

Alfa Laval / DE LAVAL / Tetra Pak



- Contherm Heat Exchangers
- Control & Indication
- Curd Mill Parts
- Heat Transfer/ Plate Heat Exchangers
- Plant Components
- Pumps - Centrifugal, Positive Displacement
- Separators
- Tank Equipment, Processing Accessories
- Valves



Since 1964

HARCO
ENTERPRISES LTD.

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Peterborough, ON
K9J 7K2

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705-743-5361
Fax: 705-743-4312

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sales@harco.on.ca

Alfa Laval / DE LAVAL / Tetra Pak



FITTINGS

See Fittings Section for more



HEAT EXCHANGERS

See Heat Exchangers Section for more



PUMPS

See Pumps Section for more



SEPARATORS

See Separators Section for more



VALVES

See Valves Section for more

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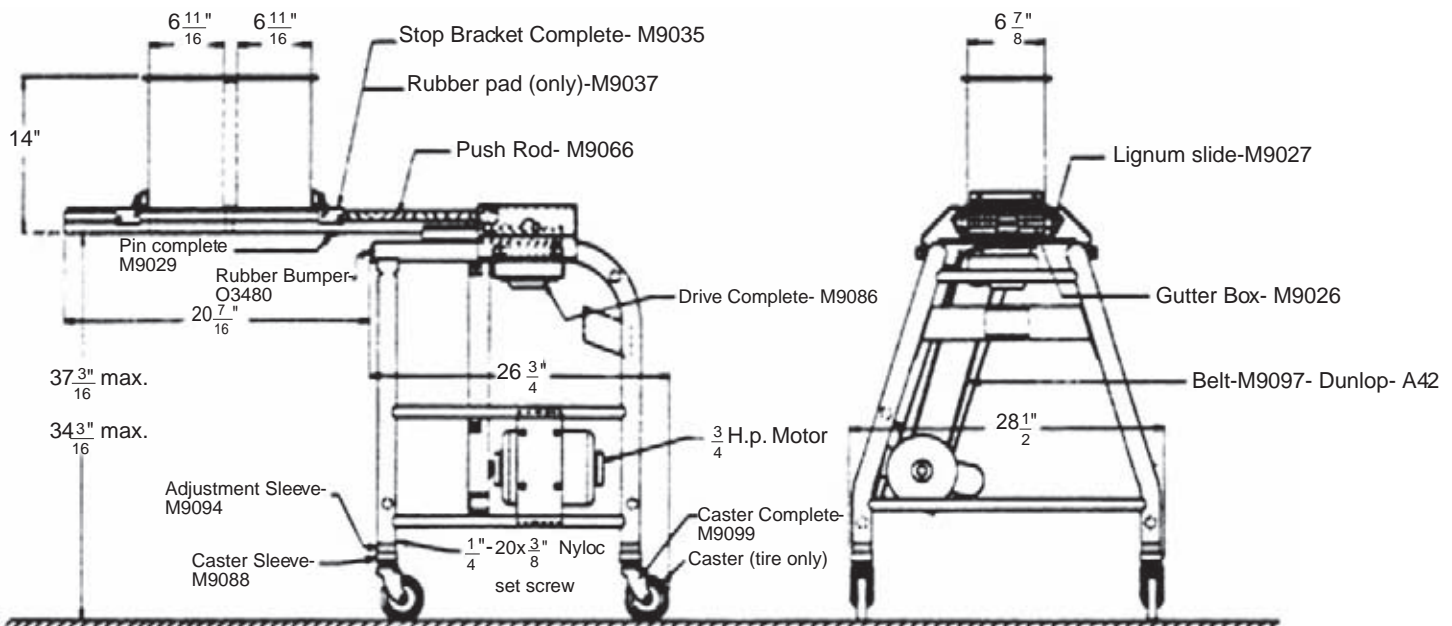
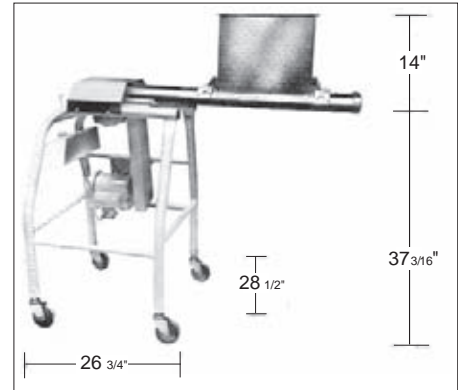
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Stainless Steel Curd Mill Parts

