Blower Purge Regenerative Dryers

pneumatech

Pure air . Pure gas

Pneumatech Pride

Pneumatech has been manufacturing energy efficient Regenerative dryers for nearly 50 years. We are proud to introduce this new design blower purge heated dryer with low pressure drop, improved controls, compact design and many other features you have come to expect from Pneumatech.

See your local Pneumatech distributor, visit our website at www.pneumatech.com or give us a call at +1-800-336-2285, we are here to help.

PB-250 to PB-4400



| Standard design | | Options | | | |
|---|-----------------|--------------------------------|--|--|--|
| Design Pressure PB-250 to 750: | 232 psig/16 bar | N/A | | | |
| Design Pressure PB-850 to 4400: | 165 psig/11 bar | 232 psig/16 bar | | | |
| Maximum Working Pressure: | 150 psig/10 bar | 210 psig/14 bar | | | |
| Pressure Dew Point: | -40°F/-40°C | -100°F/-70°C | | | |
| Electrical Requirement: | 460V-3ph-60 Hz | 575V-3ph-60 Hz | | | |
| Enclosure: | NEMA 4 | NEMA 4X, 7, 9 | | | |
| Purelogic [™] Advanced Control with Remote | e Start/Stop | 4-20mA Remote Dew Point Output | | | |
| ASME & CRN vessels/cULus Listed | | Filter Mounting Packages | | | |
| Presure Drop <3.0 psid on all models | | Dew Point Demand Control (DPD) | | | |

| Features | Benefits |
|--|--|
| Flanged vessels, optimally designed | Longer contact time/lower bed velocity/reduced leakage |
| Removable stainless steel screens | Screens and vessels can be inspected and cleaned |
| Butterfly switching valves with SST disc | Better reliability and effiency |
| Full flow, soft seat safety relief valves | Adherence to strict safety standards |
| Oversized mufflers with relief valves | Lower noise level during purge cycle |
| Status memory on Advanced Control | Resume cycle where it stopped, avoiding bed saturation |
| Lifting eyes and forklift openings | Simplified installation |
| Adjustable purge | Purge optimization with varying inlet pressure |
| Remote Alarms (Free Contact) | Status information from a distance |
| Load/Unload Contact (If wired, stops unit when compressor unloads) | Improved operation to match actual demand profile |
| Low watt density heater | Lower thermal shock to desiccant bed |
| Low kW centrifugal blower | Reduced power consumption |















Technical data



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| | SCFM Flow at -40°F PDP | | PDP | SCFM Flow at -100°F PDP | | | | | | Pres- | | Approx. |
|-----------------|------------------------|------------------------------|----------------------------|-------------------------|------------------------------|----------------------------|---------------------------|---------------------------|-----------------------|------------------------|------------------------------|-----------------------------|
| Model number | 165 psig* | 100 psig @ 232 design* | 180 psig@232 design* | 165 psig* | 100 psig @ 232 design* | 180 psig@232 design* | Heater and blower (kW) | Avg. Power (kWh***) | I/O Conn size (In) | sure drop (psid) | Dimensions L x W x H (In) | Shipping weight (lbs) |
| PB-250 | - | 250 | 425 | - | 200 | 340 | 5.25 | 3.0 | ANSI 2 | 2.9 | 32 x 45 x 73 | 900 |
| PB-325 | | 325 | 552 | | 260 | 442 | 5.25 | 3.2 | ANSI 2 | 2.9 | 36 x 45 x 75 | 1100 |
| PB-400 | - | 400 | 679 | - | 320 | 544 | 8.25 | 5.0 | ANSI 2 | 2.9 | 37 x 45 x 75 | 1250 |
| PB-500 | | 500 | 849 | | 400 | 679 | 9.45 | 5.5 | ANSI 2 | 2.9 | 40 x 45 x 76 | 1350 |
| PB-650 | - | 650 | 1104 | - | 520 | 883 | 9.45 | 5.6 | ANSI 2 | 2.9 | 40 x 45 x 76 | 1475 |
| PB-750 | | 750 | 1274 | | 600 | 1019 | 9.45 | 5.8 | ANSI 2 | 2.9 | 42 x 47 x77 | 1650 |
| PB-850 | 850 | ** | ** | 680 | ** | ** | 12.95 | 7.2 | ANSI 3 | 2.32 | 50 x 77 x 106 | 2700 |
| PB-1050 | 1050 | | | 840 | | | 14.05 | 8.9 | ANSI 3 | 2.32 | 50 x 77 x 106 | 2925 |
| PB-1220 | 1220 | ** | ** | 976 | ** | ** | 20.55 | 10.6 | ANSI 3 | 2.32 | 50 x 83 x 98 | 3625 |
| PB-1700 | 1700 | | | 1360 | | | 31.60 | 16.4 | ANSI 4 | 2.32 | 57 x 97 x 107 | 5325 |
| PB-2000 | 2000 | ** | ** | 1600 | ** | ** | 32.50 | 16.4 | ANSI 4 | 2.32 | 57 x 97 x 107 | 5800 |
| PB-2600 | 2600 | | | 2080 | | | 42.30 | 24.3 | ANSI 4 | 2.32 | 57 x 97 x 128 | 6775 |
| PB-3000 | 3000 | ** | ** | 2400 | ** | ** | 51.50 | 33.0 | ANSI 6 | 1.6 | 99 x 106 x 117 | 9025 |
| PB-3400 | 3400 | | | 2720 | | | 51.50 | 33.0 | ANSI 6 | 1.6 | 99 x 106 x 117 | 9500 |
| PB-4400 | 4400 | ** | ** | 3520 | ** | ** | C/F | C/F | C/F | <3.0 | C/F | C/F |

^{*}Reference pressure for 165 psig design pressure is 100 psig (max 150 psig). For 232 design, reference pressure is 180 psig (max 210 psig), reference temperature is 100°F inlet to dryer.

Correction Factor Example

| Pressure | bar | 5 | 6 | 6 | 7 | 8 | 10 |
|------------------------|------|------|------|-----|------|------|------|
| Des Press: 165 psig | psig | 73 | 87 | 100 | 116 | 131 | 145 |
| | F1 | 0.75 | 0.88 | 1 | 1.13 | 1.25 | 1.39 |
| | | | | | | | |
| Inlet temperature | С | 20 | 25 | 30 | 38 | 40 | 45 |
| | F | 68 | 77 | 86 | 100 | 104 | 113 |

| Inlet temperature | Ü | 20 | 20 | - 00 | - 00 | 70 | 10 | - 00 |
|-------------------|----|----|----|--------|------------|----------|-----------|-------|
| iniet temperature | | 68 | 77 | 86 | 100 | 104 | 113 | 122 |
| -40°F (AA) | F2 | 1 | 1 | 1 | 1 | 0.84 | 0.71 | 0.55 |
| | | | | | | | | |
| | _ | 40 | 70 | Max in | let flow f | or belov | v conditi | ons o |

| | С | -40 | -70 |
|-----------|----|-----|------|
| Dew Point | | -40 | -100 |
| | F3 | 1 | 0.8 |

Max inlet flow for below conditions of PB-500: 130 psig inlet pressure,

104°F inlet temperature,

-40°F point target

Nominal flow*F1*F2*F3=500*1.25*0.84*1= 525 cfm

DO (1/8)

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^{**} Not a standard option, please send in quote request for Pneumatech Engineered Product

^{***} At 100 psig operating and -40°F PDP