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TWP & TWB Series

Heat Reactivated Desiccant Dryers





TWP & TWB Series Externally Heated and Blower Purge Desiccant Air Dryers

Parker Airtek Externally Heated and Blower Purge Desiccant Air Dryers use the adsorption method to remove moisture from compressed air. Nominal pressure dew points ranging from -40°F (-40°C) to -100°F (-70°C) are achieved by directing the flow of saturated compressed air over a bed of desiccant.

The most commonly used desiccant is activated alumina, a spherically shaped, hygroscopic material, selected for its consistent size, shape and extreme surface to mass ratio. This physically tough and chemically inert material is contained in two pressure vessels commonly referred

to as "dual" or "twin" towers. As the saturated compressed air flows through the bed of the "on-line" tower, its moisture content adheres to the surface of the desiccant.

The dry compressed air is then discharged from the vessel into the distribution system.

A master controller cycles the flow of compressed air between the towers. While one tower is "on-line" drying, the other tower is "off-line" regenerating. Regeneration, sometimes referred to as "purging", is the process of stripping the accumulated moisture from the "off-line" bed.

Both types of Parker Airtek heat reactivated dryers combine heat with either a small portion of the dried compressed air or with forced ambient air to affect regeneration. The heated, low pressure purge air flows gently through the regenerating bed, adsorbing the moisture that accumulated on the surface of the desiccant during the drying cycle and exhausting it to the atmosphere.



Flow Schematic

Parker Airtek's patented Multi-Port Regeneration System (TWP Series) affects superior desiccant bed regeneration and, as a result, provides better and more consistent performance. The Multi-Port Regeneration System injects heated purge air at precise points up and down the towers' length providing a more balanced distribution of heat. This system prevents the desiccant on top from prematurely deteriorating while providing the bottom of the chamber with enough heated purge air to allow complete regeneration on every cycle. The energy saving temperature monitoring system senses the exiting

purge air temperature. When the purge air temperature increases to a pre-set point at which the desiccant bed is fully heated and regenerated, the heater is turned off.

Parker Airtek's Primary Blowdown System is standard on all TWP Series and TWB Series heat reactivated air dryers 1000 scfm and larger. It improves performance and efficiency while increasing desiccant life. The depressurization stage also strips moisture from the bottom of the tank through a purge muffler. Once depressurization is complete, the system switches to the main exhaust where final regeneration is accomplished with low pressure purge air. By eliminating the main exhaust mufflers, back pressure is also eliminated which allows for more thorough regeneration and less maintenance.

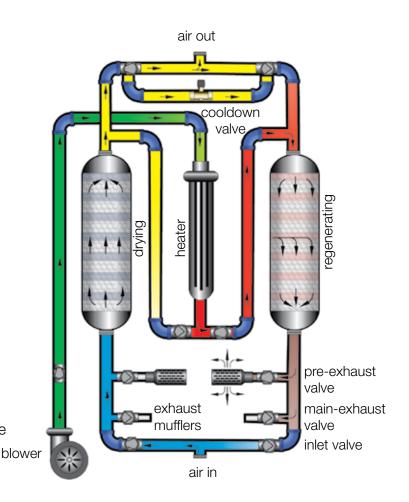
Up Flow Versus Down Flow Drying

In the event of prefilter/auto drain failure, up flow drying protects the desiccant bed from contamination of bulk liquids and oil since they stay on the bottom of the tank and get discharged during blowdown. When down flow drying, liquids and oil will gravity drain through the entire bed to the bottom of the tank.

TWP Externally Heated with Patented Multi-Port

air out purge regulator pre-exhaust valve main-exhaust valve inlet valve blo

TWB Series Blower Purge



Quick Glance Operational Status

Digital Readout

The Control Center features a backlit four line character display that monitors operation and status. Including regenerating countdowns and time remaining.

