

READY REFERENCE GUIDE

Generation • Distribution • Transmission



Chapter 4 TE's Raychem Medium Voltage Cable Accessories

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HVS In-Line Splices for 1/C Shielded Cable (5-35 kV)

FEATURES

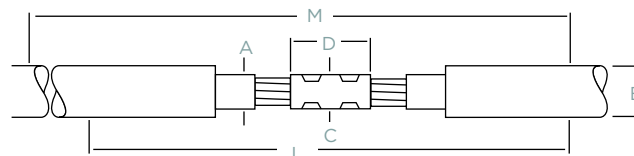
- Kits contain a solderless grounding kit, consisting of a ground clamp, a ground braid, and a shielding mesh.
- Heat shrink feature allows the kits to accommodate out-of-round, out-of-spec cable.
- Some kits contain tube for outer layer.
- Meets IEEE-404 standard requirements.

APPLICATIONS

- For 1/C Shielded cables from 5-35 kV
- For use on copper tape, wire shield, lead sheath, and UniShield cables.

BENEFITS

- Pre-engineered to offer a compact, low-profile installation with a minimum diameter buildup.



PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Catalog Number	Conductor Size (AWG/kcmil)	Min - Max Insulator Dia. (A)	Jacket O.D. (max) (B)	Max Connector O.D. (C)	Max Connector Length (D)	Kit Installed Length (L)	Required Install Space (M)	
HVS-820S	(5 kV)	(5/8 kV)						
HVS-821S	#6-2/0	#6-#2	0.35-0.65 (9-17)	0.80 (20)	0.50 (13)	3.0 (76)	24 (610)	44 (1118)
HVS-822S	3/0-300	#1-4/0	0.55-0.90 (14-23)	1.15 (29)	0.75 (19)	4.25 (108)	24 (610)	45 (1143)
HVS-823S	350-750	250-350	0.80-1.25 (20-32)	1.80 (46)	1.10 (28)	6.0 (152)	27 (686)	50 (1270)
HVS-824S	1000-1500	500-750	1.00-1.60 (25-41)	2.30 (58)	1.45 (37)	8.0 (203)	30 (762)	56 (1422)
HVS-825S		750-1000	1.30-2.25 (33-57)	2.45 (62)	1.85 (47)	8.0 (203)	30 (762)	56 (1422)
HVS-1520S		(15 kV)						
HVS-1521S		#2-4/0	0.65-1.05 (17-27)	1.25 (32)	0.90 (23)	4.25 (108)	27 (686)	54 (1372)
HVS-1522S		250-350	0.90-1.30 (23-33)	1.50 (38)	1.20 (30)	5.5 (140)	28 (711)	56 (1422)
HVS-1523S		500-750	1.10-1.60 (28-41)	1.85 (47)	1.60 (41)	8.0 (203)	30 (762)	59 (1499)
HVS-1524S		750-1000	1.25-1.80 (32-46)	2.10 (53)	1.85 (47)	8.0 (203)	34 (864)	67 (1702)
HVS-1525S		1250-2000	1.60-2.50 (41-64)	2.80 (71)	2.40 (61)	8.0 (203)	40 (1016)	74 (1880)
HVS-1520S-W		(15 kV with Wraparound Rejacketing Sleeve)						
HVS-1521S-W		#2-4/0	0.65-1.05 (17-27)	1.25 (32)	0.90 (23)	4.25 (108)	28 (711)	39 (990)
HVS-1522S-W		250-350	0.90-1.30 (23-33)	1.50 (38)	1.20 (30)	5.50 (140)	28 (711)	40 (1016)
HVS-1523S-W		500-750	1.10-1.60 (28-41)	1.85 (47)	1.60 (41)	8.00 (203)	30 (762)	45 (1143)
HVS-1524S-W		750-1000	1.25-1.80 (32-46)	2.10 (53)	1.85 (47)	8.00 (203)	34 (864)	49 (1244)
HVS-1525S-W		1250-2000	1.60-2.50 (41-64)	2.80 (71)	2.40 (61)	11.00 (279)	40 (1016)	54 (1371)
HVS-2520S		(25 kV)						
HVS-2521S		#1-250	0.90-1.20 (23-31)	1.50 (38)	1.10 (28)	4.0 (102)	40 (1016)	40 (1016)
HVS-2522S		350-500	1.20-1.50 (31-38)	1.95 (50)	1.35 (34)	6.0 (152)	40 (1016)	40 (1016)
HVS-2523S		750-1000	1.50-1.80 (38-46)	2.40 (61)	1.85 (47)	8.0 (203)	40 (1016)	40 (1016)
HVS-3520S		(35 kV)						
HVS-3521S		1/0-3/0	0.95-1.35 (24-34)	1.55 (39)	1.20 (30)	4.0 (102)	40 (1016)	53 (1346)
HVS-3522S		4/0-600	1.20-1.70 (31-43)	2.10 (53)	1.50 (38)	6.0 (152)	44 (1118)	62 (1575)
HVS-3523S		600-1000	1.55-2.15 (39-55)	2.80 (71)	1.85 (47)	10.0 (254)	44 (1118)	67 (1702)
HVS-3524S		1250-2000	2.1-2.63 (53-66)	3.0 (76)	2.6 (66)	10 (254)	44 (1118)	45 (1145)

