

SERFILCO®

KNIGHT FILTRATION SYSTEMS

BULLETIN
F-217 A
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STEEL OR STAINLESS STEEL CONSTRUCTION

FEATURES

- Flow rates 1,500 - 9,000 GPH @ 60 Hz (7,875 - 28,350 LPH @ 50 Hz)
- Heavy duty cast 316 SS or cast iron centrifugal single or double seal pumps 1.0 - 5.0 HP (.75 - 3.2 kW)
- Heavy duty filter chambers carbon steel, 304SS or 316SS (rated to 150 PSI)
- High filter surface area (to 280 sq. ft solids loading area)
- Flow control valve between pump and filter chamber
- Differential, drain and vent ports standard on filter system chamber
- For use with stainless steel or polypropylene media (See Bulletins M-109 and M-309.)

The SERFILCO KNIGHT filtration systems feature the most durable pumps and filter chambers in our product line. They are designed to provide years of trouble-free service in demanding applications. The KNIGHT systems are intended for use where thermoplastic systems are unsuitable due to chemical and / or temperature limitations.

SYSTEM:

Models offer a choice of 304 or 316 stainless steel filter chamber with a cast centrifugal 316SS pump, or a carbon steel filter chamber with cast iron pump. Systems include a flow control valve between pump and filter, piping and 0-60 PSI pressure gage, all mounted on a rugged vinyl coated steel base plate.

FILTER CHAMBER:

The series 'K' filter chamber is available in carbon steel, 304 stainless steel, or 316 stainless with an EPDM cover gasket (Viton optional). The chamber is 150 PSI design with quick swing closure, and also includes differential, drain and vent parts.

PUMP:

The series 'HSS', cast 316 stainless steel, or 'HCI', cast iron, centrifugal pumps feature a compact, close-coupled design. A high efficiency, semi-open impeller minimizes clogging, and since the components are cast, there are no welds to break. Also, cast construction provides corrosion resistance that is superior to welded styles.

The pump is available with a single seal or with a double seal which uses external liquid as a flush. Motors are TEFC, 208-230-460V, 3 ϕ , 3450 RPM, 60 Hz.

KNIGHT FILTRATION SYSTEMS Specifications and ordering Information

The following systems and specifications depict a representative sampling of the Knight product line. Standard systems are shown for stainless steel or carbon steel construction. Stainless steel systems have a 304SS or 316SS filter chamber with a 316SS pump. Carbon steel systems have a carbon steel filter chamber with a cast iron pump. EPDM elastomers are standard for both.

Consult Sales Department for systems with self-priming pumps or for special systems featuring titanium pumps, Teflon lined chambers and special seals for use with external applications such as black oxide.

SPECIFICATIONS AND ORDERING INFORMATION

304 stainless steel chamber with 316SS pump- single mechanical seal

SYSTEM NUMBER ^{1,2,3}	FLOW		MAX. PUMP PSI	PUMP HP	MEDIA	SURFACE AREA sq. ft.*	CONNECTIONS SUCTION X DISCHARGE	DIMENSIONS L x W x H	SHIPPING WEIGHT lbs.
	GPH@ 60 Hz	LPH@ 50 Hz							
K4S6HSS110 K4S9HSS110 K4S12HSS110	1,500	4,725	21	1.0	3 - 20 " 3 - 30 " 3 - 40 "	21 32 42	1¼" NPT x 1½" NPT	30 x 13 x 37" 30 x 13 x 47" 30 x 13 x 57"	145 170 195
K4S12HSS215 K4S18HSS215	2,500	7,875	26	1.5	6 - 20 " 6 - 30 "	42 63	1¼" NPT x 2" NPT	33 x 18 x 37" 33 x 18 x 47"	180 205
K4S18HSS420 K4S24HSS420	3,500	11,025	30	2.0	6 - 30 " 6 - 40 "	63 84	1¼" NPT x 2" NPT	33 x 18 x 47" 33 x 18 x 57"	215 240
K4S18HSS620 K4S24HSS620	4,500	14,175	19	2.0	6 - 30 " 6 - 40 "	63 84	2" NPT x 2" NPT	33 x 18 x 47" 33 x 18 x 57"	225 250
K4S33HSS730 K4S44HSS730	7,500	23,625	28	3.0	11 - 30 " 11 - 40 "	116 154	2" NPT x 3" F	50 x 18 x 73" 50 x 18 x 83"	540 550
K4S44HSS950 K4S60HSS950 K4S80HSS950	9,000	28,350	32	5.0	11 - 40 " 20 - 30 " 20 - 40 "	154 210 280	2" NPT x 3" F	50 x 18 x 83" 50 x 18 x 74" 50 x 18 x 84"	550 610 620

¹ For Viton elastomers, add - V to System Number.

² For 316 stainless steel filter chamber change k4s to k6s in System Number.

³ For double mechanical seal pump change HSS to HSSD in System Number.

* with 2½" diameter nominal string wound cartridges. Order media separately. Refer to Bulletins M-109 and M-309.

Motors are TEFC, 230-460V/3φ/60 Hz. Consult Sales Dept. for explosion-proof, 50 Hz or 1φ motors.

