

# PRODUCT CATALOG

Superior Filtration Products. Pure & Simple.

FILTERS | DRYERS | DRAINS | ACCESSORIES

tsunami.us.com







# COMBINING QUALITY AND CUTTING-EDGE TECHNOLOGY



#### **OPTIMIZED CONTENT**

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- Find in-depth information on the products you need.
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Tsunami Compressed Air Solutions<sup>™</sup> offers over fifty online videos.

- · Sales training and demonstration videos.
- · View step-by-step installation instructions.
- General knowledge as well as tips and tricks on compressed air best practices.

Visit our YouTube channel or video library at: tsunami.us.com

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For over 35 years, Tsunami Compressed Air Solutions<sup>™</sup>, has set the industry standard for quality compressed air filtration and drying solutions. While we strive to bring cutting-edge technology to the world of pneumatics, we continue to focus on the core principles that built the foundation of our successful business: quality, value, and world-class customer service.

At Suburban Manufacturing Group, our mission is to build value for our customers by producing quality, innovative, application-based products. Suburban is an engineering driven organization that partners with customers to design and develop unique and specific fluid power products.

Today, we distribute thousands of fluid power solutions worldwide right from our U.S. manufacturing facility located in Monticello, Minnesota.

Suburban Manufacturing Group is an ISO 9001-2015 Certified Manufacturer.

a division of







# THE #1 RULE OF COMPRESSED AIR

For Every 20°F that Compressed Air is Cooled, the Air Loses 50% of its ability to Hold Moisture in Vapor Form (Humidity) and is Dropped Out as a Liquid.

#### UNDERSTANDING AIR DRYING AND AIR FILTRATION... THERE IS A DIFFERENCE!

AIR DRYING The Removal of Water Vapor (Humidity) from Compressed Air

Typically, this is accomplished in one of four ways:

#### WHEN TO USE COMPRESSED AIR DRYERS

Air dryers should be used when you want to remove or reduce the humidity levels in your compressed air system to meet or exceed the air quality requirements for the compressed air demands of your tools, equipment, or applications.

AIR FILTRATION The Removal of Particulates, Water, Oil Droplets, and Aerosols

This is most effective when done in stages:

- · Water separator removes bulk water, oil, and large particulates (down to 10 micron)
- · Coalescing filter removes oil, aerosols and fine particulates (down to .01 micron)
- · Activated carbon filter removes oil vapors; eliminates odors and taste (down to .003ppm)

#### WHERE TO PLACE COMPRESSED AIR FILTRATION

- •The further away from the compressor, the more effective your filtration will work
- On or near the equipment, directly connected to air supply connection (IMPORTANT)
- In front of all air dryers as pre-filters
- · Water separators should be placed at all air tool drops with regulators

#### IMPORTANT THINGS TO KNOW

- Proper control of air pressure throughout your facility can help save 10-15% of your compressed air energy costs.
- · Repairing an audible air leak can save you \$50 or more per year in energy used to drive your compressor.
- When sizing a compressor for manufacturing, it is important to calculate total machine air consumption as well as total air consumed by machine operators and other personnel.
- Proper control of air volume (CFM) will make all your air drying and filtration technology perform at their rated capacity. Most pieces of equipment have a manufacturer's specification of volume consumption along with the recommended operating pressure.
- Improper use of volume can cause an "over-flowing" of the rated capacity of your dryer or filtration which causes a carry over of moisture and contaminants.
- · Many OSHA approved blow off guns can consume up to 35 CFM, the equivalent of a 10 Hp compressor.
- · Many color changing indicators used with desiccant systems do not begin to change color before 20% rH.

# **KEY QUESTIONS FOR APPLICATION SOLUTIONS**

#### ABOUT THE APPLICATION

- 1. How much air does the application/equipment need, in CFM?
- 2. What pressure does the application require?
- 3. How dry does the air have to be?
  - a) Typically going to be specified as dew point or relative humidity
- 4. How clean does the air have to be?
- a) Are we just worried about water, dirt, dust, and other particulates?
- b) Do we have to remove any oil aerosols from the air?

#### ABOUT THE SUPPLY SIDE

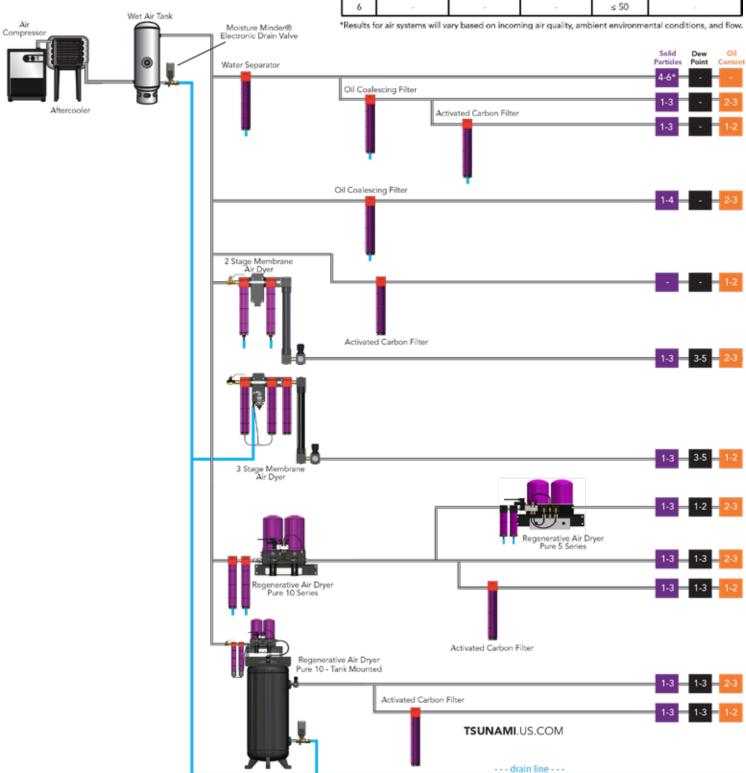
- 1. What types, and how many, compressors are in the facility?
- 2. What is the horsepower rating of the compressor(s)?
  - a) Do we know the output flow of the compressor?
  - b) What is the output pressure of the compressor?
- 3. What is the system pressure?
- 4. What drying technology is used?
- a) Is the dryer installed before or after the receiver tank?
- b) Are there pre-filters used before the dryer?
- c) Are there filters after the dryer?
- 5. Where, and how many, receiver tanks are installed?
- 6. Is the system a looped system, "tree" layout, or a "dead stick" system?





# THE TSUNAMI GUIDE TO ISO 8573-1:2010 STANDARDS

	19	SO 8573-1	:2010 Star	ndards	
Class	max. nu 0.1 µm < d ≤ 0.5 µm	Solid Particles, mber of particles p 0.5 µm < d ≤ 1.0 µm	perm. <sup>3</sup> 1.0 µm < d ≤ 5.0 µm	Pressure Dew Point *F	Oil Content (liquid, aerosol, oil vapor) mg/m³
0	In accordan	ce with the unit operato	r's or supplier's specificat	ions, stricter requir	ements than class 1
1	≤ 20,000	≤ 400	≤ 10	≤ -94	≤ 0.01
2	≤ 400,000	≤ 6,000	≤ 100	≤ -40	≤ 0.1
3	-	≤ 90,000	≤ 1,000	≤-4	≤1
4	-	-	≤ 10,000	≤ 37	≤ 5
5	-	-	≤ 100,000	≤ 45	> 5
6	-	-	-	≤ 50	-



# PROPER SHOP AIR SET UP

#### FILTRATION:

The further away from the air compressor, the more effective your air filtration will be. Compressed air filters should sit as close to the equipment as possible to catch condensed liquid in the piping.

#### **DRYERS:**

For all compressed air systems, using some form of drying technology near the compressor is essential to an effectively designed air system. An air dryer is the final touch to prevent water from entering your equipment or application.

For applications requiring even dryer air, the ideal placement would be right before the point-of-use. This allows the compressed air to drop in temperature so the water vapor can be converted to liquid moisture and captured by the air filters; allowing for the dryer to remove any lingering humidity.

#### **DRAINS:**

There are three locations automatic drains are required to be present in order for an efficient, well-running system:

1 Compressed air receiver tank:

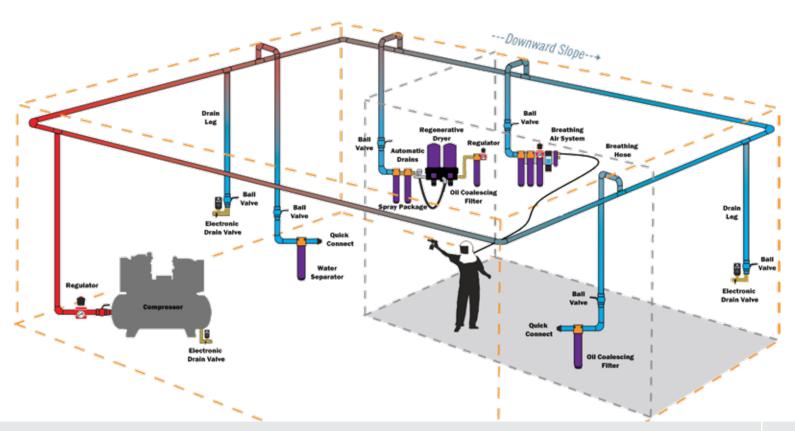
This allows for the draining of liquid that will condense in the tank and cause corrosion to the internal reservoir as well as take up valuable storage space for your compressed air volume.

2 Anywhere there is a drip leg throughout the air piping:

Placing an automatic drain on those drip legs removes collected moisture, thereby preventing it from being recaptured by the air stream. Catching and draining the liquid in the air pipes will ease the work of the air filters downstream.

3 On all air filters and air dryers:

Automatic drains are recommended over manual drains in the event the operator forgets to drain the systems.



# AIR DRYERS

Tsunami Regenerative Drying Systems use proprietary technology to provide extremely clean and dry air.

- · Low relative humidity down to .01% RH
- · Dew points down to -80°F
- · Easy, low-cost maintenance under \$100/year average
- · Includes Tsunami Water Separator and Oil Coalescing Filter with automatic drains

#### **HOW IT WORKS**

#### The Drying Process

- Pre-filtered air enters the dryer and is channeled through the desiccant tower(s).
- Wet air passes through the tower(s) where molecular sieve desiccant draws water vapor in while under pressure.
- 3 After flowing through the desiccant, the now dry air is sent downstream.
- 4 After two minutes, the control timer sends out a pilot signal shifting the internal piston. When the piston shifts, air is redirected from the tower(s) to the opposite side.



#### The Regeneration Process

- 1 A small amount of air from the dry outlet on the opposite tower(s) percolates up through the regeneration orifice and back through the desiccant filled tower(s).
- 2 The desiccant is dried as the sweep air passes back through the media.
- 3 With the use of this air, the tower(s) discharge water vapor through the mufflers.
- 4 After two minutes, the control timer sends out a pilot signal shifting the internal piston. When the piston shifts, flow is reversed and this tower(s) begins drying the air.



#### WHICH IS BEST FOR YOUR APPLICATION?



#### TSUNAMI REGENERATIVE DRYER

- $\bullet$  Delivers ultra-low dew points (as low as  $-80^{\circ}\text{F}$ )
- Designed for critical applications requiring extremely dry air
- Available in electric or fully pneumatic (C1D1) models
- Includes multi-stage filtration for maximum air quality
- More robust moisture removal for precision or sensitive processes



#### TSUNAMI REFRIGERATED DRYER

- Ideal for general-purpose compressed air systems
- Consistent dew points 38-50°F
- Lower upfront cost compared to regenerative systems
- Simple installation and low maintenance
- Best for non-critical application where ultra-low dew point is not required

# **ULTRA REGENERATIVE DRYERS**

#### **ULTRA SERIES REGENERATIVE DRYERS INCLUDE:**

2-stage Pre-filtration\*; Water Separator, Oil Coalescing Filter

Regenerative Dryer

Moisture Minder® Automatic Drains

Programmable Logic Control (PLC)

Heater pads availble for cold temp applications



3-Year Warranty on Tsunami Ultra Drying Systems

\* All Ultra Series Dryers come with oversized water filters and a special coalescing element to accomodate for expansion



# 21999-0830

#### **ULTRA SERIES WALL-MOUNTED**

Ultra series wall-mounted regenerative dryers are designed as complete packages. Systems can be configured in multiple variations allowing for pre-filtration to be installed on the left or right side of the unit. Dual inlet/outlet ports allow for bypass of the dryer where breathing air is required.

