS

- Available in a system that consists of a heat shrink sleeve and adhesive inserts that seal wire harness splices and plug connectors
- Adhesive inserts compliment the adhesive lined shrink tube to ensure splice sealing
- Good chemical and fuel resistance
- Available in U and Star shaped profiles
- Good adhesion to PVC, XLPE and PP-EPDM wire insulating materials
- Continuous operating temperature: -40°C to 85°C, 105°C or 125°C

STANDARDS

- Approved to OEM longitudinal water blocking specifications

TYPICAL APPLICATIONS

- Sealing of splices, connectors and terminals
- Sealing of small wire harnesses

100%

SEALING

-40°C to 125°C

(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive

STANDARDS:

RoHS

Sealing system

DIMENSIONS

ORDER NUMBER	DIAMETER		LENGTH		DELIVERY UNITS
	MM	IN	MM	IN	PIECES
U5	5.0	0.197	5.0	0.197	10,000
U7	7.0	0.275	5.0	0.197	10,000
S5	5.0	0.197	5.0	0.197	10,000
S9	9.0	0.354	5.0	0.197	10,000

INSTALLATION

The DERAY®-PressMelt system consists of two primary components:

- DERAY®-PressMelt adhesive inserts are available in a variety of geometric shapes as well as 85°C, 105°C and 125°C operating temperature ranges.
- DERAY®-SpliceMelt or DERAY®-IAKT / DERAY®-IHKT heat shrink tubing is cross-linked polyolefin tubing that is used to cover and encapsulate the entire installation.

DERAY®-WorkMan, DERAY®-Shuttle RKS or DERAY®-DockMan shrink ovens are recommended for repeatable application.

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Temperature: 85 °C, 105 °C or 125 °C
- Please specify the product name, order number and options you require
- *Example:* DERAY®-PressMelt, U7, 85°C, 10,000 PCS

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Adhesive lined heat shrink tubing specifically designed to insulate, seal and protect in-line splices in automotive wire harnesses and electronic assemblies.

FEATURES AND BENEFITS

- High shrink ratio to fit varying splice configurations
- Seals and protects against water, moisture and chemicals
- Adhesive bonds readily to PVC, XLPE and PP-EPDM cable jackets
- Quick installation due to rapid shrinkage
- Shrink ratio: 4:1 to fit varying splice configurations and substrate profiles
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 120°C min.

STANDARDS

- Approved to automotive OEM splice sealing specifications

TYPICAL APPLICATIONS

- Environmental sealing of in-line splices
- Sealing and strain relief of connectors and terminals
- Abrasion protection and electrical insulation of automotive wiring harness splices

4:1

SHRINK RATIO

-40°C to 125°C
(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial

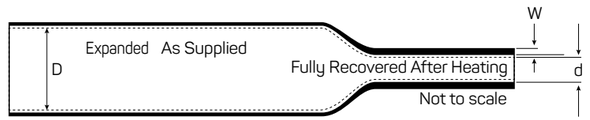
STANDARDS:

RoHS

Adhesive lined crosslinked polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	MM	IN
1	6.0	0.236	1.4	0.055	1.45	0.057	50	1.97
2	8.0	0.315	1.6	0.063	1.75	0.069	50	1.97
3	12.0	0.472	2.5	0.098	2.35	0.093	65	2.56
4	18.0	0.709	4.5	0.177	2.65	0.104	75	2.955



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), clear (CL)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-SpliceMelt, size 3, 65 mm, black

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Adhesive lined, heat shrink insulating caps specifically designed to insulate, seal and protect end or stub splices in wiring harnesses and electronic assemblies.

FEATURES AND BENEFITS

- High shrink ratio allows fewer sizes to cover a wide range of profiles
- Seals and protects against water, moisture and chemicals
- Adhesive bonds readily to PVC, XLPE and PP-EPDM cable jackets
- Quick installation due to rapid shrinkage
- Shrink ratio: 4:1
- Continuous operating temperature: -40°C to 125°C
- Shrink temperature: 125°C min.

STANDARDS

- Approved to major automotive OEM splice sealing specifications

TYPICAL APPLICATIONS

- Sealing & protection of end and stub splices

4:1

SHRINK RATIO

-40°C to 125°C
(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Automotive, Industrial

STANDARDS:

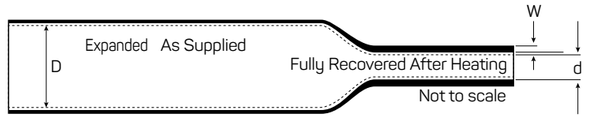
RoHS

Adhesive lined insulating caps

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Cap Lengths	
	MM	IN	MM	IN	MM	IN	MM	IN
0	4.5	0.177	1.6	0.063	1.75	0.069	35	1.37
1	6.0	0.236	1.4	0.055	1.45	0.057	50	1.97
2	8.0	0.315	1.6	0.063	1.75	0.069	50	1.97
3	12.0	0.472	2.5	0.098	2.35	0.093	65	2.56
4*	18.0	0.709	4.5	0.177	2.65	0.104	70	2.76

*Cap tip open



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), clear (CL)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-SpliceMelt Cap, size 3, 65mm, clear

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

The DERAY®-SpliceMeltband seals and environmentally protects connectors and cable bundles.

FEATURES AND BENEFITS

- A specially designed mastic lined adhesive tape available as a sealing system that provides longitudinal water sealing for cable bundles, plug connectors and splices
- Cables are embedded individually into the adhesive tape to ensure 100% sealing
- Good chemical and fuel resistance
- Good adhesion to PVC, XLPE and PP-EPDM wire insulating materials

STANDARDS

- Approved to OEM longitudinal water blocking specifications

TYPICAL APPLICATIONS

- Water/moisture ingress elimination
- Abrasion protection and strain relief

100%

SEALING

-40°C to 125°C

(-40°F to 257°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial

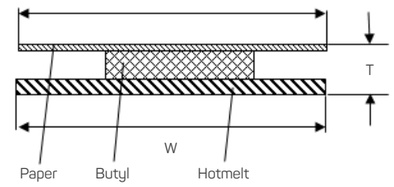
STANDARDS:

RoHS

Water blocking solution

DIMENSIONS

ORDER NUMBER	WIDTH (W)		THICKNESS (T)		DELIVERY UNITS	
	MM	IN	MM	IN	M	FT
6210001007	10.0	0.394	1.50	0.059	500	1640
6210001507	15.0	0.591	1.80	0.071	500	1640



INSTALLATION

The DERAY®-SpliceMeltband system consists of two primary components:

- DERAY®-SpliceMeltband mastic adhesive strips, used to seal all of the individual elements of the cable bundle.
- DERAY®-SpliceMelt heat shrink tubing or DERAY®-SpliceMelt Cap is a cross-linked polyolefin that is used to cover and encapsulate the entire installation.

DERAY®-WorkMan or DERAY®-DockMan shrink ovens are recommended for repeatable application.

ORDERING

- Select options:
  - Length: Standard spool length or cut pieces on request
- Please specify the product name, order number and options you require
- *Example:* DERAY®-SpliceMeltband, 6210001007, 10-1.5, 500 m reel

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Medium wall heat shrinkable tubing suitable for a variety of mechanical, electrical and thermal applications.

FEATURES AND BENEFITS

- High resistance to impact and abrasion
- Shrink ratio: 3:1
- Continuous operating temperature: -40°C to 135°C
- Shrink temperature: 120°C min.

STANDARDS

- VG 95343 Part 5 Type G
- GMW 17136
- GS 95008-3-3

TYPICAL APPLICATIONS

- Shaping on battery cables
- Bundling

3:1

SHRINK RATIO

-40°C to 135°C

(-40°F to 275°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Electrical Utility, Power Distribution, Industrial, Commercial Construction Projects, Aerospace, Defense, Marine, Automotive

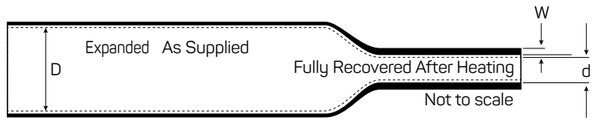
STANDARDS:

RoHS VG

Medium wall heat shrink crosslinked modified polyethylene

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths
	MM	IN	MM	IN	MM	IN	1.22 M / 48 IN
12/3	12.0	0.472	3.0	0.118	1.00	0.039	10
19/5	19.0	0.748	5.0	0.197	2.00	0.079	10
28/8	28.0	1.102	8.0	0.315	2.50	0.098	10
38/12	38.0	1.496	12.0	0.472	2.50	0.098	10
50/16	50.0	1.969	16.0	0.630	2.50	0.098	10
65/19	65.0	2.559	19.0	0.748	2.50	0.098	5
75/22	75.0	2.953	22.0	0.866	3.00	0.118	5
85/25	85.0	3.346	25.0	0.984	3.00	0.118	5
95/25	95.0	3.740	25.0	0.984	3.00	0.118	5



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-MC 225, 50/16, black

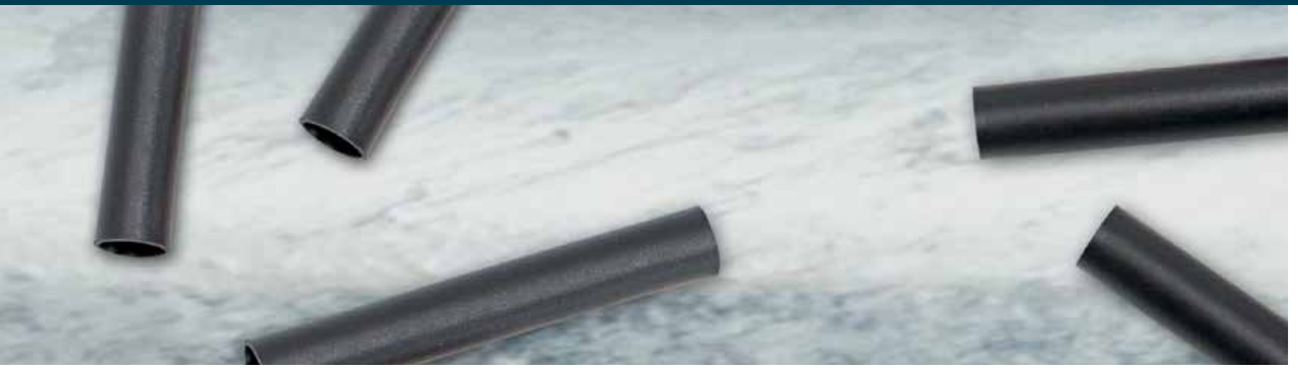
Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

SPECIALTY NON-POLYOLEFIN PRODUCTS

PROVIDING SUPERIOR PROTECTION AGAINST EXTREME TEMPERATURES AND HARSH ENVIRONMENTS

The DSG-Canusa product line provides special materials for demanding industrial and wire harness applications.

These products, made of materials ranging from elastomers to fluoropolymers, offer increased protection against extreme temperatures and harsh operating environments.



Thin wall crosslinked chlorinated polyolefin heat shrink tubing suitable for harnessing, hydraulic couplings and applications requiring exceptional flexibility.

FEATURES AND BENEFITS

- Superior cut-though and abrasion resistance
- Very flexible even at low temperatures
- Excellent oil resistance
- Shrink ratio: 2:1
- Continuous operating temperature: -70°C to 120°C
- Shrink temperature: 135°C min.

STANDARDS

- MIL-R-46846 Type 1
- QPL SAE AS23053/1, Class 1 and 2

TYPICAL APPLICATIONS

- Insulation, strain relief and abrasion resistance for wire harnesses exposed to fluids and solvents

2:1

SHRINK RATIO

-70°C to 120°C
(-94°F to 248°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Aerospace, Defense, Industrial

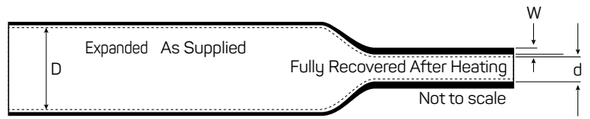
STANDARDS:

RoHS QPL

Thin wall crosslinked chlorinated polyolefin

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	MM	IN
0125	3.18	0.125	1.57	0.062	0.76	0.030	60	200
0187	4.75	0.187	2.36	0.093	0.89	0.035	60	200
0250	6.35	0.250	3.18	0.125	0.89	0.035	60	200
0375	9.53	0.375	4.75	0.187	1.02	0.040	60	100
0500	12.70	0.500	6.35	0.250	1.22	0.048	30	100
0625	15.88	0.625	7.92	0.312	1.32	0.052	30	100
0750	19.05	0.750	9.53	0.375	1.45	0.057	30	100
0875	22.23	0.875	11.10	0.437	1.65	0.065	30	100
1000	25.40	1.000	12.70	0.500	1.78	0.070	15	50
1250	31.75	1.250	15.88	0.625	2.21	0.087	15	50
1500	38.10	1.500	19.05	0.750	2.41	0.095	15	50
1750	44.45	1.750	22.23	0.875	2.72	0.107	15	50
2000	50.80	2.000	25.40	1.000	2.79	0.110	15	50
3000	76.20	3.000	38.10	1.500	3.18	0.125	15	50



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
  - Approval: Standard or QPL
- Please specify the product name, order number and options you require
- *Example:* CNP 200, 0250, black, unprinted, 200 ft lengths, QPL

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Flexible PVC heat shrink tubing suitable for industrial and electronic applications.

FEATURES AND BENEFITS

- General purpose tubing
- Highly flame retardant
- Seven standard colors
- Flexible
- Shrink ratio: 2:1
- Continuous operating temperature: -30°C to 105°C
- Shrink temperature: 110°C

STANDARDS

- UL 224 125°C VW-1 - UL file # E63390
- CSA 22.2 No 198.1 125°C OFT
- AMS-DTL-23053/2, Class 2
- ASTM D 3150

TYPICAL APPLICATIONS

- Protective layer for various substrates
- Harness covering

2:1

SHRINK RATIO

-30°C to 105°C
(-22°F to 221°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial

STANDARDS:

Thin wall PVC

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths	
	MM	IN	MM	IN	MM	IN	MM	IN
0047	1.2	3/64	0.6	3/128	0.45	0.018	300	1,000
0062	1.6	1/16	0.8	1/32	0.45	0.018	300	1,000
0093	2.4	3/32	1.2	3/64	0.51	0.020	300	1,000
0125	3.2	1/8	1.6	1/16	0.64	0.025	300	1,000
0187	4.8	3/16	2.4	3/32	0.64	0.025	300	1,000
0250	6.4	1/4	3.2	1/8	0.64	0.025	300	1,000
0375	9.5	3/8	4.8	3/16	0.76	0.030	152	500
0500	12.7	1/2	6.4	1/4	0.76	0.030	76	250
0625	16.0	5/8	8.0	5/16	0.76	0.030	76	250
0750	19.0	3/4	9.5	3/8	0.89	0.035	76	250
1000	25.4	1	12.7	1/2	1.02	0.040	76	250
1250	32.0	1 1/4	16.0	5/8	1.02	0.040	76	250
1500	38.1	1 1/2	19.0	3/4	1.14	0.045	30	100
2000	50.8	2	25.4	1	1.27	0.050	30	100
3000	76.2	3	38.1	1 1/2	1.27	0.050	15	50
4000	101.6	4	50.8	2	1.40	0.055	15	50

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), red (RD), white (WT), blue (BL), yellow (YL), green (GR), clear (CL)
  - Printing: Printed or Unprinted
- Please specify the product name, order number and options you require
- *Example:* CVN 105, 0125, black, unprinted, 1,000 ft lengths

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

HIGH TEMPERATURE PRODUCTS

SEALING AND PROTECTING CABLE CONNECTIONS, WIRE HARNESSES, ELECTRONIC SYSTEMS AND BUS BARS WITH HEAT SHRINK TUBING

With the increasing electric content in vehicles, wire and cable sensors are being exposed to higher temperatures in the engine department, emissions systems, commercial vehicle applications and electric vehicles.

Traditionally temperatures in the engine department have been less than 135°C, but now industrial applications are more frequently requiring temperatures above 150°C. Also areas of application such as renewable energies require products that can be exposed to higher temperature ranges.

Our products provide special materials for these demanding applications. These products, made of materials ranging from elastomers to fluoropolymers, offer increased protection against extreme temperatures and harsh operating environments. The temperature range includes 175°C and 190°C-rated PVDF materials and goes up up to 220°C and even 260°C.

Clear, thin wall Kynar® heat shrink tubing ideal for electronic, automotive and military applications requiring protection and see through inspection in aggressive environments.

FEATURES AND BENEFITS

- Highly flame retardant
- Semi-rigid
- High withstand to abrasion and cut-through
- Excellent chemical and solvent resistance
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 175°C
- Shrink temperature: 175°C min.

STANDARDS

- UL 224 125°C VW-1 - UL file # E107857
- CSA 22.2 OFT - CSA file # 066150_0_000
- DEF STAN 59-97 Type 3
- BS G198 Part 4 Type 20
- VG 95343 Part 5 Type F
- QPL SAE AS23053/8
- PAN 6491
- VW 60360-3
- CNES approved and listed in Matrex database
- ECSS-Q-ST-70-02

TYPICAL APPLICATIONS

- Strain relief and insulation of high temperature wires
- Excellently suitable for applications where high chemical and abrasion resistance is required
- All areas where outstanding electrical insulation is required

Kynar® is a registered trademark of ATOFINA

2:1

SHRINK RATIO

-55°C to 175°C

(-67°F to 347°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial, Aerospace, Defense, Mass Transit

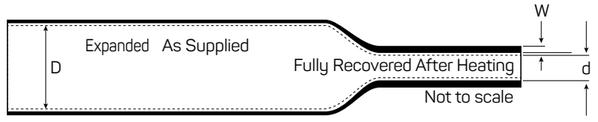
STANDARDS:

RoHS · UL · CSA · DEF STAN 59/97 · VG · PAN · QPL

Semi-rigid thin wall Kynar®

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS		
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool Lengths		Pieces
	MM	IN	MM	IN	MM	IN	M	FT	1.22 M / 48 IN
0047	1.2	3/64	0.6	0.024	0.24	0.009	300	984	25
0063	1.6	1/16	0.8	0.031	0.24	0.009	300	984	25
0094	2.4	3/32	1.2	0.047	0.24	0.009	300	984	25
0125	3.2	1/8	1.6	0.063	0.24	0.009	300	984	25
0187	4.8	3/16	2.4	0.094	0.24	0.009	300	984	25
0250	6.4	1/4	3.2	0.126	0.30	0.012	300	984	25
0375	9.5	3/8	4.8	0.189	0.30	0.012	150	492	10
0500	12.7	1/2	6.4	0.252	0.30	0.012	100	328	10
0750	19.0	3/4	9.5	0.374	0.40	0.016	50	164	10
1000	25.4	1	12.7	0.500	0.50	0.020	50	164	10



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Clear (CL)
  - Approval: Standard, VG or QPL
- Please specify the product name, order number and options you require
- *Example:* DERAY®-KY 175, 0125 or 1/8 in, clear, VG

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

High temperature Kynar® thin wall heat shrink tubing, with extreme chemical resistance ideal for protection of components in a wide range of severe temperature and harsh environments.

