

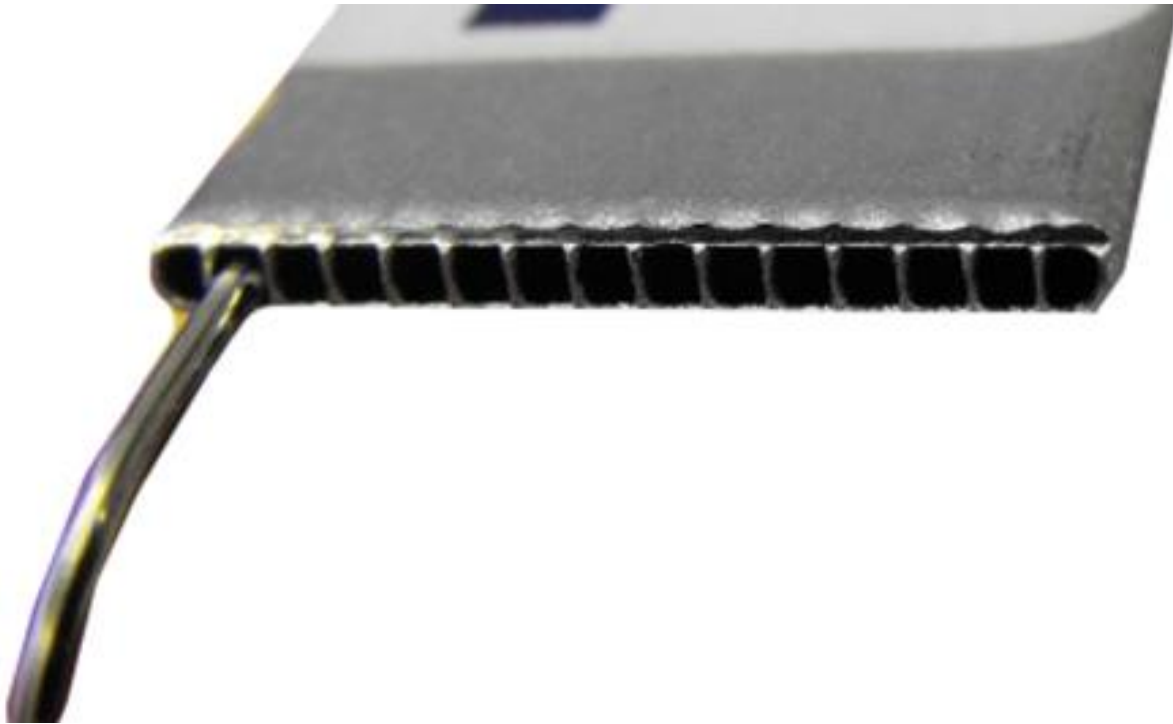
Condenser Design Technical Information

Picture #1 - Tube and Fin Design – this tube and fin condenser has copper tubes that are approximately 3/8” in diameter. It has smooth fin design spaced 8 to 16 per inch. This style condenser is more suited for harsh environments. By design, it is less likely to plug internally and can be flushed to remove any contaminates.

Picture #2 – 6mm Tube and Fin Design – this is also a tube and fin style condenser. However, it is made with aluminum tubes that are smaller in diameter. It has a louvered/rippled fin design. These are spaced anywhere from 8 to 16 fins per inch. This condenser is more likely to plug externally in harsh environments due to the fin design. It is less likely to plug internally and in most cases it can be flushed to remove any contaminates.

Picture #3 - Serpentine Style Condenser – as you can see this has flat tubes that run continuously back and forth throughout the condenser. This was first developed to be used with R12 Freon. This design typically does very well at dissipating heat, but cannot be serviced. This means it cannot be flushed if the system would ever have contamination. They are also not designed to handle harsh environments due to having a higher fin count.

Picture #4 – Parallel/Multi Flow Style Condenser – this condenser has flat tubes similar to the serpentine style. These flat tubes are connected to the tubes/manifolds on each end. The flat tubes make 2-4 passes throughout the condenser core. The Parallel/Multi Flow design is very efficient. However it cannot be serviced-due to the design of flat tubes with very small openings. If only one small tube were to become obstructed it severely decreases the efficiency, oil and refrigerant circulation. It cannot be flushed if the system would ever have contamination. It must be replaced. Because of the higher fin count design, this condenser does not work well in off-road/harsh environments.



Micro Port on Parallel/Multi Flow style condenser.

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