

OFC Series

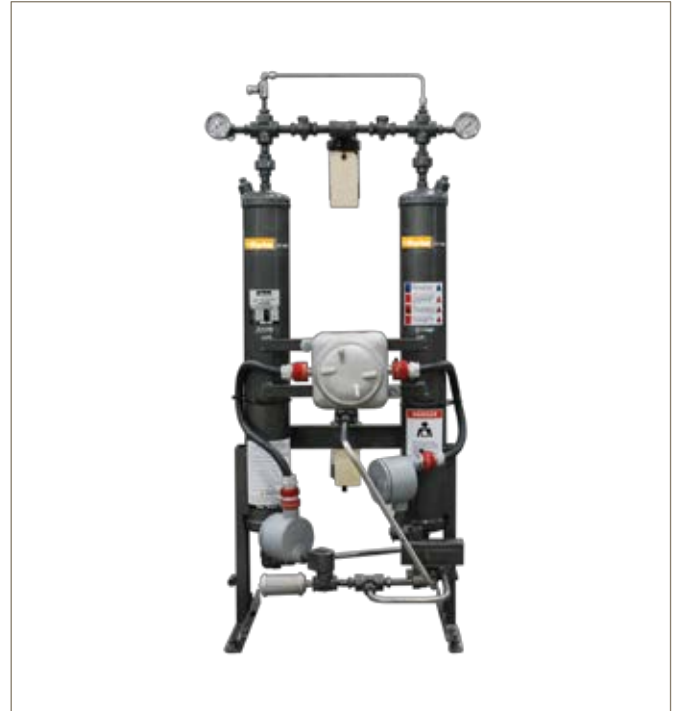
Heatless Desiccant Air Dryers for the Oil & Gas Industry



Parker Airtek's OFC Series of heatless desiccant dryers provide a continuous supply of dry, oil-free compressed air by automatically cycling the flow of air through two desiccant towers. Compressed air is dried through one tower while the other desiccant tower is being regenerated by a portion of the dried air. Cycling is controlled by a solid state controller.

The OFC Series is designed specifically for oil, gas and related industries. The dryer provides instrument quality compressed air and is packaged for maximum reliability and long, trouble-free service life.

Considering the importance of filtration to dryer performance, Parker Airtek recommends that all OFC Series dryers are ordered as a complete, factory assembled air treatment system. Standard equipment includes: properly sized, factory installed coalescing pre-filter and particulate after-filter with automatic float drain system and visual element condition indicators. Oversized filters are selected for longer element life and low pressure drop.



Features & Benefits:

- **Air quality - clean dry, oil-free meets ISO 8573.1 Class 1.2.1**
- **Reliable solid state controller eliminates the problems associated with antiquated cam timers.**
- **Superior valve performance. Four-way directional control valve has an average life expectancy of 150 million cycles even in the harshest environments.**
- **Easily classified to governing code requirements, such as OSHA, CSA, CRN, NEC, etc.**
- **Flexible packaging available. See optional equipment.**
- **Low power requirement - less than 20 watts @ 120V/1Ph/60Hz electrical input.**
- **Few moving parts - low maintenance**
- **Compact design, lightweight with minimal installation space required.**
- **Fully automatic - operates continuously without attention.**

Standard Equipment

- Electric 120V/1Ph/60Hz
- Solid State Controller
- NEMA 4 Controls
- Separate Tower Fill and Drain Ports
- 3000# Pipe Fittings
- High Life Cycle Switching Valves
- Safety Relief Valves
- Locally Mounted Tank Pressure Gauges
- Purge Adjustment Valve
- Purge Exhaust Muffler(s)
- 304 Stainless Steel Control Tubing & Parker Fittings
- Mounted Pre-filter and After-filter
- CRN Registered Tanks
- NEMA 7 Construction*
- Low Ambient Packages*
- Non-yellow Metal Construction*
- CSA Certification*
- ASME Code (OFC105 thru OFC360)*

*Optional

Engineering Data Specifications

Model	Flow Rate @ 100 psi g scfm (Nm ³ /min @ 7 bar g)	Approx. Purge scfm (Nm ³ /min)	Pipe Size In/Out	Height in (mm)	Width in (mm)	Depth in (mm)	Weight lbs (kg)	Pre-Filter	After-Filter
OFC7	7 (.20)	1 (.03)	3/8"	47 (1194)	20 (508)	14 (356)	90 (41)	JC0020-C	JC0020-F
OFC15	15 (.42)	2 (.05)	3/8"	47 (1194)	20 (508)	14 (356)	97 (44)	JC0020-C	JC0020-F
OFC23	23 (.65)	3.5 (.10)	3/8"	47 (1194)	20 (508)	14 (356)	101 (46)	JC0020-C	JC0020-F
OFC36	36 (1.02)	5.4 (.15)	1/2"	67 (1702)	20 (508)	14 (356)	140 (64)	JC0050-C	JC0050-F
OFC50	50 (1.42)	7.5 (.21)	1/2"	68 (1727)	24 (610)	14 (356)	171 (78)	JC0085-C	JC0085-F
OFC80	80 (2.27)	12 (.34)	3/4"	68 (1727)	24 (610)	14 (356)	207 (94)	JC0085-C	JC0085-F
OFC105	105 (2.97)	15 (.42)	1"	81 (2057)	31 (787)	18 (457)	350 (158)	JC0110-C	JC0110-F
OFC140	140 (3.96)	21 (.60)	1"	81 (2057)	31 (787)	18 (457)	350 (159)	JC0150-C	JC0150-F
OFC220	220 (6.23)	33 (.93)	1 1/2"	82 (2083)	38 (965)	22 (559)	704 (319)	JC0250-C	JC0250-F
OFC280	280 (7.93)	42 (1.19)	1 1/2"	82 (2083)	40 (1016)	22 (559)	746 (338)	JC0350-C	JC0350-F
OFC360	360 (10.19)	54 (1.53)	1 1/2"	82 (2083)	40 (1016)	22 (559)	856 (388)	JC0350-C	JC0350-F

Max. Inlet Temperature	120°F (49°C)
Min. Inlet Temperature	50°F (10°C)
Max. Working Pressure	150 psi g (10.3 bar g)
Min. Working Pressure	80 psi g (5.5 bar g)
Dewpoint	-40°F (-40°C)
ISO Quality Class	8573.1 Class 1.2.1
Standard Electronics	120V/1Ph/60Hz
Controls	Solid State Board

- Pressure drop at rated flow: less than 5 psi (0.34 bar)
- Maximum inlet air or ambient air temperature 120°F (49°C)
- Maximum working pressure: 150 psi g (10.5 bar g) standard units for higher maximum working pressure are available.
- Minimum operating pressure: 80 psi g (5.5 bar g)

Correction Factors

Inlet Air Pressure

psi g	80	90	100	110	120	130	140	150
bar g	5.5	6.2	6.9	7.6	8.3	9.0	9.7	10.3
CF	.83	.91	1.00	1.09	1.18	1.27	1.37	1.43

Temperature

°F	100	105	110	115	120
°C	38	41	43	46	49
CF	1.00	0.85	0.74	0.64	0.56

EXAMPLE CALCULATIONS

OFC80 Corrected for 120 psi (8.3 bar)
 Corrected Capacity: = (Rated Capacity) X (psi Correction)
 = 80 scfm (2.27 Nm³/min) X (1.18)
 = 94.4 scfm (2.67 Nm³/min)