

CABLES FOR VARIABLE FREQUENCY DRIVES

WHAT IS A VARIABLE FREQUENCY DRIVE

In today's dynamic world, efficient control of electric motors is essential for optimizing performance and reducing energy consumption. A Variable Frequency Drive, also known as a VFD or an adjustable speed drive, is an electronic device designed to regulate the speed and torque of an electric motor by varying the frequency and voltage supplied to it. By altering the frequency of the electrical input, the VFD allows precise control over motor speed, enabling optimization for specific tasks and processes.

WHAT ARE THE VFD CABLES

Cables play a crucial role in ensuring the optimal performance and longevity of variable frequency drives (VFDs).

Investing in high-quality VFD cables is essential for optimizing efficiency and reliability in variable frequency drive systems.

With their ability to withstand high voltage, protect against interference, and ensure reliable power transmission, VFD cables are the key to unlocking the full potential of your operations.



KEY CHARACTERISTICS OF VFD CABLES

- ▶ **High Voltage Withstand:** VFD cables are designed to withstand high voltage spikes and surges, ensuring the safe transmission of power in demanding industrial environments.
- ▶ **Electromagnetic Interference (EMI) Shielding:** These cables feature specialized shielding to minimize electromagnetic interference, safeguarding sensitive equipment and maintaining signal integrity.
- ▶ **Insulation and Jacketing:** VFD cables are constructed with insulation and jacketing materials that offer excellent resistance to heat, oil, abrasion, and environmental factors, ensuring long-lasting performance.
- ▶ **Flexibility:** VFD cables are designed to be flexible, facilitating easy installation and allowing for smooth routing in tight spaces.

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VFD CABLE RANGE

IAC is an expert and highly skilled manufacturer of VFD and servo motor cables. Our production versatility and project-focused approach allow us to offer our customers customized cable constructions that best fit their needs and requirements. Our range is fully open to modifications, and our technical department studies and proposes the best options to achieve optimal performance at the lowest cost.

VFD CABLE PROGRAM



▶ 2XSLCHK-JB

CONSTRUCTIVE FEATURES

- Bare copper conductor, class 5, according to EN 60228 and IEC 60228
- XLPE insulation (Cross-linked polyethylene)
- Wiring in concentric layers
- Screen Polyester Tape + Aluminum / Polyester Tape
- Tinned copper braid screen, 85% coverage
- Outer sheath LSZH
- Outer sheath color : black, grey or transparent
- Manufactured both with a symmetrical (4G120), reduced (3×120+1G70) or divided (3×120+3G16) ground conductor.
- Cross-section from 0.5 to 4G400mm²
- Rated voltage : up to 3kV
- CPR Dca



▶ 2YSLCYK-J

CONSTRUCTIVE FEATURES

- Bare copper conductor, class 5, according to EN 60228 and IEC 60228
- PE insulation according to IEC 60502-1
- Wiring in concentric layers
- Screen Polyester Tape + Aluminum / Polyester Tape
- Tinned copper braid screen, 85% coverage
- Outer sheath PVC ST2 according to IEC 60502-1+UV additive
- Outer sheath color: black, grey or transparent (2YSLCY-J)
- Manufactured both with a symmetrical (4G120), reduced (3×120+1G70) or divided (3×120+3G16) ground conductor.
- Cross-section from 0.5 to 4G400mm²
- CPR EcA

CABLES FOR VARIABLE FREQUENCY DRIVES



▶ R02C4V-K

CONSTRUCTIVE FEATURES

- Bare copper conductor, class 5, according to EN 60228 and IEC 60228
- PE insulation according to IEC 60502-1
- Wiring in concentric layers
- Screen Polyester Tape + Aluminum / Polyester Tape
- Tinned copper braid screen, 85% coverage
- Outer sheath PVC ST2 cover according to IEC 60502-1+UV additive
- Outer sheath color: black, grey or transparent
- Manufactured both with a symmetrical (4G120), reduced (3×120+1G70) or divided (3×120+3G16) ground conductor.
- Cross-section from 0.5 to 4G400mm²
- Rated voltage : up to 3kV
- CPR EcA



▶ R02C4Z1-K

CONSTRUCTIVE FEATURES

- Bare copper conductor, class 5, according to EN 60228 and IEC 60228
- XLPE insulation (Cross-linked polyethylene)
- Wiring in concentric layers
- Screen Polyester Tape + Aluminum / Polyester Tape
- Tinned copper braid screen, 85% coverage
- Outer sheath LSZH
- Outer sheath color : black, grey or transparent
- Manufactured both with a symmetrical (4G120), reduced (3×120+1G70) or divided (3×120+3G16) ground conductor.
- Cross-section from 0.5 to 4G400mm²
- Rated voltage : up to 3kV
- CPR Dca

CABLES FOR VARIABLE FREQUENCY DRIVES



▶ ROZ1-K (EMC)

CONSTRUCTIVE FEATURES

- Bare copper conductor, class 5, according to EN 60228 and IEC 60228
- Insulation Cross-linked polyethylene (XLPE) type DIX 3 according to UNE 21123, HD 603 S1 and IEC 60502-1
- Wiring in concentric layers
- Screen Tinned copper braid plus Aluminum/ Polyester Tape
- Outer sheath LSZH
- Outer sheath color : black, grey or transparent
- Manufactured both with a symmetrical (4G120), reduced (3×120+1G70) or divided (3×120+3G16) ground conductor.
- Cross-section from 0.5 to 4G400mm²
- Rated voltage : up to 3kV
- CPR EcA



▶ OTHERS

- NYCY
- NYCWY
- N2XCH
- Z1C4Z1-K
- Any other construction on demand

FEATURES ON DEMAND

- ▶ Copper class 1, 2, 5 and 6
- ▶ AWG
- ▶ Rated voltage up to 3kV
- ▶ Fire resistant
- ▶ Others

CABLES FOR VARIABLE FREQUENCY DRIVES

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THE MORE RELIABLE AND FLEXIBLE SERVICE :

- ▶ Full cable customization. OEM available
- ▶ Reduced MOQ's
- ▶ Faster lead times
- ▶ Worldwide deliveries from Spain