#### **ULTRA SERIES TANK-MOUNTED**

The optimal solution for any facility; simply connect shop air into the inlet fitting and out the regulator - it's that simple. Tank-mounted dryers provide absolute ease of installation. A built-in bypass system allows the dryer to be shutoff for maintenance or service without stopping production.

#### **ULTRA SERIES RAIL-MOUNTED**

Tsunami rail mounted regenerative dryers are built to withstand the largest surges of contamination. Similar to other Tsunami drying systems, these dual-inlet units are built as complete packages.



In addition to our complete line of standard products, Tsunami has engineered customizable dryers to meet air cleanliness requirements for a variety of industries and applications. Call 1.800.782.5752 or visit tsunami.us.com to learn more.

Dryer flow rates based on 100°F at 175 PSI with an outlet pressure of 100 PSI.\*

Lower inlet pressure and higher temperatures affect the performance and quality of the downstream air.

\*minimum recommended inlet pressure 80 PSI

Max pressure 175 PSI, max temperature 150°F

5/32 hex key required for piston bolts

# 21999-0750

#### WALL-MOUNTED DRYFRS

ITEM #	MAX CFM	SIZE	TOWERS	DRAIN	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0710	40	10 HP	2	Pneumatic	1"NPT	73 lbs	30" x 30" x 12"
21999-0715	60	15 HP	3	Pneumatic	1"NPT	93 lbs	30"x 36"x 12"
21999-0720	80	20 HP	4	Pneumatic	1"NPT	118 lbs	30" x 36" x 12"
21999-0730	120	30 HP	4	Pneumatic	1"NPT	118 lbs	30"x 36"x 12"

Parts sent globally will include a -G with the part number.

#### TANK-MOUNTED DRYERS

ITEM #	MAX CFM	SIZE	TOWERS	DRAIN	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0810	40	10 HP	2	Pneumatic	1"NPT	335 lbs	69" x 51" x 27"
21999-0815	60	15 HP	3	Pneumatic	1"NPT	358 lbs	69"x 51"x 27"
21999-0820	80	20 HP	4	Pneumatic	1"NPT	381 lbs	69"x 51"x 27"
21999-0830	120	30 HP	4	Pneumatic	1"NPT	381 lbs	69"x 51"x 27"

#### **RAIL-MOUNTED DRYERS**

ITEM #	MAX CFM	SIZE	TOWERS	DRAIN	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0740	160	40 HP	8	Pneumatic	1"NPT	267 lbs	66" x 36" x 21"
21999-0750	200	50 HP	8	Pneumatic	1"NPT	267 lbs	66" x 36" x 21"
21999-0755	300	75 HP	12	Pneumatic	1"NPT	428 lbs	66" x 36" x 42"
21999-0760	400	100 HP	16	Pneumatic	1"NPT	534 lbs	66" x 36" x 42"
125 HP and 150 HP available on request. Call for details.							



# PURE REGENERATIVE DRYERS

SIMPLE. ECONOMICAL. EFFECTIVE.

2-stage Pre-filtration; Water Separator, Oil Coalescing Filter

Regenerative Air Dryer

Solenoid Valve Timer

Automatic Drains

Heater pads available for cold temp applications



#### **PURE SERIES WALL-MOUNTED**

Pure systems utilize a simple timed control valve for cycling & Tsunami pre-filtration to assure removal of water, oil and particulates before entering the dryer.





Pure Series dryers are available with either float or Moisture Minder® pneumatic drains.

Dryer flow rates based on 100°F at 175 PSI with an outlet pressure of 100 PSI.\*
Lower inlet pressure and higher temperatures affect the performance and quality of the downstream air.
\*minimum inlet pressure 80 PSI



#### **WALL-MOUNTED DRYERS**

ITEM #	MAX CFM	SIZE	TOWERS	POWER	DRAIN	PORT SIZE (NPT)	WEIGHT	DIMENSIONS (HWD)
21999-1134	5	1 HP	2	120v	Float	¼″inlet ½″ outlet	42 lbs	15"x 22"x 8"
21999-1134-MM	5	1 HP	2	120v	Pneumatic	1/4" inlet 1/2" outlet	42 lbs	18"x 22"x 8"
21999-1138	10	3 HP	2	120v	Float	1/4" inlet 1/2" outlet	42 lbs	15"x 22"x 8"
21999-1138-MM	10	3 HP	2	120v	Pneumatic	1/4" inlet 1/2" outlet	42 lbs	18"x 22"x 8"
21999-1105	15	5 HP	2	120v	Float	1/4" inlet 1/2" outlet	42 lbs	15"x 22"x 8"
21999-1105-MM	15	5 HP	2	<sup>120</sup> V	Pneumatic	1/4" inlet 1/2" outlet	42 lbs	18"x 22"x 8"
21999-1140	25	7.5 HP	2	120v	Float	½" inlet ½" outlet	50 lbs	26" x 25" x 8"
21999-1140-MM	25	7.5 HP	2	120v	Pneumatic	½" inlet ½" outlet	50 lbs	29"x 25"x 8"
21999-1010	40	10 HP	2	120v	Float	½" inlet 1" outlet	60 lbs	26" x 25" x 8"
21999-1010-220	40	10 HP	2	<sup>220</sup> V	Float	½"inlet 1" outlet	60 lbs	29" x 25" x 8"
21999-1010-MM	40	10 HP	2	120v	Pneumatic	½"inlet 1" outlet	62 lbs	26" x 25" x 8"
21999-1010-MM-220	40	10 HP	2	<sup>220</sup> V	Pneumatic	½" inlet 1" outlet	62 lbs	29" x 25" x 8"
21999-1010-MM-24	40	10 Hp	2	<sup>24</sup> V	Pneumatic	½" inlet 1" outlet	62 lbs	29" x 25" x 8"
21999-1020	80	20 HP	4	<sup>120</sup> V	Float	1"NPT	112 lbs	27" x 36" x 9"
21999-1020-MM	80	20 HP	4	<sup>120</sup> V	Pneumatic	1"NPT	112 lbs	30" x 36" x 9"
21999-1030	120	30 HP	6	<sup>120</sup> V	Float	1"NPT	150 lbs	27" x 48" x 9"
21999-1030-MM	120	30 HP	6	<sup>120</sup> V	Pneumatic	1" NPT	150 lbs	30" x 48" x 9"

# PURE REGENERATIVE DRYERS CONT.

#### **PURE SERIES TANK DRYERS**

The Pure Series Tank-Mounted dryers come as a complete package with tank attachments to support air flow. The Pure-5T comes with a 1-gallon tank to maximize laminar air flow and the Pure-10T sits atop a 60-gallon storage tank for increased dry air storage.

#### TSUNAMI PORTABLE DRYERS

Tsunami's Portable Dryers are designed to give you ultimate mobility. These user friendly designs provide Tsunami world class air quality in a portable package.



#### **TANK DRYERS**

ITEM #	MAX CFM	SIZE	TOWERS	POWER	DRAIN	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-1105-T	15	5 HP	2	120v	Pneumatic	1/4" inlet 1/4" outlet	50 lbs	17" x 24" x 8"
21999-1105-T-MM	15	5 HP	2	120v	Pneumatic	1/4" inlet 1/4" outlet	51 lbs	20" x 24" x 8"
21999-0955	40	10 HP	2	120v	Pneumatic	1/2" NPT	190 lbs	72" x 36" x 23"
21999-0955-220	40	10 HP	2	220v	Pneumatic	1/2" NPT	190 lbs	72"x 36"x 23"

#### MOBILE/PORTABLE DRYERS

ITEM #	MAX CFM	SIZE	TOWERS	POWER	DRAIN	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-1100	15	5 HP	2	120v	Float	1/4" inlet 1/4" outlet	51 lbs	23" x 25" x 12"
21999-1100-MM	15	5 HP	2	120v	Pneumatic	1/4" inlet 1/4" outlet	51 lbs	23"x 25"x 12"
21999-0945	40	10 HP	2	120v	Float	1/2" NPT	150 lbs	53"x 33"x 22"

# REFRIGERATED DRYERS

#### ECONOMICAL. EFFICIENT. RELIABLE.

The Tsunami Refrigerated Dryer is engineered to remove excess water vapor from compressed air lines. By lowering the dew point and reducing the humidity entering downstream equipment, the Refrigerated Dryer increases job efficiency, extends equipment life, and minimizes costly downtime. Designed for every-day long-term use, this cost-effective technology improves application finishes while decreasing product waste and improving overall operations and

- Low initial cost
- Consistent dew point (38-50°F)
- UL/CSA certified
- Patented heat exchanger
- Energy-efficient
- ✓ Integrated automatic moisture drain
- Simple, compact plug-and-play design
- Reliable & easy to maintain





- Prevents corrosion, water damage, and defects caused by moisture
- Reduces energy during low-demand periods; efficiency without compromising performance
- No manual draining needed
- Integrated automatic moisture drain
- → For tight spaces & integration
- Reduces downtime

ITEM #	DESCRIPTION	CFM	NPT	MAX PSI	MAX °F	WEIGHT	POWER
RSD-015	15 CFM Refrigerated Series Dryer	15	3/4"	232	130	39 lbs	115 VAC
RSD-020	30 CFM Refrigerated Series Dryer	30	3/4"	232	130	39 lbs	115 VAC
RSD-035	35 CFM Refrigerated Series Dryer	35	3/4"	232	130	41 lbs	115 VAC
RSD-050	50 CFM Refrigerated Series Dryer	50	3/4"	232	130	45 lbs	115 VAC
RSD-075	75 CFM Refrigerated Series Dryer	75	1"	232	130	58 lbs	115 VAC
RSD-100	100 CFM Refrigerated Series Dryer	100	1"	232	130	75 lbs	115 VAC
RSD-125	125 CFM Refrigerated Series Dryer	125	1"	232	130	86 lbs	115 VAC
RSD-150	150 CFM Refrigerated Series Dryer	150	1"	232	130	88 lbs	115 VAC
RSD-175	175 CFM Refrigerated Series Dryer	175	1 1/2"	232	130	119 lbs	115 VAC
RSD-220	220 CFM Refrigerated Series Dryer	220	1 1/2"	232	130	157 lbs	230 VAC
RSD-300	300 CFM Refrigerated Series Dryer	300	1 1/2"	232	130	170 lbs	230 VAC

#### MEMBRANE DRYERS

#### SIMPLE AIR DRYING TECHNOLOGY

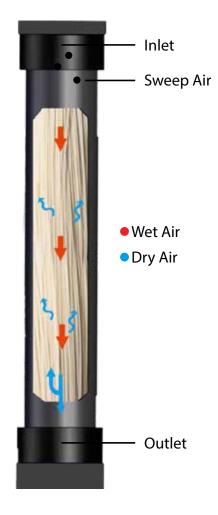
Tsunami Membrane Dryers provide an economical solution for supplying clean, dry air without the need for electricity. The molecular makeup of the hollow tubes allows water vapor to pass. The greater the pressure differential between the inlet and outlet pressures, the drier the air downstream.

- Low relative humidity down to .01% RH
- Great dew point supression up to 140°F swing
- Easy, low-cost maintenance \$160/year
- Includes Tsunami Water Separator and Oil Coalescing Filter pre-filtration with automatic drains

#### **HOW IT WORKS**

The Drying Process

- 1 The molecular makeup of the hollow tubes allows certain gases to pass through the membrane quicker than the desired gas.
- 2 As compressed air travels through the hollow tubes, water vapor passes through the membrane pores.
- The water vapor collects within the housing until it is removed.
- 4 A fixed orifice at the bottom of the hollow tubes allows dry air to pass up the housing, around the hollow tubes, to sweep the water vapor out the sweep holes at the top of the housing.



#### **MEMBRANE DRYER**

Includes:

- ·2-Stage Pre-filtration
- ·Outlet Regulator



Max Pressure: 175 ps	i		ı	Max Temperature: 100°F
ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0889	15	1/4" NPT	9 lbs	22"x 12"x 3½"
21999-0357	20	1/2" NPT	161/2 lbs	23" x 20" x 4½"
21999-0355	Membra	ane Core Repla	cement	

#### **PRECISION MEMBRANE DRYFR**

Includes:

- · 3-Stage Pre-filtration
- · Electronic Drain
- ·Outlet Regulator



Max Pressure: 175 ps	i

max r ressurer rrs p.				
ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0957	15	1/4" NPT	12 lbs	24½" x 18½" x 5½"
21999-0524	20	1/2" NPT	22 lbs	23"x 23½"x 5½"
21999-0355		Membrane	Core Replac	ement

# **CORE DESICCANT DRYER**

#### "CORE" AIR DRYING TECHNOLOGY

The Tsunami CORE Series Desiccant Air Dryer provides world-class air dryness at an affordable price, designed solely for intermittent, lower pressure point-of-use applications.

