

Self-priming liquefied gas pumps, PN 40

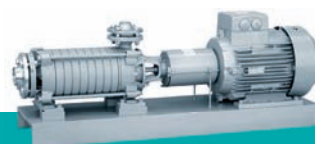
SRZS...LPG

NHE...LPG



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

Operating Data



	SRZS...LPG	NHE...LPG
Flow rates:	0,3 up to 35 m ³ /h	30 up to 170 m ³ /h
Heads:	up to 350 m	up to 290 m
Speed:	max. 1800 1/min	max. 3600 1/min
Temperature:	-40 °C up to +60 °C	-40 °C up to +60 °C
Suction height:	up to 4 m at 20 °C	–
Rated pressure:	40 bar	40 bar
Gas entrainment:	max. 50 %	max. 30 %
Max. motor:	55 KW	75 KW
NPSH-pump:	0,4 up to 1,5 m	2 up to 7,7 m

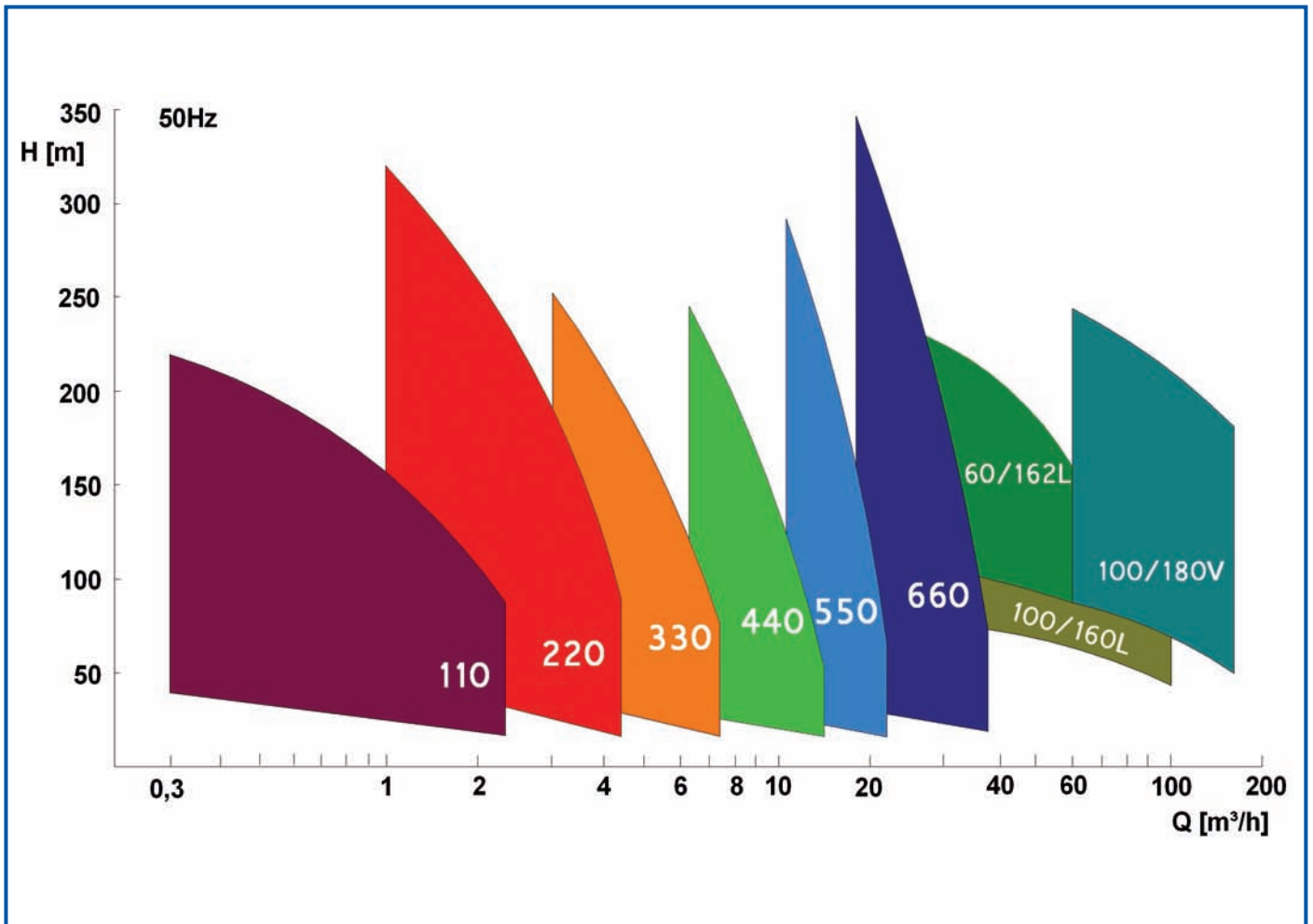
Construction

	SRZS...LPG	NHE...LPG
Housing pressure:	Nominal pressure 40	Nominal pressure 40
Socket position:	Suction casing: axial Discharge casing: radial	Suction casing: axial Discharge casing: radial
Flanges:	As specified by DIN EN 1092 Suction side: Nominal diameters 40 – 100 mm Pressure side: Nominal diameters 20 – 65 mm	As specified by DIN EN 1092 Suction side: Nominal diameters 80 – 125 mm Pressure side: Nominal diameters 65 – 100 mm
Bearings:	Pressure side: deep-grooved ball bearing Hydraulic: special carbon	Pressure side: deep-grooved ball bearing Suction side: bronze / special material Intermediate stages: bronze
Direction of rotation:	Counterclockwise	Counterclockwise
Shaft seal:	- Standard single acting / optional double-acting mechanical seal as specified by DIN 24960 Material: silicon carbide / graphitic carbon / viton < 40 bar, balanced - also available with magnetic coupling	- Single acting / optional double-acting mechanical seal as specified by DIN 24960 Material: graphitic carbon / silicon carbide / viton < 40 bar, balanced - also available with magnetic coupling
Drive:	IEC-3-phase motors, IP 55, 4-pole	IEC-3-phase motors, IP 55, 2-pole

Design

	SRZS...LPG	NHE...LPG
	Side channel pump, gas-entraining, self-priming, in segmented construction, with open unpressurized impellers, single-stage or multi-stage, with NPSH suction impeller.	Centrifugal pump, gas-entraining, not self-priming, in segmented construction, with unpressurized impellers in connection with stationary blades.

Performance Range



Areas of application for our liquefied gas pumps

- Loading and unloading tank cars (SERO empties containers leaving only a tiny residue)
- Carousel filling / bottling
- Vaporizer feeding
- LPG-tank stations / fuel-filling

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.

