



**50, 100, 250, 420 bar**  
operating pressure

**1,5 to 50 °C**  
inlet air temperature range

**-40 °C**  
pressure dew points

**50 to 1600 Nm<sup>3</sup>/h**  
flow rate

**RAL 5012**  
standard colour

## DESCRIPTION

HP-DRY adsorption dryers have been designed for continuous separation of water vapour from compressed air thus reducing dew point. Operation of the dryer requires two columns operated alternately. Adsorption takes place under pressure in the first column while the second column regenerates with a portion of already dried compressed air at ambient pressure.

Dryers consists from control valves, controller with LED display and two columns filled with desiccant. Springs in the columns make sure that the desiccant beads will not move during operation. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

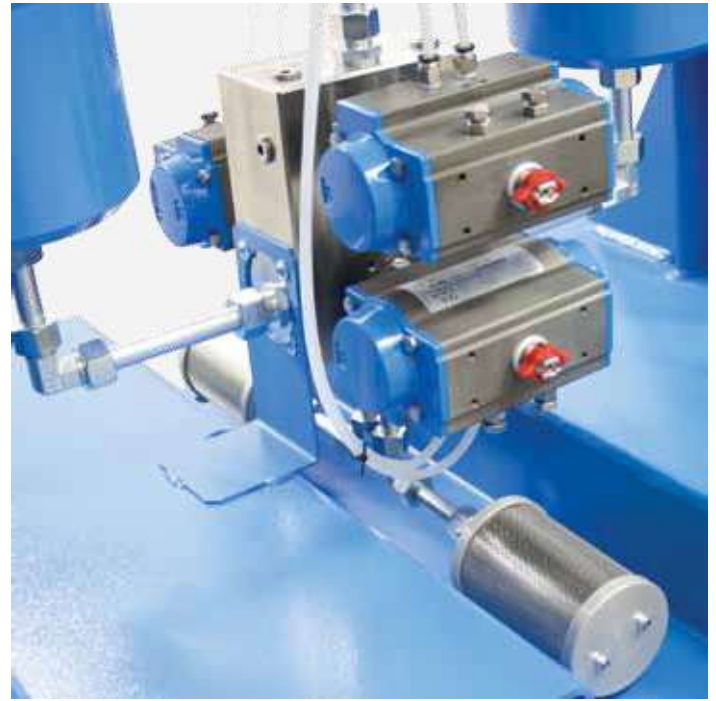
## APPLICATIONS

- Compressed air systems

# HP-DRY SERIES

## HIGH PRESSURE HEATLESS REGENERATION ADSORPTION DRYERS





50 bar version							
Type	Connection <sup>(3)</sup>	Inlet flow <sup>(1)</sup>	Outlet flow <sup>(2)</sup>	Dimensions			Mass
	IN/OUT ["]	[Nm <sup>3</sup> /h]	[Nm <sup>3</sup> /h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 050 PN50	G 3/8"	50	48,5	1200	680	580	130
HP-DRY 100 PN50	G 3/8"	100	97	1250	680	580	150
HP-DRY 150 PN50	G 3/8"	150	145,5	1550	680	580	170
HP-DRY 250 PN50	G 3/8"	250	242,5	1700	820	700	260
HP-DRY 350 PN50	G 1/2"	350	339,5	1700	820	700	320
HP-DRY 500 PN50	G 1/2"	500	485	1920	820	700	410
HP-DRY 650 PN50	G 1/2"	650	630,5	2250	820	700	460
OPERATING PRESSURE 50 bar - CORRECTION FACTORS - C <sub>op</sub> (35 °C; 50 bar)							
Operating pressure [bar]	25	30	35	40	45	50	
Correction factor C <sub>op</sub>	0,51	0,61	0,71	0,81	0,90	1	

100 bar version							
Type	Connection <sup>(3)</sup>	Inlet flow <sup>(1)</sup>	Outlet flow <sup>(2)</sup>	Dimensions			Mass
	IN/OUT ["]	[Nm <sup>3</sup> /h]	[Nm <sup>3</sup> /h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 050 PN100	G 3/8"	50	48,5	1250	680	580	125
HP-DRY 100 PN100	G 3/8"	100	97	1350	680	580	170
HP-DRY 150 PN100	G 3/8"	150	145,5	1650	680	580	200
HP-DRY 250 PN100	G 3/8"	250	242,5	1550	680	600	210
HP-DRY 350 PN100	G 1/2"	350	339,5	1460	820	680	270
HP-DRY 500 PN100	G 1/2"	500	485	1700	820	680	290
HP-DRY 650 PN100	G 1/2"	650	630,5	1800	820	700	380
HP-DRY 800 PN100	G 1/2"	800	776	1850	820	680	480
OPERATING PRESSURE 100 bar - CORRECTION FACTORS - C <sub>op</sub> (35 °C; 100 bar)							
Operating pressure [bar]	50	60	70	80	90	100	
Correction factor C <sub>op</sub>	0,50	0,60	0,70	0,80	0,90	1,00	