Sequence Annunciator

Indicates the status of each tower. LED's indicate which tower is "on-line" drying, "off-line" regenerating as well as the regeneration stages.

Manual Stepping

Allows the operator to quickly and safely step the dryer through a complete 8 hour cycle, in a matter of minutes.

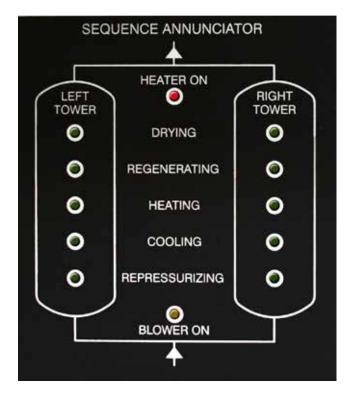
ThermaLoc[™]

The Control Center also controls Airtek's "ThermaLocTM" heater protection system. ThermaLocTM ensures maximum reliability and eliminates the safety concerns often associated with heat reactivated dryers. Heaters are protected by a totally redundant dual shutdown system that utilizes independent contactors. In addition to the redundant temperature controllers, the system monitors pressure and shuts the heater down in the event of low line pressure. Blower purge dryers have controls to prevent the heater from energizing if the blower is not running.

Dual Mode Heatless Back Up System

Allows the dryer to function in either the primary heated mode or the auxiliary heatless mode. Should the system experience a temporary overload or a heater failure, the dryer can easily be switched over to operate in the heatless mode. This way the dryer will remain on line until such time as service can be conveniently scheduled. The Dual Mode Back Up System offers unparalleled flexibility, eliminates downtime and prevents business interruptions.







High Performance Components

Non-Lubricated Valves

Dryers up to 800 scfm are equipped with our time-proven and dependable non-lubricated switching valves. These independent, air operated valves are specifically designed for compressed air service. They are resistant to desiccant dust and can be maintained without being removed from the dryer.



Butterfly Actuated Valves

High Performance Butterfly Actuated Switching Valves are standard on dryers 1000 scfm and larger. These premium, air operated butterfly valves are specifically designed for compressed air. They provide more opening and closing force compared to other types of valves. An indicator shows the "opened/closed" position of the valve and service can be performed without disturbing dryer piping.



Design Parameters

Parker Airtek's Externally Heated and Blower Purge dryers are designed to process a specific volume of compressed air and deliver it to the discharge at a desired pressure dewpoint.

Both dryers are rated for a -40°F (-40°C) pressure dewpoint.

Dewpoint spikes, inherent on all blower and heat purge dryers, can be reduced by activating Parker

Airtek's standard Supplemental Cool Down Purge feature. Standard ratings are based on inlet conditions of +100°F (38°C), 100 psi g (7 bar g) and 100% flow. Dryer performance will vary with different inlet conditions.

Tower insulation

The tower, heater, and purge lines are insulated to increase dryer performance and efficiency by reducing radiant heat loss. It also keeps the unit within the safety parameters set forth by OSHA. Insulation suitable for indoor service is standard on all Parker Airtek Heat Reactivated Dryers (Insulation suitable for outdoor service is an available option).



Equipment

- Failure to Switch Alarm
- Contacts for Common Alarm
- Systems Sequence Annunciator
- Auxiliary Cooldown
- Heater, Blower Flow Interlock (TWB Models)
- Blower Silencer (TWB Models)
- Compressor Surge Protection
- Control Center
- Redundant Heater Control System (ThermaLoc[™])
- Cycle Stepping
- Dual Mode, Heatless Backup
- Fail-Safe Operation
- · Control Air Filter

- Long Life and Low Watt Density Heater
- Independent Switching Valves
- Moisture Indicator
- Purge Flow Indicator
- · Full Instrumentation
- Indoor Tower Insulation
- Separate Tower Fill/Drain Ports
- Power Saver Exhaust Termination (early regeneration)
- Pressure Equalization
- Stainless Steel Diffuser Screens
- Standby Mode
- Structural Steel Base (1000 scfm & larger)