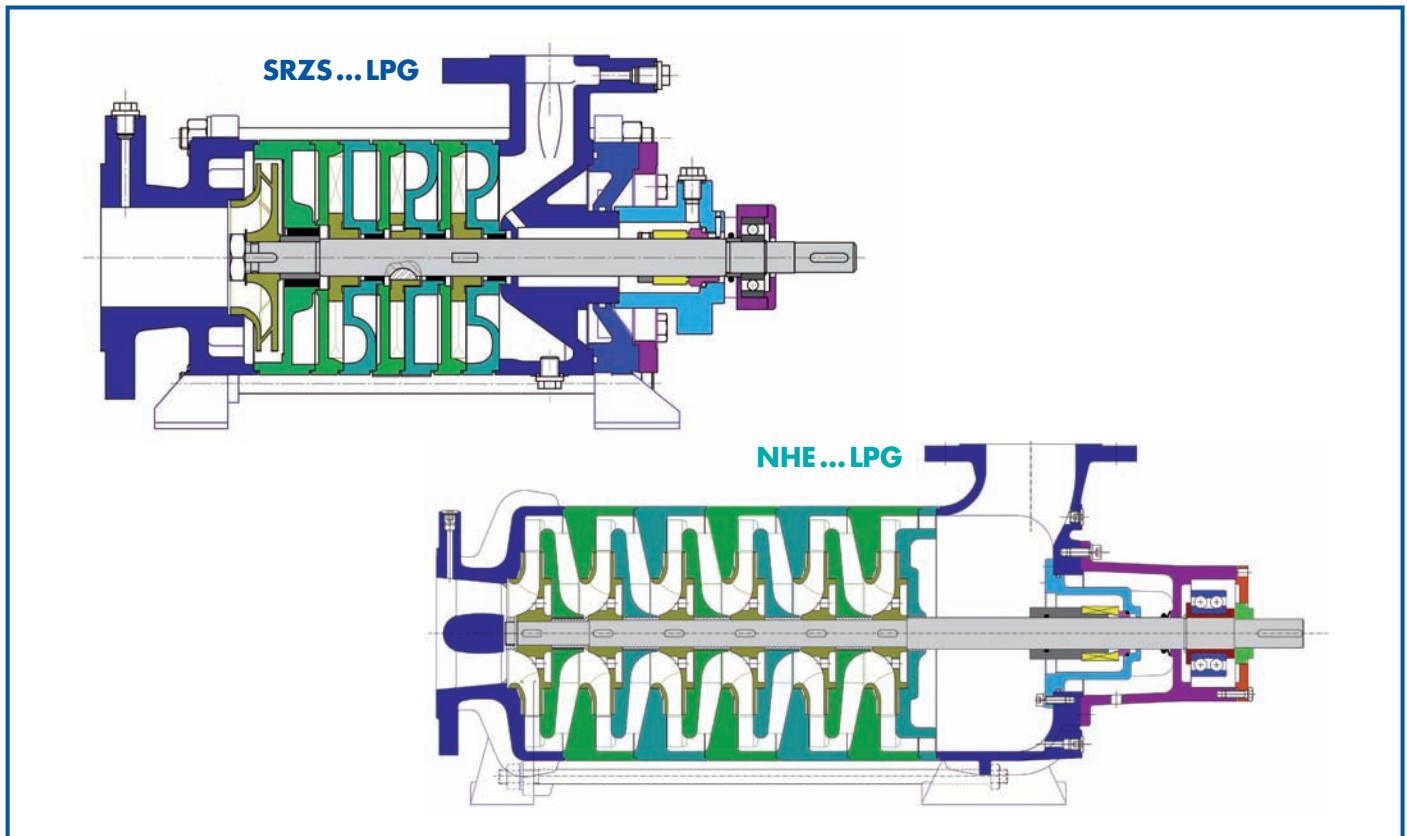
Advantages for you

- 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 at SERO **SRZS...LPG**
- The output is not interrupted during partial degassing
- SERO **SRZS...LPG** guarantee reliable pumping because of their extremely low NPSH values
- SERO **SRZS...LPG** reduce the pressure in the suction line – they are **self-priming**

Media to be pumped:

- Propane
- Butane
- Mixtures

Sectional View



Material Specification



	SRZS...LPG	NHE...LPG
Suction casing:	Ductile iron (GGG 40.3)	Ductile iron (GGG 40.3)
Discharge casing:	Ductile iron (GGG 40.3)	Ductile iron (GGG 40.3)
Stage:	Ductile iron (GGG 40)	Ductile iron (GGG 40)
Shaft:	HS Steel 1.4021	HS Steel 1.4057
Impeller:	Bronze (CuZn40Al1)	NHE 6 Bronze (G-CuSn 12) Ductile iron (GGG 50) NHE 100 Bronze (G-CuSn 12) Ductile iron (GGG 40)
Foot:	Ductile iron (GGG 40.3)	NHE 6 Cast iron (GG 25) NHE 100 Ductile iron (GGG 40.3)
Mechanical seal:	SIC / Carbon / Viton	Carbon / SIC / Viton