FEATURES AND BENEFITS

- Highly flame retardant
- Flexible
- High temperature resistance
- Excellent chemical and solvent resistance
- Additionally available in RAL2003 orange color
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 190°C
- Shrink temperature: 175°C min.

STANDARDS

- VW 60360-3
- UL 224 125°C VW-1 - UL file # E132910
- CSA C22.2 No. 198.1
- QPL SAE AS23053/18 Class 2
- CNES approved and listed in Matrex database
- ECSS-Q-ST-70-02

TYPICAL APPLICATIONS

- High temperature performance that meets or exceeds military, industrial and automotive standards
- Provides excellent electrical insulation
- High flexible and abrasion resistance requiring applications
- Protective see through covering for high temperature and aggressive chemical applications
- Protecting component for connectors and HV cable-lugs in electric vehicles

Kynar® is a registered trademark of ATOFINA

2:1

SHRINK RATIO

-55°C to 190°C
(-67°F to 374°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial, Defense, Aerospace, Mass Transit, Automotive

STANDARDS:

Flexible thin wall Kynar®

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS		
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool Lengths		Pieces
	MM	IN	MM	IN	MM	IN	M	FT	1.22M / 48IN
0047	1.2	3/64	0.6	0.024	0.24	0.009	300	984	25
0063	1.6	1/16	0.8	0.031	0.24	0.009	300	984	25
0094	2.4	3/32	1.2	0.047	0.24	0.009	300	984	25
0125	3.2	1/8	1.6	0.063	0.24	0.009	300	984	25
0187	4.8	3/16	2.4	0.094	0.24	0.009	300	984	25
0250	6.4	1/4	3.2	0.126	0.30	0.012	300	984	10
0375	9.5	3/8	4.8	0.189	0.30	0.012	150	492	10
0500	12.7	1/2	6.4	0.252	0.30	0.012	100	328	10
0591*	15.0	0.591	6.4	0.252	0.80	0.031	100	328	-

*Size 0591 in black and clear against MOQ

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Clear (CL), black (BK) & orange (OE)
  - Approval: Standard or QPL
- Please specify the product name, order number and options you require
- *Example*, DERAY®-KYF 190, 0125 or 1/8 in, clear, QPL

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

High shrink ratio Teflon® heat shrink tubing specially designed for protecting applications in extreme electrical, chemical and thermal environments.

FEATURES AND BENEFITS

- Highly flame retardant
- Semi-rigid
- High shrink ratio
- Chemically inert
- Shrink ratio: 4:1
- Continuous operating temperature: -65°C to 260°C
- Shrink temperature: 340°C min.

STANDARDS

- SAE-AMS-DTL-23053/12 Class 5

TYPICAL APPLICATIONS

- Extremely suitable for insulating and protecting objects from thermal load and chemical influence
- PTFE's excellent dielectric properties make this an ideal material for covering, protecting, and insulating wire harnesses and other bundled electrical cables
- Areas where an extreme low coefficient of friction is required
- Used to cover hydraulic hose and couplings to prevent contamination and corrosion

4:1

SHRINK RATIO

-65°C to 260°C

(-85°F to 500°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial, Aerospace, Defense

STANDARDS:

RoHS MIL

Modified crosslinked fluoropolymer

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Lengths
	MM	IN	MM	IN	MM	IN	1.22M / 48IN
0078	1.98	5/64	0.64	0.025	0.23	0.009	25
0094	2.36	3/32	0.80	0.031	0.25	0.010	25
0125	3.18	1/8	0.94	0.037	0.31	0.012	25
0187	4.76	3/16	1.27	0.050	0.31	0.012	25
0250	6.35	1/4	1.60	0.063	0.31	0.012	10
0375	9.52	3/8	2.44	0.096	0.31	0.012	10
0500	12.70	1/2	3.66	0.144	0.38	0.015	10
0625	15.88	5/8	4.52	0.178	0.38	0.015	10
0750	19.05	3/4	5.69	0.224	0.38	0.015	10
1000	25.40	1	7.06	0.278	0.38	0.015	10
1250	31.75	1 1/4	8.81	0.347	0.38	0.015	10

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Clear (CL), black (BK) against MOQ
- Please specify the product name, order number and options you require
- *Example*: DERAY®-PTFE 4:1, 0250 or 6.35/1.6, clear

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

High shrink ratio Teflon® heat shrink tubing specially designed for protecting applications in extreme electrical, chemical and thermal environments.

FEATURES AND BENEFITS

- Highly flame retardant
- Semi-rigid
- High shrink ratio
- Chemically inert
- Shrink ratio: 2:1 (AWG sizes)
- Continuous operating temperature: -65°C to 260°C
- Shrink temperature: 340°C min.

TYPICAL APPLICATIONS

- Extremely suitable for insulating and protecting objects from thermal load and chemical influence
- PTFE's excellent dielectric properties make this an ideal material for covering, protecting, and insulating wire harnesses and other bundled electrical cables
- Areas where an extreme low coefficient of friction is required
- Used to cover hydraulic hose and couplings to prevent contamination and corrosion

2:1

SHRINK RATIO

-65°C to 260°C
(-85°F to 500°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Automotive, Industrial, Aerospace, Defense

STANDARDS:

RoHS

Teflon® is a registered trademark of du Pont de Nemours and Co. Inc.

Modified crosslinked fluoropolymer

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED		DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d	Total Wall Thickness (nom) W	Lengths
	AWG	MM	MM	MM	1.22M / 48IN
AWG 30	30	0.86	0.38	0.23	25
AWG 28	28	0.97	0.46	0.23	25
AWG 26	26	1.17	0.56	0.23	25
AWG 24	24	1.27	0.64	0.25	25
AWG 22	22	1.40	0.80	0.25	25
AWG 20	20	1.52	0.97	0.30	25
AWG 18	18	1.93	1.17	0.30	25
AWG 16	16	2.36	1.45	0.30	25
AWG 14	14	3.05	1.82	0.30	25
AWG 12	12	3.81	2.26	0.30	25
AWG 10	10	4.85	2.80	0.30	25
AWG 8	8	6.10	3.55	0.38	10
AWG 6	6	7.67	4.40	0.38	10
AWG 4	4	9.40	5.45	0.38	10
AWG 2	2	10.92	6.90	0.38	10
AWG 0	0	11.94	8.56	0.38	10

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Clear (CL), black (BK) against MOQ
- Please specify the product name, order number and options you require
- *Example*: DERAY®-PTFE AWG 2:1, AWG 30, clear

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Flexible, thin wall, diesel resistant, elastomeric heat shrink tubing, especially suited for mechanical, thermal and chemical protection of sensitive components.

FEATURES AND BENEFITS

- Flame retardant
- Flexible
- High abrasion and cut resistance
- Resistant to diesel, hydraulic fluids and chemicals
- Shrink ratio: 2:1
- Continuous operating temperature: -75°C to 150°C
- Shrink temperature: 150°C min.

STANDARDS

- DEF STAN 59-97 Type 6b
- BS G198 Part 3 Type 10A
- VG 95343 Part 5 Type D
- QPL SAE AS23053/16 (only DERAY®-V 25)
- PAN 6480K
- GS 95008-3-3
- CNES approved and listed in Matrex database

TYPICAL APPLICATIONS

- Developed for rugged demands with view to high fuel, chemical and insulation requirements
- Suitable to use in rough environments where an optimum high-temperature fluid resistance, and long term heat resistance is required
- Military, aerospace and automotive cables and harnessing
- Insulation of wind-generator bus bars

2:1

SHRINK RATIO

-75°C to 150°C
(-103°F to 302°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Industrial, Aerospace, Defense, Mass Transit, Utility, Renewables/ Wind, Automotive

STANDARDS:

RoHS · DVE · PAN · DEF STAN 59/97 · VG · QPL

Modified crosslinked elastomer

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED						DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W				Spool Lengths	
					V25		V25 TW			
	MM	IN	MM	IN	MM	IN	MM	IN	M	FT
0094	2.4	3/32	1.2	0.047	-	-	0.55	0.022	50	164
0125	3.2	1/8	1.6	0.063	0.80	0.031	0.55	0.022	50	164
0187	4.8	3/16	2.4	0.094	0.90	0.035	0.55	0.022	50	164
0250	6.4	1/4	3.2	0.126	1.00	0.039	0.65	0.026	50	164
0375	9.5	3/8	4.8	0.189	1.10	0.043	0.65	0.026	50	164
0500	12.7	1/2	6.4	0.252	1.30	0.051	0.65	0.026	30	98
0750	19.0	3/4	9.5	0.374	1.50	0.059	0.85	0.033	30	98
1000	25.4	1	12.7	0.500	1.90	0.075	0.95	0.037	30	98
1250	31.8	1 1/4	15.9	0.626	-	-	1.05	0.041	30	98
1500	38.0	1 1/2	19.0	0.748	2.50	0.098	1.05	0.041	15	49
2000	51.0	2	25.4	1.000	3.10	0.122	1.05	0.041	-	-
3000	76.0	3	38.0	1.496	3.30	0.130	1.05	0.041	-	-

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
  - Approval: Standard, VG or QPL (only DERAY®-V 25)
- Please specify the product name, order number and options you require
- *Example:* DERAY®-V 25, 0750 or 3/4 in, black, VG

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Thin wall very flexible fluoroelastomer heat shrink tubing suitable for use in electronic systems and components in military, aerospace, automotive and industrial applications requiring outstanding heat and fluid resistance.

FEATURES AND BENEFITS

- Flame retardant
- Very flexible
- Highly abrasion resistant
- High withstand to corrosive fluids in extreme temperatures up to 220°C
- Shrink ratio: 2:1
- Continuous operating temperature: -55°C to 220°C
- Shrink temperature: 160°C min.

STANDARDS

- QPL SAE AS23053/13

TYPICAL APPLICATIONS

- Bundling and strain relief of wire harnesses in high temperature applications and environments
- Excellently suitable for applications where severe chemical and thermal requirements are crucial
- Highly cut through resistant
- Commonly used for protection of cables against contamination by nearly all commercial hydraulic fluids, minerals and synthetic oils
- Widely used in hydraulic equipment, aerospace and marine ship building applications

Viton® is a registered trademark of du Pont de Nemours and Co. Inc. for the raw material

2:1

SHRINK RATIO

-55°C to 220°C
(-67°F to 428°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Defense, Aerospace, Automotive, Hose & Pipe Protection, Industrial, Shipboard, Utility, Renewables, Mass Transit

STANDARDS:

RoHS QPL

Thin wall crosslinked Viton®

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Spool	
	MM	IN	MM	IN	MM	IN	M	FT
0125	3.2	1/8	1.6	0.063	0.80	0.031	50	164
0187	4.7	3/16	2.4	0.094	0.90	0.035	50	164
0250	6.4	1/4	3.2	0.126	0.90	0.035	50	164
0375	9.5	3/8	4.7	0.189	0.90	0.035	50	164
0500	12.7	1/2	6.4	0.252	0.90	0.035	30	98
0625*	15.9	5/8	7.9	0.315	1.10	0.043	30	98
0750	19.1	3/4	9.5	0.374	1.10	0.043	30	98
0875*	22.2	7/8	11.1	0.437	1.20	0.047	30	98
1000	25.4	1	12.7	0.500	1.20	0.047	30	98
1250*	31.8	1 1/4	15.9	0.626	1.40	0.055	30	98
1500	38.1	1 1/2	19.1	0.748	1.40	0.055	15	49

*Sizes 5/8 in, 7/8 in, 1 1/4 in are MOQ items

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK)
  - Approval: Standard or QPL
- Please specify the product name, order number and options you require
- *Example:* DERAY®-VT 220 TW, 0375 or 3/8 in, black, QPL

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

COMMUNICATIONS PRODUCTS

HEAT AND COLD APPLIED SOLUTIONS FOR EFFECTIVE CONNECTOR PROTECTION IN TELECOMMUNICAITON APPLICATIONS

The DSG-Canusa is the leader of outside plant protection products for broad band communications. Our innovative products prevent water ingress and mechanical damage to cables, splices and connectors.

A specially designed crosslinked polyolefin tubing system, with meltable liner, providing strength and protection to optical fiber splices.

FEATURES AND BENEFITS

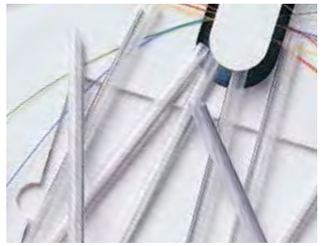
- Single fiber and ribbon fiber splice protector available
- Single holed (preshrunk) ends eliminate improper fiber threading
- Smooth, de-burred stainless steel reinforcing member ends decrease the risk of fiber damage during installation
- Extended liner length prevents contact between the fiber and the backbone
- Clear sleeve design permits easy centering of splice before heating
- Continuous operating temperature: -40°C to 60°C
- Shrink temperature: 90°C.

STANDARDS

- GR-1380 compliant

TYPICAL APPLICATIONS

- Protection of fusion splices in optical networks



-40°C to 60°C
(-40°F to 140°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Communication cable and splice protection, Industrial, OEM

STANDARDS:

RoHS

CFSP single fiber protectors

DIMENSIONS

ORDER NUMBER	NOMINAL SLEEVE LENGTH		INSIDE DIAMETER OF INNER LINER (MIN)		NOMINAL SUPPORT ROD DIAMETER*		PACKAGING	NUMBER OF SPLICES
	MM	IN	MM	IN	MM	IN	Pieces per bag	
CFSP-12-61	61.0	2.40	1.5	0.06	1.2	0.05	100	1
CFSP-12-45	45.0	1.77	1.5	0.06	1.2	0.05	100	1
CFSP-12-23	23.0	0.90	1.5	0.06	1.2	0.05	100	1

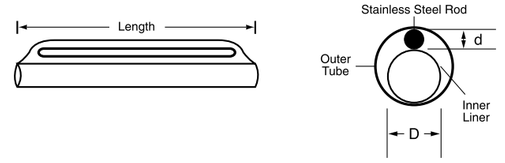
CRFP ribbon fiber protectors

DIMENSIONS

ORDER NUMBER	NOMINAL SLEEVE LENGTH		INSIDE DIAMETER OF INNER LINER (MIN)		NOMINAL SUPPORT ROD DIAMETER**		PACKAGING	NUMBER OF SPLICES
	MM	IN	MM	IN	MM	IN	Pieces per bag	
CRFP-12	40.0	1.57	3.0	0.12	1.8	0.07	50	12

*Support rod for CFSP is made from stainless steel

**Support rod for CFRP is made from ceramic



ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - CFSP Single Fiber Protectors or CFRP Ribbon Fiber Protectors
- Please specify the product name, order number and options you require
- *Example:* CFSP-12-61, 100 pieces per bag

PACKAGING

- CFSP: 100 pieces per bag
- CRFP: 50 pieces per bag

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Heat shrink tubing and adhesive liner combination that established the CATV industry standard for splice and connector protection.

FEATURES AND BENEFITS

- Craft friendly installation
- Exceptional split resistance
- CFTV adhesive retains bond providing long term protection
- Selective strippability to meet CATV industry specifications
- Minimal heat required to produce error free installation without splitting
- Thermochromatic lines change color to signal waterproof seal
- Shrinks and seals in half the time of alternative products
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C min.

TYPICAL APPLICATIONS

- Strain relief of coaxial connections
- Waterproof protection of CATV connectors

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:
Industrial

STANDARDS:

RoHS

Heat shrink cable sleeve

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED				APPLICATION RANGE		DELIVERY UNITS
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		General Use		Lengths
	MM	IN	MM	IN	MM	IN	MM	IN	1.22 M / 48 IN
0400	10.2	0.40	3.8	0.15	2	0.08	4.5 - 8.5	.18 - .34	75
0750	19.0	0.75	5.6	0.22	2	0.08	6.0 - 16.5	.24 - .65	35
1100	27.9	1.10	10.2	0.40	2	0.08	11.5 - 25.0	.45 - 1.0	75
1300	33.0	1.30	10.2	0.40	2	0.08	11.5 - 30.0	.45 - 1.2	60
1500	38.1	1.50	12.7	0.50	2	0.08	14.0 - 35.0	.55 - 1.4	40
1700	43.2	1.70	12.7	0.50	2	0.08	14.0 - 40.0	.55 - 1.6	40
2050	52.1	2.05	19.0	0.75	2	0.08	21.0 - 45.0	.82 - 1.8	25
2750	69.8	2.75	25.4	1.00	2	0.08	30.0 - 63.0	1.2 - 2.5	15

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Please specify the product name, order number and options you require
- *Example*: CFTV, 1700, lined

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Gel filled closures are a simple, fast and effective method for providing complete environmental protection for coaxial drop splices.

