

Centrifugal electric pumps in compliance with EN 733 made of AISI 316 stainless steel

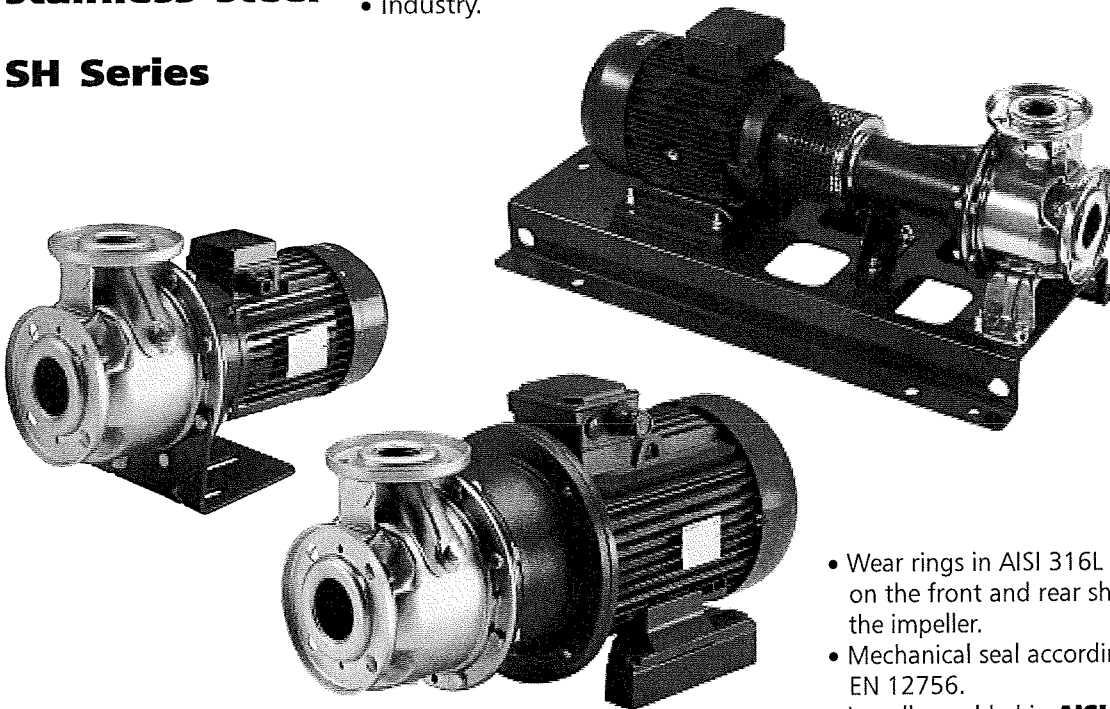
SH Series

MARKET SECTORS

CIVIL, INDUSTRIAL.

APPLICATIONS

- Handling water and clean, chemically non-aggressive or moderately aggressive fluids.
- Water supply and pressure boosting.
- Water circulation in air conditioning systems.
- Washing systems.
- Industry.



- Wear rings in AISI 316L stainless steel on the front and rear shim washers of the impeller.
- Mechanical seal according to EN 12756.
- Impeller welded in **AISI 316L** stainless steel with laser technology for SH 32, 40, 50, 65-160 (../40, ../55, ../75, ../05, ../07, ../11A); cast in **AISI 316** stainless steel for SH 65-160 (../92, ../110A, ../110, ../11, ../15), 65-200, 65-250, 80.

SPECIFICATIONS

PUMP

- Delivery up to:
 - 240 m³/h** for 2-pole range.
 - 130 m³/h** for 4-pole range.
- Head up to:
 - 110 metri** for 2-pole range.
 - 23 metri** for 4-pole range.
- Temperature of pumped liquid:
 - from -10°C to +120°C for standard version (gaskets in FPM).
 - from -30°C to +120°C for special version on request (gaskets in EPDM).
- Maximum operating **pressure**:
 - 12 bar (PN 12) at 50°C, 10 bar at 120°C.
- Hydraulic performance compliant with ISO 9906:2012 - Grade 3B (ex ISO 9906:1999 - Annex A).
- Anti-clockwise rotation when facing pump's suction port.

