

## Tweco® Robotics Water-cooled Conductor Tube

The QTRW series conductor tube is a rugged and fully insulated design. The outer jacket contains the nozzle housing with a thermally conductive insulator to efficiently draw the heat from the nozzle. A teflon sleeve insulates the outer jacket from the inner tube assembly. The strength of the outer jacket comes from the use of a 3/4" OD stainless steel seamless tube brazed between the copper nozzle housing and the brass crimp ring.

The inner tube is constructed from a brass and copper duplex style extruded tube. The front end of the brazed inner tube is tapered to fit between itself and the nozzle housing. This provides a solid heat transfer path between the inner tube and jacket assembly. The back end of the conductor tube is made from a stainless steel alloy that increases the strength of the conductor tube.

The conductor tube is positively secured in the torch body by the use of two (2) stainless steel alignment pins. These pins ensure the proper relationship with the torch body and robotic mount arm. The conductor tube is drawn into the torch body by the use of a stainless steel locking screw.

The water-cooled feature of the torch allows the water to flow through the torch body into the conductor tube. The chilled water flows to the front of the conductor tube where it circulates around the nozzle area of the torch drawing heat out of the gas diffuser, contact tip and nozzle. The water then returns to the water circulator.

The QTRW series conductor tubes are available in three (3) different amperage ranges and various degrees of bend configurations.

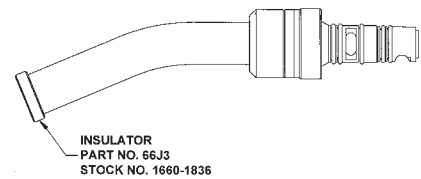
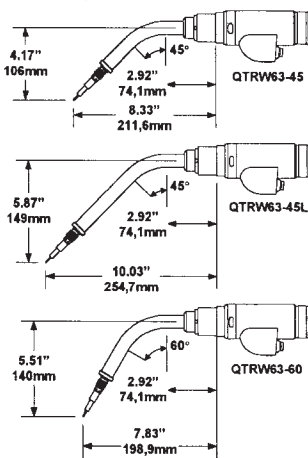
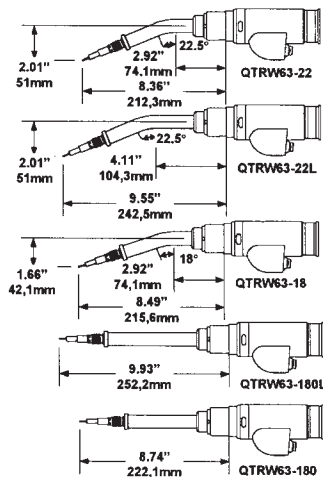
- QTRW63 Series – Robotic welding applications up to 300 amperes
- QTRW64 Series – Robotic welding applications up to 400 amperes
- QTRW66 Series – Robotic welding applications up to 600 amperes

**Note: QTRW series conductor tubes are furnished with diffusers that accept the 11RS series contact tip for QTRW63 series and 16RS & 16RZ series contact tip for QTRW64 and QTRW66 series.**



### QTRW Series QTRW63 Series (300 amp) Conductor Tube

	18°	22°	45°	60°	180°	22°L	45°L	180°L
<b>Part No.</b>	QTRW63-18	QTRW63-22	QTRW63-45	QTRW63-60	QTRW63-180	QTRW63-22L	QTRW63-45L	QTRW63-180L
<b>Stock No.</b>	1636-1125	1636-1126	1636-1128	1636-1130	1636-1131	1636-1127	1636-1129	1636-1132



Wire stickout = 5/8" (15,8 mm)