

Configuration options adsorption dryers PDAD with blower nozzles ADNA

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Nominal flow rate q_n [l/min] for pressure dew point -40°C (temperature of medium at input 25°C saturated)


	Input pressure p [bar]													
	4	5	6	7	8	9	10	11	12	13	14	15	16	
PDAD-09														
Input	73.6	88.3	103.1	117.8	132.5	147.2	162.0	176.7	191.4	206.1	220.9	235.6	250.3	
	Air nozzle no. 9			Air nozzle no. 7			Air nozzle no. 6			Air nozzle no. 5				
Purge air	33.0	30.0	34.0	31.0	36.0	40.0	31.0	34.0	37.0	30.0	32.0	34.0	36.0	
Output	40.6	58.3	69.1	86.8	96.5	107.2	131.0	142.7	154.4	176.1	188.9	201.6	214.3	
PDAD-13														
Input	109.6	132.5	153.7	176.7	197.9	220.9	242.1	265.1	286.3	309.2	330.4	353.4	374.6	
	Air nozzle no. 10			Air nozzle no. 8			Air nozzle no. 7			Air nozzle no. 6				
Purge air	42.0	52.0	61.0	51.0	54.0	68.0	45.0	49.0	54.0	62.0	67.0	71.0	76.0	
Output	67.6	80.5	92.7	125.7	143.9	152.9	197.1	216.1	232.3	247.2	263.4	282.4	298.6	
PDAD-22														
Input	186.2	225.3	261.3	300.4	336.4	375.5	411.5	450.6	486.6	525.7	561.7	600.8	636.8	
	Air nozzle no. 14			Air nozzle no. 12			Air nozzle no. 10			Air nozzle no. 9				
Purge air	76.0	89.0	106.0	88.0	97.0	107.0	86.0	96.0	106.0	89.0	96.0	103.0	111.0	
Output	110.2	136.3	155.3	212.4	239.4	268.5	325.5	354.6	380.6	436.7	465.7	497.8	525.8	
PDAD-51														
Input	416.3	503.6	584.2	671.5	752.0	839.3	919.9	1007.2	1087.8	1175.1	1255.6	1342.9	1423.5	
	Air nozzle no. 23			Air nozzle no. 17			Air nozzle no. 14			Air nozzle no. 12				
Purge air	166.0	204.0	230.0	165.5	194.5	216.0	165.0	182.5	198.5	160.5	176.0	182.5	201.5	
Output	250.3	299.6	354.2	506.0	557.5	623.3	754.9	824.7	889.3	1014.6	1079.6	1160.4	1222.0	
PDAD-73														
Input	613.5	742.1	860.9	989.5	1108.3	1236.9	1355.7	1484.3	1603.0	1731.7	1850.4	1979.1	2097.8	
	Air nozzle no. 29			Air nozzle no. 24			Air nozzle no. 17			Air nozzle no. 15				
Purge air	233.0	270.0	311.0	261.0	302.0	339.0	248.0	272.0	295.0	243.0	261.0	282.0	301.0	
Output	380.5	472.1	549.9	728.5	806.3	897.9	1107.7	1212.3	1308.0	1488.7	1589.4	1697.1	1796.8	
PDAD-100														
Input	821.7	993.9	1153.0	1325.3	1484.3	1656.6	1815.6	1987.9	2146.9	2319.2	2478.2	2650.5	2809.6	
	Air nozzle no. 23			Air nozzle no. 17			Air nozzle no. 14			Air nozzle no. 12				
Purge air	332.0	408.0	460.0	331.0	389.0	432.0	330.0	365.0	397.0	321.0	352.0	365.0	403.0	
Output	489.7	585.9	693.0	994.3	1095.3	1224.6	1485.6	1622.9	1749.9	1998.2	2126.2	2285.5	2406.6	

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For type	Air nozzle for input pressure p		
	4 ... 6 bar	10 ... 12 bar	13 ... 16 bar
PDAD-09 with ADNA-PDAD-09	Nr. 9	Nr. 6	Nr. 5
PDAD-13 with ADNA-PDAD-13	Nr. 10	Nr. 7	Nr. 6
PDAD-22 with ADNA-PDAD-22	Nr. 14	Nr. 10	Nr. 9
PDAD-51 with ADNA-PDAD-51	Nr. 23	Nr. 14	Nr. 12
PDAD-73 with ADNA-PDAD-73	Nr. 29	Nr. 17	Nr. 15
PDAD-100 with ADNA-PDAD-100	Nr. 23 (2x)	Nr. 14 (2x)	Nr. 12 (2x)

