



## EZ-RJ45<sup>®</sup> CAT6 Cable Compatibility

Before you purchase your CAT6 cable and your CAT6 connectors, it is important to know they are compatible, that both are a good fit with each other.

There are two critical dimensions when making this determination;

- Cable jacket OD
- Individual conductor OD

Lets address the cable jacket OD first. Ultimate CAT6 performance is achieved with the EZ-RJ45<sup>®</sup> CAT6 connector by being able to push the twists almost flush to the back of the contacts. This means that the end of the cable jacket can be pushed all the way inside the EZ connector, stopping at the back of the contacts. In fact, when you look at a ready to be terminated connector, you hardly see any of the individual conductors. To accomplish this perfect prep, the OD of your CAT6 cable jacket cannot be any larger than 0.275 inches. That is the MAX! Remember, the smaller the cable jacket OD, the easier it is to prep your cable.

As for the OD of the individual conductors, why is this dimension critical? Because the EZ-RJ45<sup>®</sup> CAT6 connector is designed to be able to insert the conductors the connector and out the other end via holes designed in the front end. If the OD of your conductors are oversized, they will not go through the holes, so yes, there is a MAX. It is 0.041 inches.

To determine what your cable jacket OD is, best to look at the spec sheet. It will be listed. The good source for this information is the internet.

To determine your individual conductor OD, this is not so easy because many of the cable manufacturers will not list this dimension. Of course, they do list the wire gauge and this is part of the equation. Example, 23 AWG is equivalent to 0.0226 inches. Now all you need to know is the thickness of the insulation. Sometimes it is listed and other times, it is not. If given, multiply it by two and add the answer to your wire gauge dimension and now you have the conductor OD.

***In summary, max cable OD is 0.275 inches and max individual conductor OD is 0.041 inches.***

Notes of interest;

- The above specs are based on printed specs, not real world specs which would be a dimension derived from taking a measurement. Why the difference? Because a printed spec does have a plus / minus tolerance and majority of the time, cable is produced at the minus end of the spec.
- Why do many cable manufacturers not list the actual conductor OD or the thickness of the conductor insulation? Because some manufacturers treat the thickness of the insulation as proprietary information.
- When cutting the conductors prior to inserting them into and through the EZ connector, be sure to use a good cutter or scissor. A sharp, clean cutting edge helps maintain concentricity and prevents creating burrs on the ends of the conductors. Quashed ends with burrs on them will NOT go through the holes in the other end of the EZ connector.