- Cushioned Seat Check Valves
- High Performance Butterfly Valves (1000 scfm & larger)
- ASME Coded Vessels
- 10 Year Heater Warranty
- Actuator Valve Limit Switch*
- Pre and After Set Filters*
- Outdoor Insulation*
- ModBus
- All NEMA Classifications*
- Non-Yellow Metals*
- Pressure to 1000 psi g (69 bar g)*
- Star Watch®*
- Non-Standard Voltages*
- PowerLoc™*
- Ethernet connection*

*Optional Equipment

Complete Air Treatment

Without proper filtration, desiccant air dryers will not work. Desiccant dryers are designed to adsorb vapor from compressed air; they are not designed for liquid. When liquid, especially oil, is allowed to enter the desiccant chamber, it coats the desiccant material preventing any further adsorption. Oil coated desiccant can not be regenerated, and must be replaced.

The coalescing pre-filter is installed at the dryer inlet. It protects the dryer by removing liquids and reducing the contamination level of the compressed air to .01 PPM by weight. The element is DOP rated at 99.9+% efficient in the 0.3 to 0.6 micron range. An integrated digital indicator is provided to determine element condition. An electronic drain valve is provided on systems 100 through 800 scfm to ensure proper drainage. On systems 1000 scfm and larger a zero air loss demand drain is provided. The drain

controller includes push to test, drain alarm, and common alarm contact.

To protect downstream equipment from desiccant dust a particulate after-filter is installed at the dryer discharge. The after-filter element is designed to remove solid particulates from compressed air. The hybrid pleated filter media provides high dirt retention, low pressure drop, and long element life. The element is 99+% effective in removing particles 0.9 micron and larger. An integrated digital element condition indicator is also provided.

Most field problems experienced with desiccant air dryers are the result of improper filter selection, installation, maintenance, and/or draining of condensate. Considering the importance of filtration to dryer performance, Parker Airtek recommends that all desiccant dryers be ordered as a complete,

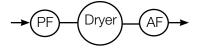
factory assembled Air Treatment System. The Optional Parker Airtek Package "E" includes: properly sized, factory installed coalescing prefilter and particulate after filter with electronic drain system (No Loss Demand Drains standard on 1000 scfm and larger), and color change indicators.

Airtek Package "E" systems match our TWP and TWB dryers with Airtek high performance filters. In-line filters (JC) are used on systems 100 through 800 scfm and two stage (JLA) severe duty filters are used on systems 1000 scfm and larger. Mist eliminators are available as extra protection.

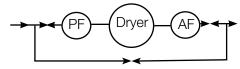
Factory packaging, with matched components and single point connections reduces installation costs, ensures performance and allows Parker Airtek to assume total responsibility for system integrity.

Element Second Stage 2nd Stage Drain First Stage 1st Stage Drain

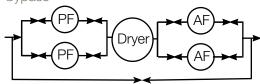
Package Schematic



Package "E" Includes dryer with factory installed pre-filter and after-filter



Package "EB" Includes dryer with factory installed pre-filter and after-filter with system bypass



Package "ED" Includes dryer with factory installed dual selectable pre and after-filters with system bypass

PowerLoc™ Energy Management (optional)

The Control Center is designed to accomodate Airtek's optional Power-Loc™ Demand Controller.

PowerLoc[™] automatically adjusts energy use to actual moisture load. Moisture loading is affected by inlet temperature, pressure, relative humidity, and flow. These conditions vary throughout the day and rarely combine in such a manner as to produce maximum moisture loads. An inlet temperature reduction of just 20°F (-7°C) will reduce the moisture load by almost 50%. Desiccant dryers are normally sized for "worst case" operation with the cycle fixed to accommodate maximum moisture loads. Because the fixed cycle does not compensate for fluctuating loads, dryers not equipped with PowerLocTM waste energy by regenerating more often than necessary. PowerLoc™ eliminates this unnecessary use of energy by delaying regeneration until the total design moisture load is achieved.

