

# **Condensate Management**

KCF Series Oil/Water Separators

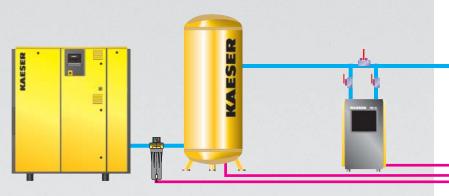


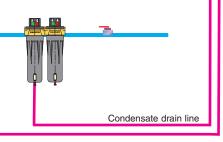
## **Compressed air condensate**

Compressed air condensate is a by-product of all compressors. It is a mixture of mostly water with ambient particulates, airborne hydrocarbons, and traces of compressor fluids that have been concentrated during the compression process. This type of oilwater mixture may be classified as hazardous waste, and federal and local environmental laws regulate the discharge of untreated compressor condensate. Kaeser's KCF condensate management system offers a reliable and economical method of oil/water separation to comply with environmental regulations.

# Condensate disposal made easy

As disposal costs for waste oil increase and environmental regulations become more stringent, the benefits of Kaeser's KCF oil/water separators are clear. The KCF eliminates the need for expensive waste collection services by removing oil, leaving most of the condensate to be safely discharged into a sanitary drain\*. KCF filters don't need frequent changes, and the spent filters are simply sent to the landfill. Condensate management just doesn't get any easier.





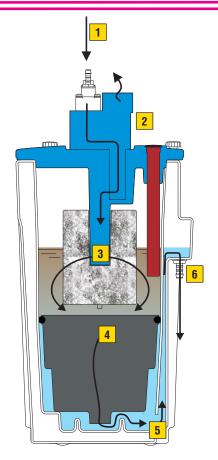
Condensate must be collected and drained from each component in an air system. A variety of condensate drains are available to provide reliable condensate removal.

### **How it works:**

Contaminated condensate 1 flows under pressure into the pressure relief chamber. 2 Here, the pressure is released to prevent turbulence downstream. The contaminated condensate flows into the high capacity pre-filter 3, which has an ideal inside to outside flow pattern to trap remaining oil droplets. It also captures any residual floating oil in the upper chamber.

As the pre-treated condensate enters the main filter cartridge 4 any remaining oil is adsorbed and locked into our advanced filter material where it cannot escape. The condensate is now fully treated and flows around the lower chamber wall 5 toward the clean water outlet, 6 ready for discharge directly into the sewer system.

\*Always observe local guidelines for disposal of effluents.



## Safe, Clean, and Cost Effective



## Easy to install

- · No electrical connections
- · Multiple inlet connections
- · No hard piping required
- Lightweight

## Reliable operation

- Works with all compressor fluid types (see specs)
- Durable roto-molded from high-strength, cross-linked polyethylene

## **Simple Maintenance**

- · Just one filter to replace
- · Lifting handles provided
- Quick and clean

#### **Features**

- · Multiple inlet connections
  - two on KCF 25, 50 and 100
  - four on KCF 200 and 400



- Lid removal knobs (no tools needed)
- · Lifting handles for filter cartridges
- Disposal bag comes with each set of filters
- Filter change indicator on KCF 200 and 400



## **Options**

- Immersion heater with thermostat for cold site installations (KCF 200 and 400 only)
- High pressure relief chamber (up to 580 psig)
- Flow splitter allows up to four (4) parallel piped units for large air flow applications
- · High condensate level alarm



### **Specifications**

Model	Compressor Capacity (scfm)								
	Screw Compressors			Piston Compressors 1- and 2 -stage		Condensate Inlet (hose	Water Outlet (hose	Weight Empty	Dimensions
	Mineral Oil Turbine Oil (additive free)	Diesters PAO	Polyglycol	Mineral Oil Turbine Oil (additive free)	Synthetic Oil	connection) (in.)	connection) (in.)	(lbs.)	<b>W x D x H</b> (in.)
KCF 25	110	90	55	90	55	2 x ½	1/2	7.7	11.4 x 8.7 x 20.8
KCF 50	220	180	110	180	110	2 x ½	1/2	12.7	14.8 x 10 x 23.4
KCF 100	500	375	250	375	250	½ or 1	1	19.5	18.1 x 20.5 x 24
KCF 200	900	600	450	600	450	3 x ½ and 1 x 1	1	70.5	20.5 x 22.6 x 44.1
KCF 400	1800	1200	900	1200	900	3 x ½ and 1 x 1	1	92.6	25.6 x 27.6 x 46.9

Notes: Maximum operating pressure of inlet is 232 psig. Operating temperature range is 41-140°F.

Rates are based on air compressor inlet conditions at 70°F and 70% relative humidity using oils with the best demulsibility in their class. Ratings for other conditions may vary significantly; consult with Kaeser for specific values. The use of automatic drain traps without any air discharge/loss is highly recommended. Mixing of oils or additive packages used in lubricants may have an adverse effect on demulsibility. **Manifolds are available for each unit. Consult factory for larger applications.** 

## Kaeser Condensate Manifold (KCM)



The KCM is a small vessel that collects condensate from multiple sources and safely diffuses residual air pressure to maximize separation effectiveness in the Kaeser Condensate Filter (or any oil/water separator).

Available in two models that vent up to 4 and 8 condensate lines, respectively. KCM is constructed from sturdy schedule 80 PVC, and has a maximum working pressure of 230 psig. Condensate lines are connected via easy push-to-connect fittings.

A venting muffler, mounting hardware and 5 ft outlet hose are included.



Specifications are subject to change without notice.



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#### Kaeser Compressors, Inc.

511 Sigma Drive Fredericksburg, VA 22408 USA Telephone: 540-898-5500 Toll Free: 800-777-7873 info.usa@kaeser.com

Certified Management Systems





#### Kaeser Compressors Canada Inc.

3760 La Verendrye Street Boisbriand, QC J7H 1R5 CANADA Telephone: (450) 971-1414 Toll free: (800) 477-1416 info.canada@kaeser.com

#### Kaeser Compresores de México S de RL de CV

Calle 2 #123
Parque Industrial Juríca
76100 Querétaro, Qro.
Telephone: 01 (442) 218 64 48
sales.mexico@kaeser.com

## Kaeser Compresores de Guatemala y Cia. Ltda.

Calzada Atanasio Tzul 21-00, Zona 12, Complejo Empresarial El Cortijo II, Bodega 501 01012 Guatemala Telephone: +502 2412-6000 info.guatemala@kaeser.com

<sup>\*</sup>Demulsibility is an oil's ability to separate from water in a given amount of time.