


# ZS\_S series pumps

The **ZS\_S side channel** centrifugal pumps are used for a very large range of applications, in particular for vacuum extraction, fluids with high steam pressure or raw materials in a storage tank centre. They can comply with the standard **DIN-24254** (for the pumps in PN40).

This pump technology has the advantage of being self-priming (even on biphasic mixes) and does not stall in the event of cavitation, but it is not compatible with suspended particles.

Different types of **API-conformed tightness** are available and the mechanical seals conform with **DIN 24 960**.

## LIMITS OF USE

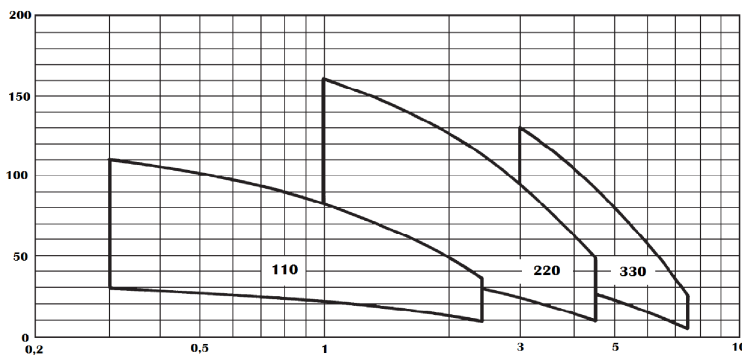
- Flow rate: 0.3 m<sup>3</sup>/h to 35 m<sup>3</sup>/h
- Total head: 5 to 350 mCl
- Operating temperature: -20 to 120°C (-40 to 220°C for PN40)
- Operating pressure: < 16 to < 40 bar
- Speed: < 1750 min<sup>-1</sup>
- ATEX certification:  II 2 G II B T3/T4



## SELECTION CURVES

**ZS\_SOH/SOHB**

1450 rpm

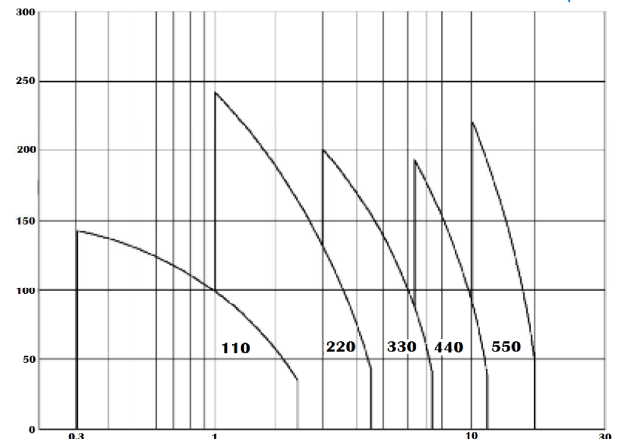


Operating pressure: < 25 bar  
For supplying heaters or the chemical industry, etc.

Operating pressure: < 16 bar  
For industries or general services, etc.

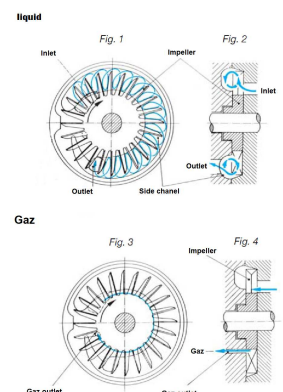
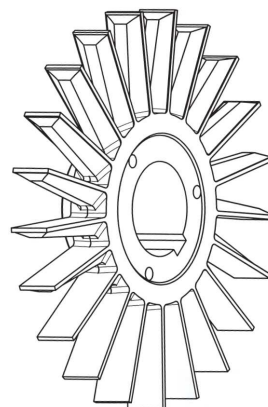
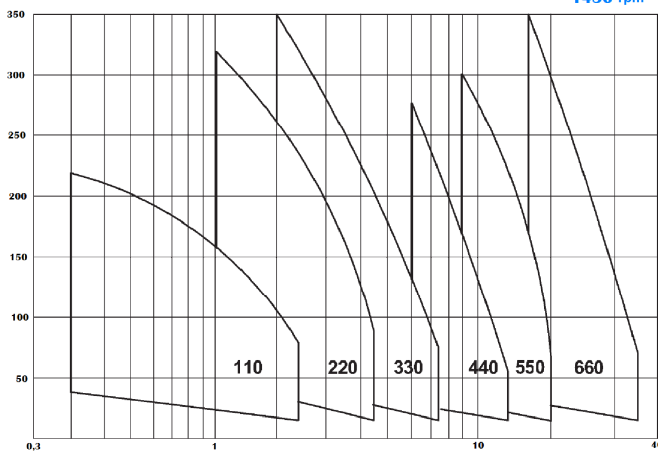
**ZS\_SFH**

