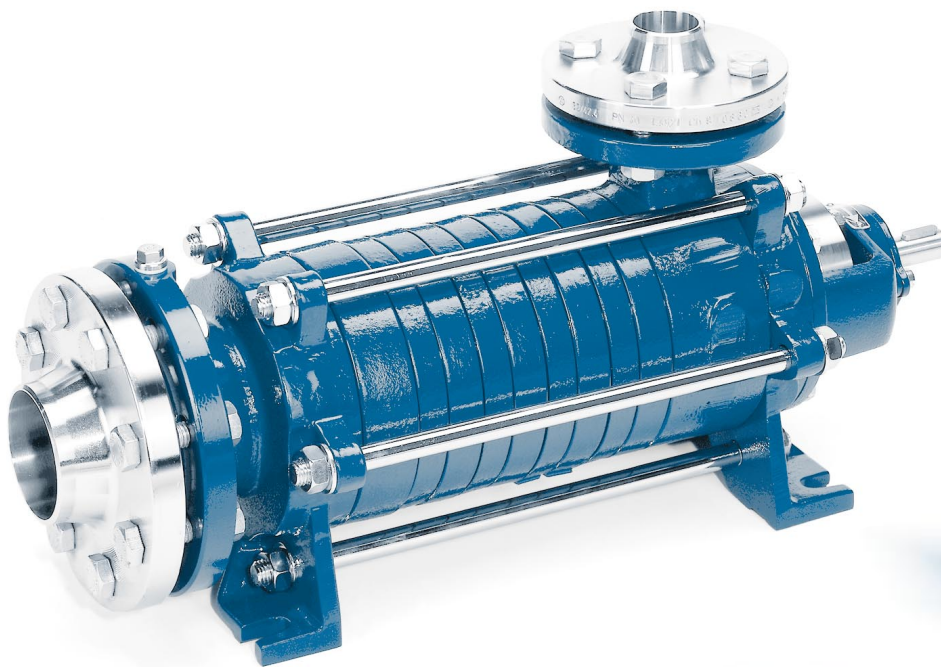


Self-priming liquefied gas pump, PN 40 SRZS...LPG



**SERO is the optimal
technological solution for
transporting media which contain
gas or which vaporize readily**

Operating data

Flow rates:	0,3 up to 35 m ³ /h
Heads:	5 up to 350 m
Speed:	max. 1800 1/min
Temperature:	-60 °C up to +120 °C
Suction height:	up to 4 m at 20 °C
Rated pressure:	40 bar
Viscosity:	0,3 up to 230 mPas
Gas entrainment:	max. 50 %
Max. motor:	55 KW
NPSH-pump:	0,4 up to 1,5 m