- 2-stage Pre-filtration with Automatic Drains
- Oesiccant Air Dryer 20% longer media life
- Corrosion-resistant interior
- Super easy maintenance
- Removes liquids, oils, particulates and humidity, dew points down to -80°F



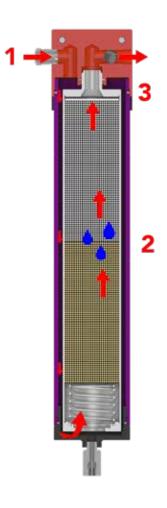
ITEM #	DESCRIPTION	PORT SIZE (NPT)	DRAIN	MAX PSI	MAX °F	WEIGHT	DIMENSIONS (IN)
21999-1225	Desiccant Air Dryer System with Pre-Filtration - 25 CFM	½ INLET / OUTLET	Float	200	175	25 lbs	22 x 13 x 7
21999-1235	Desiccant Air Dryer without Pre-Filtration - 25 CFM	½ INLET / OUTLET	Float	200	175	14 lbs	22 x 5 x 7

#### **HOW IT WORKS**

The Drying Process

- 1 Filtered air enters the dryer inlet & travels downward around the cartridge.
- 2 The air then enters the cartridge & travels through the dual layered desiccant media, which removes water vapor.\*
- 3 The dry air passes through a 10 micron filter disk before exiting the dryer outlet.

\*The CORE cartridge combines two media types to eliminate dusting and "tunneling" of air flow through the media; improving performance of the desiccant media.

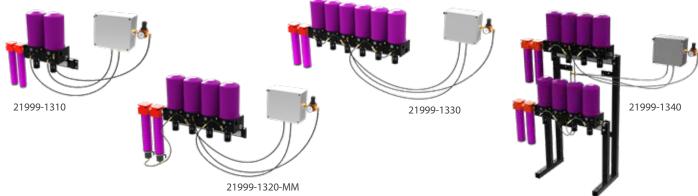


# C1D1 PNEUMATIC DRYER

#### FOR CLASS 1, DIVISON 1 HAZARDOUS LOCATIONS

The Tsunami C1D1 Pneumatic Air Dryer is engineered for Class 1, Division 1 hazardous locations with the ability to provide safe and reliable compressed air drying without the use of electricity. Designed for environments where flammable gases or vapors are present, it eliminates ignition risks while delivering clean, dry air to protect tools, equipment, and processes. The C1D1 dryer is ideal for maintaining safety and performance in explosive or volatile conditions.

- No electricity required
- Explosion-proof components
- Low dew points to prevent freezing in air pipes
- Pneumatic-powered Controller
- ✓ Wall-brackets or Floor Mount Stand
- Regenerative Dryer
- Includes Tsunami Water Separator and Oil Coalescing Filter



#### WITH FLOAT DRAINS

ITEM#	DESCRIPTION	TOWER #	CFM	DRAIN	WATER SEPARATOR	OIL COALESCING	MOUNT
21999-1310	40 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Float Drains	2	40	Float	1 x 50 Series	1 x 50 Series	Wall
21999-1320	80 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Float Drains	4	80	Float	1 x 120 Series	1 x 120 Series	Wall
21999-1330	120 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Float Drains	6	120	Float	1 x 120 Series	1 x 120 Series	Wall
21999-1340	160 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Float Drains	8	160	Float	2 x 120 Series	2 x 120 Series	Rail
21999-1350	200 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Float Drains	12	200	Float	2 x 120 Series	2 x 120 Series	Rail
21999-1355	300 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Float Drains	18	300	Float	3 x 120 Series	3 x 120 Series	Rail
21999-1360	400 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Float Drains	24	400	Float	4 x 120 Series	4 x 120 Series	Rail

#### WITH PNEUMATIC DRAINS

ITEM #	DESCRIPTION	TOWER #	CFM	DRAIN	WATER SEPARATOR	OIL COALESCING	MOUNT
21999-1310-MM	40 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Pneumatic Drains	2	40	Pneumatic	1 x 50 Series	1 x 50 Series	Wall
21999-1320-MM	80 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Pneumatic Drains	4	80	Pneumatic	1 x 120 Series	1 x 120 Series	Wall
21999-1330-MM	120 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Pneumatic Drains	6	120	Pneumatic	1 x 120 Series	1 x 120 Series	Wall
21999-1340-MM	160 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Pneumatic Drains	8	160	Pneumatic	2 x 120 Series	2 x 120 Series	Rail
21999-1350-MM	200 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Pneumatic Drains	12	200	Pneumatic	2 x 120 Series	2 x 120 Series	Rail
21999-1355-MM	300 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Pneumatic Drains	18	300	Pneumatic	3 x 120 Series	3 x 120 Series	Rail
21999-1360-MM	400 CFM Class 1 Division 1 Hazardous Location Regenerative Drying System with Pneumatic Drains	24	400	Pneumatic	4 x 120 Series	4 x 120 Series	Rail





### **AFTERCOOLER**

#### FOR LOWERING HIGH HEAT FROM AIR COMPRESSORS

The Tsunami Aftercooler delivers exceptional air cooling, critical for applications sensitive to moisture contamination. By significantly reducing the moisture load entering downstream dryers, the Aftercooler optimizes dryer performance, extends equipment life, and minimizes costly downtime. Engineered for challenging environments with high ambient temperatures, the Tsunami Aftercooler ensures reliable and efficient compressed air supply for demanding applications, maximizing system uptime and productivity.

- Ocols & condenses water vapor into liquid moisture for easy removal
- Bar & plate heat exchanger
- Pre-cools hot compressed air before entering dryers



#### WALL-MOUNTED AFTERCOOLER

The Tsunami Aftercooler's wall-mount design eliminates the need for extended piping runs and floor space-consuming stands, streamlining installation and maximizing workspace. With 6 wall-mounting configurations, you gain complete conytol over installation, enabling efficient water removal and minimizing the risk of corrosion, freezing, and contamination.

- 6 wall-mounting configurations allow for optimal performance & spacial requirements
- Choose approach temperature based on wall-mounting configuration
- Increase floor & operating space with wall-mount
- For mobile applications, spray foam, mobile paint equipment, and mobile tire rigs

ITEM #	DESCRIPTION	PORT SIZE (NPT)	MAX PSI	MAX °F	AMPS	POWER
21999-1250	Aftercooler	3/4″	290	300	0.4	120 VAC



▲ Required:

Install a water separator to remove all condensed moisture downstream.

There are six installation configurations for the Tsunami Aftercooler. Choose the best option that fits the space available to you and specific application goals.

#### GOOD **BEST** BETTER Performance: 15 - 20°F Performance: 10 - 15°F Performance: 5 - 10°F 4.3" AIR COOLING CLEARANCE 6.6" AIR COOLING CLEARANCE UNOBSTRUCTED AIR COOLING CLEARANCE Horizontal, Parallel to Wall Horizontal, Parallel to Wall Horizontal, Perpendicular to Wall Dimensions: Dimensions: Dimensions: 22.5" x 11.75" x 10.25" 22.5" x 11.75" x 12.5" 22.5" x 7.25" x 14.25" Vertical, Parallel to Wall Vertical, Parallel to Wall Vertical, Parallel to Wall Dimensions: **Dimensions:** Dimensions: 11.75" x 28" x 10.25" 11.75" x 28" x 12.5" 7.25" x 28" x 14.25'

# **AIR FILTRATION**

#### FOR THE SURGES ORDINARY FILTERS CAN'T HANDLE

Tsunami filters are machined from the highest quality materials and are anodized inside and out to ensure ultimate durability against corrosion and trapped contaminates. Our cutting-edge technology is rigorously tested to outperform your expectations regardless of the industry or application.

- Filter heads machined from 6061 Aircraft Aluminum
- Oversized tube length allows both gravity and velocity to assist in the removal of water and air contaminates
- Removable bottom cap provides ease of service and machined drain port provides various drain capabilities





- Filter packages can be ordered in reverse flow, right to left, and have a "-R" at the end of the part number
- Filtration service parts can be found on pages 18-19 or by searching the unit part number online at tsunami.us.com

#### WATER SEPARATORS

The Tsunami Water Separator removes water, up to one quart per minute, and filters particulate down to 10 micron.

#### **HOW IT WORKS**

- 1 Air enters the filter & travels down a small diameter tube causing an increase in velocity.
- 2 The air reaches the bottom of the inner tube then is redirected 180° up the outer tube allowing gravity and a slower velocity to capture bulk liquids.
- 3 Velocity increases again as air is forced through small orifice baffles before entering the stainless steel mesh element.
- 4 Centrifugal force is used to capture any remaining liquids before exiting the filter.
- 5 Liquids are automatically ejected through the drain.



Max Pressure: 250 psi (20-120 CFM) 200 psi (300-800 CFM)

Max	Tem	oera	ture:	175	5°F

ITEM #	MAX CFM	DRAIN TYPE	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0390	20	Float	1/4" NPT	1½ lbs	8½"x 2"x 2"
21999-0390-ED	20	Electronic	1/4" NPT	21/2 lbs	11½"x 2"x 2"
21999-0390-MM	20	Pneumatic	1⁄4" NPT	2 lbs	10½"x 2"x 2"
21999-0131	50	Float	1/2" NPT	31/2 lbs	14½"x 2½"x 2½"
21999-0131-ED	50	Electronic	1/2" NPT	6 lbs	17½"x 5½"x 4"
21999-0131-MM	50	Pneumatic	1/2" NPT	6 lbs	17" x 2½" x 2½"
21999-1034	120	Float	3/4" NPT	9lbs	16" x 3½" x 3½"
21999-1034-ED	120	Electronic	3/4" NPT	9½ lbs	18"x 6" x 4½"
21999-1034-MM	120	Pneumatic	3/4" NPT	9lbs	18"x 3½"x 3½"
21999-0082	120	Float	1" NPT	9 lbs	16" x 3½" x 3½"
21999-0082-ED	120	Electronic	1" NPT	9½ lbs	18"x 6" x 4½"
21999-0082-MM	120	Pneumatic	1" NPT	9 lbs	18"x 3½"x 3½"
21999-1150	225	Float	11/2" NPT	12 lbs	22" x 4½" x 6½"
21999-1150-ED	225	Electronic	11/2" NPT	13 lbs	25"x 4½"x 6½"
21999-1150-MM	225	Pneumatic	11/2" NPT	14 lbs	26"x 4½"x 10"
21999-1096	300	Float	11/2" NPT	12 lbs	28" x 4½" x 6½"
21999-1096-ED	300	Electronic	11/2" NPT	13 lbs	31"x 4½"x 6½"
21999-1096-MM	300	Pneumatic	11/2" NPT	14 lbs	32"x 4½"x 10"
21999-1160	450	Float	2" NPT	19 1/2	26" X 5½" X 5½"
21999-1160-ED	450	Electronic	2" NPT	20 1/2	28" X 5½" X 5½"
21999-1160-MM	450	Pneumatic	2" NPT	21 1/2	29" X 5½" X 5½"
21999-1120	600	Float	2" NPT	20 lbs	31" x 5½" x 5½"
21999-1120-ED	600	Electronic	2" NPT	21 lbs	34" x 5½" x 5½"
21999-1120-MM	600	Pneumatic	2" NPT	22 lbs	35" x 5½" x 5½"
21999-0960	800	Float	3" NPT	45 lbs	35½"x 6"x 6"
21999-0960-ED	800	Electronic	3" NPT	46 lbs	35½" x 6" x 10"
21999-0960-MM	800	Pneumatic	3" NPT	46 lbs	35½"x 6" x 8½"

#### OIL COALESCING FILTERS

The Oil Coalescing Filter removes bulk oils, aerosols, and particulates down to .01 micron/ppm aerosols.

#### **HOW IT WORKS**

- 1 Air enters the filter and passes through the element from the center to the outside.
- 2 As the air travels through the fibrous layers, oil aerosols are captured and coalesce.
- 3 The non-wicking outer drain layer separates the bulk liquids from the air flow.
- 4 Gravity slows the bulk liquids to drip into the drain sump off the filter where they are automatically removed.