FEATURES AND BENEFITS

- Single piece, clam shell design, requires no additional tools for installation
- Gel filled for complete waterproof protection
- Expansion chambers prevent Gel overflow
- Accommodates a wide range of environmentally sealed coaxial connectors and cable types including quad shielded cable
- Available in two sizes:
  - CE 596 for 59 and 6 series cable
  - CE 711 for 7 and 11 series cable
- Channel provided to retain messenger cable
- Fully re-enterable
- Tough outer shell withstands impacts to 5 ft-lb
- Withstands extreme temperatures (-45°C to 90°C)

STANDARDS

- Meets SCTE IPS-TP-013 (ANSI/SCTE 60 2004) requirements for water immersion and temperature cycling

TYPICAL APPLICATIONS

- Environmental protection of cable splices

-45°C to 90°C
(-49°F to 194°F)

WITHSTANDS EXTREME TEMPERATURE

NO ADDITIONAL TOOLS REQUIRED

MARKETS:

Communications cable and splice protection, Industrial

STANDARDS:

RoHS

Drop splice enclosure

DIMENSIONS

ORDER NUMBER	NOMINAL DIAMETER		LENGTHS	
	MM	IN	MM	IN
CE 596	25.4	1.0	116	4.6
CE 711	31.0	1.2	165	6.5

TYPICAL APPLICATIONS

- Cables: All 59 and 6 series coaxial cables including quad shield with messengers All 7 and 11 series coaxial cables including quad shield with messengers

Connectors

	59 AND 6 SERIES	7 AND 11 SERIES
Digicom	D2, Type II and S	D2, S and RG 11
T & B	F Series, SNS Seires	SNS Series
Corning Gilbert	GF Type, AHS, UltraEase and Ultra Range	GAF, AHS, UltraEase and Ultra Range
PPC	CMP, EX and AquaTight EX	EX and AquaTight EX
Others	F-Conn, Stirling	F-Conn, Stirling

ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Please specify the product name, order number and options you require
- *Example*, CGEL, CE 596
- *Packaging*, 12 pieces per box

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

EPR based self fusing tape designed for insulation, waterproofing, sealing and protection of electrical connections in communication and industrial applications.

FEATURES AND BENEFITS

- Provides protection where heat/flame is prohibited
- Covers any shape including high transition areas and elbows
- Strips easily and cleanly
- Layers fuse together to form a seal that provides complete environmental protection and insulation
- Excellent resistance to water, UV and ozone
- Proven long term protection
- Continuous operating temperature: -40°C to 100°C

TYPICAL APPLICATIONS

- Environmental protection of connectors in tight locations or when torch is not permitted
- Protect connectors in Cable TV, Wireless and Telecom applications

-40°C to 100°C
(-40°F to 212°F)

CONTINUOUS OPERATING TEMPERATURE

COVERS ANY SHAPE

MARKETS:
Communications cable and splice protection, Industrial, OEM

STANDARDS:

RoHS

Self fusing tape

DIMENSIONS

ORDER NUMBER	WIDTH		THICKNESS		ROLL LENGTH	
	MM	IN	MM	IN	M	FT
CTB-15	38.1	1.5	0.76	0.03	4.57	15

APPLICATION INSTRUCTIONS

- Ensure the product is conditioned to at least 15°C before use for optimum performance
- The surface of cable and connector should be clean
- Start the tape on cable approximately two inches from connector
- Make sure the tape is stretched during application
- While stretching the tape, make one wrap on cable ensuring the tape is wrapped onto itself as it will only adhere to itself Continue wrapping the cable and connector using half overlap layers
- To terminate, wrap the tape onto itself and place your thumb at the termination point and stretch the tape until it breaks
- Two layers are recommended
- The loose end of the termination should be thumbed down

STORAGE & HANDLING

Avoid direct contact between the tape and petroleum-type solvents and oils and store the rolls flat on their edge at a storage temperature between 10°C to 30°C. The product must be protected from dust, heat, moisture, direct sunlight, and solvent fumes. Under these conditions, the storage life of the product will be at least 5 years.

ORDERING

- Please specify the product name and options you require
- *Example*: CTB-15

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.

Thin wall heat shrink tubing provides excellent environmental protection and insulation for CATV drop connectors.

FEATURES AND BENEFITS

- Meltable inner liner encapsulates cable and connection completely
- Excellent UV and ozone resistance
- Resistant to all fluids and solvents
- Accommodates all F-Connectors and cables
- Flexible
- Shrink ratio: 3:1
- Continuous operating temperature: -55°C to 110°C
- Shrink temperature: 120°C

TYPICAL APPLICATIONS

- Sealing of coaxial drop connectors

3:1

SHRINK RATIO

-55°C to 110°C
(-67°F to 230°F)

CONTINUOUS OPERATING TEMPERATURE

MARKETS:

Communications cable and splice protection, Communications cable and splice protection, Industrial, OEM

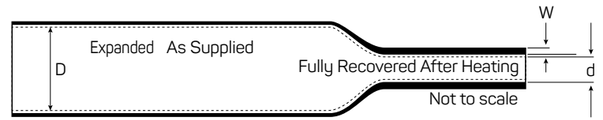
STANDARDS:

RoHS

Drop tubing

DIMENSIONS

ORDER NUMBER	EXPANDED		RECOVERED						DELIVERY UNITS	
	Internal Diameter (min) D		Internal Diameter (max) d		Total Wall Thickness (nom) W		Meltable Wall Thickness (nom)		Lengths	
	MM	IN	MM	IN	MM	IN	MM	IN	M	IN
0500	12.7	0.50	5.0	0.19	1.4	0.05	0.9	0.03	1.2	48
0750	19.1	0.75	8.0	0.31	1.7	0.06	1.0	0.04	1.2	48

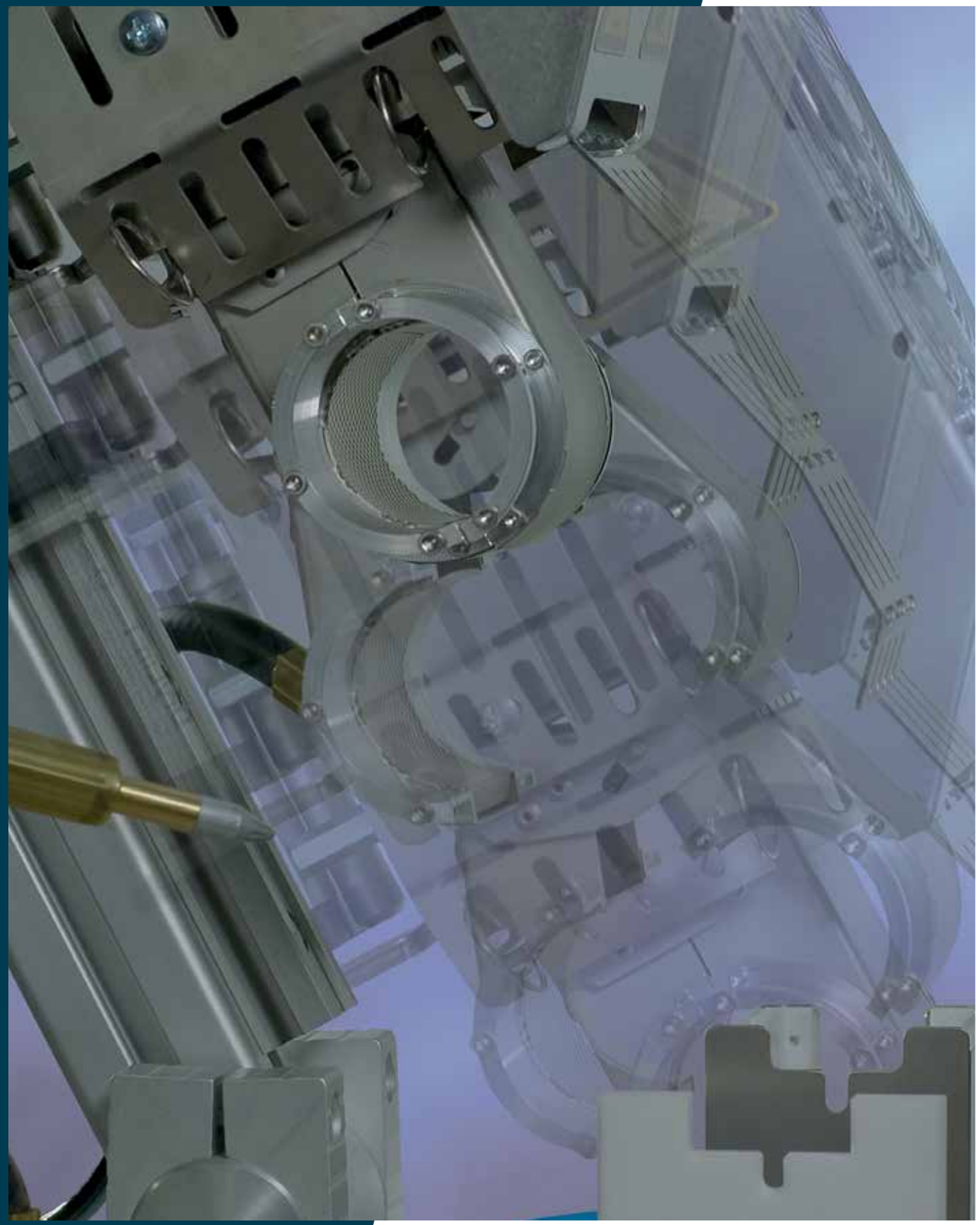


ORDERING

Select a dimension which will shrink snugly over the application to be covered. If recovery is restricted the resultant wall thickness will be less than specified.

- Select options:
  - Color: Black (BK), blue (BL)
- Please specify the product name, order number and options you require
- *Example:* DROP Tubing, 0500, black, unprinted

Please contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheet.



APPLICATION EQUIPMENT PRODUCTS

ENGINEERING AND BUILDING HIGH-PERFORMANCE HEAT SHRINK APPLIANCES IN-HOUSE FOR STANDARD MACHINES AS WELL AS UNIQUE APPLICATIONS

In addition to the standard heat shrink tubing product line, we provide a full range of technically advanced shrink appliances. Years of experience in processing heat shrink materials have resulted in the creation of a variety of processing devices, from a simple heat gun to high-performance shrink equipment. Beyond the numerous standard machines, our Machine Technology Center (MTC) designs and constructs custom machines for unique applications.

DERAY®-SPLICEMAN IR

DESCRIPTION

DERAY®-SpliceMan IR is a heat shrink system with infrared heating elements designed to process adhesive lined heat shrink tubes onto ultrasonically welded- and crimped splice joints.

FEATURES AND BENEFITS

- Up to 125 data sets storable
- Automatic communication with ultrasonic welding machine ensures process safety

DERAY®-BOARD-WORKMAN TP ADE

DESCRIPTION

DERAY®-Board-Workman TP ADE is a mobile shrink equipment with outer diameter detector (ADE) which is used on the harness board with a balancer. It is designed to process adhesive lined heat shrink tubes onto end splices on stationary and mobile cable boards.

FEATURES AND BENEFITS

- Automatic outside diameter detection of wires and allocation of shrink parameters

DERAY®-LEAKAGE TESTER

DESCRIPTION

The DERAY®-Leakage Tester is a testing device designed for the leaking test of wire applications assembled with heat shrink tubes. Using compressed air and four test chambers it can leakage test up to 20 cables at once.

FEATURES AND BENEFITS

- The testable wire cross sections are 0.13 mm² - 10 mm²
- Automatic self-testing based on predefined parameters for leakage and pressure-sensor test

DERAY®-TSD COMPACT

DESCRIPTION

The DERAY®-TSD Compact is a space-saving terminal sealing device with infrared heating elements designed to process heat shrink tubes onto terminals and splices. The shrink device has an exchangeable frame and processes up to 20 terminals per cycle.

FEATURES AND BENEFITS

- 3 heating zones for consistent heat distribution
- PLC-Controlled sequential movement of heating chambers

DERAY®-FST 950 2.0

DESCRIPTION

The DERAY®-FST 950 2.0 is a belt driven shrink tunnel with infrared heating elements designed to process a wide variety of heat shrink tubes for safe high volume production.

FEATURES AND BENEFITS

- Fully automatic calibration
- Automatic error detection
- Extended cooling zone to control adhesive flow

DERAY®-WORKMAN TP

DESCRIPTION

The DERAY®-WorkMan TP is a hot air shrink equipment designed to process heat shrink tubes onto a wide variety of applications. The universal machine can be used for both pre-assembly and wire harness series production purposes.

FEATURES AND BENEFITS

- Up to 125 data sets storable
- Quick-change system of shrink chambers for minimal process interruption

DERAY®-SHUTTLE 240 / 60

DESCRIPTION

The DERAY®-Shuttle 240 / 60 is a heat shrink system with infrared heating elements to process heat shrink tubes onto terminals and end splices.

FEATURES AND BENEFITS

- Up to 20 applications per cycle
- Two customized frames for optimized working process
- Processable cable cross section of up to 85 mm²

DERAY®-VACUUM-LEAKAGE TESTER

DESCRIPTION

The DERAY®-Vacuum-Leakage Tester is a testing device to proof wires and cables sealed with adhesive lined heat shrink tubes against a predefined leak rate.

FEATURES AND BENEFITS

- The testable wire cross sections are 10 mm² to 80 mm²
- Adjustable amount of testing adapters to accommodate individual needs

CROSS REFERENCE GUIDE

THIN WALL - SINGLE WALL PRODUCTS

							Cross Reference					Options		
PRODUCT NAME	SHRINK RATIO	DESCRIPTION	OPERATING TEMPERATURE		FLAME RATING	STANDARDS	TYCO	3M	ALPHA	SUMITOMO	LG	SIZES	COLORS	PACKAGING
			MIN	MAX								IN		
CPX 100	2:1	Flexible, multi-purpose protection and insulation	-55 °C	135 °C	Yes	UL 224, 125°C VW-1 (colors only) - UL file # E63390, CSA C22.2 No. 198.1, 125°C - CSA file # 256317 & 065781_0_000, AMS 3636, 3637 and 3587, UL/CSA approval applies to black and colors only, Approved to automotive OEM specifications	RNF-100	FP301(1)	FIT221	B2, A2	GSHS-1635F	3/64 to 4	Black, White, Red, Blue, Yellow, Green, Clear	Sticks or Spools
CPX 876	2:1	Highly flame retardant, flexible	-55 °C	135 °C	Highly	UL 224 125°C VW-1 - UL file # E107857, CSA 22.2 No 198.1 125°C OFT and Class 1 - CSA file # 265111	VERSAFIT	FP-301VW	FIT221V	B2, F2	GSHS-1625FT	3/64 to 4	Black, White, Red, Blue, Yellow, Green	Spools
CPX 300	3:1	High spec. flexible polyolefin, adhesive lined	-55 °C	135 °C	Yes	UL 224 125°C - UL file # E63390, CSA C22.2 No.198.1 125°C, QPL SAE AS23053/4	RNF-3000	SFTW-203	FIT321V	B2(3X), A2(3X)	GSHS-3635	1/8 to 1½	Black, White, Red, Blue, Yellow, Green, Clear	Spools
DERAY®- ZoH125	2:1	Halogen free, flame retardant, low smoke generation polyolefin	-40 °C	125 °C	Yes	EN45545-2 HL3 R22 & R23, LUL E 1042 A6, BS 6853 vehicle category 1a, DIN 5510	ZH100		FIT221L	NH	SNHP	3/32 to 1½	Black, Yellow, White	ZoH - Bulk Spools
DERAY®- I	2:1	Multipurpose tubing, flexible polyolefin	-55 °C	135 °C	Yes	VG95343 Part 5 Type A/B, QPL SAE AS 23053/5 Class 1+2, DEF STAN 59-97 Type 2b, BS G198 Part 3 Type 11B, UL 224 125°C ATF - UL file # E107857, CSA 22.2 No 198.1 125°C - CSA file # 066150_0_000, CNES approved and listed in Matrex database, ECSS-Q-ST-70-02	RNF-100	FP301(1)	FIT221	B2, A2	GSHS-1635F	3/64 to 4	Black, White, Red, Blue, Yellow, Green, Clear	Sticks or Spools

DUAL WALL - ADHESIVE LINED PRODUCTS

							Cross Reference					Options		
PRODUCT NAME	SHRINK RATIO	DESCRIPTION	OPERATING TEMPERATURE		FLAME RATING	STANDARDS	TYCO	3M	ALPHA	SUMITOMO	LG	SIZES	COLORS	PACKAGING
			MIN	MAX								IN		
CPA 100	3:1	General purpose for terminal sealing	-55 °C	110 °C	Yes	OEM Approval	TAT, DWP-125	EPS200/ 300	FIT321	02B2	2690W, 1625W	1.8 to 1.57	Black, Red, Blue, Clear	Sticks or Spools
CPA 300	3:1	High spec. flexible polyolefin, adhesive lined	-55 °C	125 °C	Highly	UL 224 125°C - UL file # E63390, CSA C22.2 No 198.1 125°C OFT - CSA file # 065781_0_000, QPL SAE AS23053/4, Class 3, Approved to major automotive OEM specification, UL/CSA approval applies to black and colors only	ATUM3:1, DWP-125	EPS300	FIT321	W3B2	GSHS-3635W	1/8 to 1.57	Black, White, Red	Sticks
DERAY®- Crimpseal II	3:1	Halogen free, crystal clear and adhesive lined tubing with integral solderless splice connector	-55 °C	125 °C	Yes	UL 486C – UL file # E470828	DURA SEAL	Scotchlok		SUMI SEAL		0.145 to 0.255	Red, Blue, Yellow, Clear	Pieces
DERAY®- IAKT	3:1/4:1	Adhesive lined, moisture-resistant	-55 °C	110 °C	Yes	Industrial, electronic and automotive OEM specifications	ATUM4:1	EPS400		W3B2(4X)	GSHS-3635W	0.118 to 1.57	Black, Clear	Sticks
DERAY®- IHKT	4:1	Adhesive lined, superior sealing against water and moisture, high shrink ratio	-55 °C	125 °C	Yes	VG 95343 Part 12 Type D	HTAT	EPS400		W3B2(4X)	GSHS-4635WS	0.157 to 2.047	Black,	Sticks
DERAY®- SpliceMelt	4:1	Adhesive lined, moisture-resistant, splice sealing	-40 °C	105 °C	Yes	Automotive OEM specifications	ES-2000, RBK	EPS400, SMS		SA2		0.236 to 0.708	Black, Clear	Pieces or Spools
DERAY®- SpliceMelt Cap	4:1	Adhesive lined insulating caps to protect end or stub splices	-40 °C	125 °C	Yes	Automotive OEM specifications	ES/PD-CAP					0.118 to 0.708	Black, Clear	Pieces
CDR	4:1	Semi-rigid, fluid resistant splice sealing product	-40 °C	130 °C	Yes	UL 224 125°C - UL file # E63390	SCT, ES-2000					0.236 to 0.708	Black	Sticks
CHPA	4:1	Semi-rigid, high temp, splice sealing product	-40 °C	150 °C	Yes	FCA: MS-DB-56 / MS:50107, CPN #5229; GMW17136	SCT					0.157 to 0.709	Black	Pieces

