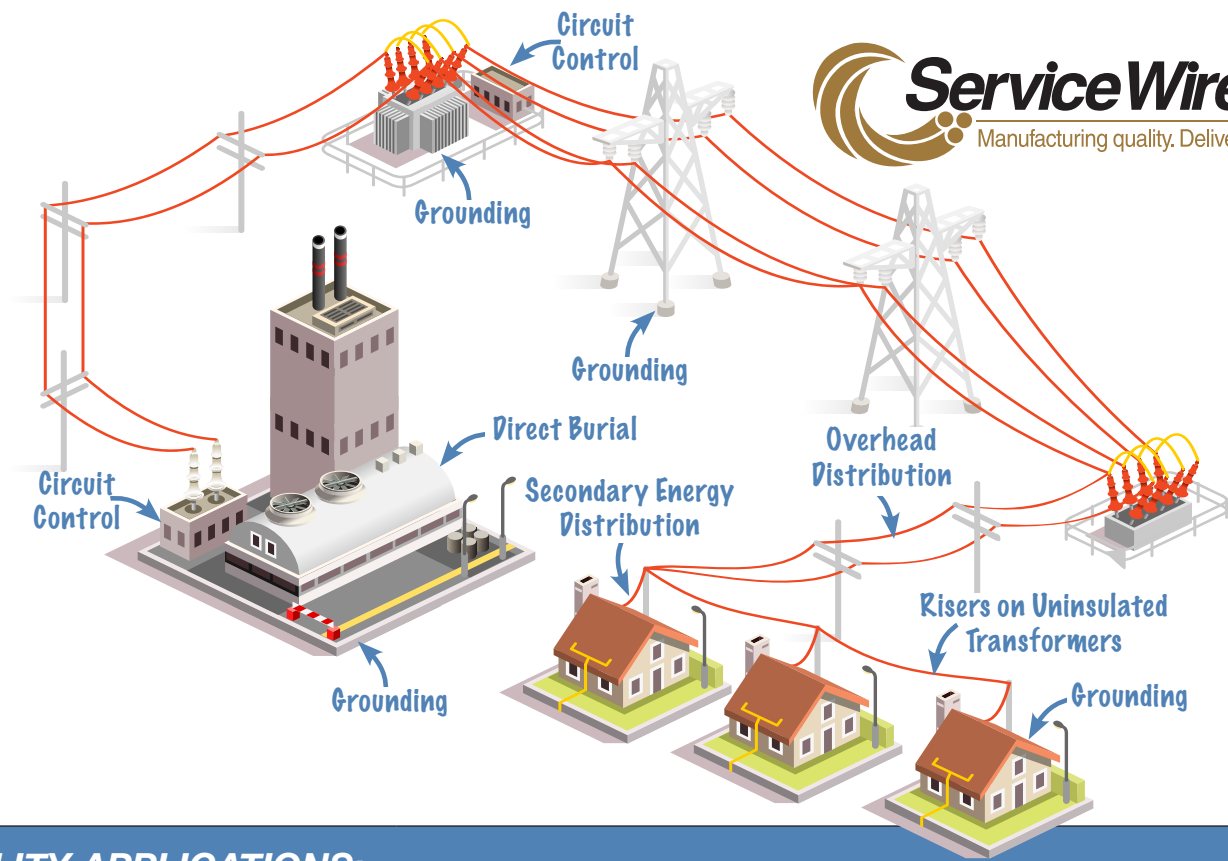




UTILITY Selection Guide

| CABLE SELECTION: | |
|---|---|
| Bare Copper <i>Soft, Medium-Hard, Hard Drawn</i> | Typically used for grounding requirements for generating plants, distribution systems, transmission towers and substations. Provides a reference (ground potential) against which all other voltages in a system are measured. |
| Bare/Tinned, Solid/Stranded 14 AWG - 1,000 Kcmil | |
| USE-2 or RHH/RHW-2 <i>14 AWG-750 Kcmil, 600V UL/1,000V c(UL)</i> | Used for 600/1,000 volt applications where additional physical protection is required. Can be directly buried in the earth or encased in concrete. Enhanced insulation level improves electrical performance on demanding circuits. |
| <i>CT and FT-4*</i> Singles or ServicePlex® | <i>(* VW rated singles 1/0 and larger)</i> |
| XHHW-2 <i>14 AWG-750 Kcmil CT and FT-4*</i> | Used to power distribution and branch feeder circuits installed in conduit or cable tray. Durable product that is flame resistant and suitable for use in 105°C dry systems and 90°C in Wet/Dry locations. |
| Singles or ServicePlex® | <i>(* VW rated singles 1/0 and larger)</i> |
| Control Cable <i>PVC, ServiceCPE®, EnviroPlus® (LSZH)</i> | Used in generating plants and substations for circuit controls. High-performance XLPE insulation is typically used, for its improved electrical and physical resistance. In smart-grid applications, shielded control cable resists EMF, ambient corona and other electrical phenomena that can cause interruptions in electrical service. |
| Shielded/Non-Shielded Tinned/Non-Tinned K1 or K2 Color Code | |
| Weatherproof Line Wire <i>Soft, Medium-Hard, Hard Drawn</i> | Used for overhead current-carrying applications. Line Wire's weatherproofing provides for years of uninterrupted service. Copper conductors have the highest conductivity for power distribution. |
| Solid/Stranded | |
| Service Drop <i>2 or 3 Conductor (plus copper messenger)</i> | Typically used from the utility pole-mounted transformers to secondary residential or commercial loads. Designed for overhead applications. In some cases, may be used for light industrial load. |
| Solid/Stranded | |
| Transformer Riser | Used in transformer riser applications. High molecular weight covering (LLD-PE - Linear Low Density Polyethylene) limits faults due to atmospheric conditions, vibrations and faulting caused by incidental contact with wildlife or tree limbs. Superior resistance to moisture, corrosion and UV breakdown. |
| Solid/Stranded | |



| UTILITY APPLICATIONS: | |
|--------------------------------------|---|
| Grounding | Direct electrical connection to earth. Effective electrical grounding minimizes susceptibility of equipment to interference, damage due to lightning, electrostatic buildup and unintended faults. |
| Direct Burial | Cable is buried directly underground and requires added physical protection. Directly buried conductors are often used where the added physical protection of the insulation is desired. |
| Low Voltage Power and Control | 600V power and control cable for Meter Loops, PT/CT enclosures, substation equipment and generating stations. |
| Circuit Control | Generating and substation applications. Often shielded on smart grid designs to provide EMF protection and electrical resilience. |
| Overhead Distribution | Overhead distribution lines, where the added conductivity of copper is advantageous. Bare overhead line wire is installed on insulators as it is considered bare copper (the air, along with conductor separation, provides the required insulation for these conductors). |
| Secondary Energy Distribution | Distribution of secondary energy to residential or commercial load. Provides electric connection from utility pole-mount transformers to the secondary load. Copper typically used for highest conductivity to ensure years of uninterrupted service. |
| Risers on Transformers | Overhead pole-mount transformers. Require protection from faults caused by wildlife and atmospheric conditions. |