

# ZS\_SV series pumps


The **ZS\_SV vertical** side channel centrifugal pumps are self-priming mono-cellular pumps capable of conveying gas-containing liquids.

This range is available with a mechanical seal in the **ZS\_SVG** series and with a magnetic coupling in the **ZS\_SVM** series.

These pumps take up limited space (*vertical assembly*). They are self-priming (*including on biphasic mixes*), and they are capable of re-priming in the event of cavitation.

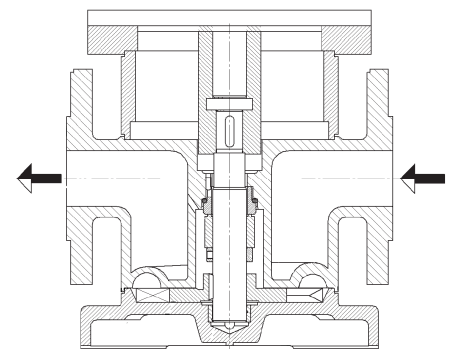
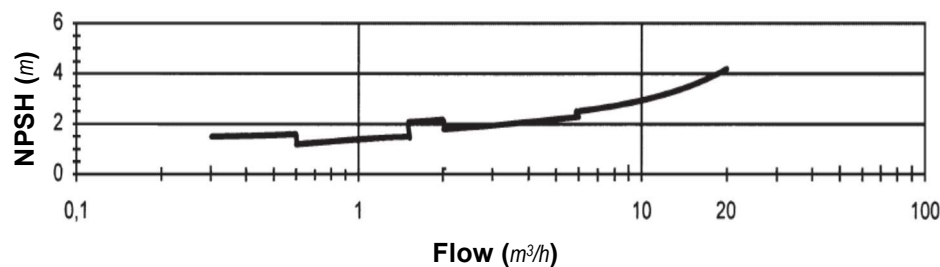
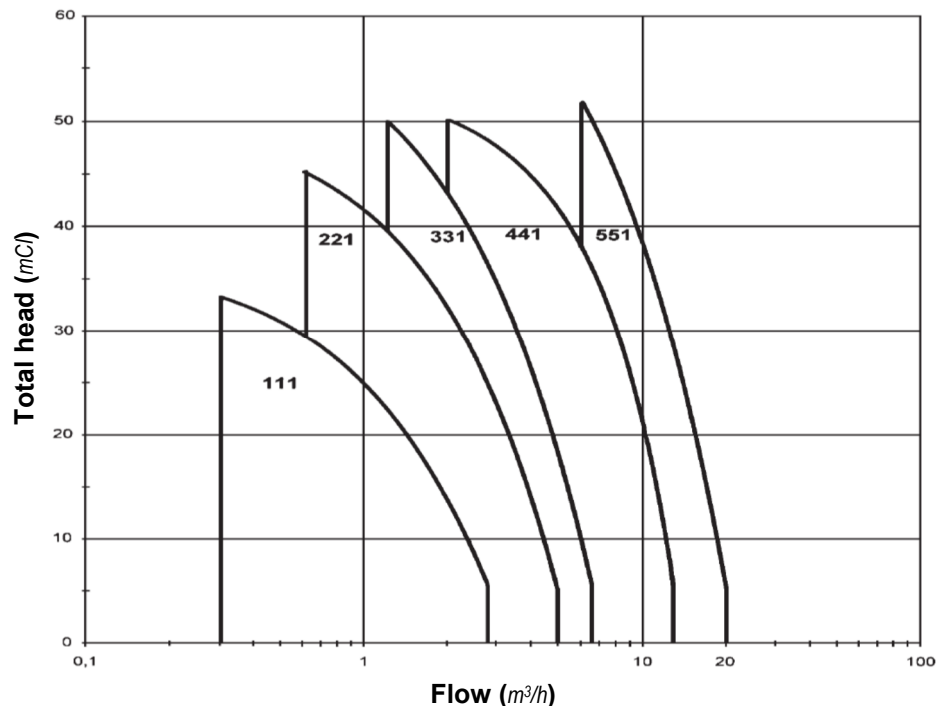
The magnetic coupling pumps in the **ZS\_SVM** series include a rupture detection hole on the air chamber. This hole is also found on the mechanical seal pumps (*having an assembly complying with the standard DIN 24960*).

