# CPC Port
Version 8.26

A CPC port allows the plasma controller to communicate with the plasma cutter. Typically, it's used in conjunction with a voltage divider. On the Hypertherm, the CPC port is a circular connection on the front control panel.

By default, most plasma cutters are not equipped with CPC ports or voltage dividers. They're an option when buying, or alternatively, they can sometimes be added later. The Hypertherm CPC port uses 7 wires:
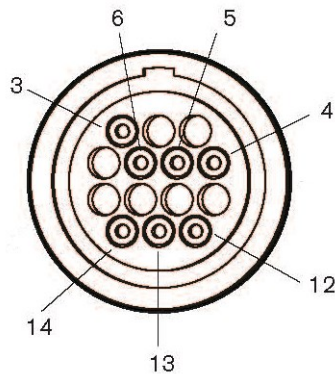
Wires 3 and 4 are inputs, and control the start circuit inside the plasma cutter. A switched signal from the plasma controller turns the plasma cutter on or off.

Wires 5 and 6 are outputs from the voltage divider. They provide voltage feedback from the arc back to the controller. The controller uses this feedback to monitor the arc, and very precisely adjust the height of the torch as necessary. This is the basis of arc voltage control, and is necessary to maintain the proper height while cutting.

Wires 12 and 14 are dry contacts (a normally open switch) used to enable machine motion. This circuit monitors the arc. When the arc strikes, and as long as the arc is maintained, the circuit is closed. This information is used by the controller to enable or disable table motion. For example, if the torch were to run off the material during a cut and the arc subsequently went out, the plasma table would automatically stop.

Wire 13 is a ground connection. It may or may not be used, depending upon the needs of the controller.