Replace element every six months

Max Pressure: 250 psi (20-120 CFM) 200 psi (300-800 CFM)

Max Temperature: 175°F

TTEM #   MAX   CFM   TYPE   SIZE   WEIGHT   DIMENSIONS (HWD)	Max Pressure: 250 psi (2	Pressure: 250 psi (20-120 CFM) 200 psi (300-800 CFM)			Ma	ax Temperature: 175°F
21999-0390-Z-ED 20 Electronic ¼" NPT 2½ lbs 11½" x 2"x 2" 2" 21999-0390-Z-MM 20 Pneumatic ¼" NPT 2 lbs 10½" x 2"x 2" 2" 21999-0390-Z-MM 20 Pneumatic ¼" NPT 3½ lbs 14½" x 2½" x 2½" 2½" 21999-0131-Z-FD 50 Electronic ½" NPT 4½ lbs 17½" x 5½" x 4½" 2½" 21999-0131-Z-MM 50 Pneumatic ½" NPT 4 lbs 17" x 2½" x 2½" 2½" 21999-1034-Z-FD 120 Float ¾" NPT 5 lbs 16" x 3½" x 3½" 21999-1034-Z-ED 120 Electronic ¾" NPT 5 lbs 18" x 6" x 4½" 21999-1034-Z-MM 120 Pneumatic ¾" NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-FD 120 Electronic 1" NPT 5 lbs 16" x 3½" x 3½" 21999-0082-Z-FD 120 Electronic 1" NPT 5 lbs 16" x 3½" x 3½" 21999-0082-Z-ED 120 Electronic 1" NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-ED 120 Electronic 1" NPT 5½ lbs 18" x 3½" x 3½" 21999-1150-Z-FD 225 Float 1½" NPT 11 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½" NPT 12 lbs 25" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½" NPT 12 lbs 26" x 4½" x 10" 21999-1096-Z-FD 300 Float 1½" NPT 10½ lbs 28" x 4½" x 10" 21999-1096-Z-ED 300 Electronic 1½" NPT 11½ lbs 31" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½" NPT 11½ lbs 31" x 4½" x 6½" 21999-106-Z-ED 450 Electronic 2" NPT 11½ lbs 32" x 4½" x 10" 21999-1160-Z-ED 450 Electronic 2" NPT 16 1/2 26" X 5½" X 5½" 21999-1160-Z-ED 450 Electronic 2" NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 3" NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6"	ITEM #				WEIGHT	
21999-0390-Z-MM 20 Pneumatic ¼"NPT 2 lbs 10½" x 2" x 2" x 2" 21999-0131-Z-FD 50 Float ½"NPT 3½ lbs 14½" x 2½" x 2½" x 2½" 21999-0131-Z-ED 50 Electronic ½"NPT 4½ lbs 17½" x 5½" x 4" 21999-0131-Z-MM 50 Pneumatic ½"NPT 4 lbs 17" x 2½" x 2½" x 2½" 21999-1034-Z-FD 120 Float ¾"NPT 5 lbs 16" x 3½" x 3½" 21999-1034-Z-ED 120 Electronic ¾"NPT 6 lbs 18" x 6" x 4½" 21999-1034-Z-MM 120 Pneumatic ¾"NPT 5 lbs 16" x 3½" x 3½" x 3½" 21999-0082-Z-FD 120 Float 1"NPT 5 lbs 16" x 3½" x 3½" x 3½" 21999-0082-Z-ED 120 Electronic 1"NPT 6 lbs 18" x 6" x 4½" 21999-0082-Z-ED 120 Electronic 1"NPT 5½ lbs 16" x 3½" x 3½" x 3½" 21999-0082-Z-MM 120 Pneumatic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-MM 120 Pneumatic 1"NPT 5½ lbs 18" x 3½" x 3½" x 3½" 21999-1150-Z-FD 225 Float 1½"NPT 12 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½"NPT 12 lbs 25" x 4½" x 10" 21999-1150-Z-ED 300 Float 1½"NPT 12 lbs 26" x 4½" x 10" 21999-1096-Z-ED 300 Electronic 1½"NPT 10½ lbs 28" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31" x 4½" x 6½" 21999-1096-Z-ED 450 Electronic 1½"NPT 12½ lbs 32" x 4½" x 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 16 1/2 26" x 5½" x 5½" x 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 19 lbs 35" x 5½" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 19 lbs 35" x 5½" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43" x 6" x	21999-0390-Z-FD	20	Float	1/4" NPT	1½ lbs	8½" x 2" x 2"
21999-0131-Z-FD 50 Float ½"NPT 3½ lbs 14½"x 2½"x 2½"x 2½" 21999-0131-Z-ED 50 Electronic ½"NPT 4½ lbs 17½" x 5½" x 4" 21999-0131-Z-MM 50 Pneumatic ½"NPT 4 lbs 17" x 2½"x 2½" 21999-1034-Z-FD 120 Float ¾"NPT 5 lbs 16" x 3½"x 3½" 21999-1034-Z-ED 120 Electronic ¾"NPT 6 lbs 18" x 6" x 4½" 21999-1034-Z-ED 120 Float 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-FD 120 Float 1"NPT 5 lbs 16" x 3½"x 3½" 21999-0082-Z-FD 120 Electronic 1"NPT 6 lbs 18" x 6" x 4½" 21999-0082-Z-ED 120 Electronic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-ED 120 Electronic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-1150-Z-FD 225 Float 1½"NPT 11 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½"NPT 12 lbs 25" x 4½" x 10" 21999-1150-Z-ED 300 Float 1½"NPT 12 lbs 26" x 4½" x 10" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31" x 4½" x 6½" 21999-1160-Z-FD 450 Float 2"NPT 16 1/2 26" x 5½" x 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 16 1/2 26" x 5½" x 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 17 1/2 28" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 800 Float 3"NPT 46 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 45 lbs 43" x 6" x 6"	21999-0390-Z-ED	20	Electronic	1/4" NPT	21/2 lbs	11½"x 2"x 2"
21999-0131-Z-ED 50 Electronic ½"NPT 4½ lbs 17½" x 5½" x 4" 21999-0131-Z-MM 50 Pneumatic ½"NPT 4 lbs 17" x 2½" x 2½" x 2½" 21999-1034-Z-FD 120 Float ¾"NPT 5 lbs 16" x 3½" x 3½" 21999-1034-Z-ED 120 Electronic ¾"NPT 5½ lbs 18" x 6" x 4½" 21999-1034-Z-MM 120 Pneumatic ¾"NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-FD 120 Float 1"NPT 5½ lbs 16" x 3½" x 3½" 21999-0082-Z-ED 120 Electronic 1"NPT 5½ lbs 16" x 3½" x 3½" 21999-0082-Z-ED 120 Pneumatic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-MM 120 Pneumatic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-1150-Z-FD 225 Float 1½"NPT 11 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½"NPT 12 lbs 25" x 4½" x 10" 21999-1150-Z-ED 300 Float 1½"NPT 12 lbs 26" x 4½" x 10" 21999-1096-Z-FD 300 Float 1½"NPT 10½ lbs 28" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31" x 4½" x 6½" 21999-1096-Z-ED 450 Float 2"NPT 12½ lbs 32" x 4½" x 5½" 21999-1160-Z-ED 450 Float 2"NPT 16 1/2 26" X 5½" X 5½" 21999-1160-Z-ED 450 Float 2"NPT 17 1/2 28" X 5½" X 5½" 21999-1120-Z-ED 600 Float 2"NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Float 3"NPT 45 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6"	21999-0390-Z-MM	20	Pneumatic	1/4" NPT	2 lbs	10½" x 2" x 2"
21999-0131-Z-MM 50 Pneumatic ½"NPT 4 lbs 17" x 2½" x 2½" 21999-1034-Z-FD 120 Float ¾"NPT 5 lbs 16" x 3½" x 3½" 21999-1034-Z-ED 120 Electronic ¾"NPT 6 lbs 18" x 6" x 4½" 21999-1034-Z-MM 120 Pneumatic ¾"NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-FD 120 Float 1"NPT 5 lbs 16" x 3½" x 3½" 21999-0082-Z-ED 120 Electronic 1"NPT 6 lbs 18" x 6" x 4½" 21999-0082-Z-ED 120 Pneumatic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-0082-Z-MM 120 Pneumatic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-1082-Z-MM 120 Pneumatic 1"NPT 5½ lbs 18" x 3½" x 3½" 21999-1150-Z-FD 225 Float 1½"NPT 11 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½"NPT 12 lbs 25" x 4½" x 10" 21999-1150-Z-ED 300 Float 1½"NPT 12 lbs 26" x 4½" x 10" 21999-1096-Z-FD 300 Float 1½"NPT 10½ lbs 28" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31" x 4½" x 6½" 21999-1160-Z-FD 450 Float 2"NPT 16 1/2 26" x 5½" x 5½" x 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 17 1/2 28" x 5½" x 5½" 21999-1160-Z-ED 600 Float 2"NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-FD 600 Float 2"NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Float 3"NPT 45 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6" x 6" a 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6	21999-0131-Z-FD	50	Float	1/2" NPT	31/2 lbs	14½"x 2½"x 2½"
21999-1034-Z-FD 120	21999-0131-Z-ED	50	Electronic	1/2" NPT	41/2 lbs	17½" x 5½" x 4"
21999-1034-Z-ED 120 Electronic ¾" NPT 6 lbs 18"x 6"x 4½" 21999-1034-Z-MM 120 Pneumatic ¾" NPT 5½ lbs 18"x 3½"x 3½" 21999-0082-Z-FD 120 Float 1" NPT 5 lbs 16"x 3½"x 3½" 21999-0082-Z-ED 120 Electronic 1" NPT 6 lbs 18"x 6" x 4½" 21999-0082-Z-MM 120 Pneumatic 1" NPT 5½ lbs 18"x 3½"x 3½" 21999-1150-Z-FD 225 Float 1½" NPT 11 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½" NPT 12 lbs 25"x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½" NPT 12 lbs 25"x 4½" x 10" 21999-1150-Z-MM 225 Pneumatic 1½" NPT 12 lbs 26"x 4½" x 10" 21999-1096-Z-FD 300 Float 1½" NPT 10½ lbs 28" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½" NPT 11½ lbs 31"x 4½" x 6½" 21999-1096-Z-ED 300 Float 1½" NPT 12½ lbs 32" x 4½" x 10" 21999-1160-Z-ED 450 Float 2" NPT 16 1/2 26" x 5½" x 5½" x 5½" 21999-1160-Z-ED 450 Electronic 2" NPT 16 1/2 26" x 5½" x 5½" x 5½" 21999-1120-Z-FD 600 Float 2" NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2" NPT 18 lbs 34" x 5½" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2" NPT 18 lbs 34" x 5½" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2" NPT 19 lbs 35" x 5½" x 5½" x 5½" 21999-1120-Z-ED 600 Float 3" NPT 19 lbs 35" x 5½" x 5½" x 5½" 21999-0960-Z-ED 800 Float 3" NPT 45 lbs 43" x 6" x	21999-0131-Z-MM	50	Pneumatic	1/2" NPT	4 lbs	17" x 2½" x 2½"
21999-1034-Z-MM 120 Pneumatic ¾" NPT 5½ lbs 18" x 3½" x 3½" x 3½" 21999-0082-Z-FD 120 Electronic 1" NPT 5 lbs 16" x 3½" x 3½" 21999-0082-Z-ED 120 Electronic 1" NPT 6 lbs 18" x 6" x 4½" 21999-0082-Z-MM 120 Pneumatic 1" NPT 5½ lbs 18" x 3½" x 3½" 21999-1150-Z-FD 225 Float 1½" NPT 11 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½" NPT 12 lbs 25" x 4½" x 10" 21999-1150-Z-ED 225 Pneumatic 1½" NPT 12 lbs 26" x 4½" x 10" 21999-1150-Z-MM 225 Pneumatic 1½" NPT 12 lbs 26" x 4½" x 10" 21999-1096-Z-FD 300 Float 1½" NPT 10½ lbs 28" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½" NPT 11½ lbs 31" x 4½" x 6½" 21999-1096-Z-MM 300 Pneumatic 1½" NPT 12½ lbs 32" x 4½" x 10" 21999-1160-Z-FD 450 Float 2" NPT 16 1/2 26" X 5½" X 5½" 21999-1160-Z-ED 450 Electronic 2" NPT 16 1/2 28" X 5½" X 5½" 21999-1160-Z-ED 450 Float 2" NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-FD 600 Float 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2" NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-ED 600 Float 3" NPT 19 lbs 35" x 5½" x 5½" 21999-0960-Z-ED 800 Float 3" NPT 45 lbs 43" x 6" x	21999-1034-Z-FD	120	Float	3/4" NPT	5 lbs	16"x 3½"x 3½"
21999-0082-Z-FD 120 Float 1"NPT 5 lbs 16"x 3½"x 3½" 21999-0082-Z-ED 120 Electronic 1"NPT 6 lbs 18"x 6"x 4½" 21999-0082-Z-MM 120 Pneumatic 1"NPT 5½ lbs 18"x 3½"x 3½" 21999-1150-Z-FD 225 Float 1½"NPT 11 lbs 22"x 4½"x 10" 21999-1150-Z-ED 225 Electronic 1½"NPT 12 lbs 25"x 4½"x 10" 21999-1150-Z-MM 225 Pneumatic 1½"NPT 12 lbs 26"x 4½"x 10" 21999-1096-Z-FD 300 Float 1½"NPT 10½ lbs 28"x 4½"x 6½" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31"x 4½"x 6½" 21999-1096-Z-ED 300 Float 1½"NPT 12½ lbs 32"x 4½"x 10" 21999-1096-Z-ED 300 Electronic 1½"NPT 1½ lbs 31"x 4½"x 6½" 21999-1160-Z-FD 450 Float 2"NPT 16 1/2 26" X 5½" X 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 17 1/2 28" X 5½" X 5½" 21999-1160-Z-ED 450 Float 2"NPT 17 lbs 31"x 5½"x 5½" 21999-1120-Z-FD 600 Float 2"NPT 17 lbs 31"x 5½"x 5½" 21999-1120-Z-FD 600 Float 2"NPT 18 lbs 34"x 5½"x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34"x 5½"x 5½" 21999-1120-Z-ED 600 Float 2"NPT 19 lbs 35"x 5½"x 5½" 21999-1120-Z-MM 600 Pneumatic 2"NPT 19 lbs 35"x 5½"x 5½" 21999-1120-Z-MM 600 Pneumatic 2"NPT 19 lbs 35"x 5½"x 5½" 21999-0960-Z-FD 800 Float 3"NPT 45 lbs 43"x 6"x 6" 21999-0960-Z-ED 800 Electronic 3"NPT 46 lbs 43"x 6"x 6"	21999-1034-Z-ED	120	Electronic	3/4" NPT	6 lbs	18"x 6"x 4½"
21999-0082-Z-ED 120 Electronic 1"NPT 6 lbs 18"x 6"x 4½" 21999-0082-Z-MM 120 Pneumatic 1"NPT 5½ lbs 18"x 3½"x 3½"x 3½" 21999-1150-Z-FD 225 Float 1½"NPT 11 lbs 22"x 4½"x 10" 21999-1150-Z-ED 225 Electronic 1½"NPT 12 lbs 25"x 4½"x 10" 21999-1150-Z-MM 225 Pneumatic 1½"NPT 12 lbs 26"x 4½"x 10" 21999-1096-Z-FD 300 Float 1½"NPT 10½ lbs 28"x 4½"x 6½" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31"x 4½"x 6½" 21999-1096-Z-ED 300 Float 1½"NPT 11½ lbs 31"x 4½"x 6½" 21999-1096-Z-ED 300 Float 1½"NPT 11½ lbs 32"x 4½"x 10" 21999-1096-Z-ED 300 Float 2"NPT 16 1/2 26" X 5½" X 5½" X 5½" 21999-1160-Z-FD 450 Float 2"NPT 16 1/2 28" X 5½" X 5½" X 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 17 1/2 28" X 5½" X 5½" X 5½" 21999-1120-Z-FD 600 Float 2"NPT 18 lbs 31"x 5½"x 5½" X 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34"x 5½"x 5½" X 5	21999-1034-Z-MM	120	Pneumatic	3/4" NPT	51/2 lbs	18"x 3½"x 3½"
