

**STERLING**

STERLING *multi* – Modular multistage pumps



STERLING FLUID SYSTEMS GROUP

# STERLING *multi*

Backed by its 70 years of application and manufacturing knowledge in the field of ring-section multistage pumps, Sterling Fluid Systems has developed its new STERLING<sup>multi</sup> range in order to address today's needs of industrial and process applications, namely increased performances and reliability combined with reduced life-cycle costs.

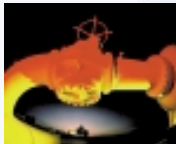
The result is an innovative pump design integrating an advanced modular concept for high flexibility and interchangeability of parts. Several unique design features ensure enhanced performance and reliability, while closely matching duty conditions.

## *Applications*

- Waterworks and Water supply
- Boiler feed
- Pressure boosting
- Irrigation
- High pressure cleaning
- Heating
- Condensate systems
- Reverse osmosis
- Process and Chemical
- And many more...



Water distribution

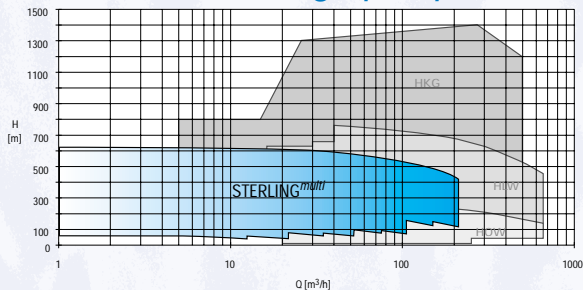


High pressure



Process and Chemical

## Modular multistage pumps



The STERLING<sup>multi</sup> range of horizontal, ring-section multistage pumps are for high pressure applications and meet the technical requirements of ISO 5199 / EN 25199. By adopting an advanced modular design, the number of parts is reduced whilst maximising interchangeability. Optimal selection of impeller diameter and diffuser size ensures that the pump closely matches the required duty conditions. Axial thrust is balanced by a newly designed and patented drum system that does not need tight, wear-sensitive running clearances to efficiently control re-circulation flow in the balance line.

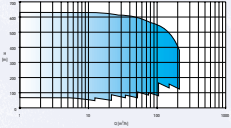
As shown on the chart above, STERLING<sup>multi</sup> is also complemented by the well established HOW, HLW and HKG ranges of multistage pumps that are also suitable for higher flow and higher head conditions.

## more ... for less ...

- **Reduced life-cycle costs**
  - Enhanced efficiency with the balance drum system
  - Only one shaft seal
  - Lower power consumption
  - High reliability
- **Ease of maintenance**
  - Simple dismantling and assembly
- **Minimised wear**
  - Reduced usage of spare parts
- **Global service network**
  - Established local Service Centres around the world

# STERLING<sup>multi</sup> - Modular multistage pumps

### Performance Range



**Suction Position**  
Adaptable design allows for either radial or axial suction.

**Discharge Position**  
Adaptable design allows different radial positions to be selected.

**New Design of Balance Drum System**  
This new, patented design combines a balance drum with a self-adjusting throttling device.

- The benefits include:
- greatly reduced re-circulation flow in the balance line
  - same balanced drum system for different number of stages
  - high efficiency, lower power consumption
  - lesser wear rate as this system does not rely on tight, wear-sensitive clearances to control the re-circulation flow

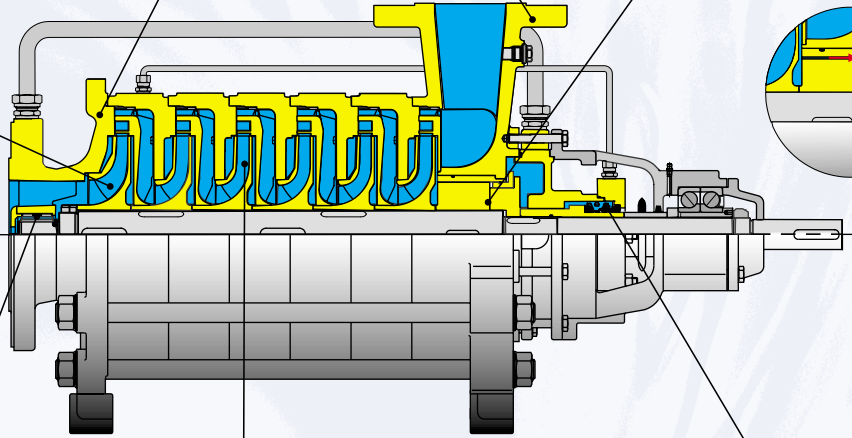
**Suction Impeller**  
First stage impeller ensures reliable operation with low NPSH conditions.

**Product Lubricated Sleeve Bearing**  
Self-aligning bearing for higher reliability.

**Modular Design**  
Modular geometry of impellers / diffusers permits optimal hydraulic design matching all duty conditions.

**Shaft Sealing**

- uncooled and cooled single-acting mechanical seal
- uncooled double acting mechanical seal
- uncooled or cooled packed gland



# STERLING<sup>multi</sup> - Options

## Nozzle Position *(viewed from drive end)*

### Discharge Casing



radial horizontal left



radial top



radial horizontal right

every combination of suction and discharge casing is available

### Suction Casing



axial



radial horizontal left

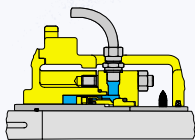


radial top

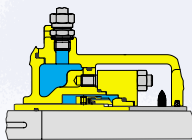


radial horizontal right

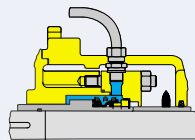
## Shaft Sealing *(Mechanical seal arrangement)*



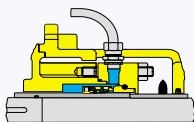
uncooled, balanced



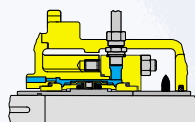
cooled, balanced



uncooled, unbalanced

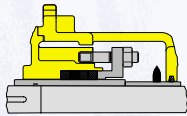


uncooled, balanced  
STERLING<sup>GN2 seal</sup>

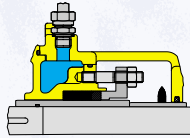


uncooled, double back-to-back

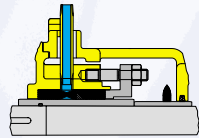
## Shaft Sealing *(Packed gland arrangement)*



uncooled



with jacket-cooling



with external flushing

## Performance Range

Capacity	max. 250 m <sup>3</sup> /h
Head	max. 630 m
Speed	max. 3600 rpm
Temperature	-10 °C to +180 °C (optional 200 °C)
Pressure Rating	max. 63 bar

## Materials

Suction Casing	Cast Iron, Ductile Iron, Stainless Steel, Chrome Steel
Stage Casing	Cast Iron, Ductile Iron, Stainless Steel, Chrome Steel
Discharge Casing	Cast Iron, Ductile Iron, Stainless Steel, Chrome Steel
Impeller, Diffuser	Cast Iron, Bronze, Stainless Steel
Shaft	Chrome Steel, Duplex

*Special materials are available on customers request.*

*more ... for less ... - please contact us !*