

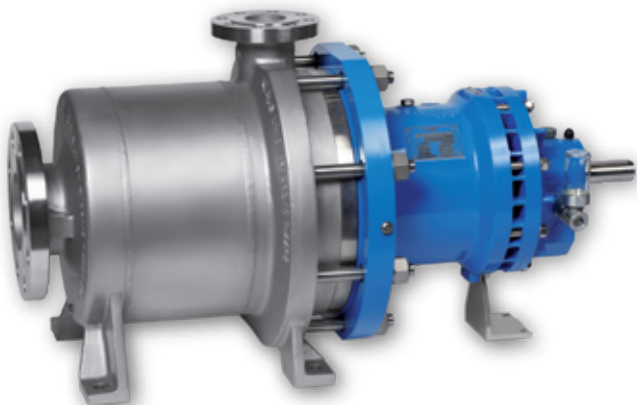
SLM GV

 **KLAUS
UNION**
QUALITY IS OUR SUCCESS



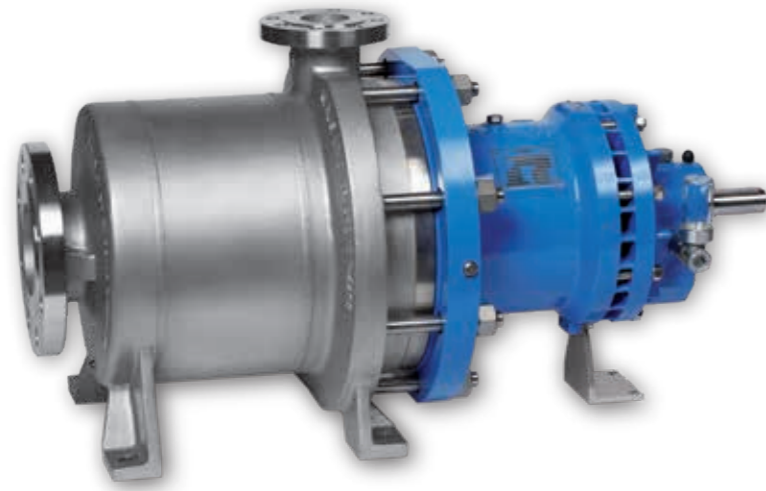
MULTI-STAGE CENTRIFUGAL PUMP SERIES SLM GV

SEALLESS WITH MAGNET DRIVE
ACC. TO DIN EN ISO 15783



www.klaus-union.com

MULTI-STAGE PUMP WITH MAGNET DRIVE SERIES SLM GV



As a member of Klaus Union's successful modular pump concept, the SLM GV further extends our sealless application coverage. The SLM GV pump is primarily used for applications requiring high delivery heads.

Requirements have increased, become more complex, and more specific in recent years, particularly in the chemical and petrochemical industry, where pumps handle aggressive, toxic, and explosive liquids under highest safety requirements. Klaus Union's new SLM GV pump series addresses today's industry requirements – and offers new efficient and demand-driven solutions.

Klaus Union satisfies these requirements with over sixty years of experience in development, construction, manufacturing, and in the application of magnet drive pumps.

SLM GV – “V” stands for “variable” through modular design. Features and benefits of the modular “V-Concept” are:

- ▶ Few individual components – multi-functional, individual application
- ▶ Greater safety over the entire construction range
- ▶ Suitable for serial fabrication at competitive prices
- ▶ Standard modules offer many design variations
- ▶ Energy efficient systems
- ▶ Maximum flexibility and interchangeability
- ▶ Off-the-shelf availability of parts, components and accessories

The construction series SLM GV covers the complete performance range of multistage centrifugal pumps. Pumps for high system pressure applications and features according to API 685 2nd edition are also available upon request.