MOTOR

- Squirrel cage in short circuit enclosed construction with external ventilation.
- IP55 protection.
- Class 155 (F) insulation.
- Performances according to EN 60034-1.
- Standard voltage:
 - Single-phase version: 220-240 V, 50 Hz.
 - Three-phase version: 220-240/380-415 V, 50 Hz for power up to 3 kW, 380-415/660-690 V, 50 Hz for power above 3 kW.

CONSTRUCTION CHARACTERISTICS

- Stainless steel centrifugal pump with end suction and radial discharge ports.
- Hydraulic sizes and nominal diameter of suction and discharge ports according to EN 733 (except for SH 25).
- Flanges according to EN 1092-2.
- Back pull-out design (impeller, bracket and motor can be extracted without disconnecting the pump body from the piping).

MOTOR-PUMP COUPLING

Three different motor-pump couplings are available:

- **SHE**: Close-coupled version with rotor directly splined onto the motor shaft protrusion and special coupling joint. The variant with single-phase motor (FHEM) is available for some models.
- **SHS**: Close-coupled version with rotor directly splined onto the rigid coupling connected to the shaft protrusion of a standardised motor, joint and coupling adapter.
- **SHF**: Version with rotor directly splined onto the rigid coupling connected to the shaft protrusion of a standardised motor by means of a flexible coupling, joint, coupling support with bearings, alignment base and anchor system.

Just the bare shaft pump is available on request.

The variant with elastic coupling and spacer (SHF..SC) is available.

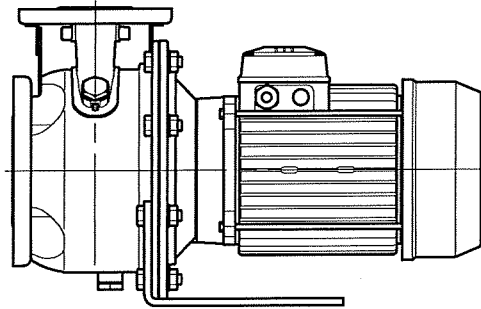
ACCESSORIES ON REQUEST

- Counter-flanges in galvanised steel or AISI 316 stainless steel and gaskets.
- Shims for pump and motor feet.

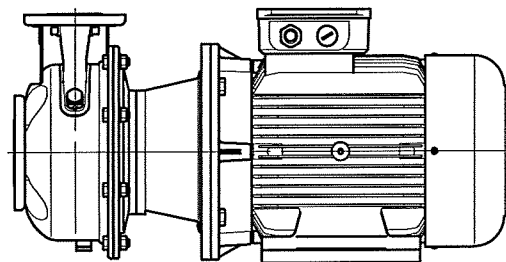
OPTIONAL FEATURES

- Different voltages.
- Frequency 60 Hz (see specific catalogue).
- Tropicalised motors.
- Special materials for mechanical seal and gaskets.
- Mechanical seal with anti-rotation locking ring.
- Mechanical seal internal flush tube.
- Mechanical seal external flush connector.
- Elastic coupling with spacer (SHF..SC).
- Pumps with diesel engine.
- Electric pumps with HYDROVAR™ control system.
- Pumps (SHF) and electric pumps (SHS, SHF) compliant with ATEX 94/9/CE for Group II, Category 3, Gas atmosphere (II3G

