

# Composite cables for ITER applications Cat. C – High vacuum Quality Class 2

## ADVANTAGES

- > Range of cables built to provide the most reliable interconnect in a high vacuum,
- > Can withstand high radiation dose and neutron fluence in a wide temperature range,
- > The polyimide insulation combines the advantages of three unique manufacturing processes, offering outstanding electrical performances with reduced dimensions and good flexibility.

## GENERAL CHARACTERISTICS

- > Compliant with ITER Vacuum Handbook,
- > Temperature: 4K (static) to 473K (200°C),
- > Radiation resistance: up to 50 MGy,
- > Fire resistance compliant with NFC 32070 C1,
- > Zero Halogen, low smoke insulation.

## APPLICATIONS

- > Typical applications are in-cryostat and range from instrumentation to high power / high voltage thanks to custom designed variants.

# Composite cables for ITER applications

## CAT. C - HIGH VACUUM QUALITY CLASS 2

ALL INFORMATION CONTAINED IN THIS BROCHURE IS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

### EXAMPLES OF CONFIGURATION

#### Technical Characteristics

Section L (<1kV) – Low voltage, control & instrumentation

Cat. C – High vacuum quality class 2 (in-cryostat)

Overall shield

Twisted pair cable

ITER code	Wires	AWG	Diameter	Weight	Bending radius
T20226LC	2 (1pair)	26	2.7 mm	18 kg/km	14 mm
T20426LC	4 (2 pairs)	26	4.5 mm	33 kg/km	23 mm
T20626LC	6 (3 pairs)	26	4.8 mm	41 kg/km	24 mm
T21226LC	12 (6 pairs)	26	6.1 mm	65 kg/km	31 mm
T24026LC	40 (20 pairs)	26	10.1 mm	182 kg/km	51 mm
T20222LC	2 (1pair)	22	3.6 mm	27 kg/km	18 mm
T20422LC	4 (2 pairs)	22	5.7 mm	52 kg/km	29 mm
T20622LC	6 (3 pairs)	22	6.2 mm	66 kg/km	31 mm
T20822LC	8 (4 pairs)	22	6.7 mm	79 kg/km	34 mm
T21222LC	12 (6 pairs)	22	8.0 mm	111 kg/km	40 mm
T21822LC	18 (9 pairs)	22	13.2 mm	326 kg/km	66 mm

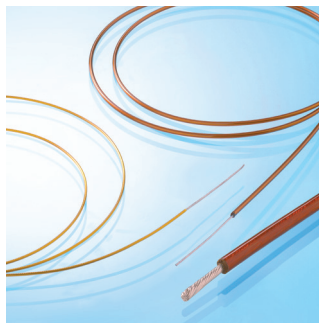
### CUSTOM-DESIGNED VERSIONS

Don't hesitate to contact us for others versions: [contact.iter@axon-cable.com](mailto:contact.iter@axon-cable.com)

We can offer cable assemblies to your needs.

#### Examples:

- different AWG,
- number of wires,
- different configurations,
- insulating voltage,
- optimized EMI,
- ...



Extruded wires



Taped cables