The system monitors actual moisture loading and limits the number of purge cycles accordingly.

At \$0.08 per KWH, the PowerLoc[™] would save \$6,730 annually when used with a 1000 scfm externally heated dryer operating at 75% load for 8,000 hours, at an average inlet temperature of +80°F (27°C). Digital dew point control provides for additional energy savings by allowing the operator to select higher dewpoints when appropriate. The moisture probe is contained in and protected by a rugged, stainless steel housing with a 80 micron sintered metal guard and a pressure rating of 3000 psi g. This housing increases the sensor's ability to withstand reasonable shock and vibration.

The housing also contains an electronics package for continuous self calibration, temperature compensation, and signal stabilization. Due to

less frequent cycling, switching valves and desiccant will last longer and require less maintenance.

The PowerLoc™ ceramic sensor is made from state-of-the-art metallized ceramic and replaces traditional materials such as aluminum, silicon and hydroscopic salts. This fast response sensor is made from a ceramic tile that is plated and vapor deposited to form a surface that is very sensitive to small changes in water vapor pressure.

The proprietary coating processes make the ceramic sensor inherently faster to respond than other impedance or capacitive sensors currently available. The ceramic sensor features the latest digital technology with calibration data stored directly in the sensor's memory, and is equipped with a built-in thermistor for automatic temperature compensation. The PowerLoc™ is traceable to the National Institute of Standards and Technology. A certificate of traceability is available.



Control Center

Parker Airtek's Control Center for Heat Reactivated Desiccant Air Dryers features a complete complement of data acquisition functions.

These data acquisition functions include the measurement of temperature, pressure, and dewpoint.

TEMPERATURE (thermocouple)

- · Purge Air
- "Special" (fail-safe) Heater Over Temperature
- Left Exhaust
- · Right Exhaust
- · Dryer Inlet
- Dryer Outlet

<u>PRESSURE</u> (Transducer signals can be either 4-20ma or 1-5 volt DC)

- Inlet
- · Left Tower
- Right Tower
- Purge
- Pre-Filter (psi d) (Package "E")
- After-Filter (psi d) (Package "E")

<u>DEWPOINT</u> (Energy Management) - optional

- PowerLoc™ ("Fast Response" Digital Readout with Power Save feature)
- Flow Meter

All Parker Airtek Heated Desiccant Dryers are remotely accessible by RemoteWatch™ software which can be downloaded at http://divapps.parker.com/divapps/pdf/Starwatch/.



Star Watch® activated dryers can monitor and analyze every moment of operation, 24-7; it can be done wirelessly. When Star Watch® is active on an installation, it is like having an Airtek factory technician in your plant, advising your process engineer.

The easy to use Control Center affords superior dryer control along with digital telemetry for remote analysis of performance.





Features

- RemoteWatch[™] Software virtual control, diagrams and graphics
- Star Watch® ready with 68 channels of data and over 60 process values
- Temperature and pressure instrumentation package
- Energy Management
 PowerLoc™ dewpoint digital readout with Power Save (optional)
- Two extra user defined 4-20 mA or 1-5 Vdc inputs with setpoints and alarms for connection to your flow

- Intelligent display with operational information
- Full system retentive alarm network (event) log
- Programmable process set points
- Dryer operating "state" annunciation display
- Automatic data logging 24/7, 365 days of all operational information
- 16 Channel "programmable" common alarm

- RS-232 communications port (Optional RS-485)
- Access system via Star Watch® or Modbus protocols
- UL Rated Components
- 160 Fields of operational information
- Dual Mode communications.
 Modbus Protocol, and
 Star Watch® Protocol
- Connectivity: telco line and cellular wireless modem
- Ethernet (optional)