250 bar version							
Type	Connection <sup>(3)</sup>	Inlet flow <sup>(1)</sup>	Outlet flow <sup>(2)</sup>	Dimensions			Mass
	IN/OUT ["]	[Nm <sup>3</sup> /h]	[Nm <sup>3</sup> /h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 050 PN250	G 3/8"	50	48,5	1000	680	450	95
HP-DRY 100 PN250	G 3/8"	100	97	1360	680	450	135
HP-DRY 150 PN250	G 3/8"	150	145,5	1600	680	450	145
HP-DRY 250 PN250	G 3/8"	250	242,5	1500	680	450	180
HP-DRY 350 PN250	G 1/2"	350	339,5	1400	820	650	250
HP-DRY 500 PN250	G 1/2"	500	485	1500	820	650	300
HP-DRY 650 PN250	G 1/2"	650	630,5	1500	820	650	400
HP-DRY 800 PN250	G 1/2"	800	776	1550	820	650	460
HP-DRY 1000 PN250	G 1/2"	1000	970	1600	820	650	580
HP-DRY 1200 PN250	G 1/2"	1200	1164	1550	820	700	620
HP-DRY 1400 PN250	G 1/2"	1400	1358	1650	820	700	650
OPERATING PRESSURE 250 bar - CORRECTION FACTORS - C <sub>op</sub> (35 °C; 250 bar)							
Operating pressure [bar]	110	130	160	190	220	250	
Correction factor C <sub>op</sub>	0,44	0,52	0,64	0,76	0,88	1,00	
OPERATING TEMPERATURE - CORRECTION FACTORS - C <sub>ot</sub>							
Operating temperature [°C]	25	30	35	40	45	50	
Correction factor C <sub>ot</sub>	1	1	1	0,97	0,87	0,80	

420 bar version							
Type	Connection <sup>(3)</sup>	Inlet flow <sup>(1)</sup>	Outlet flow <sup>(2)</sup>	Dimensions			Mass
	IN/OUT ["]	[Nm <sup>3</sup> /h]	[Nm <sup>3</sup> /h]	H [mm]	W [mm]	D [mm]	[kg]
HP-DRY 100 PN420	G 3/8"	100	97	1120	680	450	120
HP-DRY 150 PN420	G 3/8"	150	145,5	1360	680	450	135
HP-DRY 250 PN420	G 3/8"	250	242,5	1450	680	580	190
HP-DRY 350 PN420	G 1/2"	350	339,5	1350	820	580	270
HP-DRY 500 PN420	G 1/2"	500	485	1380	820	650	310
HP-DRY 650 PN420	G 1/2"	650	630	1450	820	650	440
HP-DRY 800 PN420	G 1/2"	800	776	1230	820	650	425
HP-DRY 1000 PN420	G 1/2"	1000	970	1450	820	650	600
HP-DRY 1200 PN420	G 1/2"	1200	1164	1450	1000	900	850
HP-DRY 1400 PN420	G 1/2"	1400	1358	1500	1000	900	800
HP-DRY 1600 PN420	G 1/2"	1600	1552	1450	1000	900	1200
OPERATING PRESSURE 420 bar - CORRECTION FACTORS - C <sub>op</sub> (35 °C; 420 bar)							
Operating pressure [bar]	250	275	300	325	350	375	400
Correction factor C <sub>op</sub>	0,59	0,65	0,71	0,77	0,83	0,89	0,95
DEW POINT - CORRECTION FACTORS - C <sub>dp</sub>							
Dew point temperature [°C]		-25	-40	-55			
Correction factor C <sub>dp</sub>		1,1	1	0,7			

<sup>(1)</sup> Refers to 1 bar(a) and 20 °C, at nominal operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.

<sup>(2)</sup> Purge air requirements depend on actual operating conditions (Typically about 3 %).

<sup>(3)</sup> Threads of the dryer are male. It is possible to remove the fittings on the inlet and outlet, to get a pipe connection (for welding), where you should contact the manufacturer for the diameter and thickness. Also on the inlet you can remove the fittings and pipes entirely to get a female connection directly on the pre-filter.