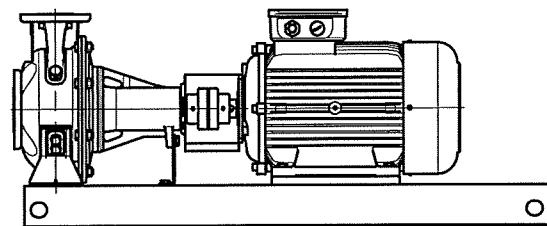
SHE - SHE4



SHS - SHS4

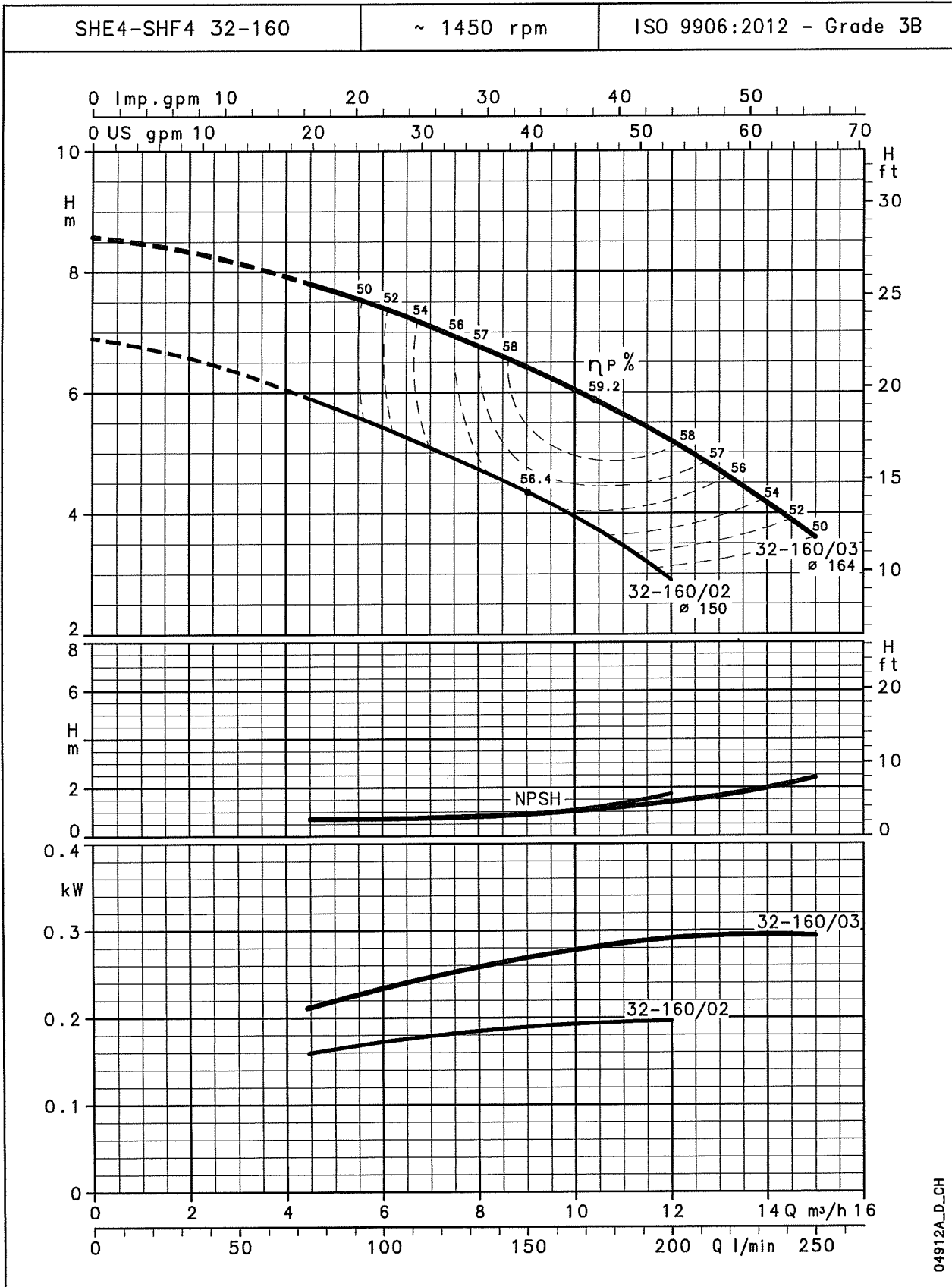


SHF - SHF4



04905_A_SC

**SHE4-SHF4 SERIES
OPERATING CHARACTERISTICS AT 50 Hz, 4 POLES**



04912A_D_CH

The NPSH values are laboratory values; for practical use we suggest increasing these values by 0,5 m.
These performances are valid for liquids with density $\rho = 1,0 \text{ Kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.