Design

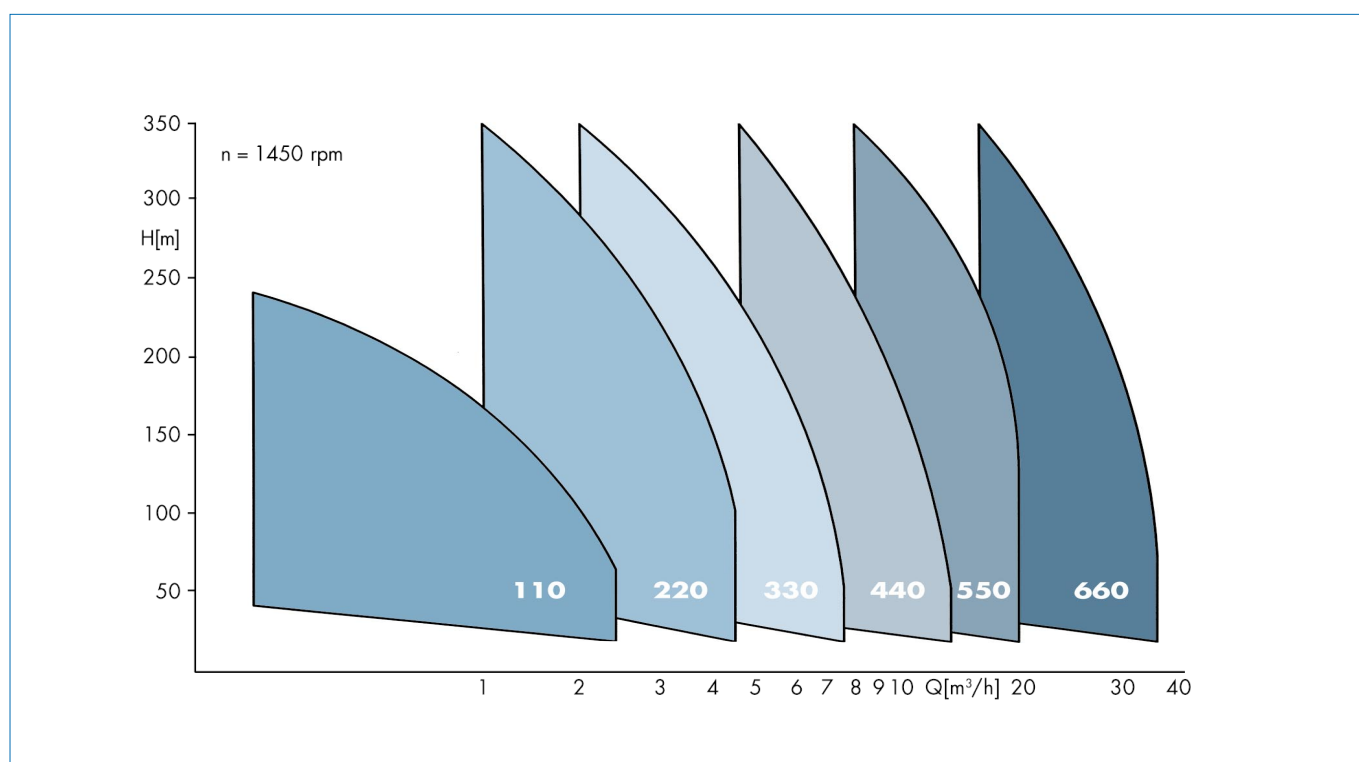
Side channel pump, gas-entraining, self-priming, in segmented construction, with open unpressurized impellers, single-stage or multi-stage, with intake NPSH suction impeller.

Construction

Housing pressure:	Nominal pressure 40
Socket position:	Suction casing: axial Pressure casing: radial
Flanges:	As specified by DIN 2501, nominal pressure 40, Suction side: Nominal diameters 40-100 mm Pressure side: Nominal diameters 20-65 mm
Bearings:	Pressure side: deep-grooved ball bearing Suction side: hard carbon in steel housing and shaft sleeve intermediate stages: special carbon
Direction of rotation:	Counterclockwise
Shaft seal:	Standard single-acting mechanical seal as specified by DIN 24960 Material: silicon carbide/graphitic carbon/ viton G11V-HK = < 16 bar, unbalanced G13V-HK = < 25 bar, balanced G12V-HK = < 40 bar, balanced
Drive:	Standard 3-phase motors, 4-pole

NOTE: This seal does not meet the standard specifications in Germany and parts of the European Union. Germany requires either a double-acting mechanical seal or a magnetic coupling to pump liquefied gas. We can provide both designs.

Performance Range n = 1450 rpm (50 Hz)



Areas of application for our liquefied gas pumps

- loading and unloading tank cars (SERO empties containers leaving only a tiny residue)
- Carousel filling of LPG bottles
- Vaporizer feeding
- Fueling at LPG tank stations

Our speciality: Pumping from underground tanks!