Engineering Data Specifications CAGU





Product Selection -40°F (-40°C) with Activated Alumina Desiccant

			Dim	ensions ins (r	nm)	Wei	ight				
Model	Flowrate @ 100 psi g (scfm)	Heater (kW)	Height (H)	Width (W)	Depth (D)	lbs	kg	Dryer Air In/Out	Pre-Filter	After-Filter	
TWP100	100	1.5	83 (2108)	31 (787)	18 (457)	680	308	1" NPT	JC0110-C	JC0150-FH	
TWP130	135	1.5	83 (2108)	40 (1016)	22 (559)	720	327	1" NPT	JC0150-C	JC0150-FH	
TWP200	200	3	85 (2159)	40 (1016)	22 (559)	920	417	1 1/2" NPT	JC0250-C	JC0250-FH	
TWP250	250	3	85 (2159)	40 (1016)	22 (558)	1180	535	1 1/2" NPT	JC0250-C	JC0250-FH	
TWP300	300	4	87 (2209)	43 (1092)	27 (686)	1370	621	1 1/2" NPT	JC0350-C	JC0350-FH	
TWP400	400	6	88 (2235)	47 (1194)	27 (686)	1400	635	2" NPT	JC0450-C	JC0450-FH	
TWP500	500	6	89 (2261)	50 (1270)	27 (686)	2060	934	2" NPT	JC0625-C	JC0625-FH	
TWP600	600	9	92 (2337)	52 (1321)	28 (711)	2350	1066	2" NPT	JC0625-C	JC0625-FH	
TWP800	800	9	93 (2362)	63 (1600)	35 (889)	3035	1377	2" NPT	JC0800-C	JC0800-FH	
TWP1000	1000	13	102 (2591)	74 (1880)	41 (1041)	4195	1903	3" Flg	JC1000-C	JC1000-FH	
TWP1200	1200	13	113 (2870)	74 (1880)	41 (1041)	5215	2365	3" Flg	JLA1603-C	JLA1800-FH	
TWP1500	1500	18	113 (2870)	78 (1981)	60 (1524)	7765	3522	3" Flg	JLA1603-C	JLA1800-FH	
TWP2000	2000	25	110 (2794)	78 (1981)	60 (1524)	8565	3885	4" Flg	JLA2100-C	JLA2600-FH	
TWP2600	2600	25	112 (2845)	96 (2438)	60 (1524)	11562	5244	4" Flg	JLA3200-C	JLA2600-FH	
TWP3000	3000	30	112 (2845)	96 (2438)	60 (1524)	12002	5444	6" Flg	JLA3206-C	JLA3506-FH	
TWP4000	4000	38	CF	CF	CF	CF	CF	6" Flg	CF	CF	
TWP5000	5000	50	CF	CF	CF	CF	CF	6" Flg	CF	CF	
TWP6000	6000	60	CF	CF	CF	CF	CF	6" Flg	CF	CF	
TWP8000	8000	60	CF	CF	CF	CF	CF	8" Flg	CF	CF	



Description	Flow Range @ 100 psi g (7 bar g)	Dewpoint	Max Operating Pressure	Min Operating Pressure	Max Inlet Temp	Min Inlet Temp	Standard Electrical Supply
TWP100 - TWP130	100 cfm - 130 cfm	-40°F (-40°C) Standard	150 psi g (10.3 bar g)	80 psi g (5.5 bar g)	120°F (49°C)	50°F (10°C)	120V/1Ph/60Hz 240V/1Ph/60Hz (optional)
TWP200 - TWP250	250 cfm	-40°F (-40°C) Standard	150 psi g (10.3 bar g)	80 psi g (5.5 bar g)	120°F (49°C)	50°F (10°C)	240V/1Ph/60Hz 460V/3Ph/60Hz (optional) 575V/3Ph/60Hz (optional)
TWP300 - TWP1500	300 - 1500 cfm	-40°F (-40°C) Standard	150 psi g (10.3 bar g)	80 psi g (5.5 bar g)	120°F (49°C)	50°F (10°C)	460V/3Ph/60Hz - Control Power 115V/1Ph/60Hz (575V/3Ph/60Hz optional)
TWP2000 - TWP8000	2000 - 8000 cfm	-40°F (-40°C) Standard	135 psi g (9.3 bar g)	80 psi g (5.5 bar g)	120°F (49°C)	50°F (10°C)	460V/3Ph/60Hz - Control Power 115V/1Ph/60Hz (575V/3Ph/60Hz Optional)

