

**MODEL C418-1**  
w/Metal Automatic  
Drain (optional)

**AIR  
COALESCER  
MODEL BFGD201**

*Designed for use with tools, instruments, and paint booth equipment operated with compressed air, as well as for cleaning and drying parts.*

**Prevents damage to air devices and systems**

SERFILCO Kompressed-Air-Konditioners provide acid-free, clean, dry air at the lowest dewpoints attainable without refrigeration. They extend operating life and improve performance of pneumatic instruments, tools and equipment.

- Removes free water and oil
- Removes water and oil vapors
- Removes particles to one micron
- Lowers dewpoint  
25°F with dehydrated clay element  
80°F with molecular sieve element
- Pipe sizes from ¼" to 2" NPT
- Flow rates to 550 SCFM at 100 PSI

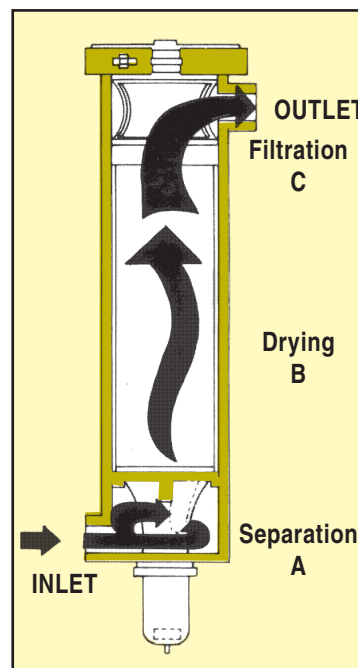
### WHAT CAUSES A PNEUMATIC DEVICE TO FAIL?

First, a mist of oil and water vapor escapes from the compressor and condenses as oil and water droplets in the air tank and lines. In a rotating or reciprocating device the water and oil are mixed into an emulsion. When reheated, this will build up a varnish residue between contacting surfaces which will slow down, and may eventually even stop the air device.

In addition, most petroleum oils contain sulfur compounds. These can react with condensate to form corrosive sulfuric acid. This acid not only deteriorates 'O'-rings and seals, but also pits and corrodes metal surfaces. Once initiated, the pits become progressively bigger and eventually the metal part will have to be replaced.

Another factor that contributes to wear is pipe scale. Vibration of the pipe will loosen the scale and the rust particles will travel and collect at critical points. When these mix with oil and/or water, the resulting "grinding compound" causes considerable wear of moving parts.

### THREE STAGE FILTER / DRYER SOLVES THE PROBLEM



#### C - THIRD STAGE

Final filter removes particles down to one micron to provide a clean, dry air supply.

#### B - SECOND STAGE

Dryer element removes water and oil vapors, medium size particles and provides a lower dewpoint.

#### A - FIRST STAGE

Cyclonic cone spins out free oil and water. Large particles and scale are separated from air stream and discharged via drain.

## KOMPRESSED-AIR-KONDITIONERS Ordering Information

**TO ORDER use Price Code Number**

Select Kompressed-Air-Konditioner based on flow rate or pipe size. Assembly includes dryer element and filter pads. Select choice of drain style. Pressure ratings for

both components are shown. System maximum pressure is limited by the lowest pressure rating of filter / dryer and drain.

### KOMPRESSED-AIR-KONDITIONERS

MODEL	SCFM @ 100 PSI*	MAX. PSI	PRESS. DIFF. @ 150 PSI MAX. SCFM	CONNS. NPT	DIMENSIONS		SHIPPING WEIGHT LBS.	WITH ELEMENT		
					DIA.	HT.		Dehydrated Clay	Molecular Sieve	Dehydrated Clay / Carbon
SF-B25-¼	7	250	3.5 PSI	¼"	2½"	7"	3	79-0070	79-0094	79-0301
SF-A38-½	30	250	4.0 PSI	½"	3½"	11½"	8	79-0002 A	79-0004	79-0302
SF-C418-1	70	250	3.5 PSI	1"	4½"	20"	18	79-0034 A	79-0036	79-0303
SF-E625-1½	150	200	3.5 PSI	1½"	6"	21¼"	29	79-0050	79-0056	—
SF-D832-2	300	150	11.0 PSI	2"	8¾"	34"	25	79-0072	79-0093	—

\* Maximum flow - intermittent operation

### DRAINS FOR KONDITIONERS

MODEL	DESCRIPTION		FOR KONDITIONERS				
			B25	A38	C418	E625	D832
			PRICE CODE NUMBERS				
D3	Metal Manual	Metal bowl with sight bubble & petcock. 250 PS	79-0078	79-0083			
D4	Metal Automatic	Metal bowl. Float operated drain. 175 PSI	79-0062	79-0084			
D5	Electronic Automatic	115V/1/60, 175 PSI	—	79-0309			

