

# Dry, clean and oilfree compressed air

## oilfreepac



Member of



Compressed air must be treated before use in most applications. Contaminated air can damage pipe systems, valves and tools. The result is increased energy and repair costs and more frequent downtime. The quality of your products is compromised and the health of your workforce put at risk.

We have long known the source of contamination – our ambient air. The contaminants are compressed in the system and abraded particles add to the problem. The result is a highly aggressive mixture of solids and gases, heavy oil and aerosols, moisture and condensate, viruses and bacteria ...

The costs that emerge through these contaminants will add up very significantly if you are willing to compromise in your choice of compressed air treatment system. Tackling small problems, e.g. fitting a dryer to remove moisture, will yield only small successes. Even an oil-free compressor is no guarantee for oil-free compressed air. The oilfreepac® from ultrafilter will show you a whole new way to purity. Whether you work in the brewing, cosmetics, chemical, pharmaceuticals or electronics industries, oilfreepac® guarantees the completely clean solution – oil-free, pure and dry compressed air.

## Pure compressed air and nitrogen – the result of a professional system

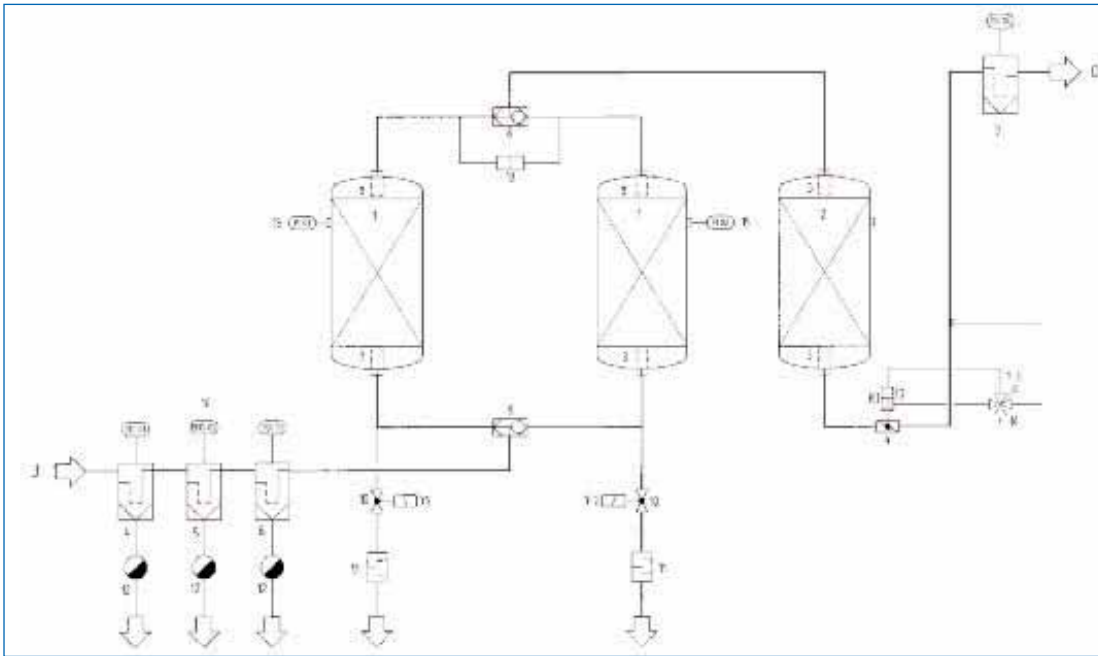
Remove water, oil and dirt particles from your compressed air in one process with the oilfreepac®. Instead of ill-matching individual units, the oilfreepac® is a compact system solution, complete with electronic control unit. The oilfreepac® not only guarantees you oil-free compressed air satisfying the highest standards, but also maximum operational reliability – irrespective of whether you use an oil-free or oil-lubricated compressor. The oilfreepac® filters oil and adsorbs oil vapor so thoroughly that the residual oil content is below the detection limit.

**DRY:** The oilfreepac is firstly an efficient reliable heatless dryer, generating a dew point of either  $-40^{\circ}\text{F}$  or  $-100^{\circ}\text{F}$ .

**OILFREE:** Compressed air of the purest oil-free quality, 100,000 times purer than the air we breath. Many times purer than you could ever produce with an oil-free compressor.

**CLEAN:** Absolutely clean compressed air and low operating costs, especially when using an oil-lubricated compressor. Dry rotors are more expensive to buy, more expensive to maintain and, because of their higher energy consumption, more expensive to operate. This is why oilfreepac® provides the best advantages in performance and economy. Ideal for use with an oil-lubricated compressor and also for the perfect treatment of partial flows.





## The greatest reliability – electronic measuring technology

Greater reliability, less downtime, lower operating costs, higher benefits. A system will only operate economically if it operates reliably. That is why we have ensured the 100 % operational reliability of the oilfreepac®. You don't need to monitor the oilfreepac® – it does it itself. If a set value is exceeded, an optical warning signal is given. If no action is taken, a shut-off valve automatically stops the flow of air and the compressor switches itself off. The oilfreepac® also offers perfect protection against the oil discharges which often occur in oil-lubricated compressors. A microfilter combined with a central control unit and a shut-off valve patrols the unit and ensures that not even the tiniest drop of oil can get into your compressed air system. The ultimate in reliability. ultrafilter has developed the pharmapac® especially for applications in, for example, the pharmaceutical industry. A complete treatment system which will not only supply dry and oil-free but also sterile compressed air – to satisfy the most stringent quality requirements.

