STAINLESS STEEL VORTEX TUBES

A Vortex Tube turns ordinary compressed air into two streams of air, one is very cold and one hot.

The Brauer Vortex Tube is manufactured from stainless steel giving excellent resistance to oxidation and corrosion and particularly high wear resistance. No tools are needed to adjust the temperature; this is achieved by use of a control knob at the end of the unit.

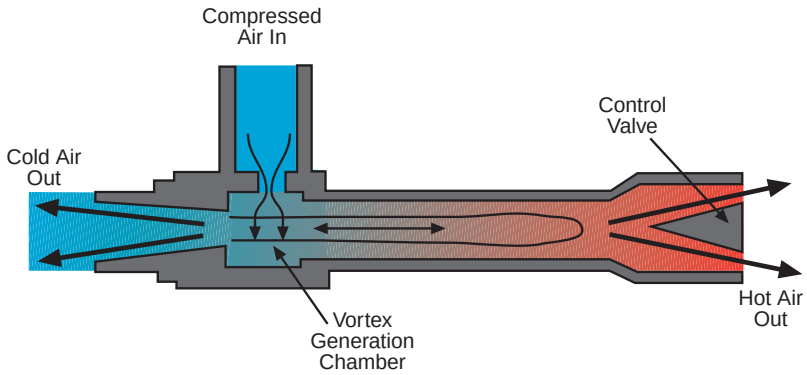
Brauer Vortex Tubes can produce:

– temperatures from 38°C below input temperature to 39°C above input temperature
– airflow rates up to 0.85m³/min (30 SCFM or 860 SLPM)
– refrigeration up to 1430 Btu/H (360 Kcal/H)

Applications include the cooling of electronic enclosures.

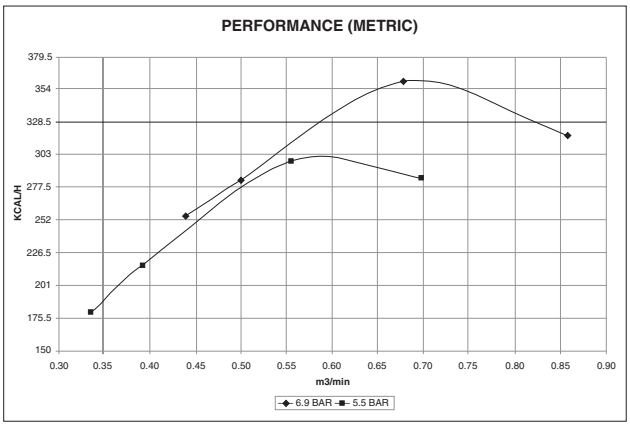
VORTEX TUBES AND HOW THEY WORK

A compressed air supply at up to 6.9 bar is used to create 2 low pressure air flows when passed through the vortex generator. The generator spins the air and separates it into cold air and hot air. The cold air exits at typically 38˚C below the air supply temperature, whilst hot air at 39˚C above the air supply temperature exits at the rear of the vortex chamber.



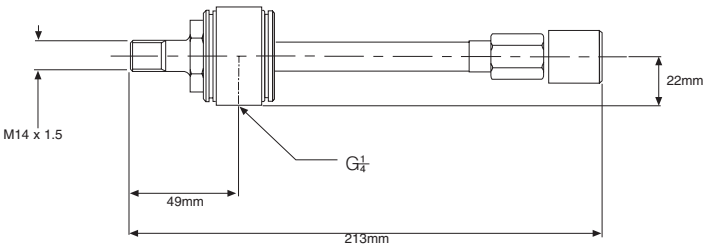
VORTEX TUBES PERFORMANCE

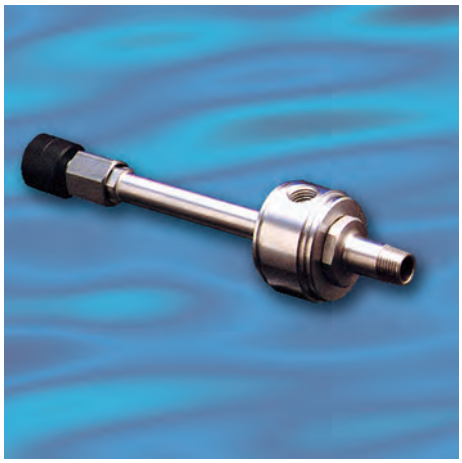
The Vortex Tube Performance Charts below give approximate temperature drops (and rises) from inlet air temperature produced by a vortex tube set at each cold fraction. Assuming no fluctuation of inlet temperature or pressure, a vortex tube will reliably maintain temperature within ±1°C.



Unit/ Generator	Supply Pressure BAR	Air Consumption m³/min	Thermal Capacity KCAL/H	Temp Red's °C
#2	6.9	0.44	255	38
#4	6.9	0.50	283	34
#6	6.9	0.68	360	25
#8	6.9	0.86	318	16.4
#2	5.5	0.34	180	36
#4	5.5	0.39	217	33
#6	5.5	0.56	298	25
#8	5.5	0.70	285	16

CG4AX VORTEX TUBES





Material: Stainless Steel.

Weight: 1.5Kg

dB(A) at: 5.5 bar is 80

Standard Inlet Threads: G1/4

Options: 1/4" *NPT*

Please specify on order 1/4" *NPTF*