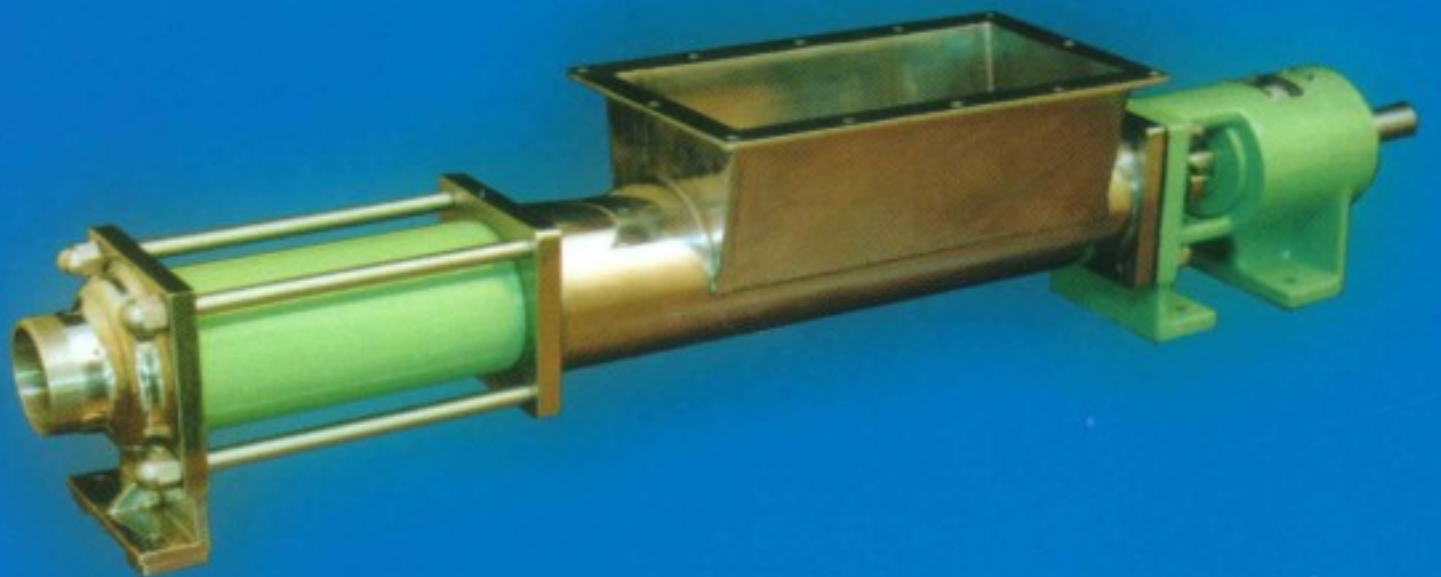
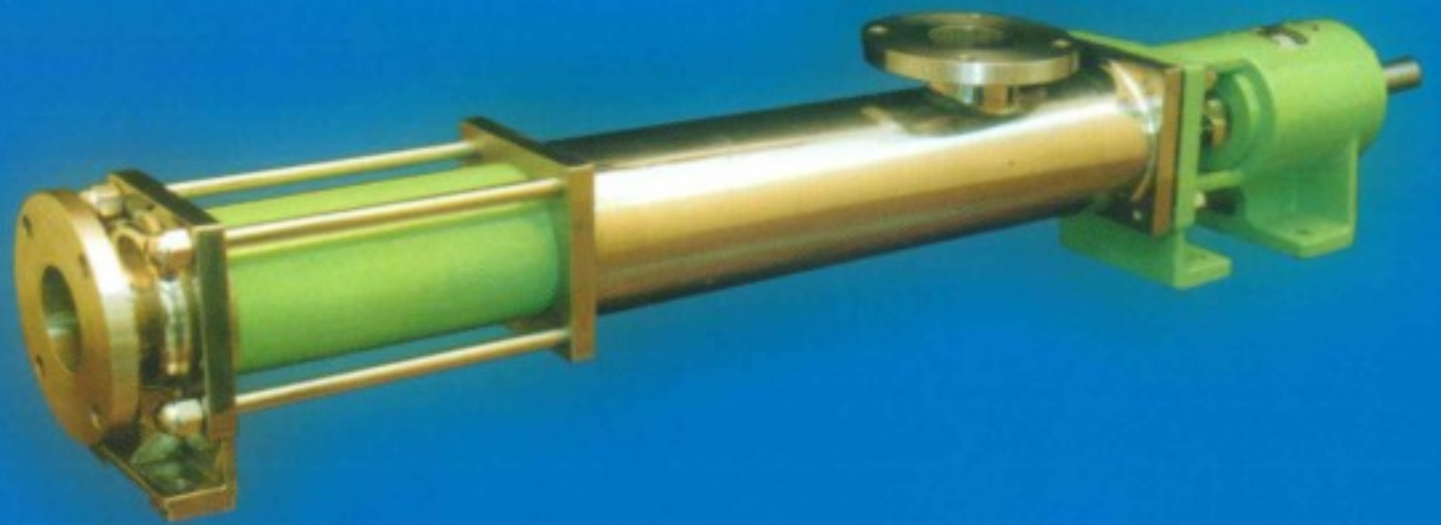


