

SLM-AHO & NHO
SealLess Magnet-drive

**High Temperature
Sealless Centrifugal Pump**



SLM-AHO → ANSI Hydraulics
SLM-NHO → ISO Hydraulics

General Description

Klaus Union's SLM-AHO/NHO is a horizontal, sealless centrifugal pump for high temperature applications. High performance Samarium-Cobalt Magnet Systems cover temperatures up to 752 °F (400 °C). Aluminum Nickel Cobalt Magnet Systems are available to cover applications with temperatures up to 840 °F (450 °C) – no external cooling required.

Operating Parameters

- ▷ Flow rates up to 5,500 GPM
- ▷ Total delivery heads up to 575 feet
- ▷ Temperature ratings from -185 °F (-120 °C) to +840 °F (+450 °C)
- ▷ Flange rating per ANSI B16.5 Class 150 and Class 300

Pumping

- ▷ Heat transfer liquids
- ▷ Hydrocarbons
- ▷ Aggressive, explosive and toxic liquids
- ▷ Acids & lyes
- ▷ Liquid gases
- ▷ Difficult-to-seal liquids
- ▷ Ultrapure liquids

Applications

- ▷ Heat engineering
- ▷ Refineries
- ▷ Chemical and petrochemical industries
- ▷ Liquid gas plants
- ▷ Power stations
- ▷ Tank installations
- ▷ Pharmaceutical industries
- ▷ Fibers industries

Construction

- ▷ Horizontal sealless centrifugal pump
- ▷ Separation of liquid chamber/atmosphere by means of an isolation shell
- ▷ Permanent magnet drive system, no mechanical seal
- ▷ Synchronous drive transmitted by inner and outer magnet systems
- ▷ Liquid lubricated internal bearings made of pure, sintered silicon carbide
- ▷ Bearings of outer magnet carrier: deep groove ball bearings

Standard Materials of Construction

Pump casing:	316 SS
Impeller:	316 SS
Isolation shell:	316 SS/Hastelloy C4
Inner magnet carrier:	316 SS/Hastelloy C4
Internal bearings:	Silicon carbide, alpha grade
Bearing frame:	Cast steel/nodular cast iron
Magnets:	Samaritan cobalt or aluminum nickel cobalt

Special Alloy

Hastelloy B	Alloy 20
Hastelloy C	Titanium

Other materials available

Optional Features

- ▷ PMP 25 - Power monitor
- ▷ TPS - Isolation shell temperature probe
- ▷ CDS - Double-wall isolation shell (dual containment)
- ▷ Self-cleaning internal & external filter for liquids containing solids
- ▷ External flush connection
- ▷ Jacketed casing & lantern for heating/cooling
- ▷ Suction inducer for low NPSHa applications
- ▷ Isolation shell materials: Hastelloy C4 or Titanium
- ▷ Internal bearing materials: Carbon/SSIC, carbon/satellite

Specifications are subject to change. Materials listed are equivalent to DIN/ISO standards.

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