- 1. PowerLoc Demand Control shown as Option P on following page is an Energy Management system that adjusts energy use to demand. Features automatic demand control, digital dewpoint readout, 4-20 mA analog output
- 2. Above information should be used as a guideline. Flows are at 100 psi g inlet pressure, 100°F inlet temperature and 100°F ambient temperature. For specific applications, please consult Parker Airtek Technical Services.
- Weight includes desiccant (shipped loose TWP2000 and up).
 For sizing at other temperatures and pressures, please consult factory.

Correction Factors

To obtain dryer capacity at new conditions, multiply nominal capacity x C1 x C2.

Temperature Correction Factor CFT													
Maximum Inlet Temperature	°F	80		85	90	95	j .	100	105	110)	115	120
	°C	27		29	32	35	i	38	41	43	1	46	49
(C1)	CFT	1.17		1.17	1.17	1.15	i	1.00	0.87	0.76	i	0.66	0.58
Pressure Correc	ction Factor	CFP											
Minimum	psi g	80	85	90	95	100	105	110	115	120	125	130	135
Inlet Pressure	bar g	5.51	5.86	6.21	6.55	6.89	7.24	7.58	7.93	8.27	8.62	8.96	9.31
(C2)	CFP	0.83	0.87	0.91	0.96	1.00	1.04	1.09	1.13	1.17	1.22	1.26	1.31

Product Selection -40°F (-40°C) with Activated Alumina Desiccant

			Heater (kW)	Dim	Wei	ght					
Model	Flowrate @ 100 psi g (scfm)	Blower (HP)		Height (H)	Width (W)	Depth (D)	lbs	kg	Dryer Air In/Out	Pre-Filter	After-Filter
TWB100	100	.75	3	83 (2108)	49 (1245)	37 (940)	1050	308	1" NPT	JC0110-C	JC0150-FH
TWB200	200	.75	6	85 (2159)	56 (1422)	39 (991)	1500	417	1 1/2" NPT	JC0250-C	JC0250-FH
TWB300	300	1.5	6	87 (2210)	43 (1092)	27 (686)	1900	621	1 1/2" NPT	JC0350-C	JC0350-FH
TWB400	400	1.5	9	88 (2235)	47 (1194)	27 (686)	2180	635	2" NPT	JC0450-C	JC0450-FH
TWB500	500	3	12	89 (2261)	50 (1270)	27 (686)	2840	934	2" NPT	JC0625-C	JC0625-FH
TWB600	600	3	12	92 (2337)	52 (1321)	28 (711)	3420	1066	2" NPT	JC0625-C	JC0625-FH
TWB800	800	5	15	93 (2362)	64 (1626)	35 (889)	4490	1377	2" NPT	JC0800-C	JC0800-FH
TWB1000	1000	5	18	102 (2591)	78 (1981)	60 (1524)	5700	1903	3" Flg	JC1000-C	JC1000-FH
TWB1200	1200	4	25	113 (2870)	78 (1981)	60 (1524)	6300	2365	3" Flg	JLA1603-C	JLA1800-FH
TWB1500	1500	7.5	30	113 (2870)	78 (1981)	60 (1524)	7165	3522	3" Flg	JLA1603-C	JLA1800-FH
TWB2000	2000	7.5	38	112 (2845)	132 (3353)	72 (1829)	9850	3885	4" Flg	JLA2100-C	JLA2600-FH
TWB2600	2600	10	50	112 (2845)	132 (3353)	72 (1829)	12210	5244	4" Flg	JLA3200-C	JLA2600-FH
TWB3000	3000	10	60	112 (2845)	144 (3658)	72 (1829)	12650	5444	6" Flg	JLA3206-C	JLA3506-FH
TWB4000	4000	15	85	114 (2896)	168 (4267)	84 (2134)	18910	CF	6" Flg	JLA4500-C	JLA5306-FH
TWB5000	5000	20	100	114 (2896)	180 (4572)	96 (2438)	21590	CF	6" Flg	JLA5000-C	JLA5306-FH
TWB6000	6000	20	115	112 (2845)	180 (4572)	96 (2438)	24890	CF	6" Flg	JLA7206-C	JLA6000-FH
TWB7500	7500	25	135	CF	CF	CF	CF	CF	8" Flg	CF	CF
TWB9000	9000	30	150	CF	CF	CF	CF	CF	8" Flg	CF	CF



