



SIHI^{LPH-X} - Liquid Ring Vacuum Pumps



ATEX
CERTIFIED

STERLING FLUID SYSTEMS GROUP
www.sterlingfluidsystems.com

SIHI LPH-X

VACUUM TECHNOLOGY – Cost Effective Performance

For over 80 years Sterling SIHI has maintained its position as a leading supplier of innovative technologies in liquid ring vacuum pumps and liquid ring compressors.

The comprehensive Sterling SIHI range of liquid ring vacuum pumps is available in single and two stage designs, with suction capacities up to 12000 m³/h and suction pressures in the range 33 to 1013 mbar. In addition, above atmospheric pressure these pumps can be used as compressors.

The latest addition to this is the SIHI ^{LPH-X} range, which is available in one and two stage variants and able to operate at 50Hz and 60Hz. It has been designed for interchangeability with the well established LPHA range and offers the lowest cost of ownership.

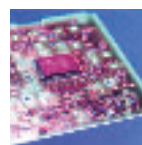
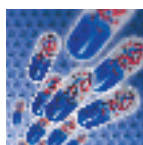
| PERFORMANCE RANGE - See page 3 for product availability | | |
|---|---------------------|--------------------------------|
| Type | Suction Pressure | Suction Volume Flow |
| LPH-X single stage | 120 to 1013 mbar | 50 to 850 m ³ /h |
| LPH-X two-stage | 33 to 1013mbar | 44 to 800 m ³ /h |

INDUSTRIES/MARKETS

- Chemical
- Pharmaceutical
- Plastics Processing
- Food Industry
- Beverage Production
- Ceramic Manufacture
- Medical Technology
- Textile Processing
- Specialist Paper
- Paint Manufacture
- Electronics Industry
- and many more

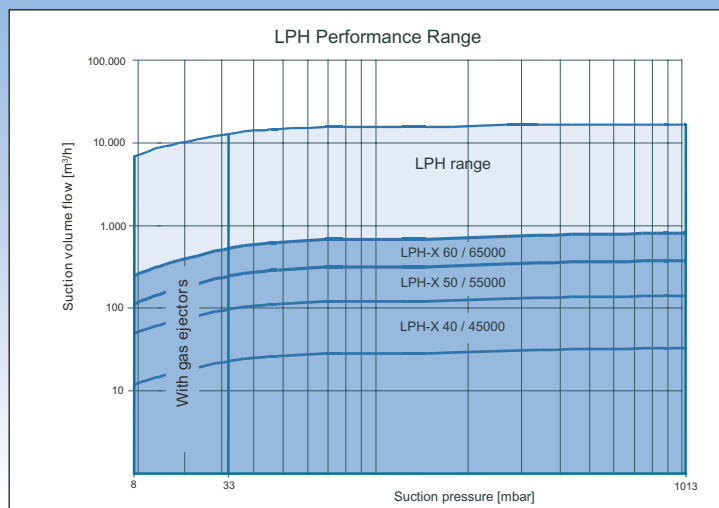
TYPICAL APPLICATIONS

- Distillation
- Drying
- Degassing
- Filtration
- Deodorisation
- Deoxygenation
- Sterilisation
- Filling
- Product Transfer
- Vapour Recovery
- Priming
- Central Vacuum Systems



SIHI^{LPH-X} - Design Shaped by Function

THE PROVEN VACUUM SOLUTION



Note: For further information on this product range contact your local sales office or visit www.sterlingfluidsystems.com

The modular **SIHI^{LPH-X}** is offered in one and two stage designs in a range of different sizes and materials to meet most vacuum requirements.

In addition to offering the usual benefits of liquid ring vacuum pumps such as near isothermal compression, oil free vacuum, low noise and application flexibility, the **SIHI^{LPH-X}** offers the following features and benefits:-

FEATURES

- Interchangeable with previous LPH range
- Complies with ATEX legislation
- Single and two stage
- Modular construction
- Compact design
- Fewer components
- Extensive range of sizes, materials and sealing combinations
- Seal accessibility
- Engineered systems

