



DBP Series Downstream Equipments

D/ALGAKIRAN
COMPRESSED AIR TECHNOLOGIES

DBP SERIES 850 / 1000 / 1250 / 1500 / 1800 / 2200 / 2700
/ 3200 / 3600 / 4400 / 5000 / 6300 / 7200 / 8800 / 10800

Dalgakiran DBP Series Heated Desiccant Air Dryers provide $-40\text{ }^{\circ}\text{C}$ pressure dew point. A centrifugal blower and high efficiency heater eliminates the use of valuable compressed air to be used for desiccant regeneration. Pre-filters and after-filters are supplied along with Dalgakiran Heated Air Dryers to keep the air stream clean and maintain the integrity of the desiccant medium. A very reliable electronic controller makes sure that the dryer operates perfectly all through the service life of the dryer.

>PRINCIPLE OF OPERATION

The completely automatic drying system uses blower to pull ambient air and pass it through the heater. This hot air stream flows opposite to drying flow direction. Hot Air above $200\text{ }^{\circ}\text{C}$ regenerates the moisture inside desiccant bed and strips it completely of all moisture. The advanced control system monitors the dew point and adjusts the heating / regeneration accordingly there by providing valuable energy savings. The heater circuit is completely insulated ensuring maximum heating efficiency.

- Dew point monitoring and control
- Computer Control
- Display Status
- Display Alarms
- Display Pressure
- Remote Start / Stop
- Low Pressure Alarm



- Minimum Pressure monitoring valve
- High pressure switches and alarms
- Externally heated or heatless dryer functions integrated to the DBP dryer

> NORMAL WORKING CONDITIONS

- 7 bar Inlet Pressure
- $35\text{ }^{\circ}\text{C}$ Inlet Temperature
- 100 % Inlet Air rel. humidity
- Nominal pressure dew point is
- Maximum working pressure 10 bar(g)

> PLC IS STANDARD

DBP Blower Purge Dryers has a very reliable electronic controller that makes sure that the dryer operates perfectly all through the servicelife of the dryer. Touch screen PLC is capable of showing the cycles as well as the valves which operate on real time. It also shows the dew point (if applicable). User friendly multi-languag PLC helps the end users understand the operation system any field issues easily.



> ACTIVATED ALUMINA

Dalgakiran uses a mixture of adsorption media in its heatless range of desiccant dryers to achieve consistent dewpoint.

Activated Alumina, Molecular Sieve and Silica Gel are used in varying ratios depending on the application.

TECHNICAL DATA

TYPE	CONNECTION SIZE	AIR FLOW	PRESSURE DROP	AVERAGE POWER	VOLTAGE
		(m ³ /h)	(mbar)	(kW)	kg
DBP 850	2"	850	≤ 130	6,5	264
DBP 1000	2"	1000	≤ 130	7,5	364
DBP 1250	DN80	1250	≤ 130	8	407
DBP 1500	DN80	1500	≤ 130	10	443
DBP 1800	DN80	1800	≤ 130	12	500
DBP 2200	DN80	2200	≤ 130	17	690
DBP 2700	DN80	2700	≤ 130	19	714
DBP 3200	DN100	3200	≤ 130	20	790
DBP 3600	DN100	3600	≤ 130	26	816
DBP 4400	DN100	4400	≤ 130	28	1100
DBP 5000	DN125	5000	≤ 130	33	1320
DBP 6300	DN150	6300	≤ 130	35	1575
DBP 7200	DN150	7200	≤ 130	40	1800
DBP 8800	DN150	8800	≤ 130	56	2200
DBP 10800	DN200	10800	≤ 130	75	2700

Inlet temperature	: 35 °C
Working pressure	: 7 bar
Maximum working pressure	: 12 bar
Maximum working temperature	: 50 °C
Maximum inlet temperature	: 50 °C
Pressure Dew Point	: -40 °C

X PRE FILTER	Y PRE FILTER	P AFTER FILTER
Efficiency rating: 1 Micron particle removal & 0.5mg/m3 oil removal	Efficiency rating: 0,01 Micron particle removal & 0.1mg/m3 oil removal	Efficiency rating: 5 Micron particle removal (removes desiccant particles after the dryer)

! For special requirements please contact **Dalgakiran** technical department

The dryers are designed according to Pneurop, conditions as per ISO7183

Bar g	4,5	5	6	7	8	9	10
	0,69	0,75	0,88	1	1,08	1,12	1,20
Inlet Temp. °C	20	25	30	35	40	45	50
	1	1	1	1	0,80	0,73	0,59