## LIMITS OF USE

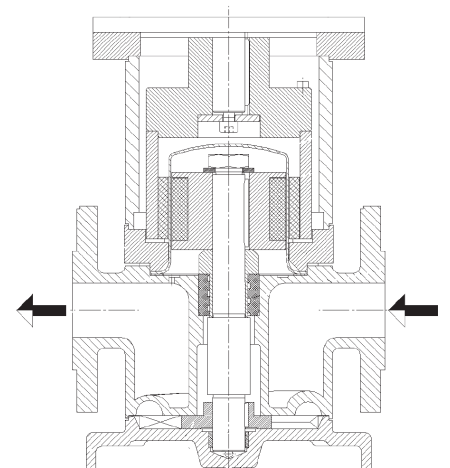
- Flow rate: 0.3 m<sup>3</sup>/h to 20 m<sup>3</sup>/h
- Total head: 5 to 52 mCl
- Operating temperature: -40 to 120°C
- Operating pressure: < 16 bar
- Speed: < 1750 min<sup>-1</sup>
- ATEX certification:  II 2 G II B T3/T4



## SELECTION CURVES



**ZS\_SVG**



**ZS\_SVM**

## BUSINESS ACTIVITIES AND PRINCIPAL USE

Chemical and fine chemicals industries - Pharmaceutical industry - Cosmetic industry - Paper-making industry - Automotive industry - Metalworking industry - Skid manufacturers - Transferring corrosive liquids or flammable solvents - Tank unloading - General use...

**POMPES GROSCLAUDE**

Technical sheet n°: ZS\_SV-13-FR

# SPECIFICATIONS

## Basic components

Composant	Code matière		
	32 (*)	60	62
Suction/Discharge casing	Duplex - 1.4470	Cast iron GS	Cast iron GS
Coupling	Cast iron FT25	Cast iron FT25	Cast iron FT25
Base	Duplex - 1.4470	Cast iron GS	Cast iron GS
Shaft	SS 316Ti	SS 420	SS 420
Impeller	SS 316Cb	Laiton	Z20CN17.2M
Bearing bush	Carbone	Carbone	Carbone
Gasket	Teflon	Teflon	Teflon
Mechanical seal	SiC/C	SiC/C	SiC/C
Adapter ring	Acier	Acier	Acier
Low bush bearing	Carbone	Carbone	Carbone
Split can	SS 316Ti	SS 316Ti	SS 316Ti

(\*) only available on SVM

**SERO**  
PumpSystems

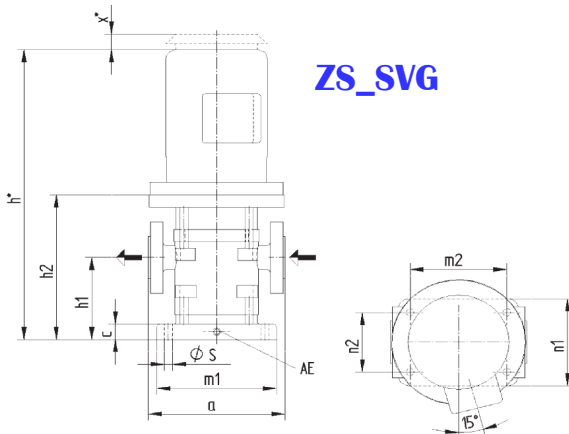
## Pump inlet and outlet connections

Size	Inlet	Outlet
111	DN25 PN16	DN25 PN16
221	DN40 PN16	DN40 PN16
331	DN40 PN16	DN40 PN16
441	DN50 PN16	DN50 PN16
551	DN50 PN16	DN50 PN16

