



Multistage Liquid/Particulate Separator

TKO Series



protecting your equipment • protecting your environment

Solberg's TKO series is a multistage liquid and particulate separator. It is an off the shelf solution for a majority of liquid removal applications.

Benefits

- Maximum pump protection with multi-stage filtration & separation
- Reduce costs with a singular modular design
- Housings may be used in a variety of conditions with multiple media pack options available
- Minimize frequent and costly maintenance checks with large liquid/slurry holding chamber

Solberg innovates solutions that meet the needs of our clients.

- Protect pumps from harmful liquids that destroy lubricating/seal oil
- Ease of maintenance
- Prevents emulsification in oil lubricated systems
- Sustain vacuum levels

Standard Features

Filtration Process



Ports

- 2 - 1" sight glass ports with sight glasses (low/high level)
- 1" upper chamber drain port
- 1/4" plugged differential ports on inlet and outlet
- 1/2" plugged equalization port for use with pneumatic drain system

Legs

- 6 position adjustable legs
- Pre drilled to accept pneumatic drain system option
- Predrilled floor anchor holes
- Legs ship in lowest position

Other

- Nameplate
- 2" drain with brass ball valve included
- Lifting lugs on the tank body



Selection Guide

The TKO series is designed to cover most liquid removal applications found in the marketplace. Use self selection guidelines and the chart below to find preferred TKO models based on your target flow rate. Please contact factory to discuss the proper product selection when there are large volumes of liquid, harsh process chemicals or extreme operating conditions.

Operating Guidelines for Self Selection

Vacuum Level (Absolute)	100 mbar	200 mbar	300 mbar	400-1000 mbar
High Temp Level	40°C (86°F)	50°C (104°F)	60°C (113°F)	65°C (150°F)

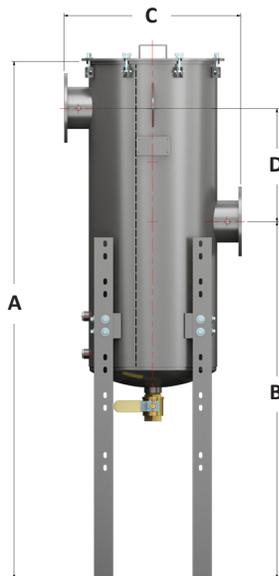
- Service range: Up to 1000 mbar absolute
- Fluids: water and non-corrosive oils
- No foaming substances

Note: Vacuum, temperature, and materials being separated can significantly affect performance. For any conditions outside of those listed, please contact factory to discuss your application specifics.

		Assembly Part Number		Pump Max Flow Rating (CFM)									
		5 micron 99+% particulate protection	1 micron 99+% particulate protection	175	300	400	520	700	1100	1800	2900		
3" FLANGE	Demister	TKO-F175D5-300F	TKO-F175D1-300F	■	■	■	■	■	■	■	■	■	■
	Wire mesh	TKO-F300W5-300F	TKO-F300W1-300F	■	■	■	■	■	■	■	■	■	■
4" FLANGE	Demister	TKO-F400D5-400F	TKO-F400D1-400F	■	■	■	■	■	■	■	■	■	■
	Wire mesh	TKO-F520W5-400F	TKO-F520W1-400F	■	■	■	■	■	■	■	■	■	■
6" FLANGE	Demister	TKO-F700D5-600F	TKO-F700D1-600F	■	■	■	■	■	■	■	■	■	■
	Wire mesh	TKO-F1100W5-600F	TKO-F1100W1-600F	■	■	■	■	■	■	■	■	■	■
8" FLANGE	Demister	TKO-F1100D5-800F	TKO-F1100D1-800F	■	■	■	■	■	■	■	■	■	■
	Wire mesh	TKO-F1800W5-800F	TKO-F1800W1-800F	■	■	■	■	■	■	■	■	■	■
10" FLANGE	Demister	TKO-F1850D5-1000F	TKO-F1850D1-1000F	■	■	■	■	■	■	■	■	■	■
	Wire mesh	TKO-F2900W5-1000F	TKO-F2900W1-1000F	■	■	■	■	■	■	■	■	■	■

- Suitable for use in this flow range
- Contact Solberg for review of application
- Not recommended for use at listed flowrate

Dimensions *(listed for reference only)*



	TKO300F	TKO400F	TKO600F	TKO800F	TKO1000F
A*	80 13/16"	78 1/4"	82 1/4"	82 1/4"	93 1/4"
B*	52 3/4"	52 3/4"	56 3/4"	56 3/4"	63 3/4"
C	20"	23 1/2"	29"	34 1/2"	40"
D	18"	18"	16 1/2"	16 1/2"	17"
ANSI FLANGE CONNECTION	3"	4"	6"	8"	10"
LIQUID CAPACITY	5 Gal.	9 Gal.	15 Gal.	24 Gal.	40 Gal.
UPPER ELEMENT SERVICE HEIGHT	10"	10"	15"	15"	15"
LOWER ELEMENT SERVICE HEIGHT	26"	28"	33"	33"	40"
UPPER ELEMENT	235 / 235Z	245 / 245Z	375 / 375Z	377 / 377Z	385 / 385Z
LOWER ELEMENT	230S / DM8	234S / DM12	274S / DM16	276S / DM20	384S / DM26

*Height can be adjusted up or down in 6" increments to a maximum of 12" in either direction.

Optional Equipment

Flange Adapters



FLANGE TO FLANGE	ADAPTER PART NUMBER	FACE TO FACE DIMENSION
300F to 400F	AD-400F/300F	3 1/2"
400F to 600F	AD-600F/400F	4 1/2"
600F to 800F	AD-800F/600F	5 1/2"
800F to 1000F	AD-1000F/800F	6 1/2"

STS Series

Benefits

- Prohibit liquid and debris from damaging vacuum valves & pumps
- Easy visual inspection with see-through housing
- Minimize piping costs with "T" style configuration
- Compact design for space restricted work areas
- Shuts off flow to prevent liquid bypass

Filtration Process (standard)



Pneumatic Drain System



The Pneumatic Drain System allows Solberg Liquid Separator units to be drained without stopping the process and breaking the vacuum. The liquid removed by the liquid separator flows under gravity into the drain pot. When the high level sensor detects the liquid, the drain pot is isolated from the liquid separator by the upper pneumatic ball valve. The bleed in valve then opens along with the bottom drain valve allowing the liquid to drain to atmosphere either by gravity (DSG) or forced by compressed air (DSP). When the lower level sensor triggers, the bleed-in valve closes along with the bottom drain valve and the upper pneumatic ball valve opens to allow the process to repeat.



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