21999-0082-Z-MM         120         Pneumatic         1"NPT         5½ lbs         18"x 3½"x 3½"           21999-1150-Z-FD         225         Float         1½"NPT         11 lbs         22"x 4½"x 10"           21999-1150-Z-ED         225         Electronic         1½"NPT         12 lbs         25"x 4½"x 10"           21999-1150-Z-MM         225         Pneumatic         1½"NPT         12 lbs         26"x 4½"x 10"           21999-1096-Z-FD         300         Float         1½"NPT         10½ lbs         28"x 4½"x 6½"           21999-1096-Z-ED         300         Electronic         1½"NPT         11½ lbs         31"x 4½"x 6½"           21999-1096-Z-ED         300         Pneumatic         1½"NPT         11½ lbs         32"x 4½"x 10"           21999-1160-Z-ED         450         Float         2"NPT         16 1/2         26" X 5½" X 5½"           21999-1160-Z-ED         450         Electronic         2"NPT         17 1/2         28" X 5½" X 5½"           21999-1160-Z-ED         450         Pneumatic         2"NPT         18 1/2         29" X 5½" X 5½"           21999-1120-Z-ED         600         Float         2"NPT         18 lbs         34"x 5½"x 5½"           21999-1120-Z-ED         600         Electroni	21999-0082-Z-FD	120	Float	1" NPT	5 lbs	16"x 3½"x 3½"
21999-1150-Z-FD 225 Float 1½" NPT 11 lbs 22" x 4½" x 10" 21999-1150-Z-ED 225 Electronic 1½" NPT 12 lbs 25" x 4½" x 10" 21999-1150-Z-MM 225 Pneumatic 1½" NPT 12 lbs 26" x 4½" x 10" 21999-1096-Z-FD 300 Float 1½" NPT 10½ lbs 28" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½" NPT 11½ lbs 31" x 4½" x 6½" 21999-1096-Z-HM 300 Pneumatic 1½" NPT 11½ lbs 32" x 4½" x 10" 21999-1109-Z-MM 300 Pneumatic 1½" NPT 12½ lbs 32" x 4½" x 10" 21999-1160-Z-FD 450 Float 2" NPT 16 1/2 26" X 5½" X 5½" X 5½" X 10" 21999-1160-Z-ED 450 Electronic 2" NPT 17 1/2 28" X 5½" X 5½" X 5½" X 10" 21999-1160-Z-HM 450 Pneumatic 2" NPT 18 1/2 29" X 5½" X 5½" X 5½" X 1999-1120-Z-FD 600 Float 2" NPT 17 lbs 31" x 5½" x 5½" X 1999-1120-Z-ED 600 Electronic 2" NPT 18 lbs 34" x 5½" x 5½" X 1999-1120-Z-ED 600 Pneumatic 2" NPT 19 lbs 35" x 5½" x 5½" X 1999-1120-Z-MM 600 Pneumatic 2" NPT 19 lbs 35" x 5½" x 5½" X 1999-0960-Z-FD 800 Float 3" NPT 45 lbs 43" x 6" X 6	21999-0082-Z-ED	120	Electronic	1" NPT	6 lbs	18"x 6" x 4½"
21999-1150-Z-ED         225         Electronic         1½" NPT         12 lbs         25"x 4½"x 10"           21999-1150-Z-MM         225         Pneumatic         1½" NPT         12 lbs         26"x 4½"x 10"           21999-1096-Z-FD         300         Float         1½" NPT         10½ lbs         28"x 4½"x 6½"           21999-1096-Z-ED         300         Electronic         1½" NPT         11½ lbs         31"x 4½"x 6½"           21999-1096-Z-MM         300         Pneumatic         1½" NPT         12½ lbs         32"x 4½"x 10"           21999-1160-Z-FD         450         Float         2" NPT         16 1/2         26" X 5½" X 5½" X 5½"           21999-1160-Z-ED         450         Electronic         2" NPT         17 1/2         28" X 5½" X 5½" X 5½"           21999-1160-Z-ED         450         Pneumatic         2" NPT         18 1/2         29" X 5½" X 5½" X 5½"           21999-1120-Z-FD         600         Float         2" NPT         17 lbs         31" x 5½" x 5½" x 5½"           21999-1120-Z-ED         600         Electronic         2" NPT         18 lbs         34" x 5½" x 5½" x 5½"           21999-1120-Z-MM         600         Pneumatic         2" NPT         19 lbs         35" x 5½" x 5½" x 5½"           21999-	21999-0082-Z-MM	120	Pneumatic	1" NPT	51/2 lbs	18"x 3½"x 3½"
21999-1150-Z-MM         225         Pneumatic         1½" NPT         12 lbs         26"x 4½" x 10"           21999-1096-Z-FD         300         Float         1½" NPT         10½ lbs         28" x 4½" x 6½"           21999-1096-Z-ED         300         Electronic         1½" NPT         11½ lbs         31"x 4½" x 6½"           21999-1096-Z-MM         300         Pneumatic         1½" NPT         12½ lbs         32"x 4½" x 10"           21999-1160-Z-FD         450         Float         2" NPT         16 1/2         26" X 5½" X 5½" X 5½"           21999-1160-Z-ED         450         Electronic         2" NPT         17 1/2         28" X 5½" X 5½" X 5½"           21999-1160-Z-HM         450         Pneumatic         2" NPT         18 1/2         29" X 5½" X 5½" X 5½"           21999-1120-Z-FD         600         Float         2" NPT         17 lbs         31" x 5½" x 5½" x 5½"           21999-1120-Z-ED         600         Electronic         2" NPT         18 lbs         34" x 5½" x 5½" x 5½"           21999-1120-Z-MM         600         Pneumatic         2" NPT         19 lbs         35" x 5½" x 5½" x 5½"           21999-0960-Z-FD         800         Float         3" NPT         45 lbs         43" x 6" x 6"           21999-0	21999-1150-Z-FD	225	Float	11/2" NPT	11 lbs	22" x 4½" x 10"
21999-1096-Z-FD 300 Float 1½"NPT 10½ lbs 28" x 4½" x 6½" 21999-1096-Z-ED 300 Electronic 1½"NPT 11½ lbs 31" x 4½" x 6½" 21999-1096-Z-MM 300 Pneumatic 1½"NPT 12½ lbs 32" x 4½" x 10" 21999-1160-Z-FD 450 Float 2"NPT 16 1/2 26" X 5½" X 5½" 21999-1160-Z-ED 450 Electronic 2"NPT 17 1/2 28" X 5½" X 5½" 21999-1160-Z-ED 450 Pneumatic 2"NPT 18 1/2 29" X 5½" X 5½" 21999-1160-Z-FD 600 Float 2"NPT 17 lbs 31" x 5½" x 5½" 21999-1120-Z-FD 600 Electronic 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Electronic 2"NPT 18 lbs 34" x 5½" x 5½" 21999-1120-Z-ED 600 Float 2"NPT 19 lbs 35" x 5½" x 5½" 21999-1120-Z-MM 600 Pneumatic 2"NPT 19 lbs 35" x 5½" x 5½" 21999-0960-Z-FD 800 Float 3"NPT 45 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6"	21999-1150-Z-ED	225	Electronic	11/2" NPT	12 lbs	25"x 4½"x 10"
21999-1096-Z-ED         300         Electronic         1½" NPT         11½ lbs         31"x 4½"x 6½"           21999-1096-Z-MM         300         Pneumatic         1½" NPT         12½ lbs         32"x 4½"x 10"           21999-1160-Z-FD         450         Float         2" NPT         16 1/2         26" X 5½" X 5½"           21999-1160-Z-ED         450         Electronic         2" NPT         17 1/2         28" X 5½" X 5½"           21999-1160-Z-MM         450         Pneumatic         2" NPT         18 1/2         29" X 5½" X 5½"           21999-1120-Z-FD         600         Float         2" NPT         17 lbs         31"x 5½"x 5½"           21999-1120-Z-ED         600         Electronic         2" NPT         18 lbs         34"x 5½"x 5½"           21999-1120-Z-MM         600         Pneumatic         2" NPT         19 lbs         35"x 5½"x 5½"           21999-0960-Z-FD         800         Float         3" NPT         45 lbs         43"x 6"x 6"           21999-0960-Z-ED         800         Electronic         3" NPT         46 lbs         43"x 6"x 6"	21999-1150-Z-MM	225	Pneumatic	11/2" NPT	12 lbs	26"x 4½"x 10"
21999-1096-Z-MM       300       Pneumatic       1½" NPT       12½ lbs       32"x 4½"x 10"         21999-1160-Z-FD       450       Float       2" NPT       16 1/2       26" X 5½" X 5½" X 5½"         21999-1160-Z-ED       450       Electronic       2" NPT       17 1/2       28" X 5½" X 5½" X 5½"         21999-1160-Z-MM       450       Pneumatic       2" NPT       18 1/2       29" X 5½" X 5½" X 5½"         21999-1120-Z-FD       600       Float       2" NPT       17 lbs       31" x 5½" x 5½"         21999-1120-Z-ED       600       Electronic       2" NPT       18 lbs       34" x 5½" x 5½"         21999-1120-Z-MM       600       Pneumatic       2" NPT       19 lbs       35" x 5½" x 5½" x 5½"         21999-0960-Z-FD       800       Float       3" NPT       45 lbs       43" x 6" x 6"         21999-0960-Z-ED       800       Electronic       3" NPT       46 lbs       43" x 6" x 6"	21999-1096-Z-FD	300	Float	11/2" NPT	10½ lbs	28" x 4½" x 6½"
21999-1160-Z-FD       450       Float       2" NPT       16 1/2       26" X 5½" X 5½"         21999-1160-Z-ED       450       Electronic       2" NPT       17 1/2       28" X 5½" X 5½"         21999-1160-Z-MM       450       Pneumatic       2" NPT       18 1/2       29" X 5½" X 5½" X 5½"         21999-1120-Z-FD       600       Float       2" NPT       17 lbs       31" x 5½" x 5½"         21999-1120-Z-ED       600       Electronic       2" NPT       18 lbs       34" x 5½" x 5½"         21999-1120-Z-MM       600       Pneumatic       2" NPT       19 lbs       35" x 5½" x 5½"         21999-0960-Z-FD       800       Float       3" NPT       45 lbs       43" x 6" x 6"         21999-0960-Z-ED       800       Electronic       3" NPT       46 lbs       43" x 6" x 6"	21999-1096-Z-ED	300	Electronic	11/2" NPT	11½ lbs	31"x 4½"x 6½"
21999-1160-Z-ED       450       Electronic       2" NPT       17 1/2       28" X 5½" X 5½"         21999-1160-Z-MM       450       Pneumatic       2" NPT       18 1/2       29" X 5½" X 5½"         21999-1120-Z-FD       600       Float       2" NPT       17 lbs       31" x 5½" x 5½"         21999-1120-Z-ED       600       Electronic       2" NPT       18 lbs       34" x 5½" x 5½"         21999-1120-Z-MM       600       Pneumatic       2" NPT       19 lbs       35" x 5½" x 5½"         21999-0960-Z-FD       800       Float       3" NPT       45 lbs       43" x 6" x 6"         21999-0960-Z-ED       800       Electronic       3" NPT       46 lbs       43" x 6" x 6"	21999-1096-Z-MM	300	Pneumatic	11/2" NPT	121/2 lbs	32"x 4½"x 10"
21999-1160-Z-MM       450       Pneumatic       2" NPT       18 1/2       29" X 5½" X 5½"         21999-1120-Z-FD       600       Float       2" NPT       17 lbs       31" x 5½" x 5½"         21999-1120-Z-ED       600       Electronic       2" NPT       18 lbs       34" x 5½" x 5½"         21999-1120-Z-MM       600       Pneumatic       2" NPT       19 lbs       35" x 5½" x 5½"         21999-0960-Z-FD       800       Float       3" NPT       45 lbs       43" x 6" x 6"         21999-0960-Z-ED       800       Electronic       3" NPT       46 lbs       43" x 6" x 6"	21999-1160-Z-FD	450	Float	2" NPT	16 1/2	26" X 5½" X 5½"
21999-1120-Z-FD       600       Float       2" NPT       17 lbs       31" x 5½" x 5½" x 5½"         21999-1120-Z-ED       600       Electronic       2" NPT       18 lbs       34" x 5½" x 5½" x 5½"         21999-1120-Z-MM       600       Pneumatic       2" NPT       19 lbs       35" x 5½" x 5½" x 5½"         21999-0960-Z-FD       800       Float       3" NPT       45 lbs       43" x 6" x 6"         21999-0960-Z-ED       800       Electronic       3" NPT       46 lbs       43" x 6" x 6"	21999-1160-Z-ED	450	Electronic	2" NPT	17 1/2	28" X 5½" X 5½"
21999-1120-Z-ED       600       Electronic       2" NPT       18 lbs       34" x 5½" x 5½" x 5½"         21999-1120-Z-MM       600       Pneumatic       2" NPT       19 lbs       35" x 5½" x 5½"         21999-0960-Z-FD       800       Float       3" NPT       45 lbs       43" x 6" x 6"         21999-0960-Z-ED       800       Electronic       3" NPT       46 lbs       43" x 6" x 6"	21999-1160-Z-MM	450	Pneumatic	2" NPT	18 1/2	29" X 5½" X 5½"
21999-1120-Z-MM       600       Pneumatic       2"NPT       19 lbs       35"x 5½"x 5½"         21999-0960-Z-FD       800       Float       3"NPT       45 lbs       43"x 6"x 6"         21999-0960-Z-ED       800       Electronic       3"NPT       46 lbs       43"x 6"x 6"	21999-1120-Z-FD	600	Float	2" NPT	17 lbs	31" x 5½" x 5½"
21999-0960-Z-FD 800 Float 3"NPT 45 lbs 43" x 6" x 6" 21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6"	21999-1120-Z-ED	600	Electronic	2" NPT	18 lbs	34" x 5½" x 5½"
21999-0960-Z-ED 800 Electronic 3" NPT 46 lbs 43" x 6" x 6"	21999-1120-Z-MM	600	Pneumatic	2" NPT	19 lbs	35" x 5½" x 5½"
	21999-0960-Z-FD	800	Float	3" NPT	45 lbs	43" x 6" x 6"
21999-0960-Z-MM 800 Pneumatic 3"NPT 46 lbs 43" x 6" x 6"	21999-0960-Z-ED	800	Electronic	3" NPT	46 lbs	43" x 6" x 6"
	21999-0960-Z-MM	800	Pneumatic	3" NPT	46 lbs	43" x 6" x 6"

