

CABLES vs WIRES

Comparing Features, Classifications and Applications



Differences between Cables and Wires

	Cables	Wires
Structure	Composed of multiple conductor cores bundled, twisted, or stranded together. More robust structure but heavier and less flexible due to additional insulation and protective layers.	Consist of a single conductor. Wires are typically more flexible and easier to install in tight spaces
Functions	Suitable for more complex systems requiring durability, long-distance power transmission, and integrated control or data transfer	Used for short electrical connections and basic current transmission
Applications	Communication networks Automated control, industrial use	Residential wiring and small household electronic devices

Differences between Cables and Wires

	Cables	Wires
Classifications	Highly diversified, suitable for different operating conditions	Two main types: solid wire and stranded wire
Flexibility	Equipped with many protective layers, offering superior durability	More flexible due to simpler construction, but less durable and more prone to damage in harsh environments
Cost	Higher cost but delivers better long-term value	Lower cost due to simple structure and fewer protective components

WIRES

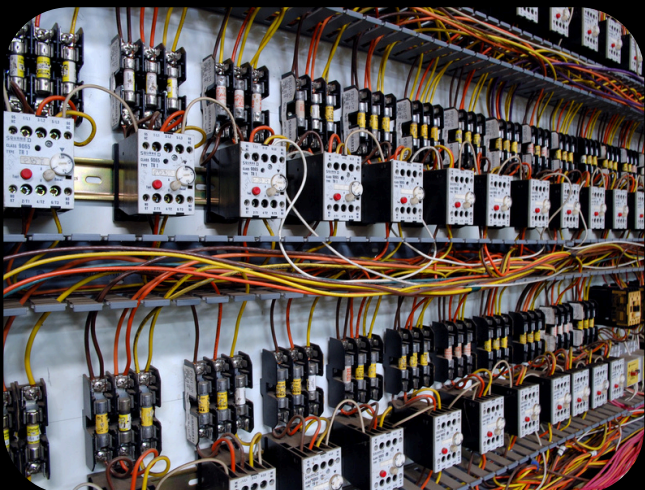
Single conductor, solid wire, stranded wire, tinned copper wire.

Flexibility, low cost.

Short-distance power transmission.



Household appliances, internal wiring in devices, lighting systems, quick repairs, etc.



CABLES

**Multiple conductors,
bundled/ twisted/ braided,
conductor + insulation +
outer sheath, armouring,
shielding.**

**Durability, multi-layer protection,
specialized features (chemical-
resistant, etc.).**

Industrial systems, communication networks, automation, motor control,
harsh environments (oil, chemical, outdoor).



Chains, Cables, Assemblies: Quality from a Single Source

