



Backshells for DMM series connectors (2020/09/29 06:50:22am)

A backshell is the rear portion of a connector, which is normally a separate section from the connector head. It is used to secure the cable to the end of the connector in order to relieve strain on solder and crimp joints. It also shields against electrical interference (EMI/RFI protection), mechanical injury or physical damage due to environmental conditions. Nicomatic Transfer Impedance is under 200mOhm from 10Khz to 400Mhz, which allows us to offer an excellent & clean data transfer from an emitting device to a receptor. Additionally, all Nicomatic DMM connectors and backshells are tested to meet the requirements of MIL-DTL-83513G.

There are 2 available designs for our backshells, split and mono. The split backshells are designed as a two-piece nickel-coated aluminum shell. The shell cable entry can be either elliptical or circular in shape, allowing large number of cables or mix layout design. Split backshells do not carry the fixing hardware. As a result they are easy and quick to assemble and are fully compatible with all Nicomatic DMM connectors.

Mono backshells are one-piece solid nickel-coated aluminum, and the cable entries are elliptical in shape. Mono backshells carry the fixing hardware. They are compatible with medium profile with long shell DMMs.

If you are in an industry that requires a more rugged design, such as aerospace and defense, backshells enhance the strength and protection of your DMM connectors. They also give the flexibility of design as you can easily replace the contacts on cable inside your connector as opposed to backpotting.

Overview:

- EMI/RFI 360° protection
- Mechanical protection for better retention (cables-contacts)
- Low susceptibility to interference: < 200mOhm from 10Khz to 400Mhz (clean data transfer w/ great impedance transfer value)
- Prehension - gripping ability for “bigger” connections
- Aesthetic design (cosmetic)