A. SAFETY INSTRUCTIONS

- All electrical connections must follow the local laws and regulations and be performed by an authorized electrician.
- Disconnect electrical supply before opening the electric element cap.
- -Connect anyway the grounding end of the electric element to the grounding network of the building.
- ATTENTION! Hot water outlet, collectors, connecting pipes and parts may reach very high temperatures and touching with bare hands may cause severe burns.

B. CHOOSING THE POSITION

Follow the next rules:

1. South orientation for the North hemisphere and North for the South.
2. Avoid shade of objects like buildings, trees other solar or mechanical equipment.
3. Suggested distance of shading object 1.5 times the height of it.
4. Minimum length of pipe work.

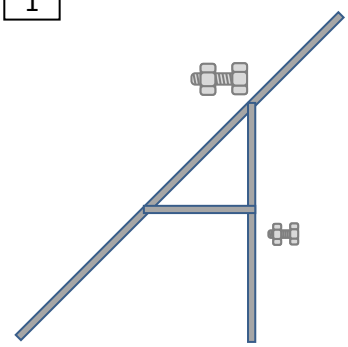
C. DELIVERY PARTS

Forced solar system consists of:

1. One or more solar water tanks
2. The solar collector(s)
3. Supporting parts, connecting fittings and parts and safety valves.
4. Pump(s) for circulating the liquid between collectors and tanks.
5. Differential thermostatic control.
6. Expansion tank
7. Solar antifreeze and anticorrosion liquid.

D. MOUNDING THE COLLECTORS SUPPORT PARTS

1



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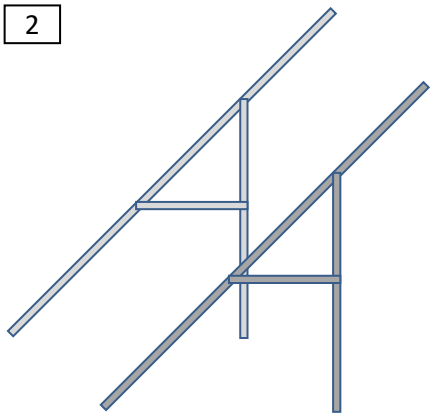

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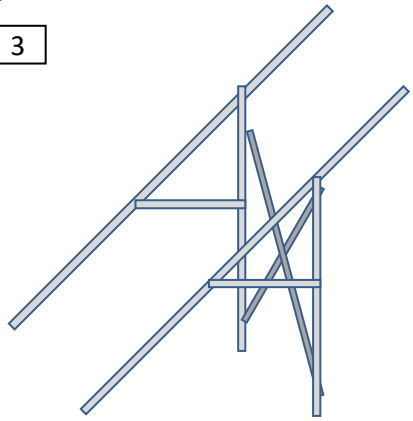

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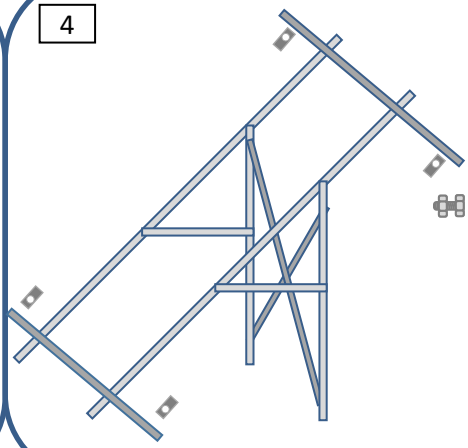

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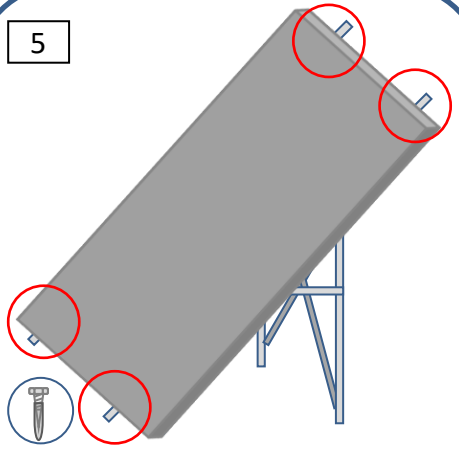