ADDITIONAL PRODUCT INFORMATION

- Select the appropriate catalog number. All selections are based on the typical dimensions of 100% insulated cables, manufactured in accordance with AIEC standard. Nominal insulation thickness (100%): 5 kV: 90 mils., 5/8 kV: 115 mils., 15 kV: 175 mils., 25 kV: 260 mils., 35 kV: 345 mils. Nominal insulation thickness (133%): 15 kV: 220 mils. Check the jacket O.D. on the 15 kV, 133%-insulated 4/0 and 750-kcmil cables to ensure they fall within the use range specified. If you have any questions, contact your TE sales engineer or representative.
- For cables manufactured to other specifications, confirm selection with cable and connector dimensions.
- HVS-SHIM kits are available if the diameter of one of your cables is not within the standard range.
- Kits do not contain connectors; order compression or solder-connectors separately. Standard package: 1 kit/box
- If external grounding is required, order an HVS-EG kit.
- Related test reports: HVS 5-8 kV: EDR-5181. HVS 15 kV: EDR-5114, HVS 25 kV: EDR-5150, HVS 25-35 kV: EDR-5197, HVS-1520S-W: EDR-5225

CSJA In-line Cold Shrinkable Joints for all 1/C Shielded Power Cables

FEATURES

- Total length of the splice body on the holdout is 14 to 19 inches providing a compact design.
- Integrated electrical stress control enhanced by factory molded stress cones and a Faraday cage.
- Void filling stress relief mastics are not necessary.
- Proven shield continuity concept which can also bridge concentric neutrals.
- The joint accepts both mechanical and compression connectors.
- When a shear bolt connector is used, this is a totally crimpless system.
- Meets IEEE-404 standard requirements.

APPLICATIONS

- "All-in-One" cold shrinkable joint for 5 kV through 35 kV. It is designed to splice tape shield, wire shield, LC shield, UniShield, JCN and flat strap shielded cables.

BENEFITS

- ♦ This cable joint has a pre-expanded EPDM re-jacketing sleeve and an integrated neutral sock. The "All-in-One" design is easy to install with minimal steps and short installation time.
- ♦ A pre-expanded, single-piece silicone rubber joint body with high mechanical expansion capability allows a wide application range.
- ♦ The silicone rubber body provides high dielectric strength, high tear strength, low tension set, and excellent low temperature recovery.
- ♦ An ergonomically designed spiral holdout provides a smooth installation with low release forces.



