



## 20 Series Tsunami™ Water Separator / Oil Coalescing Filter / Activated Carbon Filter

### Tsunami™ Water Separator



- **30 Day Money Back Performance Guarantee!!**
- Guaranteed point-of-use protection for air tools and pneumatic equipment
- Removes large amounts of moisture
- **Exceeding recommended flow of 20 SCFM may result in moisture carryover.**
- Unique up-flow separation takes place as air reverses direction 180° and passes through a *special stainless steel mesh element*
- Integral float drain ejects water and oil from large drain sump
- OEM Choice for Product Protection



P/N 21999-0424  
Tsunami™ 2-stage Filter System  
(separator and oil coalescing filter)

P/N 21999-0421  
Tsunami™ 3-stage Filter System  
(separator / oil coalescing / activated carbon)



### Tsunami™ Oil Coalescing Filter



### Element Construction

Tsunami™ coalescing filter media is made of 100% borosilicate glass micro fibers, bonded together with a resin binder. In the standard configuration, chemical-resistant polypropylene cores and layers intimately support the coalescing media. A non-wicking drain layer is in intimate contact with the outside of the outer support core.



Part #	Description	Flow Rating	Port Size	Length	Width	Max Pressure	Max. Temp.	Weight
21999-0390	Tsunami™ Water Separator - removes water and oil to 10 micron	20 SCFM	1/4" NPT	8-1/2"	2"	250 PSI	200° F.	1.1 lbs
21999-0390-Z	Tsunami™ Oil Coalescing Filter - removes oil and particulate to .01 micron	20 SCFM	1/4" NPT	8-1/2"	2"	250 PSI	200° F.	1.1 lbs
21999-0390-AC	Tsunami™ Activated Carbon Filter - removes oil and oil vapor to .003ppm	20 SCFM	1/4" NPT	8-1/2"	2"	250 PSI	200° F.	1.1 lbs
21999-0424	Tsunami™ 2-stage Filter System (separator and oil coalescing filter)	20 SCFM	1/4" NPT	8-1/2"	4 3/4"	250 PSI	200° F.	2.3 lbs
21999-0421	Tsunami™ 3-stage Filter System (separator / oil coalescing / activated carbon)	20 SCFM	1/4" NPT	8-1/2"	7 1/2"	250 PSI	200° F.	3.6 lbs
9000801	Float Drain Replacement							

Other configurations available: Tsunami™ F/R, Tsunami™ F/L, Tsunami™ FRL

# Dynamic Technology

vs

# Old Technology

## Tsunami™ Water Separator

- Dynamic technology
- **30 Day Money Back Performance Guarantee**
- Flow rated under heavy wet conditions

### Heads:

- Machined from 6061 aircraft aluminum, anodized. **maximum corrosion protection**

### Water Separation:

- Air flows thru center air channel tube to the bottom of Tsunami
- It hits the baffle plate depositing the liquid and particulate in the large drain sump
- **The air is then redirected 180° and flows up thru the oversized Stainless Steel mesh element**
- **Any remaining water droplets and aerosols to 10 micron are forced to the outside and will run down to the drain sump.**
- **Up-flow gravity separation**
- **Performance is 100% consistent at all flows**

### Barrel:

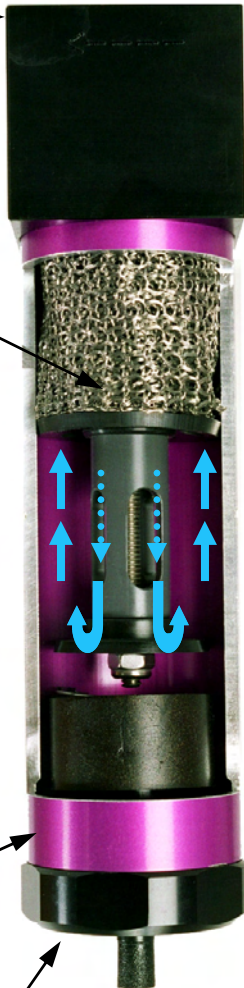
- **Oversize length and diameter**
- Machined from 6061 aircraft aluminum
- **Mil Spec anodized inside and out for corrosion**
- **Large drain sump**
- **Can handle large surges of water**

### Bottom Cap:

- **Mil Spec anodized for corrosion**
- **Elevated sump for sediment to accumulate (extended drain life)**
- **Easy to remove to service float drain**

### Float Drain Standard:

- **Easy to service**
- **Easy to install; low maintenance**



## Standard Filter

- Competition does not offer guaranteed product performance
- 1940's technology
- Most Filters are flow rated dry in a laboratory

### Heads:

- Made of die cast aluminum
- Interior not coated, **causes corrosion.**

### Water Separation:

- Water separation is created by centrifugal motion (spinning the air)
- Does not work well with intermittent or low flows, **moisture carries over**
- Need high continuous flow for best performance.
- Short separation distance between air inlet and filter element, **moisture carries over**
- **Shortened element life**

### Elements:

- Very small
- **Plug Easily**
- **High pressure drop**
- **Frequent replacement required**

### Plastic Bowls:

- **Requires metal bowl guards for safety**
- **Compressor oils will cause cracking**
- **Unable to support electric solenoid drain**
- **Unable to handle large surges of water**

### Aluminum Die Cast Bowls:

- **Internal corrosion**

### Drains:

- Manual drains are standard on most filters
- Float drains are optional
- **Location of float drains in one piece filter bowls cause premature drain failure**
- **Difficult replacement**

