

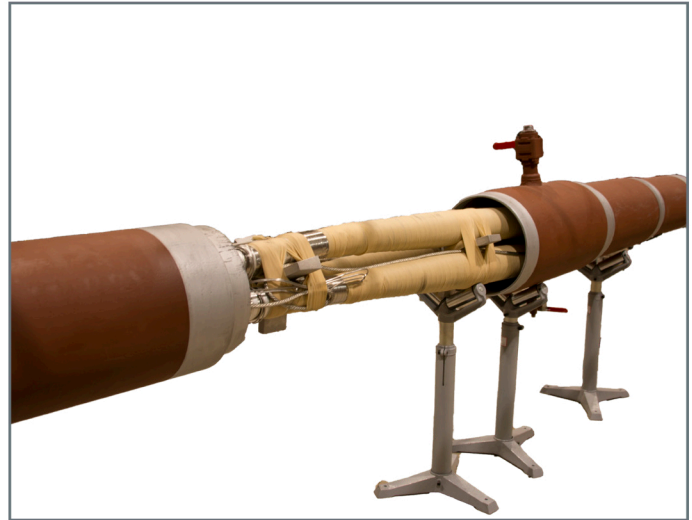
Joins for Pipe-Type Cables with LPP Insulation up to 345kV

G&W LCJ joints are used to connect two 3-core pipe-type cables up to 345kV with fluid filled system nominal pressures up to 400 psi.

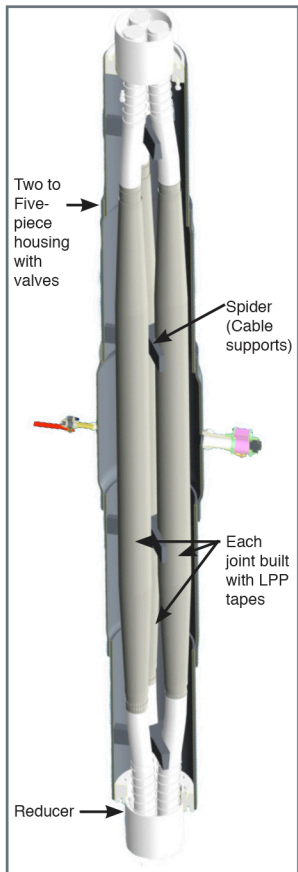
Every joint is custom designed and engineered for the specific cable, system requirements, and field constraints. Kits are supplied with all parts and materials required to construct the joint in the field.

345kV rated joints can fit in typical 18' long by 6' wide manhole. For details and more available layout options contact your G&W representative.

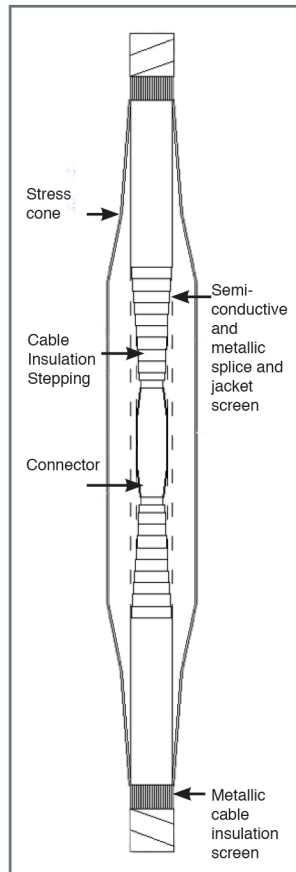
These joints are qualified per IEEE 404-12 at 345kV system voltage level. Additional tests were performed at reduced oil pressure of 100 psi and verify the design margins of the system.



▲ 345kV LPP Joint



▲ Configuration of 345kV 3-c Joint LCJ 180-L



▲ Design of the joint cores

Characteristics	
Nominal System Voltage	345kV
Maximum System Voltage	362kV
Rated Line to Ground	199.2kV
Basic Impulse Level (BIL)	1300kV
AC withstand 24 hours	500kV
Standard	IEEE 404-12 (Table 4)
Cable Range	Suitable for Cables up to 3000KCM
Continuous Current	Same as Cable
Short Circuit Current	Same as Cable

CASING

Casings are fabricated of carbon steel pipe, which is designed to withstand operating and transient pressures of a fluid filled pipe-type system. The telescoping design aids in reducing the length required for installation and space of the manhole.

INSULATION

Insulation of the joint body is built with provided oil-impregnated flat LPP tapes with low dissipation factor and high breakdown strength, which enables for smaller joint diameter and length.

ORDERING INFORMATION

For efficient ordering, please provide the following information:

- System voltage
- Cable specification
- Cable pipe material, diameter and thickness
- Fluid filled system pressure rating
- Manhole size

System Voltage	BIL Rating	Catalog Number
138 kV	650 kV	LCJ 140 - L
230 kV	1050 kV	LCJ 160 - L
345 kV	1300 kV	LCJ 180 - L