### REPLACEMENT ELEMENTS <sup>1</sup>

FOR MODEL	DESCRIPTION	PRICE CODE NO.	DESCRIPTION	PRICE CODE NO.
SF-B25-¼ SF-A38-½ SF-C418-1 SF-E625-1½ SF-D832-2	<b>DEHYDRATED CLAY</b> media hydro-philically removes water and oil vapors and medium size particles from the air stream. Pressure dewpoint is lowered approximately 25°F below the entering air temperature.	79-0071 A 79-0003 A 79-0035 A 79-0051 A 79-0073 A	<b>MOLECULAR SIEVE</b> media is recommended for those applications requiring exceptionally pure air at low dewpoints free of oil vapor. Pressure dewpoint is lowered approximately 80°F below the entering air temperature. For use with oilless compressors or a coalescer upstream.	79-0021 A 79-0022 A 79-0023 A 79-0024 A 79-0025 A
SF-B25-¼ SF-A38-½ SF-C418-1	<b>DEHYDRATED CLAY / CARBON</b> combination media bag removes rough materials, water, oil aerosols and other solvents.	79-0006 A 79-0005 A 79-0037 A	<sup>1</sup> Element sets include desiccant media packaged in PP bag, one micron filter pads, "O"-ring seal and instructions. For Kompressed-Air-Konditioners purchased prior to 1993, drop the <b>A</b> from the Price Code Number of the replacement media.	

## KOMPRESSED-AIR-KONDITIONERS Ordering Information

### AIR COALESCERS

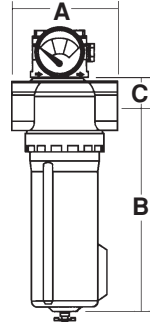
- Remove aerosols economically

- 99.98% efficiency, to 0.3 micron

The use of SERFILCO Air Coalescers is recommended to stop the negative effects of water, oil and solids concentrations on instruments, air tools, valves and desiccant dryers. The result is longer lasting equipment, fewer production stoppages and higher quality products.

Models starting with B have metal bowls. Others have plastic bowls with metal guards. The letter **D** in the model signifies an internal automatic drain which is standard on 1/2" and larger models. The 1/4" model has a manual drain.

Plastic bowls are rated 150 psig at 125°F. Metal bowls are rated 200 psig at 175°F.



MODEL	CAPACITY SCFM @ 100 PSIG	CONNECTION NPT	DIMENSIONS			WEIGHT Lbs.	PRICE CODE NO.
			A	B	C		
FC101-2	20	1/4"	3 1/2"	5 3/4"	5/8"	2 1/4	79-0310
FCD101H-4	60	1/2"	3 1/2"	10 1/4"	5/8"	3 1/4	79-0311
BFCD201-6	185	3/4"	4 1/2"	10 1/8"	1"	3 1/2	79-0312
BFCD201-8	220	1"	4 1/2"	10 1/8"	1"	3 1/2	79-0313
BFCD201-12	278	1 1/2"	5 1/2"	10 3/4"	1 5/8"	4 3/8	79-0314
BFCD101-16	430	2"	7 3/4"	22"	1 5/8"	19 3/4	79-0315

### 5 MICRON AIR FILTERS

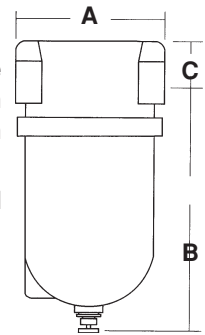
#### REMOVE COARSE PARTICLES ECONOMICALLY AND EXTEND LIFE OF AIR DRYER AND COALESCING ELEMENTS

SERFILCO 5 Micron Air Filters are designed to be used independently for less sensitive filtration applications and as prefilters for the high efficiency air coalescer designs, thereby extending the operating life of the high efficiency coalescing element.

These air filters cover a wide variety of sizes

and flow rates. Models starting with **B** have metal bowls. Others have plastic bowls with metal guards. All models come standard with an internal automatic drain.

Plastic bowls are rated 150 psig at 125°F. Metal bowls are rated 200 psig at 175°F.



