

## High-Efficiency Vertical In-line Centrifugal Pumps

DESMI ESL centrifugal pumps are designed for special industrial applications and meet the requirements for:

- Low maintenance costs
- High efficiency
- Low NPSH
- High configuration flexibility
- Installation and serviceability

Normal Diameter (DN)	25 to 100
Flow rate - 50 Hz	Up to 200 m³/h (880 US gpm)
Flow rate - 60 Hz	Up to 250 m³/h (1100 US gpm)
Head	Up to 65 m (220 ft)
Pressure	Up to 30 bar (435 psi)
Temperature	Up to 140°C (284 °F)
Motor	Standard and Ex motor
VFD	Direct or Bulhead/Wall-mounted
ATEX approved	



### Design Features

ESL pumps are single-stage centrifugal pumps with connecting flanges according to international standards. Further the pumps can be fitted with electric motors with flange dimensions also according to all international standards.

The pumps have been designed in such a way that access to all rotating parts is possible without removing the pump from the piping.

All ESL pumps are equipped with mechanical shaft seal of an approved brand.

The impellers are with double curved blades, which ensure high efficiencies and low NPSH values.

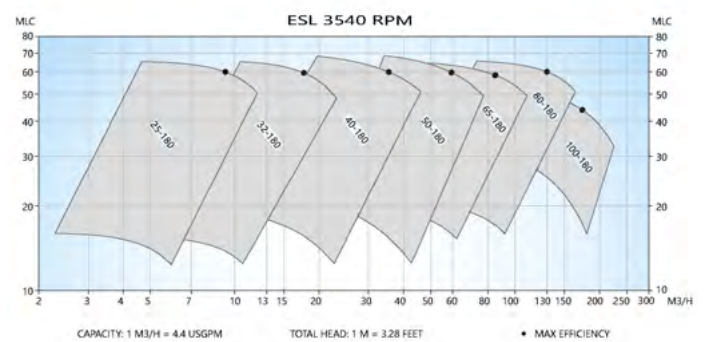
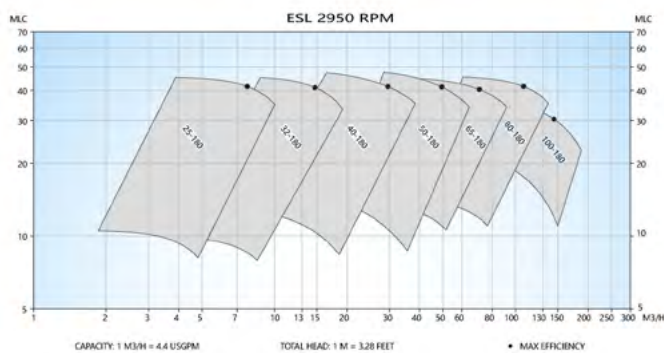
### A Variety of Industrial Applications:

- Hot water circulation
- Fresh water circulation
- HVAC
- Hydrophore pump
- Cooling water
- The pump can be equipped with an air-driven or electrically driven priming device
- Water with additives
- Sea water
- Process water
- Brine

## Material specification

Materials	A	D	S
Pump casing	Cast Iron (GG20)	Bronze (RG5)	St. steel (1.4436)
Impeller	Bronze (RG10)	Bronze (RG10)	St. steel (1.4436)
Sealing ring	Bronze (RG10)	Bronze (RG10)	St. steel (1.4436)
Rear cover	Cast iron (GG20)	Bronze (RG10)	St. steel (1.4436)
Shaft	Duplex St. steel (1.4460)	Duplex St. steel (1.4460)	Duplex St. steel (1.4460)
Shaft seal	Mechanical	Mechanical	Mechanical

The pumps are also available in other materials such as e.g. impeller in ductile iron and various bronze alloys and stainless steel.



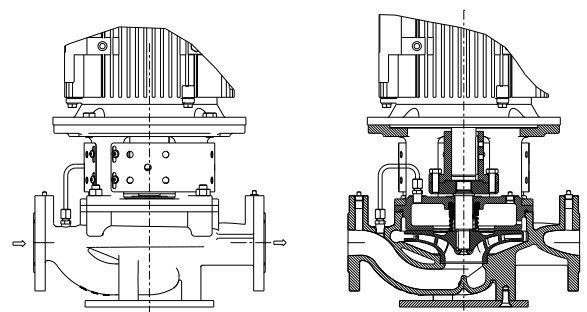
## Design Details

### ESL In-line Pumps with Ø 180 or Ø 190 Impeller

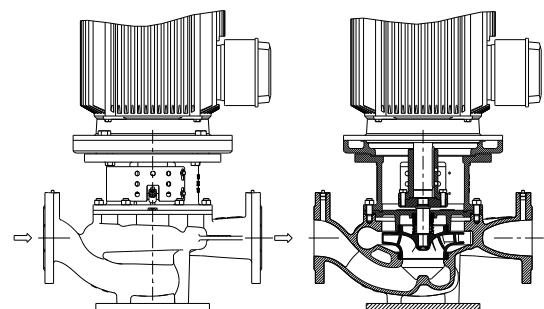
The dimension of the suction flange is identical with the dimension of the discharge flange. The line through inlet and outlet is flush with the centre line of the shaft. The pumps are equipped with one impeller wear ring.

### Monobloc without Bearings

A sturdy standard pump for clean liquids. Compact design because the rear cover is part of the motor bracket. Dismantling of rotating parts is possible without removing the pump casing from the piping. The ESL in-line pump can be mounted horizontally on request.



ESL 25-32-40-50



ESL 65-80-100