Replacement Of White Neoprene Rubber Pads

- A. Remove old pad and clean all traces of adhesive from the stainless steel pad bracket. To thoroughly clean this bracket a solvent must be used. This solvent consists of equal parts Acetone and Naptha gasoline. **(Caution: this is HIGHLY FLAMMABLE.)** After cleaning, coat the bracket with a thin layer of adhesive. Assemble on curd mill together with the cutting grid on the Curd Mill frame.
- B. Thoroughly clean the new rubber pad on the surface to be glued, using the same solvent as described above; then coat the pad with a thin layer of adhesive. Allow both surfaces to dry for 30 minutes before placing rubber on the stop bracket, using the cutting grid as a location guide for the pad.
- C. Carefully remove the stop bracket with pad from the mill and clamp rubber firmly to the bracket using a piece of wood against the rubber. Allow to set for 24 hours.

The solvent and adhesive referred to above may be obtained from HARCO.



PLEASE NOTE: The majority of parts are still available

Plant Components

The experts' choice



HARCO

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1-800-743-5361

The experts' range of plant components

Our extensive range of standard high-grade plant components helps to satisfy the demands on installing, running and maintaining food production lines. After discussions with you, we can recommend/select units that are best suited to processing conditions and the properties of the food being produced such as density, viscosity and other flow characteristics.

Among other questions considered are: how can we combine the best performance with gentle product handling? Are components needed for sanitary or non-sanitary use, for hygienic or aseptic processing? What is the optimal capacity of components for high production efficiency while minimising energy costs?

The following component categories available from Tetra Pak contribute to a fast return on investment and minimal life-cycle costs.

- Valves
- Pumps
- Measuring instruments
- Integration components
- Automation and electrical components



Valves



This category of plant components covers a wide range of valves for both sanitary (e.g. aseptic processing) and non-sanitary (primarily utilities and media) applications.

Sanitary valves

- Mixproof
- Shut-off and changeover
- Sampling
- Regulating

Non-sanitary valves

- Shut-off
- Regulating

Simple yet smart design

The simple yet smart design of valves supplied by Tetra Pak accounts for their popularity. They incorporate corrosion-free materials, and they are precision-engineered and simple to clean. Therefore you gain smooth and flexible operation, high standards of hygiene, low-cost maintenance, and a long and reliable lifetime.

Automation option

As a valve option, we can integrate a control unit that is mounted on top of a valve and that can control up to three valves simultaneously. Different interfaces allow trouble-free communication with a central control room.

Pumps



The highly efficient pumps supplied by Tetra Pak provide precision pumping for all kinds of fluids with different viscosities, and the desired functionality for gentle and cost-effective food production.

Sanitary pumps

- Centrifugal pumps for standard and heavy-duty applications
- Rotary lobe pumps
- Liquid ring pumps

Non-sanitary pumps for media

- Hot-water pumps
- Vacuum pumps

Brief descriptions of the main types of sanitary pump are given below.

Centrifugal pumps – the premium pumps and standard duty pumps in this range are excellent for moving product through a system gently and efficiently. For special applications, we offer multi-stage, high-pressure, self-priming, and high-purity water pumps.

Rotary lobe pumps – the optimum solution for ultra-clean processes. They incorporate a universal mounting and provide highly efficient pumping of liquids over a wide range of viscosity. With their efficient, front-loading primary seal options and unique self-cleaning rotor retention device, these pumps offer maximum hygiene integrity.

Liquid ring pumps – provide a number of options for pumping liquids containing gases. The liquid ring is self-priming when at least half filled with liquid, enabling it to pump from a suction line partly filled with air, thus making these pumps ideal as return pumps in CIP systems.

All pumps tolerate CIP for optimal hygiene and minimal downtime, undergo low wear and tear, and ensure easy low-cost maintenance.

Measuring instruments



In keeping with its comprehensive approach to plant components, Tetra Pak supplies an extensive range of measuring instruments. This is a specialist area that you can discuss in depth with us to ensure that we satisfy your process monitoring needs.

The main areas covered are:

- Flow metering
- Pressure transmitters
- Level measurement
- Temperature measurement
- Analysers

In addition to project work we supply complete instruments as replacement parts, and service kits.

Our Tetra PlantCare™ maintenance concept includes the supply of plant components, as well as pump and valve service and instrument calibration by certified personnel. The latter service complies with ISO 10012:2003 including the calibration results as found, required adjustments, calibration results as left, certificates and labels.

Flow metering – measured as volumetric or mass flow rate. Electromagnetic flow meters for volumetric flow rate are supplied for both basic and demanding applications. Mass flow meters for liquids with or without conductivity include brix metering as well as density and viscosity monitoring.

Pressure transmitters – for monitoring pressure and liquid levels.