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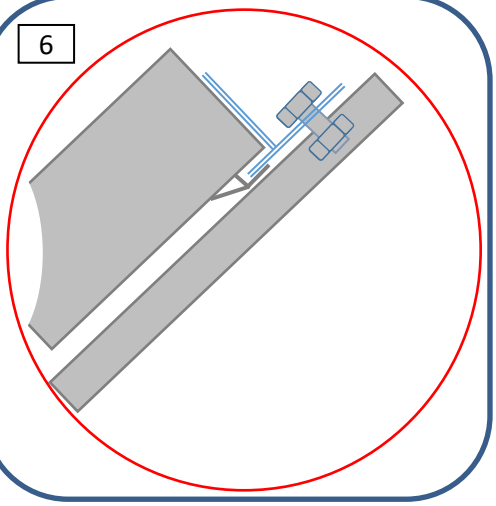
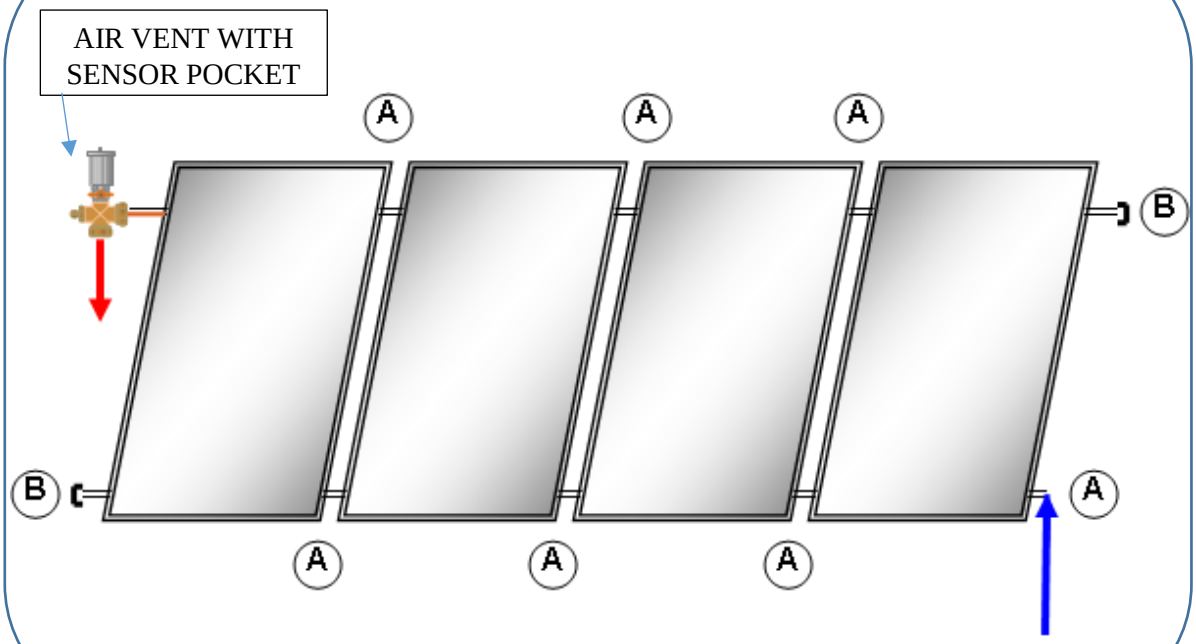
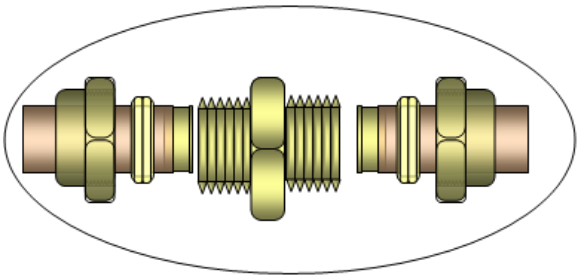


