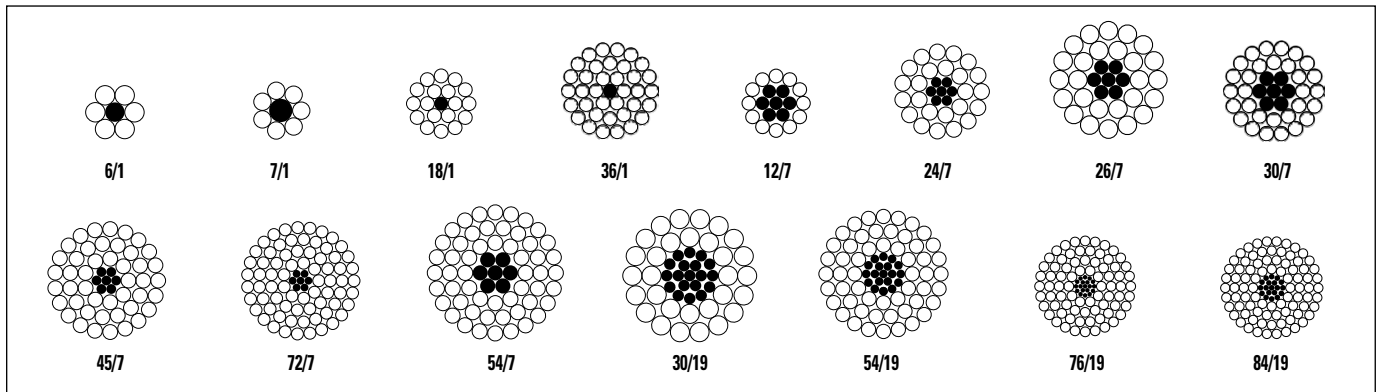


TransPowr® ACSR/AW Bare Overhead Conductor

Aluminum Conductor Aluminum-Clad Steel-Reinforced Concentric-Lay-Stranded



Product Construction:

Complete Conductor:

ACSR/AW is a composite concentric-lay-stranded conductor. ACSR/AW conductors are manufactured in accordance with the requirements of the latest issue of ASTM B549. Aluminum-clad steel strands form the central core of the conductor, around which is stranded one or more layers of aluminum 1350-H19 wires. The aluminum-clad steel core may consist of a single strand or a concentric stranded conductor of 7, 19, 37 or more wires. Numerous combinations of aluminum and steel strands and layers are possible. The sizes and strandings listed on the following pages are those most frequently used for overhead lines.

Features and Benefits:

The AW core, which consists of a thick layer of aluminum (approx. 10 percent of the nominal wire radius) over steel, gives ACSR/AW conductors the advantage of the light weight and good conductivity of aluminum with the high tensile strength and ruggedness of steel. The cross-sections above illustrate some common strandings.

Applications:

Aluminum conductors reinforced with aluminum-clad steel wire (ACSR/AW) are used for overhead distribution and transmission lines where a high degree of corrosion resistance is needed. It should also be considered for use in locations where air pollution exists, such as along the coast or in highly industrialized areas.

Options:

- E3X® surface coating (/E3X)
- Compact aluminum strands (ASTM B401)
- High-conductivity aluminum (/HC) (62.2% IACS)
- Trapezoidal-shaped aluminum strands (/TW)
- Non-specular surface finish (/NS)

