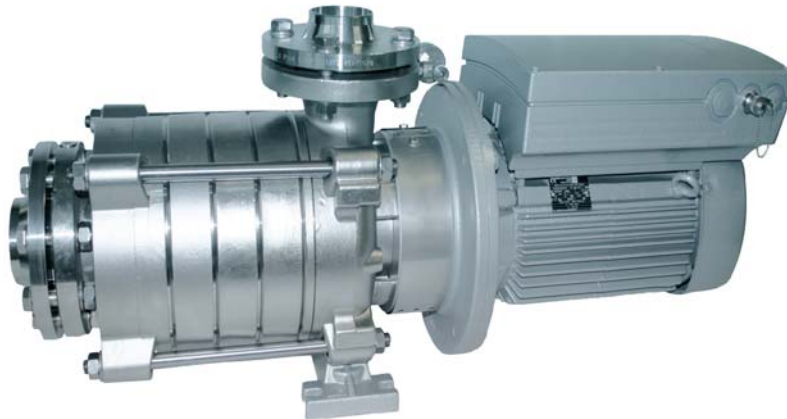


Self-controlled EDUR Centrifugal Pumps with integrated Frequency Converter



- efficient
- adaptable
- self-controlled
- integrated



EDUR easi-Control

Advantages

Optimal adaptability to on site conditions

- No fixed Q/H characteristic curves but any points of operation within an operational range due to infinitely variable speed
- Control according to the requirements by suitable regulating variables, e.g. constant pressure, differential pressure, differential temperature, flow
- Minimized energy costs due to clearly reduced pump power input in part load ranges

Self-controlled

- Nominal speed only will be reached in case of peak demand. Reduced speed at partial load

Longevity

- Low-wear operation by means of slow run-up and run-out
- Minimal mechanical alternating load of the pump
- Reduction or avoidance of water hammers in pipe lines

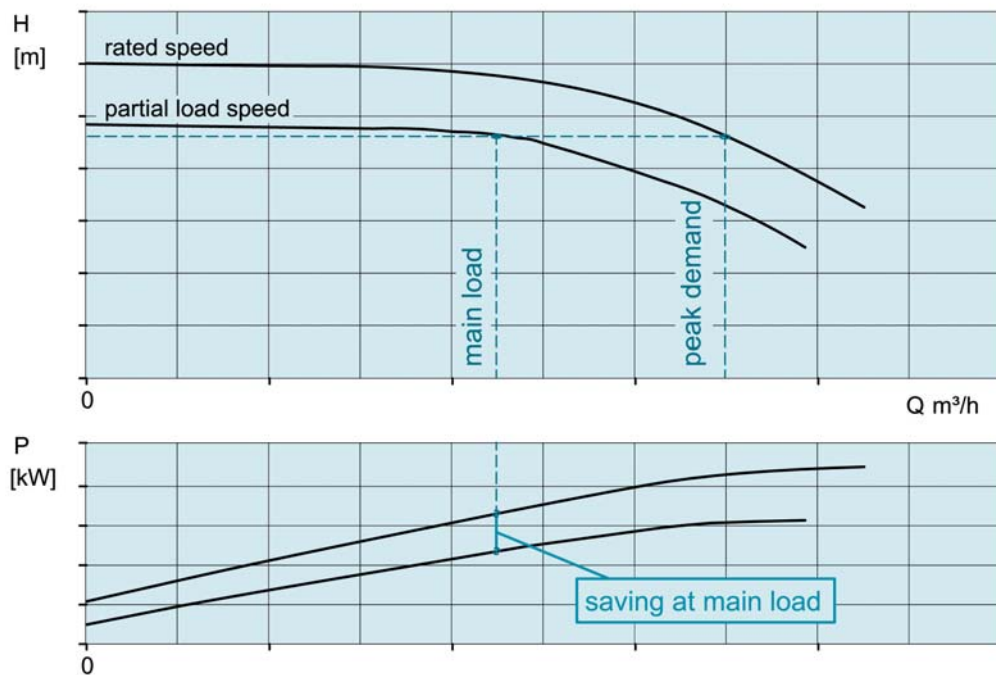
Easy operability

- In case of corresponding selection (e.g. sufficient motor power) oversynchronous operation is possible, i.e. speed-up far in excess of rated speed - so that an increasing pump performance is possible at unchanged dimensions
- Integration possible in superordinated field bus systems
- Parameterization possible by external control unit directly at the motor
- Softstart replaces star-delta starting
- Electronic self-monitoring about impermissible operating conditions
- Overload control

Self-controlled EDUR Centrifugal Pumps with integrated Frequency Converter

Continuously rising energy costs are wasting the productivity gains in industry and municipalities, so that energy-efficiency became a global challenge. Approx. 23% of the total industrial power consumption is caused by pump drives. At the same time the German Energy Agency (DENA) evaluates the average savings potential to 24% by means of an efficiency increase for pump systems in industrial plants. By this a large part of the energy cost increases can be compensated.

Nearly all pumps are not operated in their design point but in a point of operation that differs from it internal to the plant. So the pumps do not reach their efficiency optimum and therefore are used uneconomical. So far it is still common to throttle the pumps mechanically to a changed point of operation and by this “wasting” energy. As speed variations influence the pump power input by cube, high energy savings can be obtained by using a frequency converter that adjusts the pump characteristic curve to the operating conditions by variable speed.



example: speed-controlled centrifugal pump, pressure-controlled

Technical Characteristics

- Up to 22 kW power (up to 45 kW projected)
- Degree of protection IP55 (optional IP65, IP66)
- Easy initial operation
- No shield supply lines
- Space saving
- Easy to maintain
- High vibration resistance
- Parameters preset ex factory
- Interference filter class A serially (optional class B)
- Control and parameterizing panel incl. for customied parameterizing on site
- Transducer incl.

Integrated Features e.g.

- Characteristic curve for continuous and quadratic torque
- 2 parameter sets and factory setting
- “Quick Stop”, specific stop and jog
- Motor potentiometer function
- 7 fixed setpoint values per parameter set
- DC-holding level (anti-condensation heater)
- PID controller (2-wire-transducer)
- Sleep function