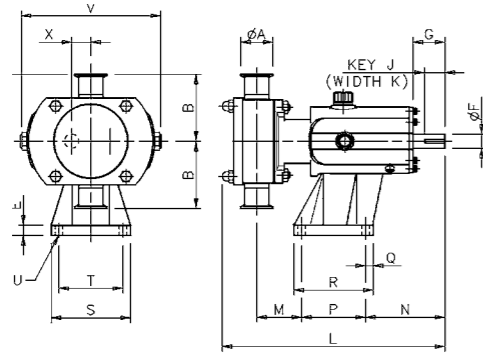
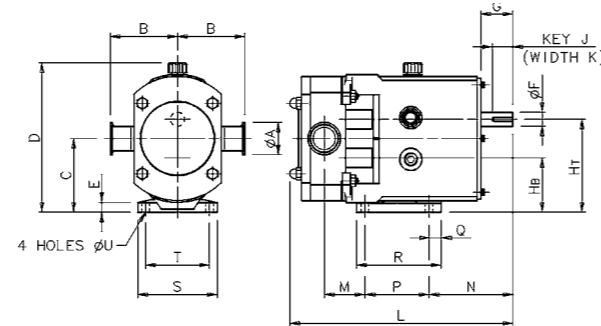


Bareshaft Pump Dimensions

Vertically ported



Horizontally ported



Vertically ported

All dimensions in mm

Pump Model	A1	A2	B	C	D	E	F	G	J	K	L	M	N	P	Q	R	S	T	U	V	X
S1-0005-V08 S1-0008-V05	25 25	- 40	95 95	113 113	208 208	15 15	16 16	40 40	30 30	5 5	285 295	49 55	117 117	80 80	22 22	114 114	104 104	80 80	10 10	179 179	22.5 22.5
S2-0013-V10 or V15 S2-0018-V07 or V10	25 40	40 50	105 105	147 147	252 252	15 15	22 22	50 50	32 32	6 6	339 348	67 70	124 124	100 100	12 12	124 124	124 124	100 100	12 12	219 219	30 30
S3-0027-V10 or V15 S3-0038-V07 or V10	40 50	50 65	125 125	175 175	300 300	22 22	28 28	61 61	40 40	8 8	437 450	67.5 72	161 161	155 155	15 15	185 185	155 155	125 125	14 14	253 253	37.5 37.5
S4-0055-V10 or V20 S4-0079-V07 or V15	50 65	65 80	150 150	213 213	363 363	25 25	38 38	80 80	63 63	10 10	541 558	78 87	197 197	200 200	17 17	234 234	184 184	150 150	14 14	307 307	48 48
S5-0116-V10 or V20 S5-0168-V07 or V15	65 80	80 100	175 175	256.5 256.5	431.5 431.5	30 30	45 45	110 110	70 70	14 14	627 650	91.5 103	264 264	200 200	20 20	240 240	220 220	180 180	14 14	345 345	60 60
S6-0260-V10 or V20 S6-0353-V07 or V15	100 100	100 150	190 190	295 295	485 485	30 30	48 48	110 110	70 70	14 14	748 777	124 139	267 267	260 260	20 20	300 300	250 250	210 210	14 14	400 400	70 70

A1: Standard Port A2: Enlarged Port

Horizontally ported

All dimensions in mm

Pump Model	A1	A2	B	C	D	E	F	G	HB	HT	J	K	L	M	N	P	Q	R	S	T	U
S1-0005-H08 S1-0008-H05	25 25	- 40	95 95	90.5 90.5	189 189	10 10	16 16	40 40	68 68	113 113	30 30	5 5	285 295	42 48	124 124	80 80	10 10	100 100	100 100	80 80	10 10
S2-0013-H10 or H15 S2-0018-H07 or H10	25 40	40 50	105 105	115 115	233 233	15 15	22 22	50 50	85 85	145 145	32 32	6 6	339 348	60 63	131 131	100 100	19 19	132 132	124 124	100 100	12 12
S3-0027-H10 or H15 S3-0038-H07 or H10	40 50	50 65	125 125	137.5 137.5	273 273	18 18	28 28	61 61	100 100	175 175	40 40	8 8	437 450	82.5 87	176 176	125 125	30 30	181 181	154 154	125 125	14 14
S4-0055-H10 or H20 S4-0079-H07 or H15	50 65	65 80	150 150	163 163	325 325	20 20	38 38	80 80	115 115	211 211	63 63	10 10	541 558	101 110	224 224	150 150	35 35	202 202	184 184	150 150	14 14
S5-0116-H10 or H20 S5-0168-H07 or H15	65 80	80 100	175 175	195 195	376 376	20 20	45 45	110 110	135 135	255 255	70 70	14 14	627 650	97 108	279 279	180 180	35 35	275 275	210 210	180 180	14 14
S6-0260-H10 or H20 S6-0353-H07 or H15	100 100	100 150	190 190	225 225	429 429	20 20	48 48	110 110	155 155	295 295	70 70	14 14	748 777	124.5 140	266 266	260 260	40 40	370 370	220 220	190 190	14 14