1450 rpm



**ZS\_SRZ**

1450 rpm



Operating pressure: < 40 bar - complies with DIN 24254

## BUSINESS ACTIVITIES AND PRINCIPAL USE

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

**POMPES GROSCLAUDE**

Technical sheet n°: ZS\_S-13-FR

# SPECIFICATIONS

## Basic components

Composant	Material code				
	10	12	32	60	62
Suction casing	Cast iron FT25	Cast iron FT25	SS 316L	Cast iron GS	Cast iron GS
Discharge casing	Cast iron FT25	Cast iron FT25	SS 316L	Cast iron GS	Cast iron GS
Stage casing	Cast iron FT25	Cast iron FT25	Duplex - 1.4470	Cast iron GS	Cast iron GS
Side Channel casing	Cast iron FT25	Cast iron FT25	Duplex - 1.4470	Cast iron GS	Cast iron GS
Foot	Cast iron GS	Cast iron GS	Cast iron GS	Cast iron GS	Cast iron GS
Shaft	SS 420	SS 420	SS 316Ti	SS 420	SS 420
Impeller	Cu Zn 40 Al 1	Z20CN17.2M	SS 316Cb	Cu Zn 40 Al 1	Z20CN17.2M
Bearing support	Cast iron FT20	Cast iron FT20	Cast iron FT20	Cast iron FT20	Cast iron FT20
Bearing cover open	Cast iron FT20	Cast iron FT20	Cast iron FT20	Cast iron FT20	Cast iron FT20
Bearing cover closed	Cast iron FT20	Cast iron FT20	Cast iron FT20	Cast iron FT20	Cast iron FT20
Casing gaskets	Teflon	Teflon	Teflon	Teflon	Teflon
Bearing bush	Bronze	Carbon	Carbon	Bronze	Carbon

**SERO**  
PumpSystems

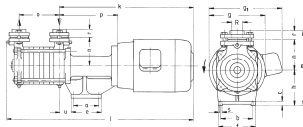
## Pump inlet and outlet connections

Size	Type		
	ZS_SO...	ZS_SF...	ZS_SR
110	1"	DN25 PN25	DN25 PN40
220	1 1/4"	DN32 PN25	DN32 PN40
330	1 1/2"		
440	Not available	DN40 PN25	DN40 PN40
550		DN50 PN25	DN50 PN40
660		Not available	DN65 PN40

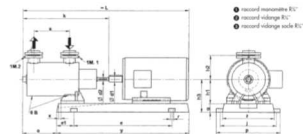
## Mechanical seal

Standardised mechanical seal (DIN 24960) Simple, double back to back, tandem or quenched assembly  
Non-compensated for outlet pressures less than 16 bar or compensated for pressures above .  
Friction face: Silicon carbide on carbon with the possibility to change on request  
O-ring material: According to the type of liquid conveyed, we'll adapt the type of O-ring

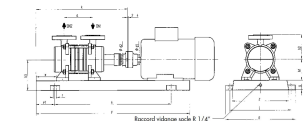
# OVERALL DIMENSIONS



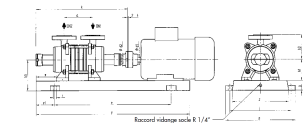
**ZS\_SOHB...  
W**



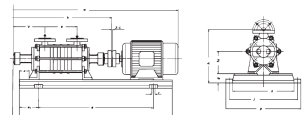
**ZS\_SOH...  
W**



**ZS\_SFH...  
W**



**ZS\_SFH...  
WW**



**ZS\_SRZ...  
WW**

## Applications & Industries

- For all applications where a self-priming pump is required. The pump is adapted for conveying clean, contaminated liquids or dissolved gases (or not), which do not contain abrasive substances.
- Supplying heaters, construction of installations, chemical and petrochemical industries, machine building, ship building, agriculture, and residential solution for irrigation/watering and drainage.

## Features

- The pumps come with oval counter flanges with threaded holes in 1", 1 1/4" and 1 1/2"
- Maximum total head between 110 and 160 mCl since the pump is limited to 16 bar and 7.5 m³/h.

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## Features

- Pumps come with one block (ZS\_SFH...W) or two blocks (ZS\_SFH...WW)
- Maximum total head between 140 and 240 mCl since the pump is limited to 25 bar and 20 m³/h.

## Applications

- The pumps in this series are made of standard, interchangeable hydraulic parts. They have a consistent performance level and comply with DIN 24254, which makes them interchangeable with other manufacturers' pumps.
- Combined with the ZS\_SFH pumps, they can be used for difficult chemical and engineering applications.

## Features

- Range of pumps complying with DIN 24254 or DIN/EN 734
- Maximum total head between 220 and 350 mCl since the pump is limited to 40 bar and 36 m³/h

# PART NUMBER

ZS	SRZ	33	2	W	G15	T	32	3	4	I	27135
	Type	Size	N° of stage	Ball bearing	Shaft seal - Mechanical seal	Mechanical seal gasket	Material code	Power (kW)	4 4 poles (# 1450 rpm)	Protection	Serial N°
SOHB	Low pressure	PN16	1 à 4 ZS_SOH	W 1	G11 Unbalanced single	V FPM				A ATEX	
SOH	Low pressure + base plate	PN16	1 à 6 ZS_SFH	WW 2	G12 Balanced single	E EPDM				I non-ATEX	
SFH	Medium pressure	PN25	1 à 8 ZS_SRZ		G15 Unbalanced double	T FPM jacket PTFE					
SRZ	High pressure	PN40			G16 Balanced double	...					
					Q31 Unbalanced single						
					Q32 Balanced single						

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