Experience
Responsibility
Passion



Quality Assurance

A major component of the Klaus Union ethos is to ensure highest product quality. Existing quality assurance procedures with Klaus Union suppliers are constantly monitored from order placement to goods receipt and final assembly. This quality assurance system, developed on latest technologies, complies with the requirements of international regulations.

Klaus Union is a DIN EN ISO 9001 certified company



In accordance with TÜV NORD CERT procedures,

KLAUS UNION GmbH & Co. KG
Blumenfeldstraße 18, 44795 Bochum
&
KLAUS UNION Service GmbH & Co. KG
Blumenfeldstraße 18, 44795 Bochum

are certified according to
DIN EN ISO 9001

Performance Range

- ▶ **Flow Rate:** Q = up to 350 m³/h
- ▶ **Delivery Head:** H = up to 700 m L. C.

Higher flow rates and delivery heads upon request

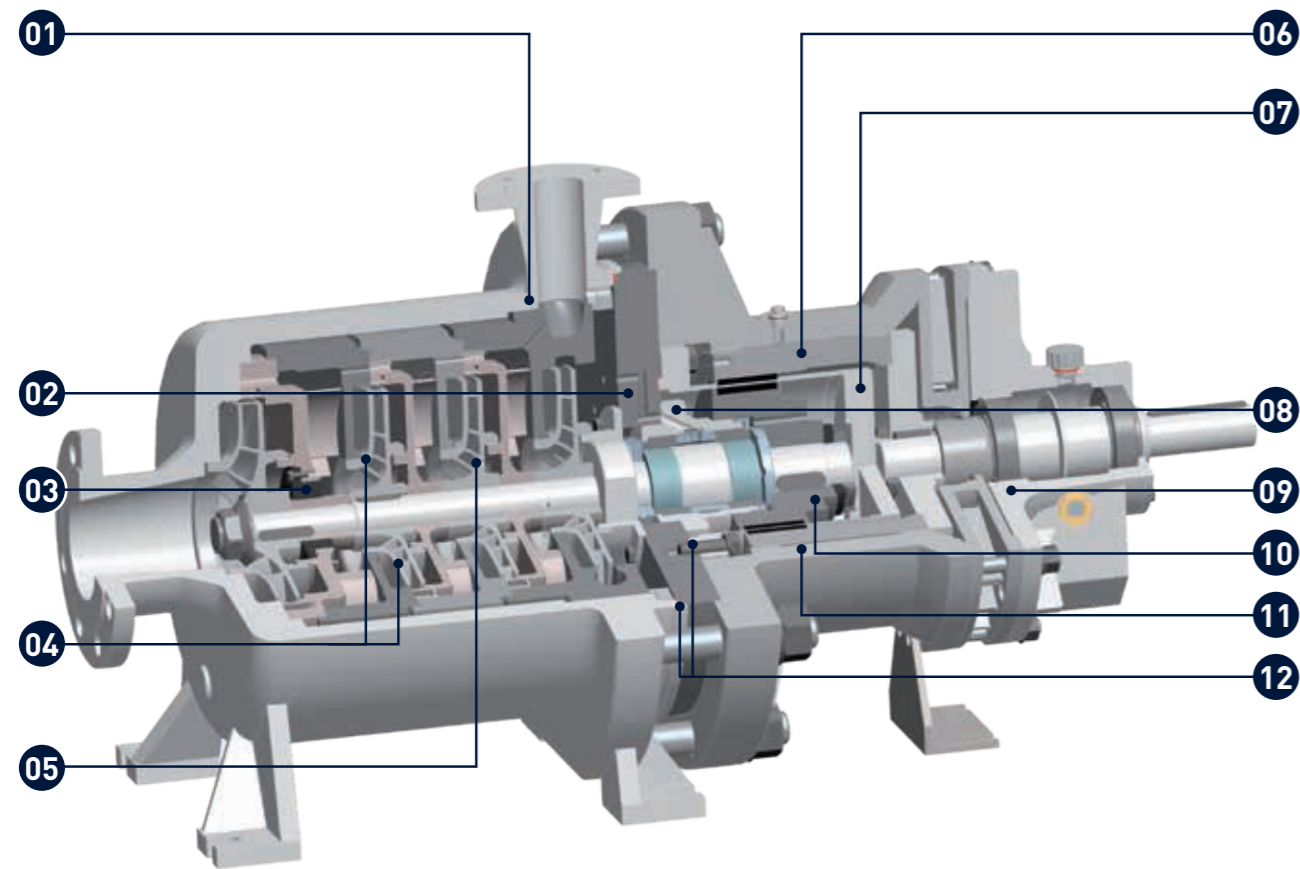
Pressure Ratings/Temperature Range

- ▶ **Standard Construction:** PN 40 / PN 63 at 120 °C
- ▶ **Temperature Range:** -120 °C up to 350 °C
- ▶ **Pressure Rating:** up to PN 200