A1: Standard Port A2: Enlarged Port

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

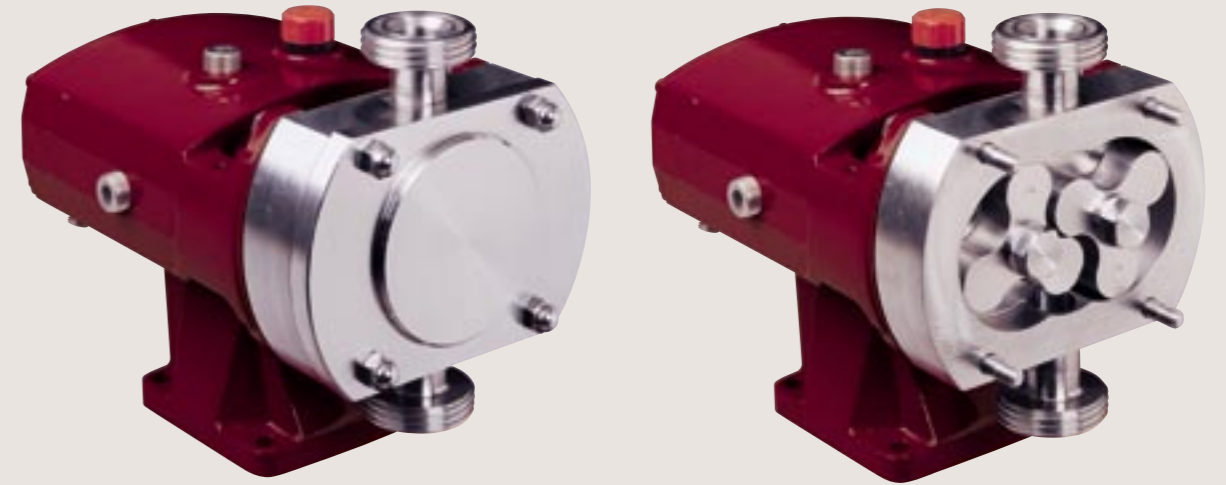
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Alfa Laval Ltd.
SSP Pumps
Birch Road, Eastbourne
East Sussex BN23 6PQ, England
Tel: +44(0)1323 414600
Fax: +44(0)1323 412515
www.sspumps.com



Series S

Rotary Lobe Pumps for all applications



SSP Series S stainless steel rotary lobe pumps operate at the heart of process industries worldwide. Series S pumps fulfil a wide range of application requirements throughout Chemical, Food, Pharmaceutical and other related industries.

Handling from low to high viscosity pumped media the characteristic smooth, low shear pumping action is ideal for delicate media and where organic solids in suspension, creams, froths, gels, emulsions and mixtures are to be pumped.

User Benefits

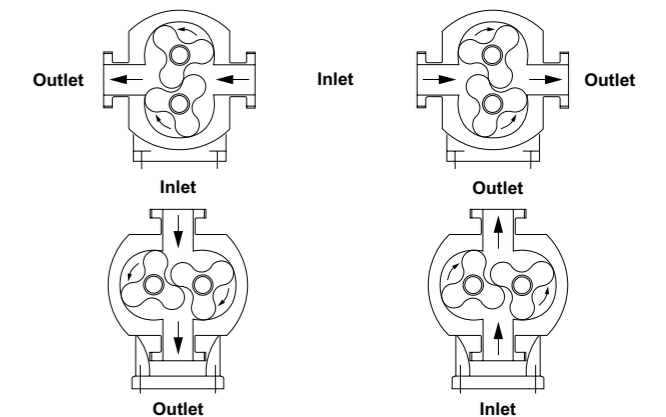
- High efficiency
- Low energy consumption
- Compact size
- Robust construction
- Smooth flow
- Reversible operation
- Low shear pumping
- Minimal pumped media agitation
- Hygienic design
- Easy maintenance

Series S pumps are suitable for CIP (Cleaning In Place) and conform to USA 3A Sanitary Standard.



Operation

The positive displacement of the Series S pump is provided by noncontacting, contra rotating tri-lobe or bi-lobe rotors within a fully swept pump chamber. All Series S pumps are capable of bi-rotational flow without modification.



Performance

The Series S pump range has twelve pump head displacements ranging from 0.053 litres/rev to 3.53 litres/rev.

- Flow rates up to 106 m³/h
- Differential pressures up to 20 bar
- Port sizes from 25 mm to 150 mm diameter

High Volumetric Efficiency – The Series S pump offers high efficiency transfer of low, medium and high viscosity pumped media. This important aspect of performance is achieved by maintaining high accuracy and repeatability of component part manufacture, thereby maximising shaft rigidity and minimising the effects of thermal expansion within the pump gearbox. This combination allows the optimum pump head geometry to be achieved which, in turn, maximises volumetric efficiency.

Low NPSH – The Series S pump with standard port connections has full through-bore inlet and outlet ports to International Standards. This reduces inlet and outlet port losses, thereby lowering NPSH requirements.

