

## 040/070 Series Hybrid I/O

### Features

- I/O connectors for use with a mixture of signal and power circuits
- Plug connector for wire termination accepts three types of circuitry, i.e., signal and power circuits singly or a mixture of both circuits
- Board-mounting cap connector accepts signal circuits or power circuits and a mixture of both

### Performance Data

#### Low-level resistance and overall resistance:

040 Series—  
10mΩ max. (initial)  
20mΩ max. (final)

070 Series—  
3mΩ max. (initial)  
10mΩ max. (final)

#### Insulation resistance:

100MΩ min. DC 500V

#### Withstanding strength voltage:

1,000V AC for 1 minute

#### Contact retention:

Lance only—6kg min.  
Lance plus double—  
8kg min.

#### Operating temperature range:

-30° ~ +105°C

#### Product specification:

108-5280  
108-5342 (Mark II)

#### Mounting specification:

040 Series—  
114-5108, 5094, 5159,  
5133  
070 Series—  
114-5091, 5092, 5160



AMP 040/070 Hybrid I/O Connectors are an improved wire-to-board interconnection connector incorporating the features of both 040 and 070 connectors which have proven performance as a sub-miniature I/O connector for automotive applications. These connectors consist of a plug connector for wire termination which accepts three types of circuitry, i.e., signal, power and a mixture of both (for loading receptacle contacts) and a PC board-mount cap connector. The plug connector features a housing lance design; eliminating the possibility of contacts being tangled with one another or a deformed lance. This receptacle contact is available in two series, 040 and 070. It resists damage with a built-in spring and ensures a reliable electrical connection. The plug housing also features an integral double-lock to hold contacts loaded after wire termination, providing an effective protection against contact damage due to rocking motion at mating & unmating.

The board-mount cap connector is preloaded with right-angle post contacts for soldering.

The connectors are available in the following sizes:

- Plug Connectors
  - 12 positions (signal circuits)
  - 12 positions (power circuits)
  - 16 positions (signal circuits)
  - 22-positions hybrid (16 positions for signal and 6 positions for power circuits)
  - 26-positions hybrid (16 positions for signal and 10 positions for power circuits)
- Cap Connectors
  - Plug listed in parentheses are mating connectors.
  - 26 positions (26-position hybrid)
  - 34 positions (12 positions for power circuits and 22-position hybrid)
  - 38 positions (16 positions for signal circuits and 22 positions for 22-position hybrid)

- 42 positions (16 positions for signal circuits and 26 positions for 26-position hybrid)
- 48 positions (22 positions for 22 position hybrid and 26 positions for 26-position hybrid)
- 54 positions (12 positions and power circuits, 16 positions for signal circuits and 26 position for 26-position hybrid)
- 64 positions (16 positions for signal circuits 22 positions for 22-position hybrid and 26 position for 26-position hybrid)
- 76 positions (12 and 16 positions each for signal circuits, 22 positions for 22-position hybrid and 26 positions for 26-position hybrid)