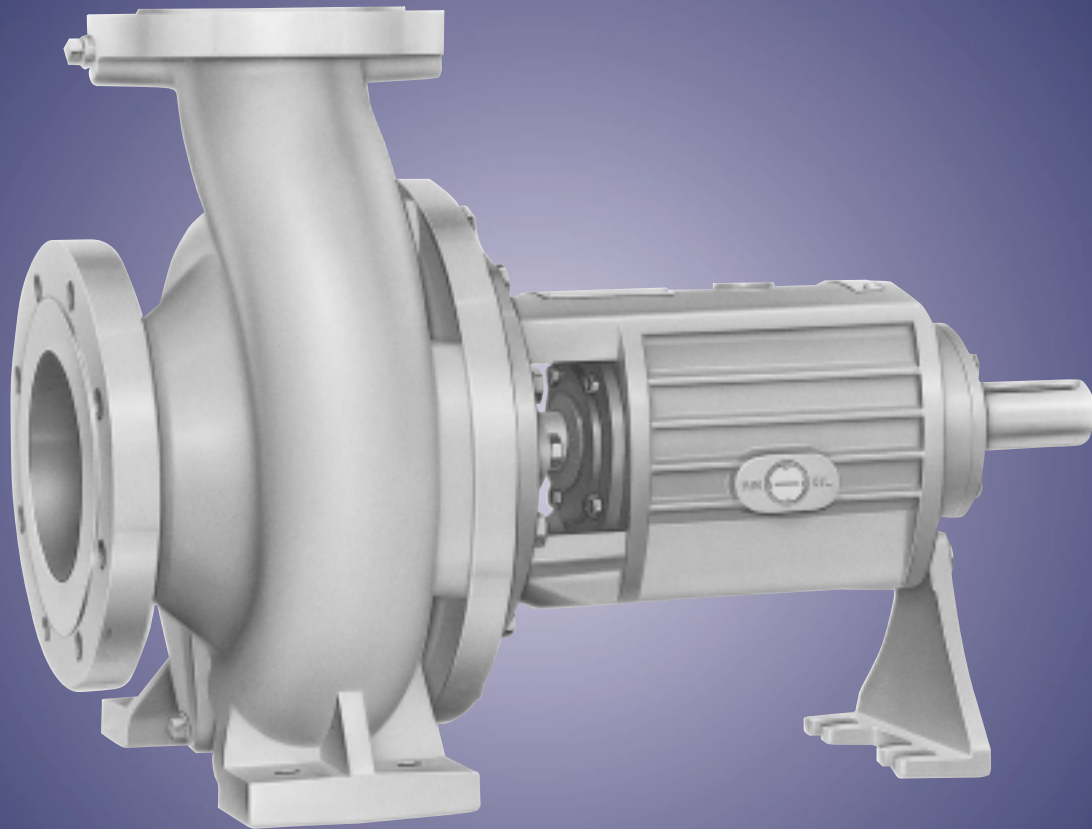


Acme Pumps

Type ES & SES Single-Stage
End-Suction Centrifugal Pumps



ISO 2858 • 16 bar working pressure • Back-pull-out Construction • Heavy-duty angular-contact ball bearings

Description

ACME type ES and SES centrifugal pumps are of single-stage end-suction design, and are especially suitable for handling water, chemicals and corrosive liquids. They are available in cast iron and a range of corrosion resistant materials suitable for use in the food, chemical and waste industries, as well as in general industrial applications where corrosion resistance is required. More importantly, ACME ES and SES centrifugal pumps are designed to ensure a long, continuous service life at an efficient cost.

