

Flex-Core® Model# FCL Flexible Split-Core Current Transformer

Top 4 Mission Critical Sectors Aided by the FCL Flexible Split-Core Technology

Flex-Core® has engineered the [FCL split-core current transformer](#) for easy installation over busbars and cables to precisely represent the primary current. The construction, which uses a single split configuration, provides flexibility and a wide opening that allows easy installation in existing conductors.

The core consists of directional silicon steel with secondary copper windings encapsulated in silicone rubber to protect against moisture, dirt, oil, corona, salinity, and UV radiation. The FCL split-core current transformer is UL recognized for indoor use and non-UL outdoor applications.

All FCL models come with standard 12ft lead cables with black and white lead wires covered by a yellow sheath; these come standard with spade terminals at the end.

Because of the flexible construction and ease-of-installation, the FCL split-core current transformers, particularly those with 0-5A secondary outputs, are industry standards in industrial and commercial applications such as:

1. Information (Data Centers)

Flex-Core® has sold many FCL800/5-4 models in the US and Canada for use in the construction of new data centers and retrofits of existing facilities. Because of the ease of installation over existing cables and bus bars, these critical systems are typically down for a matter of minutes rather than the hours required when using other split-core technology. The FCL800/5-4 has a metering accuracy of +/-1.0% at 2.0va burden, which is very applicable for power quality and energy monitoring.

2. Power Quality (Power Factor Correction and Active Harmonic Filters)

The FCL split-core current transformers are used in equipment that provides power factor correction and active harmonic filters to solve power quality issues that can destroy critical equipment in utility grids, commercial and industrial facilities, data centers, hospitals, and induction furnaces. The split-core configuration is ideal for quick installation in difficult locations.

3. Transportation (Marine)

For more than five years, Flex-Core® has supplied the maritime industry with FCL model current transformers. The split-core construction and the silicon rubber encapsulation make the FCL split-core current transformers ideal for the harsh working environments typical in ocean-going vessels – the silicon rubber is resistant to saline, oil, and dirt.

4. Power and Energy Monitoring (Utilities)

The Flex-Core® FCL series has become a leading choice for power and energy metering. Among the four different outputs to choose from, this CT is the industry's first single break flexible split-core current transformer that offers the 5A output many meters require. The 12ft secondary lead wire is just the right length to reach between the cable and control compartments.

The [FCL current transformer](#) is available with seven different internal diameters and nineteen current ratios. Custom lead lengths and custom ratios are available upon request. The standardized 0-1.0Aac or 0-5.0Aac output is the most common configuration needed for metering applications.

Flex-Core® has also developed a current-to-voltage output current transformer utilizing the 0-0.333Vac or the 0-1.0Vac output in response to the emerging sub-metering market. This current transformer is used extensively in the submetering market but can be used with any meter that requires a voltage input for current sensing.

Flex-Core® can provide custom solutions for most commercially available meters, so please contact us if your application requires something that you don't see within our offering.