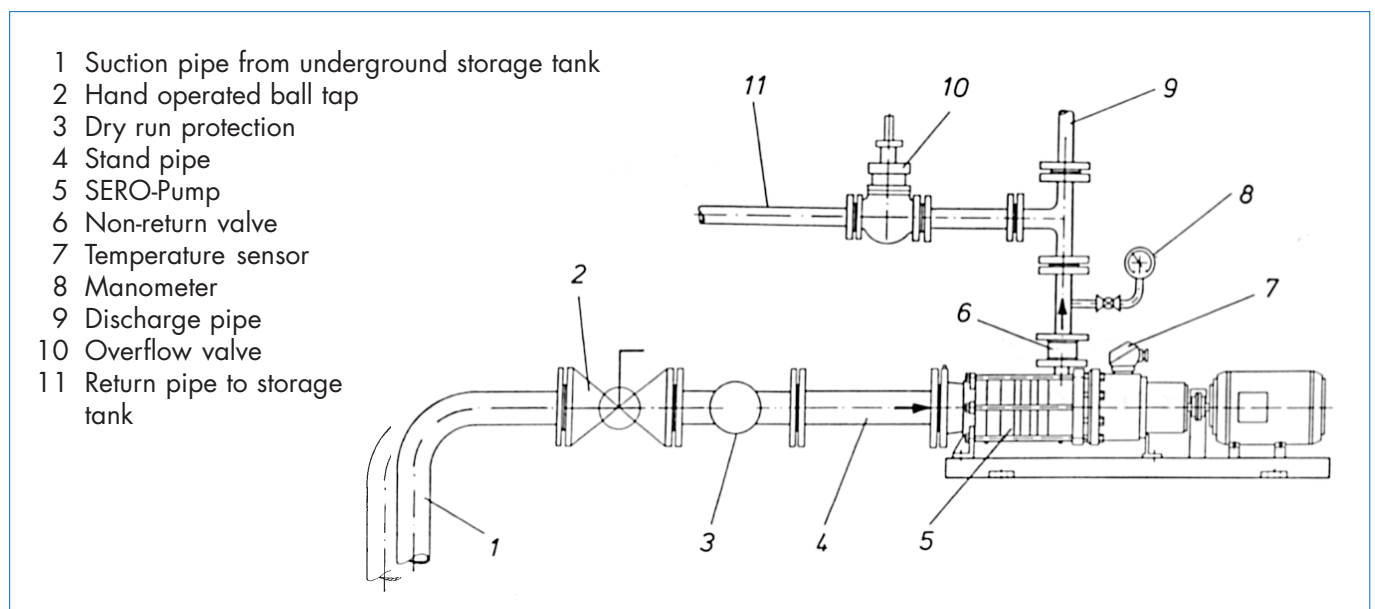
With our special SRZS/2 design, liquefied gas can be pumped with a maximum suction height of 4 m with suitable plant design.

Advantages for you


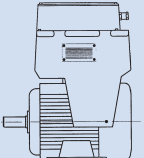
- The steep Q-H characteristic curve controls steam pressure fluctuations
- The hydraulic pumping system feeds two-phase streams (liquid-gas mixtures with up to 50 % gas) without difficulty
- The output is not interrupted during partial degassing
- SERO pumps guarantee reliable pumping because of their extremely low NPSH values
- SERO pumps reduce the pressure in the suction line – they are **selfpriming**

Other advantages:

- low speed (1450 rpm) and low wear
- the high nominal pressure of 40 bar makes SERO pumps reliable



