

CJ SERIES

INSULATE
SEAL
PROTECT

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 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. The joints use continuously extruded components for stress control, insulation and the insulation shield. This ensures “cable quality” consistency. They do not suffer from the potential “shot-to-shot” variability of molded products. The CJ series joints have redundant seals. The first seal is provided by a heavy wall tube or wraparound sleeve that encapsulates the joint and seals between the cable jackets. The secondary, or redundant seal, is provided by the heavy wall conductive tube that shields and seals the joint to the cables’ insulation shield.

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

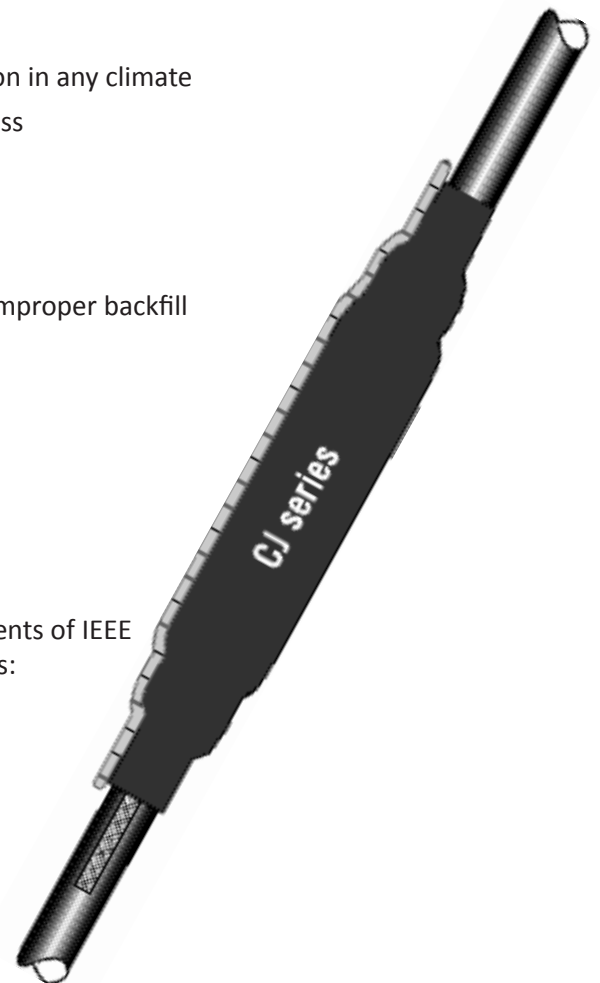
STANDARDS

- Rated to IEEE 404-2000

TEST REPORTS

The CJ 820 series through CJ 3500 series joints were tested to the requirements of IEEE 404-2000 at an independent laboratory. Test reports are available as follows:

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



HEAT SHRINK MEDIUM VOLTAGE

PRODUCT LINE

- 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 armoured 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 ("P" suffix).
- CJ 20 series: 1/C, 5 to 35 kV metal tape, drain wire, UniShield® 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 ("P" 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 armoured 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 ("P" 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 your local DSG-Canusa stocking distributor to add connectors to your kits or consult the DSG- Canusa factory.

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
• 5 min while submerged		☒	☒	21 kV	39 kV	65 kV	87 kV	91 kV