CROSS REFERENCE GUIDE

MEDIUM HEAVY WALL PRODUCTS

							Cross Reference					Options		
PRODUCT NAME	SHRINK RATIO	DESCRIPTION	OPERATING TEMPERATURE		FLAME RATING	STANDARDS	TYCO	3M	ALPHA	SUMITOMO	LG	SIZES	COLORS	PACKAGING
			MIN	MAX								IN		
CFM	3:1	Strain relief, environmental protection, splice covers	-55 °C	110 °C	-	-	MWTM, SST-M	IMCSN		SCM2	LG-PMWT	0.4 to 9.0	Black, Red, Clear	Sticks
CFW	3:1	Splice sealing, cable/jacket repair, direct burial	-55 °C	110 °C	Yes	UL 486D - UL file # E132914, CSA C22.2 No. 198.2, ANSI C119-1, Western Underground Guide Numbers 2.4 and 2.5, ICEA and NEMA insulation thickness requirements, DNV Type approval, DIN EN 60684-3-247	WCSM, SST, RHW	ITCSN	FIT700		LG-PHWT	0.35 to 4.72	Black, Red	Sticks
FCFW	3:1	Heavy wall polyolefin, flame retardant, optionally adhesive lined	-55 °C	110 °C	Yes	UL 486D - UL file # E132914, UL 94 V-0 - UL file # E167396, CSA C22.2 No. 198.2, Western Underground Guide No. 2.4, ICEA S-19-81 and NEMA insulation thickness requirements, QPL SAE AS23053/15, Class 1	BSTSFR, SSTFR, FCSM	HDT, ITCSF				0.35 to 4.72	Black, Red	Sticks
CFHR	6:1	Flexible polyolefin, flame retardant, very high shrink ration, optionally adhesive lined	-55 °C	110 °C	Yes	SAE-AMS-DTL 23053/15, IEC 60684-3-247, UL 486D - UL file# E132914	HRSR, HRHF		FIT621			0.75 to 4.7	Black	Sticks
CCAP	3:1	Watertight sealing of cable ends & pipe conduit	-55 °C	110 °C	-	UL, CSA, Rated for 600/1000 V 90°C continuous use	SSC, ESC	ICEC	FIT Cap			0.18 to 4.50	Black	Pieces
CCB	>2.5:1	Heat shrinkable boot for 2, 3, 4 -way cable breakouts	-55°C	100°C	-	IEC 62677, ESI 09-11	CBR	HDBB				1.18 to 5.25	Black	Pieces
CBTM/CBTH	3:1	Halogen free, anti-track Bus Bar tubing	-40 °C	125 °C	Yes	ANSI C37.20.2 to 36 kV	CBTM - BPTM CBTH - BBIT	CBTM - BBI CBTH - BBI		CBTM - SBI300, CBTH - SBI350		0.75 to 6.70	Red	Spools

SPECIALTY NON-POLYOLEFIN PRODUCTS

							Cross Reference					Options		
PRODUCT NAME	SHRINK RATIO	DESCRIPTION	OPERATING TEMPERATURE		FLAME RATING	STANDARDS	TYCO	3M	ALPHA	SUMITOMO	LG	SIZES	COLORS	PACKAGING
			MIN	MAX								IN		
DERAY®- KY 175	2:1	Semi-rigid thin wall Kynar® heat shrink tubing, excellent chemical/solvent resistance	-55 °C	175 °C	Highly	QPL SAE AS23053/8, DEF STAN 59-97 Type 3, BS G198 Part 4 Type 20, VG 95343 Part 5 Type F, PAN 6491, VW 60360-3, UL 224 125°C VW-1 - UL file # E107857, CSA 22.2 OFT - CSA file # 066150_0_000, CNES approved and listed in Matrex database, ECSS-Q-ST-70-02	RW-175	MFP	FIT350	K	GSHS-1675	3/64 to 1	Black, Clear	Sticks
DERAY®-V25	2:1	Flexible, diesel resistant elastomer	-75 °C	150 °C	Yes	DEF STAN 59-97 Type 6b, BS G198 Part 3 Type 10A, QPL SAE AS23053/16, VG 95343 Part 5 Type D, PAN 6480K, GS 95008-3-3, CNES approved and listed in Matrex database	DR25	PST		R120	LG-DRET	1/8 to 3	Black	Spools
DERAY®- VT 220	2:1	High temperature fluoroelastomer, abrasion resistant, withstand to corrosive fluids in extreme temperature	-55 °C	220 °C	Yes	DEF STAN 59-97 Type 4a, BS G198 Part 3 Type 12A, VG95343 Typ E, PAN6480L, GS 95008-3-3, CNES approved and listed in Matrex database, ECSS-Q-ST-70-02	RW200, Viton®	VTN 200	FIT650	FE3	GSHS-1650F	1/8 to 2	Black	Spools
DERAY®- KYF 190	2:1	High temperatire, flexible thin wall Kynar® heat shrink tubing, extreme chemical/solvent resistance	-55 °C	190 °C	Highly	VW 60360-3, UL 224 125°C VW-1 - UL file # E132910, CSA C22.2 No. 198.1, QPL SAE AS23053/18 Class 2, CNES approved and listed in Matrex database, ECSS-Q-ST-70-02	RT-375 RNF-150			K2		3/64 to 1/2	Black, Clear	Spools
CNP 200	2:1	Very flexible, chlorinated polyolefin	-70 °C	120 °C	Yes	MIL-R-46846 Type 1, QPL SAE AS23053/1, Class 1 and 2	NT	NST	FIT600	R10	LG-CRFR	1/8 to 2	Black	Spools

CROSS REFERENCE GUIDE

COLD SHRINK MEDIUM VOLTAGE PRODUCTS

PRODUCT NAME	VOLTAGE RANGE	MIN - MAX CONDUCTOR SIZE	APPLICATION	DESCRIPTION	STANDARDS	Cross Reference TYCO	Cross Reference 3M
CSJ 10 SERIES	15 kV	#2 - 2000 kcmil	Splice	Cold shrink splice kits for single core bare and jacketed concentric neutral cables	IEEE-404 2000	CSJA SERIES	QSIII
CSJ 20 SERIES	5 - 15 kV	#4 - 1000 kcmil	Splice	MV cold shrink splice kits for single core tape and wire shielded cables	IEEE-404 2000	CSJA SERIES	QSIII

COLD SHRINK LOW VOLTAGE PRODUCTS

PRODUCT NAME	VOLTAGE RANGE	MIN - MAX CONDUCTOR SIZE	APPLICATION	DESCRIPTION	STANDARDS	Cross Reference TYCO	Cross Reference 3M
CSS Series	1 kV	#2 - 2000 kcmil	Splice	In-line splices and cable to elbow sealing applications	ANSI C119.1-1986		8400 SERIES
CSS - EP	1 kV	#6 - 2000 kcmil	Splice / Outer Jacket	Cold shrink EPDM splice kit and protective jacket for low voltage cable	-		8400 SERIES
CSEC	N/A	0.46 - 3.32 inch	Cable end protection	Cold shrink cable end caps for sealing and environmental protection	-		EC SERIES

HEAT SHRINK MEDIUM VOLTAGE PRODUCTS

PRODUCT NAME	VOLTAGE RANGE	MIN - MAX CONDUCTOR SIZE	APPLICATION	DESCRIPTION	STANDARDS	Cross Reference TYCO	Cross Reference 3M
CT UD SERIES	15 - 35 kV	#4 - 2500 kcmil	Termination	Heat shrink termination kits for single core bare and jacketed concentric neutral cables	IEEE-48-1996	HVT J SERIES	
CT G SERIES	5 - 35 kV	#6 - 2500 kcmil	Termination	Heat shrink termination kits for single core tape and wire shielded cables	IEEE-48-1996	HVT G SERIES	
CT 3G SERIES	5 - 35 kV	#6 - 1750 kcmil	Termination	Heat shrink terminations for 3 core armored or unarmored tape and wire shielded cables	IEEE-48-1996		7600 SERIES -3C COLD SHRINK
CJ 10 SERIES	15 - 35 kV	#4-1000 kcmil	Splice	Heat shrink splice kit for single core bare and jacketed concentric neutral cables	IEEE 404-2000	HVS J SERIES	
CJ 20 SERIES	15 - 35 kV	#4-1000 kcmil	Splice	Heat shrink splice kit for single core tape and wire shielded cables	IEEE 404-2000	HVS S SERIES	
CJ 80 SERIES	15 - 25 kV	#4-1000 kcmil	Splice	Heat shrink splice kit for single core PILC to PILC splice or PILC to tape shield or concentric neutral cable	IEEE 404-2000	HVS 80 SERIES	
CJT 80 SERIES	15 - 25 kV	#4-1000 kcmil	Splice	MV heat shrink splice kit for 3 core PILC to PILC splice or PILC to tape shield or concentric neutral cable splice	IEEE 404-2000	HVS T 80 SERIES	

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www.shawcor.com/connections-systems

QUICK SELECTOR

CABLE ACCESSORY SELECTION GUIDE

How to use this guide: It's as easy as 1, 2, 3

1. Use the index pages to select cable accessories for single core or three core cables.
   Find the voltage class and cable type (15 kV tape shielded, etc.) and turn to the respective page and section
2. Find your conductor size
3. Select the products you need across the conductor size line

Purpose of this guide

This guide has been developed to assist contractors, estimators and sales people doing takeoffs or responding to bid requests. The guide allows you to find a wide variety of products that will save valuable time and man hours on the job. For example: If you have 1/C, 2/0 AWG, 5 kV copper tape shielded cable and 3/C armored, 350 kcmil, 15 kV copper tape shielded cable to be installed, at a minimum you will need to consider ordering the following:

- Live front terminations (indoor or outdoor) or dead front elbows
- Straight joints
- End caps if the cable will not be terminated or spliced within 24 hr
- Jacket repair sleeves to repair damage during shipment or during the cable pull
- Motor termination kit for hook-up to a 5 kV circuit

The descriptions on page 249 provide further details on the product application and uses on 1/C and 3/C cables.

PRODUCT OPTIONS		CABLE ACCESSORY DESCRIPTIONS
1/C Terminal Seal	3/C Terminal Seals	>1 kV 1/C, 3/C and 3/C Armored Low Voltage Terminal Seals
		CFM medium wall tubing is used to seal low voltage cable to the terminal. The tubing is supplied in 48 in lengths and cut to size for 1/C terminal seals. CCB cable breakout boots are combined with the CFM Tubing to seal the crotch area where the individual phases exit the common jacket. Separate sealant is used to seal ground wires.
1/C Indoor & Outdoor	3/C Indoor & Outdoor	5 - 35 kV, 1/3, 3/C (armored) Medium Voltage Live-front Terminations
		CT series terminations are supplied as either indoor or outdoor, live-front terminations. Indoor is where the termination is not exposed to direct precipitation (CT xxx or CT xxxG). Outdoor kits are for when the termination is exposed to direct precipitation (CT xxxE or CT xxxEG). Termination kits for unshielded cables are suitable for both indoor and outdoor applications. Three core kits are for armored and unarmored cables. They use three, single core terminations plus a conversion kit.
1/C Elbow Seal Kit	3/C Elbow Seal Kit	1/C, 3/C (armored) Dead-front Elbow Seal Kits, w & w/o ground kits
		CESK series kits seal and mechanically reinforce dead-front, load break elbows. CESK (G) kits are the same as above but include an external grounding kit for tape shield cables. Three core cables can be totally sealed with a CT3MODx kit to convert the three core cable into three, single cores, and adding the three CESK or CESK(G) kits for the elbow seals.
1/C Splices	3/C Splices	600 V - 1 kV, 1/C and 3/C (armored) Splices
		600 V - 1 kV, CFW series heavy wall tubing is supplied in 48 in tubes for field cutting. The tube is cut so that it is at least 4 in longer than the butt splice it is insulating and sealing. A separately purchased CRDW wraparound sleeve is combined with the three CFW tubes to seal across the spliced three core cable from jacket to jacket.
1/C Joints w/tube jacket	3/C Joints	5 - 35 kV, 1/C and 3/C (armored) Splices
		CJ series joints are for 1/C joints with a lower cost tubular splice jacket for some 8 - 35 kV joints. A wraparound jacket sleeve version is provided for the longer joints, including all 3/C and 3/C armored joints. Joints do not come with butt splice connectors. Parallel crimp connectors are provided for connecting the drain wires to the ground braid and constant force springs are provided for attaching the braid to the metal tape shield on CJ xx20 series kits.
1/C & 3/C Jacket Repair	1/C & 3/C End Caps	600 V - 35 kV, 1/C and 3/C (armored) Jacket Repair and End Caps
		CRDW and CRLS are wraparound repair sleeves for insulation and jacket repair on cables rated to 1 kV and for jacket repair only above 1 kV. CRDW has stainless steel channels to hold the rails and form a tube. CRLS is RAIL-LESS®. CRDW is unsuitable for 5 kV unshielded cables because of the stainless steel channels. They are acceptable for jacket repair on all shielded cables 5 - 35 kV. CCAP series end caps are for live-ending up to 1 kV, 1/C cables and for sealing all other cables.
600 V and 5 kV stub or in-line motor connections		600 V and 5kV, Motor Connection Kits
		CMTK motor connection kits are available in two configurations: the stub type which take up the least room in the motor box, and the in-line type where generous space is provided by the motor box. The CMTK 10V (stub) and CMTK 10L (in-line) series kits are rated to 1 kV (480 V motors). CMTK 50V (stub) and CMTK 50L (in-line) series kits are rated to 5 kV (2300 - 4160 V motors).

QUICK SELECTOR INDEX

CABLE ACCESSORY SELECTION GUIDE

SINGLE CORE CABLES

UNSHIELDED CABLES				PAGE
600 V				
1/C	600 V	XLPE or EPR/PVC or EPR/CSPE		252
5 kV				
1/C	5 kV	Unshielded XLPE or EPR/PVC or EPR/CSPE		252
SHIELDED CABLES				
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1/C	5 kV	90 - 115 mils	Copper Tape	253
1/C	5 kV	90 - 115 mils	Drain Wire	253
1/C	5 kV	115 mils	UniShield®	254
15 kV				
1/C	15 kV	175 - 220 mils	Copper tape	255
1/C	15 kV	175 - 220 mils	Drain Wire	255
1/C	15 kV	175 - 220 mils	UniShield®	256
1/C	15 kV	175 - 220 mils	LC Type (longitudinally corrugated)	256
1/C	15 kV	175 - 220 mils	Bare Concentric Neutral (URD)	257
1/C	15 kV	175 - 220 mils	Jacketed Concentric Neutral (JCN)	257
25 - 28 kV				
1/C	25 - 28 kV	260 - 280 mils	Copper Tape	258
1/C	25 - 28 kV	260 - 280 mils	Drain Wire	258
1/C	25 - 28 kV	260 - 280 mils	UniShield®	259
1/C	25 - 28 kV	260 - 280 mils	LC Type (longitudinally corrugated)	259
1/C	25 - 28 kV	260 - 280 mils	Bare Concentric Neutral (URD)	260
1/C	25 - 28 kV	260 - 280 mils	Jacketed Concentric Neutral (JCN)	260
35 kV				
1/C	35 kV	345 mils	Copper Tape	261
1/C	35 kV	345 mils	Drain Wire	261
1/C	35 kV	345 mils	UniShield®	262
1/C	35 kV	345 mils	LC Type (longitudinally corrugated)	262
1/C	35 kV	345 mils	Bare Concentric Neutral (URD)	263
1/C	35 kV	345 mils	Jacketed Concentric Neutral (JCN)	263

THREE CORE CABLES

UNSHIELDED CABLES				PAGE
600 V				
3/C Unarmored	600 V	XLPE or EPR/PVC or EPR/CSPE		264
3/C Armored	600 V	XLPE or EPR/PVC or EPR/CSPE		264
5 kV				
3/C Unarmored	5 kV	Unshielded XLPE or EPR/PVC or EPR/CSPE		265
3/C Armored	5 kV	Unshielded XLPE or EPR/PVC or EPR/CSPE		265
SHIELDED CABLES				
5 kV				
3/C Unarmored	5 kV	90 - 115 mils	Copper Tape	266
3/C Armored	5 kV	90 - 115 mils	Copper Tape	266
15 kV				
3/C Unarmored	15 kV	175 - 220 mils	Copper Tape	267
3/C Armored	15 kV	175 - 220 mils	Copper Tape	267
25 - 28 kV				
3/C Unarmored	25 - 28 kV	260 - 280 mils	Copper Tape	268
3/C Armored	25 - 28 kV	260 - 280 mils	Copper Tape	268
35 kV				
3/C Unarmored	35 kV	345 mils	Copper Tape	269
3/C Armored	35 kV	345 mils	Copper Tape	269