Configuration options PDAD with blower nozzles ADNA

Nominal flow rate q_n [l/min] for pressure dew point -70°C (temperature of medium at input 25°C saturated)													
	Input pressure p [bar]												
	4	5	6	7	8	9	10	11	12	13	14	15	16
PDAD-09													
Input	51.5	61.8	72.1	82.5	92.8	103.1	113.4	123.7	134.0	144.3	154.6	164.9	175.2
	Air nozzle no. 9			Air nozzle no. 7			Air nozzle no. 6			Air nozzle no. 5			
Purge air	33.0	30.0	34.0	31.0	36.0	40.0	31.0	34.0	37.0	30.0	32.0	34.0	36.0
Output	18.5	31.8	38.1	51.5	56.8	63.1	82.4	89.7	97.0	114.3	122.6	130.9	139.2
PDAD-13													
Input	77.3	92.8	108.2	123.7	139.2	154.6	170.1	185.5	201.0	216.5	231.9	247.4	262.8
	Air nozzle no. 10			Air nozzle no. 8			Air nozzle no. 7			Air nozzle no. 6			
Purge air	42.0	52.0	61.0	51.0	54.0	68.0	45.0	49.0	54.0	62.0	67.0	71.0	76.0
Output	35.3	40.8	47.2	72.7	85.2	86.6	125.1	136.5	147.0	154.5	164.9	176.4	186.8
PDAD-22													
Input	131.4	157.7	184.0	210.3	236.6	262.8	289.1	315.4	341.7	368.0	394.3	420.6	446.8
	Air nozzle no. 14			Air nozzle no. 12			Air nozzle no. 10			Air nozzle no. 9			
Purge air	76.0	89.0	106.0	88.0	97.0	107.0	86.0	96.0	106.0	89.0	96.0	103.0	111.0
Output	55.4	68.7	78.0	122.3	139.6	155.8	203.1	219.4	235.7	279.0	298.3	317.6	335.8
PDAD-51													
Input	293.8	352.5	411.3	470.0	528.8	587.5	646.3	705.0	763.8	822.5	881.3	940.1	998.8
	Air nozzle no. 23			Air nozzle no. 17			Air nozzle no. 14			Air nozzle no. 12			
Purge air	166.0	204.0	230.0	165.5	194.5	216.0	165.0	182.5	198.5	160.5	176.0	182.5	201.5
Output	127.8	148.5	181.3	304.5	334.3	371.5	481.3	522.5	565.3	662.0	705.3	757.6	797.3
PDAD-73													
Input	432.9	519.5	606.1	692.7	779.3	865.8	952.4	1039.0	1125.6	1212.2	1298.8	1385.3	1471.9
	Air nozzle no. 29			Air nozzle no. 24			Air nozzle no. 17			Air nozzle no. 15			
Purge air	233.0	270.0	311.0	261.0	302.0	339.0	248.0	272.0	295.0	243.0	261.0	282.0	301.0
Output	199.9	249.5	295.1	431.7	477.3	526.8	704.4	767.0	830.6	969.2	1037.8	1103.3	1170.9
PDAD-100													
Input	579.8	695.8	811.7	927.7	1043.6	1159.6	1275.6	1391.5	1507.5	1623.4	1739.4	1855.4	1971.3
	Air nozzle no. 23			Air nozzle no. 17			Air nozzle no. 14			Air nozzle no. 12			
Purge air	332.0	408.0	460.0	331.0	389.0	432.0	330.0	365.0	397.0	321.0	352.0	365.0	403.0
Output	247.8	287.8	351.7	596.7	654.6	727.6	945.6	1026.5	1110.5	1302.4	1387.4	1490.4	1568.3

 **Note**

Please do not use the average consumption values (flow rate) as your guide when setting up the dryer, instead use

- the input pressure of the dryer,
- the peak value for the flow rate and
- the maximum permissible supply temperature.

The adsorption dryers are designed for continuous operation.

Intensely pulsed or intermittent operation leads to premature ageing of and/or damage to the drying agent and thus to failure of the dryer.

If the adsorption dryer PDAD is nonetheless to be used in pulsed or intermittent mode, the use of buffer re-

servoirs, through which the compressed air flows, is recommended for smoothing the pressure peaks. Depending on the application these can be mounted upstream and/or downstream of the dryer. The volume of a reservoir should be approx. 50% of the flow rate for one minute.

 **Note**

On delivery the adsorption dryer PDAD is configured with an air nozzle for an input pressure of 7 ... 9 bar.

If a different input pressure is used, the air nozzle must be exchanged. The set containing alternative air nozzles must be ordered separately as an accessory.