MODEL	CAPACITY SCFM @ 100 PSIG	CONNECTION NPT	DIMENSIONS			WEIGHT Lbs.	PRICE CODE NO.
			A	B	C		
FC101-2	45	1/4"	2 5/8"	4 5/8"	5/8"	1 1/4	79-0320
FCD101H-4	130	1/2"	3 1/2"	5 3/4"	5/8"	2 1/4	79-0321
BFCD201-6	225	3/4"	4 1/2"	8"	13/16"	2 1/2	79-0322
BFCD201-8	275	1"	4 1/2"	8"	13/16"	2 1/2	79-0323
BFCD201-12	950	1 1/2"	8"	13 1/4"	1 3/4"	14 1/2	79-0324
BFCD101-16	950	2"	8"	13 1/4"	1 3/4"	14 1/2	79-0325

## KOMPRESSED-AIR-KONDITIONERS

### SERFILCO Kompressed-Air-Konditioners

remove water and oil vapor to prevent condensation downstream. Three choices of desiccant elements are available:

#### DEHYDRATED CLAY ELEMENT

Effective for both water and oil removal. Requires no coalescing or air preparation. A general purpose desiccant which produces initial dew point de-pressions (pressure dew points) of 20° to 25°F. Life expectancy is up to three months depending on humidity, flow rate and frequency of operation.

#### DEHYDRATED CLAY WITH ACTIVATED CARBON ELEMENT

A layer of activated carbon following the clay desiccant produces slightly lower initial dew points. It provides

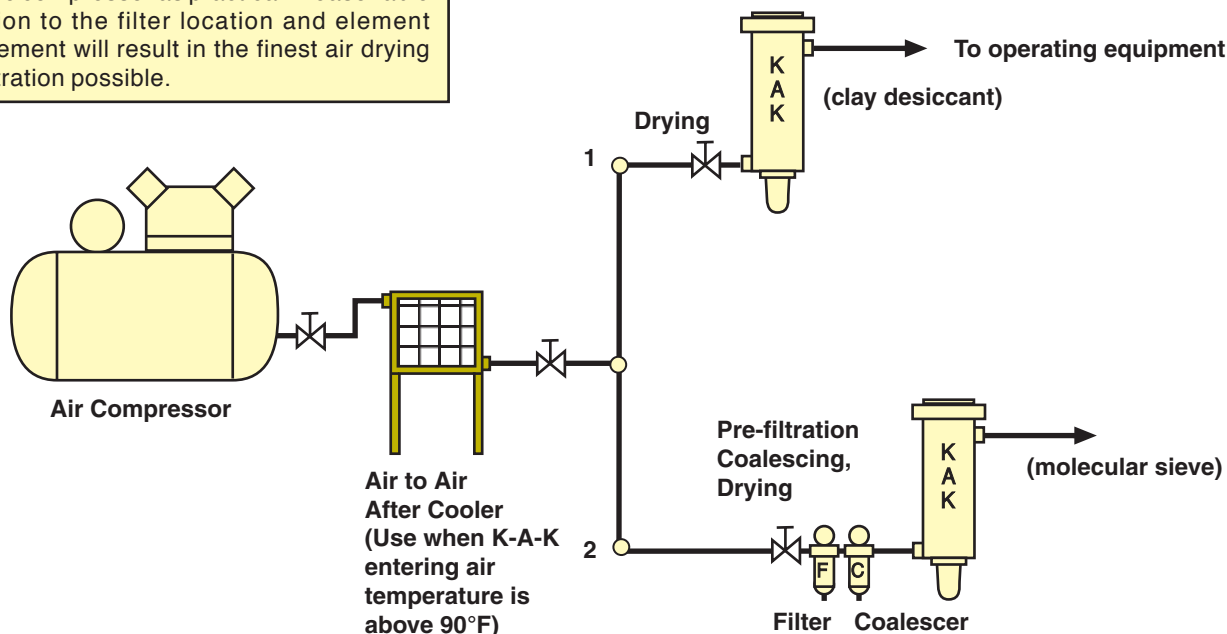
better removal of noxious gasses and oil aerosols. It is to be used where a higher degree of purification is required.

#### MOLECULAR SIEVE ELEMENT

Highly porous alumina-silicate complexes produce exceptionally low dew points - as much as an 80°F initial pressure dew point depression. Molecular sieve material will be coated with oil passing through the system thereby reducing efficiency and life expectancy. They are generally used with oil-less compressors or a coalescing filter is used to remove the oil before the air enters the Filter/Dryer. The addition of a general purpose filter will extend the life of the coalescing filter element, further reducing cost. Always install filters before the Molecular Sieve models.

## TYPICAL INSTALLATIONS

**INSTALLATION RECOMMENDATION**  
It is intended that all models be located as far from the compressor as practical. Reasonable attention to the filter location and element replacement will result in the finest air drying and filtration possible.



F.O.B. Northbrook, Illinois

Specifications subject to change without notice.



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