prakash pumps

SINGLE SCREW PUMPS  
FOR  
CHEMICAL AND PROCESS  
INDUSTRIES



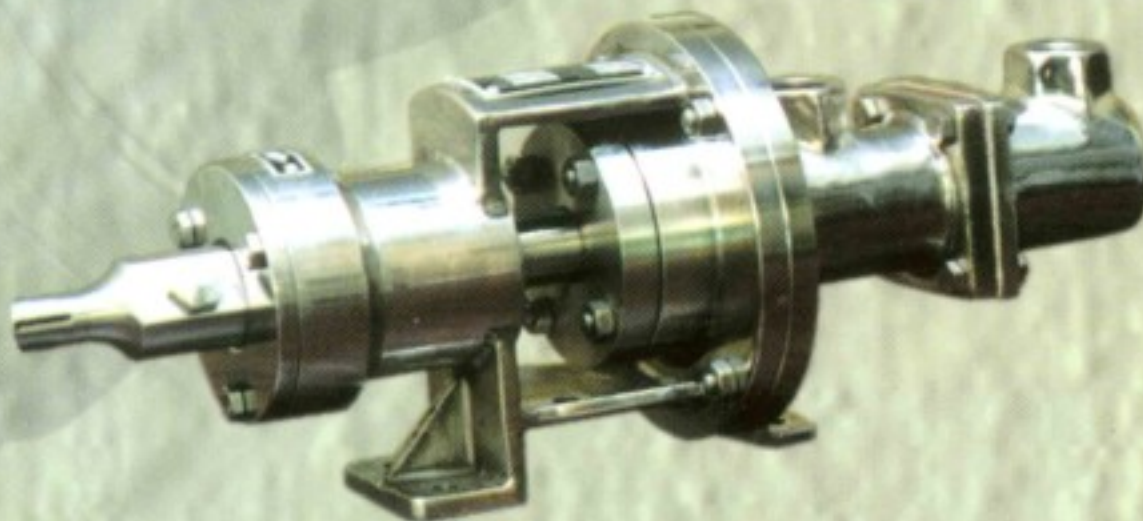
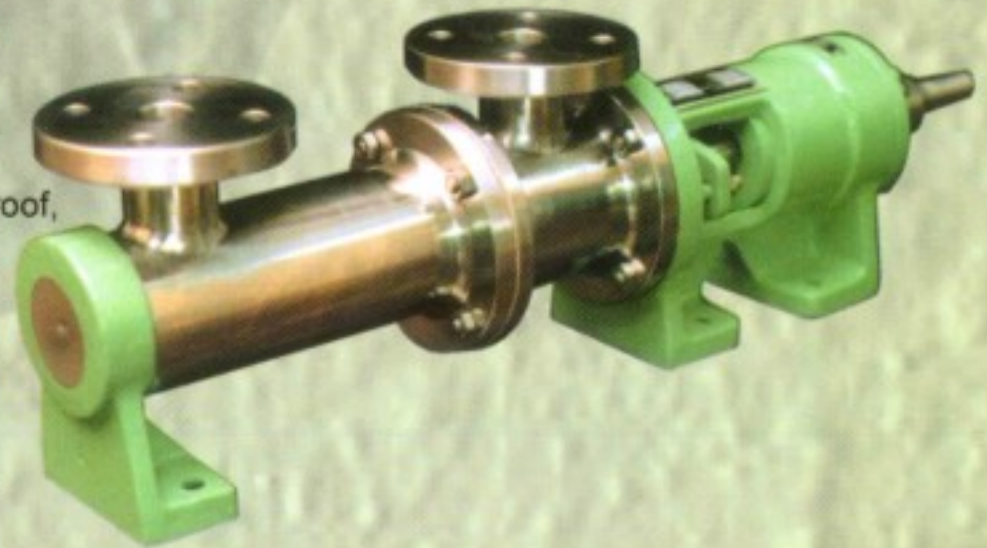
***Prakash Process Pumps***



## 'PC' / 'PS' SERIES PUMPS - TECHNICAL DATA

### TYPICAL FEATURES

- ◆ Self-Priming upto 8.5 metres of water column.
- ◆ Suitable for all media which can be forced through a pipe i.e. aqueous media and media of extreme viscosity (upto 1 million Centipoise) and extreme proportions of fibrous or solid particles.
- ◆ Positive, rotary displacement virtually pulsation free flow.
- ◆ Integrally vulcanized, easily replaceable stator, torsion-proof, geometrically stable and therefore offering long life.
- ◆ No need for valves, which would impede flow.
- ◆ Speed-governed delivery rate.
- ◆ Suction and delivery ends can be interchanged by merely changing direction of rotation of the prime mover.
- ◆ The pressure head is independent of speed and the capacity is approximately proportional to speed.