Level measurement – either level guards (switches) or continuous monitoring based on different measurement techniques.

Temperature measurement – sensors and meters for the control and supervision of temperature.

Conductivity measurement – for both alkalis and acids.

pH measurement – direct inline monitoring using glass-free sensors that can be retracted during CIP operations.

Integration components



This category of plant components comprises those units that are required to integrate the key components, valves and pumps of diverse processing modules, systems and lines.

The main components are:

- **Installation material**
 - fittings, bends, tees, reducers, tubing, pipe supports
- **Strainers**
- **Tank equipment**
 - manhole covers, agitators, sight glasses, sampling valves, tank legs
- **Cleaning equipment**
 - spray balls, rotary spray balls, rotary jet heads
- **Steam accessories**
 - steam filters, separators and traps
- **Other typical components**
 - air accessories, filters, hoses, pipe holders, unions, etc.

Uniform high quality

Integration components must comply with the same stringent quality standards as the equipment they join together. It is important that products are uniform, especially in regard to material quality, wall thickness, problem-free welding, tolerances and surface finish. Various options in addition to standard rubber seals include nitrile, fluorine and ethylene rubber. Typical standards followed include SMS, ISO, BS, IDF and DIN.

Automation and electrical components



Components for control panels and electrical circuits supplied by Tetra Pak are almost exclusively used in project work. However, certain components are kept in stock to serve customers who want to make changes to installed control panels, or to replace certain components because of wear and tear.

Typical automation and electrical components stocked by Tetra Pak are:

- PLC parts
- Recorders
- Signal transducers
- Fuses and circuit breakers
- Power supplies
- Frequency converters
- Motor drives
- Motor starters

As with all other components supplied by Tetra Pak, you get added value in the form of specialist knowledge, personal service and production security.



ENTERPRISES LTD

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Proven Performance and Reliability

SCPP 1 Circumferential Piston Pump

Application

The SCPP range of positive displacement pumps have been designed for use on a wide range of applications within: Dairy, Food, Beverage, Pharma and Personal Care markets. The highly efficient design is particularly suited to applications that are low in viscosity with medium to high discharge pressures.

Standard Design

Pump Gearbox The SCPP pump with its circumferential piston pump design concept has a cast iron gearbox which provides maximum shaft rigidity. Gear box is powder-coated. Stainless steel gear box is optional on models 006, 015, 018, 030, 045, 060 & 130. One-piece 316L stainless steel shafts are standard on models 006, 015 & 018. High-strength 17-4 PH one-piece shafts are standard on models 030, 045, 060, 130, 220 & 320. Four-way mounting allows horizontal or vertical porting and provides mounting flexibility.

Pumphead Construction The SCPP in standard specification has pump casing in AISI 316 stainless steel with an internal surface finish of Ra 32/Ra 0.8 complying to 3A standards. Rotors are made of special non-galling alloy and are available as standard with twin-wing form or optionally with single wing for handling large solids. Seal options include single O-ring seal, single mechanical seal, double O-ring seal with flush, or double mechanical seal with flush.



Pump Performance

SCPP 1 Model	Nominal Capacity		Displacement per Revolution		Maximum Pressure		Temperature Range		Standard Ports		Optional Ports		Maximum Speed (RPM)
	US		US		Bar	PSI	Deg. C	Deg. F	mm	in.	mm	in.	
	M ³ /hr	GPM	Litre	Gal.									
006	1.3	6.0	0.030	0.008	14	200	-40° to 150°	-40° to 300°	25	1.0	38.0	1.5	800
015	2.0	9.0	0.052	0.014	14	200	-40° to 150°	-40° to 300°	38	1.5	-	-	700
018	3.8	17.0	0.110	0.030	14	200	-40° to 150°	-40° to 300°	38	1.5	51.0	2.0	600
030	8.2	36.0	0.230	0.060	14	200	-40° to 150°	-40° to 300°	38	1.5	51.0	2.0	600
045	13.3	59.0	0.380	0.100	27	400	-40° to 150°	-40° to 300°	51	2.0	-	-	600
060	20.4	90.0	0.580	0.150	14	200	-40° to 150°	-40° to 300°	64	2.5	76.0	3.0	600
130	34.1	150.0	0.960	0.250	14	200	-40° to 150°	-40° to 300°	76	3.0	-	-	600
220	70.4	310.0	1.980	0.520	14	200	-40° to 150°	-40° to 300°	102	4.0	-	-	600
320	102.0	450.0	2.850	0.750	14	200	-40° to 150°	-40° to 300°	152	6.0	-	-	600

