

Thermoplastic Vertical Sump Pump

Type ETLB-E

dry-run safe



Technical data	
Flow rate Q	up to 17 m ³ /h (3500 rpm)
Head H	up to 35 m (3500 rpm)
Immersion depth	275 mm
Suction extension	up to 1500 mm
Operating temperatures	PP up to 70°C
Pressure connections	DN 25
Motor output (kW)	up to 2,2 kW

Design:

- Vertical single-stage sump pump, dry running safe

Sizes:

- ETLB-E 25-125

Technical design:

- Immersion depth: 275 mm
- Materials: PP
- Screwless thermoplastic spiral casing
- Closed impeller, fastened on the motor shaft independent of the rotational direction
- Stainless steel shaft separated from the fluid by a thick-walled thermoplastic protection tube
- Shaft lead-through at the mounting plate with lip seals to protect against fluid vapours
- Radial and axial forces are absorbed by reinforced motor bearings
- Corrosion protection by a 2C protection paint coat
- Suction strainer

Actuator

- Three-phase motor, 0,37 kW to 2,2 kW, IP 55

Application

- Chemical plants
- Water treatment
- Electroplating plants

Utilisation

- ASV vertical sump pumps are designed for operation in open and closed, depressurized containers or pits, for simple draining and circulation of the fluid.

Flow Media

- used to convey aggressive fluids, such as acids, alkalines, solutions, provided that the pump components coming into contact with the media are resistant at the operating temperature in accordance with the ASV resistance guide.

Media viscosity

- max. 160mPas (cP)

Operating temperature

Depends on the operating conditions (system pressure, load etc.). Taking creep strength into account, the following approximate temperatures apply:

- PP up to +70°C

Testing

- DIN EN ISO 9906

Structural design

- The pump housing is designed in two sections. The housing lid and pump housing are designed as a screw connection and thus completed without additional screws.

Impeller

- The closed impellers with vanes of a shape to enhance the fluid flow are made by state of the art plastic injection moulding technology.
- The impeller is fastened independent of the rotational direction.
- Simple impeller mounting with thermoplastic covered hexagonal bold and O ring inserted.
- A suction strainer protects the pump and prevents the impeller from blocking when solid or fibrous material is processed.

Immersion and shaft protection tube

- The thick-walled immersion tube as well as the pump shaft guarantee vibration free operation and prevent the rotating pump elements from getting into contact with the pump housing.
- Drainholes in the immersion tube prevent admission of the pumping medium into the shaft exit.
- The drive shaft is separated from the medium by means of a thermoplastic protection tube.

Shaft exit

- Special V-rings at the shaft exit on the mounting plate prevent vapour from escaping into the atmosphere.

Actuator

- ASV vertical sump pumps are driven by specially designed IEC 3-phase-currentmotors with extended shaft.

Materials

Pump housing, impeller, immersion, pressure and shaft protection tub

- PP

O-ring

- EPDM

V-ring

- FPM

Technical data

Flow rate

- see characteristic curves

Head:

- see characteristic curves

Immersion depth

- see table dimensions

Pressure connection

- threaded necks acc. DIN 8063
- on request with pressure connection band, union sockets or spigot ends acc. DIN ISO

Suction connection

- strainer (standard)
- optionally without strainer

Motor


- Type: IEC 3-phase-current-motor
- Design: IM B5
- Voltage: 230/400 V
- Speed: 2900/3500 min⁻¹, 50/60 Hz
- Protection: IP 55