### FLUIDS HANDLED

- ◆ Acidic & Alkaline Slurry
- ◆ Alum
- ◆ Ceramic Slurry
- ◆ Detergent Slurry
- ◆ Emulsions
- ◆ Effluent
- ◆ Molasses
- ◆ Paper Pulp
- ◆ Paint
- ◆ Petroleum Jelly
- ◆ Printing Ink
- ◆ Resins
- ◆ Soap Stock
- ◆ Sewage Sludge
- ◆ Sugar Juice
- ◆ Sodium Silicate
- ◆ Viscose
- ◆ Yeast

### INDUSTRIES

- ◆ Brewery
- ◆ Chemical & Process
- ◆ Ceramics
- ◆ Construction
- ◆ Cosmetics & Toiletries
- ◆ Distillery
- ◆ Effluent & Sewage Treatment
- ◆ Electronics
- ◆ Engineering
- ◆ Edible Oil
- ◆ Fertilizer
- ◆ Marine
- ◆ Mining
- ◆ Oil Exploration
- ◆ Paper Pulp & Cellose
- ◆ Paint
- ◆ Pharmaceuticals
- ◆ Petrochemicals & Refinery
- ◆ Soap & Detergent
- ◆ Sugar





# Series PC & PS Pump Technical Data

## SINGLE STAGE PUMPS

TOTAL HEAD FROM ALL CAUSES

PUMP MODEL	SUCTION AND DELIVERY BRANCHES mm	SUCTION LIFT WATER metres	SPEED R.P.M	DELIVERY PRESSURE					
				1.5 kg/sq.cm		3 kg/sq.cm		4.5 kg/sq.cm	
				DISCHARGE L.P.M	ESTIMATED MOTOR H.P	DISCHARGE L.P.M	ESTIMATED MOTOR H.P	DISCHARGE L.P.M	ESTIMATED MOTOR H.P
PC-2/PS-2	19	8.5	720	10	0.5	8	0.5	5	0.5
			960	13	0.75	11	0.75	7	0.75
			1450	20	1	16	1	10	1
PC-3/PS-3	32	8.3	720	18	0.75	12	0.75	6	0.75
			960	25	1	20	1	12	1
			1450	36	1	32	1	24	1
PC-4/PS-4	38	8.3	720	60	2	50	2	31	2
			960	91	2	73	2	54	3
			1450	120	3	118	3	102	5
PC-6/PS-6	50	7.6	720	110	3	82	3	55	3
			960	150	3	125	3	90	4
			1450	234	3	208	5	170	5
PC-8/PS-8	65	7.6	720	142	3	106	3	71	3
			960	193	3	161	3	116	5
			1450	302	5	268	5	219	7.5
PC-10/PS-10	76	7.6	580	230	3	188	4	140	5
			720	286	4	256	5	200	7.5
			960	396	5	355	5	302	7.5
PC-12/PS-12	100	7.6	580	400	5	318	7.5	217	10
			720	499	7.5	418	7.5	326	10
			960	680	7.5	600	10	509	12.5
PC-14/PS-14	100	7.6	350	370	5	310	5	242	7.5
			580	601	7.5	485	10	330	15
			720	760	10	637	10	498	15