#### **ACTIVATED CARBON FILTERS**

The Activated Carbon Filter removes oil vapor down to .003 ppm, removing odor and taste from the air.

#### **HOW IT WORKS**

- 1 Air enters the filter and passes through the element from the outside to the center.
- 2 As the air travels through the activated carbon layers, oil vapors are captured and held through the process of adsorption.
- 3 No liquids should be present at this stage, therefore, there is no drain.



Replace element every six months

Max Pressure: 250 psi Max Temperature: 175°F

ITEM#	MAX CFM	DRAIN TYPE	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0390-AC	20	-	1/4" NPT	11/2 lbs	8"x 2"x 2"
21999-0131-AC	50	-	1/2" NPT	31/2 lbs	14½" x 2½" x 2½"
21999-1034-AC	120	-	3/4" NPT	9 lbs	16"x 3½"x 3½"
21999-0082-AC	120	-	1"NPT	9 lbs	16"x 3½"x 3½"

### FILTER DRAIN OPTIONS

Tsunami water separators and oil coalescing filters are designed to accommodate multiple drain types for specific application needs. Draining options include float drains, our patented Moisture Minder\* Electronic Drain and our patent pending pneumatic filter drain.



FLOAT DRAIN
Standard with all filters.



MOISTURE MINDER® EDV

A fixed strainer screen removes contaminates before reaching the valve orifice.



MOISTURE MINDER® FILTER DRAIN

Requires an intermittent pilot signal to operate. Designed to spin on corresponding size filter housing.

# FILTRATION PACKAGES

#### PACKAGE 1

Includes:

- ·Water Separator
- ·Lubricator



ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0416	20	1/4" NPT	21/2 lbs	9½"x 4½"x 2½"
21999-0247	50	1/2" NPT	7 lbs	18" x 6" x 5"
21999-0248	120	1" NPT	12 lbs	19½"x 8"x 5½"

#### PACKAGE 3

Includes:

- ·Water Separator
- ·Oil Coalescing Filter



ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0424	20	1/4" NPT	3 lbs	9½"x 5"x 2½"
21999-0251	50	1/2" NPT	91/2 lbs	18" x 6½" x 5"
21999-0252	120	1" NPT	14 lbs	19½"x 8"x 5½"

#### PACKAGE 5

Includes:

- ·Water Separator
- ·Oil Coalescing Filter
- ·Activated Carbon Filter



ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0421	20	1⁄4" NPT	4 lbs	9½"x 8"x 2½"
21999-0255	50	1/2" NPT	131/2 lbs	17" x 13" x 3½"
21999-0255-R	50	1/2" NPT	131/2 lbs	17" x 13" x 3½"
21999-0256	120	1" NPT	21 lbs	21"x 13"x 6½"

"-R" indicates right to left flow

#### PACKAGE 7

Includes:

- ·Oil Coalescing Filter
- ·Regulator



ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0969	20	1/4" NPT	2 lbs	10½"x 4"x 3½"
21999-0494	50	1/2" NPT	6 lbs	18½" x 6½" x 6"
21999-0967	120	1" NPT	12 lbs	21"x 8"x 51/2"

#### PACKAGE 2

Includes:

- ·Water Separator
- $\cdot Regulator \\$
- ·Lubricator



ITEM#	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0415	20	1/4" NPT	3 lbs	10½"x 5½"x 3½"
21999-0249	50	1/2" NPT	101/2 lbs	18" x 13" x 6½"
21999-0249-R	50	1/2" NPT	101/2 lbs	18" x 13" x 6½"
21999-0250	120	1" NPT	16 lbs	21"x 13"x 6½"

"-R" indicates right to left flow

#### **PACKAGE 4**

Includes:

- ·Water Separator
- ·Oil Coalescing Filter
- $\cdot Regulator$



ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0677	20	1/4" NPT	3½ lbs	9½"x 6½"x 3½"
21999-0253	50	1/2" NPT	12 lbs	17" x 13" x 4½"
21999-0253-R	50	1/2" NPT	12 lbs	17" x 13" x 4½"
21999-0254	120	1" NPT	18 lbs	21"x 13"x 6½"

"-R" indicates right to left flow

#### PACKAGE 6

Includes:

- ·Water Separator
- ·Oil Coalescing Filter
- ·Activated Carbon Filter
- · Regulator



ITEM #	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0678	20	1/4" NPT	5 lbs	10½"x 9"x 3½"
21999-0257	50	1/2" NPT	151/2 lbs	18½"x 17"x 4½"
21999-0257-R	50	1/2" NPT	151/2 lbs	18½" x 17" x 4½"
21999-0258	120	1"NPT	25 lbs	21"x 18"x 6½"
EDV Models Available	e: 20 SCFM	1: 21999-0457	50 SCFM:	21999-0291

#### PACKAGE 8

Includes:

- ·Water Separator
- ·Regulator



ITEM#	MAX CFM	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0414	20	1/4" NPT	21/2 lbs	10½"x 4"x 3½"
21999-0679	50	1/2" NPT	8 lbs	18" x 6½" x 6"
21999-0968	120	1" NPT	12 lbs	21"x 8"x 5½"

<sup>&</sup>quot;-R" indicates right to left flow





# **BREATHING AIR SYSTEMS**

Tsunami Breathing Air Systems are the optimal solution when Grade D breathing air is required. The complete system features industry-leading Tsunami 3-stage filtration along with continuous carbon monoxide monitoring that can be used in any SAR (Supplied Air Respirator) system.

- · 3-stage Tsunami filtration system with automatic float drains
- · Easy-to-read digital carbon monoxide alarm
- ·CO monitor calibration made easy with Autocal®
- · Meets OSHA Grade D breathing air quality specifications



SINGLE-USER SYSTEM (1 USER)



**MULTI-USER SYSTEM (1-4 USERS)** 

#### **BREATHING AIR PANELS**

ITEM #	DESCRIPTION	MAX CFM	PORT SIZE	DRAIN	MAX PSI	MAX °F	DIMENSIONS (HWD)
21999-0265	Multi-User Breathing Air System - USA (10ppm)	50	½ NPT	Float	250	175	16" x 18" x 5"
21999-0980	Single-User Breathing Air System - USA (10ppm)	20	1/4 NPT	Float	250	175	13"x 12"x 5"
21999-0265-CA	Multi-User Breathing Air System - Canada (5ppm)	50	½ NPT	Float	250	175	16" x 18" x 5"
21999-0980-CA	Single-User Breathing Air Panel - Canada (5ppm)	20	1/4 NPT	Float	250	175	13" x 12" x 5"

Calibration videos available on our website



# **BREATHING AIR ACCESSORIES**

#### GFG BREATHING AIR ACCESSORIES

ITEM #	DESCRIPTION
21999-0264	Calibration Kit for CO Monitor - GFG 7735-10 (This MUST drop ship from manufacturer to end user)
21999-0263	CO Monitor for Tsunami Breathing Air Panel - GFG RAM 744 (10ppm) - USA
21999-0263-CA	CO Monitor for Tsunami Breathing Air Panel - GFG RAM (5ppm) - Canada
21999-0267	110/120v Wall Pack Adaptor Replacement
1450004	Replacement CO Sensor - RAM 744







# **AUTOMATIC DRAINS**

Neglecting to consistently drain condensate and contamination will result in endless headaches and costly downtime. Inadequate or forgotten draining dramatically wears on filtration systems causing them to become ineffective and damaging to critical equipment and processes. Tsunami offers a variety of drain styles to assure timely and effective draining for your facility.

