

# 344 Superconductors

Type CryoBlock2™ HTS Wire

- CryoBlock2 wire is used in current leads for high electrical conductivity, low heat leak connections to LTS magnets and circuits.
- The extremely low thermal conductivity of CryoBlock2 wire below 77K enables high temperature gradients to be maintained with minimal heat loss.
- One-third the thermal conductivity and 6 times stronger than 1G CryoBlock™

**344 superconductors are American Superconductor's YBCO second generation HTS wires.**



## Mechanical Properties:

Average thickness:	0.27 - 0.31 mm
Minimum width:	4.27 mm
Maximum width:	4.55 mm
Minimum double bend diameter (RT):	25 mm <sup>i</sup>
Maximum rated tensile stress (RT):	300 MPa <sup>i</sup>
Maximum rated wire tension (RT):	20 kg <sup>i</sup>
Maximum rated tensile strain (77K):	0.3% <sup>i</sup>

## Electrical Properties:

### Minimum amperage (Ic)<sup>ii</sup>

80A or 90A (100A, contact factory)
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## Composite Thermal Conductivity and Electrical Resistivity

T(K)	k(W/m·K)
10	7
25	12
50	15
75	17.5
100	20

Continuous piece length: Contact factory

Certificate of Conformance provided.

Certificate of Analysis optionally available. Contact factory.

<sup>i</sup> Greater than 95% Ic retention

<sup>ii</sup> 77K, self-field, 1μV/cm

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