DESIGN DETAILS

SERIES SLM GV



Please see
the description
on the following page
→

Design
ACC. TO
DIN EN ISO 15783

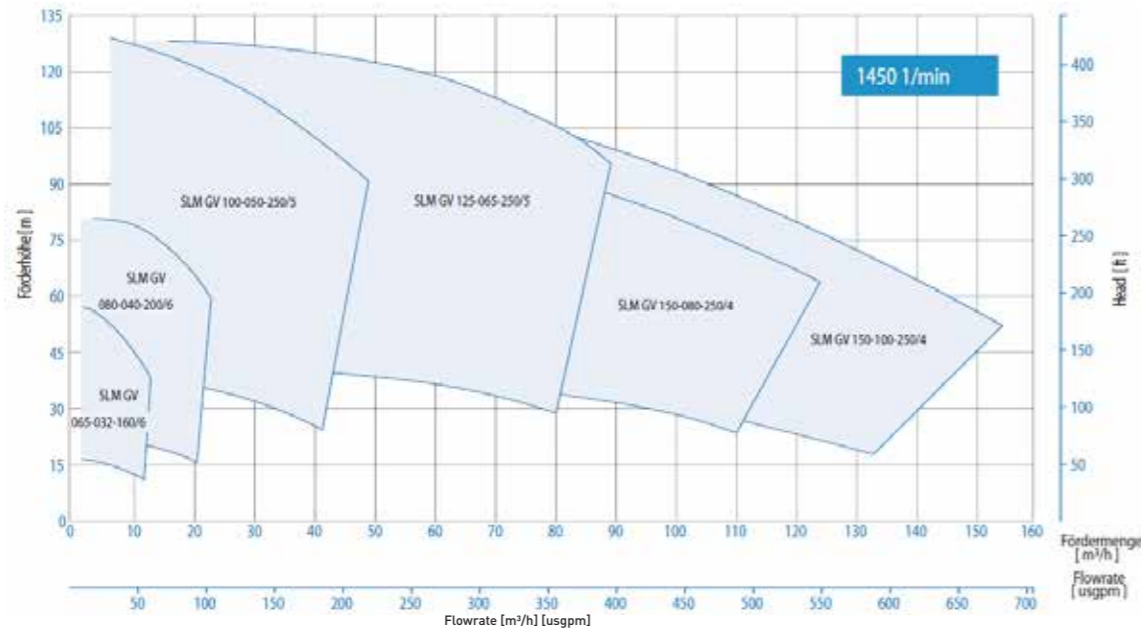


- 01 ▶ **Barrel-type pump casing**
PN 40 / PN 63 at 120 °C;
Suction nozzle with horizontal inlet
Optional: heating jacket.
- 02 ▶ **Flushing System**
Pressurised to safely handle liquids close to boiling.
- 03 ▶ **Radial Journal Bearing**
Radial journal bearing behind the suction impeller.
- 04 ▶ **Impellers**
Arranged in series; First stage with suction impeller
Optional: Suction inducer to reduce required NSPH.
- 05 ▶ **Balancing Holes**
Optimized thrust loads over the entire operating range via hydraulic measures.
- 06 ▶ **Outer Magnet Carrier**
Two piece with rub ring on the intermediate lantern.
- 07 ▶ **Containment Shell**
Self-venting and fully drainable; Vortex breaker.
- 08 ▶ **Journal Bearings**
Double bearing made of SSiC;
Counter centred combination for universal utilisation over a wide temperature range.
- 09 ▶ **Bearing Support**
Bearing Bracket with Oil- or Greased-for-Life Anti-Friction Bearings
Optional: Close-coupled design
- 10 ▶ **Inner Magnet Carrier**
With rub ring on the journal bearing bush.
- 11 ▶ **Intermediate Lantern**
With outer magnet carrier rub ring and assembly/ disassembly guidance.
- 12 ▶ **Static Gasket**
Merely two static gaskets on containment shell and casing.

