

# CFE Series

**MIST ELIMINATORS FOR OIL FILTRATION**  
125–3,000 SCFM



## THE AUDITOR'S CHOICE

*to reduce energy costs and remove oil and water aerosols from compressed air systems*

- ▶ Protect products and processes from contamination
- ▶ Increase the life of pneumatic equipment
- ▶ Help eliminate paint appearance and adhesion problems
- ▶ Keep pneumatic instruments operating

## LOW OPERATING COSTS

- ▶ Low pressure drop: 0.5 to 1 psi (0.04 to 0.07 kgf/cm<sup>2</sup>) Typical coalescing filters operate at 3 to 6 psi (0.21 to 0.42 kgf/cm<sup>2</sup>) requiring the air compressor to operate at higher operating pressures, increasing power requirements by 2.5% or more
- ▶ Long element life: 8 to 15 years

- ▶ With a large in-depth bed, element life is much longer than conventional oil removal filters
- ▶ Virtually maintenance free

## EXTRA PROTECTION

- ▶ Captures and retains large slugs of oil and water, should drain trap fail.
- ▶ Protects downstream equipment from contamination should oil separator or rotary screw compressor fail

## REMOVES SUBMICRONIC PARTICLES

*for ultra clean air*

- ▶ 100% of particles 3 microns and larger
- ▶ 99.98% of particles 0.1 micron and larger
- ▶ 0.5 ppm w/w maximum liquid content after filtration
- ▶ 1000 ppm maximum inlet liquid loading



**CHAMPION®**

## ADVANCED FILTER BED TECHNOLOGY

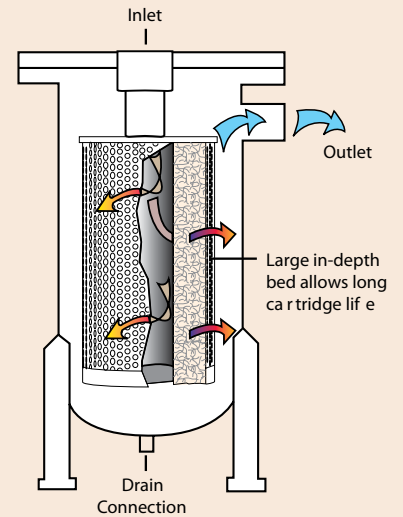
Compressed air is directed through a loosely packed bed of highly engineered, water resistant glass fibers. Water droplets and oil aerosols entrained in the air stream are captured by the fibers through the mechanisms of direct interception, inertial impaction, and interception resulting from Brownian motion. The captured aerosols move along the fibers and coalesce into larger droplets that gravitate to the bottom of the housing and are discharged from the system by an optional automatic drain valve.

## STANDARD FEATURES

- ▶ Differential pressure gauge
- ▶ Heavy duty ASME stamped pressure vessel
- ▶ Long life mist eliminator element
- ▶ Floor stand

## OPTIONS

- ▶ Automatic condensate drains – pneumatically or electrically operated
- ▶ Differential pressure gauge with reed switch



**5 YEAR**  
Equipment Warranty  
and 5 Year  
Element Life Guarantee

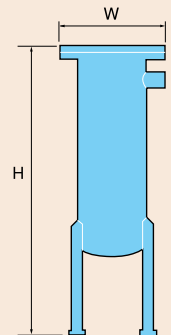
## SPECIFICATIONS

Model Number	Flow @ 100 psig (7 KGf/CM <sup>2</sup> )		Maximum Working Pressure	Maximum Operating Temperature	Replacement Cartridge	Dimensions				Connections	Weight	
	scfm	m <sup>3</sup> /H				HEIGHT		WIDTH			lbs	kg
						IN	MM	IN	MM			
CFE1	125	220	150 psig (14.1 bar)	150°F (66° C)	CFE1E	34.8	884	18.0	457	2" NPT	185	84
CFE2	250	440			CFE2E	34.8	884	18.0	457	2" NPT	190	86
CFE3	500	870			CFE3E	45.0	1143	18.0	457	2-1/2" NPT	220	100
CFE4	1100	1910			CFE4E	63.3	1608	23.8	605	4" ANSI FLG	350	159
CFE5	1500	2600			CFE5E	70.8	1798	25.8	655	4" ANSI FLG	390	177
CFE6	2100	3650			CFE6E	72.4	1839	31.8	808	4" ANSI FLG	700	318
CFE7	2400	4170			CFE7E	72.4	1839	31.8	808	4" ANSI FLG	715	324
CFE8	3000	5210			CFE8E	72.4	1839	31.8	808	4" ANSI FLG	730	331

## CORRECTION FACTORS FOR INLET PRESSURE

Inlet Pressure		Multiplier
psig	BAR	
20	1.4	0.30
30	2.1	0.39
40	2.8	0.48
60	4.1	0.65
80	5.5	0.83
100	6.9	1.00
120	8.3	1.17
150	10.3	1.44

Sizing: Maximum air flow at 100 psig (7 kgf/cm<sup>2</sup>) is indicated in the Specifications table. To determine maximum air flow at pressures other than 100 psig (7 kgf/cm<sup>2</sup>), multiply flow @ 100 psig (7 kgf/cm<sup>2</sup>) by the multiplier from Table 2 that corresponds to the minimum operating pressure at the inlet to the filter.



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