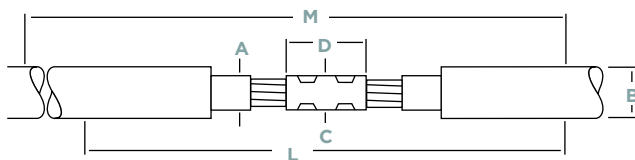
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PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Catalog Number	Length of Moisture Blocked Braid (mm)	Braid (AWG)
Cold Applied External Grounding Kit		
CSJ-EG-1	24 (610)	#8
CSJ-EG-2	24 (610)	#6
CSJ-EG-3	24 (610)	#4
CSJ-EG-4	24 (610)	#2

ADDITIONAL PRODUCT INFORMATION

- Selections are based on the typical dimensions of 100% insulated cables, manufactured in accordance with AEIC standard. Nominal insulation thickness (100%): 15 kV: 175 mils, 25 kV: 260 mils, 35 kV: 345 mils.
- Select the appropriate catalog number. Use the insulation OD and jacket OD range as the final ordering criteria.
- For mechanical shear bolt connector included in the kit confirm the correct connector selection according to the Min/Max diameter over the cable conductor from the tables.
- If external grounding is required, order the CSJ-EG kit.
- Standard package: 1 kit per box.
- Related test reports: EDR-5430, EDR-5455, EDR-5513, EDR-5570, EDR-5572, EDR-5588
- For AL Mechanical shear bolt connector information request data sheet 9-1773440-4 and for CU request 165972.


PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Catalog Number	Voltage Class	Nominal Cable Range	Min - Max Insulation O.D. (A)	Jacket O.D. (max) (B)	Neutral Sock (AWG)	Min - Max Diameter Over Cable Conductor*		Kit Installed Length (L)	Required Install Space (M)
						O.D. (C)	Length (D)		
CSJA Joint Without Connector									
CSJA-821	5-8 kV	4/0-750	0.69-1.20 (17.5-30.5)	1.50 (38.1)	1/0	1.30 (33.0)	5.50 (140.0)	29 (737)	39 (990)
CSJA-1521	15 kV	#2-350	0.69-1.20 (17.5-30.5)	1.50 (38.1)	1/0	1.30 (33.0)	5.50 (140.0)	29 (737)	39 (990)
CSJA-1522	15 kV	4/0-750	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	1.50 (38.0)	5.50 (140.0)	29 (737)	39 (990)
CSJA-1523	15 kV	350-1000	1.03-1.58 (26.2-40.0)	2.05 (52.1)	2/0	1.65 (42.0)	6.69 (170.0)	33 (838)	43 (1090)
CSJA-1524	15 kV	750-1250	1.28-2.05 (32.50-52.0)	2.60 (66.0)	2/0	1.85 (47.0)	7.90 (200.0)	37 (939)	49 (1244)
CSJA-2822	28 kV	#1-500	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	1.50 (38.0)	5.50 (140.0)	29 (737)	39 (990)
CSJA-2823	28 kV	4/0-750	1.03-1.58 (26.20-40.0)	2.05 (52.1)	2/0	1.65 (42.0)	6.69 (170.0)	33 (838)	43 (1090)
CSJA-2824	28 kV	500-1250	1.28-2.05 (32.50-52.0)	2.60 (66.0)	2/0	1.85 (47.0)	7.90 (200.0)	37 (939)	49 (1244)
CSJA-3523	35 kV	1/0-350	1.03-1.49 (26.20-37.8)	2.05 (52.1)	2/0	1.40 (35.6)	5.50 (140.0)	33 (838)	43 (1090)
CSJA-3524	35 kV	350-1000	1.28-2.05 (34.54-52.0)	2.60 (66.0)	2/0	1.96 (50.0)	7.90 (200.0)	37 (939)	49 (1244)
CSJA-3525	35 kV	750-1250	1.63-2.36 (41.40-60.0)	2.60 (66.0)	2/0	2.36 (60.0)	7.90 (200.0)	37 (939)	49 (1244)
CSJA Joint With Copper Mechanical Shear Bolt Connector									
CSJA-1521M1	15 kV	2/0-350	0.69-1.20 (17.5-30.5)	1.50 (38.1)	1/0	0.376-0.736 (9.50-18.7)		29 (737)	39 (990)
CSJA-1522M1	15 kV	4/0-500	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	0.376-0.736 (9.50-18.7)		29 (737)	39 (990)
CSJA-1522M2	15 kV	350-750	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	0.570-0.945 (14.5-24.0)		29 (737)	39 (990)
CSJA-1523M2	15 kV	350-750	1.03-1.58 (26.2-40.0)	2.05 (52.1)	2/0	0.570-0.945 (14.5-24.0)		33 (838)	43 (1090)
CSJA-2822M1	28 kV	2/0-500	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	0.376-0.736 (9.50-18.7)		29 (737)	39 (990)
CSJA-2823M2	28 kV	350-750	1.03-1.58 (26.2-40.0)	2.05 (52.1)	2/0	0.570-0.945 (14.5-24.0)		33 (838)	43 (1090)
CSJA-2824M2	28 kV	500-750	1.28-2.05 (32.50-52.0)	2.60 (66.0)	2/0	0.570-0.945 (14.5-24.0)		37 (939)	49 (1244)
CSJA-3523M1	35 kV	2/0-350	1.03-1.49 (26.20-37.8)	2.05 (52.1)	2/0	0.376-0.736 (9.50-18.7)		33 (838)	43 (1090)
CSJA-3524M2	35 kV	350-750	1.28-2.05 (34.54-52.0)	2.60 (66.0)	2/0	0.570-0.945 (14.5-24.0)		37 (939)	49 (1244)
* Min./max. diameter over cable conductor accepted by the copper mechanical connector.									
CSJA Joint with Aluminum Mechanical Shear Bolt Connector									
CSJA-1521M4	15 kV	#2-3/0	0.69-1.20 (17.5-30.5)	1.50 (38.1)	1/0	0.268-0.470 (6.80-11.9)		29 (737)	39 (990)
CSJA-1521M5	15 kV	#2-350	0.69-1.20 (17.5-30.5)	1.50 (38.1)	1/0	0.268-0.681 (6.80-17.3)		29 (737)	39 (990)
CSJA-1522M6	15 kV	350-750	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	0.423-0.813 (10.7-20.6)		29 (737)	39 (990)
CSJA-1522M7	15 kV	350-750	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	0.736-0.998 (18.7-25.3)		29 (737)	39 (990)
CSJA-1523M8	15 kV	350-750	1.03-1.58 (26.20-40.0)	2.05 (52.1)	2/0	0.616-0.998 (15.7-25.3)		33 (838)	43 (1090)
CSJA-1524M9	15 kV	750-1000	1.28-2.05 (32.50-52.0)	2.60 (66.0)	2/0	0.813-1.152 (20.6-29.2)		37 (939)	49 (1244)
CSJA-2822M5	28 kV	#1-350	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	0.268-0.681 (6.80-17.3)		29 (737)	39 (990)
CSJA-2822M6	28 kV	4/0-500	0.87-1.40 (22.1-35.6)	1.80 (46.0)	1/0	0.423-0.813 (10.7-20.6)		29 (737)	39 (990)
CSJA-2823M8	28 kV	350-750	1.03-1.58 (26.20-40.0)	2.05 (52.1)	2/0	0.616-0.998 (15.7-25.3)		33 (838)	43 (1090)
CSJA-2824M8	28 kV	500-750	1.28-2.05 (32.50-52.0)	2.60 (66.0)	2/0	0.616-0.998 (15.7-25.3)		37 (939)	49 (1244)
CSJA-2824M9	28 kV	750-1000	1.28-2.05 (32.50-52.0)	2.60 (66.0)	2/0	0.813-1.152 (20.60-29.2)		37 (939)	49 (1244)
CSJA-3523M5	35 kV	1/0-350	1.03-1.49 (26.20-37.8)	2.05 (52.1)	2/0	0.268-0.681 (6.8-17.3)		33 (838)	43 (1090)
CSJA-3524M8	35 kV	350-750	1.28-2.05 (34.54-52.0)	2.60 (66.0)	2/0	0.616-0.998 (15.7-25.3)		37 (939)	49 (1244)
CSJA-3524M9	35 kV	750-1000	1.28-2.05 (34.54-52.0)	2.60 (66.0)	2/0	0.813-1.152 (20.60-29.2)		37 (939)	49 (1244)
CSJA-3525M10	35 kV	1000-1250	1.63-2.36 (41.40-60.0)	2.60 (66.0)	2/0	1.060-1.251 (23.0-31.7)		37 (939)	49 (1244)
* Min/max diameter over cable conductor accepted by the aluminum mechanical connector.									

