H Series | Heatless Regenerative Air Dryer

High Performance with Maximum Service Life

The Pure-Aire H Series consistently delivers a -40°F pressure dew point (-100°F optional). 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

- ✓ NEMA 4 Enclosure
- ✓ eControl with Simplified Interface
- ✓ Pre and After-Filters Mounted and Piped
- ✓ Nickel Plated Check Valves with Stainless Steel Discs for Maximum Life
- ✓ High Efficiency Mufflers with Integrated Safety Valve to Keep Dryer Running
- ✓ Indication of Tower Operation
- ✓ Countdown to Switchover
- ✓ Robust Full Contact Steel Frame
- ✓ ASME Coded Pressure Vessels (CRN optional)
- ✓ Replaceable Stainless Steel Diffusers
- ✓ Filtered Pilot Air

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 (optional)

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.

Optional Features

- Digital Dew Point Display
- eDemand
- Air Flow Meter with Display
- Fail to Shift Alarm
- Visual Moisture Indication
- -100°F Pressure Dew Point
- 3 or 9 Valve By-Pass Piping
- Modbus Communication
- Flow Chart
- Color HMI Graphical Display
  - Dew Point Chart
  - Flow Chart

**Custom Designs Available*

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

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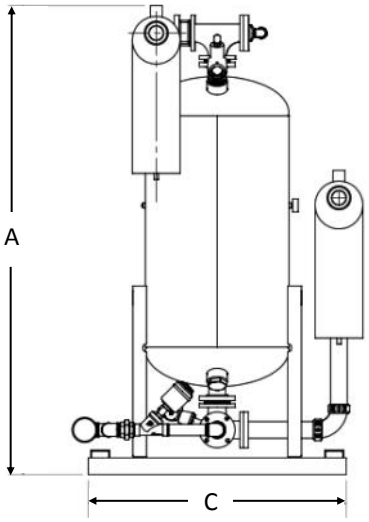
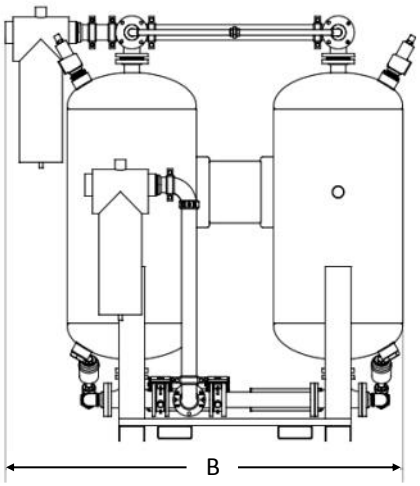
Technical Specifications

Flow Range at 100 psig (7 barg)	80 to 10,000 scfm
Dew Point (°F)	-40°F (-100°F optional)
Maximum Operating Pressure	150 psig (standard)
Minimum Operating Pressure	80 psig
Nominal Inlet Temperature	100°F
Inlet Temperature	35°F to 120°F
Standard Electrical Supply	115V / 1Φ / 60Hz





Model	scfm	In/Out	Height (A) (Inches)	Length (B) (Inches)	Width (C) (Inches)	Weight (lbs.)
H80	80	1" NPT	85	36	22.5	450
H100	100	1" NPT	85	36	22.5	475
H125	125	1" NPT	85	36	22.5	550
H150	150	1" NPT	85	36	22.5	650
H200	200	1 1/2" NPT	82.5	50	35.5	800
H250	250	1 1/2" NPT	82.5	50	35.5	1,100
H300	300	1 1/2" NPT	82.5	50	35.5	1,300
H400	400	2" NPT	89	50	42	1,700
H500	500	2" NPT	89	50	42	2,000
H600	600	2" NPT	89	50	42	2,300
H900	900	3" FLG	94.25	68	48	2,600
H1100	1100	3" FLG	94.25	72	46	3,800
H1250	1250	3" FLG	94.25	72	46	4,100
H1500	1500	3" FLG	94.25	72	49	4,400
H2000	2000	3" FLG	94.25	72	49	4,900
H2500	2500	4" FLG	109	93	50	5,900
H3000	3000	6" FLG	109	93	50	7,500
H3500	3500	6" FLG	117	118	64	8,500
H4000	4000	6" FLG	122	120	64	9,500
H4500	4500	6" FLG	122	120	64	11,000
H5000	5000	6" FLG	122	120	64	13,500

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

1-800-274-3233

sales@pure-aire.com

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Proudly Engineered, Assembled, and Supported in the USA