Protective paint coat

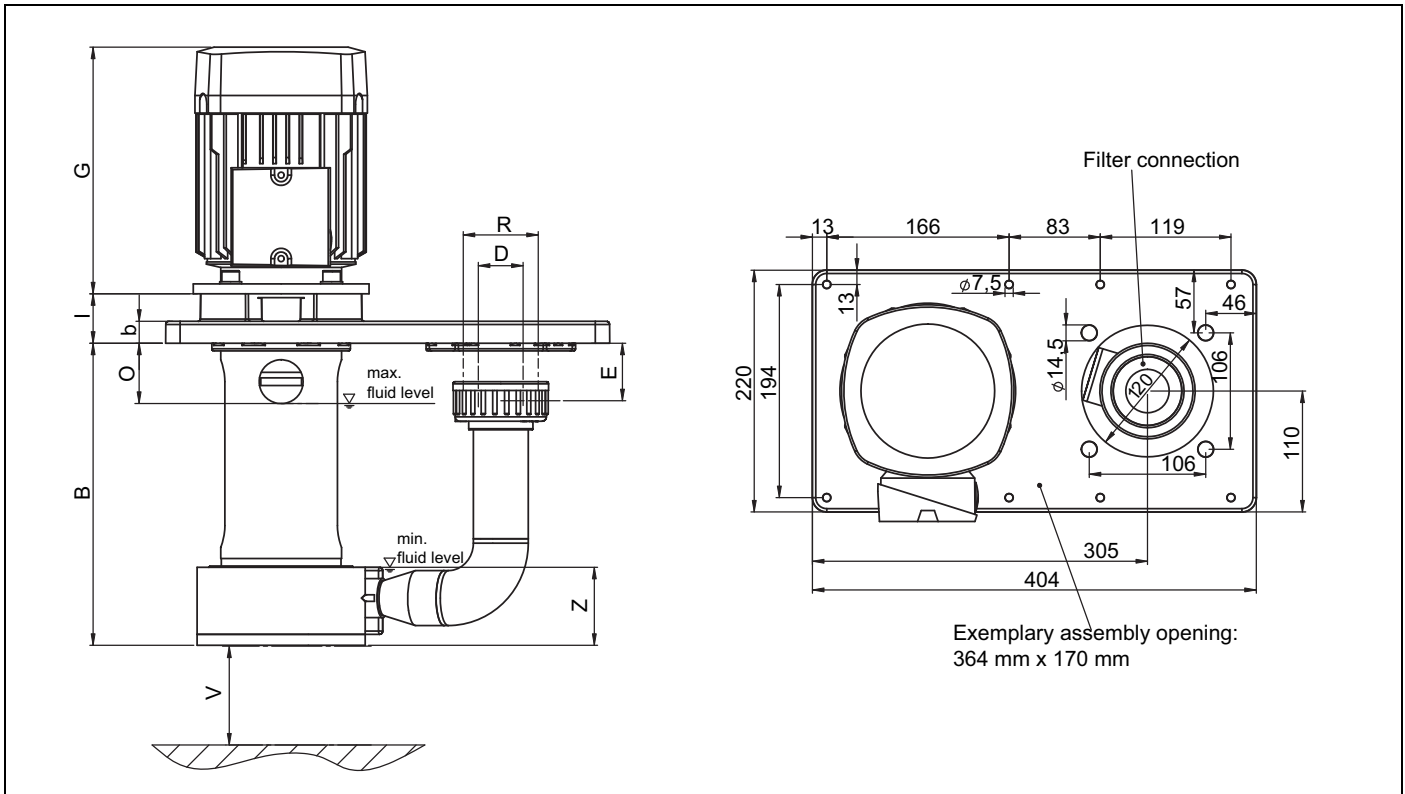
- Motor and metal parts are protected against corrosion by a 2 component protection paint coat.