Basic Design

The Series S pump with its modular design giving a choice of 44 models, provides for greater application flexibility and cost effective easy maintenance.

Pumphead – All metallic pumped media wetted components are manufactured in 316L type stainless steel. The Series S in standard specification has tri-lobe rotors available in three temperature ratings, allowing the pump to be operated at maximum temperatures of 70°C, 130°C and 200°C for both process and CIP.

Shafts – 316L Stainless steel shafts are used for pressures up to 10 bar. Higher pressures up to 20 bar are attained by the use of high strength duplex stainless steel.

Gearbox – The Series S pump has a robust cast iron gearbox with a universal design for models S1 to S4. This gives the flexibility of mounting pumps with the inlet and outlet ports in either a vertical or horizontal plane by changing the foot and its position. The Series S models S5 and S6 have a choice of two dedicated gearbox castings, which allows the inlet and outlet ports to be in either the vertical or horizontal plane.

Specification Options



Pump overload protection

For essential overload protection to protect pump, drive unit and also limit pressure build up within associated process equipment, the pump can be fitted with a pressure relief valve.

This is supplied as an integral part of the pump, not requiring any external pipework. The design is such that the valve mechanism is isolated from the pumped media. Mechanical or pneumatic operation is available for both pressure/safety and cleaning bypass.

Surface finish and coatings

To enhance standard surface finish or for hygiene purposes, the pumphead and rotors may be electro polished. For abrasive applications the stainless steel pumphead and rotors may be supplied with a tungsten carbide coating or other surface hardening treatment to increase wear resistance.

Interchangeable rotors

Mathematically defined profile and precision manufacture ensure interchangeability of rotors with sealed involute splines giving accurate position, location and positive rotor drive.

Option of bi-lobe rotors in stainless steel for handling products containing large delicate solids, or bi-lobe rotors manufactured from non-galling alloy for increased efficiencies. Elastomeric tri-lobe rotors can also be offered where the application dictates.

Pumped media seals

The optimum primary seal can be chosen to match the pumped media and duty conditions. Single or double mechanical seals include flushed or aseptic variants. For arduous duties hard faced seal materials such as tungsten carbide or silicon carbide can be used. Packed glands offer a simple, low cost, and easy to maintain controlled leakage sealing arrangement.

Pumped media wetted elastomers are EPDM, NBR, FPM all FDA conforming or PTFE for chemical applications.

Heating / Cooling devices

These are primarily used for heating the pumphead so as to maintain the pumped media viscosity and reduce risk of any crystallisation/solidification. They may also be used for cooling purposes when required.

Connections

Comprehensive choice covering

- Screwed male connections to all major standards including BSP, DIN11851, ISS/IDF, NPT, Rdg, RJT, SMS, Tri-clamp and more.
- Flange connections to all major standards including ASA/ANSI150, BS4504/DIN2533, BS10E and more.
- Enlarged diameter and rectangular ports for handling very high viscosity products.

Motorised pump units

Pumps may be supplied fully motorised with fixed or variable speed drives including appropriate control systems if required, mounted on either mild or stainless steel baseplates.

In addition to electric motor drives, hydraulic, pneumatic, diesel or petrol powered prime movers can be fitted.

Pump Model	Inlet and Outlet Connection size International standard		Displacement litres/rev	Differential Pressure bar	Maximum Speed rev/min	Weight Bare Shaft Pump	
	Standard Port mm	Enlarged Port mm				Horizontal Porting (H) kg	Vertical Porting (V) kg
S1-0005-*08	25	-	0.053	8	1000	15	16
S1-0008-*05	25	40	0.085	5	1000	17	18
S2-0013-*10	25	40	0.128	10	1000	28	30
S2-0013-*15	25	40	0.128	15	1000	28	30
S2-0018-*07	40	50	0.181	7	1000	29	31
S2-0018-*10	40	50	0.181	10	1000	29	31
S3-0027-*10	40	50	0.266	10	1000	53	56
S3-0027-*15	40	50	0.266	15	1000	53	56
S3-0038-*07	50	65	0.384	7	1000	56	59
S3-0038-*10	50	65	0.384	10	1000	56	59
S4-0055-*10	50	65	0.554	10	1000	105	111
S4-0055-*20	50	65	0.554	20	1000	105	111
S4-0079-*07	65	80	0.79	7	1000	110	116
S4-0079-*15	65	80	0.79	15	1000	110	116
S5-0116-*10	65	80	1.16	10	600	152	152
S5-0116-*20	65	80	1.16	20	600	152	152
S5-0168-*07	80	100	1.68	7	600	160	160
S5-0168-*15	80	100	1.68	15	600	160	160
S6-0260-*10	100	100	2.60	10	500	260	260
S6-0260-*20	100	100	2.60	20	500	260	260
S6-0353-*07	100	150	3.53	7	500	265	265
S6-0353-*15	100	150	3.53	15	500	265	265

* = H or V H = Horizontal Porting V = Vertical Porting