SCPP 1 Rectangular Flange Model	Nominal Capacity		Displacement per Revolution		Maximum Pressure		Temperature Range		Inlet (W x L)		Outlet		Maximum Speed (RPM)
	US		US		Bar	PSI	Deg. C	Deg. F	mm	in.	mm	in.	
	M ³ /hr	GPM	Litre	Gal.									
024	2.5	11.6	0.11	0.03	14	200	-40° to 150°	-40° to 300°	33.27 x 125.22	1.31 x 4.93	38.1	1.5	400
034	5.4	24.0	0.22	0.06	14	200	-40° to 150°	-40° to 300°	44.50 x 171.45	1.75 x 6.75	50.8	2.0	400
064	13.6	60.0	0.57	0.15	14	200	-40° to 150°	-40° to 300°	56.90 x 224.03	2.24 x 8.82	57.2	2.5	400
134	22.7	100.0	0.96	0.25	14	200	-40° to 150°	-40° to 300°	75.44 x 234.95	2.97 x 9.25	76.2	3.0	400
224	45.4	200.0	1.97	0.52	14	200	-40° to 150°	-40° to 300°	98.30 x 279.40	3.87 x 11.00	101.6	4.0	400

Hot clearances required for high temperature operation.

Materials of Construction

Pump gearbox – high quality grey cast iron. Pumphead – product wetted components in 316L and rotors in special non-galling material. Product wetted elastomers EPDM, NBR, FPM all FDA conforming.

Shaft Sealing Options

...for different liquids and conditions of service

Single O-Ring Seals

- Standard O-rings and Cover Seals: Buna
- Optional O-rings and Cover Seals: FPM, EPDM, Silicone



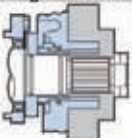
Double O-Ring Seals with Flush

- Standard O-rings and Cover Seals: Buna
- Optional O-rings and Cover Seals: FPM, EPDM, Silicone



Single Mechanical Seals

- Standard Seal Faces: SiC/SiC
- Standard O-rings and Cover Seals: Buna
- Optional Faces: Carbon, Ceramic
- Optional O-rings and Cover Seals: FPM, EPDM, Silicone



Double Mechanical Seals with Flush


- Standard Seal Faces: SiC/SiC
- Standard O-rings and Cover Seals: Buna
- Optional Faces: Carbon, Ceramic
- Optional O-rings and Cover Seals: FPM, EPDM, Silicone



Twin Wing Rotors Standard.
Provides minimum pulsation.



Single Wing Rotors Optional.
Provides reduced shear on shear sensitive fluids or large solids such as fruit pieces, nut kernels, cheese curds or meats.



Remanufacturing Value

We offer unrivaled value by remanufacturing worn Alfa Laval or competitor circumferential piston pumps to like-new condition, providing you with increased efficiency and reduced slip for enhanced productivity. Alfa Laval will replace all parts except the cover, pump case, gear case in their remanufacturing process, and provide you a one-year warranty on the work. Machined in increments as required by wear, the pump case and cover are outfitted with corresponding oversized rotors. The SCPP 1 can be remanufactured up to 4 times, and the SCPP 2 up to three times for unmatched savings. Alfa Laval remanufacture and complete factory tests to ensure your pumps perform from day one and beyond. Best of all, having your pumps remanufactured by Alfa Laval gets you all of our improved features such as:

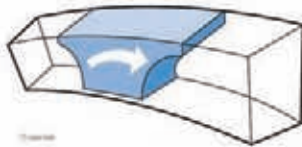
- One-piece shafts
- Helical timing gears for higher load carrying and quieter operation
- Stainless steel bearing retainers for increased corrosion resistance



Alfa Laval Positive Displacement Circumferential Piston Pumping Principle



Alfa Laval rotor wings (pistons) rotate around the circumference of the channel in the pump casing. This continuously generates a partial vacuum at the suction port as the rotors unmesh, causing fluid to enter the pump. The fluid is transported around the channel by the rotor wings, and is displaced as the rotor wings re-mesh, generating pressure at the discharge port. Direction of flow is reversible.



The deep channels in which the rotors travel provide large voids to minimize shear and bruising of solids.



The rotors are made of non-galling alloy, allowing extremely tight clearances between rotating and stationary surfaces, which ensures high efficiency and metering accuracy, even on thin liquids.



The hub of each non-galling rotor rotates in a recess in the pump head to minimize deflection even at high discharge pressures.