Operating instructions

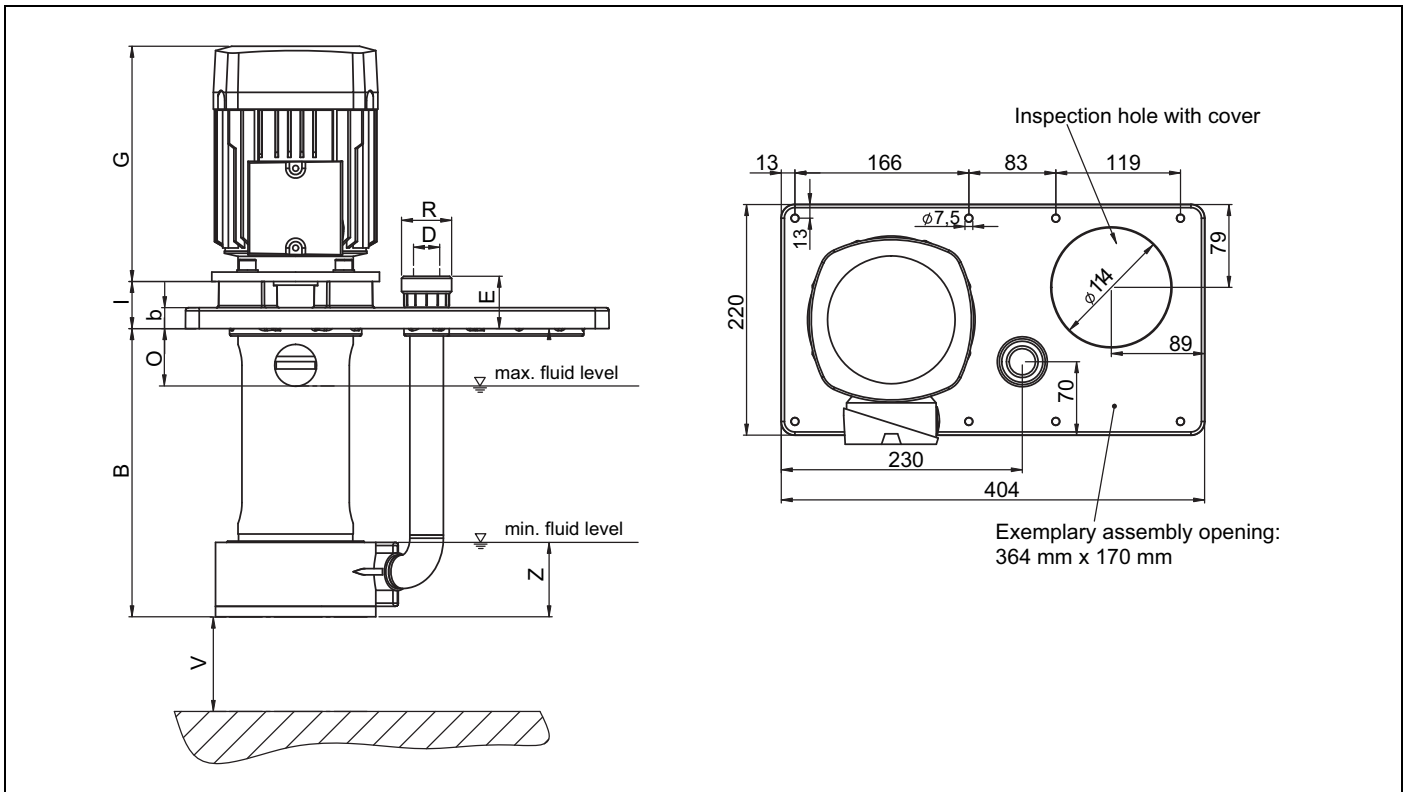
NOTE

Please take the operating and maintenance manual into consideration for pump installation and operation! 

Dimension for filter connection



Dimension for inspection hole with cover



ETLB-E	version	NW	motor	dimension (mm)								
size		DN	kW	B	b	E	I	O	R	L	Vmin.	Z
25-125	type 1	25	0,37-1,50 ¹⁾	275	20	50	45	60	1 1/2"	82	60	82
25-125	type 2	40	1,50-4,00 ¹⁾	275	20	52,5	45	60	2 1/4"	87	60	82

ETLB-E			Motor			
size	type 1 weight (kg)	type 2 weight (kg)	size	power	G	weight (kg)
25-125	4,6	4,8	BG 71	0,37	235	9
25-125	4,6	4,8	BG 71	0,75	235	9
25-125	4,6	4,8		1,5		
25-125	4,6	4,8		2,2		

Type 1 = Inspection hole with cover

Type 2 = Filter connection

NOTE

Suction behaviour

In order to insure malfunction free operation of the ASV vertical sump pumps observe the installation dimensions O, Z and V in the dimensional table during the planning and assembly.

Dimensions O, Z, and V are minimum dimensions. Dropping below these dimensions will result in reduced output, vibrations and/or pump damage.

Always ensure the minimum covering dimension »Z« of the pump housing when starting the unit.

For higher operating temperatures observe the steam pressure of the medium and if necessary increase »Z« appropriately.

