Heatless Desiccant Dryer



Pure air . Pure gas

Pneumatech Pride

Pneumatech has been manufacturing energy-efficient desiccant dryers for nearly 50 years. We are proud to introduce this new design heatless desiccant dryer with low pressure drop, user-friendly controls, compact design and many other features you have come to expect from Pneumatech.

PH 2-45 HE (High Efficiency)

Delivered with a pre-filter TF PF C & dust filtration integrated in the desiccant cartridge; Desiccant type - Molecular Sieves;

Pressure Dew Point - 100°F can be achieved by flow de-rating;

Working pressure up to 232 PSIG as standard.

PH 2-45 HE



Design standards	PH 2-45 HE					
Dew point	-40°F					
Working Pressure range	58 - 232 psig					
Voltages	115 and 230-1-60 volt std					
Frequency	60 Hz					
Technology	Heatless desiccant					
Usage	Continuous					
Handling	Easy to maneuver and install					
Applications	Food & beverage, electronics, general industry					

Important features & benefits
Low pressure drop accross the whole range
Inlet and outlet can be reversed and dryer can be installed vertically or horizontally
Integrated silencers ensure extremely low noise
Full electronic controller IP65 protected against water & dust
Purge Saver function included as standard (can be wired to pause drying cycle when compressor stops or unloads)
Adjustable purge to tune the purge air consumption according to the actual pressure (optional)
Pre-filters and after-filters included with dryer

Options	PH 2-45 HE
Optimized purge nozzle	•
Wall mounting (up to PH HE 150)	•
DPD kit (hygrometer)	•
PDP -70°C/-94°F	√ (by de-rating)
IP65	✓

- ✓ Standard
- Optional
- Not available















Technical data



MODEL	SCFM FLOW at -40°C/ -40°F PDP	SCFM FLOW at -70°C/ -100°F PDP	INLET CONN SIZE (in)**	OUTLET CONN SIZE (in)**	L x W x H (in)	APPROX. SHIPPING WT (lbs)	RECOMMENDED INLET FILTER TYPE C
PH-HE 2	2.1	1.5	1/4	1/4	4 x 8 x 21	15	3
PH-HE 3	3.2	2.2	1/4	1/4	4 x 8 x 23	18	
PH-HE 4	4.2	2.9	1/4	1/4	4 x 8 x 28	20	3
PH-HE 5	5.3	3.7	1/4	1/4	4 x 8 x 33	22	
PH-HE 6	6.4	4.5	1/4	1/4	4 x 8 x 34	24	3
PH-HE 11	10.6	7.4	3/8	1/2	25 x 13 x 6	42	TF PF 1
PH-HE 15	14.8	10.4	3/8	1/2	29 x 13 x 6	49	TF PF 1
PH-HE 20	21.2	14.8	3/8	1/2	34 x 13 x 6	55	TF PF 1
PH-HE 25	25.4	17.8	1/2	1/2	40 x 13 x 6	64	TF PF 2
PH-HE 35	36.0	25.2	1/2	1/2	50 x 13 x 6	77	TF PF 2
PH-HE 45	46.6	32.6	1/2	1/2	59 x 13 x 6	97	TF PF 2

^{*} Reference pressure is 100 psig (design pressure is 232 psig, and maximum working pressure 232 psig)



Correction factors

(Kd) Pressure dew point (°C/°F)	-40/-40	-70/-100
PH 2-45 HE	1	0.7

(Kt) Air inlet temperature (°C/°F)	20/68	25/77	30/86	35/95	40/104	45/113	50/122
PH 2-45 HE	1.07	1.06	1.04	1	0.88	0.67	0.55

(Kp) Air inlet pressure (bar/psi)	4/58	5/73	6/87	7/102	8/116	9/131	10/145	11/160	12/174	13/189	14/203	15/218	16/232
PH 2-45 HE	0.62	0.75	0.87	1	1.12	1.25	1.37	1.50	1.62	1.75	1.87	2	2.12

Example:

What is the capacity of a PH 15 HE, working at 8 bar(g)/116 psi(g), with an inlet temperature of 40°C/104°F and with a required pressure dew point of -70°C/-100°F?

Find each correction factor: Kd=0.7 Actual capacity = Norminal capacity x Kd x Kp x Kt

Kt=0.88 14.8 x 0.7 x 0.88 x 1.12 10.2 cfm

Kp=1.12

Pneumatech reserves the right to change or revise specifications and product design in connection with any features of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.













1800 Overview Drive Rock Hill, SC 29730 USA 1-800-336-2285 www.pneumatech.com



^{**} Inlet connection refers to inlet filter. Outlet refers to the dryer outlet.

^{***}For conditions differing from the reference conditions, use the below correction factor table.