1/C, 600 V CABLE - XLP, EPR/PVC OR EPR/CSPE

CONDUCTOR SIZE	TERMINAL LUG SEAL*	STRAIGHT SPLICE*	END CAP	JACKET/INSULATION REPAIR	MOTOR CONNECTION KIT	
				RAILED	STUB TYPE	IN-LINE TYPE
#8	CFM-Blk-0750-6-lined	CFW-Blk-0500-6-lined	CCAP 0400-RL	Not Applicable	CMTK 12V	CMTK 11L
#6	CFM-Blk-0750-6-lined	CFW-Blk-0500-6-lined	CCAP 0400-RL	Not Applicable	CMTK 12V	CMTK 11L
#4	CFM-Blk-0750-6-lined	CFW-Blk-1100-6-lined	CCAP 0400-RL	CRDW-1-48	CMTK 12V	CMTK 11L
#2	CFM-Blk-1100-6-lined	CFW-Blk-1100-6-lined	CCAP 0400-RL	CRDW-1-48	CMTK 12V	CMTK 11L
#1	CFM-Blk-1100-6-lined	CFW-Blk-1500-6-lined	CCAP 0750-RL	CRDW-1-48	CMTK 13V	CMTK 11L
1/0	CFM-Blk-1100-6-lined	CFW-Blk-1500-6-lined	CCAP 0750-RL	CRDW-1-48	CMTK 13V	CMTK 11L
2/0	CFM-Blk-1100-6-lined	CFW-Blk-1500-6-lined	CCAP 0750-RL	CRDW-1-48	CMTK 13V	CMTK 11L
3/0	CFM-Blk-1100-6-lined	CFW-Blk-1500-6-lined	CCAP 0750-RL	CRDW-1-48	CMTK 13V	CMTK 11L
4/0	CFM-Blk-1100-6-lined	CFW-Blk-1500-6-lined	CCAP 0750-RL	CRDW-1-48	CMTK 13V	CMTK 11L
250	CFM-Blk-1700-6-lined	CFW-Blk-2000-6-lined	CCAP 1100-RL	CRDW-1-48	CMTK 14V	CMTK 12L
300	CFM-Blk-1700-6-lined	CFW-Blk-2000-6-lined	CCAP 1100-RL	CRDW-1-48	CMTK 14V	CMTK 12L
350	CFM-Blk-1700-6-lined	CFW-Blk-2000-6-lined	CCAP 1100-RL	CRDW-1-48	CMTK 14V	CMTK 12L
400	CFM-Blk-1700-6-lined	CFW-Blk-2000-6-lined	CCAP 1100-RL	CRDW-1-48	CMTK 14V	CMTK 12L
500	CFM-Blk-1700-6-lined	CFW-Blk-2700-6-lined	CCAP 1100-RL	CRDW-1-48	CMTK 14V	CMTK 12L
600	CFM-Blk-2050-6-lined	CFW-Blk-2700-6-lined	CCAP 1500-RL	CRDW-2-48	Not Available	CMTK 12L
750	CFM-Blk-2050-6-lined	CFW-Blk-2700-6-lined	CCAP 1500-RL	CRDW-2-48	Not Available	CMTK 12L
1000	CFM-Blk-2050-6-lined	CFW-Blk-2700-6-lined	CCAP 1500-RL	CRDW-2-48	Not Available	CMTK 12L

*The CFM and CFW tubing lengths should be purchased in 48 in lengths and cut to the length shown.
For example: for a #2 butt splice less than 4 in long, you would cut eight, 6 in pieces

1/C, 5 KV UNSHIELDED

90 - 115 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION INDOOR OR OUTDOOR	HEAT SHRINK STRAIGHT SPLICE WITH TUBE	END CAP	JACKET REPAIR SLEEVE	MOTOR CONNECTION KIT	
				RAILED	STUB TYPE	IN-LINE TYPE
	CT 50N Series	CJ N50 Series				
#8	-	-	CCAP 0750-RL	Not Applicable	CMTK 51V	CMTK 51L
#6	-	-	CCAP 0750-RL	Not Applicable	CMTK 51V	CMTK 51L
#4	CT 51N	CJ N51	CCAP 0750-RL	Not Applicable	CMTK 51V	CMTK 51L
#2	CT 51N	CJ N51	CCAP 0750-RL	Not Applicable	CMTK 51V	CMTK 51L
#1	CT 51N	CJ N51	CCAP 0750-RL	Not Applicable	CMTK 52V	CMTK 51L
1/0	CT 51N	CJ N51	CCAP 0750-RL	Not Applicable	CMTK 52V	CMTK 51L
2/0	CT 51N	CJ N51	CCAP 1500-RL	Not Applicable	CMTK 52V	CMTK 51L
3/0	CT 52N	CJ N52	CCAP 1500-RL	Not Applicable	CMTK 52V	CMTK 51L
4/0	CT 52N	CJ N52	CCAP 1500-RL	Not Applicable	CMTK 52V	CMTK 51L
250	CT 52N	CJ N52	CCAP 1500-RL	Not Applicable	CMTK 52V	CMTK 51L
300	CT 52N	CJ N52	CCAP 1500-RL	Not Applicable	CMTK 53V	CMTK 52L
350	CT 52N	CJ N52	CCAP 1500-RL	Not Applicable	CMTK 53V	CMTK 52L
400	CT 52N	CJ N53	CCAP 1500-RL	Not Applicable	CMTK 53V	CMTK 52L
500	CT 52N	CJ N53	CCAP 2050-RL	Not Applicable	CMTK 53V	CMTK 52L
600	CT 53N	CJ N53	CCAP 2050-RL	Not Applicable	CMTK 53V	CMTK 52L
750	CT 53N	CJ N53	CCAP 2050-RL	Not Applicable	CMTK 53V	CMTK 52L
1000	CT 53N	CJ N53	CCAP 2050-RL	Not Applicable	CMTK 53V	CMTK 52L

1/C, 5 KV SHIELDED CABLES - COPPER TAPE

GROUNDED 90 MILS OR UNGROUNDED 115 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINT		COLD SHRINK STRAIGHT JOINT	END CAP	JACKET REPAIR SLEEVE	MOTOR CONNECTION KITS	
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND			RAILED	STUB TYPE	IN-LINE TYPE
	CT G Series		CJ 20 Series		CSJ 20 Series				
#8	CT 081G	CT 081EG	CJ 821	CJ 821W	-	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#6	CT 081G	CT 081EG	CJ 821	CJ 821W	-	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#4	CT 081G	CT 081EG	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#2	CT 081G	CT 081EG	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#1	CT 081G	CT 081EG	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
1/0	CT 082G	CT 082EG	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
2/0	CT 082G	CT 082EG	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
3/0	CT 082G	CT 082EG	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
4/0	CT 082G	CT 082EG	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
250	CT 082G	CT 082EG	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
300	CT 083G	CT 083EG	CJ 822	CJ 822W	CSJ 822	CCAP 1500-RL	CDRW-1-48	CMTK 53V	CMTK 52L
350	CT 083G	CT 083EG	CJ 823	CJ 823W	CSJ 822	CCAP 1500-RL	CDRW-2-48	CMTK 53V	CMTK 52L
400	CT 083G	CT 083EG	CJ 823	CJ 823W	CSJ 822	CCAP 1500-RL	CDRW-2-48	CMTK 53V	CMTK 52L
500	CT 083G	CT 083EG	CJ 823	CJ 823W	CSJ 822	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
600	CT 084G	CT 084EG	CJ 823	CJ 823W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
750	CT 084G	CT 084EG	CJ 823	CJ 823W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
1000	CT 084G	CT 084EG	CJ 824	CJ 824W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L

1/C, 5 KV SHIELDED CABLES - DRAIN WIRE

GROUNDED 90 MILS OR UNGROUNDED 115 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINT		COLD SHRINK STRAIGHT JOINT	END CAP	JACKET REPAIR SLEEVE	MOTOR CONNECTION KITS	
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND			RAILED	STUB TYPE	IN-LINE TYPE
	CT G Series		CJ 20 Series		CSJ 20 Series				
#8	CT 081	CT 081E	CJ 821	CJ 821W	-	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#6	CT 081	CT 081E	CJ 821	CJ 821W	-	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#4	CT 081	CT 081E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#2	CT 081	CT 081E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#1	CT 081	CT 081E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
1/0	CT 082	CT 082E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
2/0	CT 082	CT 082E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
3/0	CT 082	CT 082E	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
4/0	CT 082	CT 082E	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
250	CT 082	CT 082E	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
300	CT 083	CT 083E	CJ 822	CJ 822W	CSJ 822	CCAP 1500-RL	CDRW-1-48	CMTK 53V	CMTK 52L
350	CT 083	CT 083E	CJ 823	CJ 823W	CSJ 822	CCAP 1500-RL	CDRW-2-48	CMTK 53V	CMTK 52L
400	CT 083	CT 083E	CJ 823	CJ 823W	CSJ 822	CCAP 1500-RL	CDRW-2-48	CMTK 53V	CMTK 52L
500	CT 083	CT 083E	CJ 823	CJ 823W	CSJ 822	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
600	CT 084	CT 084E	CJ 823	CJ 823W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
750	CT 084	CT 084E	CJ 823	CJ 823W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
1000	CT 084	CT 084E	CJ 824	CJ 824W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L

1/C, 5 KV SHIELDED CABLES - UNISHIELD®

8 KV GROUNDED OR 5 KV UNGROUNDED 115 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATIONS		HEAT SHRINK STRAIGHT JOINTS		COLD SHRINK STRAIGHT JOINT	END CAP	JACKET REPAIR SLEEVES	MOTOR CONNECTION KITS	
	INDOOR	OUTDOOR	W/TUBE	W/WRAP-AROUND			RAILED	STUB TYPE	IN-LINE TYPE
	CT G Series		CJ 20 Series		CSJ 20 Series				
#8	CT 081	CT 081E	CJ 821	CJ 821W	-	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#6	CT 081	CT 081E	CJ 821	CJ 821W	-	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#4	CT 081	CT 081E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#2	CT 081	CT 081E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 51V	CMTK 51L
#1	CT 081	CT 081E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
1/0	CT 082	CT 082E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
2/0	CT 082	CT 082E	CJ 821	CJ 821W	CSJ 820	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
3/0	CT 082	CT 082E	CJ 822	CJ 822W	CSJ 821	CCAP 1100-RL	CDRW-1-48	CMTK 52V	CMTK 51L
4/0	CT 082	CT 082E	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
250	CT 082	CT 082E	CJ 822	CJ 822W	CSJ 821	CCAP 1500-RL	CDRW-1-48	CMTK 52V	CMTK 51L
300	CT 083	CT 083E	CJ 822	CJ 822W	CSJ 822	CCAP 1500-RL	CDRW-1-48	CMTK 53V	CMTK 52L
350	CT 083	CT 083E	CJ 823	CJ 823W	CSJ 822	CCAP 1500-RL	CDRW-1-48	CMTK 53V	CMTK 52L
400	CT 083	CT 083E	CJ 823	CJ 823W	CSJ 822	CCAP 1500-RL	CDRW-2-48	CMTK 53V	CMTK 52L
500	CT 083	CT 083E	CJ 823	CJ 823W	CSJ 822	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
600	CT 084	CT 084E	CJ 823	CJ 823W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
750	CT 084	CT 084E	CJ 823	CJ 823W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L
1000	CT 084	CT 084E	CJ 824	CJ 824W	CSJ 823	CCAP 2750-RL	CDRW-2-48	CMTK 53V	CMTK 52L

1/C, 15 KV SHIELDED CABLES - COPPER TAPE

GROUNDED 175 MILS OR UNGROUNDED 220 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATIONS		HEAT SHRINK STRAIGHT JOINTS		COLD SHRINK STRAIGHT JOINTS	END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND			RAILED
	CT G Series		CJ 20 Series		CSJ 20 Series		
#4	CT 151G	CT 151EG	CJ 1521	CJ 1521W	-	CCAP 1700-RL	CRDW-1-48
#2	CT 151G	CT 151EG	CJ 1521	CJ 1521W	CSJ 1520	CCAP 1700-RL	CRDW-1-48
#1	CT 151G	CT 151EG	CJ 1521	CJ 1521W	CSJ 1521	CCAP 1700-RL	CRDW-1-48
1/0	CT 151G	CT 151EG	CJ 1521	CJ 1521W	CSJ 1521	CCAP 1700-RL	CRDW-1-48
2/0	CT 151G	CT 151EG	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-1-48
3/0	CT 151G	CT 151EG	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-2-48
4/0	CT 151G	CT 151EG	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-2-48
250	CT 152G	CT 152EG	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
300	CT 152G	CT 152EG	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
350	CT 152G	CT 152EG	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
400	CT 153G	CT 153EG	CJ 1522	CJ 1522W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
500	CT 153G	CT 153EG	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
600	CT 153G	CT 153EG	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
750	CT 153G	CT 153EG	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
1000	CT 153G	CT 153EG	CJ 1523	CJ 1524W	CSJ 1524	CCAP 2750-RL	CRDW-2-48

1/C, 15 KV SHIELDED CABLES - DRAIN WIRE

GROUNDED 175 MILS OR UNGROUNDED 220 MILS

CONDUCTOR SIZE	LIVEFRONT TERMINATION		STRAIGHT JOINT		COLD SHRINK STRAIGHT JOINTS	END CAP	JACKET REPAIR SLEEVE
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND			RAILED
	CT G Series		CJ 20 Series		CSJ 20 Series		
#4	CT 151	CT 151E	CJ 1521	CJ 1521W	-	CCAP 1700-RL	CRDW-1-48
#2	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1520	CCAP 1700-RL	CRDW-1-48
#1	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1521	CCAP 1700-RL	CRDW-1-48
1/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1521	CCAP 1700-RL	CRDW-1-48
2/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-1-48
3/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-2-48
4/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-2-48
250	CT 152	CT 152E	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
300	CT 152	CT 152E	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
350	CT 152	CT 152E	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
400	CT 153	CT 153E	CJ 1522	CJ 1522W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
500	CT 153	CT 153E	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
600	CT 153	CT 153E	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
750	CT 153	CT 153E	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
1000	CT 153	CT 153E	CJ 1524	CJ 1524W	CSJ 1524	CCAP 2750-RL	CRDW-2-48

1/C, 15 KV SHIELDED CABLES - UNISHIELD®

GROUNDED 175 MILS OR UNGROUNDED 220 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS		COLD SHRINK STRAIGHT JOINTS	END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND			RAILED
	CT G Series		CJ 20 Series		CSJ 20 Series		
#4	CT 151	CT 151E	CJ 1521	CJ 1521W	-	CCAP 1700-RL	CRDW-1-48
#2	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1520	CCAP 1700-RL	CRDW-1-48
#1	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1521	CCAP 1700-RL	CRDW-1-48
1/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1521	CCAP 1700-RL	CRDW-1-48
2/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-1-48
3/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-1-48
4/0	CT 151	CT 151E	CJ 1521	CJ 1521W	CSJ 1522	CCAP 1700-RL	CRDW-2-48
250	CT 152	CT 152E	CJ 1522	CJ 1522W	CSJ 1522	CCAP 1700-RL	CRDW-2-48
300	CT 152	CT 152E	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
350	CT 152	CT 152E	CJ 1522	CJ 1522W	CSJ 1522	CCAP 2750-RL	CRDW-2-48
400	CT 153	CT 153E	CJ 1522	CJ 1522W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
500	CT 153	CT 153E	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
600	CT 153	CT 153E	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
750	CT 153	CT 153E	CJ 1523	CJ 1523W	CSJ 1523	CCAP 2750-RL	CRDW-2-48
1000	CT 153	CT 153E	CJ 1524	CJ 1524W	CSJ 1524	CCAP 2750-RL	CRDW-2-48

1/C, 15 KV SHIELDED CABLES - LC TYPE

GROUNDED 175 MILS OR UNGROUNDED 220 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINT		END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR	W/TUBE*	W/WRAP AROUND		RAILED
	CT LC Series		CJ LC Series			
#4	CT 151LC	CT 151LCE	CJ 1531LCT	CJ 1531LC	CCAP 1700-RL	CRDW-1-48
#2	CT 151LC	CT 151LCE	CJ 1531LCT	CJ 1531LC	CCAP 1700-RL	CRDW-1-48
#1	CT 151LC	CT 151LCE	CJ 1531LCT	CJ 1531LC	CCAP 1700-RL	CRDW-1-48
1/0	CT 151LC	CT 151LCE	CJ 1531LCT	CJ 1531LC	CCAP 1700-RL	CRDW-1-48
2/0	CT 151LC	CT 151LCE	CJ 1531LCT	CJ 1531LC	CCAP 1700-RL	CRDW-1-48
3/0	CT 152LC	CT 152LCE	CJ 1532LCT	CJ 1532LC	CCAP 1700-RL	CRDW-2-48
4/0	CT 152LC	CT 152LCE	CJ 1532LCT	CJ 1532LC	CCAP 2750-RL	CRDW-2-48
250	CT 152LC	CT 152LCE	CJ 1532LCT	CJ 1532LC	CCAP 2750-RL	CRDW-2-48
300	CT 152LC	CT 152LCE	CJ 1532LCT	CJ 1532LC	CCAP 2750-RL	CRDW-2-48
350	CT 152LC	CT 152LCE	CJ 1532LCT	CJ 1532LC	CCAP 2750-RL	CRDW-2-48
400	CT 153LC	CT 153LCE	CJ 1532LCT	CJ 1532LC	CCAP 2750-RL	CRDW-2-48
500	CT 153LC	CT 153LCE	CJ 1533LCT	CJ 1533LC	CCAP 2750-RL	CRDW-2-48
600	CT 153LC	CT 153LCE	CJ 1533LCT	CJ 1533LC	CCAP 2750-RL	CRDW-2-48
750	CT 153LC	CT 153LCE	CJ 1533LCT	CJ 1533LC	CCAP 2750-RL	CRDW-2-48
1000	CT 153LC	CT 153LCE	CJ 1534LCT	CJ 1534LC	CCAP 2750-RL	CRDW-2-48

*Special order.