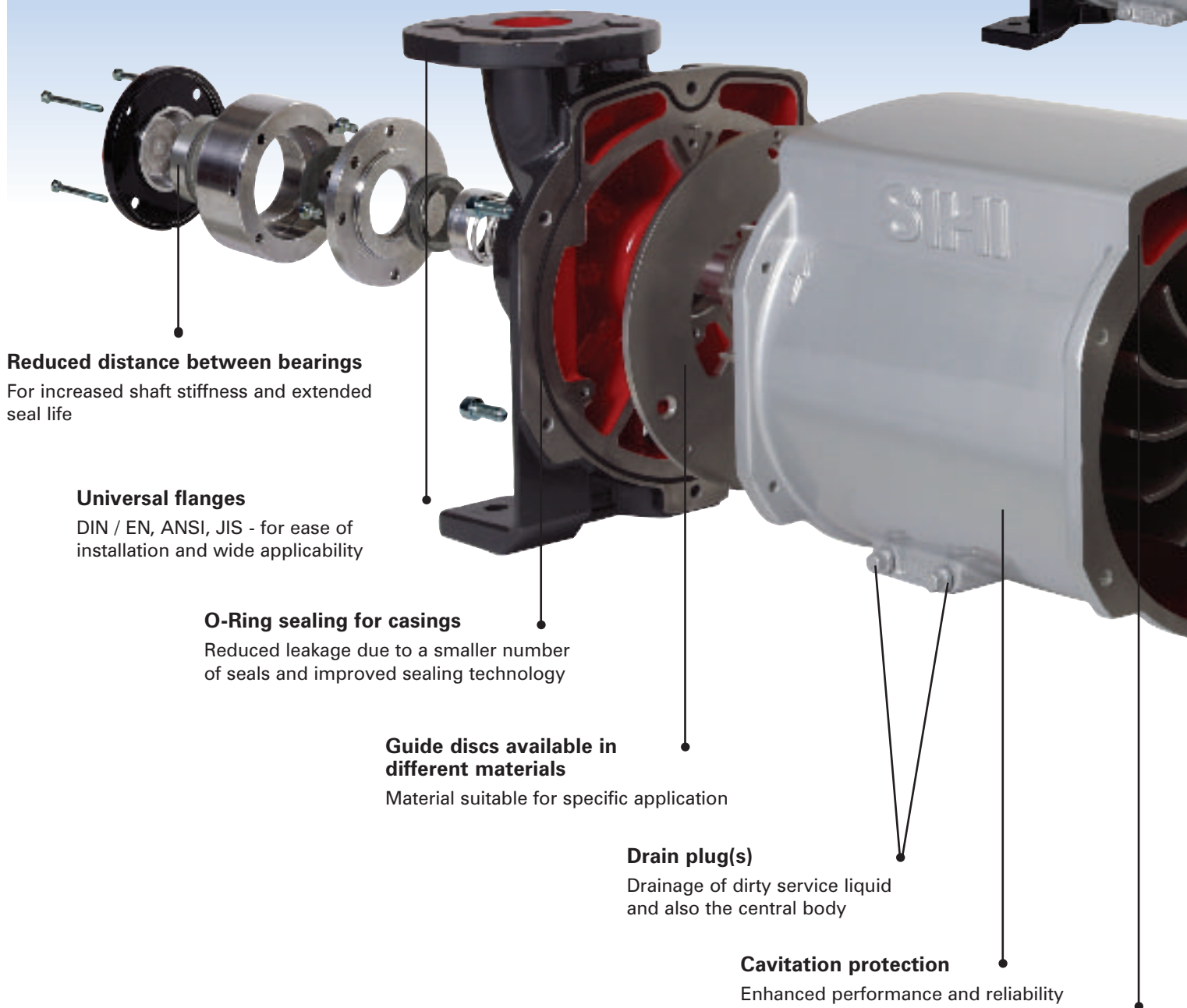
BENEFITS

- ✓ "Drop in" replacement with key parts interchangeability
- ✓ Certified for Category 1 and Category 2
- ✓ Enhanced performance range
- ✓ Ease of maintenance and low inventories of spare parts
- ✓ Space saving
- ✓ Short lead times and fast deliveries
- ✓ Ensures optimal solution for the application
- ✓ Ease of maintenance
- ✓ Complete solution

SIHI^{LPH-X} ...The Vacuum Pump Range With Lowest Cost of Ownership.

SIHI LPH-X

The SIHI *LPH-X* range has been designed to incorporate the best features of the former LPHA range whilst improving the overall design, reducing part complexity and cutting life cycle costs. The benefits are lower maintenance, reduced requirement for spare parts, enhanced reliability and increased customer satisfaction.



Reduced distance between bearings
For increased shaft stiffness and extended seal life

Universal flanges
DIN / EN, ANSI, JIS - for ease of installation and wide applicability

O-Ring sealing for casings
Reduced leakage due to a smaller number of seals and improved sealing technology

Guide discs available in different materials
Material suitable for specific application

Drain plug(s)
Drainage of dirty service liquid and also the central body

Cavitation protection
Enhanced performance and reliability

Central body with integrated cross over pipe
Providing a more compact design and easier maintenance

