

AHLSTAR E Centerline Supported End Suction Single Stage Centrifugal Pumps



Main Applications

The AHLSTAR E range of centerline supported end suction single stage centrifugal pumps is suitable for demanding industrial hot liquid applications in several industries such as oil and gas, hydrocarbon processing, power generation, pulp and paper, general and chemical industry and water to ensure process reliability, high efficiency and low operating costs. The AHLSTAR range has been designed with long experience and deep knowledge to exceed the minimum requirements of the the international standard ISO 5199 and to give the excellent pumping performance in demanding industrial applications. The AHLSTAR E range centrifugal pump can be used to pump

- clean
- viscose liquids
- fibrous slurries



Features and Benefits

- Versatile selection of reliable, high efficiency closed, open and specially open impellers
- Reduce life cycle costs, especially energy consumption, operation time and downtime costs
- Patended, self-locking reserve rotation safe, non-sensitive to axial loads rotor key impeller mounting
- Enables easy and quick assembly and dismantling
- Helps to minimize maintenance and downtime costs

3 Double volute casing in larger pumps

- Reduces radial forces and shaft deflection
- Maximizes the life of the bearings and shaft seals, thereby lowering life cycle costs

Versatile, reliable, simple design shaft seal options

- Ensures easy and quick assembly and dismantling
- Reduces life cycle costs by minimizing energy, operation, maintenance, and downtime costs

5 Heavy duty shaft

- Minimizes deflection at stuffing box to less than 0.05 mm/0.002 inches
- Helps to extend the shaft seal lifetime
- Reduces unexpected shutdowns and maintenance costs

6 Reliable, simplified, heavy duty bearing unit

- Lowers the number of unexpected shutdowns and maintenance costs
- Innovative, non-contracting bearing protection isolators with deflectors, lip seals and labyrinths
- Prevent lubricant leaks
- Extend the bearing life
- Prevent outside contaminants from entering the bearing house
- Minimize unexpected shutdowns and maintenance costs



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Oil & Gas

Hydrocarbon Processing Industry

Power Generation



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General

Industry





Chemical

Process

Industry



Water

Operating data

Metric		Imperial	
up to 1,500 l/s	Capacities	24,000 USgpm	
up to 160 m	Heads	up to 525 feet	
up to 25 bar	Pressures	up to 360 psi	
up to 210°C	Temperatures	up to 410°F	
up to 3,600 rpm	Maximum speed of rotation	up to 3,600 rpm	

Performance range



Materials

Standard material options	Material			
Duplex SS	ASTM	A890	Grade A3	(41)
Duplex SS	ASTM	A890	Grade 1B	(4L)
Duplex SS	ASTM	A890	Grade 5A	(4T)

Main Design Features of Installation, Operation and Maintenance

Centerline supported casing/ base plate design

• Eliminates the misalignments of the coupling in high temperature applications resulting in lower unexpected shutdowns and maintenance

2 Rigid, distortion-free, hot dip galvanized base plate

- Easy to install and grout into the concrete foundation
- Lowers vibration and reducies wear and tear

3 Galvanized riser blocks

- Allow the installation of the next frame size of motor
- Ease the installation and minimize maintenance costs

Alignment blocks of stainless steel for the coupling alignment

- Enable fast and easy motor movement thus reducing maintenance costs
- Guards for the rotating parts are designed according to stringent safety regaultions
- Ensures safe and reliable operation

6 Windows on both side of the guards

 Allow safe and easy stoboscope inspection of the coupling during operation

Various flexible couplings with spacer

• Provide quick and easy maintenance

8 Back pull-out design

 Facilitates quick access for servicing

9 Jackscrews

- Enable simple disassembly of the main parts of the unit while minimizing maintenance costs
- Classic ISO and API standard base plate for applications where standard installation is required





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