1/C, 15 KV SHIELDED CABLES - BARE CONCENTRIC NEUTRAL

GROUNDED 175 MILS OR UNGROUNDED 220 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS NO JACKET	HEAT SHINK REPAIR JOINTS NO JACKET	COLD SHRINK STRAIGHT JOINTS	END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR					RAILED
	CT UD Series		CJ 10 Series	CJ R10 Series	CJ 10 Series		
#4	CT 151UD	CT 151 UDE	CJ 1511	CJ R1511	-	CCAP 1700-RL	Not Applicable
#2	CT 151UD	CT 151 UDE	CJ 1511	CJ R1511	CSJ 1510	CCAP 1700-RL	Not Applicable
#1	CT 151UD	CT 151 UDE	CJ 1511	CJ R1511	CSJ 1511	CCAP 1700-RL	Not Applicable
1/0	CT 151UD	CT 151 UDE	CJ 1511	CJ R1511	CSJ 1511	CCAP 1700-RL	Not Applicable
2/0	CT 151UD	CT 151 UDE	CJ 1511	CJ R1511	CSJ 1512	CCAP 1700-RL	Not Applicable
3/0	CT 151UD	CT 151 UDE	CJ 1511	CJ R1511	CSJ 1512	CCAP 1700-RL	Not Applicable
4/0	CT 151UD	CT 151 UDE	CJ 1511	CJ R1511	CSJ 1512	CCAP 1700-RL	Not Applicable
250	CT 152UD	CT 152 UDE	CJ 1512	CJ R1512	CSJ 1512	CCAP 2750-RL	Not Applicable
300	CT 152UD	CT 152 UDE	CJ 1512	CJ R1512	CSJ 1512	CCAP 2750-RL	Not Applicable
350	CT 152UD	CT 152UDE	CJ 1512	CJ R1512	CSJ 1513	CCAP 2750-RL	Not Applicable
400	CT 153UD	CT 153UDE	CJ 1512	CJ R1512	CSJ 1513	CCAP 2750-RL	Not Applicable
500	CT 153UD	CT 153UDE	CJ 1513	CJ R1513	CSJ 1513	CCAP 2750-RL	Not Applicable
600	CT 153UD	CT 153UDE	CJ 1513	CJ R1513	CSJ 1513	CCAP 2750-RL	Not Applicable
750	CT 153UD	CT 153UDE	CJ 1513	CJ R1513	CSJ 1514	CCAP 2750-RL	Not Applicable
1000	CT 153UD	CT 153UDE	CJ 1514	CJ R1514	CSJ 1514	CCAP 2750-RL	Not Applicable

1/C, 15 KV SHIELDED CABLES - JACKETED CONCENTRIC NEUTRAL

GROUNDED 175 MILS OR UNGROUNDED 220 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS W/WRAP AROUND	HEAT SHRINK REPAIR JOINTS W/WRAP AROUND	COLD SHRINK STRAIGHT JOINTS	END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR					RAILED
	CT UD Series		CJ 10 Series	CJ R10 Series	CJ 10 Series		
#4	CT 151UD	CT 151UDE	CJ 1511J	CJ R1511J	-	CCAP 1700-RL	CRDW-1-48
#2	CT 151UD	CT 151UDE	CJ 1511J	CJ R1511J	CSJ 1510	CCAP 1700-RL	CRDW-1-48
#1	CT 151UD	CT 151UDE	CJ 1511J	CJ R1511J	CSJ 1511	CCAP 1700-RL	CRDW-1-48
1/0	CT 151UD	CT 151UDE	CJ 1511J	CJ R1511J	CSJ 1511	CCAP 1700-RL	CRDW-1-48
2/0	CT 151UD	CT 151UDE	CJ 1511J	CJ R1511J	CSJ 1512	CCAP 1700-RL	CRDW-1-48
3/0	CT 152UD	CT 152UDE	CJ 1512J	CJ R1512J	CSJ 1512	CCAP 1700-RL	CRDW-2-48
4/0	CT 152UD	CT 152UDE	CJ 1512J	CJ R1512J	CSJ 1512	CCAP 2750-RL	CRDW-2-48
250	CT 152UD	CT 152UDE	CJ 1512J	CJ R1512J	CSJ 1512	CCAP 2750-RL	CRDW-2-48
300	CT 152UD	CT 152UDE	CJ 1512J	CJ R1512J	CSJ 1512	CCAP 2750-RL	CRDW-2-48
350	CT 152UD	CT 152UDE	CJ 1512J	CJ R1512J	CSJ 1513	CCAP 2750-RL	CRDW-2-48
400	CT 153UD	CT 153UDE	CJ 1512J	CJ R1512J	CSJ 1513	CCAP 2750-RL	CRDW-2-48
500	CT 153UD	CT 153UDE	CJ 1513J	CJ R1513J	CSJ 1513	CCAP 2750-RL	CRDW-2-48
600	CT 153UD	CT 153UDE	CJ 1513J	CJ R1513J	CSJ 1513	CCAP 2750-RL	CRDW-2-48
750	CT 153UD	CT 153UDE	CJ 1513J	CJ R1513J	CSJ 1514	CCAP 2750-RL	CRDW-2-48
1000	CT 153UD	CT 153UDE	CJ 1514J	CJ R1514J	CSJ 1514	CCAP 2750-RL	CRDW-2-48

1/C, 25 - 28 KV SHIELDED CABLES - COPPER TAPE

GROUNDED 260 - 280 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINT		END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND		RAILED
	CT G Series		CJ 20 Series			
#1	CT 251G	CT 251EG	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
1/0	CT 251G	CT 251EG	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
2/0	CT 251G	CT 251EG	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
3/0	CT 251G	CT 251EG	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
4/0	CT 251G	CT 251EG	CJ 2521	CJ 2521W	CCAP 2750-RL	CRDW-2-48
250	CT 251G	CT 251EG	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
300	CT 251G	CT 251EG	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
350	CT 252G	CT 252EG	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
400	CT 252G	CT 252EG	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-3-48
500	CT 252G	CT 252EG	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-3-48
600	CT 252G	CT 252EG	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48
750	CT 252G	CT 252EG	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48
1000	CT 252G	CT 252EG	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48

1/C, 25 - 28 KV SHIELDED CABLES - DRAIN WIRE

GROUNDED 260 - 280 MILS

CONDUCTOR SIZE	LIVEFRONT TERMINATION		HEAT SHRINK STRAIGHT JOINT		END CAP	JACKET REPAIR SLEEVE
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND		RAILED
	CT G Series		CJ 20 Series			
#1	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
1/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
2/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
3/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
4/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 2750-RL	CRDW-2-48
250	CT 251	CT 251E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
300	CT 251	CT 251E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
350	CT 252	CT 252E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
400	CT 252	CT 252E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-3-48
500	CT 252	CT 252E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-3-48
600	CT 252	CT 252E	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48
750	CT 252	CT 252E	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48
1000	CT 252	CT 252E	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48

1/C, 25 - 28 KV SHIELDED CABLES - UNISHIELD®

GROUNDED 260 - 280 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINT		END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND		RAILED
	CT G Series		CJ 20 Series			
#1	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
1/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
2/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
3/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
4/0	CT 251	CT 251E	CJ 2521	CJ 2521W	CCAP 1700-RL	CRDW-2-48
250	CT 251	CT 251E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
300	CT 251	CT 251E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
350	CT 252	CT 252E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
400	CT 252	CT 252E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-2-48
500	CT 252	CT 252E	CJ 2522	CJ 2522W	CCAP 2750-RL	CRDW-3-48
600	CT 252	CT 252E	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48
750	CT 252	CT 252E	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48
1000	CT 252	CT 252E	Not Available	CJ 2523W	CCAP 2750-RL	CRDW-3-48

1/C, 25 - 28 KV SHIELDED CABLES - LC TYPE

GROUNDED 260 - 280 MILS

CONDUCTOR SIZE	LIVEFRONT TERMINATION		HEAT SHRINK STRAIGHT JOINT		END CAP	JACKET REPAIR SLEEVE
	INDOOR	OUTDOOR	W/TUBE*	W/WRAP AROUND		RAILED
	CT LC Series		CJ LC Series			
#1	CT 251LC	CT 251LCE	CJ 2531LCT	CJ 2531LC	CCAP 1700-RL	CRDW-2-48
1/0	CT 251LC	CT 251LCE	CJ 2531LCT	CJ 2531LC	CCAP 1700-RL	CRDW-2-48
2/0	CT 251LC	CT 251LCE	CJ 2531LCT	CJ 2531LC	CCAP 1700-RL	CRDW-2-48
3/0	CT 251LC	CT 251LCE	CJ 2531LCT	CJ 2531LC	CCAP 1700-RL	CRDW-2-48
4/0	CT 251LC	CT 251LCE	CJ 2531LCT	CJ 2531LC	CCAP 2750-RL	CRDW-2-48
250	CT 251LC	CT 251LCE	CJ 2532LCT	CJ 2532LC	CCAP 2750-RL	CRDW-2-48
300	CT 251LC	CT 251LCE	CJ 2532LCT	CJ 2532LC	CCAP 2750-RL	CRDW-2-48
350	CT 252LC	CT252LCE	CJ 2532LCT	CJ 2532LC	CCAP 2750-RL	CRDW-2-48
400	CT 252LC	CT252LCE	CJ 2532LCT	CJ 2532LC	CCAP 2750-RL	CRDW-3-48
500	CT 252LC	CT252LCE	CJ 2532LCT	CJ 2532LC	CCAP 2750-RL	CRDW-3-48
600	CT 252LC	CT252LCE	Not Available	CJ 2533LC	CCAP 2750-RL	CRDW-3-48
750	CT 252LC	CT252LCE	Not Available	CJ 2533LC	CCAP 2750-RL	CRDW-3-48
1000	CT 252LC	CT252LCE	Not Available	CJ 2533LC	CCAP 2750-RL	CRDW-3-48

*Special order

1/C, 25 - 28 KV SHIELDED CABLES - BARE CONCENTRIC NEUTRAL

GROUNDED 260 - 280 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS NO JACKET	HEAT SHRINK REPAIR JOINTS NO JACKET	END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR				RAILED
	CT UD Series		CJ 10 Series	CJ R10 Series		
#1	CT 251UD	CT 251UDE	CJ 2511	CJ R2511	CCAP 1700-RL	Not Applicable
1/0	CT 251UD	CT 251UDE	CJ 2511	CJ R2511	CCAP 1700-RL	Not Applicable
2/0	CT 251UD	CT 251UDE	CJ 2511	CJ R2511	CCAP 1700-RL	Not Applicable
3/0	CT 251UD	CT 251UDE	CJ 2511	CJ R2511	CCAP 1700-RL	Not Applicable
4/0	CT 251UD	CT 251UDE	CJ 2511	CJ R2511	CCAP 2750-RL	Not Applicable
250	CT 251UD	CT 251UDE	CJ 2512	CJ R2512	CCAP 2750-RL	Not Applicable
300	CT 251UD	CT 251UDE	CJ 2512	CJ R2512	CCAP 2750-RL	Not Applicable
350	CT 251UD	CT 251UDE	CJ 2512	CJ R2512	CCAP 2750-RL	Not Applicable
400	CT 252UD	CT 252UDE	CJ 2512	CJ R2512	CCAP 2750-RL	Not Applicable
500	CT 252UD	CT 252UDE	CJ 2512	CJ R2512	CCAP 2750-RL	Not Applicable
600	CT 252UD	CT 252UDE	CJ 2513	CJ R2513	CCAP 2750-RL	Not Applicable
750	CT 252UD	CT 252UDE	CJ 2513	CJ R2513	CCAP 2750-RL	Not Applicable
1000	CT 252UD	CT 252UDE	CJ 2513	CJ R2513	CCAP 2750-RL	Not Applicable

1/C, 25 - 28 KV SHIELDED CABLES - JACKETED CONCENTRIC NEUTRAL

GROUNDED 260 - 280 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS W/ WRAP AROUND	HEAT SHRINK REPAIR JOINTS W/ WRAP AROUND	END CAP	JACKET REPAIR SLEEVE
	INDOOR	OUTDOOR				RAILED
	CT UD Series		CJ 10 Series			
#1	CT 251UD	CT 251UDE	CJ 2511J	CJ R2511J	CCAP 1700-RL	CRDW-2-48
1/0	CT 251UD	CT 251UDE	CJ 2511J	CJ R2511J	CCAP 1700-RL	CRDW-2-48
2/0	CT 251UD	CT 251UDE	CJ 2511J	CJ R2511J	CCAP 1700-RL	CRDW-2-48
3/0	CT 251UD	CT 251UDE	CJ 2511J	CJ R2511J	CCAP 1700-RL	CRDW-2-48
4/0	CT 251UD	CT 251UDE	CJ 2511J	CJ R2512J	CCAP 2750-RL	CRDW-2-48
250	CT 251UD	CT 251UDE	CJ 2512J	CJ 2512J	CCAP 2750-RL	CRDW-2-48
300	CT 251UD	CT 251UDE	CJ 2512J	CJ 2512J	CCAP 2750-RL	CRDW-2-48
350	CT 252UD	CT 252UDE	CJ 2512J	CJ 2512J	CCAP 2750-RL	CRDW-2-48
400	CT 252UD	CT 252UDE	CJ 2512J	CJ 2512J	CCAP 2750-RL	CRDW-3-48
500	CT 252UD	CT 252UDE	CJ 2512J	CJ 2512J	CCAP 2750-RL	CRDW-3-48
600	CT 252UD	CT 252UDE	CJ 2513J	CJ 2513J	CCAP 2750-RL	CRDW-3-48
750	CT 252UD	CT 252UDE	CJ 2513J	CJ 2513J	CCAP 2750-RL	CRDW-3-48
1000	CT 252UD	CT 252UDE	CJ 2513J	CJ 2513J	CCAP 2750-RL	CRDW-3-48

1/C, 35 KV SHIELDED CABLES - COPPER TAPE

GROUNDED 345 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS		END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND		RAILED
	CT G Series		CJ 20 Series			
#1	CT 351G	CT 351EG	-	-	CCAP 2050-RL	CRDW-2-48
1/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
2/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
3/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
4/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
250	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2750-RL	CRDW-2-48
300	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-2-48
350	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-2-48
400	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-3-48
500	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-3-48
600	CT 352G	CT 352EG	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
750	CT 352G	CT 352EG	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
1000	CT 352G	CT 352EG	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
1500	-	-	Not Available	-	CCAP 2750-RL	CRDW-3-48

1/C, 35 KV SHIELDED CABLES - DRAIN WIRE

GROUNDED 345 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHINK STRAIGHT JOINTS		END CAP	JACKET REPAIR SLEEVE
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND		RAILED
	CT G Series		CJ 20 Series			
#1	CT 351	CT 351E	-	-	CCAP 2050-RL	CRDW-2-48
1/0	CT 351	CT 351E	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
2/0	CT 351	CT 351E	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
3/0	CT 351	CT 351E	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
4/0	CT 351	CT 351E	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
250	CT 351	CT 351E	Not Available	CJ 3521W	CCAP 2750-RL	CRDW-2-48
300	CT 352	CT 352E	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-2-48
350	CT 352	CT 352E	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-2-48
400	CT 352	CT 352E	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-3-48
500	CT 352	CT 352E	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-3-48
600	CT 352	CT 352E	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-3-48
750	CT 352	CT 352E	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
1000	CT 352	CT 352E	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
1500	-	-	Not Available	-	CCAP 2750-RL	CRDW-3-48

1/C, 35 KV SHIELDED CABLES - UNISHIELD®

GROUNDED 345 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS		END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR	W/TUBE	W/WRAP AROUND		RAILED
	CT G Series		CJ 20 Series			
#1	CT 351G	CT 351EG	-	-	CCAP 2050-RL	CRDW-2-48
1/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
2/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
3/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
4/0	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2050-RL	CRDW-2-48
250	CT 351G	CT 351EG	Not Available	CJ 3521W	CCAP 2750-RL	CRDW-2-48
300	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-2-48
350	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-2-48
400	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-3-48
500	CT 352G	CT 352EG	Not Available	CJ 3522W	CCAP 2750-RL	CRDW-3-48
600	CT 352G	CT 352EG	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
750	CT 352G	CT 352EG	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
1000	CT 352G	CT 352EG	Not Available	CJ 3523W	CCAP 2750-RL	CRDW-3-48
1500	-	-	Not Available	-	CCAP 2750-RL	CRDW-3-48

1/C, 35 KV SHIELDED CABLES - LC TYPE

GROUNDED 345 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS		END CAP	JACKET REPAIR SLEEVE
	INDOOR	OUTDOOR	W/TUBE*	W/WRAP AROUND		RAILED
	CT LC Series		CJ LC Series			
1.01 in	CT 351LC	CT 351LCE	-	-	CCAP 2050-RL	CRDW-2-48
1/0	CT 351LC	CT 351LCE	CJ 3531LCT	CJ 3531LC	CCAP 2050-RL	CRDW-2-48
2/0	CT 351LC	CT 351LCE	CJ 3531LCT	CJ 3531LC	CCAP 2050-RL	CRDW-2-48
3/0	CT 351LC	CT 351LCE	CJ 3531LCT	CJ 3531LC	CCAP 2050-RL	CRDW-2-48
4/0	CT 351LC	CT 351LCE	CJ 3531LCT	CJ 3531LC	CCAP 2050-RL	CRDW-2-48
250	CT 351LC	CT 351LCE	Not Available	CJ 3531LC	CCAP 2750-RL	CRDW-2-48
300	CT 352LC	CT 352LCE	Not Available	CJ 3532LC	CCAP 2750-RL	CRDW-2-48
350	CT 352LC	CT 352LCE	Not Available	CJ 3532LC	CCAP 2750-RL	CRDW-2-48
400	CT 352LC	CT 352LCE	Not Available	CJ 3532LC	CCAP 2750-RL	CRDW-3-48
500	CT 352LC	CT 352LCE	Not Available	CJ 3532LC	CCAP 2750-RL	CRDW-3-48
600	CT 352LC	CT 352LCE	Not Available	CJ 3532LC	CCAP 2750-RL	CRDW-3-48
750	CT 352LC	CT 352LCE	Not Available	CJ 3533LC	CCAP 2750-RL	CRDW-3-48
1000	CT 352LC	CT 352LCE	Not Available	CJ 3533LC	CCAP 2750-RL	CRDW-3-48