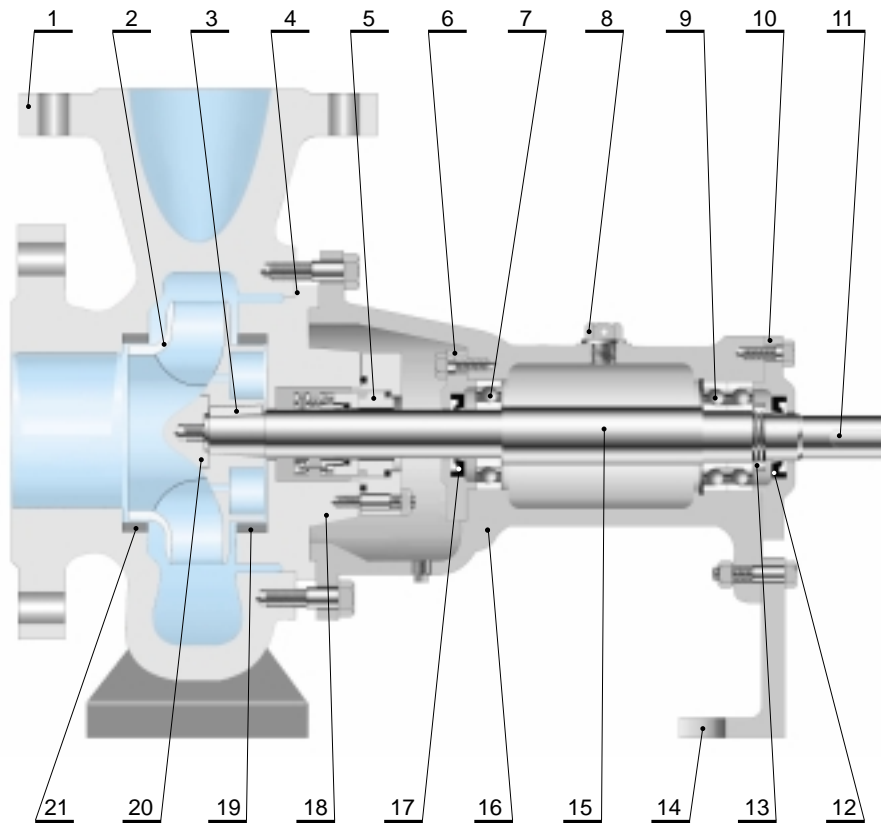
Features

- **ISO 2858 standard** to ensure dimensional interchangeability with other pumps of the same standard.
- **Designed for 16 bar working pressure** with optional casing for a working pressure of up to 20 bar. A robust and solid construction that guarantees long life even under high suction pressure conditions.
- **More than 3mm corrosion allowance** for extended use on corrosive applications.
- **Back-pull-out construction** allows rotating assembly to be withdrawn without disturbing the suction and delivery connections.
- **Double volute design** available for selected pumps. It eliminates radial load by balancing the hydraulic force of the liquid within the pump casing, extends seal and bearing life and minimizes vibration and noise.
- **DIN 2533 ND/16** suction and delivery flanges connections to meet the design working pressure rating.
- **Heavy-duty, deep-grooved bearings** with minimum 50,000 hours operating life under normal condition.
- **Grease lubricated** sealed-for-life bearings require no maintenance.
- **Heavy-duty, stiff solid shaft design** with low L3/D4 ratio ensures less than 0.05mm shaft deflection at the seal face in all operating conditions. This extends the seal life.
- **Seal housing** is constructed to accommodate different seal designs, so as to meet the severe heavy-duty requirements.
- **Excellent parts interchangeability** reduces inventory levels for spare parts to a minimum.

Optional Features

- **Heavy-duty, oil lubricated angular-contact ball bearings** with a minimum of 50,000 hours operating life ensure long life and reliability.
- **Labyrinth seal** can be fitted to seal out water or other harmful contaminants.
- **Oil temperature indicator** is available to indicate oil temperature.
- **Stuffing box cooling** is available to meet the high temperature service requirements.
- **Bearing housing cooling** is available for pumping liquids above 110 °C.

Construction



- | | | |
|----------------------|--|-------------------------------|
| 1 Pump Casing | 8 Breath Valve (optional) | 15 Shaft |
| 2 Impeller | 9 Double Row Thrust Bearing (optional) | 16 Bearing Bracket |
| 3 Impeller Key | 10 Thrust Bearing Cover | 17 Oil Seal |
| 4 Casing Joint | 11 Coupling Key | 18 Stuffing Box Cover |
| 5 Mechanical Seal | 12 Oil Seal | 19 Back Wear Ring (optional) |
| 6 Line Bearing Cover | 13 Bearing Locknut | 20 Impeller Nut |
| 7 Line Bearing | 14 Bearing Bracket Foot | 21 Front Wear Ring (optional) |