Description	Flow Range @ 100 psi g (7 bar g)	Dewpoint	Max Operating Pressure	Min Operating Pressure	Max Inlet Temp	Min Inlet Temp	Standard Electrical Supply
TWB100	100 cfm	-40°F (-40°C) Standard	150 psi g (10.3 bar g)	80 psi g (5.5 bar g)	120°F (49°C)	50°F (10°C)	120V/1Ph/60Hz
TWB200 - TWB1500	200 - 1500 cfm	-40°F (-40°C) Standard	150 psi g (10.3 bar g)	80 psi g (5.5 bar g)	120°F (49°C)	50°F (10°C)	460V/3Ph/60Hz - Control Power 115V/1Ph/60Hz (575V/3Ph/60Hz Optional)
TWB2000 - TWB9000	2000 - 9000 cfm	-40°F (-40°C) Standard	135 psi g (9.3 bar g)	80 psi g (5.5 bar g)	120°F (49°C)	50°F (10°C)	460V/3Ph/60Hz - Control Power 115V/1Ph/60Hz (575V/3Ph/60Hz Optional)

Notes

- 1. PowerLoc Demand Control shown as Option P on following page is an Energy Management system that adjusts energy use to demand. Features automatic demand control, digital dewpoint readout, 4-20 mA analog output and high humidity alarm with contacts.

 2. Above information should be used as a guideline. Flows are at 100 psi g inlet pressure, 100°F inlet temperature and 100°F ambient temperature. For specific applications, please consult Parker Airtek Technical Services.

- Weight includes desiccant (shipped loose Models TWB2000 and up).
 For sizing at other temperatures and pressures, please consult factory.

Correction Factors

To obtain dryer capacity at new conditions, multiply nominal capacity x C1 x C2.

Temperature Co	orrection Fa	ctor CFT											
Maximum Inlet Temperature	°F	80	8	35	90	9:	5	100	105	11	0	115	120
	°C	27	2	9	32	3	5	38	41	4	3	46	49
(C1)	CFT	1.17	1.1	7	1.17	1.1	5	1.00	0.87	0.7	6	0.66	0.58
Pressure Correc	Pressure Correction Factor CFP												
Minimum	psi g	80	85	90	95	100	105	110	115	120	125	130	135
Inlet Pressure	bar g	5.51	5.86	6.21	6.55	6.89	7.24	7.58	7.93	8.27	8.62	8.96	9.31
(C2)	CFP	0.83	0.87	0.91	0.96	1.00	1.04	1.09	1.13	1.17	1.22	1.26	1.31

Worldwide Filtration Manufacturing Locations

North America

Compressed Air Treatment

Filtration & Separation/Balston Haverhill, MA

978 858 0505 www.parker.com/balston

Finite Airtek Filtration Airtek/domnick hunter/Zander

Lancaster, NY 716 686 6400 www.parker.com/faf

Finite Airtek Filtration/Finite

Oxford, MI 248 628 6400 www.parker.com/finitefilter

Engine Filtration & Water Purification

Racor Modesto, CA

209 521 7860 www.parker.com/racor

Holly Springs, MS 662 252 2656 www.parker.com/racor

Beaufort, SC 843 846 3200 www.parker.com/racor

Racor - Village Marine Tec.