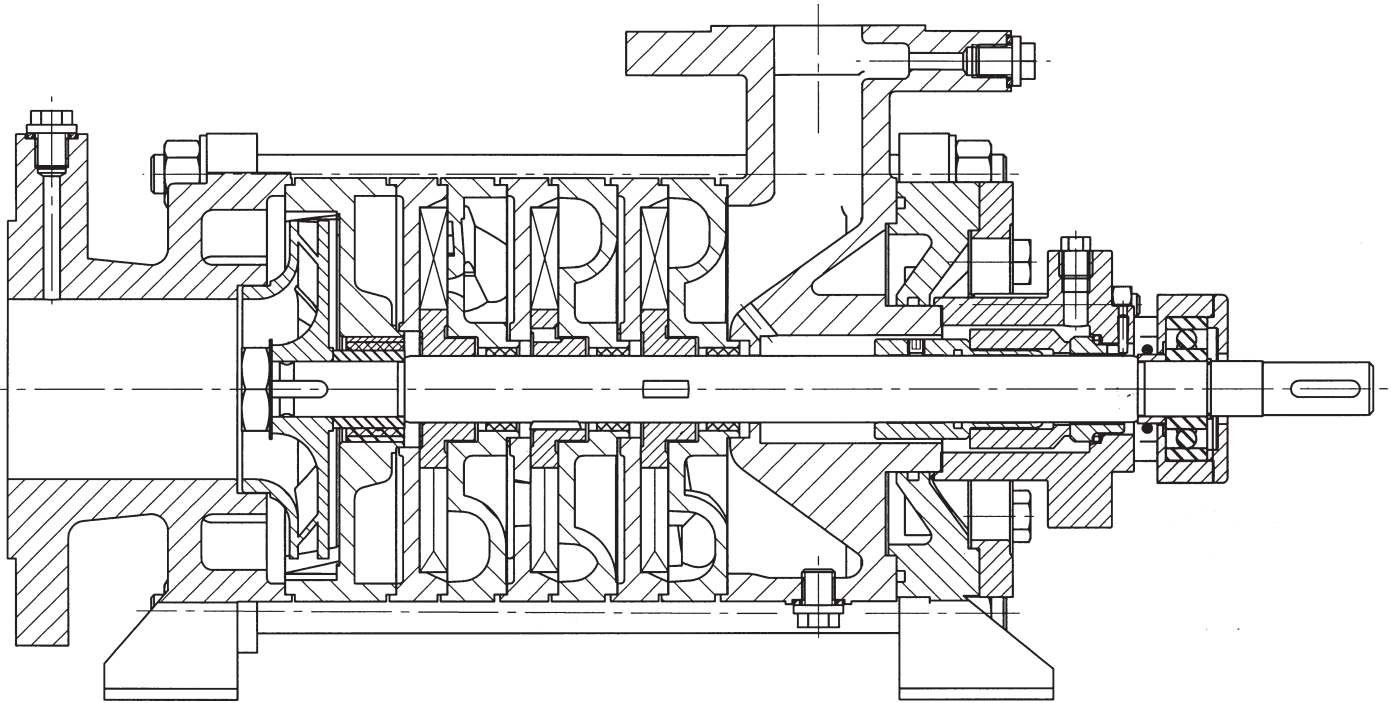
Pump Components

<h3>Dry Run and Load Monitors</h3> 	<p>Signaling or pump shutdown, respectively, in the following cases:</p> <ul style="list-style-type: none"> ● Dry Run ● Closed Suction or Pressure Line ● The suction head is below the specified NPSH value
<h3>Speed Control</h3> 	<p>Three-phase motor with integrated electronic frequency converter for continuously variable speed control.</p> <p>Variable duty points can be controlled at different speeds. This ensures expanded pump performance while saving energy.</p>

Liquids to be pumped:

- propane
- propene
- butane
- butene
- mixtures

Sectional View



Material Specification

	Material version 60
suction casing	GGG 40.3
discharge casing	GGG 40.3
stage casing	GGG 40
discharge stage casing	GGG 40
shaft	1.4021
impeller	special brass
foot	GGG 40
bearing bracket	GG 25
bearing bushing	special carbon
tie bolt	St. 60
mechanical seal	hard metal

High-quality material subject to change.

Pump Designation (Example)

	SRZS	33	5	W	LPG	G13V-HK	I. 60
Pump series	_____	_____	_____	_____	_____	_____	_____
Size	_____	_____	_____	_____	_____	_____	_____
Numbers of stages	_____	_____	_____	_____	_____	_____	_____
Bearing design	_____	_____	_____	_____	_____	_____	_____
LPG design	_____	_____	_____	_____	_____	_____	_____
Shaft seal	_____	_____	_____	_____	_____	_____	_____
Material version	_____	_____	_____	_____	_____	_____	_____