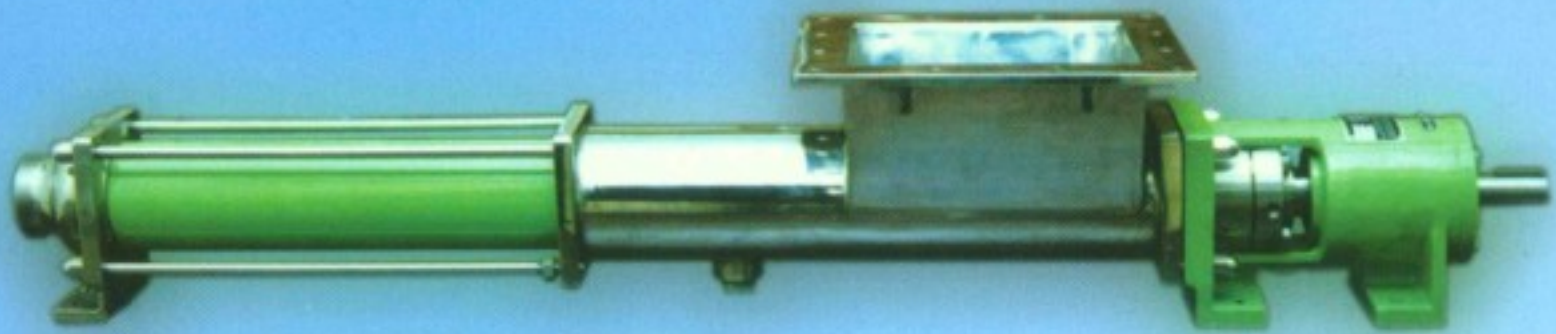
## DOUBLE STAGE PUMPS

PUMP MODEL	SUCTION AND DELIVERY BRANCHES mm	SUCTION LIFT WATER metres	SPEED R.P.M	DELIVERY PRESSURE					
				3 kg/sq.cm		6 kg/sq.cm		9 kg/sq.cm	
				DISCHARGE L.P.M	ESTIMATED MOTOR H.P	DISCHARGE L.P.M	ESTIMATED MOTOR H.P	DISCHARGE L.P.M	ESTIMATED MOTOR H.P
PC-2D/PS-2D	19	8.5	720	10	1	8	1	6	1
			960	14	1	11	1	8	1
			1450	22	1	16	1.5	11	1.5
PC-3D/PS-3D	32	8.3	720	18	1.5	18	1.5	0	1.5
			960	24	1.5	30	2	12	2
			1450	38	2	36	2	20	2
PC-4D/PS-4D	38	8.3	720	65	3	54	3	33	3
			960	98	3	79	3	58	5
			1450	130	5	127	5	110	5
PC-6D/PS-6D	50	7.6	720	125	3	96	4	60	5
			960	158	4	136	4	105	6
			1450	256	4	232	5	200	7.5
PC-8D/PS-8D	65	7.6	720	153	5	114	5	77	7.5
			960	208	5	174	5	125	10
			1450	326	7.5	289	7.5	237	10
PC-10D/PS-10D	76	7.6	580	248	5	203	7.5	151	10
			720	309	7.5	276	7.5	216	10
			960	428	7.5	383	10	326	12.5

The Suction lift quoted relate to water at 10°C and 762 mm. barometer when operated at the lowest speeds listed. The data above are related to pumps without circulating bypasses and for liquids of similar viscosity to water.



# WIDE THROAT SCREW PUMP- WPS SERIES



The WPS-Series pumps possess an ideal principle for handling substances such as thick pastes, heavy sludges, pulps with low moisture content, minced substances, greases and many other materials hitherto regarded as unpumpable. The pump is used in all branches of industry, above all in food industry, food and vegetable processing, beverage industry, sewage technics, leather industry, starch and sugar plants, etc.

## SALIENT FEATURES

- ◆ Suitable for all media up to most thick-pulp consistency with highest content of solid or fibrous materials.
- ◆ Open hopper type inlet with force feed screw upstream of rotor and stator.
- ◆ Vulcanized stator, simply to be changed, secured against torsion, solid form and therefore long service life.
- ◆ Temperature range from -40 to +200°C.
- ◆ High capacity of resistance to wear.
- ◆ Continuous pumping current, depending on the speed.
- ◆ The joints are completely sealed against the medium.

## MATERIAL OF CONSTRUCTION

'PC' Series pumps are of Cast Iron construction. The internal rotating parts can be of either Alloy - Steel or Stainless Steel and corrosive resistant special alloys depending on the fluid being handled. The rotor is made of the same material as rotating parts or additionally hardened chrome steel or in special cases, of plastic materials. For better abrasion resistance, rotors are hard chrome plated or Ceramic coated.

'PS' Series pumps have wettable housing and rotating parts of AISI SS 304/316. For highly corrosive fluids, the pump housing can be C.I. Ebonite / FRP lined while rotating parts can be of Alloy-20/ Hastelloy - Alloy/Monel. For specialised applications the pump can also be made in Alloy-20 or any other special alloys.

'WPS' Series pumps for hygienic or corrosive duties, all parts in contact with the pumped media are in Stainless Steel. For duties where hygiene or corrosion are unimportant, Mild steel/Cast Iron pumps are standard.

**Stators** Natural and synthetic rubber of various Shore hardness values, Buna N, Neoprene, food stuff-grade materials, ethylene-propylene, Hypalon, Viton, Butyl, silicone, polyurethane, plastics and special materials.

**Sealing Arrangements** is usually by soft gland-packings with mechanical Seal being optional.

Manufactured by :



**Prakash Process Pumps**

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