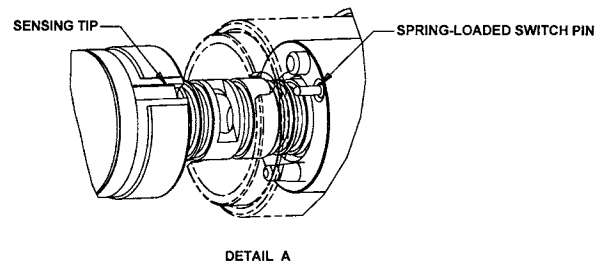
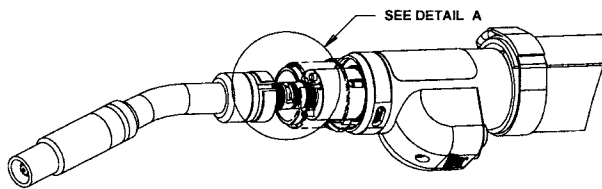


## Tweco® Robotics Nozzle-Sensing Water-cooled Conductor Tube

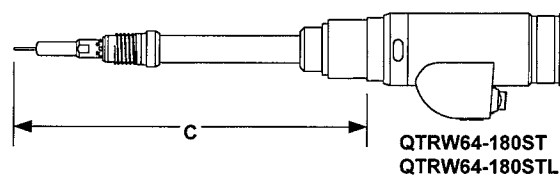
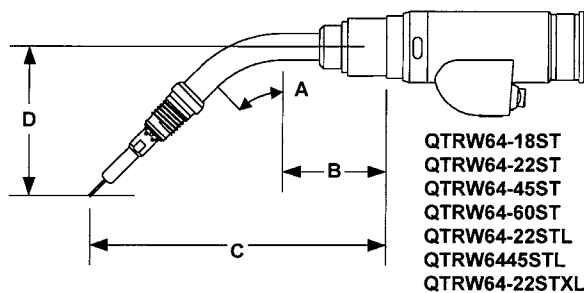


The nozzle-sensing conductor tube (QTRW-ST) incorporates the same rugged and fully insulated design features of the QTRW series tubes. The QTRW-ST, however, adds the capability to run a low-voltage (DC) charge to the nozzle using a specially designed outer jacket assembly on the conductor tube.

1. A low-voltage (DC) charge is generated and sent from the robot control system to the conductor tube outer jacket and nozzle assembly via the torch and cable assembly.
2. A spring-loaded switch pin in the torch block contacts the sensing tip.
3. When the conductor tube is inserted into the torch body, a spring-loaded switch pin found on the torch block comes into contact with the sensing tip completing the nozzle-sensing circuit path. (Refer to figure below)



Part No.	Stock No.	A	B	C	D
QTRW64-18ST	1646-1709	18°	2.92"/74,1mm	8.50"/215,8mm	1.66"/42,1mm
QTRW64-22ST	1646-1710	22°	2.92"/74,1mm	8.37"/212,5mm	2.01"/51,1mm
QTRW64-45ST	1646-1711	45°	2.92"/74,1mm	8.34"/211,8mm	4.18"/106,1mm
QTRW64-60ST	1646-1712	60°	2.92"/74,1mm	7.85"/199,3mm	5.54"/149,3mm
QTRW64-180ST	1646-1713	180°	---	8.75"/222,3mm	---
QTRW64-22STL	1646-1714	22°	4.11"/104,3mm	9.56"/242,7mm	2.01"/51,1mm
QTRW64-45STL	1646-1716	45°	2.92"/74,1mm	10.04"/254,9mm	5.88"/149,3mm
QTRW64-180STL	1646-1715	180°	---	9.94"/252,5mm	---
QTRW64-22STXL	1646-1717	22°	2.92"/74,1mm	13.88"/352,6mm	4.29"/109,1mm



**NOTE:** Wire stick-out equals 5/8" (15,88mm)