Z Series | Vacuum Purge Regenerative Air Dryer

The Most Energy Efficient Design. Period.

The Pure-Aire Z Series has revolutionized the compressed air industry. This innovative design uses an average 1.7% purge flow and ZERO heat to regenerate the desiccant bed. A regeneration pump draws moisture from the desiccant and ***only consumes half the energy of the next most efficient design!*** We continuously review feedback from engineers, service technicians, and our customers, and this has driven us to produce the most reliable and serviceable designs available. The Pure-Aire line of compressed air dryers are engineered, assembled, and supported in the United States.

Benefits and Standard Features

- ✓ **Vacuum Purge Design Saves Energy and Compressed Air**
- ✓ Reliable Regeneration Pump
- ✓ Nickel Plated Check Valves with Stainless Steel Discs for Maximum Life
- ✓ High Efficiency Mufflers with Integrated Safety Valve to Keep Dryer Running
- ✓ NEMA 4 Enclosure
- ✓ eDemand Dew Point Meter with Simplified Interface
  - Indication of Tower Operation
  - Countdown to Switchover
- ✓ Color HMI Graphical Display
  - Dew Point Chart
  - Fault Log
- ✓ Robust Full Contact Steel Frame
- ✓ ASME Coded Pressure Vessels (CRN optional)
- ✓ Replaceable Stainless Steel Diffusers
- ✓ Filtered Pilot Air

Optional Features

- Air Flow Meter with Display
- Modbus Communication
- Flow Chart
- Fail to Shift Alarm
- Visual Moisture Indication
- 3 or 9 Valve By-Pass Piping
- Pre and After-Filters Mounted and Piped

Non-Lubricated Valves Through 2” *Time proven to be the most reliable. Precision machined, premium valves resist desiccant dust and are serviceable in place.*	**High Performance Valves 3” and Above** *Double offset design ensures reliable switching with maximum service life.*
eDemand (standard) *Digital dew point display and sensor reduce energy by matching system demand to dryer purge flow.*	**Best In Class Warranty** *The first 12 months covers all components. Each additional year of major component coverage (up to 9) is validated by an annual service call and parts kit from your local Pure-Aire distributor.*

1-800-274-3233 sales@pure-aire.com www.pure-aire.com

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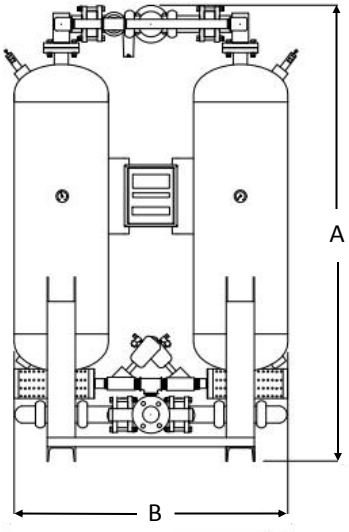
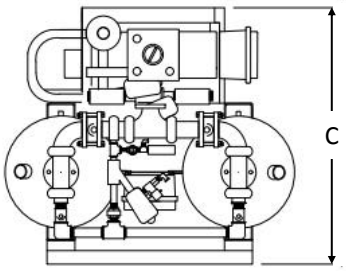
Technical Specifications

Flow Range at 100 psig (7 barg)	200 to 10,000 scfm
Dew Point (°F)	-40°F (-100°F optional)
Maximum Operating Pressure	150 psig (standard)
Minimum Operating Pressure	80 psig
Temperature Range	35°F to 120°F
Standard Electrical Supply	460V / 3Φ

Model	scfm	In/Out	Height (A) (Inches)	Length (B) (Inches)	Width (C) (Inches)	Weight (lbs.)
Z200	200	1 1/2" NPT	82.75	50	30	1000
Z250	250	1 1/2" NPT	82.75	50	30	1300
Z300	300	1 1/2" NPT	82.75	50	30	1500
Z400	400	2" NPT	83.5	50	30	1600
Z500	500	2" NPT	83.5	50	30	2300
Z600	600	2" NPT	83.5	50	30	2600
Z900	900	3" FLG	91.5	70	45	2900
Z1100	1100	3" FLG	96.25	72	45	4300
Z1250	1250	3" FLG	96.25	72	45	4600
Z1500	1500	3" FLG	128	92	63	4900
Z2000	2000	3" FLG	128	92	63	5500
Z2500	2500	4" FLG	128	92	63	6500
Z3000	3000	6" FLG	125	132	72	8100
Z3500	3500	6" FLG	125	132	72	9600
Z4000	4000	6" FLG	122	144	64	14200
Z4500	4500	6" FLG	122	144	64	11700
Z5000	5000	6" FLG	122	144	64	14400
Z6000	6000	6" FLG	CF	CF	CF	CF
Z8000	8000	8" FLG	CF	CF	CF	CF
Z10000	10,000	10" FLG	CF	CF	CF	CF

CF = Consult Factory





Flow Correction Factors

Inlet Air Temperature Correction

°F	Between 35 and 100	100	105	110	115	120
°C	1.7 and 37.8	37.8	40.6	43.3	46.1	48.9
Factor	1.00	1.00	0.93	0.87	0.81	0.76

Inlet Air Pressure Correction

psig	50	60	70	80	90	100	110	120	150	175	200	225	250
barg	3.4	4.1	4.8	5.5	6.2	6.9	7.6	8.3	10.3	12.1	13.8	15.5	17.2
Factor	0.56	0.65	0.74	0.83	0.91	1.00	1.09	1.17	1.44	1.66	1.87	2.09	2.31

Air Flow Capacity = Nominal Capacity of the Dryer x Inlet Temperature Correction x Inlet Pressure Correction

Contact Us

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Proudly Engineered, Assembled, and Supported in the USA