

# Vortex Cooler Kits



NEMA 4/4X

NEMA 12

## Applications

Compressed air cooling is used where conventional enclosure cooling by air conditioners or heat exchangers is not possible. (Examples: Small to medium size enclosures, nonmetallic enclosures, and areas where the size of cooling devices is restricted).

## Features

- Suitable for harsh environments
- Small physical size
- Creates cool air without refrigerants (no CFCs, HCFCs)
- Exceptionally reliable - no moving parts and virtually no maintenance

## Requirements

- Uses clean, dry, oil-free compressed air (100 PSIG / 70° F or below) required to achieve published BTU/H ratings. Lower pressures and higher temperatures will reduce BTU/H ratings
- A 5-micron water and particulate removal filter must be installed prior to any vortex cooler operation
- An oil removal filter can be installed between the 5 micron filter and the Vortex Cooler if oil is present in the compressed air line
- Mounting holes
- NEMA 12: (1) 1-3/32" (28mm) or 0.25in [6 mm] knockout hole for cooling tube and (1) 11/16in [152 mm] hole for thermostat
- NEMA 4 and 4X: (1) 1-15/16in [152 mm] (49mm) or 1-0.5in [13 mm] knockout hole for cooling tube and (2) #8 holes for thermostat

## How vortex coolers create cold air

Compressed air is injected into the vortex tube at extremely high speeds and that creates a cyclone, or vortex, spinning a million revolutions per minute. Part of the air is forced to spin inward to the center and travels up a long tube where a valve turns the spinning column of air inside itself. The inside column of air gives up its heat to the outside column. The cold air is directed out the cold end of the Vortex Tube and the hot air is directed out the other end of the Vortex Tube. And since there are no moving parts there is little need for maintenance.

## Includes the following:

- Vortex cooler
- Vortex distribution tube
- Solenoid valve 120V / 60Hz - 110V / 50Hz
- Filter: 5-micron water and particulate removal
- Ducting kit
- Thermostat

## Standards

- UL Listed
- NEMA 12, NEMA 4 or NEMA 4X



## Shipping Schedule

Same day 1 - 5 days 1 - 7 days 1 - 15 days 1 - 20 days

Color indicates shipping lead time in business days.

Part Number	Price	Description	Capacity BTU/H [KCAL/H]	Air Consumption SCFM [SLPM]
<b><u>W750400</u></b>	—	Wiegmann vortex cooler kit, 400 BTUH (117W) / 8 SCFM (227 SLPM), aluminum body. For NEMA 12 enclosures. Thermostat, solenoid valve, distribution tube and filter included.	400 BTUH (117W)	8 SCFM (227 SLPM)
<b><u>W740900</u></b>	Retired	Wiegmann vortex cooler kit, 900 BTUH (264W) / 15 SCFM (425 SLPM), aluminum body. For NEMA 12 enclosures. Thermostat, solenoid valve, distribution tube and filter included.	900 BTUH (264W)	15 SCFM (425 SLPM)
<b><u>W7901500</u></b>	Retired	Wiegmann vortex cooler kit, 1500 BTUH (440W) / 25 SCFM (708 SLPM), aluminum body. For NEMA 12 enclosures. Thermostat, solenoid valve, distribution tube and filter included.	1500 BTUH (440W)	25 SCFM (708 SLPM)
<b><u>W7971700</u></b>	—	Wiegmann vortex cooler kit, 1700 BTUH (498W) / 25 SCFM (708 SLPM), aluminum body. For NEMA 4 enclosures. Thermostat, solenoid valve, distribution tube and filter included.	1700 BTUH (498W)	25 SCFM (708 SLPM)
<b><u>W797SS1700</u></b>	—	Wiegmann vortex cooler kit, 1700 BTUH (498W) / 25 SCFM (708 SLPM), stainless steel body. For NEMA 4/4X enclosures. Thermostat, solenoid valve, distribution tube and filter included.	1700 BTUH (498W)	25 SCFM (708 SLPM)

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## Dimensions

