PH 760 - 3390 HE - Welded vessel heatless adsorption dryers

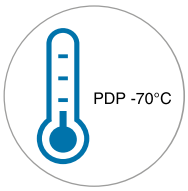
Features & Benefits

- Available in three standard variants
  - With Standard DC1 Controller (PDP Control optional)
  - With Purelogic™ (PDP control std available)
  - With Pneumatic Controller (no need of electricity for the installation and no PDP control possible)
- Lowest possible pressure drop thanks to innovative open silencer design
- Improved performance with reduced purge rate to 16% across the complete range
- Advanced energy management for lowest operating costs
  - PDP control - (std with Purelogic™ and optional with DC1 Controller)
  - Compressor synchronization
  - Purge nozzle optimization (optional)
- High-quality, high-efficient desiccant, selected for the right application
  - PDP -40°C/-40°F (std): activated alumina
  - PDP -70°C/-94°F and high inlet temp. (option): molecular sieves
- Minimal risk of crushed desiccant thanks to the large vessel diameter and the sonic nozzle (std available)
- Counter-current regeneration for optimal energy efficiency and guaranteed dry air
- High reliability and robust design
- Low noise levels while purging
- Designed for transportability
- Optimal control and monitoring thanks to the Purelogic™ controller

General Specifications

- Heatless adsorption dryers: welded vessel design
- Dew points achievable: -40°C/-40°F & -70°C/-94°F
- Pressure range: 4-9 barg/58-130 psig (14 barg/203 psig variant available as separate variant)
- Ambient temperature range: 1-50°C/34-122°F
- Inlet temperature range: 1-55°C/34-131°F
- Power supply: 230VAC 50 Hz; 115VAC 60 Hz 3 ph

Variants



PDP -70°C

14.5 Bar(g)

DC1 controller

Purelogic™

Pneumatic controlled

Options

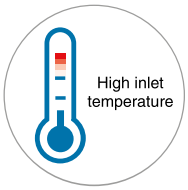
Purge nozzle optimization

PDP Control for DC1 controller variants (std with Purelogic™ Controller)

In and outlet filters

Vessel Safety valves

Wooden Packaging



High inlet temperature

Pneumatech presents the newly designed and significantly improved heatless adsorption dryer range – PH 760-3390 HE. Incorporating high-quality components, PH heatless adsorption dryers provide you with clean, dry air to extend the life of your equipment and products. Heatless adsorption dryers use dry, expanded purge air to remove moisture from the desiccant material.

PH 760-3390 HE adsorption dryers are capable of drying air to a PDP of -40°C/-40°F as standard and -70°C/-94°F as option for higher flows up to 5760 m³/hr/3390 cfm. The desiccant is housed in welded vessels, which are coated and can operate up to 9 barg/130 psig (fatigue load) with std variant and up to 14,5 barg/203 psi with high pressure variant(fatigue load). All dryers can be equipped with 2 coalescing pre-filters before and 1 particulate filter after the dryer (optional).

Thanks to ingeniously designed mechanical components i.e open type of silencers and large vessels, PH 760-3390 HE range offers highest performance with lowest pressure drop and improved purge loss of 16%.

Considering different needs of the customers, the PH 760-3390 HE range offers 3 different controller for different requirements. DC 1 Controller version has a basic controller with required controls and monitoring such as Service Alarm, General alarm relay, synchronization control and optional dew point control whereas Purelogic™ controller version will have the Purelogic™ as central brain of the adsorption dryer. The Purelogic™ optimizes operating costs; ensures maximum reliability by monitoring the most important parameters; and offers impressive control and monitoring capabilities. For special applications where Pneumatic control is preferred and no electricity is possible, PH 760-3390 HE also operates with Pneumatically enabled controller.

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

Specification	Unit	PH760 HE	PH1020 HE	PH1330 HE	PH2060 HE	PH2670 HE	PH3390 HE
Max volume Flow at Dryer Inlet(1)	l/s	360	480	630	970	1260	1600
	m³/hr	5760	1728	2268	3492	4536	5760
Regeneration Air Consumption average at max. flow	%	16	16	16	16	16	16
Pressure Drop over Dryer excluding Filters	Bar	0.15	0.15	0.15	0.15	0.15	0.18
	PSI	2.18	2.18	2.18	2.18	2.18	2.61
Inlet and outlet connections	DIN PN16	DN80	DN80	DN80	DN100	DN100	DN150
Optional Pre & After Filter Sizes[2]	General purpose coalescing filter	PMH G 1529	PMH G 1529	G 1F	G 2F	G 3F	G 4F
	High efficiency coalescing filter	PMH C 1529	PMH C 1529	C 1F	C 2F	C 3F	C 4F
	Particulate filter	PMH S 1529	PMH S 1529	S 1F	S 2F	S 3F	S 4F
Length	mm	1776	1776	1884	2359	2472	2788
	inch	69.9	69.9	74.1	92.8	97.3	109.7
Width	mm	822	822	822	1000	1026	1417
	inch	32.3	32.3	32.3	39.3	40.3	55.7
Height	mm	2549	2549	2604	2671	2653	2576.5
	inch	100.3	100.3	102.5	105.1	104.4	101.4
Length	inch	69.9	69.9	74.2	92.9	97.3	109.8
Width	inch	32.4	32.4	32.4	39.4	40.4	55.8
Height	inch	100.4	100.4	102.5	105.2	104.4	101.4
Mass	kg	1220	1300	1620	2651	3100	4600
	lb	2690	2866	3571	5844	6834	10141

*1. Flow is measured at Reference Conditions: 1 Bar(a) and 25°C at operating pressure of 7 bar (g),inlet temperature 35°C & std PDP of -40°C at the outlet
*2. Filters are sized at reference conditions. Consult the AML of the filters for sizing outside the reference conditions.

For accurate sizing for your operating conditions consult Pneumatech