Technical Information

Metal braids, whether they are tubular or flattened follow the same basic principles of braid construction. The construction of a braid is usually written as shown below:

48 / 30 / 0.15

- **0.15** — Diameter of conductor strands
- **30** — Number of conductor strands or ends
- **48** — Number of carriers

The Size of a Braid

The size of a braid is most often quoted using its 'cross-sectional area', although its width, length and thickness may also be given. The cross-sectional area of a braid is crucial to predicting its current rating, its resistance and its temperature rise due to it carrying a given current. The cross-sectional area of a braid is calculated using the following equation:

$$\text{Cross-sectional area} = \frac{C \times E \times \pi \times D^2}{4}$$

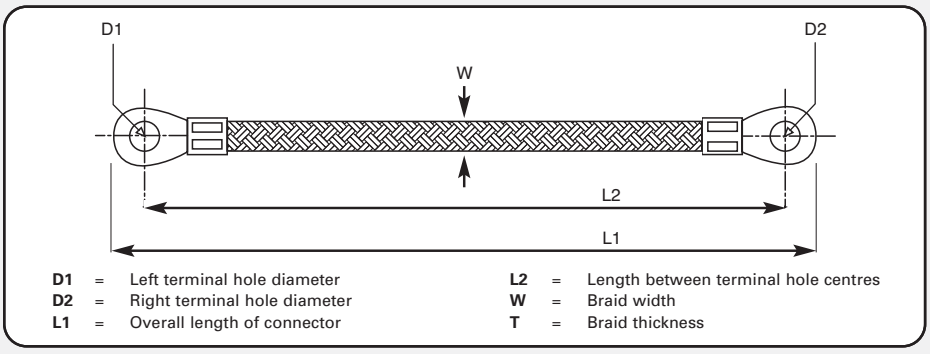
Example:

A braid manufactured using a 48-carrier machine, comprising 30 ends of a 0.15mm diameter conductor strand, using the equation above, has a cross-sectional area of 25mm²

C = Number of carriers
E = Number of conductor strands or ends
π = 3.142
D = Diameter of conductor strands

Braid Connectors - Critical Dimensions

Braid connectors are typically designed and manufactured for a specific application or to a detailed customer specification. In addition to the cross-sectional area of a braid the dimensions shown below are required to ensure the correct finished product.



D1	=	Left terminal hole diameter	**L2**	=	Length between terminal hole centres
D2	=	Right terminal hole diameter	**W**	=	Braid width
L1	=	Overall length of connector	**T**	=	Braid thickness

Disclaimer