KNIGHT FILTRATION SYSTEMS Specifications and ordering Information

Carbon steel chamber with cast iron pump – single mechanical seal

SYSTEM NUMBER ^{1,2}	FLOW		MAX. PUMP PSI	PUMP HP	MEDIA	SURFACE AREA sq. ft.*	CONNECTIONS SUCTION X DISCHARGE	DIMENSIONS L x W x H	SHIPPING WEIGHT lbs.
	GPH@ 60 Hz	LPH@ 50 Hz							
KS6HCI110 KS9HCI110 KS12HCI110	1,500	4,725	21	1.0	3 - 20 "	21	1 1/4" NPT x 1 1/2" NPT	30 x 13 x 37"	145
3 - 30 "					32	30 x 13 x 47"		170	
3 - 40 "					42	30 x 13 x 57"		195	
KS12HCI215 KS18HCI215	2,500	7,875	26	1.5	6 - 20 "	42	1 1/4" NPT x 2" NPT	33 x 18 x 37"	180
6 - 30 "					63	33 x 18 x 47"		205	
KS18HCI420 KS24HCI420	3,500	11,025	34	2.0	6 - 30 "	63	1 1/4" NPT x 2" NPT	33 x 18 x 47"	215
6 - 40 "					84	33 x 18 x 57"		240	
KS18HCI620 KS24HCI620	4,500	14,175	19	2.0	6 - 30 "	63	2" NPT x 2" NPT	33 x 18 x 47"	225
6 - 40 "					84	33 x 18 x 57"		250	
KS33HCI730 KS44HCI730	7,500	23,625	28	3.0	11 - 30 "	116	2" NPT x 3" F	50 x 18 x 73"	510
11 - 40 "					154	50 x 18 x 83"		520	
KS44HCI950 KS60HCI950 KS80HCI950	9,000	28,350	39	5.0	11 - 40 "	154	2" NPT x 3" F	50 x 18 x 83"	520
20 - 30 "					210	50 x 18 x 74"		580	
20 - 40 "					280	50 x 18 x 84"		590	

¹ For Viton elastomers, add -V to System Number.

² For double mechanical seal pump change HCI to HCID in System Number.

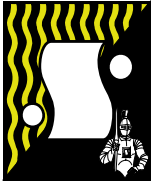
* with 2 1/2" diameter nominal string wound cartridges. Order media separately. Refer to Bulletins M-109 and M-309.

Motors are TEFC, 230-460V/3φ/60 Hz. Consult Sales Dept. for explosion-proof, 50 Hz or 1φ motors.

OPTIONAL EQUIPMENT

DESCRIPTION	PRICE CODE NO.
MOTOR STARTER - Assembled & installed Specify operating voltage. Watertight NEMA 4X magnetic push-button with overload protection. For Start / Stop operation	O-MS3P
As above, but includes low voltage control circuit required for use with Dri-Stop 2R	O-MS3P-S

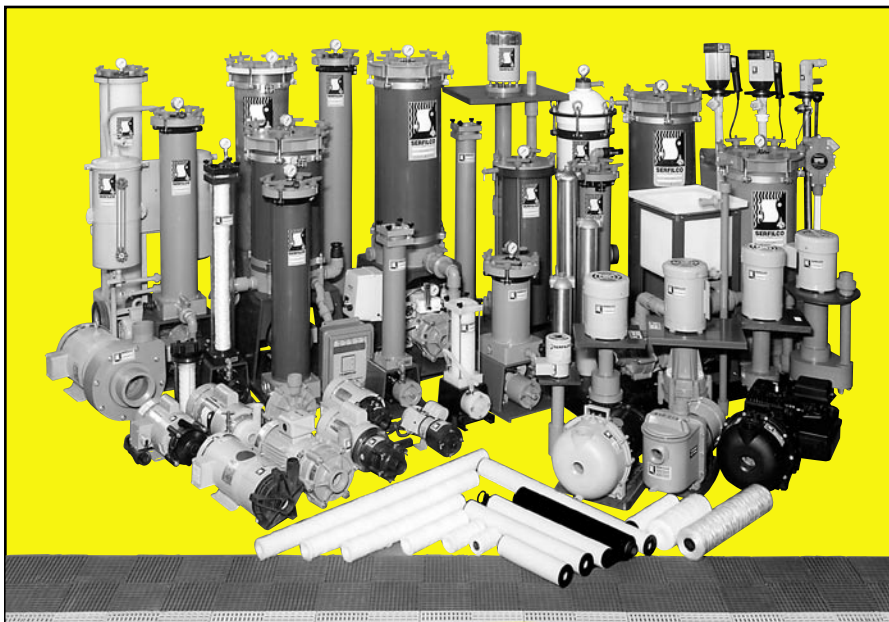
DESCRIPTION	PRICE CODE NO.
Dri-Stop® 2R Recommended for use with double mechanical water flush seal pump. Automatically de-energizes pump motor when cooling water flow is interrupted. Eliminates costly dry run repairs. Requires MS3P-S motor starter, electric and water source.	O-2DS2R



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