## Choice of Tightness

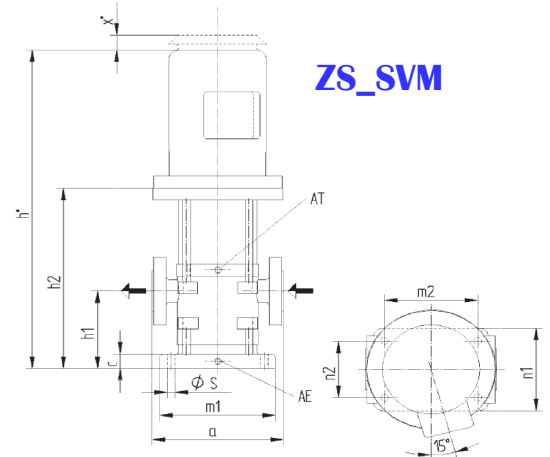
- Magnetic coupling consists solely of static tightness ensuring reduced maintenance and the total absence of fugitive leaks. A hole detecting possible rupture in the can before the liquid penetrates into the motor has been integrated into the assembly.
- Standard mechanical seal complying with DIN 24960 and the assembly include a hole allowing detection of a fault before the liquid enters the motor.

# OVERALL DIMENSIONS



Size	Motor		Weight (Kg)			h1	a	h2	h*	n1	n2	m1	m2	c	S
	Size	kW	I	E	G										
111	71	0,37	19	19	25	132	205	216	417	140	96	180	145	25	12
	80	0,55	20	21	32				448						
	80	0,75	22	24	34				448						
221	80	0,55	29	32	41	120	230	227	459	162	116	210	168	30	14
	90	0,75	31	33	43				459						
	90S	1,1	33	35	51				471						
331	90L	1,5	35	37	53				496						
	90S	1,1	33	35	51	120	230	227	471	162	116	210	168	30	14
	90L	1,5	35	37	53				496						
441	100L	2,2 (2)	39	43	58				530						
	100L	3 (2,5)	50	54	79	180	280	302	605	182	140	240	200	40	14
	112M	4 (3,6)	58	60	87				622						
551	112M	4 (3,6)	67	69	96	180	280	318	638	200	150	250	200	40	15
	132S	5,5 (5)	84	104	124				723						
	132M	7,5 (6,8)	89	119	139				723						

Comments:  
The dimension x will be between 20 to 50 mm depending to motor and supplier  
The motor EExe will most of the time including the rain deflector.  
H will depend on the supplier.  
The values (I) are applicable on EExe motor.  
  
The weight are related to:  
- I: Motor IP54  
- E: Motor EExe II T3  
- G: Motor EEx de II  
AE # drain connection at 1/4"



Size	Motor		Weight (Kg)			h1	a	h2	h*	n1	n2	m1	m2	c	S
	Size	kW	I	E	G										
111	80	0,75	29	31	41	132	205	280	512	140	96	180	145	25	12
	90S	1,1	45	47	63	120	230	324	568	162	116	210	168	30	14
	90L	1,5	47	49	65				593						
331	90S	1,1	45	47	63	120	230	324	568	162	116	210	168	30	14
	90L	1,5	47	49	65				593						
	100L	2,2 (2)	51	55	70				627						
441	100L	2,2 (2)	65	69	84	180	280	386	689	182	140	240	200	40	14
	100L	3 (2,5)	67	71	87				689						
	112M	4 (3,6)	75	77	104				706						
551	112M	4 (3,6)	88	90	117	180	280	430	750	200	150	250	200	40	15
	132S	5,5 (5)	105	125	145				835						
	132M	7,5 (6,8)	110	140	160				835						

Comments:  
The dimension x will be between 20 to 50 mm depending to motor and supplier  
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H will depend on the supplier.  
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AE # drain connection at 1/4"

# PART NUMBER

ZS	SVG	33	1	K.T	32	30	2	I	27135
	Type	Size	N° of stage	Mechanical seal gasket	Material code	Motor			N° de serie
	SVG Mechanical seal	11	1	V FPM		Power (kW)	4 4 poles (# 1450 rpm)	Protection	
	SVM Magnetic coupling	22		E EPDM				A ATEX	
		...		T FPM jacket PTFE				I non-ATEX	
		55							

# POMPES GROSCLAUDE

Parc du chêne - 29, rue du 35<sup>ème</sup> régiment d'aviation

69 500 BRON – FRANCE

Tel: (33) 4 72 37 94 00

Fax: (33) 4 72 37 94 01

E-mail: [info@pompes-grosclaude.com](mailto:info@pompes-grosclaude.com)

Web: [www.pompes-grosclaude.com](http://www.pompes-grosclaude.com)

