

**S**

# **SELF-PRIMING**

**CENTRIFUGAL PUMPS**



H I G H Q U A L I T Y



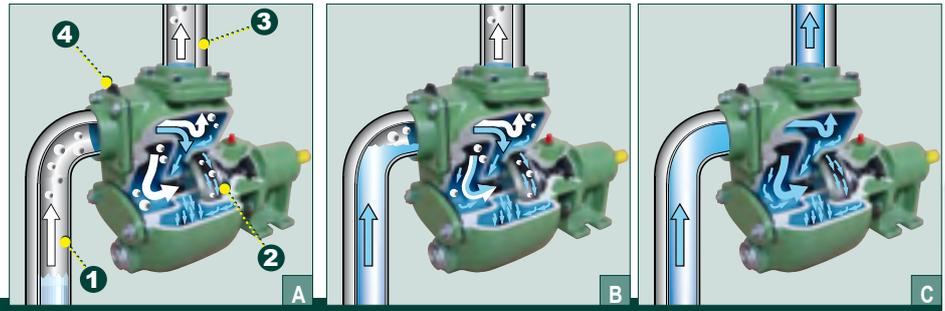
V E R S A T I L I T Y



H E A V Y D U T Y

**VICTOR  
PUMPS**





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 ④ avoids a backflow of the liquid and reduces priming times.

**APPLICATIONS**

<b>A</b> Animal meat	Flood drainage	River water	Water with mud
Bentonite	Gasoline	Soda	Water with sand
Biomass	Light-oil	Sump water	Water with solids
Clean or dirty solvents	Lime milk	Transformator oil	Water with solids
Cooling milk	Liquid manure	Wash fluids	and many more...
Diesel	Must	Wastewater	
Fertilizer	Petroleum products	Water with cutting sand	
Fire fighting water	Rain water		

- 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.

**CONSTRUCTION**



**S 40 G31M+SG**  
Our smallest self-priming pump with single-phase motor 220-230V with on-off switch, cable on carrying frame.

1



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

1



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

1



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

**TOP SELLER**

2



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

3

## ADVANTAGES



## SELF-PRIMING CENTRIFUGAL PUMPS



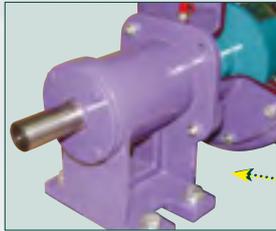
Priming cover



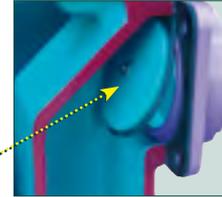
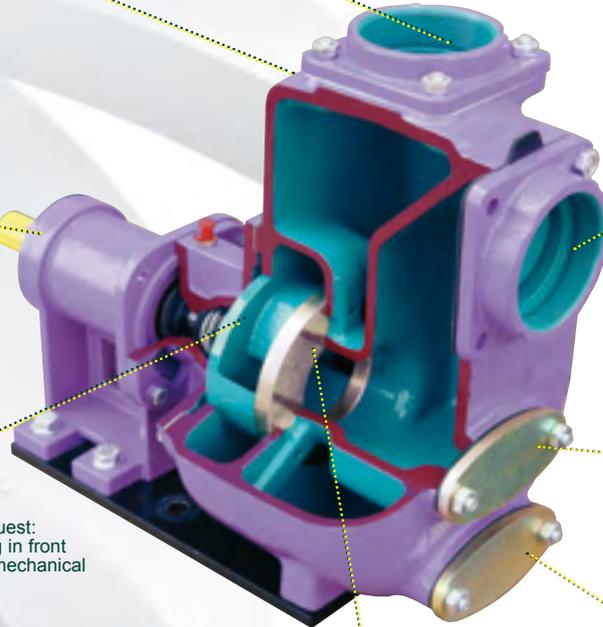
Suction and discharge ports available flanged or threaded (up to 4"). The threaded port is flanged in the casing to uncouple faster the pipes.



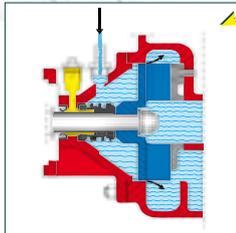
The DIN or ASA flanged ports have through-holes for easy installation and 1/4" threaded hole for vacuum- and manometer.