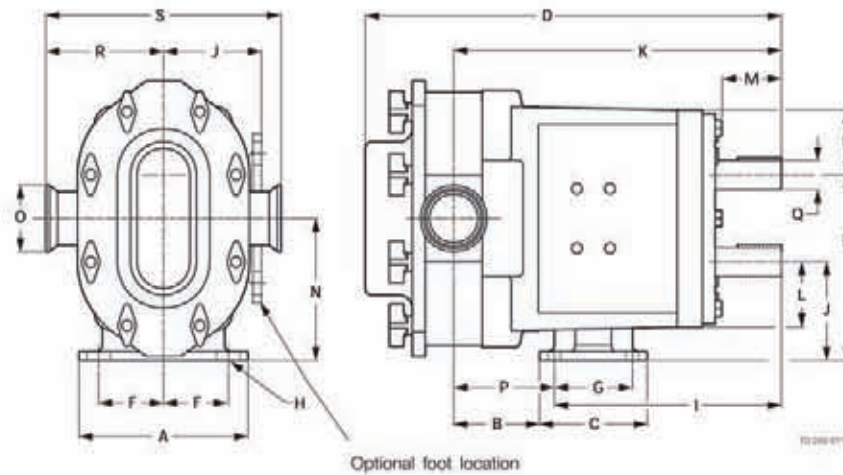
Suction

Discharge

Unique Cleaning and Maintenance Features

- Designed for easy strip cleaning, the pump casing is independently fastened to the gearbox to prevent damage to the seals when the cover is removed, and to allow the rotors to be turned while spraying down the fluid chamber
- Bearing retainers are stainless steel, not carbon steel, ensuring longer life under harsh cleaning conditions.
- Grease fittings are threaded, not pressed in, to prevent accidental removal during greasing.

Dimensions



Optional foot location

(mm)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Weight
0060	121	59	81	303	140	49	59	9.5 x 8 (slot)	173	74	244	46	51	107	38	71	22.23	89	177	24 kg
0150	121	59	81	303	140	49	59	9.5 x 8 (slot)	173	74	244	46	51	107	38	71	22.23	89	177	24 kg
0180	121	59	81	316	140	49	59	9.5 x 8 (slot)	173	74	250	46	51	107	38	77	22.23	90	180	24 kg
0300	159	71	108	369	174	61	66	11 x 11 (slot)	197	90	295	67	59	132	38	98	31.75	108	216	45 kg
0450	210	105	149	480	243	89	105	14 x 13 (slot)	258	129	392	89	55	186	51	134	41.28	136	273	132 kg
0600	210	105	149	480	243	89	105	14 x 13 (slot)	258	129	385	89	55	186	63	127	41.28	136	273	132 kg
1300	210	122	149	499	243	89	105	14 x 13 (slot)	257	129	401	89	55	186	76	144	41.28	136	273	142 kg
2200	216	129	229	592	314	95	184	14 x 5 (slot)	324	162	470	114	67	238	102	146	50.80	168	337	252 kg
3200	305	105	295	766	353	133	203	16 Ø	420	175	557	129	103	264	152	136	60.45	203	406	477 kg

(in)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Weight
0060	4.75	2.34	3.20	12.04	5.50	1.94	2.31	0.375 x 0.31 (slot)	6.82	2.93	9.61	1.81	2.00	4.21	1.50	2.79	0.875	3.49	6.97	53 lb
0150	4.75	2.34	3.20	12.04	5.50	1.94	2.31	0.375 x 0.31 (slot)	6.82	2.93	9.61	1.81	2.00	4.21	1.50	2.79	0.875	3.49	6.97	53 lb
0180	4.75	2.34	3.20	12.46	5.50	1.94	2.31	0.375 x 0.31 (slot)	6.82	2.93	9.84	1.81	2.00	4.21	1.50	3.02	0.875	3.55	7.09	53 lb
0300	6.25	2.78	4.25	14.52	6.86	2.42	2.56	0.438 x 0.44 (slot)	7.77	3.56	11.61	2.62	2.32	5.21	1.50	3.84	1.250	4.25	8.50	99 lb
0450	8.25	4.14	5.87	18.91	9.56	3.50	4.12	0.56 x 0.50 (slot)	10.14	5.06	15.42	3.50	2.15	7.31	2.00	5.28	1.625	5.38	10.75	290 lb
0600	8.25	4.14	5.87	18.73	9.56	3.50	4.12	0.56 x 0.50 (slot)	10.14	5.06	15.14	3.50	2.15	7.31	2.50	5.00	1.625	5.37	10.75	290 lb
1300	8.25	4.79	5.87	19.66	9.56	3.50	4.12	0.56 x 0.50 (slot)	10.12	5.06	15.77	3.50	2.15	7.31	3.00	5.65	1.625	5.37	10.75	312 lb
2200	8.50	5.07	9.00	23.29	12.38	3.75	7.25	0.56 x 0.19 (slot)	12.74	6.38	18.49	4.50	2.63	9.38	4.00	5.75	2.000	6.63	13.25	555 lb
3200	12.00	4.12	11.63	30.17	13.88	5.25	8.00	0.66 Ø	16.55	6.88	21.92	5.06	4.06	10.38	6.00	5.37	2.375	8.00	16.00	1050 lb

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The information contained herein is correct at the time of issue, but may be subject to change without prior notice.