# PNEUMATIC PISTON DRAINS

#### **HOW IT WORKS**

PILOT SIGNAL RECEIVED Condensation enters left hand, or

#### MOISTURE MINDER®

water inlet of valve.



#### MOISTURE MINDER® FILTER DRAIN



#### 2 PILOT SIGNAL FROM UNLOADER

Piston shifts, closing off drain port. As piston moves, it will open up the stainless ball check allowing condensate to be forced into pressurized discharge reservoir.



#### **3** VALVE AT REST

When pilot signal is relieved, piston returns to relaxed position. The ball check closes preventing zero pressure loss in the system. The drain port opens and the stored condensate is ejected.





#### MOISTURE MINDER® PNEUMATIC DRAIN

Powered by a pneumatic pilot signal. Drain Minder Cotroller can be used to cycle pneumatic drains.



ITEM #	MAX PSI	PORT SIZE	WEIGHT	DIMS (HWD)		
152-0000	250	1/4" NPT	2 lbs	5" x 5½" x 2"		
21999-0317	P	neumatic D	rain Installat	ion Kit		
21999-0300	Universal Strainer w/ 50 mesh screen					

#### MOISTURE MINDER® **FILTER DRAIN**

Designed to spin on the corresponding size Tsunami filter tube.



ITEM #	FILTER SIZE	MAX PSI	WEIGHT	DIMS (HWD)
21999-0792	20 CFM	250	1 lbs	4" x 3" x 2"
21999-0795	50 CFM	250	1 lbs	4" x 3½" x 3½"
21999-0805	120/240 CFM	250	11/2 lbs	4" x 3½" x 3"

#### **ELECTRONIC DRAINS**

#### MOISTURE MINDER® ELECTRONIC DRAIN VALVE (EDV)

The Moisture Minder<sup>®</sup> EDV incorporates a self-cleaning feature where a fixed strainer screen is used to capture contaminants before reaching the valve orifice. Opening the manual ball valve automatically flushes the strainer screen clean. The drain is compatible with various types of media and conforms to the NEMA 4 standard.

- 1 Adjustable Timer: OFF: 0.5 45 minutes ON: 0.5 10 seconds
- 2 Internal screen and ball valve allows for self cleaning
- 3 Dual Size Inlet: Accommodates 1/4" I.D. or 1/2" OD NPT thread sizes
- 4 1/4 turn ball valve allows for self cleaning without disassembling
- IP65 Rating

#### **HOW IT WORKS**

#### **1** TIMER ACTUATES

Condensation enters through the inlet side of valve. Debris is captured inside the internal strainer.



#### 2 DEBRIS IS EJECTED

When valve activates condensate flows thru strainer up to the orifice and out the back discharge port. Debris is captured by internal strainer which prevents fouling.



## 3 SELF CLEANING

Only open ¼" ball valve to clean strainer or to manually drain the tank.



#### MOISTURE MINDER® ELECTRONIC DRAIN VALVE

ITEM#	POWER	DUAL SIZE INLET	MAX PSI	WEIGHT	DIMENSIONS (HWD)
21999-0177	115v AC / 60Hz	1/4" ID & 1/2" OD	230	1 lb	5½" x 3½" x 3½"
21999-0177-230	220v AC / 60Hz	1/4" ID & 1/2" OD	230	1 lb	5½" x 3½" x 3½"
21999-0177-24	24v DC	1/4" ID & 1/2" OD	230	1 lb	5½" x 3½" x 3½"
21999-0177-12	12v DC	1/4" ID & 1/2" OD	150	1 lb	5½" x 3½" x 3½"
21999-0316	Electronic Drain Installation Kit				

# DRAIN MINDER II CONTROLLER

Provides the pilot signal every .5 to 45 minutes to multiple pneumatic drains.

ITEM #	DESCRIPTION
144-0001	Drain Minder II Controller - 110v
144-0001-12	Drain Minder II Controller - 12v

# - B

#### FLOAT DRAIN REPLACEMENT

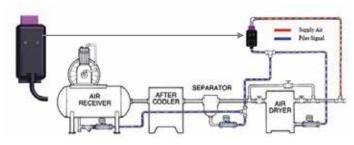
Includes 3 float drains and o-rings for replacement in Tsunami filters.

ITEM#	DESCRIPTION
21999-0868	Float Drain 3-Pack



# HOW IT WORKS DRAIN MINDER II AUTOMATIC TIMER

The Drain Minder II can deliver the pilot signal needed to operate the Moisture Minder pneumatic drain valves when no other intermittent pilot signal is available. The control is installed in the typical system by teeing into a filtered air supply and connecting the supply line to the inlet side of the controller solenoid.



# **COMPRESSED AIR ACCESSORIES**

#### AIR MONITORING EQUIPMENT

Tsunami Air Monitoring Equipment provides the ability to verify that the air system tested is supplying the quality of compressed air cleanliness required for the application.

- Air Prep Kit
  - · Includes Air Survey Monitor and CFM Test Kit
- B Air Survey Monitor
  - · Measures humidity, dew point, and air temperature
  - · Easy to read LCD screen
  - · Includes sensor filtration
- CFM Test Kit (3 30 CFM)
  - · Measure the CFM usage at any tool
  - · Easy to read graph
  - · Complete with regulator and female coupler



ITEM #	DESCRIPTION	WEIGHT	DIMENSIONS (LWH)
21999-0938	Air Prep Kit (A)	8.5 lbs	13" x 17" x 4"
21999-0440	Air Survey Kit (B)	5.5 lbs	13"x 17"x 4"
21999-0447	CFM Test Kit (C)	5 lbs	13"x 17"x 4"

#### **ULTRA-FLO SPRAY HOSE**

The extremely lightweight Tsunami Ultra-flo Spray Hose is designed to bring both longevity and performance to the toughest applications. Engineered for high-temperature exposure, this lay-flat hose features a proprietary internal coating which prevents breakdown caused by heat and harmful chemicals. The Ultra-Flo Spray Hose is also equipped with an anti-static strip to reduce or elminate static build-up.



#### **ULTRA-FLO SPRAY HOSE**

ITEM #	HOSE LENGTH	HOSE QUANTITY	NPT	HOSE I.D.	WEIGHT
21999-0495	5′	1	1/4" Male	3/8"	2 lbs
21999-0449	35′	1	1/4" Male	3/8"	4.5 lbs
21999-0450	50′	1	1/4" Male	3/8"	5.5 lbs
21999-0783	35′	10 pack	1/4" Male	3/8″	4.5 lbs each
21999-0784	50′	5 pack	1/4" Male	3/8"	5.5 lbs each

#### **HIGH-FLOW COUPLERS** 10 PACK

ITEM#

**Prevost Venting-Action** couplers are designed to eliminate hose whip.



**HIGH-FLOW PLUGS** 10 PACK



ITEM #	DESCRIPTION
21999-0833	1/4" Female (sold in 10 pack)
21999-0834	1/4" Male (sold in 10 pack)

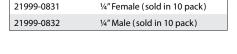
**BLOW GUN** 10 PACK

TSUNAMI.US.COM

Nylon Tip OSHA Compliant Blow Gun



ITEM #	DESCRIPTION
21999-0835	1/4" Inlet (sold in 10 pack)









# COMPRESSED AIR ACCESSORIES FILTERS, REGULATORS, AND LUBRICATORS







#### **REGULATORS WITH GAUGE**

232 max PSI, 122°F max temp

ITEM#	MAX FLOW	PORT SIZE	WEIGHT	DIMENSIONS (HWD)
21999-0870	25 SCFM	1/4" NPT	1 lbs	4" x 2" x 3"
21999-0871	89 SCFM	1/2" NPT	2 lbs	5" x 2½" x 3½"
21999-0872	160 SCFM	1"NPT	31/2 lbs	7½"x 3"x 4½"

#### **LUBRICATORS**

ITEM #	MAX FLOW	PORT SIZE	RESEVOIR	WEIGHT	DIMENSIONS (HWD)
21999-0298	25 CFM	1/4" NPT	50 mL	1 lb	6½" x 2" x 2"
21999-0195	153 CFM	1/2" NPT	150 mL	2 lbs	8" x 2½" x 2½"
21999-0196	565 CFM	1"NPT	380 mL	21/2 lbs	10"x 3"x 3"
21999-0361	565 CFM	1"NPT	1088 mL	5lbs	17" x 3½" x 3½"

#### **ACCESSORIES**

ITEM#	DESCRIPTION
4338228	Pressure Gage - (0-200 PSI) - fits "back mount - ¼" NPT & ½" NPT Regulators
21999-0946	Pressure Gage - (0-200 PSI) - fits ¼" back mount - 1" NPT Regulators
8825701	Filter-Regulator-Lubricator - ¼" NPT - 25 SCFM (F/R/L)
21999-0874	Regulator Rebuild Kit 50 Series - adjustment knob and replacement bottom end



Multiple configurations available upon request.

# **SERVICE PARTS**





	ITEM#	DESCRIPTION
Α	21999-0707	Piston Replacement Kit for Regenerative Dryer
Α	21999-1149	Dryer Piston O-Ring Service Kit - 12 Pistons
В	21999-0976	Tower Replacement (Purple) - Pure-1, 3, 5 Dryers only
В	21999-0976-BK	Tower Replacement (Black) - Pure-1, 3, 5 Dryers only
В	21999-0349	Tower Replacement (Purple) - Pure-7, 10, & Ultra Series
В	21999-0349-BK	Tower Replacement (Black) - Pure-7, 10, & Ultra Series
С	21999-0672-10	PLC for 10HP Regenerative Dryer
С	21999-0672	PLC for Regenerative Dryer (15HP or larger)
С	21999-1139	PLC, Rail Dryer Controller, 4 MM Pneumatic Drains, 120VAC
С	21999-1141	PLC, Rail Dryer Controller, 4 MM Pneumatic Drains, 24VDC
С	21999-0672-BK	PLC - Custom Dryer
-	21999-0951	Pneumatic Timer Dryer Control - 2 outputs
-	21999-0714	Power Supply - Regenerative Dryer
-	21999-0714-G	Global Power Supply - Regenerative Dryer
-	21999-1133	PLC Direct Current (DC) Power Cord; 6' 18 AWG Flying Leads, Barrel Connector
-	21999-0941	Timer Valve Assembly for 110v Dryer
-	21999-0797	Air Valve Replacement
-	21999-0797-12	Air Valve Replacement - 12v
-	21999-0504	12v DC Timer / Coil Assembly
-	21999-1012-24	24v DC Timer / Coil Assembly
-	610928-01	110v AC Timer / Coil Assembly
-	610934-01	220/230v AC Timer / Coil Assembly

	ITEM #	DESCRIPTION
D	21999-0650-15	Tower Mounting Stud/Regen Valve (.015") - Pure-7, 10, Ultra
D	21999-0650-24	Tower Mounting Stud/Regen Valve (.024") - Pure-7, 10, Ultra
D	21999-0650-30	Tower Mounting Stud/Regen Valve (.030") - Pure-7, 10, Ultra
D	21999-0650-45	Tower Mounting Stud/Regen Valve (.045") - Pure-7, 10, Ultra
D	21999-0650-60	Tower Mounting Stud/Regen Valve (.060") - Pure-7, 10, Ultra
D	21999-0650-80	Tower Mounting Stud/Regen Valve (.080") - Pure-7, 10, Ultra
D	21999-0650-90	Tower Mounting Stud/Regen Valve (.090") - Pure-7, 10, Ultra
D	21999-1108-12	Tower Mounting Stud/Regen Valve (.012") - Pure-1, 3, 5
D	21999-1108-15	Tower Mounting Stud/Regen Valve (.015") - Pure-1, 3, 5
D	21999-1108-18	Tower Mounting Stud/Regen Valve (.018") - Pure-1, 3, 5
D	21999-1108-30	Tower Mounting Stud/Regen Valve (.030") - Pure-1, 3, 5
-	21999-1157	Muffler Replacement - Pure-1, 3, 5 Only
-	21999-0700	Muffler Replacement - Pure-7, 10, & Ultra Series
-	21999-1046	Muffler Core Replacement - Pure-10, & Ultra Series only
-	21999-1165	Single Tower Dryer Heater 120 VAC - Pure-10 & Larger
-	21999-1170	Single Tower Dryer Heater 12 VDC - Pure-10 & Larger (special order 8-12 week lead time required)
-	21999-0937	Tsunami Dryer Heater 24 VDC - Pure-10 & Ultra Dryers
-	21999-0712	Energy Saver Kit (Ultra dryer accessory only)
-	21999-1038	Modular Dryer Subassembly Repl Ultra/Pure 10-20-30
-	21999-0529	Filter Assembly - Tsunami Ultra Regenerative Dryer
-	21999-1135	Upgrade Kit; Pure-5 to Pure-5T

# **INSTALLATION AND SERVICING**



The Tsunami Learning Center hosts a wide range of informational blogs and videos including installation walk-throughs, step-by-step servicing, best practices, and more!