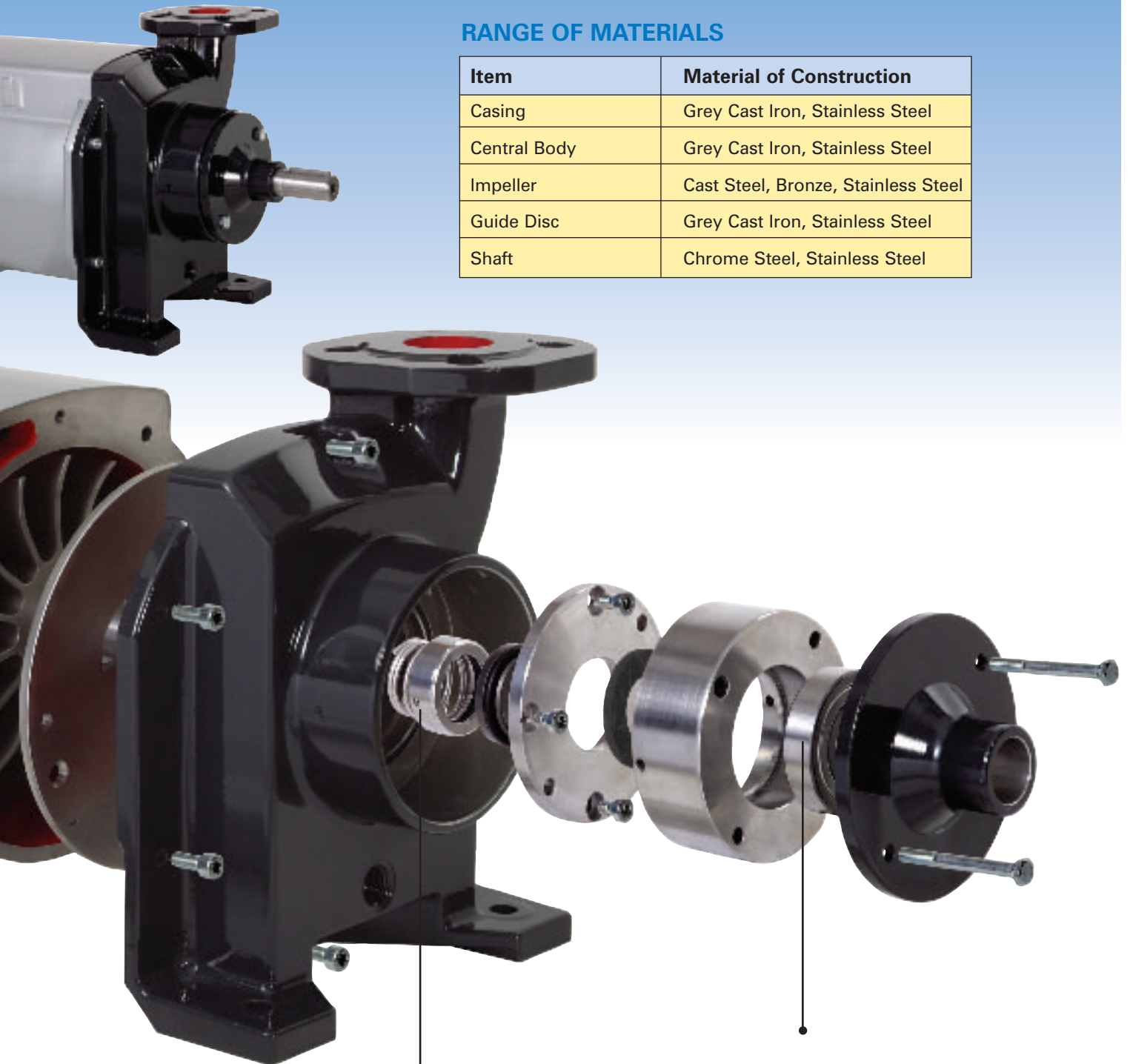
"Drop in" replacement for the former LPHA range with key wear part interchangeability



Performance Through Design

RANGE OF MATERIALS

| Item | Material of Construction |
|--------------|-------------------------------------|
| Casing | Grey Cast Iron, Stainless Steel |
| Central Body | Grey Cast Iron, Stainless Steel |
| Impeller | Cast Steel, Bronze, Stainless Steel |
| Guide Disc | Grey Cast Iron, Stainless Steel |
| Shaft | Chrome Steel, Stainless Steel |



Mechanical seals

Many different sealing options available.
Seal replacement without
disassembling pump

Robust bearings

20,000 hours, L_{10} life - maintenance free,
extended MTBF - (Mean Time Between Failure)

SIHI *LPH-X*



e.Biz



Benefits

- Electronic order processing to accelerate transactions
- RAPID web software available to facilitate pump selection by the customer
- Available in 50Hz & 60Hz versions
- ATEX compliance
- Modular design to minimise spares inventory
- Compact design for maximum space saving
- "Drop in" replacement for former LPHA range with key wear part interchangeability
- Investment in "state of the art" manufacturing for highest quality product
- Value engineered for cost effectiveness and maximum reliability
- Global, regional and local sales and service network
- Vacuum engineering expertise allied with a full understanding of customer needs

Tailored to Meet Market Needs

End users

- Suitable for many applications
- In-depth experience of vacuum applications
- Emphasis on lowest cost of ownership
- Universal flanges for ease of installation for wide applicability
- Available from bare shaft pump through to engineered systems

OEM Business

- Strong OEM customer base
- OEM feedback has been key in the development of the range
- Value engineered for cost effectiveness
- "Drop in" replacement ensures no OEM drawing modifications
- Intelligent logistics for short lead times and on time delivery
- Open to joint product development where product volumes justify investment

Replacement Business

- Identical performance with the LPHA range
- Pump fully interchangeable with the previous LPHA pump range, through a common footprint and identical inlet and outlet locations
- Reduced internal complexity, leading to lower inventory of spare parts
- Modular construction - ease of maintenance
- Key benefits of the LPHA range incorporated in the LPH-X design to enhance reliability



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