How to contact Alfa Laval
 Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.



Proven Performance and Reliability

SCPP 2 Circumferential Piston Pump

Application

The SCPP range of positive displacement pumps have been designed for use on a wide range of applications within: Dairy, Food, Beverage, Pharma and Personal Care markets. The highly efficient design is particularly suited to applications that are low in viscosity with medium to high discharge pressures.

Clean-In-Place

Optional internal flush ports for increased exposure of O-rings and rotor hubs to the flushing liquid. A flat body profile is also available which allows drainability when pump ports are in the vertical position.

Standard Design

Pump Gearbox The SCPP pump with its circumferential piston pump design concept has a cast iron gearbox which provides maximum shaft rigidity. Gear box is powder-coated. 17-4 PH High-Strength steel shafts on all sizes. Four-way mounting allows horizontal or vertical porting and provides mounting flexibility.

Pumphead Construction The SCPP in standard specification has pump casing in AISI 316 stainless steel with an internal surface finish of Ra 32/Ra 0.8 complying to 3A standards. Rotors are made of special non-galling alloy and are available as standard with twin-wing form or optionally with single wing for handling large solids. Seal options include single mechanical seal or double mechanical seal with flush.



Pump Performance

SCPP 2 Model	Nominal Capacity		Displacement per Revolution		Maximum Pressure		Temperature Range		Standard Ports		Optional Ports		Maximum Speed (RPM)
	US		Litre	US Gal.	Bar	PSI	Deg. C	Deg. F	mm	in.	mm	in.	
	M ³ /hr	GPM											
006	1.8	8	0.030	0.008	21	300	-40° to 150°	-40° to 300°	25.4	1.0	38.0	1.5	1000
015	2.5	11	0.052	0.014	17	250	-40° to 150°	-40° to 300°	38.0	1.5	-	-	800
018	4.5	20	0.108	0.029	14	200	-40° to 150°	-40° to 300°	38.0	1.5	51.0	2.0	700
030	8.2	39	0.227	0.060	17	250	-40° to 150°	-40° to 300°	38.0	1.5	51.0	2.0	600
045	13.2	58	0.366	0.096	31	450	-40° to 150°	-40° to 300°	51.0	2.0	-	-	600
060	20.4	90	0.568	0.150	21	300	-40° to 150°	-40° to 300°	64.0	2.5	76.0	3.0	600
130	34.1	150	0.948	0.250	14	200	-40° to 150°	-40° to 300°	76.0	3.0	-	-	800
180	52.2	230	1.450	0.383	31	450	-40° to 150°	-40° to 300°	76.0	3.0	-	-	600
210	68.1	300	1.890	0.500	34	500	-40° to 150°	-40° to 300°	102.0	4.0	-	-	600
220	70.4	310	1.950	0.516	21	300	-40° to 150°	-40° to 300°	102.0	4.0	-	-	600

SCPP 2 Rectangular Flange Model	Nominal Capacity		Displacement per Revolution		Maximum Pressure		Temperature Range		Inlet (W x L)		Outlet		Maximum Speed (RPM)
	US		Litre	Gal.	Bar	PSI	Deg. C	Deg. F	mm	in.	mm	in.	
	M ³ /hr	GPM											
024	2.5	11.6	0.11	0.03	14	200	-40° to 150°	-40° to 300°	33.27 x 125.22	1.31 x 4.63	38.1	1.5	400
034	5.4	24.0	0.23	0.06	14	200	-40° to 150°	-40° to 300°	44.60 x 171.45	1.75 x 6.75	38.1	1.5	400
064	13.6	60.0	0.57	0.15	14	200	-40° to 150°	-40° to 300°	56.90 x 224.03	2.24 x 8.82	57.15	2.5	400
134	22.7	100.0	0.95	0.25	14	200	-40° to 150°	-40° to 300°	75.44 x 234.95	2.97 x 9.25	76.2	3.0	400
224	45.4	200.0	1.95	0.52	14	200	-40° to 150°	-40° to 300°	98.30 x 279.40	3.87 x 11.00	101.6	4.0	400

Hot clearances required for high temperature operation.