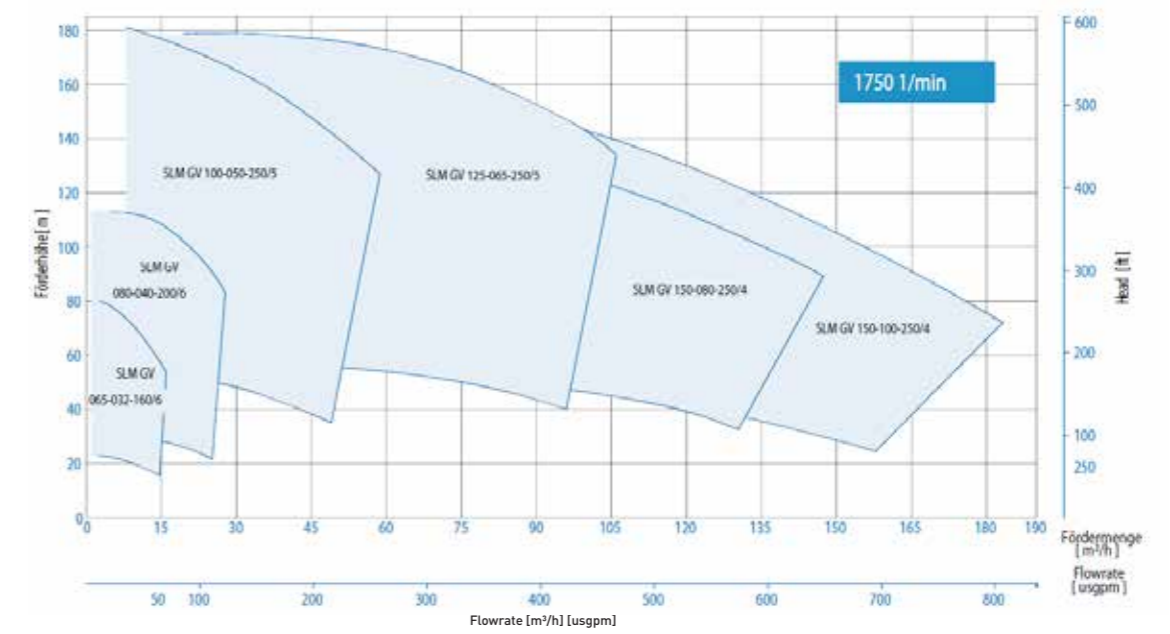
PERFORMANCE CURVES SERIES SLM GV



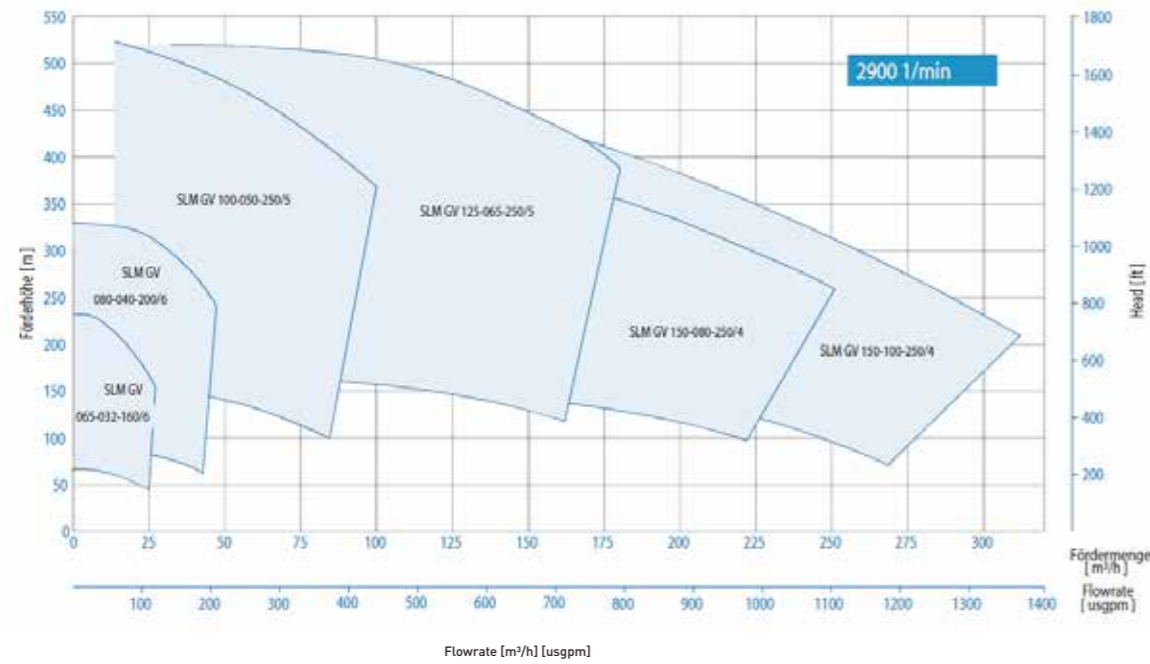
Performance Curve 50 Hz



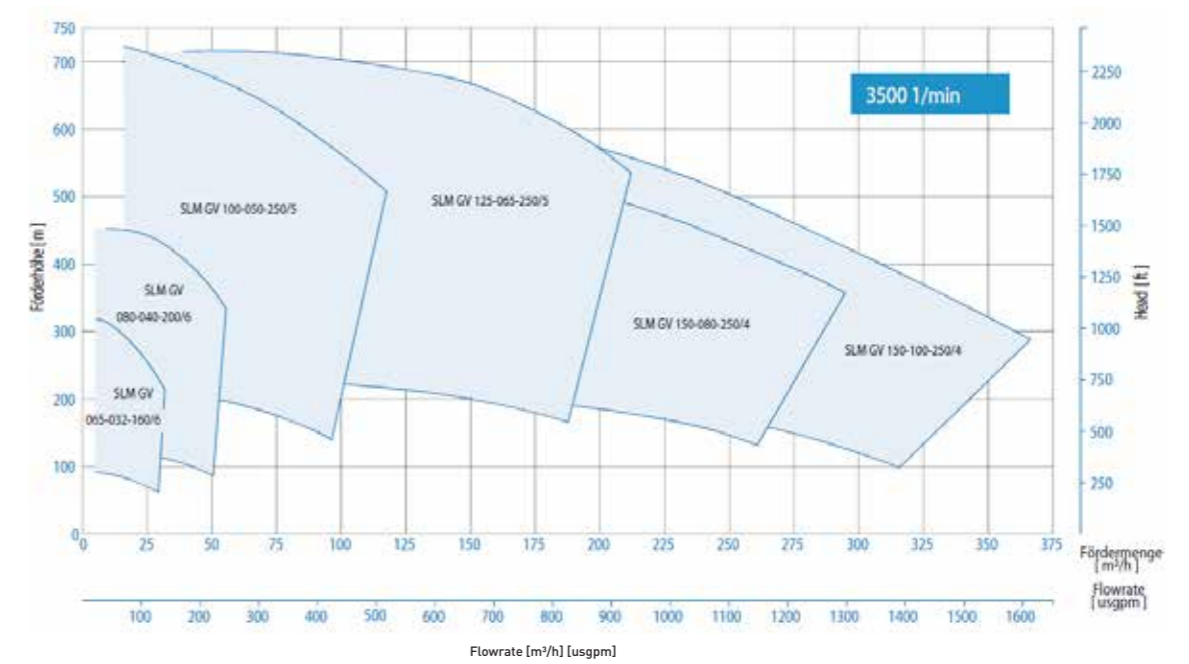
Performance Curve 60 Hz



Performance Curve 50 Hz



Performance Curve 60 Hz



Product Range Pumps:

Magnet Drive Pumps

- ▶ Centrifugal Pumps according to DIN EN ISO 2858 & DIN EN ISO 15783
- ▶ Centrifugal Pumps according to ASME B73.3M-2015
- ▶ Centrifugal Pumps according to API 685 2nd Edition
- ▶ Multi-Stage Centrifugal Pumps (Barrel-Type Design available)
- ▶ Side Channel Pumps following DIN EN ISO 15783
- ▶ Twin Screw Pumps, Single Volute, according to API 676 3rd Edition
- ▶ Pumps in Close-Coupled Design
- ▶ Pumps for High Pressure Applications
- ▶ Pumps for High Temperature Applications
- ▶ Self-Priming Pumps
