

Condensate Management

KCF Series Oil/Water Separators



Condensate Management

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 to be changed frequently and the spent filters are simply sent to the landfill. Condensate management doesn't get any easier.

Compressed air condensate

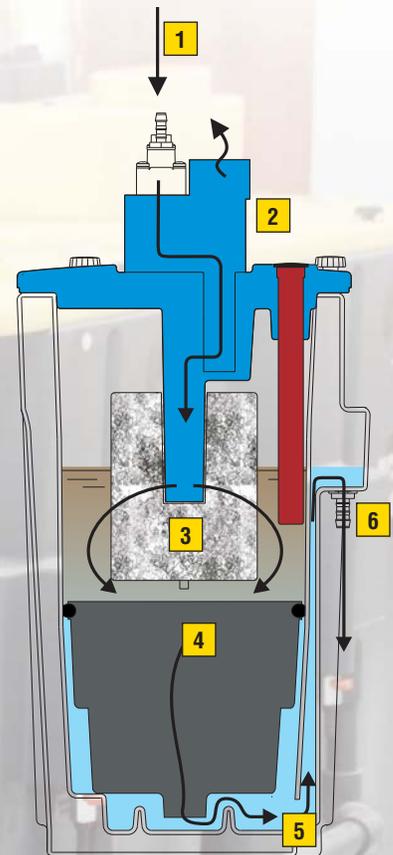
Compressed air condensate is a by-product of all compressors. It is a mixture of mostly water with ambient particulates, airborne hydrocarbons, and traces of compressor fluids that have been concentrated during the compression process. This type of oil-water mixture may be classified as hazardous waste, 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.

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 the 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 the 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

Kaeser's KCFs are easy to install with no electrical connections or hard piping required. They are lightweight and contain multiple inlet connections. KCFs are durable rotomolded from high-strength, cross-linked polyethylene and work with all compressor fluid types. Operation can be checked weekly by performing a cloudiness test with containers provided and scheduled maintenance as needed.

KCF features



Simple maintenance

Lid removal knobs make removing and replacing single filter cartridge simple. The convenient lifting handles enable quick and clean maintenance.



High performance filter

The filter can then be easily fixed to the KCF casing to drain. Pre-soaking the new filter is not necessary. A disposal bag comes with each set of filters.



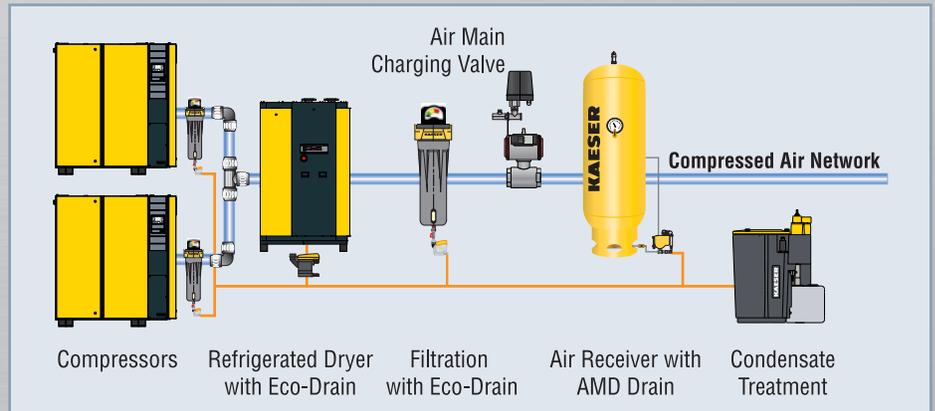
Filter change indicator

A filter change indicator is available on the KCF 200 and 400. A raised float indicates when the filter needs to be replaced.



Multiple inlet connections

The KCF 25 and 50 have two inlet connections while the KCF 100, 200, and 400 have four. Plastic plugs are provided to block off any unused connections.



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.

Technical Specifications

Model	Compressor Capacity (scfm)					Condensate Inlet (hose connection) (in.)	Water Outlet (hose connection) (in.)	Weight Empty (lbs.)	Dimensions W x D x H (in.)
	Screw Compressors			Piston Compressors 1- and 2 -stage					
	Mineral Oil Turbine Oil (additive free)	Diesters PAO	Polyglycol	Mineral Oil Turbine Oil (additive free)	Synthetic Oil				
KCF 25	110	90	55	90	55	2 x ½	½	7.7	11.4 x 8.7 x 20.8
KCF 50	220	180	110	180	110		½	12.7	14.8 x 10 x 23.4
KCF 100	450	340	225	340	225	3 x ½ and 1 x 1	1	19.5	18.1 x 20.5 x 24
KCF 200	900	600	450	600	450		1	70.5	20.5 x 22.6 x 44.1
KCF 400	1800	1200	900	1200	900		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 Kaeser for specific values. Using 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.**

*Demulsibility is an oil's ability to separate from water in a given amount of time.

Specifications are subject to change without notice.

KCF Options

- Immersion heater with thermostat for cold site installations (KCF 50, 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

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 will accept condensate from air systems operating at up to 230 psig. Condensate lines are connected via easy push-to-connect fittings. A venting muffler, mounting hardware, and 5 foot outlet hose are included.



KAESER COMPRESSORS

Built for a lifetime.™

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