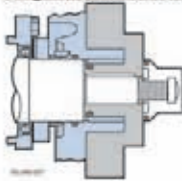
Materials of Construction

Pump gearbox – high quality grey cast iron. Pumphead – product wetted components in 316L and rotors in special non-galling material. Product wetted elastomers EPDM, NBR, FPM all FDA conforming. Also PTFE for chemical applications.

Shaft Sealing Options

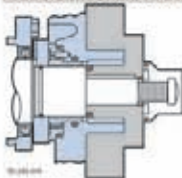
...for different liquids and conditions of service

Single Mechanical Seals



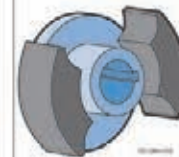
- Standard Seal Faces: SiC/SiC
- Standard O-rings and Cover Seals: Buna
- Optional Faces: Carbon, Ceramic
- Optional O-rings and Cover Seals: FPM, EPDM, Silicone

Double Mechanical Seals with Flush

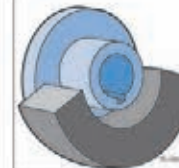


- Standard Seal Faces: SiC/SiC
- Standard O-rings and Cover Seals: Buna
- Optional Faces: Carbon, Ceramic
- Optional O-rings and Cover Seals: FPM, EPDM, Silicone

Twin Wing Rotors Standard.
Provides minimum pulsation.



Single Wing Rotors Optional.
Provides reduced shear on shear sensitive fluids or large solids such as fruit pieces, nut kernels, cheese curds or meats.



Remanufacturing Value

We offer unrivaled value by remanufacturing worn Alfa Laval or competitor circumferential piston pumps to like-new condition, providing you with increased efficiency and reduced slip for enhanced productivity. Alfa Laval will replace all parts except the cover, pump case, gear case in their remanufacturing process, and provide you a one-year warranty on the work. Machined in increments as required by wear, the pump case and cover are outfitted with corresponding oversized rotors. The SCPP 1 can be remanufactured up to 4 times, and the SCPP 2 up to three times for unmatched savings. Alfa Laval remanufacture and complete factory tests to ensure your pumps perform from day one and beyond. Best of all, having your pumps remanufactured by Alfa Laval gets you all of our improved features such as:

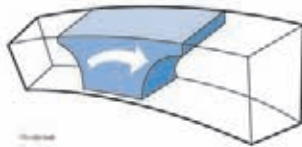
- One-piece shafts
- Helical timing gears for higher load carrying and quieter operation
- Stainless steel bearing retainers for increased corrosion resistance



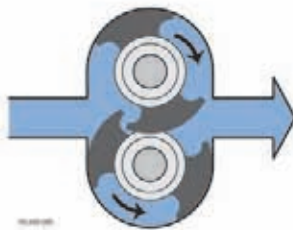
Alfa Laval Positive Displacement Circumferential Piston Pumping Principle



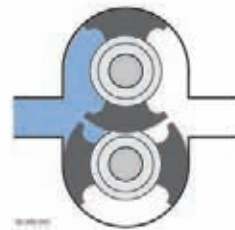
Alfa Laval rotor wings (pistons) rotate around the circumference of the channel in the pump casing. This continuously generates a partial vacuum at the suction port as the rotors unmesh, causing fluid to enter the pump. The fluid is transported around the channel by the rotor wings, and is displaced as the rotor wings converge, generating pressure at the discharge port. Direction of flow is reversible.



The deep channels in which the rotors travel provide large voids to minimize shear and bruising of solids.



The rotors are made of non-galling alloy, allowing extremely tight clearances between rotating and stationary surfaces, which ensures high efficiency and metering accuracy, even on thin liquids.



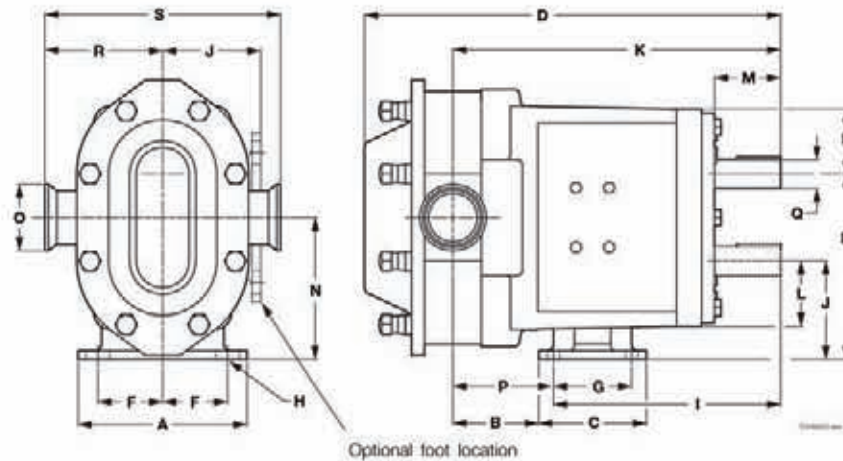
The hub of each non-galling rotor rotates in a recess in the pump head to minimize deflection even at high discharge pressures.