- ▶ Submerged Pumps, Single- / Multi-Stage and Twin Screw Design
- ▶ Vertical Inline Pumps

Mechanically Sealed Pumps

- ▶ Centrifugal Pumps according to DIN EN ISO 2858 & DIN EN ISO 5199
- ▶ Centrifugal Pumps following API 610 11th Edition & ISO 13709 2010
- ▶ Multi-Stage Centrifugal Pumps (Barrel-Type Design available)
- ▶ Propeller Pumps, Horizontal / Vertical / Bottom-Flange
- ▶ Side Channel Pumps
- ▶ Twin Screw Pumps, Single / Double Volute, according API 676 3rd Edition
- ▶ Pumps for High Pressure Applications
- ▶ Pumps for High Temperature Applications
- ▶ Self-Priming Pumps
- ▶ Submerged Pumps, Single- / Multi-Stage and Twin Screw Design
- ▶ Vertical Inline Pumps

Product Range Valves:

- ▶ Globe Valves, T-Pattern
- ▶ Globe Valves, Y-Pattern
- ▶ Control Valves
- ▶ Gate Valves, Isomorphous Construction Series
- ▶ Gate Valves, Wedge or Wedge Plates
- ▶ Relief Valves
- ▶ Check Valves
- ▶ Sight Glasses
- ▶ Strainers
- ▶ Bottom Valves
- ▶ Butterfly Valves, Metal Seated
- ▶ Control Butterfly Valves, Metal Seated

Klaus Union Service Performance:

- ▶ Workshop / On-Site Repairs
- ▶ Genuine Spare Part Delivery Worldwide
- ▶ Spare Parts Storage
- ▶ Customized Spare Parts Management
- ▶ On-Site Maintenance
- ▶ Installation
- ▶ Retrofitting
- ▶ On-Site Testing / Monitoring
- ▶ Customer Advisory Service
- ▶ Start Up & Commissioning
- ▶ Individual 24 / 7 Service
- ▶ Trouble-Shooting
- ▶ In-House & On-Site Training
- ▶ On-Site Assembly and Disassembly
- ▶ Long-Term Maintenance Contracts
- ▶ Maintenance Planning and Consulting
- ▶ Diagnostics

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