## Functioning:

Compressed air is flowing through the inlet of the system (J) into a three stage prefiltration VU, MF, SU (4, 5, and 6). In these stages, the air is cleaned from particles and condensate down to a residual content of 0.01 ppm . The condensate is removed by condensate drains (12). Via a lower shuttle valve (8), the air is led for drying into the adsorption vessel (1), in which the air is dried down to the required dew-point. After that, the air is led through the upper shuttle valve (8) and into an activated carbon tower (2), in which oil vapor and hydrocarbons are retained. Via an afterfilter (7), in which possibly occurring abrasion from activated carbon is retained, the clean and oilfree air is led into the compressed air network to the point of use. While one vessel is in the drying phase (adsorption), the other vessel is being dried again (regeneration). A partial stream of dried air is expanded to atmospheric pressure via an orifice plate (13), led across the desiccant bed for regeneration and discharged to atmosphere via a solenoid valve (10) and a silencer (11). As a safety feature against contamination (e.g. oil breakthrough of the compressor), the differential pressure across the MF element is constantly monitored. In case of an immediate increase in differential pressure, the differential pressure gauge triggers the control and a valve (9) is closed.



## Technical Data oilfreepac:

type	capacity at 100 psi g cfm	connection	dimensions in inches			weight lbs
			height	width	depth	
0003-60	<b>3</b>	3/8"	28	26	13	77
0005-60	<b>5</b>	3/8"	28	26	13	99
0010-60	<b>10</b>	3/8"	42	26	13	128
0015-60	<b>15</b>	1/2"	42	26	13	136
0020-60	<b>20</b>	1/2"	42	26	13	145
0030-60	<b>30</b>	3/4"	63	37	18	323
0050-60	<b>50</b>	3/4"	63	37	18	422
0060-60	<b>60</b>	1"	63	37	18	508
0085-60	<b>85</b>	1"	78	45	24	601
0100-60	<b>100</b>	1"	78	45	24	670
0125-60	<b>125</b>	1 1/2"	78	45	24	832
0175-60	<b>175</b>	1 1/2"	78	45	24	964
0200-60	<b>200</b>	1 1/2"	86	62	28	1,195
0300-60	<b>300</b>	2"	86	62	28	1,294
0400-60	<b>400</b>	2"	86	62	28	1,518
0500-60	<b>500</b>	2"	93	63	31	1,786
0600-60	<b>600</b>	2 1/2"	93	63	31	2,031
0800-60	<b>800</b>	3"	101	89	37	2,926
1000-60	<b>1000</b>	3"	93	100	41	3,355
1200-60	<b>1200</b>	3"	102	106	45	3,718
1400-60	<b>1400</b>	4"	103	114	51	4,741
1600-60	<b>1600</b>	4"	106	120	53	5,346
2000-60	<b>2000</b>	4"	106	134	59	6,413
2400-60	<b>2400</b>	6"	117	144	64	8,811
3000-60	<b>3000</b>	6"	119	156	68	10,164
3500-60	<b>3500</b>	6"	121	167	71	12,045
4000-60	<b>4000</b>	6"	121	179	75	13,618
5000-60	<b>5000</b>	8"	129	203	90	20,130

Type 0003 to 600 in cabinet, including pre-, micro- and sub micro filter, adsorption dryer, oil vapor adsorber and dust filter.

Type 0800 to 5000 without cabinet, including pre-, micro- and sub micro filter, adsorption dryer, oil vapor adsorber and dust filter.

Pressure dew point -40°F at 100% load or -100°F.  
Residual oil content: 0.001 ppm.  
100 % particle clean.

Operating pressure: min. 60 psig; max. 250 psig.  
Maximum operating pressure 150 psig and 250 psig up to size 0600.  
Maximum operating pressure 150 psig from size 0800 to 5000.

Pre-filter with electronically level-controlled drain ultramat.

Subject to change without prior notice.

### Product range:

Demister:	20 – 5,000 cfm
Cyclone Separator:	70 – 8,600 cfm
High-capacity filters:	3 – 16,000 cfm
Compressed air fridge dryer:	5 – 7,400 cfm
– BURAN	5 – 1,050 cfm
– BUREAS	1,200 – 7,400 cfm
Adsorption dryer:	
– up 2000	3 – 60 cfm
– up classic	3 – 5,000 cfm
– oilfreepac	3 – 5,000 cfm
Condensate Management:	
– ultracarat condensate drains	
– ultrasep superplus ufs-sp	75 – 4,000 cfm

**Donaldson<sup>®</sup>**  
**Ultrafilter<sup>®</sup>**

Donaldson Company, Inc.  
Ultrafilter  
3560 Engineering Drive  
Norcross, GA 30092

Telephone: 770.448.3363  
Telefax: 770.448.3854  
Toll free: 800.543.3634  
E-mail: info@ultrafilter-us.com  
Web: www.ultrafilter-us.com