Suction

Discharge

Dimensions



(mm)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q Ø	R	S	Weight
006	121	50	95	297	140	49	59	9.5 x 8 (slot)	173	74	244	54	51	107	38	71	22.23	89	177	24 kg
015	121	50	95	297	140	49	59	9.5 x 8 (slot)	173	74	244	54	51	107	38	71	22.23	89	177	24 kg
018	121	55	95	314	140	49	59	9.5 x 8 (slot)	173	74	250	54	51	107	38	77	22.23	89	177	24 kg
030	159	71	108	368	174	59	65	11 x 11 (slot)	197	90	295	67	59	132	38	98	31.75	108	216	45 kg
045	210	98	149	472	243	89	105	14 x 13 (slot)	257	129	377	89	57	186	51	120	41.28	136	273	132 kg
060	210	105	149	486	243	89	105	14 x 13 (slot)	257	129	385	89	57	186	53	127	41.28	136	273	132 kg
130	210	121	149	512	243	89	105	14 x 13 (slot)	257	129	401	89	57	186	76	144	41.28	136	273	142 kg
180	216	88	229	591	314	95	184	14 x 13 (slot)	357	162	450	114	70	238	76	107	50.8	166	332	238 kg
210	305	88	295	688	353	133	203	16 Ø	420	175	539	129	103	264	102	119	60.33	187	374	395 kg
220	216	94	229	610	314	95	184	14 x 5 (slot)	357	162	470	114	70	238	102	113	50.80	168	337	252 kg

(in)

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q Ø	R	S	Weight
006	4.75	1.95	3.75	11.71	5.50	1.94	2.31	0.375 x 0.31 (slot)	6.82	2.93	9.61	2.12	2.00	4.21	1.50	2.79	0.875	3.49	6.97	53 lb.
015	4.75	1.95	3.75	11.71	5.50	1.94	2.31	0.375 x 0.31 (slot)	6.82	2.93	9.61	2.12	2.00	4.21	1.50	2.79	0.875	3.49	6.97	53 lb.
018	4.75	2.18	3.75	12.37	5.50	1.94	2.31	0.375 x 0.31 (slot)	6.82	2.93	9.84	2.12	2.00	4.21	1.50	3.02	0.875	3.49	6.97	53 lb.
030	6.25	2.78	4.25	14.49	6.88	2.31	2.56	0.438 x 0.44 (slot)	7.77	3.58	11.61	2.62	2.32	5.21	1.50	3.84	1.250	4.25	8.50	99 lb.
045	8.25	3.86	5.87	18.59	9.56	3.50	4.12	0.56 x 0.50 (slot)	10.13	5.06	14.86	3.50	2.25	7.31	2.00	4.73	1.625	5.37	10.75	290 lb.
060	8.25	4.14	5.87	19.14	9.56	3.50	4.12	0.56 x 0.50 (slot)	10.13	5.06	15.14	3.50	2.25	7.31	2.50	5.01	1.625	5.37	10.75	290 lb.
130	8.25	4.78	5.87	20.15	9.56	3.50	4.12	0.56 x 0.50 (slot)	10.12	5.06	15.77	3.50	2.25	7.31	3.00	5.05	1.625	5.37	10.75	312 lb.
180	8.50	3.45	9.00	23.26	12.38	3.75	7.25	0.56 x 0.50 (slot)	14.05	6.38	17.75	4.50	2.75	9.38	3.00	4.20	2.000	6.53	13.06	528 lb.
210	12.00	3.45	11.63	27.08	13.88	5.25	8.00	0.66 Ø	16.54	6.88	21.24	5.06	4.06	10.38	4.00	4.70	2.375	7.37	14.73	870 lb.
220	8.50	3.69	9.00	24.00	12.38	3.75	7.25	0.56 x 0.19 (slot)	14.05	6.38	18.49	4.50	2.75	9.38	4.00	4.44	2.000	6.63	13.25	555 lb.

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The information contained herein is correct at the time of issue, but may be subject to change without prior notice.

How to contact Alfa Laval
 Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information direct.