Gardena, CA 310 516 9911 desalination.parker.com

Parker Sea Recovery

Carson, CA 310 637 3400 www.searecovery.com

Hydraulic Filtration Hydraulic Filter

Metamora, OH 419 644 4311

www.parker.com/hydraulicfilter

Laval, QC Canada 450 629 9594 www.parkerfarr.com

Process Filtration

domnick hunter Process Filtration

Oxnard, CA 805 604 3400 www.parker.com/processfiltration

Madison, WI 608 824 0500 www.scilog.com

Phoenixville, PA

610 933 1600 www.parker.com/processfiltration

Aerospace Filtration

Velcon FiltrationColorado Springs, CO
719 531 5855

www.velcon.com

Europe

Compressed Air Treatment domnick hunter Filtration & Separation

Gateshead, England +44 (0) 191 402 9000 www.parker.com/dhfns

Parker Gas Separations

Etten-Leur, Netherlands +31 76 508 5300 www.parker.com/dhfns

Hiross Zander

Padova Business Unit Padova, Italy +39 049 9712 111 www.parker.com/hzd

Hiross Zander

Essen Business Unit Essen, Germany +49 2054 9340 www.parker.com/hzd

Engine Filtration & Water Purification

Racor

Dewsbury, England +44 (0) 1924 487 000 www.parker.com/rfde

Racor Research & Development

Stuttgart, Germany +49 (0)711 7071 290-10 www.parker.com/rfde

Hydraulic Filtration

Hydraulic Filter Arnhem, Holland

+31 26 3760376 www.parker.com/hfde

Urjala Operation

Urjala, Finland +358 20 753 2500 www.parker.com/hfde

Condition Monitoring Centre

Norfolk, England +44 (0) 1842 763 299 www.parker.com/hfde

Parker Kittiwake

West Sussex, England +44 (0) 1903 731 470 www.kittiwake.com

Parker Procal

Peterborough, England +44 (0) 1733 232 495 www.kittiwake.com

Process Filtration domnick hunter Process Filtration

Birtley, England +44 (0) 191 410 5121 www.parker.com/processfiltration

Parker Twin Filter BV

Zaandam, Netherlands +31(0)75 655 50 00 www.twinfilter.com **Asia Pacific**

Australia

Castle Hill, Australia +61 2 9634 7777 www.parker.com/australia

China

Shanghai, China +86 21 5031 2525 www.parker.com/china

India

Navi Mumbai, India +91 22 651 370 8185 www.parker.com/india

Parker Fowler

Bangalore, India +91 80 2783 6794 www.johnfowlerindia.com

Japan

Tokyo, Japan +81 45 870 1522 www.parker.com/japan

Parker Techno

Osaka, Japan +81 66 340 1600 www.techno.taiyo-ltd.co.jp

Korea

Hwaseon-City +82 31 359 0852 www.parker.com/korea

Singapore

Jurong Town, Singapore +65 6887 6300 www.parker.com/singapore

Thailand

Bangkok, Thailand +66 2186 7000 www.parker.com/thailand

Latin America

Parker Comercio Ltda. Filtration Division Sao Paulo, Brazil

+55 12 4009 3500 www.parker.com/br

Pan American Division

Miami, FL 305 470 8800 www.parker.com/panam

Africa

Aeroport Kempton Park, South Africa +27 11 9610700 www.parker.com/africa

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Finite Airtek Filtration Division 4087 Walden Avenue Lancaster, NY 14086 phone 716 686 6400 www.parker.com/faf

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