FARGON

FDA mini

Compressed Air dryer

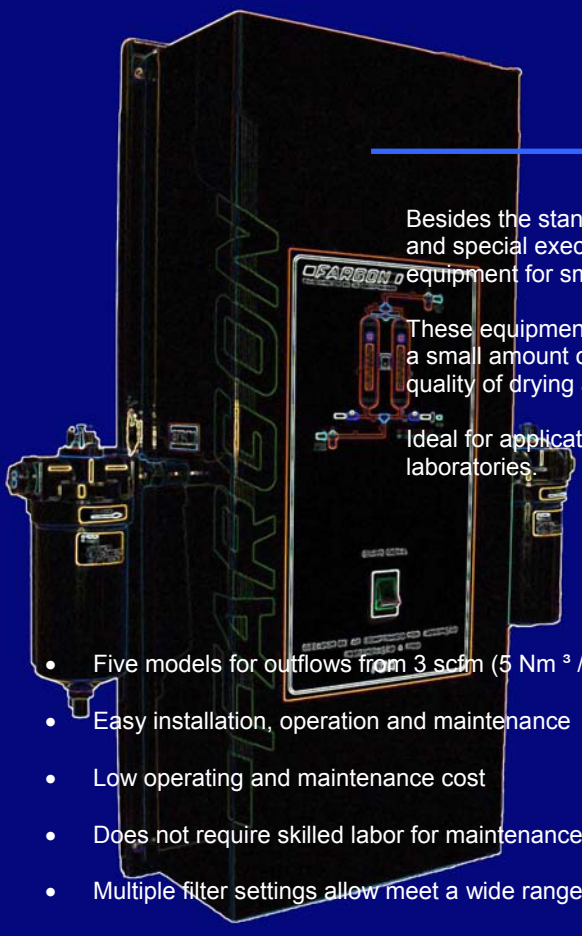
Adsorption – heatless regeneration
Low capacities

Principle of adsorption

Drying with high efficiency and reliability

Some applications require a compressed air with very low moisture content (dew point negative between -5 to -70 ° C approximately), not being met by drying systems for cooling (dew point +3 ° C). In this case we use a dryer which operates by the principle of adsorption.
Adsorption is a physical process that leads to the fixing of certain gas molecules (in our case water vapor) on the surface of solids materials called adsorption, adsorbents or sorbents. This process is highly efficient, since the materials are easily regenerated adsorption after reaching its saturation (hot or cold).
With regard to compressed air, the adsorption system radically eliminates water vapor in the mixture. With this system you can currently obtain dew points near -100 ° C.

The adsorbents are porous products extreme mind, and commonly have specific surfaces 500-1000 square meters per gram. And it is this vast area which creates the fundamental condition for the adsorption phenomenon (which is comparable to the known phenomenon of condensation) which comes into being, ultimately, a surface phenomenon.
Regeneration (also called reactivation) of materials for adsorption is the removal or evaporation of water adsorbed from the same compressed air. This regeneration can be achieved by "washing" of the adsorption material saturated with dry air and warm (drying line FDH), or with pressurized cold and dry air (line FDA).



FDA mini series

Besides the standard equipment of adsorption (lines FDA / FDH) and special executions, the Fargon designs and manufactures equipment for small points of use.

These equipments are used in applications that despite consuming a small amount of air compressed air, need to have the same high quality of drying and purity.

Ideal for applications in machines, point of use, medical air, laboratories.

- Five models for outflows from 3 scfm (5 Nm ³ / h) to 35 scfm (60 Nm ³ / h)
- Easy installation, operation and maintenance
- Low operating and maintenance cost
- Does not require skilled labor for maintenance
- Multiple filter settings allow meet a wide range of applications, from industrial use to the medical and pharmaceutical use.
- Automation controlled by special electronic board programmable microprocessor allows, if necessary, fine adjustment of the device to the operating conditions of the process.

FDA 0010

the lowest model of the line

wall fixing

SPECIFICATIONS

Model	Capacity at pressure 7 bar temper. 38°C DP = -25/-40°C		Inlet and outlet connect. R- threaded	Dimensions / weight approximate (without filters) (mm / kg)				Power Consum.	Consumption of compressed air for regeneration
	scfm	Nm³/h		Length	Width	Height	Weight	W	
FDA 0010	3	5	¼" R	250	150	500	12	10	10-15%

FDA 0020

intermediate model of the line

Wall fixing

SPECIFICATIONS

Model	Capacity at pressure 7 bar temper. 38°C DP = -25/-40°C		Inlet and outlet connect. R- threaded	Dimensions / weight approximate (without filters) (mm / kg)				Power Consum.	Consumption of compressed air for regeneration
	scfm	Nm³/h		Length	Width	Height	Weight	W	
FDA	9	15	¼" R	300	165	700	25	10	10-15%

FDA 0090
FDA 0120
FDA 0130

the largest line capacity

SPECIFICATIONS

Model	Capacity at pressure 7 bar temper. 38°C DP = -25/-40°C		Inlet and outlet connect. R-threaded	Dimensions / weight approximate (without filters) (mm / kg)				Power Consum.	Consumption of compressed air for regeneration
	scfm	Nm³/h		Length	Width	Height	Weight	W	
FDA 0090	20	34	½" R	350	350	850	52	10	10-15%
FDA 0120	35	60	½" R	310	300	800	65	10	10-15%
FDA 0130	35	60	½" R	350	350	850	55	10	10-15%

To select he correct model to your necessity, use the table bellow
FÓRMULA: Table flow rate = Q X factor F1 X factor F2

Q	Compressed air flow rate to be treated (Nm³/h or scfm)							
F1	Operation pressure (bar)	4	5	6	7	8	9	10
	Operation pressure correction factor	1,58	1,34	1,14	1	0,88	0,8	0,72
F2	Inlet compressed air temperature (°C)	30	35	38	40	45	50	
	Compressed air temperature correction factor	0,64	0,86	1	1,11	1,43	1,88	
		Table flow rate = Q x F1 x F2						
		Selected dryer						

Filtration systems

Dryers FDA MINI can be supplied with a complete filtration system, which may include:

- Filter to remove particulate
- Coalescing filter for removal of oil / condensate
- Activated charcoal filter to remove odors oil
- Sterilization filter
- Purifiers filters Purifiers (removal of CO_2 / CO)

FARGON®

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