*Special order

1/C, 35 KV SHIELDED CABLES - BARE CONCENTRIC NEUTRAL

GROUNDED 345 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS NO JACKET	HEAT SHRINK REPAIR JOINTS NO JACKET	END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR				RAILED
	CT UD Series		CJ 10 Series	CJ R10 Series		
#1	CT 351UD	CT 351UDE	CJ 3511	CJ R3511	CCAP 2050-RL	Not Applicable
1/0	CT 351UD	CT 351UDE	CJ 3511	CJ R3511	CCAP 2050-RL	Not Applicable
2/0	CT 351UD	CT 351UDE	CJ 3511	CJ R3511	CCAP 2050-RL	Not Applicable
3/0	CT 351UD	CT 351UDE	CJ 3511	CJ R3511	CCAP 2050-RL	Not Applicable
4/0	CT 351UD	CT 351UDE	CJ 3511	CJ R3511	CCAP 2050-RL	Not Applicable
250	CT 351UD	CT 351UDE	CJ 3511	CJ R3511	CCAP 2750-RL	Not Applicable
300	CT 352UD	CT 352UDE	CJ 3512	CJ R3512	CCAP 2750-RL	Not Applicable
350	CT 352UD	CT 352UDE	CJ 3512	CJ R3512	CCAP 2750-RL	Not Applicable
400	CT 352UD	CT 352UDE	CJ 3512	CJ R3512	CCAP 2750-RL	Not Applicable
500	CT 352UD	CT 352UDE	CJ 3512	CJ R3512	CCAP 2750-RL	Not Applicable
600	CT 352UD	CT 352UDE	CJ 3512	CJ R3512	CCAP 2750-RL	Not Applicable
750	CT 352UD	CT 352UDE	CJ 3513	CJ R3513	CCAP 2750-RL	Not Applicable
1000	CT 352UD	CT 352UD	CJ 3513	CJ R3513	CCAP 2750-RL	Not Applicable
1500	-	-	-	-	CCAP 2750-RL	Not Applicable

1/C, 35 KV SHIELDED CABLES - JACKETED CONCENTRIC NEUTRAL

GROUNDED 345 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINTS W/ WRAP AROUND	HEAT SHINK REPAIR JOINTS W/ WRAP AROUND	END CAP	JACKET REPAIR SLEEVES
	INDOOR	OUTDOOR				RAILED
	CT UD Series		CJ 10 Series			
#1	CT 351UD	CT 351UDE	CJ 3511J	Special Order	CCAP 2050-RL	CRDW-2-48
1/0	CT 351UD	CT 351UDE	CJ 3511J	Special Order	CCAP 2050-RL	CRDW-2-48
2/0	CT 351UD	CT 351UDE	CJ 3511J	Special Order	CCAP 2050-RL	CRDW-2-48
3/0	CT 351UD	CT 351UDE	CJ 3511J	Special Order	CCAP 2050-RL	CRDW-2-48
4/0	CT 351UD	CT 351UDE	CJ 3511J	Special Order	CCAP 2050-RL	CRDW-2-48
250	CT 351UD	CT 351UDE	CJ 3511J	Special Order	CCAP 2750-RL	CRDW-2-48
300	CT 352UD	CT 352UDE	CJ 3512J	Special Order	CCAP 2750-RL	CRDW-2-48
350	CT 352UD	CT 352UDE	CJ 3512J	Special Order	CCAP 2750-RL	CRDW-2-48
400	CT 352UD	CT 352UDE	CJ 3512J	Special Order	CCAP 2750-RL	CRDW-3-48
500	CT 352UD	CT 352UDE	CJ 3512J	Special Order	CCAP 2750-RL	CRDW-3-48
600	CT 352UD	CT 352UDE	CJ 3512J	Special Order	CCAP 2750-RL	CRDW-3-48
750	CT 352UD	CT 352UDE	CJ 3513J	Special Order	CCAP 2750-RL	CRDW-3-48
1000	CT 352UD	CT 352UDE	CJ 3513J	Special Order	CCAP 2750-RL	CRDW-3-48
1500	-	-	-	-	CCAP 2750-RL	CRDW-3-48

3/C, 600 V - 1 KV CABLES

XLP, EPR/PVC OR EPR/CSPE

CONDUCTOR SIZE	LUG SEAL*	SEALING BOOT	STRAIGHT SPLICES**	OVERALL SLEEVE	END CAP	JACKET REPAIR SLEEVES	MOTOR CONNECTION KITS	
	3 EACH	PLUS 1	3 EACH	PLUS 1		RAILED	STUB TYPE	IN-LINE TYPE
#8	CFM-0750-6	CCB-0150	CFW-0500-6	CRDW-2-24	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#6	CFM-0750-6	CCB-0150	CFW-0500-6	CRDW-2-24	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#4	CFM-0750-6	CCB-0150	CFW-1100-6	CRDW-2-24	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#2	CFM-1100-6	CCB-0220	CFW-1100-6	CRDW-2-24	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#1	CFM-1100-6	CCB-0220	CFW-1500-8	CRDW-3-36	CCAP 1700-RL	CRDW-2-48	CMTK 13V	CMTK 11L
1/0	CFM-1100-6	CCB-0220	CFW-1500-8	CRDW-3-36	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
2/0	CFM-1100-6	CCB-0220	CFW-1500-8	CRDW-3-36	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
3/0	CFM-1100-6	CCB-0220	CFW-1500-8	CRDW-3-36	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
4/0	CFM-1100-6	CCB-0350	CFW-1500-8	CRDW-3-36	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
250	CFM-1700-6	CCB-0350	CFW-2000-12	CRDW-4-48	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
300	CFM-1700-6	CCB-0350	CFW-2000-12	CRDW-4-48	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
350	CFM-1700-6	CCB-0350	CFW-2000-12	CRDW-4-48	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
400	CFM-1700-6	CCB-0430	CFW-2000-12	CRDW-4-48	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
500	CFM-1700-6	CCB-0430	CFW-2700-12	CRDW-4-48	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
600	CFM-2050-6	CCB-0430	CFW-2700-12	CRDW-4-48	CCAP 4700-RL	CRDW-3-48	Not Available	CMTK 12L
750	CFM-2050-6	CCB-0430	CFW-2700-12	CRDW-4-48	CCAP 4700-RL	CRDW-3-48	Not Available	CMTK 12L
1000	CFM-2050-6	CCB-0430	CFW-2700-12	CRDW-4-48	CCAP 4700-RL	CRDW-4-48	Not Available	CMTK 12L

*CFM Example: For two 2/0 terminal lug seals, you would need six, 6" pieces. Ground wires must be blocked and encapsulated in 2" wide black sealant CTSB.
**CFW Example: For a 2/0 butt splice less than 4" long you would cut six 8" pieces to make six splices. The CRDW wraparound sleeve is used to seal from jacket to jacket across the overall three conductor cable. The maximum connector length is the tubing length less 4", i.e. 6" long tubes can accommodate 4" long connectors.

3/C, ARMORED 600 V CABLES

XLP, EPR/PVC OR EPR/CSPE

CONDUCTOR SIZE	LUG SEAL*	SEALING BOOT	STRAIGHT SPLICES	END CAP	JACKET REPAIR SLEEVES	MOTOR CONNECTION KITS	
	3 EACH	PLUS 1			RAILED	STUB TYPE	IN-LINE TYPE
#8	CFM-0750-6	CCB-0150	Not Available; Consult Factory	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#6	CFM-0750-6	CCB-0150	Not Available; Consult Factory	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#4	CFM-0750-6	CCB-0150	Not Available; Consult Factory	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#2	CFM-1100-6	CCB-0220	Not Available; Consult Factory	CCAP 1700-RL	CRDW-2-48	CMTK 12V	CMTK 11L
#1	CFM-1100-6	CCB-0220	Not Available; Consult Factory	CCAP 1700-RL	CRDW-2-48	CMTK 13V	CMTK 11L
1/0	CFM-1100-6	CCB-0220	Not Available; Consult Factory	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
2/0	CFM-1100-6	CCB-0220	Not Available; Consult Factory	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
3/0	CFM-1100-6	CCB-0220	Not Available; Consult Factory	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
4/0	CFM-1100-6	CCB-0350	Not Available; Consult Factory	CCAP 2050-RL	CRDW-2-48	CMTK 13V	CMTK 11L
250	CFM-1700-6	CCB-0350	Not Available; Consult Factory	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
300	CFM-1700-6	CCB-0350	Not Available; Consult Factory	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
350	CFM-1700-6	CCB-0350	Not Available; Consult Factory	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
400	CFM-1700-6	CCB-0430	Not Available; Consult Factory	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
500	CFM-1700-6	CCB-0430	Not Available; Consult Factory	CCAP 3500-RL	CRDW-3-48	CMTK 14V	CMTK 12L
600	CFM-2050-6	CCB-0430	Not Available; Consult Factory	CCAP 4700-RL	CRDW-3-48	Not Available	CMTK 12L
750	CFM-2050-6	CCB-0430	Not Available; Consult Factory	CCAP 4700-RL	CRDW-3-48	Not Available	CMTK 12L
1000	CFM-2050-6	CCB-0430	Not Available; Consult Factory	CCAP 4700-RL	CRDW-4-48	Not Available	CMTK 12L

*CFM Example: For two 2/0 terminal lug seals, you would need six, 6" pieces. Ground wires must be blocked and encapsulated in 2" wide black sealant CTSB.

3/C, 5 KV UNSHIELDED CABLES

90 - 115 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION INDOOR OR OUTDOOR	HEAT SHRINK STRAIGHT SPLICE	END CAP	JACKET REPAIR SLEEVES	MOTOR CONNECTION KITS	
				RAILED	STUB TYPE	IN-LINE TYPE
	CT 50N3 Series	CJ N50 Series				
#8	CT 51N3	CJ N351	CCAP 2050-RL	CRDW-2-48	CMTK 51V	CMTK 51L
#6	CT 51N3	CJ N351	CCAP 2050-RL	CRDW-2-48	CMTK 51V	CMTK 51L
#4	CT 51N3	CJ N351	CCAP 2050-RL	CRDW-2-48	CMTK 51V	CMTK 51L
#2	CT 51N3	CJ N351	CCAP 2050-RL	CRDW-2-48	CMTK 51V	CMTK 51L
#1	CT 51N3	CJ N351	CCAP 2050-RL	CRDW-2-48	CMTK 52V	CMTK 51L
1/0	CT 51N3	CJ N351	CCAP 2050-RL	CRDW-2-48	CMTK 52V	CMTK 51L
2/0	CT 51N3	CJ N351	CCAP 2750-RL	CRDW-2-48	CMTK 52V	CMTK 51L
3/0	CT 52N3	CJ N352	CCAP 2750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
4/0	CT 52N3	CJ N352	CCAP 2750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
250	CT 52N3	CJ N352	CCAP 2750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
300	CT 52N3	CJ N352	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
350	CT 52N3	CJ N352	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
400	CT 52N3	CJ N353	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
500	CT 52N3	CJ N353	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
600	CT 53N3	CJ N353	CCAP 4700-RL	CRDW-3-48	CMTK 53V	CMTK 52L
750	CT 53N3	CJ N353	CCAP 4700-RL	CRDW-4-48	CMTK 53V	CMTK 52L
1000	CT 53N3	CJ N353	CCAP 4700-RL	CRDW-4-48	CMTK 53V	CMTK 52L

3/C, ARMORED 5 KV UNSHIELDED CABLES

90 - 115 MILS

CONDUCTOR SIZE	HEAT SHRINK TERMINATION INDOOR OR OUTDOOR	HEAT SHRINK STRAIGHT SPLICE	END CAP	JACKET REPAIR SLEEVES	MOTOR CONNECTION KITS	
				RAILED	STUB TYPE	IN-LINE TYPE
	CT 50N3 Series	CJ N50 Series				
#8	CT 51N3	CJ N3A51	CCAP 0750-RL	CRDW-3-48	CMTK 51V	CMTK 51L
#6	CT 51N3	CJ N3A51	CCAP 0750-RL	CRDW-3-48	CMTK 51V	CMTK 51L
#4	CT 51N3	CJ N3A51	CCAP 0750-RL	CRDW-3-48	CMTK 51V	CMTK 51L
#2	CT 51N3	CJ N3A51	CCAP 0750-RL	CRDW-3-48	CMTK 51V	CMTK 51L
#1	CT 51N3	CJ N3A51	CCAP 0750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
1/0	CT 51N3	CJ N3A51	CCAP 0750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
2/0	CT 51N3	CJ N3A51	CCAP 1500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
3/0	CT 52N3	CJ N3A52	CCAP 1500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
4/0	CT 52N3	CJ N3A52	CCAP 1500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
250	CT 52N3	CJ N3A52	CCAP 1500-RL	CRDW-4-48	CMTK 52V	CMTK 51L
300	CT 52N3	CJ N3A52	CCAP 1500-RL	CRDW-4-48	CMTK 53V	CMTK 52L
350	CT 52N3	CJ N3A52	CCAP 1500-RL	CRDW-4-48	CMTK 53V	CMTK 52L
400	CT 52N3	CJ N3A53	CCAP 1500-RL	CRDW-4-48	CMTK 53V	CMTK 52L
500	CT 52N3	CJ N3A53	CCAP 2050-RL	CRDW-4-48	CMTK 53V	CMTK 52L
600	CT 53N3	CJ N3A53	CCAP 2050-RL	CRDW-4-48	CMTK 53V	CMTK 52L
750	CT 53N3	CJ N3A53	CCAP 2050-RL	CRDW-4-48	CMTK 53V	CMTK 52L
1000	CT 53N3	CJ N3A53	CCAP 2050-RL	CRDW-4-48	CMTK 53V	CMTK 52L

3/C, TAPE SHIELDED 5 KV CABLES

90 MILS GROUNDED, 115 MILS UNGROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINT	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES	MOTOR CONNECTION KITS	
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED	STUB TYPE	IN-LINE TYPE
	CT 3G Series		CJ 320 Series				
#8 - #2	CT 3X081G	CT 3B081EG	CJ 3821	CCAP 2750-RL	CRDW-2-48	CMTK 51V	CMTK 51L
#1	CT 3X081G	CT 3B081EG	CJ 3821	CCAP 2750-RL	CRDW-2-48	CMTK 52V	CMTK 51L
1/0	CT 3X082G	CT 3B082EG	CJ 3821	CCAP 2750-RL	CRDW-2-48	CMTK 52V	CMTK 51L
2/0	CT 3X082G	CT 3B082EG	CJ 3821	CCAP 2750-RL	CRDW-2-48	CMTK 52V	CMTK 51L
3/0	CT 3X082G	CT 3B082EG	CJ 3822	CCAP 2750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
4/0	CT 3X082G	CT 3B082EG	CJ 3822	CCAP 3500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
250	CT 3X082G	CT 3B082EG	CJ 3822	CCAP 3500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
300	CT 3X083G	CT 3B083EG	CJ 3822	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
350	CT 3X083G	CT 3B083EG	CJ 3823	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
400	CT 3X083G	CT 3B083EG	CJ 3823	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
500	CT 3X083G	CT 3B083EG	CJ 3823	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
600	CT 3X084G	CT 3B084EG	CJ 3823	CCAP 3500-RL	CRDW-3-48	CMTK 53V	CMTK 52L
750	CT 3X084G	CT 3B084EG	CJ 3823	CCAP 4700-RL	CRDW-4-48	CMTK 53V	CMTK 52L
1000	CT 3X084G	CT 3B084EG	CJ 3824	CCAP 4700-RL	CRDW-4-48	CMTK 53V	CMTK 52L
1500	-	-	-	CCAP 4700-RL	CRDW-4-48	-	-

3/C, ARMORED TAPE SHIELDED 5 KV CABLES

90 MILS GROUNDED, 115 MILS UNGROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		HEAT SHRINK ARMORED JOINT	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES	MOTOR CONNECTION KITS	
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED	STUB TYPE	IN-LINE TYPE
	CT 3G Series		CJ 3A20 Series				
#8 - #2	CT 3X081G	CT 3B081EG	CJ 3A821	CCAP 2750-RL	CRDW-3-48	CMTK 51V	CMTK 51L
#1	CT 3X081G	CT 3B081EG	CJ 3A821	CCAP 2750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
1/0	CT 3X082G	CT 3B082EG	CJ 3A821	CCAP 2750-RL	CRDW-3-48	CMTK 52V	CMTK 51L
2/0	CT 3X082G	CT 3B082EG	CJ 3A821	CCAP 3500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
3/0	CT 3X082G	CT 3B082EG	CJ 3A822	CCAP 3500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
4/0	CT 3X082G	CT 3B082EG	CJ 3A822	CCAP 3500-RL	CRDW-3-48	CMTK 52V	CMTK 51L
250	CT 3X082G	CT 3B082EG	CJ 3A822	CCAP 3500-RL	CRDW-4-48	CMTK 52V	CMTK 51L
300	CT 3X083G	CT 3B083EG	CJ 3A822	CCAP 3500-RL	CRDW-4-48	CMTK 53V	CMTK 52L
350	CT 3X083G	CT 3B083EG	CJ 3A823	CCAP 3500-RL	CRDW-4-48	CMTK 53V	CMTK 52L
400	CT 3X083G	CT 3B083EG	CJ 3A823	CCAP 3500-RL	CRDW-4-48	CMTK 53V	CMTK 52L
500	CT 3X083G	CT 3B083EG	CJ 3A823	CCAP 3500-RL	CRDW-4-48	CMTK 53V	CMTK 52L
600	CT 3X084G	CT 3B084EG	CJ 3A823	CCAP 4700-RL	CRDW-4-48	CMTK 53V	CMTK 52L
750	CT 3X084G	CT 3B084EG	CJ 3A823	CCAP 4700-RL	CRDW-4-48	CMTK 53V	CMTK 52L
1000	CT 3X084G	CT 3B084EG	CJ 3A824	CCAP 4700-RL	CRDW-4-48	CMTK 53V	CMTK 52L
1500	-	-	-	CCAP 4700-RL	CRDW-4-48	-	-

