PB 760 - 3390 S - The cost efficient alternative to PB 700-2950 HE

Features & Benefits

- Advanced energy management for lowest operating costs
  - Compressor synchronization
  - PDP control (optional)
  - Regeneration & cooling temperature control
- High-quality, high-efficient desiccant, selected for the right application activated alumina
- Minimal risk of crushed desiccant thanks to the sonic nozzle and the large vessel diameter
- Counter-current regeneration for optimal energy efficiency and guaranteed dry air
- High reliability and robust design
- Low noise levels while purging
- Designed for transportability
- High efficient heaters, designed for maximum lifetime and minimal risk
- Compact, efficient and reliable side-channel centrifugal blower
- Optimal control and monitoring thanks to the Purelogic™ controller

General Specifications

- Blower purge adsorption dryers: welded vessel design
- Dew points achievable: -40°C/-40°F
- Pressure range: 4-10 barg/58-145 psig
- Ambient temperature range: 1-40°C/34-104°F
  For ambient temperatures above 40 deg C see High Ambient Temperature variant
- Inlet temperature range: 1-45°C/34-113°F
  For temperatures above 45 deg C see HIT-variant
- Power supply: 400VAC 50Hz; 440-460VAC 60Hz

Options


Blower inlet filter


In and outlet filters

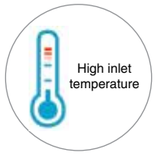

Vessel safety valves


External pilot air connection

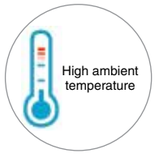

PDP control


Wooden packaging


Vessel insulation



High inlet temperature



High ambient temperature
(not on PB760S)

PB dryers are for customers who focus on energy efficiency and low lifecycle costs, while maintaining the highest standards in air purity. PB dryers use heated blower purge air to remove moisture from the desiccant material and have therefore no purge loss during regeneration.

PB 760-3390 S adsorption dryers are capable of drying air to a PDP of -40°C/-40°F. The desiccant is housed in welded vessels, which are coated and can operate up to 10 barg/145 psig (fatigue load). Mounted pre- and after-filters can be ordered as an option.

The Purelogic™ is the central brain of the adsorption dryer. It optimizes operating costs thanks to the availability of regeneration & cooling temperature control, PDP control (optional) and compressor synchronization; ensures maximum reliability by monitoring the most important parameters of the dryer; and offers impressive control and monitoring capabilities.

Technical specifications for PB 760S up to PB 3390S (standard version, PDP -40 ˚C)

Specification	Unit	PB 760 S	PB 1020 S	PB 1330 S	PB 2060 S	PB 2670 S	PB 3390 S
Maximum volume flow at dryer inlet (1) (2)	l/s	360	480	630	970	1260	1600
	m^3/hr	1296	1728	2268	3492	4536	5760
Average purge air consumption (3)	%	2%	2%	2%	2%	2%	2%
Pressure drop over dryer	barg	0.2	0.16	0.16	0.16	0.16	0.11
	psig	2.9	2.32	2.32	2.32	2.32	1.60
Inlet and outlet connections	G Thread/DN, acc to DIN2633 PN16	ISO 7-R2" (2)	DN80	DN80	DN100	DN100	DN150
Optional pre & after filter sizes(4)	Fine filter	TF 9 G S	TF 10 G S	TF 11 G S	FF 2 G HE	FF 3 G HE	FF 4 G HE
	Super fine filter	TF 9 C S	TF 10 C S	TF 11 C S	FF 2 C HE	FF 3 C HE	FF 4 C HE
	Dust filter	TF 9 S S	TF 10 S S	TF 11 S S	FF 2 S HE	FF 3 S HE	FF 4 S HE
Mass	Kg	1160	1355	1700	2720	3185	4470
	Lb	2557	2987	3748	5997	7022	9855
Height	mm	1829	2558	2612	2702	2681	2488
	inch	72.0	100.7	102.8	106.4	105.6	98.0
Width	mm	1028	1024	1024	1175	1175	2373
	inch	40.5	40.3	40.3	46.3	46.3	93.4
Length	mm	1100	1764	1884	2359	2472	2809
	inch	43.3	69.4	74.2	92.9	97.3	110.6

1. Flow is measured at reference conditions: 1 bara and 20°C at operating pressure of 7 barg, inlet temperature 35°C & std PDP of -40°C at the outlet.
2. Dryer designed for mentioned volume flow, based on average duty of 80%.
2. Specially designed adapters are to be used when no filter is ordered.
4. Filters are sized at reference conditions. Consult the AML of the filters for sizing outside the reference conditions.

Correction factor Kp x Kt for PDP-40

T inlet	Working pressure barg (psig)						
°C (°F)	4.5 (65)	5 (73)	6 (87)	7 (102)	8 (116)	9 (131)	10 (145)
<=20 (68)	“1,00”						
25 (77)	0.89						
30 (86)	0.74	0.87					
35(95)	0.59	0.7	0.88				
40(104)	0.42	0.5	0.62	0.71	0.8	0.89	0.98
45(113)	0.29	0.34	0.43	0.49	0.55	0.61	0.67

Notes for PDP-40°C variants
1) Correction factor are for 100% saturated compressed air.

PB 760-3390 S - The cost efficient alternative to PB 700-2950 HE