HVT-Z-G/SG High Voltage Termination for shielded cables (5 kV-35 kV)

FEATURES

- When the tubing is shrunk down, the coating softens and sticks to irregular surfaces, providing moisture seals as well as electrical stress control.
- TE's Raychem HVT-Z high-voltage terminations meet IEEE-48 standard Class I termination requirement.

APPLICATIONS

- The market's most popular heat shrink terminations!
- Designed for Copper Tape Shield, Wire Shield, Unshield, and Lead Sheath cables from 5 kV to 35 kV

BENEFITS

- The main termination component consists of TE's Raychem non-tracking tube together with a co-extruded stress control grading layer. This stress control layer is based on ceramic semi-conductor technology (ZnO) and provides superior discharge and impulse performance.
- Unlimited shelf life when stored in normal conditions



PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Indoor Kit	Outdoor Kit	Min - Max Conductor Size		Min - Max Insulation Dia	Jacket O.D. (max)
5/8 kV		5 kV 0.90	8 kV 0.115		
HVT-Z-80-G/SG		#4-#1 AWG	#6-#2 AWG	0.35-0.60 (9-15)	0.95 (24)
HVT-Z-81-G/SG		1/0-250 kcmil	#1-4/0 AWG	0.60-0.95 (15-24)	1.20 (30)
HVT-Z-82-G/SG		300-500 kcmil	250-500 kcmil	0.80-1.25 (20-32)	1.50 (38)
HVT-Z-83-G/SG		600-1750 kcmil	600-1750 kcmil	1.10-1.75 (28-44)	2.10 (53)
HVT-Z-84-G/SG		1500-3500 kcmil	1500-2500 kcmil	1.60-2.45 (41-62)	2.75 (70)
<i>Installed Length 11.5" (295)</i>		<i>Can be cut shorter for use with MCK kits</i>		<i>No Skirts for Outdoor Operation*</i>	
15 kV		15 kV .175-.220			
HVT-Z-151-G	HVT-Z-151-SG	#4-1/0 AWG		0.60-0.95 (15-24)	1.20 (30)
HVT-Z-152-G	HVT-Z-152-SG	2/0-350 kcmil		0.80-1.25 (20-32)	1.50 (38)
HVT-Z-153-G	HVT-Z-153-SG	400-1000 kcmil		1.10-1.75 (28-44)	2.10 (53)
HVT-Z-154-G	HVT-Z-154-SG	1250-2500 kcmil		1.60-2.45 (41-62)	2.75 (70)
<i>Installed Length 11.5" (295)</i>				<i>1 Skirt for Outdoor Operation*</i>	
25 kV/35 kV		25 kV 0.260	35 kV 0.345		
HVT-Z-252/352-G	HVT-Z-252/352-SG	#2-250 kcmil	#1-1/0 AWG	0.80-1.25 (20-32)	1.50 (38)
HVT-Z-253/353-G	HVT-Z-253/353-SG	300-750 kcmil	2/0-500 kcmil	1.10-1.75 (28-44)	2.10 (53)
HVT-Z-254/354-G	HVT-Z-254/354-SG	1000-2000 kcmil	750-1750 kcmil	1.60-2.45 (41-62)	2.75 (70)
<i>Installed Length 19.0" (485)</i>				<i>4 Skirts for Outdoor Operation*</i>	

*Additional skirts sold separately. Refer to Accessory and Tool section.

PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Indoor Kit	Outdoor Kit	Min - Max Conductor Size		Min - Max Insulation Dia.	Jacket O.D. (max)
HVT-Z Termination with Aluminum Shear Bolt Terminal					
5/8 kV		5 kV	8 kV		
HVT-Z-81-G/SG-T5		1/0-250 kcmil	#1-4/0 AWG	0.60-0.95 (15-24)	1.20 (30)
HVT-Z-82-G/SG-T5		300-350 kcmil	250-350 kcmil	0.80-1.07 (20-27)	1.50 (38)
HVT-Z-82-G/SG-T8		350-500 kcmil	350-500 kcmil	0.85-1.25 (22-32)	1.50 (38)
HVT-Z-83-G/SG-T9		600-1000 kcmil	600-1000 kcmil	1.10-1.40 (28-36)	2.10 (53)
<i>No Skirts for Outdoor Operation*</i>					
15 kV		15 kV			
HVT-Z-151-G-T5	HVT-Z-151-SG-T5	#2-1/0 AWG		0.65-0.95 (17-24)	1.20 (30)
HVT-Z-152-G-T5	HVT-Z-152-SG-T5	2/0-350 kcmil		0.80-1.25 (20-32)	1.50 (38)
HVT-Z-153-G-T8	HVT-Z-153-SG-T8	400-500 kcmil		1.10-1.355 (28-34)	2.10 (53)
HVT-Z-153-G-T9	HVT-Z-153-SG-T9	600-1000 kcmil		1.215-1.65 (32-42)	2.10 (53)
<i>1 Skirt for Outdoor Operation*</i>					
25 kV/35 kV		25 kV (0.260")	35 kV (0.345")		
HVT-Z-252/352-G-T5	HVT-Z-252/352-SG-T5	#2-250 kcmil	#1-1/0 AWG	0.80-1.25 (20-32)	1.50 (38)
HVT-Z-253/353-G-T5	HVT-Z-253/353-SG-T5	300-350 kcmil	2/0-350 kcmil	1.10-1.50 (28-38)	2.0 (51)
HVT-Z-253/353-G-T8	HVT-Z-253/353-SG-T8	350-750 kcmil	350-500 kcmil	1.185-1.70 (30-43)	2.10 (53)
HVT-Z-254/354-G-T9	HVT-Z-254/354-SG-T9	600-1000 kcmil	600-1000 kcmil	1.60-1.79 (41-45)	2.75 (70)
<i>4 Skirts for Outdoor Operation*</i>					

*Additional skirts sold separately. Refer to Accessory and Tool section.

ADDITIONAL PRODUCT INFORMATION

- Select the appropriate catalog number. All selections are based on the typical dimensions of 100% and 133% insulated cables manufactured in accordance with the data contained in AIEC CS5 and AIEC CS6, as well as the dimensions of commonly used connectors. Nominal Insulation thickness (100%): 15 kV: 175 mils, 25 kV: 260 mils, 35 kV: 345 mils. Nominal thickness (133%): 15 kV: 220 mils.
- For cables manufactured to other specifications, confirm selection with cable dimensions.
- Some kits do not contain connectors. Order compression, shear bolt, or solder connectors separately.
- Cable mounting brackets are available to accommodate cable diameters from 0.80-2.40 inches (20-46 mm) refer to Accessory and Tools section for ordering information.
- Standard package: 1 kit/box.
- Refer to the Application and Technical Specification section for testing information.
- Related test reports: 15 kV: EDR-5322, EDR-5323, 25 kV: EDR-5473 35 kV: EDR-5481

CST Cold Shrink Terminations

FEATURES

- Spiral holdout with pull direction toward the lug provides easy installation
- Extra-long, integrated geometric stress control and void-filling mastic to reduce termination positioning errors
- Outstanding weathering, UV and ozone resistance
- Chemical-resistant and fungus-resistant
- Hydrophobic silicone material to repel water
- Meet IEEE-48 standard class 1 requirements.

APPLICATIONS

- TE's raychem CST cold applied termination for polymeric shielded cables up to 35 kV with JCN, copper tape, wire, LC and Flat strap metallic shields. Indoor and outdoor applications included.

BENEFITS

- ♦ Reliable, easy to install system to ensure trouble free service
- ♦ All components are pre-expanded on an easy-to-remove spiral holdout, allowing installation in compact environments on prepared cable.
- ♦ Shear Bolt and compression style terminals and pin connectors are available to provide reliable connection to a variety of conductors.

PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Catalog Number*	Cable Range (AWG/kcmil)	Min - Max Insulation Diameter	Number of Skirts	Std. Pack (Kits/Box)
Shielded, Indoor (5/8 kV) Range is for 5/8kV 100% insulation				
CSTI-152	2/0-350 kcmil	0.65 - 1.06 in (16.5 - 27.0 mm)	3	1
CSTI-153	500-750 kcmil	0.97 - 1.35 in (24.5 - 34.5 mm)	3	1
CSTI-154	1000 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	3	1
CSTIL-154	1000 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	3	1
Shielded, Outdoor (5/8 kV) Range is for 5/8kV 100% insulation				
CSTO-152	2/0-350 kcmil	0.65 - 1.06 in (16.5 - 27.0 mm)	4	1
CSTO-153	500-750 kcmil	0.97 - 1.35 in (24.5 - 34.5 mm)	4	1
CSTO-154	1000 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	4	1
CSTOL-154	1000 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	4	1
Shielded, Indoor (15kV) Range is for 15kV 100% insulation				
CSTI-152	#2 - 250 kcmil	0.65 - 1.06 in (16.5 - 27.0 mm)	3	1
CSTI-153	350 - 500 kcmil	0.97 - 1.35 in (24.5 - 34.5 mm)	3	1
CSTI-154	600 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	3	1
CSTIL-154	600 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	3	1
Shielded, Outdoor (15kV) Range is for 15kV 100% insulation				
CSTO-152	#2 - 250 kcmil	0.65 - 1.06 in (16.5 - 27.0 mm)	4	1
CSTO-153	350 - 500 kcmil	0.97 - 1.35 in (24.5 - 34.5 mm)	4	1
CSTO-154	600 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	4	1
CSTOL-154	600 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	4	1
Shielded, Indoor (25/28kV) Range is for 25kV 100% insulation				
CSTI-282	#1 - 2/0	0.65 - 1.06 in (16.5 - 27.0 mm)	3	1
CSTI-283	2/0 - 350 kcmil	0.97 - 1.35 in (24.5 - 34.5 mm)	3	1
CSTI-284	500 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	3	1
CSTIL-284	500 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	3	1
Shielded, Outdoor (25/28kV) Range is for 25kV 100% insulation				
CSTO-282	#1 - 2/0	0.65 - 1.06 in (16.5 - 27.0 mm)	4	1
CSTO-283	2/0 - 350 kcmil	0.97 - 1.35 in (24.5 - 34.5 mm)	4	1
CSTO-284	500 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	4	1
CSTOL-284	500 - 1250 kcmil	1.28 - 2.04 in (32.5 - 52.0 mm)	4	1
Shielded, Indoor (35kV) Range is for 35kV 100% Insulation				
CSTI-352	1/0 - 350 kcmil	0.95 - 1.41 in (24.3 - 36.0 mm)	7	1
CSTI-353	250 - 750 kcmil	1.27 - 1.89 in (32.4 - 48.0 mm)	7	1
CSTI-354	750 - 2000 kcmil	1.70 - 2.52 in (43.2 - 64.0 mm)	7	1
Shielded, Outdoor (35kV) Range is for 35kV 100% Insulation				
CSTO-352	1/0 - 350 kcmil	0.95 - 1.41 in (24.3 - 36.0 mm)	8	1
CSTO-353	250 - 750 kcmil	1.27 - 1.89 in (32.4 - 48.0 mm)	8	1
CSTO-354	750 - 2000 kcmil	1.70 - 2.52 in (43.2 - 64.0 mm)	8	1

* For JCN, add a J at the end of the part description. Example: CSTI-152 becomes CSTI-152J

For other shielded cables, add a G at the end of the part description. Example: CSTO-153 becomes CSTO-153G

