

## Joint Kit for submersible pumps for Borehole Submersible pumps

The joint kit it's suitable only for plastic insulated cables for low voltage application.

Mastic tape and sealant assure a very good performances in liquid tight protection and allow to joint flat and round cable.

# Installation instructions

1. Remove from both cable need to be joined 150 mm of outer jacket (**A**) as described in the table below.
2. Slide the outer heat shrink sleeve on the power cable side.
3. Cut the phases and ground conductors for the length (**B**) as described in the cutting chart. This miss-alignment between the conductors reduce the dimension of the final joint.
4. Strip the wires insulation for the length (**C**) as described in the cutting chart, or for the proper length required to install the connectors properly.

Cable and wire cutting chart				
Wire color	A	C	B	
	mm	mm	Wires on pump side	Wires on power side
Blue-Grey	150	Half connector length + 5 mm*	55 mm	145 mm
Brown	150		55 mm	145 mm
Black	150		145 mm	55 mm
Yellow/Green	150		145 mm	55 mm

\* for aluminium cable + 10 mm

5. Slide the inner heat shrink sleeve on each single wire .
6. Join the single wires (keep in mind the colour code) with the connectors using the proper tools and dies available from the connectors manufactures . Check each joint and use a file to remove any pressure-burrs found.
7. Position the inner heat shrink sleeve centrally over the connector .  
Using a heat source suitable for shrinking ( hot air blower or gas burner ) start to shrink the sleeve from the middle. The shrinking process can considered completed when the sleeve fit tightly and the melt adhesive escape at the ends.  
Using a gas burner, pay attention to use the yellow part of the flame and move the flame continually in order to prevent local overheating.
8. Repeat the operations of point 7 for each conductor
9. Remove grease or dirty from the outer cable jacket and possibly keep it rough with sand paper for 100 mm.
10. Apply at about 40 mm of cable jacket end the sealant tape.  
On the flat cable , pay attention to fill all voids between the single conductors squeezing the sealant tape with the fingers in order to close all air gap.
11. Slide the outer heat shrink sleeve centrally over the joint and from the middle start to shrink.  
The shrinking process can considered completed when the sleeve fit tightly and the melt adhesive escape at the ends.
12. Wait the joint cooling ( 10 ÷15 minutes ) before loaded mechanically or electrically.