Visit tsunami.us.com to download catalogs and cut sheets, watch videos, and search for products.

Still have questions? Reach out to our sales team!



# **SERVICE PARTS** CONT.



#### **CORE DRYER**

ITEM #	DESCRIPTION
- 21999-1230	Desiccant Cartridge Replacement
- 21999-1146	Moisture Indicator - Replace Annually
- 21999-1124	CORE Series Dryer End Cap
- 21999-1077-PL	Outer Tube Replacement
- Q215-5716	Head Quad Ring Replacement

#### **FILTRATION HARDWARE**

	ITEM #	DESCRIPTION
-	21999-0201	Drain Tube Kit - 10 Pack
Α	21999-0867	Mounting Bracket - 20 Series
Α	21999-0144	Mounting Bracket - 50 & 120 Series
Α	21999-1126	Mounting Bracket - 225/300/450/600 Series

#### **OUTER TUBE REPLACEMENT**

	ITEM#	DESCRIPTION
В	21999-0386	Outer Tube - 20 Series
В	21999-0125	Outer Tube - 50 Series
В	21999-0078	Outer Tube - 120 / 240 Series
В	21999-1077-PL	Outer Tube - 225/300 Series
В	21999-1087-PL	Outer Tube - 450/600 Series
В	21999-0962-PL	Outer Tube - 800 Series

#### **BOTTOM CAP REPLACEMENT**

ITEM#	DESCRIPTION
C 21999-0388	Bottom Cap - 20 Series
C 21999-0127	Bottom Cap - 50 Series
C 21999-0182	Bottom Cap - 120 / 240 Series
C 21999-1148	Bottom Cap - 225 Series
C 21999-1078	Bottom Cap - 300 Series
C 21999-1158	Bottom Cap - 450 Series
C 21999-1088	Bottom Cap - 600 Series
C 21999-0961	Bottom Cap - 800 Series

#### **HEATER WRAPS**

	ITEM #	DESCRIPTION
D	163-0644	20 / 50 Series - 110 / 120v AC, 100W
D	163-0648	20 / 50 Series - 12v DC, 75W
D	163-0646	20 / 50 Series - 24 DC, 100W
D	163-0649	120 / 240 Series - 110 / 120v AC, 150W
D	163-0651	120 / 240 Series - 12v DC, 50W
D	163-0650	120 / 240 Series - 24v DC, 120W
D	163-0656	800 Series - 120v DC, 150W

#### FILTER ACCESSORIES

ITEM#	DESCRIPTION
21999-0821	Condensation Collection Kit

# **SERVICE PARTS** CONT.



# WATER SEPARATOR

ITEM#	DESCRIPTION	
21999-0846	20 Series Water Separator Service Kit/ Pure-5 Regenerative Dryers - Includes A, B, C, D, E	
21999-0227	50 Series Water Separator Service Kit/ Pure-10 Regenerative Dryers - Includes A, B, C, D, E	
21999-0228	120 / 240 Series Water Separator Service Kit (240 requires x 2) Includes A, B, C, D, E	
21999-1098	225/300 Series Water Separator Service Kit - Includes A, B, C, D, E	
21999-1121	450/600 Series Water Separator Service Kit - Includes A, B, C, D, E	
21999-1005	800 Series Water Separator Service Kit - Includes A, B, C, D, E	

#### **OIL COALESCING FILTER**

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ITEM #	DESCRIPTION						
21999-0394	20 Series Oil Coalescing Filter Service Kit / Pure-5 Regenerative Dryers - Includes A, B, C, D, E						
21999-0202	50 / 120 / 240 / Pure-10 Series (240 requires x 2) - Includes A, B, C, D, E						
21999-0202-Z-SP	Ultra Model Regenerative Dryer Oil Coalescing Service Kit						
21999-1099	225/300 Series Filter Service Kit - Includes A, B, C, D, E						
21999-1122	450/600 Series Filter Service Kit - Includes A, B, C, D, E						
21999-1069	800 Series Filter Service Kit - Includes A, B, C, D, E						
21999-0823	Pack of 5 (A) Elements - 20 Series Coalescing Element/ Pure-5 Series						
21999-0825	Pack of 5 (A) Elements - 50 / 120 / 240 / Pure-10 Series (240 requires x 2)						
21999-0828	Pack of 5 (A) Elements - Ultra Model Regenerative Dryer Coalescing Element						

#### **ACTIVATED CARBON**

ITEM #	DESCRIPTION
21999-0395	20 Series/ Pure-5 Regenerative Dryers - Includes A, B, C, D, E
21999-0200	50 Series/ Pure-10 Regenerative Dryers - Includes A, B, C, D, E
21999-1072	120 Series/ Ultra Regenerative Dryers - Includes A, B, C, D, E
21999-0824	Pack of 5 (A) Elements - 20 Series/ Pure-5 Regenerative Dryers Activated Carbon Element
21999-0826	Pack of 5 (A) Elements - 50 Series/ Pure-10 Regenerative Dryers Activated Carbon Element

#### ANNUAL MANTENANCE KITS

ITEM#	DESCRIPTION
21999-0818	20 Series Annual Maintenance Kit - Includes (2) Biannual Coalescing and Activated Carbon Element Kits with O-rings
21999-0819	50 Series Annual Maintenance Kit - Includes (2) Biannual Coalescing and Activated Carbon Element Kits with O-rings
21999-1110	120 Series Annual Maintenance Kit - Includes (2) Biannual Coalescing and Activated Carbon Element Kits with O-rings

# **DRYER STATS**

#### AIR CONSUMPTION AVERAGES FOR TSUNAMI DRYERS\*

Unit	Max CFM	# of Towers	Orifice	CFM Consumption	Cycle Time for Tower Shifting	Total Time Tower is Drying	# of Towers Drying	# of Towers Regenerating
21999-1134	5	2	.012	.3	2 min	120 sec	1	1
21999-1138	10	2	.015	.5	2 min	120 sec	1	1
21999-1105	15	2	.018	1	2 min	120 sec	1	1
21999-1140	25	2	.024	1.25	2 min	120 sec	1	1
21999-1010	40	2	.030	2.2	2 min	120 sec	1	1
21999-1020	80	4	.030	4.4	2 min	120 sec	2	2
21999-0710	40	2	.030	2.2	2 min	120 sec	1	1
21999-0715	60	3	.045	4	1 min	120 sec	2	1
21999-0720	80	4	.030	4.4	2 min	120 sec	2	2
21999-0730	120	4	.060	8	45 sec	135 sec	3	1
21999-0810	40	2	.030	2.2	2 min	120 sec	1	1
21999-0815	60	3	.045	4	1 min	120 sec	2	1
21999-0820	80	4	.030	4.4	2 min	120 sec	2	2
21999-0830	120	4	.060	8	45 sec	135 sec	3	1
21999-0740	160	8	.045	8	2 min	120 sec	4	4
21999-0750	200	8	.060	16	45 seconds	135 seconds	6	2
21999-0755	300	12	.060	24	45 seconds	135 seconds	9	3
21999-0760	400	16	.060	32	45 seconds	135 seconds	12	4

<sup>\*</sup>Based on 120 PSI inlet pressure

#### FLOW VOLUME THROUGH AN ORIFICE

The charts below indicate the volume of air consumed per orifice during the regeneration process; also known as "sweep air".

#### Orifice Diameter

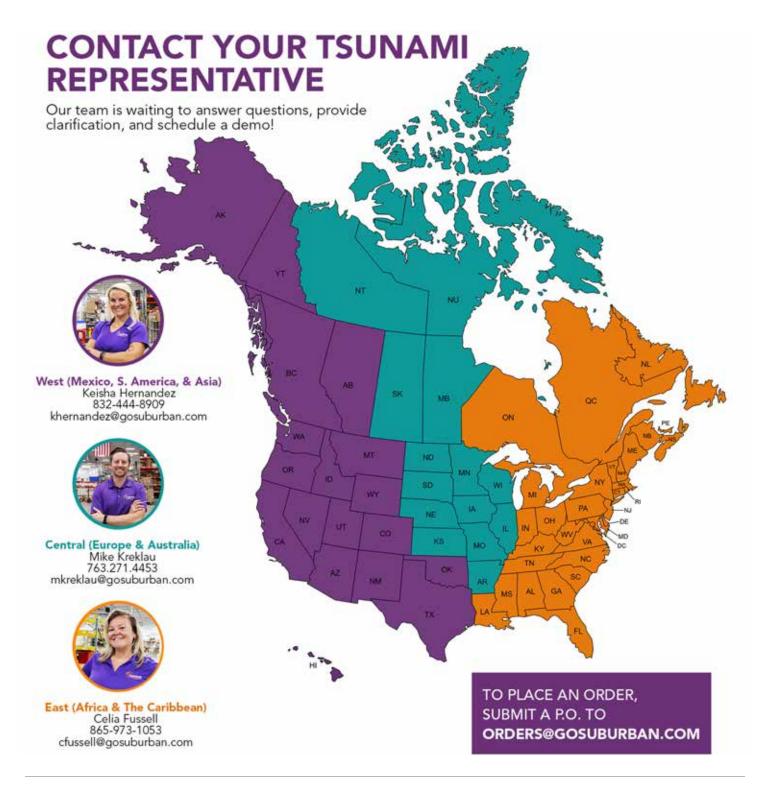
Dryer Inlet Pressure

	0.012"	0.015"	0.018"	0.024"	0.030"	0.045"	0.060"	0.080"	.090"
100 PSI	0.24	0.4	0.6	1.0	1.5	3.4	6.0	10.7	13.5
125 PSI	0.29	0.5	0.7	1.2	1.9	4.1	7.3	13	16.4
150 PSI	0.35	0.6	0.8	1.4	2.2	5	8.6	15.3	19.5
175 PSI	0.40	0.7	0.9	1.6	2.5	5.6	10	17.6	22.3

OTES:			

NOTES:		

NOTES:		



# FIND A DISTRIBUTOR



Looking for service parts or a complete system?

Find local and online retailers by visiting the Tsunami website and clicking "Buy Tsunami Products."

Interested in becoming a Tsunami distributor? Reach out to our sales team!





Building value for our customers by producing quality, innovative, engineered, application-based products.

Suburban is an engineering driven organization that partners with our customers to design and develop unique and specific solutions for multiple application specific needs in the Defense, Hydraulics, Oil & Gas, Automotive, Agriculture, Construction, Utilities, and Industrial markets. In addition to custom engineered solutions, Suburban offers a complete line of standard products sold under the Python, LubeMinder®, and Tsunami brands.



#### CLEAN, DRY AIR

Providing the highest-grade clean, dry air, our systems filter out oil, water, and dirt that build up in compressed air systems and interrupt daily business.



AIR DRYERS & **FILTRATION** 



**GRADE D BREATHING AIR** 



AIR HOSES, DRAINS & **ACCESSORIES** 



#### **MODERN DAY PROTECTION**

Our lubrication systems automatically grease and oil machinery - reducing the overall time spent maintaining tools and increasing the life of equipment.



**AUTOMATIC OILING SYSTEMS** 



**AUTOMATIC GREASE SYSTEMS** 



MANUAL GREASE **BANK SYSTEMS** 



#### **EQUIPMENT & OPERATOR PROTECTION**

Protect hoses, wires, and cables from abrasion, temperature, moisture, and ruptures with our easy-to-use sleeves and straps.



WRAP **SLEEVES** 



**TUBULAR SLEEVES** 





**BUNDLING STRAPS** 

