

DSL

Vertical In-Line Double Suction Centrifugal Pumps



DSL Pumps – High-Capacity, High-Efficiency Solutions for Demanding Applications

The DSL pumps are single-stage, double-suction, vertical, centrifugal pumps designed for high-capacity and high-efficiency operation in heavy-duty applications. With flow rates of up to 7400 m³/h and pressures reaching 140 mLC at 60 Hz, they offer a powerful and reliable solution for continuous-duty systems.

Pump Concept

- Single-stage, double-suction, vertical, centrifugal design
- Suction side designed for optimal flow dynamics
- Inlet aligned with the outlet for smooth flow and compact installation
- Advanced double-suction impeller for high efficiency and low NPSH values
- Radially split casing for easy maintenance
- Optional spacer design allows servicing of bearings and mechanical seals without removing motor or piping
- High efficiency with low NPSH requirements

Construction Benefits

- Double volute pump casing reduces radial load on the shaft
- No bottom radial bearing or shaft seal required, enhancing durability
- Robust construction ensures long-lasting, trouble-free operation
- Optionally equipped with separate priming pumps or ejectors for added operational flexibility

Applications:

District heating/cooling, seawater, water circulations, cooling tower distribution, chiller distribution & scrubber (Hue gas cleaning).

Material specification

Materials	A	D	S
Pump casing	Cast Iron	Bronze	Stainless Steel
Impeller	NiAl-Bronze	NiAl-Bronze	Stainless Steel
Wear ring	NiAl-Bronze	NiAl-Bronze	Stainless Steel
Shaft seal cover	Cast Iron	Bronze	Stainless Steel
Shaft	Stainless Steel	Stainless Steel	Stainless Steel
Shaft seal	Mechanical	Mechanical	Mechanical

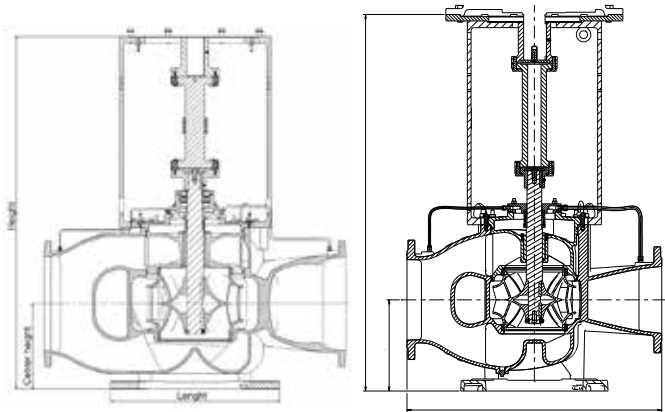
Alternative material combinations are available:

Normal Diameter (DN)	150 to 600
Flow rate - 50 Hz	Up to 6200 m ³ /h (27,300 US gpm) at 50 Hz
Flow rate - 60 Hz	Up to 7400 m ³ /h (32,600 US gpm) at 60 Hz
Head	Up to 140 m (460ft)
Pressure	Up to 25 bar (360 psi)
Temperature	Up to 140°C (284°F)
Motor	Standard and Ex motor
VFD	Bulkead/Wall-mounted
ATEX approved	

The DSL pump is designed using advanced CAD/CAM systems and CNC manufacturing, ensuring precise tolerances and consistent performance at a competitive price. Its robust construction includes bearings and mechanical shaft seals at both the top and bottom, supporting trouble-free continuous operation.

The radially split, spacer-type design allows for easy maintenance—bearings and seals can be replaced without removing the motor or piping. Additionally, the double volute casing reduces radial forces on the shaft, minimizing the need for bottom radial support. This results in a durable, service-friendly pump ideal for demanding applications.

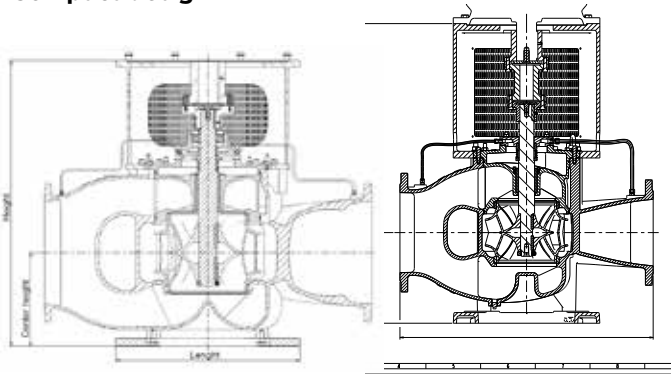
Spacer design



DSL B-U spacer structure with ball bearing

DSL B spacer structure without ball bearing

Compact design



DSL G-U compact structure with ball bearing

DSL G compact structure without ball bearing

