

TSL

Two-stage Vertical Centrifugal Pump



The TSL pumps are two-stage, single-suction centrifugal pumps with high differential pressure pumps including a flow up to 48 m³/h and pressure up to 135 mLC at 60 Hz.

Both vertical and horizontal installations are available. The suction port and discharge port are an inline or angular arrangement.

Two impellers in a tandem array achieve both high pressure and high efficiency. The main wet parts are casted, ensuring various pump materials are attainable.

Low pressure seal chamber extends the shaft seal life time. Innovative volute and impeller structure minimize the axial and radial force on shaft to enable steady running. Split casing in three parts allows overhauling of the rotation parts without disturbing pump casing or pipeline. Optimal flow passage to guarantee high efficiency achieved.

Concept Features:

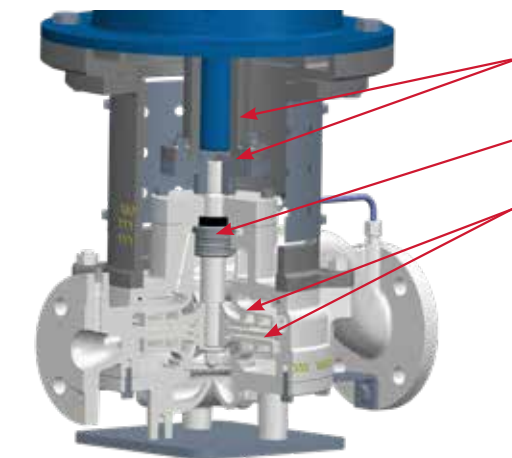
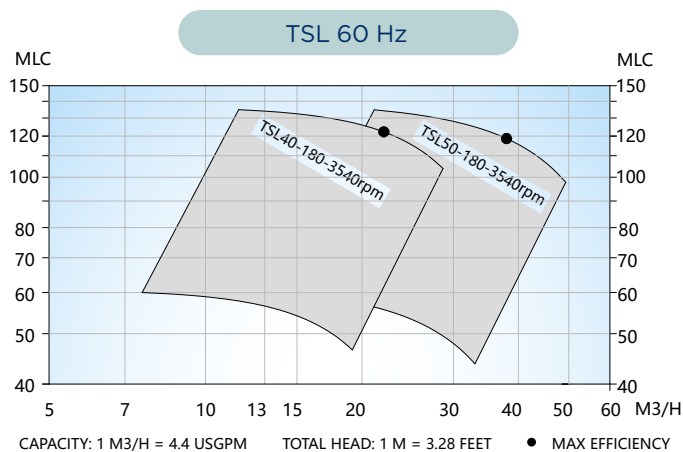
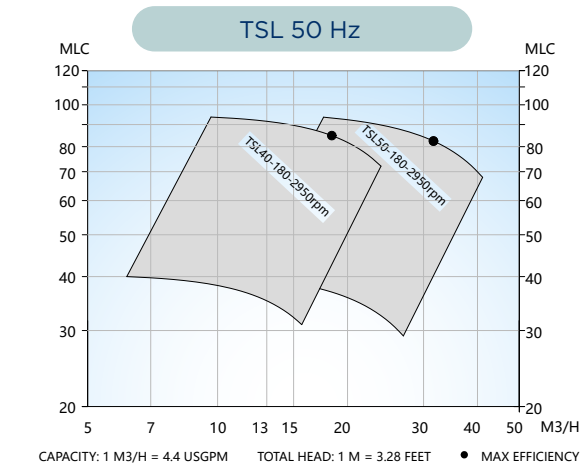
- Inlet and outlet in the same height for easy assembly.
- Longer mechanical seal life - low pressure placing design.
- High pump efficiency - optimal transition flow passage design to realize minimum pressure loss.
- Longer pump life - innovative impeller design to balance the axial force on shaft.
- Longer pump life - innovative dual volutes design to balance the radial force on shaft.

Applications

- Boiler water supply
- Ballast water backflush
- Sprinkler
- Fire water jockey
- EGCS demist cleaning
- Industrial cleaning
- Water treatment and filtration
- Etc.

Normal Diameter (DN)	45 & 50
Flow rate - 50 Hz	Up to 40 m ³ /h (180 US gpm)
Flow rate - 60 Hz	Up to 48 m ³ /h (210 US gpm)
Head	Up to 135 m (440 ft)
Pressure	Up to 16 bar (230 psi)
Temperature	Up to 140°C (284°F)
Motor	Standard and Ex motor
VFD	Direct or Bulhead/Wall-mounted

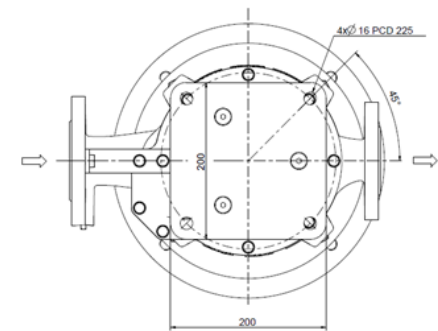
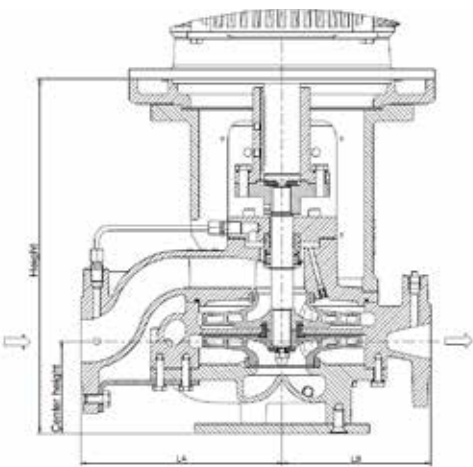
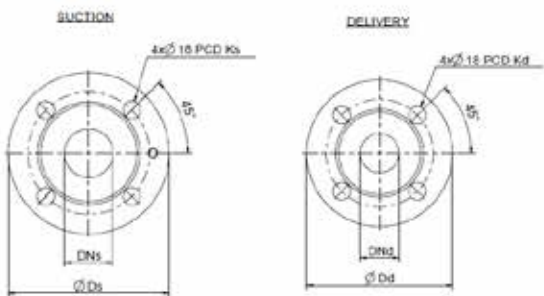
Production Technology



Overhaul rotation parts without disturbing pump casing or pipeline.

Low pressure seal chamber to ensure long shaft seal life.

Innovative impeller and volute design that minimize the axial and radial force on shaft, steady running.



TSL	Motor Size	LA	LB	Center Height	Height	DNs	Ds	Ks	DNd	Dd	Kd
TSL40-180	160	230	170	105	405	50	165	125	40	150	110
	132				375						
	100/112				354						
	90				354						
	80				354						
TSL50-180	160	260	180	110	425	65	185	145	50	165	125
	132				395						
	100/112				374						
	90				374						
	80				374						