



ISO 9001:2015

Application areas

The KDF-W change-over filter consists of two KWF series filters with intermediate-positioned ball cock change-over. It is a filter for liquid, gaseous, or pasty media that offers versatile implementation. It is characterized by high performance, low spatial requirements, as well as fast and easy cleaning.

Inlet and outlet flange can be positioned as desired.





Brief description

In the standard version the filter consists of two welded steel vessels with covers that are fastened via screws and nuts. Alternatively the filter can be equipped with a strainer, ringer strainer insert or cartridges, or bag filters.

Notice:

The compatibility between medium and vessel or sealing material is the responsibility of the operator.

The design of the pressure vessel is based on a quasi-static operation (load cycle number \leq 1000 according to AD 2000 Merkblatt S1, section 1.4). Max. Differential pressure inlet - outlet 2 bar.

Installation

The filter is installed in pipelines via flanges. Ensure that the standard version filter is installed vertically without additional mechanical stress, tension-free. The medium must flow in the direction specified on the vessel. Incorrect installation can cause malfunctions and damage to the filter.

Commissioning/operating instructions

- 1. Open the vent until liquid escapes.
- 2. Close vent.
- 3. Filter is ready for operation.
- 4. The lever points toward the filter pot that is in operation.

Cleaning

- 1. **Attention:** Since in this case a pressure vessel is involved, strictly ensure that the vessel is depressurized before starting maintenance tasks. Comply with the safety and accident prevention guidelines required for the medium.
- 1. Take the filter that will be cleaned out of service by throwing over the lever the lever will be pointing to the filter that is in operation. Depressurize the filter via the vent device or drain.
- 2. Loosen the vessel opening and take off the cover.
- 3. Empty the filter via the drain to a level that is at least below the strainer support.
- 4. Pull the sieve insert upward and out of the filter vessel. The strainer can now be cleaned by blowing it out or blasting it with compressed air, steam, or water. If necessary the strainer must be soaked and cleaned in a suitable cleaning agent. In some circumstances optimum cleaning is achieved via ultrasound. For all cleaning methods ensure that the filter mesh is not damaged.
- 5. When assembling the filter check the cover seal for wear, replace it if necessary.
- 6. Vent and close drain.

Materials (standard version)		
Vessel	St. 35.8/P265 GH; SS321, SS316Ti Hastelloy, special mat Plastic PE, PP, PVDF, GFK/FRP	erials
Filter medium	Perforated plate with stainless steel mesh, cartridges, bags	
Nominal diameter DN	Design pressure PH (standard – higher PN on request)	
15–50	25 (64)	16 Filter opening with retainer
65–100	16 (64)	10 Filter opening with retainer
125–300	16 (64)	16 Snap closings and cover pivot fixtures
300-1.000	On request filter opening with screws and nuts	Medium-dependent snap closings and cover pivot fixtures

On request approval in accordance with DGRL 2014/68/EU, approval in accordance with module G through TÜV, GL, DHV, IRTN or GOST certificates possible.

Technical data

Technical data					
	Standard version	Special version or supplemental equipment			
Filter insert	Strainer insert	Ring strainer insert double strainer	Double strainers, pleated strainer insert, cartridges, bags		
Degree of filtration	10–1000 $\mu m;$ > 1 mm: perforated plate with round perforation	-			
Filter opening	Through screws with nuts	Snap closings			
Vent	Screw	Ball cock			
Drain	Screw	Ball cock			
Connection	Height-offset according to the design pressure of the filter inlet and outlet	As specified by customer			
Materials					
Vessel and cover	St 35.8, P 265 GH, 1.4541, 1.4571	Special materials			
Filter opening	In accordance with the vessel material	-			
Cover seal	Asbestos-free flat seal	O-Ring: NBR, FPM, EPDM, MPO, PTFE			
Perforated plate/mesh	St, St/SS316, SS304, SS304/SS316	SS316Ti/SS316, MS/Bz, Hastelloy C 4, various plastics			
Attachment parts	VA	-			
Extras					
Supplemental filter	-	Magnetic filter insert			
Heater	-	Steam, hot water or electrical	heater		
Differential pressure indicator	-	Optical, electrical			
Surface treatment interior*					
Vessel steel	Preservation oil	Corrosion protection lacquer, e	epoxy resin, E-CTFE		
Vessel stainless steel	Glass-shot blasted	Pickled and passivated, electro-polished			
Vessel plastic PP, PE, PVDF, GFK/FRP	-	-			
Surface treatment exterior					
Vessel steel	Synthetic resin lacquer, RAL 5010 blue	Rubberized, epoxy-coated, as	well as customer-specific		
Vessel stainless steel	Glass-shot blasted	Pickled and passivated			

* Selector switch cannot be coated.

Accessory

We produce and deliver additional design and material variants on request. We solicit your request.

Technical data and dimensions





Nominal diameter DN	PN**	ØD1	Α	В	С	D	E	ØD2	Contents approx.	Flow rate	Filter surface	Weight approx.
mm	bar	mm	mm	mm	mm	mm	mm	mm	dm ³	m³/h	cm ²	kg
15	16	114	256	155	508	94	380	220	8	5	500	25
20	16	114	256	155	508	94	380	220	8	5	500	25
25	16	114	256	155	508	94	380	200	8	5	500	25
40	16	114	220	210	542	149	418	220	11	18	890	45
50	16	114	220	210	542	149	418	220	11	18	890	45
65	16	168	360	300	841	155	575	285	40	45	2.100	120
80	16	219	360	300	841	155	575	340	40	45	2.100	120
100	16	219	430	345	951	175	600	340	48	72	2.450	130
125	16	273	615	435	1.328	240	726	405	118	162	4.300	230
150	16	273	625	435	1.328	240	726	405	118	162	4.300	230
Sizes DN 200-800 on request												

* Variable ** To PN 64



Product range		
Self cleaning filter	• KAF® • KRF • SCF	Self cleaning Bernoulli®-filter Backflush-filter Scraper filter
Single filter	• KSF® • KMF • KWF • KWF-Inline	Single basket filter (flanged) Threaded basket filter Welded/custom made basket filter Inlet flange and outlet flange inline
Duplex filter	KDF-KKDF-VKDF-VB	Duplex filter Valve switch duplex filter Butterfly valve switch filter
Other filter solutions Image: Constraint of the solution of t	• KBF • KOW • SEP Separator	Bag filter Oil and water separator Centrifugal separator
Others / accessoires	DeltaPFilterbags	Differential pressure indicator Contaminant level indicator
Strainer inserts	 Basket strainers Ring strainers Wedged wire in 	s serts



Krone Filter Solutions GmbH Industriestrasse 19 | 28876 Oyten/Germany Phone +49 4207 98769-0 | Fax +49 4207 98769-27 filter@krone-filter.com | www.krone-filter.com www.shop.krone-filter.com