Material Specifications

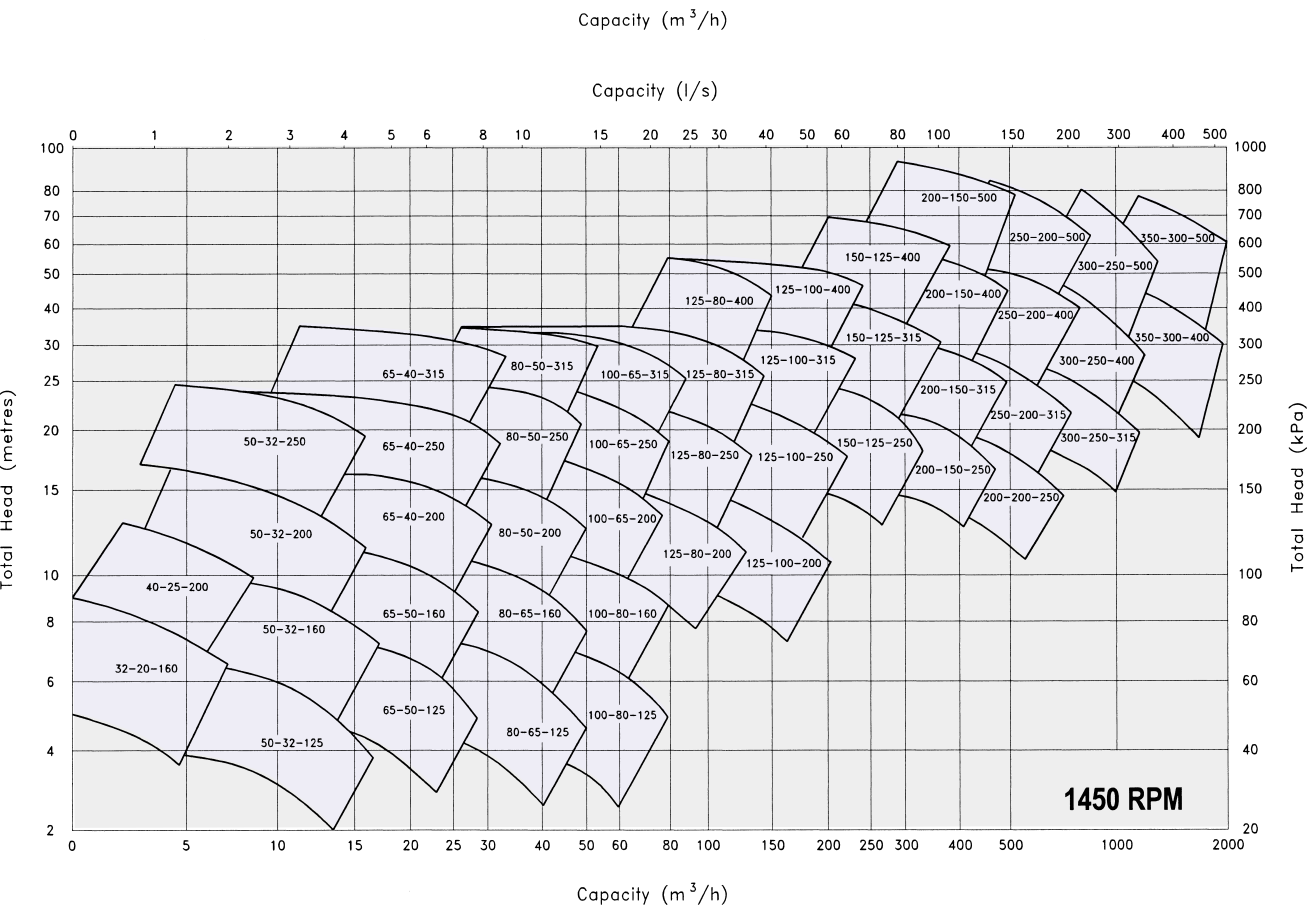
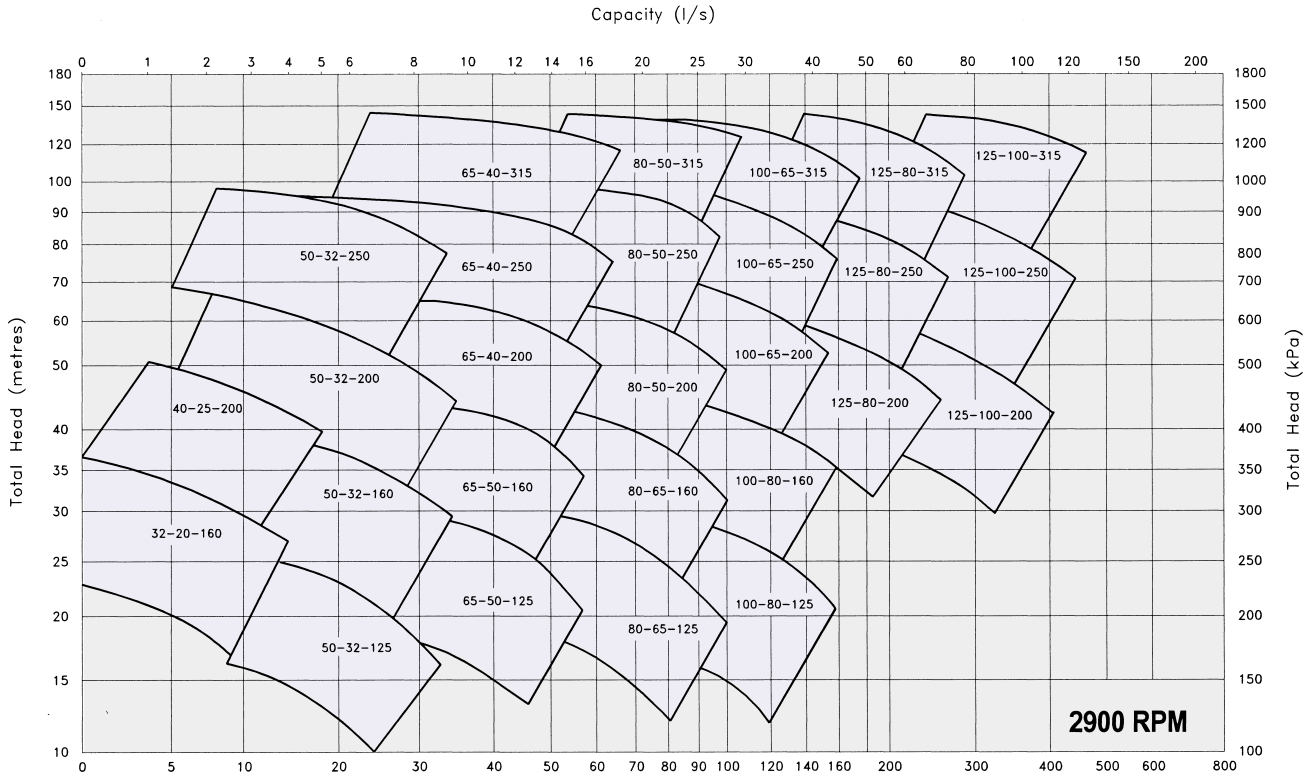
Parts	Casing	Impeller	Shaft	Impeller Nut	Bearing Frame
MATERIALS	Cast Iron	Bronze	416 SS	416 SS	C.I. or D.I.
	Cast Iron	316 SS	416 SS	316 SS	C.I. or D.I.
	316 SS	316 SS	Duplex SS	316 SS	C.I. or D.I.
	Duplex SS	Duplex SS	Duplex SS	Duplex SS	C.I. or D.I.
	Hastelloy	Hastelloy	Hastelloy	Hastelloy	C.I. or D.I.
	Alloy 20	Alloy 20	Alloy 20	Alloy 20	C.I. or D.I.
	Titanium	Titanium	Titanium	Titanium	C.I. or D.I.
	Monel	Monel	Monel	Monel	C.I. or D.I.

* Other materials include Zirconium, Incoloy, Inconel and other Nickel Alloys

Operating Limits

	Working Pressure	Test Pressure	Suction Pressure	Max. Liquid Temperature
Standard Option	16 bars	24 bars	Up to 16 bars	110° C without cooling
	20 bars	30 bars	Up to 16 bars	250° C with cooling

Coverage Charts – 50 Hz



Coverage Charts – 60 Hz