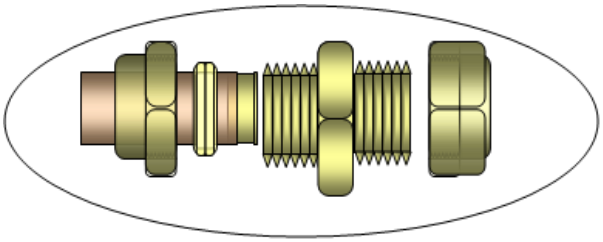
E. CONNECTING COLLECTORS



A: CONNECTING Φ 22X22



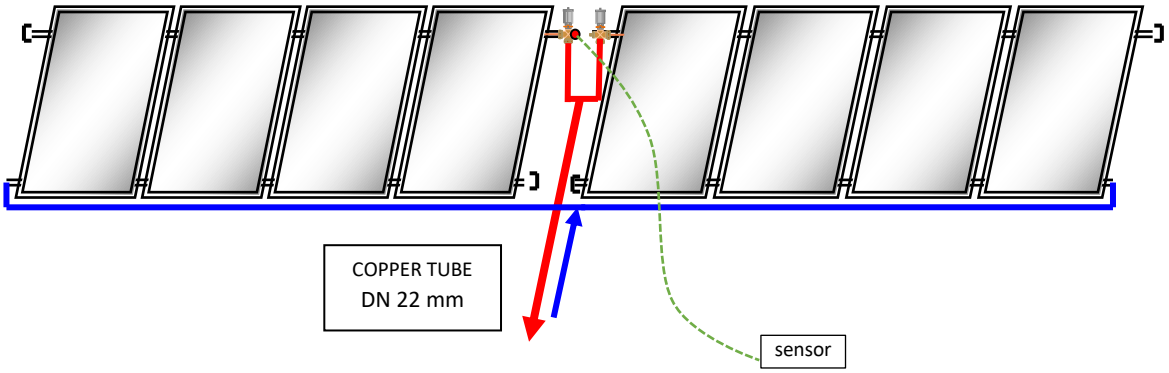
B: PLUG Φ 22



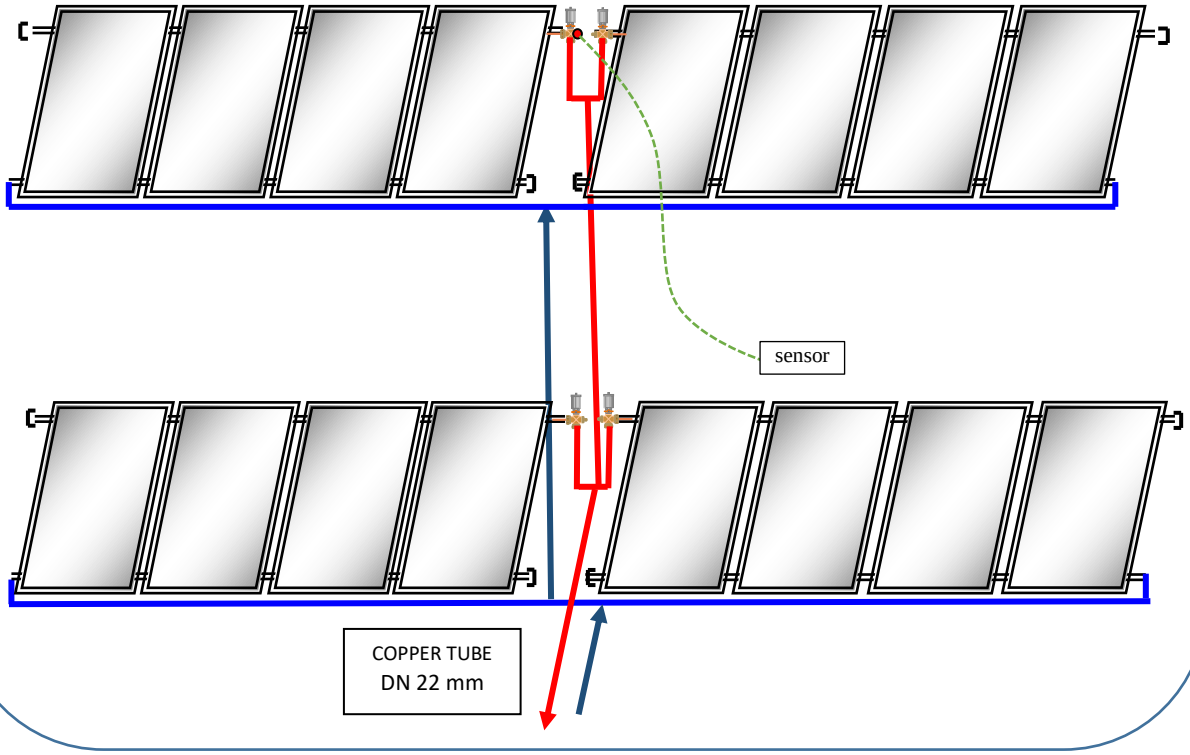
KEEP THE FITTING'S BODY STILL, USING A WRENCH, WHILE SCREWING THE FITTING'S NUTS

