

Product note

Kabeldon cable joint, 52–123 kV JS-A, JX-A

Premolded cable joints for XLPE-insulated 52–123 kV cables with aluminium or copper conductors and various types of cable screens and cable sheaths. The joint is available with or without integrated screen interruption for cross bonding of cable screens. Designed to meet the requirements of internationally accepted standards.

Two types of cable joints are available:

JS-A: Straight through joint.

JX-A: Cross-bonded joint.

The joint is applicable to various types of cable screens and cable sheaths:

C For cables with copper wire screen only.

P For aluminium laminated cables.

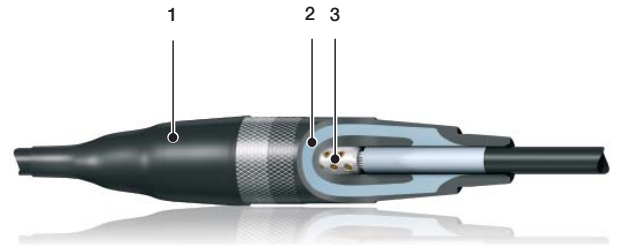
M For cables with metal screen, plain or corrugated; lead, copper, aluminium or stainless steel.

1. Outer protection

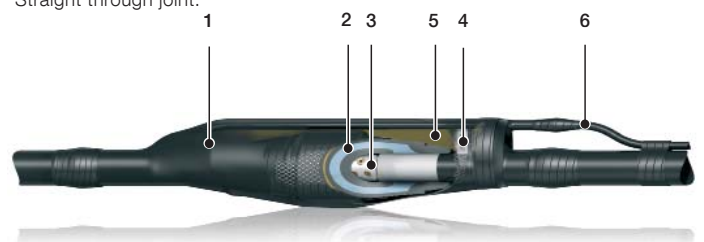
- JS and JX are designed with heat-shrink outer jackets with additional sealing at all ends to prevent longitudinal water ingress.
- JX also includes a heat-shrink crutch-seal and filling compound for moisture and mechanical protection of outgoing cross-bonding cable.
- The outer protection is tested in accordance with IEC 60840 “tests of outer protection for joints”.

2. Joint body

The joint bodies in JS and JX are of premolded one-piece design. The joint bodies with geometrical field control are size wise optimized to ensure an active pressure and sealed interface towards the cable, irrespective of load.



JS
Straight through joint.



JX
Cross-bonded joint.

JX joint body is designed with an integrated screen sectionalizing i.e. the screen is partly interrupted to enable a cross-bonded system.

3. Connector

Kabeldon bolt connector is available for both aluminium and copper conductors.

4. Cable screen

The cable screens are connected with a bolt connector.

5. Filling material

JX is partly filled with two-component filling compound.

6. Coaxial cable

To achieve cross bonding, a coaxial cable shall be used. (Not supplied by ABB.)

Main technical data

Electrical data, IEC standard 60840	Voltage kV		
Highest voltage for equipment, U_m	52	72.5	123
Rated voltage, U	45–47	60–69	110–115
Value of U_0 for determination of test voltage	26	36	64
Heating cycle voltage test, $2U_0$	52	72	128
Partial discharges test $<5pC, 1.5U_0$	39	54	96
Impulse voltage test	250	325	550
AC voltage test, $2.5U_0$	65	90	160



Type testing a JX 123 P.



JS-A 72 kV installation.



JS
Straight through joint.



JX
Cross-bonded joint.



RKM 145
Installation tool.



Installation cone
Needed for installation.



OKJ 2 and OKJ 3
Opto fiber kit for cables with integrated optical fibers in the earth screen. OKJ 2 für JS 123 kV and OKJ 3 for JX 123 kV.

Routine test, IEC standard 60840	52 kV	72 kV	123 kV
PD, max 5 pC at	39 kV	54 kV	96 kV
AC, for 30 minutes at	65 kV	90 kV	160 kV
Visual inspection is performed on all parts of the joints			

Cable range	52 kV	72 kV	123 kV
Prepared insulation Ø (mm)	33–75	33–75	46–100
Conductor Cu/Al (mm ²)	150–1600	150–1600	150–2500
Outer jacket Ø (mm)	Max. 95	Max. 95	Max. 190

Installation	Dimensions (mm)
JS-A, required space in manhole	Min. 2500
JX-A, required space in manhole	Min. 5000

Packaging	Voltage kV	Gross weight kg	Dimensions mm
JS-A	52 and 72	~23-27	1570 x 400 x 210
JX-A	52 and 72	~53-57	1570 x 400 x 430
JS-A	123	~28-33	1570 x 400 x 210
JX-A	123	~59-63	1570 x 400 x 430

Dimensions and weights may vary as products occasionally have different packaging.

For additional information, please visit:
www.abb.com/cableaccessories

© Copyright 2014 ABB. All rights reserved.
Specifications subject to change without notice.

Type	Dimensions 52-72 kV		Dimensions 123 kV	
	L (mm)	Ø (mm)	L (mm)	Ø (mm)
JS-A C	1460	140–170	1450	176–226
JS-A P	1460	140–170	1460	176–226
JS-A M	1460	140–170	1460	176–226
JX-A C	1800	200–235	1800	235–300
JX-A P	1800	200–235	1800	235–300
JX-A M	1800	200–235	1800	235–300

Storage

When stored in original, unopened packaging at temperatures in the range of -30°C to 30°C:

- The joint body has a shelf life of ten years from date of manufacture.
- Tapes and grease have a shelf life of five years.
- Metal hardwares such as connectors and the casing of the outer protection have no shelf life limit.

The two-component filling compound shall be stored in original, unopened packaging at temperatures in the range of 5°C to 30°C. The shelf life is three years from date of manufacture.

During installation we recommend temperatures in the range of 5°C to 30°C.

Optional equipment	Designation
Installation tool	RKM 145
Installation cone	Installation cone
Kit for opto fiber for JS 123	OKJ 2
Kit for opto fiber for JX 123	OKJ 3