CST - Outdoor



PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

CST Accessory Options

CSTO L** -153J -SL2 -B2

Connector Code	Type	Use Range	Size
blank	no connector included		
-CP0	Compression pin (12 inches)		#2
-CP1	Compression pin (12 inches)		#1
-CP2	Compression pin (12 inches)		1/0
-CP3	Compression pin (12 inches)		2/0
-CP4	Compression pin (12 inches)		3/0
-CP5	Compression pin (12 inches)		4/0
-CLO	Copper Compression lug		#2
-CL1	Copper Compression lug		#1
-CL2	Copper Compression lug		1/0
-CL3	Copper Compression lug		2/0
-CL4	Copper Compression lug		3/0
-CL5	Copper Compression lug		4/0
-CL6	Copper Compression lug		350
-CL7	Copper Compression lug		500
-CL8	Copper Compression lug		750
-CL9	Copper Compression lug		1000
-SLO	Aluminum Shearbolt lug	.268-.528	#2-4/0
-SL1	Aluminum Shearbolt lug	.268-.681	#2-350
-SL2	Aluminum Shearbolt lug	.616-.998	350-750**
-SL3	Aluminum Shearbolt lug	.813-1.152	600-1000**

Bracket

Code	T	Use Range (in)	Size
blank		not included	N/A
-B1		0.80-1.25	straight
-B2		1.10-1.50	straight
-B3		1.45-1.95	straight
-B4		1.80-2.40	straight
-B5		0.80-1.25	90 degree
-B6		1.10-1.50	90 degree
-B7		1.45-1.95	90 degree
-B8		1.80-2.40	90 degree

Contact TE customer support (or equivalent) for other connectors, as TE offers other sizes, lengths, and types.

**These size connectors must be used with long neck type CST except for 35 kV part numbers. Aluminum connectors are tin plated and can be used on copper or aluminum conductors. Compression and shear bolt connectors are 2-hole NEMA type.

ADDITIONAL PRODUCT INFORMATION

- Selections are based in the typical dimensions of Concentric-Stranded insulated cables and the dimensions of commonly used connectors manufactured in accordance with AEIC standard. Nominal insulation thicknesses: 15 kV 100% (175 mils), 15 kV 133% (220 mils), 25 kV 100% (260 mils), 35 kV (345 mils).
- For cables manufactured to other specifications, confirm selection with cable dimensions.
- Test Report available EDR-5591, EDR-5629.

MCK-5 Flame Retardant Splice to 8.7 kV

FEATURES

- TE's Raychem MCK-5 is rated to the general electrical requirements of the IEEE-48 withstand tests
- Motor connection kit provides excellent insulation sealing—and resistance to abrasion—in motor connections
- MCK is qualified to ANSI-C119.1 and rated to ICEA electrical withstand test for 1000 V.

APPLICATIONS

- For use as an in-line or stub splice between 1/C poly feeder cable and motor leads

BENEFITS

- The Type V kit is designed to splice the stub or butt configuration that is commonly used where there is insufficient room to make in-line connections.
- The Type L kit is used, where space permits, to splice in-line connections.



PRODUCT SELECTION INFORMATION: DIMENSIONS IN INCHES (MM)

Catalog Number	Motor Feeder Size AWG/kcmil	Bolt Length Max	Connector Length Max	Length Nominal
Type V (Stub)				Cap
MCK-5-1V	#8-#2	1.0	5.0 (127)	7.5 (191)
MCK-5-2V	#1-250	1.5	6.0 (152)	8.5 (216)
MCK-5-3V	300-750	1.5	7.0 (178)	9.5 (241)
Type L (In-Line)			Sleeve	
MCK-5-1L	#8-250	1.0	6.0 (152)	12.0 (305)
MCK-5-2L	300-1000	1.5	7.0 (178)	14.0 (356)
<i>MCK (5/8.7 kV)</i>				

ADDITIONAL PRODUCT INFORMATION

- Select appropriate catalog number based on the motor feeder cable. TE's Raychem MCK-5 selections are based on the typical dimensions of 100% insulated cables and the dimensions of commonly used connectors manufactured in accordance AEIC standard. Nominal insulation thickness (100%): 90 mils. For cables manufactured to other specifications, confirm selection with cable and connector dimensions.
- Shielded cable must be terminated before installing MCK-5 (use TE Connectivity HVT-8x-G or HVT-Z-8x-G/SG. G only for HVT).
- TE's Raychem MCK-5 kits are designed for single-hole connectors and include caps and sealant strips for three connections. Kits do not contain connectors.
- Standard package: MCK-5: 1 kit/box
- Related test reports: MCK-5: EDR-5010