





# WORKING PRINCIPLE



The pump is normally placed dry above or aside the liquid. In these cases the suction line contains air. The self-priming pump will evacuate all the air. The vacuum produced as the impeller rotates **2** draws air **1** into the pump where it is mixed with the liquid already contained in the pump casing. The air/liquid mixture is driven to the discharge side where the air separates out and is expelled through the discharge port **3** while the liquid, due to the higher gravity, falls back and is reused in the suction side through a small passage. When all the air has been evacuated from the suction line the liquid is pumped, even if air-laden. The high suction port keeps enough liquid inside the casing to allow re-priming any time. The non-return valve in the

suction port avoids a backflow of the liquid and reduces priming times.

Α	Animal meat	Flood drainage	River water	Water	
	Bentonite	Gasoline	Soda	with mud	
	Biomass	Light-oil	Sump water	Water	
	Clean or dirty	Lime milk	Transformator	with sand	
	solvents	Liquid manure	oil	Water with	
	Cooling milk	Must	Wash fluids	SOlids	_
	Diesel	Petroleum	Wastewater	and many	
	Fertilizer	products	Water with	more	
	Fire fighting water	Rain water	cutting sand		Z

# APPLICATIONS

CONSTRUCTION

- With liquids up to 50 mm<sup>2</sup>/s (cSt), which can contain air, be abrasive, corrosive and compatible with cast iron, bronze or stainless steel. Can be located above, on side or under the liquid. Some pumps sizes can self-prime up to the physical limit of 8-9 m.
- Used by transfer, load and unload, neutralizing, by-pass, spray, circulating, dewatering, irrigation, priming, well-point duty.
- In industry, water treatment, refineries, ship building, environmental projects, construction, agricultural, civil guards.



## S 40 G31M+SG

Our smallest selfpriming pump with single-phase motor 220-230V with on-off switch, cable on carrying frame.



### **Closed coupled**

One shaft for motor and pump: easy, compact, best price.



**On trailer** Our self-priming pumps are available with gasoline or diesel engine and on trailer or trolley.



### Bi-Block<sup>™</sup>

Standard B5 motor, elastic coupling and pump with own pedestal designed in one unit: user friendly, heavy-duty, reduced dimensions.



Classic



Bare shaft pump, elastic coupling with guard, B3 motor on base plate: traditional, heavy duty, flexible. Best above 15 kW.





# ADVANTAGES







Suction and discharge pors available flanged or threaded (up to 4"). The threaded port is flanged in the casing to uncouple faster the pipes.



Priming cover



Maintenance free ball bearings





Non-return valve: avoids a backflow of the liquid from the discharge side and reduces priming times. Available in NBR, Viton<sup>®</sup>, PTFE, EPDM.



Inspection cover



On request: flushing in front of the mechanical seal

Mechanical seal in SiC/Viton® with stainless steel shaft sleeve and lubrication behind the seal to improve the dry running capabilities.



Heavy-duty open impeller and wear plate designed for abrasion and passage of solids. On request with cutting device for soft solids.

PERFORMANCES



#### Clean out cover

ТҮРЕ		SOLIDS	MOTOR	IMPELLER	CAPACITY (m <sup>3</sup> /h) BY A TOTAL HEAD OF										
	(inches)	Ømm	kW	Ømm	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m	55m
2900 rpm															
S 30	32 (1")	12	0,9	110	15	10	1								
S 40	40 (1½")	20	1,1	110	20	13	5^								
S 45	40 (1½")	14 x 19	2,2	172		22	18	14	10	5					
S 50	50 (2")	25	2,2	120	40	30	13								
S 60	50 (2")	17	4,0	172		42	37	30	23	14					
S 63	50 (2")	22	7,5	193						45	37	28	18		
S 68	50 (2")	25	11	220							50	46	39	30	21
S 80	80 (3")	32	4	138	80	62	45	20							
S 83	80 (3")	27	7,5	172			80	70	57	40	20				
S 88	80 (3")	35	15	218					97	90	80	70	50	30	
S100	100 (4")	37	11	158		120	95	65	25						
S108	100 (4")	35	18,5	210					135	125	105	90	65		
				14	50 rpn	n									
S 65	50 (2")	25	2,2	220	40	28	<b>10</b> <sup>A</sup>								
S 85	80 (3")	40	4,0	220	80	62	20 <sup>A</sup>								
S 91	80 (3")	37	7,5	280		112	90	57	25 <sup>B</sup>						
S105	100 (4")	45	5,5	220	140	100	<b>50</b> <sup>A</sup>								
S121	100 (4")	45	11	280		178		100	50 <sup>B</sup>						
S150	150 (6")	72 x 50	11	220	260	180	80 <sup>A</sup>								
S161	150 (6")	54	18,5	280		290	220	110							
S180	150 (6")	40	30	358				320	250	160					
S201	200 (8")	57	22	280	500	430	300								
S240	200 (8")	54	45	352	540	500	460	410	330	200					
960 rpm															
S170	150 (6")	54	11	352	300	240	120								TTCTOP
S220	200 (8")	72	18,5	358	530	420	200								VICION
S300	300 (12")	76	55	405	1200	1000	450								PUMPS /
^: max 14 m	<sup>B</sup> : max 23 m														

- 12 IMPORTANT
- 1. Capacity
- 2.
- 3. Type of liquid
- 4. Viscosity
- 5. Pump job
- 6. Type of installation

QUESTIONS

FOR

- Suction lift 7.
- 8. Temperature
- 9. Old pumping experience
- 10. Running hours/day SEIEINON
- 11. Voltage
- 12. Frequency



VICTOR PUMPS Srl Viale Svezia 2 35020 Ponte San Nicolò (Padova) Italy Tel. +39 049 8961266 Fax +39 049 8961255 italy@victorpumps.com

1900



B Bi-Block with ATEX for Gaso

s \*\* S-steel for sump in zinc inquisity

S

S150 for wastewater in page mil

\$105 Water in Paint cabin