

SUPREME

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**MV / LV Aerial Bundled Cable/
HV Covered Conductor Accessories**

Overhead distribution line system can be categorized as either low voltage or medium voltage. Low voltage lines have an operating voltage up to 1kV. They may be either bare or covered. Covered lines may either be unscreened or fully insulated ABC System. In LV Aerial Application, fully insulated ABC are increasingly as being used almost only alternative to bare overhead or underground system in different parts of the world because of their outstanding features.

FEATURES OF LV ABC SYSTEM

The phase conductors are fully insulated. The messenger may be either bare or insulated depending on type of system being followed :-

- ☞ More than one conductor is part of the bundle. Commonly they are four comprising of three phases and one neutral messenger. Very often 5th conductor can be used for street lighting is also a part of the bundle.
- ☞ They are self-supporting and suspended between supports (generally existing poles)
- ☞ They can be installed through forest areas without cutting of aisles prescribed for overhead lines.
- ☞ ABC Bundle and accessories being fully insulated protect lineman actively as the design is touch proof.
- ☞ They are twisted together to form a bundle as there is no requirement of phase to phase clearance. Individual cores are separated only at dead ends, supports, joints and tap-offs.
- ☞ Prescribed clearance required for Bare Conductors under NEC/NESC/VDE/EDF codes not applicable here and the same may be reduced without limitation as long as insulation does not become vulnerable to mechanical damage.
- ☞ The conductors and joints are fully water proof. All joints and taps are required by most standards to be tested to withstand 6 kV RMS while being immersed in water of defined maximum resistivity and prescribed minimum pressure.
- ☞ Lower voltage drop and higher current carrying capacity. For supply cases vulnerable to voltage problem the use of ABC system increases transmission capacity because of very low inductive resistance as compared to ohmic resistance.

Dead End Clamp



French System Insulated Messenger & Insulated Phase Conductors Dead End Clamp

German System 4 Core Tension Clamp

Finish / REC India System Bare Messenger Dead End Clamp

Suspension Clamp



French System Insulated Phase Conductors & Insulated Messenger Dead End Clamp

German System 4 Core Suspension Clamp

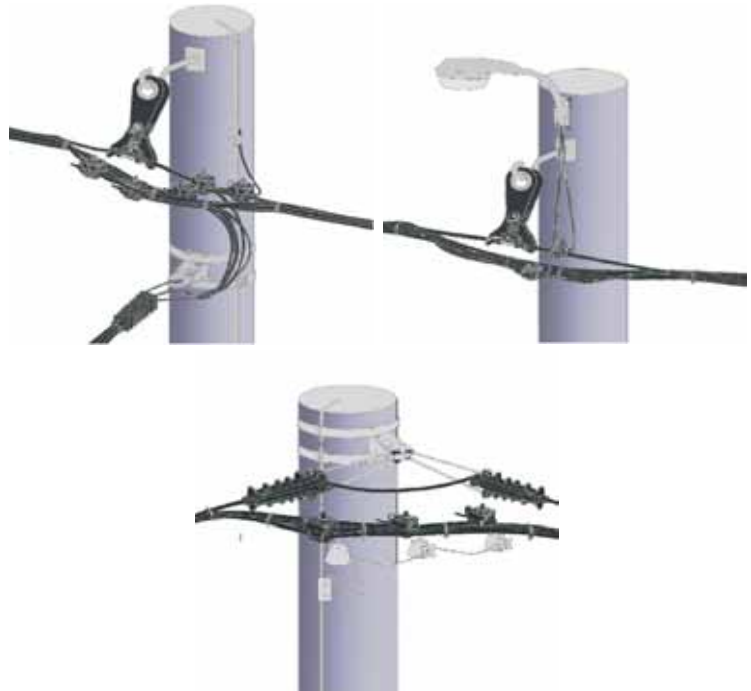
Finish / REC India System Bare Messenger Suspension Clamp attached to Pole Clamp



French System Bare Messenger Automatic Midspan Joint (Cross Sectional View)

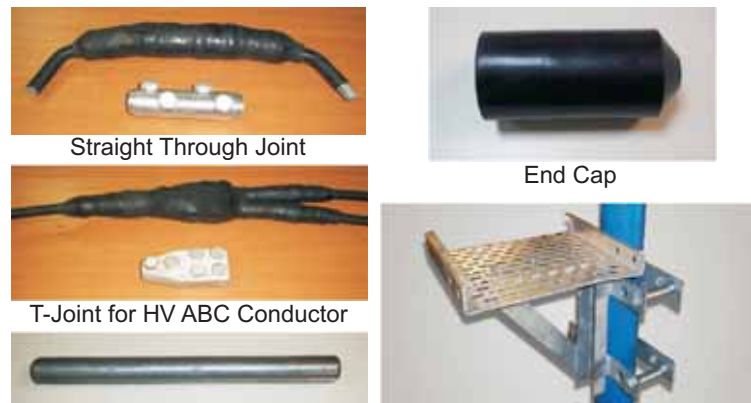
MV ABC Dead End & Suspension Fittings

Fully Insulated Joint (Under Installation on Insulated Core of ABC)



Conceptual Assembly of ABC system including Suspension & Tension Clamp, Piercing connector, pole bracket, pole strap & street light.

HV ABC CONDUCTOR



Straight Through Joint

End Cap

T-Joint for HV ABC Conductor

Midspan Joint for Bare Messenger

Cable Tray for HV AB Cable



Suspension Clamp Assembly

Tension Clamp Assembly

COVERED CONDUCTOR



Top Tie



Tension Clamp for Covered Conductor



Covered



Piercing Connector for Covered Conductor



Al. Sleeve
Midspan Joint for Covered Conductor



LV ABC CONDUCTOR



Insulated Compression Joint



Insulated Piercing Connector



Tension Clamp Assembly



Suspension Clamp Assembly





SUPREME & CO. PVT. LTD.

ISO 9001: 2008 & 14001: 2004 Certified

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