3/C, TAPE SHIELDED 15 KV CABLES

175 MILS GROUNDED, 220 MILS UNGROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		HEAT SHRINK STRAIGHT JOINT	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED
	CT 3G Series		CJ 320 Series		
#4	CT 3X151G	CT 3B151EG	CJ 31521	CCAP 3500-RL	CRDW-3-48
#2	CT 3X151G	CT 3B151EG	CJ 31521	CCAP 3500-RL	CRDW-3-48
#1	CT 3X151G	CT 3B151EG	CJ 31521	CCAP 3500-RL	CRDW-3-48
1/0	CT 3X151G	CT 3B151EG	CJ 31521	CCAP 3500-RL	CRDW-3-48
2/0	CT 3X151G	CT 3B151EG	CJ 31521	CCAP 3500-RL	CRDW-3-48
3/0	CT 3X151G	CT 3B151EG	CJ 31521	CCAP 3500-RL	CRDW-3-48
4/0	CT 3X151G	CT 3B151EG	CJ 31521	CCAP 3500-RL	CRDW-3-48
250	CT 3X152G	CT 3B152EG	CJ 31522	CCAP 4700-RL	CRDW-4-48
300	CT 3X152G	CT 3B152EG	CJ 31522	CCAP 4700-RL	CRDW-4-48
350	CT 3X152G	CT 3B152EG	CJ 31522	CCAP 4700-RL	CRDW-4-48
400	CT 3X153G	CT 3B153EG	CJ 31522	CCAP 4700-RL	CRDW-4-48
500	CT 3X153G	CT 3B153EG	CJ 31523	CCAP 4700-RL	CRDW-4-48
600	CT 3X153G	CT 3B153EG	CJ 31523	CCAP 4700-RL	CRDW-4-48
750	CT 3X153G	CT 3B153EG	CJ 31523	CCAP 4700-RL	CRDW-4-48
1000	CT 3X153G	CT 3B153EG	CJ 31524	CCAP 4700-RL	CRDW-4-48
2000	-	-	-	CCAP 4700-RL	CRDW-4-48

3/C, ARMORED TAPE SHIELDED 15 KV CABLES

175 MILS GROUNDED, 220 MILS UNGROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		HEAT SHRINK ARMORED JOINT	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED
	CT 3G Series		CJ 3A20 Series		
#4	CT 3X151G	CT 3B151EG	CJ 3A1521	CCAP 3500-RL	CRDW-3-48
#2	CT 3X151G	CT 3B151EG	CJ 3A1521	CCAP 3500-RL	CRDW-3-48
#1	CT 3X151G	CT 3B151EG	CJ 3A1521	CCAP 3500-RL	CRDW-3-48
1/0	CT 3X151G	CT 3B151EG	CJ 3A1521	CCAP 3500-RL	CRDW-3-48
2/0	CT 3X151G	CT 3B151EG	CJ 3A1521	CCAP 3500-RL	CRDW-3-48
3/0	CT 3X151G	CT 3B151EG	CJ 3A1521	CCAP 3500-RL	CRDW-3-48
4/0	CT 3X151G	CT 3B151EG	CJ 3A1521	CCAP 3500-RL	CRDW-3-48
250	CT 3X152G	CT 3B152EG	CJ 3A1522	CCAP 4700-RL	CRDW-4-48
300	CT 3X152G	CT 3B152EG	CJ 3A1522	CCAP 4700-RL	CRDW-4-48
350	CT 3X152G	CT 3B152EG	CJ 3A1522	CCAP 4700-RL	CRDW-4-48
400	CT 3X153G	CT 3B153EG	CJ 3A1522	CCAP 4700-RL	CRDW-4-48
500	CT 3X153G	CT 3B153EG	CJ 3A1523	CCAP 4700-RL	CRDW-4-48
600	CT 3X153G	CT 3B153EG	CJ 3A1523	CCAP 4700-RL	CRDW-4-48
750	CT 3X153G	CT 3B153EG	CJ 3A1523	CCAP 4700-RL	CRDW-4-48
1000	CT 3X153G	CT 3B153EG	CJ 3A1524	CCAP 4700-RL	CRDW-4-48
2000	-	-	-	CCAP 4700-RL	CRDW-4-48

3/C, TAPE SHIELDED 25 - 28 KV CABLES

260 - 280 MILS GROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		STRAIGHT JOINT	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED
	CT 3G Series		CJ 320 Series		
#1	CT 3X251G	CT 3B251EG	CJ 32521	CCAP 3500-RL	CRDW-4-48
1/0	CT 3X251G	CT 3B251EG	CJ 32521	CCAP 3500-RL	CRDW-4-48
2/0	CT 3X251G	CT 3B251EG	CJ 32521	CCAP 3500-RL	CRDW-4-48
3/0	CT 3X251G	CT 3B251EG	CJ 32521	CCAP 3500-RL	CRDW-4-48
4/0	CT 3X251G	CT 3B251EG	CJ 32521	CCAP 3500-RL	CRDW-4-48
250	CT 3X251G	CT 3B251EG	CJ 32522	CCAP 3500-RL	CRDW-4-48
300	CT 3X251G	CT 3B251EG	CJ 32522	CCAP 4700-RL	CRDW-4-48
350	CT 3X252G	CT 3B252EG	CJ 32522	CCAP 4700-RL	CRDW-4-48
400	CT 3X252G	CT 3B252EG	CJ 32522	CCAP 4700-RL	CRDW-4-48
500	CT 3X252G	CT 3B252EG	CJ 32522	CCAP 4700-RL	CRDW-4-48
600	CT 3X252G	CT 3B252EG	CJ 32523	CCAP 4700-RL	CRDW-4-48
750	CT 3X252G	CT 3B252EG	CJ 32523	CCAP 4700-RL	CRDW-4-48
1000	CT 3X252G	CT 3B252EG	CJ 32523	CCAP 4700-RL	CRDW-4-48

3/C, ARMORED TAPE SHIELDED 25 - 28 KV CABLES

260 - 280 MILS GROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		ARMORED JOINT	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED
	CT 3G Series		CJ 3A20 Series		
#1	CT 3X251G	CT 3B251EG	CJ 3A2521	CCAP 3500-RL	CRDW-4-48
1/0	CT 3X251G	CT 3B251EG	CJ 3A2521	CCAP 3500-RL	CRDW-4-48
2/0	CT 3X251G	CT 3B251EG	CJ 3A2521	CCAP 3500-RL	CRDW-4-48
3/0	CT 3X251G	CT 3B251EG	CJ 3A2521	CCAP 3500-RL	CRDW-4-48
4/0	CT 3X251G	CT 3B251EG	CJ 3A2521	CCAP 3500-RL	CRDW-4-48
250	CT 3X251G	CT 3B251EG	CJ 3A2522	CCAP 4700-RL	CRDW-4-48
300	CT 3X251G	CT 3B251EG	CJ 3A2522	CCAP 4700-RL	CRDW-4-48
350	CT 3X252G	CT 3B252EG	CJ 3A2522	CCAP 4700-RL	CRDW-4-48
400	CT 3X252G	CT 3B252EG	CJ 3A2522	CCAP 4700-RL	CRDW-4-48
500	CT 3X252G	CT 3B252EG	CJ 3A2522	CCAP 4700-RL	CRDW-4-48
600	CT 3X252G	CT 3B252EG	CJ 3A2523	CCAP 4700-RL	CRDW-4-48
750	CT 3X252G	CT 3B252EG	CJ 3A2523	CCAP 4700-RL	CRDW-4-48
1000	CT 3X252G	CT 3B252EG	CJ 3A2523	CCAP 4700-RL	CRDW-4-48

3/C, TAPE SHIELDED 35 KV CABLES

345 MILS GROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		STRAIGHT JOINTS	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED
	CT 3G Series		CJ 320 Series		
#1	CT 3X351G	CT 3B351EG	-	CCAP 4700-RL	CRDW-4-48
1/0	CT 3X351G	CT 3B351EG	CJ 33521	CCAP 4700-RL	CRDW-4-48
2/0	CT 3X351G	CT 3B351EG	CJ 33521	CCAP 4700-RL	CRDW-4-48
3/0	CT 3X351G	CT 3B351EG	CJ 33521	CCAP 4700-RL	CRDW-4-48
4/0	CT 3X351G	CT 3B351EG	CJ 33521	CCAP 4700-RL	CRDW-4-48
250	CT 3X351G	CT 3B351EG	CJ 33521	CCAP 4700-RL	CRDW-5-48
300	CT 3X352G	CT 3B352EG	CJ 33522	CCAP 4700-RL	CRDW-5-48
350	CT 3X352G	CT 3B352EG	CJ 33522	CCAP 4700-RL	CRDW-5-48
400	CT 3X352G	CT 3B352EG	CJ 33522	CCAP 4700-RL	CRDW-5-48
500	CT 3X352G	CT 3B352EG	CJ 33522	CCAP 4700-RL	CRDW-5-48
600	CT 3X352G	CT 3B352EG	CJ 33522	Not Available	CRDW-5-48
750	CT 3X352G	CT 3B352EG	CJ 33523	Not Available	CRDW-5-48
1000	CT 3X352G	CT 3B352EG	CJ 33523	Not Available	CRDW-5-48

3/C, ARMORED TAPE SHIELDED 35 KV CABLES

345 MILS GROUNDED

CONDUCTOR SIZE	3/C HEAT SHRINK TERMINATION		STRAIGHT JOINTS	END CAP STORAGE ONLY	JACKET REPAIR SLEEVES
	INDOOR - NO BOOT	OUTDOOR - WITH BOOT			RAILED
	CT 3G Series		CJ 3A20 Series		
#1	CT 3X351G	CT 3B351EG	-	CCAP 4700-RL	CRDW-4-48
1/0	CT 3X351G	CT 3B351EG	CJ 3A3521	CCAP 4700-RL	CRDW-4-48
2/0	CT 3X351G	CT 3B351EG	CJ 3A3521	CCAP 4700-RL	CRDW-4-48
3/0	CT 3X351G	CT 3B351EG	CJ 3A3521	CCAP 4700-RL	CRDW-4-48
4/0	CT 3X351G	CT 3B351EG	CJ 3A3521	CCAP 4700-RL	CRDW-4-48
250	CT 3X351G	CT 3B351EG	CJ 3A3521	CCAP 4700-RL	CRDW-5-48
300	CT 3X352G	CT 3B352EG	CJ 3A3522	CCAP 4700-RL	CRDW-5-48
350	CT 3X352G	CT 3B352EG	CJ 3A3522	CCAP 4700-RL	CRDW-5-48
400	CT 3X352G	CT 3B352EG	CJ 3A3522	CCAP 4700-RL	CRDW-5-48
500	CT 3X352G	CT 3B352EG	CJ 3A3522	CCAP 4700-RL	CRDW-5-48
600	CT 3X352G	CT 3B352EG	CJ 3A3522	Not Available	CRDW-5-48
750	CT 3X352G	CT 3B352EG	CJ 3A3523	Not Available	CRDW-5-48
1000	CT 3X352G	CT 3B352EG	CJ 3A3523	Not Available	CRDW-5-48

PRODUCT INDEX

PRODUCT INDEX

OUR CATALOGS

CATALOGS FOR YOUR INDIVIDUAL CHALLENGES AND REQUIREMENTS

In order to respond to the respective industry requirements and applications and to give you a better overview, we offer the following catalogs.

APPLICATION EQUIPMENT CATALOG

As a manufacturer of heat shrink tubes, we also supply the tools and application equipment to reliably apply our products in your factory or at your work site. This catalog showcases our hot air based equipment, our infrared technologies and our test equipment.

AUTOMOTIVE CATALOG

In the Automotive Catalog, we showcase solutions that insulate, seal and protect electronic components, wire, terminals, hoses and pipes, cables and splices.

The catalog includes heat shrink tubes, adhesive lined or single-wall, water blocking systems, protective sleeves and caps, and application equipment to automate the shrink process.

ADM CATALOG

We recognize the special requirements for the Aerospace, Defense and Mass Transit (ADM) markets and have grown our product portfolio accordingly.

Check out our ADM Catalog and find out how we satisfy the need for superior quality through our engineering and design approach and various certifications.

Contact the Customer Service Representative or the Sales Representative in your region and they be happy to send you a catalog.

PROCESSING INFORMATION

TUBING SELECTION AND PROCESSING INFORMATION

Easy processing makes heat shrink tubing an economical and functional solution. Please keep the following processing notes in mind:

- The inner diameter of the heat shrink tubing should be selected so that after free shrinkage it is approx. 20% smaller than the object to be covered
- If necessary, cut the shrink tubing to the desired length. Please make sure to have a smooth cut edge
- Slide the tubing over the object to be sealed
- Shrink the tubing onto the object, starting at one end. Use a heating appliance for this process, e.g. a heat gun or a shrink device
- The optimal shrink temperature of the selected material is vital to assure a short shrink period. Please make sure to use the appointed shrink temperature for each product
- Ensure even heat distribution to prevent overheating. Overheating the material may cause bubbles, discoloration or damage to the tube
- During shrinking of adhesive lined heat shrink tubing the adhesive may slightly flow out the end

If you have any further questions, our application engineers will be happy to assist you.

ORDERING INFORMATION

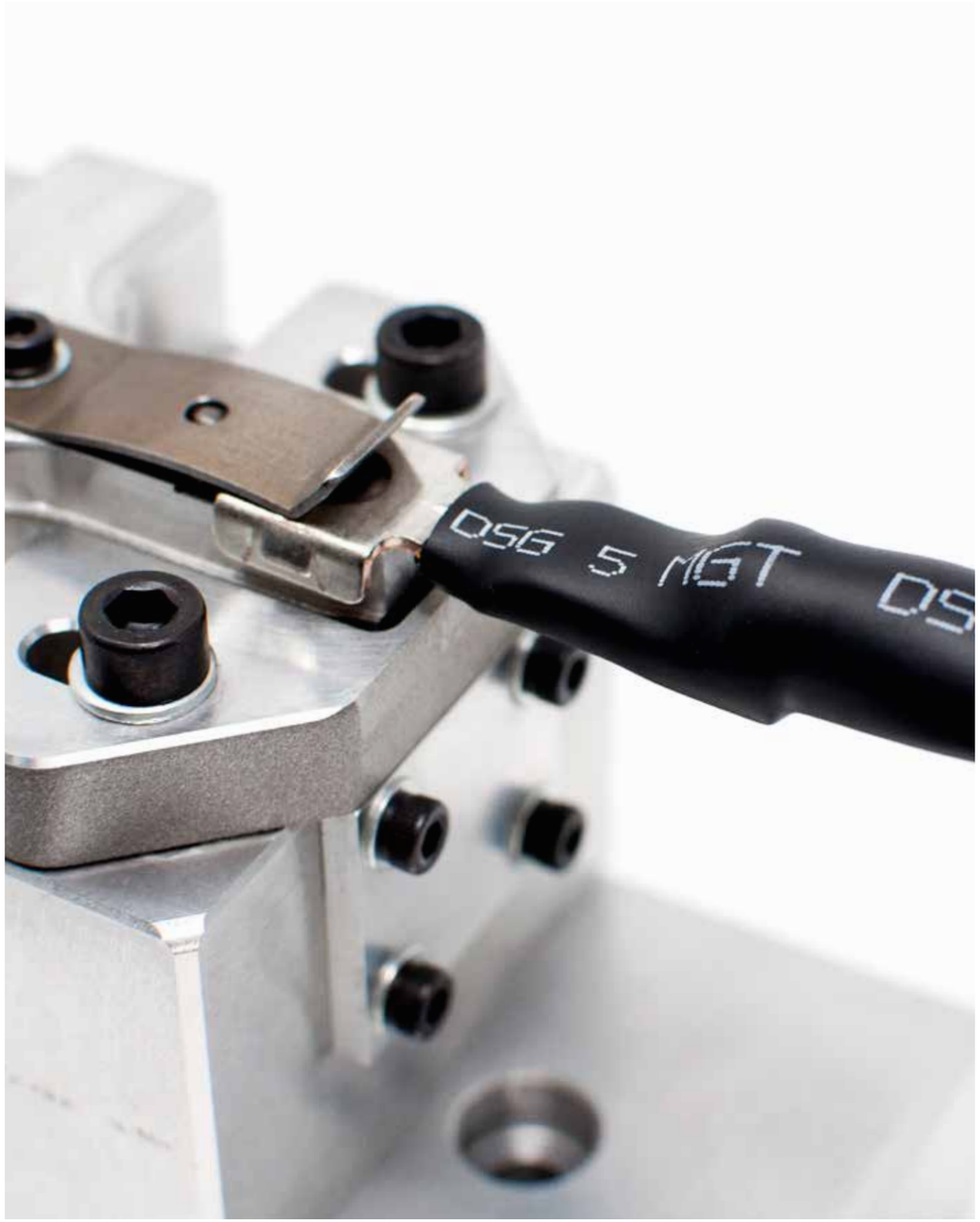
When ordering, please specify for each item the following information:

- Name and/or order number
- Dimension
- Options, if available: e.g. color
- Quantity: Spool, lengths or pieces

Example: **CPX 100, 0375, black, 500 ft**

The catalog shows a selection of our product portfolio and does not reflect our full product range. If you cannot find the right product for your application or requirements, please contact us.

Please also contact your Customer Service Representative for information on custom colors, sizes, lengths and material data sheets via phone or e-mail you'll find at the back of this catalog.



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