F. CONNECTING COLLECTORS ARRAYS

CONNECTING 8 COLLECTORS IN PARALLEL

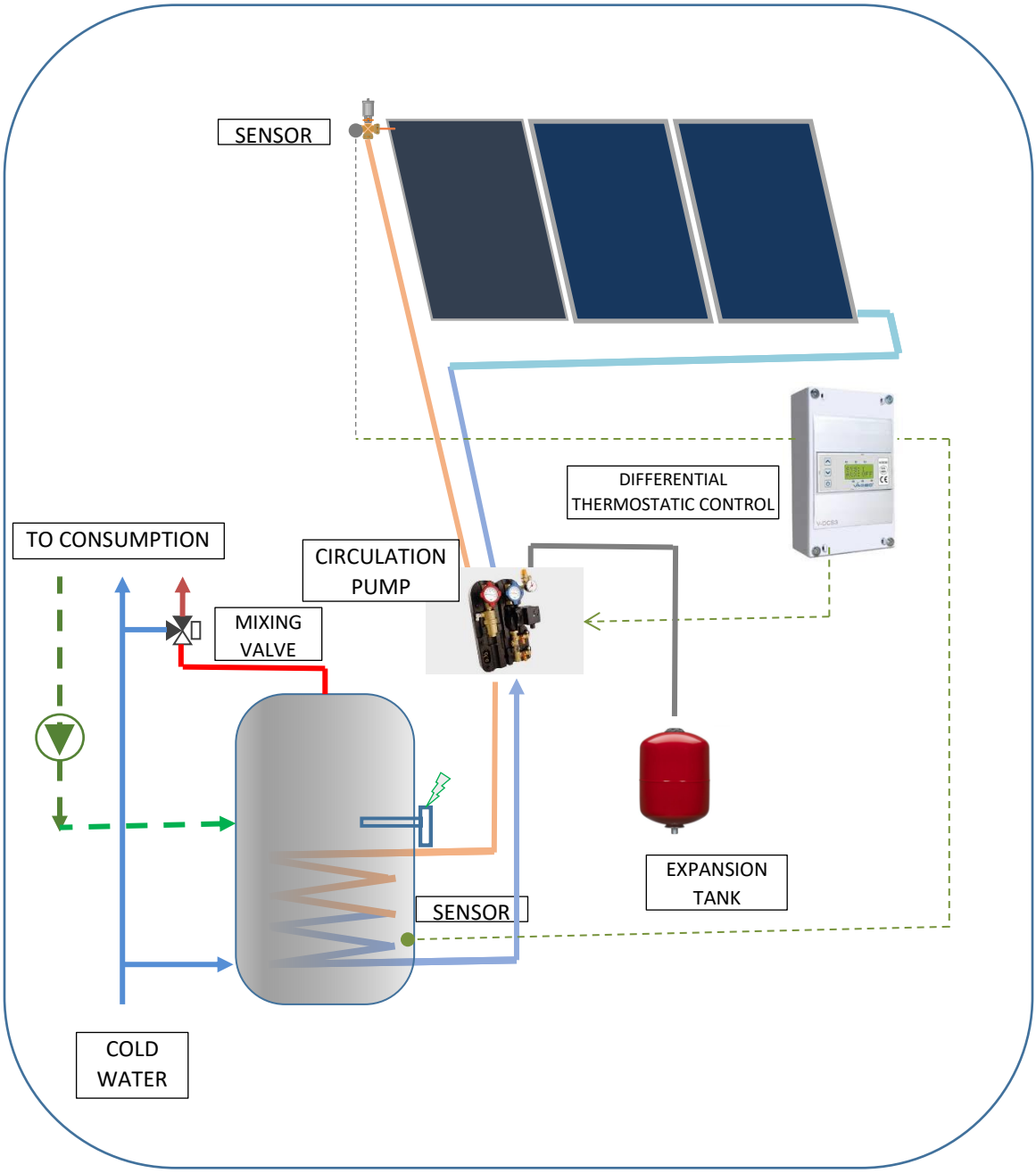


CONNECTING 16 COLLECTORS IN PARALLEL



G. CONNECTING COLLECTORS TO THE TANK

G 1 . SMALL FORCED SYSTEMS (max 20 collectors)



K. INSTRUCTIONS OF USE AND MAINTAINANCE

1. During hot summer days the hot water can reach extremely high temperatures. If there is no use of hot water (f.ex. absence for some days) you must cover collectors.
2. Check once a year the condition of the piping insulation and replace if there is need.
3. Check, as often the local conditions impose, if the collectors are covered with dust and clean the glass cover. Cleaning must be executed early in the morning, when collectors are not hot, using warm water.
4. Proper operation of forced solar installations need to have always a full of thermal liquid circulating network. For this reason there is an expansion tank in the system. If the pressure of the thermal liquid is lower than the ~~s~~ set point ~~-~~you have to rise it up using a filling pump. We don't recommend the use of an automatic filling valve permanent connected to the cold water network.
5. All storage tanks must be protected by connecting a proper **safety valve**.
6. One or more sacrificial magnesium anode(s) is built-in the storage tank(s). **Replacing the anode at least every two years is strictly recommended in order to protect the tank against corrosion and follow the guaranty terms.**
7. MALTEZOS solar systems have a long life time. After the end of their life, remember that it is made mostly, by recyclable materials (copper, aluminum, steel …) and do recycle it following the local regulations.