

CAVALCADE Power Cable

Ensure continuous, reliable power

Applications

- ▶ Conventional and unconventional wells
- ▶ Motor electrical requirements from 2kV to 5kV
- ▶ Bottomhole temperatures up to 450 °F (232 °C)
- ▶ Casing sizes from 5.5 in. to 9 in.

Benefits

- ▶ Reduces power losses
 - Solid copper conductor
- ▶ Enhances system reliability
 - Insulation for high-gas environments
 - Lead sheath to prevent gas and fluid ingress
 - Armor metallurgy options to mitigate corrosion
 - Heavy lead sheath and PTFE tape configuration for harsh, corrosive environments



It doesn't matter how robust your electrical submersible pumping (ESP) system is if you can't get consistent, reliable power to the submersible motor.

Apergy's **CAVALCADE™ power cable** is designed to ensure the electrical integrity of UNBRIDLED® ESP Systems as well as extend system run life in harsh downhole conditions. Our cables meet the high-quality standards required for any oil and gas industry specification—even the most challenging unconventional applications.

Flat or round cable configurations are available in multiple gauges to meet the power requirements for all UNBRIDLED ESPs. CAVALCADE power cables come standard with multiple insulation and jacket options and solid copper conductors, all of which is protected by a metal armor.

All CAVALCADE cables have solid copper conductors, which reduces power losses and provides greater tensile

strength. Cables are available with either polypropylene or EPDM insulation, wrapped in nitrile or lead sheathing, to meet the electrical requirements and temperature ratings necessary for oilfield applications. The EPDM insulation, combined with lead sheathing, provides superior protection from gas ingress into the cable in high H₂S environments. The metal armor encasing the conductor, insulation, and sheathing is available in galvanized steel, stainless steel, or Monel[†] to meet a wide range of well conditions.

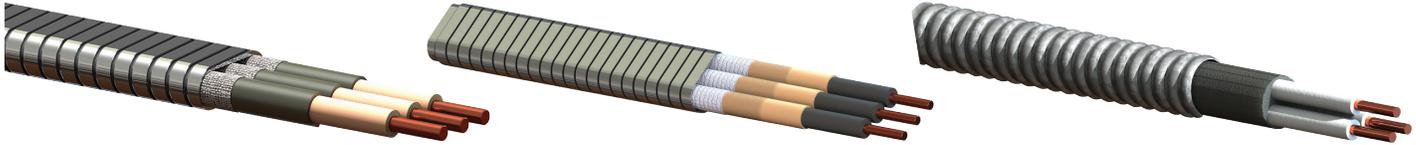
For harsh, corrosive environments, CAVALCADE power cable is available with a heavy lead sheath that is wrapped in polytetrafluoroethylene (PTFE) tape to protect the lead sheath from well fluids. This construction extends ESP run life in challenging conditions where the chemical composition of the well fluid can compromise the lead sheath.

[†] Monel is a trademark of Special Metals Corp.

Flat cable with EPDM insulation

Flat cable with polypropylene insulation

Round cable with EPDM insulation



CAVALCADE Power Cable Specifications

| Gauge | Orientation | Conductor | Insulation | Sheath | Tape | Armor | Temperature | Voltage |
|-------|-------------|-----------|---------------|-----------------|-----------|------------------------------------|---------------|---------|
| 2 | Flat | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |
| | | Copper | EPDM | Lead Heavy Lead | PTFE Tape | Galvanized Steel / Stainless Steel | 450°F (232°C) | 5 kV |
| | Round | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |
| 4 | Flat | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |
| | | Copper | EPDM | Lead Heavy Lead | PTFE Tape | Galvanized Steel / Stainless Steel | 450°F (232°C) | 5 kV |
| | Round | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |
| 6 | Flat | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |
| | | Copper | EPDM | Lead | N/A | Galvanized Steel / Stainless Steel | 450°F (232°C) | 5 kV |
| | Round | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |
| 1/0 | Flat | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |
| | | Copper | EPDM | Lead | N/A | Galvanized Steel / Stainless Steel | 450°F (232°C) | 5 kV |
| | Round | Copper | Polypropylene | NBR | N/A | Galvanized Steel / Stainless Steel | 205°F (96°C) | 5 kV |

