

Cable accessories and connectors

145 kV Cable joint

JS145 Straight cable joint

JX145 Cross-bonded cable joint

145 kV Cable joint

JS145 Straight cable joint

JX145 Cross-bonded cable joint

Application

Premolded cable joint for 123 kV or 145 kV XLPE insulated cables with copper conductor and metal type of cable screens.

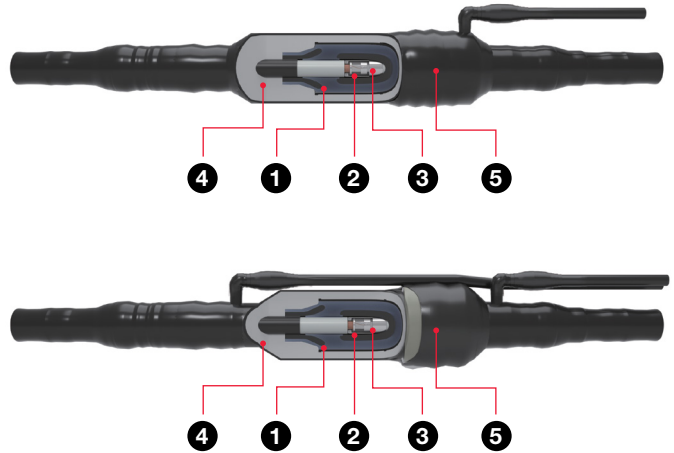
Standard

Designed to meet the requirements of international accepted standards, IEC 60840 and China standard GB/T 11017.

Features

- 1** Joint body: The joint bodies have premolded one-piece design, with a mold-injected outer semi-conductive shielding layer of 6mm thickness. The raw material, liquid silicone rubber (LSR), enables a more compact structure. Different joint body sizes are designed to fit cables with different cross-section area, to ensure optimal interface pressure between joint bodies and cables, as well as the excellent electrical and insulation performance. Straight joint and Insulated joint share the same joint body design
- 2** Connector: Crimping connector, available for copper conductor cables
- 3** Shielding electrode: Different sized shielding electrodes ensures good fit with outer insulation diameters of different cables
- 4** Filling material: The joint is filled with environmental friendly and flame retardant filling compounds, which have excellent insulation, thermal conductive and flame-retardant properties
- 5** Outer water-proof protection: Excellent water-proof performance is guaranteed by a copper casing with pre-molded insulating coating (fiberglass casing is optional) filled with adhesive compound, and oversheathed by waterproof tapes and heat shrink tubes

The outer protection is tested according to GB/T 11017.



Main electrical properties

Standard, IEC 60840, GB/T 11017	Type test kV	Routine test*** kV
Highest voltage for equipment, U_m	145	145
Rated voltage, U	132	132
Value of U_0 for determination of test voltage	76	76
Heating cycle voltage test, $2 U_0$	152/20 cycles	/
Partial discharge test <math>< 5 \text{ pC}, 1.5 U_0</math>	114	114
Switching impulse voltage test	+/-650	/
AC-voltage test, $2.5 U_0$	190, (15 mins)	190, (30 mins)
Visual inspection	Preformed	Preformed

NOTE:

* Please contact Hitachi Energy in case of aluminum conductor cable.

** Please contact Hitachi Energy, if bolt connectors are required.

*** All joint bodies pass the routine test.

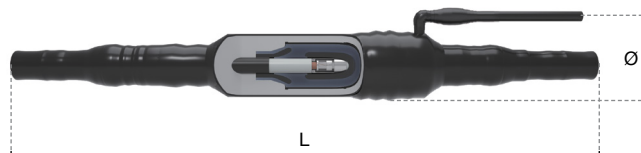
Technical specification

JS145 Straight cable joint

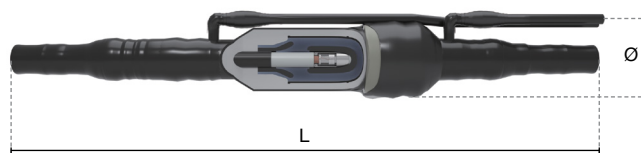
JX145 Cross-bonded cable joint



High-voltage test



JS145 Straight cable joint



JS145 Cross-bonded cable joint

Size information

Type	Dimensions(mm)	
	L	Ø
JS145	~1800	~240
JX145	~1800	~270

Packaging information

Type	Weight (kg)	Dimensions (mm)
JS145	~100	~1900 X 600 X 500*
JX145	~110	~1900 X 600 X 500*

*For further information, please contact Hitachi Energy.

Cable range applicable

Cable type*	126 kV	145 kV
	XLPE Ø (mm)	57-84
Conductor (mm ²)	240-1200	240-1200
Oversheath Ø (mm)	Max. 120	Max. 120

*Please contact Hitachi Energy for 66 kV XLPE cables.

Installation space requirements

Installation	Dimensions (mm)
JS145	Min. 3500
JX145	Min. 3500

Storage

When stored in original, unopened status at normal and dry conditions:

- The joint body has a shelf life of five years from the date of manufacture
- Tape and grease have a shelf life of three years

- Filling compound has a shelf life of one year from the date of manufacture
- Metal parts have no shelf life limit

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