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®, PTFE, EPDM.



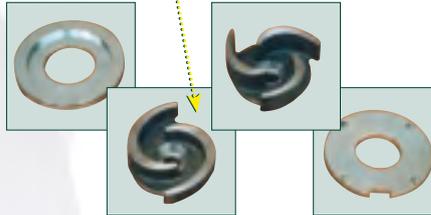
On request: flushing in front of the mechanical seal



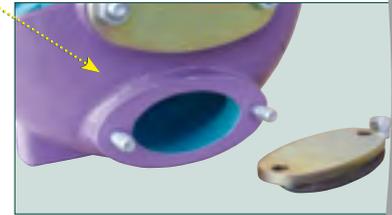
Mechanical seal in SiC/Viton® with stainless steel shaft sleeve and lubrication behind the seal to improve the dry running capabilities.



Inspection cover



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



Clean out cover

## PERFORMANCES

TYPE	PORTS DN PN16 (inches)	SOLIDS Ø mm	MOTOR kW	IMPELLER Ø mm	CAPACITY (m³/h) BY A TOTAL HEAD OF									
					5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
<b>2900 rpm</b>														
<b>S 30</b>	32 (1")	12	0,9	110	15	10	1							
<b>S 40</b>	40 (1½")	20	1,1	110	20	13	5 <sup>A</sup>							
<b>S 45</b>	40 (1½")	14 x 19	2,2	172	22	18	14	10	5					
<b>S 50</b>	50 (2")	25	2,2	120	40	30	13							
<b>S 60</b>	50 (2")	17	4,0	172	42	37	30	23	14					
<b>S 63</b>	50 (2")	22	7,5	193					45	37	28	18		
<b>S 68</b>	50 (2")	25	11	220					50	46	39	30	21	
<b>S 80</b>	80 (3")	32	4	138	80	62	45	20						
<b>S 83</b>	80 (3")	27	7,5	172			80	70	57	40	20			
<b>S 88</b>	80 (3")	35	15	218					97	90	80	70	50	30
<b>S100</b>	100 (4")	37	11	158		120	95	65	25					
<b>S108</b>	100 (4")	35	18,5	210					135	125	105	90	65	
<b>1450 rpm</b>														
<b>S 65</b>	50 (2")	25	2,2	220	40	28	10 <sup>A</sup>							
<b>S 85</b>	80 (3")	40	4,0	220	80	62	20 <sup>A</sup>							
<b>S 91</b>	80 (3")	37	7,5	280	112	90	57	25 <sup>B</sup>						
<b>S105</b>	100 (4")	45	5,5	220	140	100	50 <sup>A</sup>							
<b>S121</b>	100 (4")	45	11	280	178	150	100	50 <sup>B</sup>						
<b>S150</b>	150 (6")	72 x 50	11	220	260	180	80 <sup>A</sup>							
<b>S161</b>	150 (6")	54	18,5	280	290	220	110							
<b>S180</b>	150 (6")	40	30	358			320	250	160					
<b>S201</b>	200 (8")	57	22	280	500	430	300							
<b>S240</b>	200 (8")	54	45	352	540	500	460	410	330	200				
<b>960 rpm</b>														
<b>S170</b>	150 (6")	54	11	352	300	240	120							
<b>S220</b>	200 (8")	72	18,5	358	530	420	200							
<b>S300</b>	300 (12")	76	55	405	1200	1000	450							

<sup>A</sup>: max 14 m    <sup>B</sup>: max 23 m



**S**

**S 41** S-steel for sump in zinc industry

**s150** for wastewater in paper mill

**S105** water in paint cabin

**S 40** Bi-Block with ATEX for gasoline

**12 IMPORTANT QUESTIONS FOR INQUIRIES**

1. Capacity
2. Delivery pressure
3. Type of liquid
4. Viscosity
5. Pump job
6. Type of installation
7. Suction lift
8. Temperature
9. Old pumping experience
10. Running hours/day
11. Voltage
12. Frequency

**VICTOR PUMPEN GmbH**  
Dieselstrasse 7  
85551 Kirchheim bei München  
Germany  
Tel. +49 (0)89 9048660  
Fax +49 (0)89 9043447  
germany@victorpumps.com

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



[www.victorpumps.com](http://www.victorpumps.com)