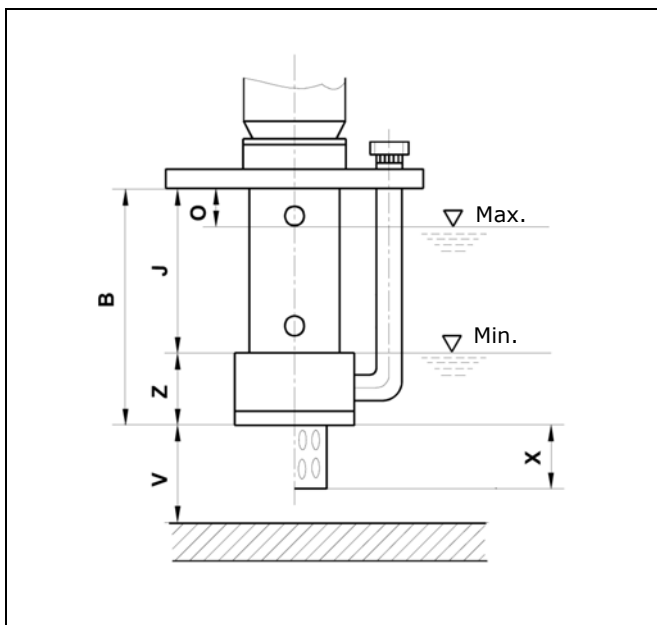
Terminology definition

Fluid level »max.«

- maximum admissible fluid level
- top switching point for level control

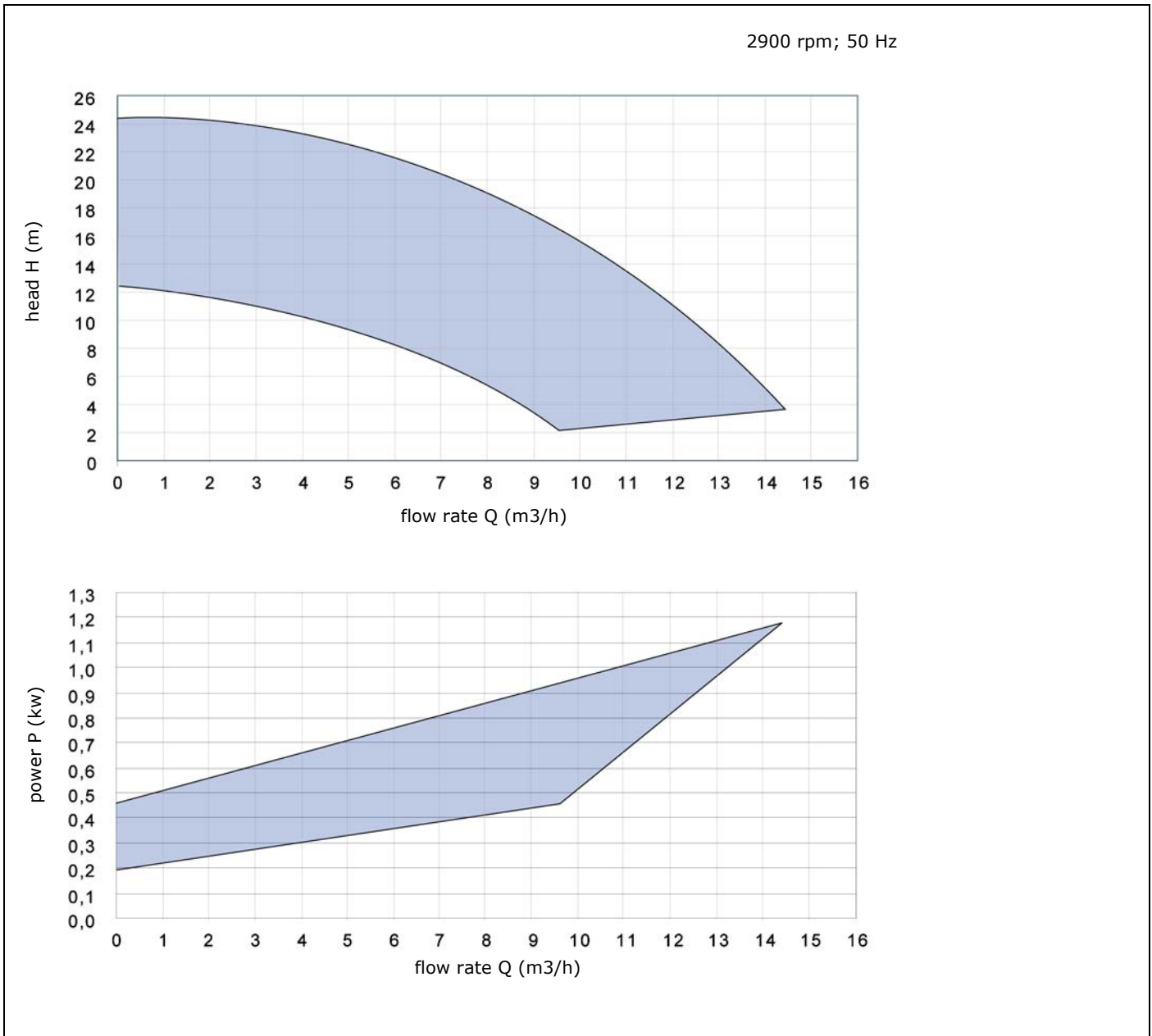
Fluid level »min.«

- lowest admissible fluid level each time the pump unit is started up
- bottom switching point for level control during commissioning/start-up of the pump unit



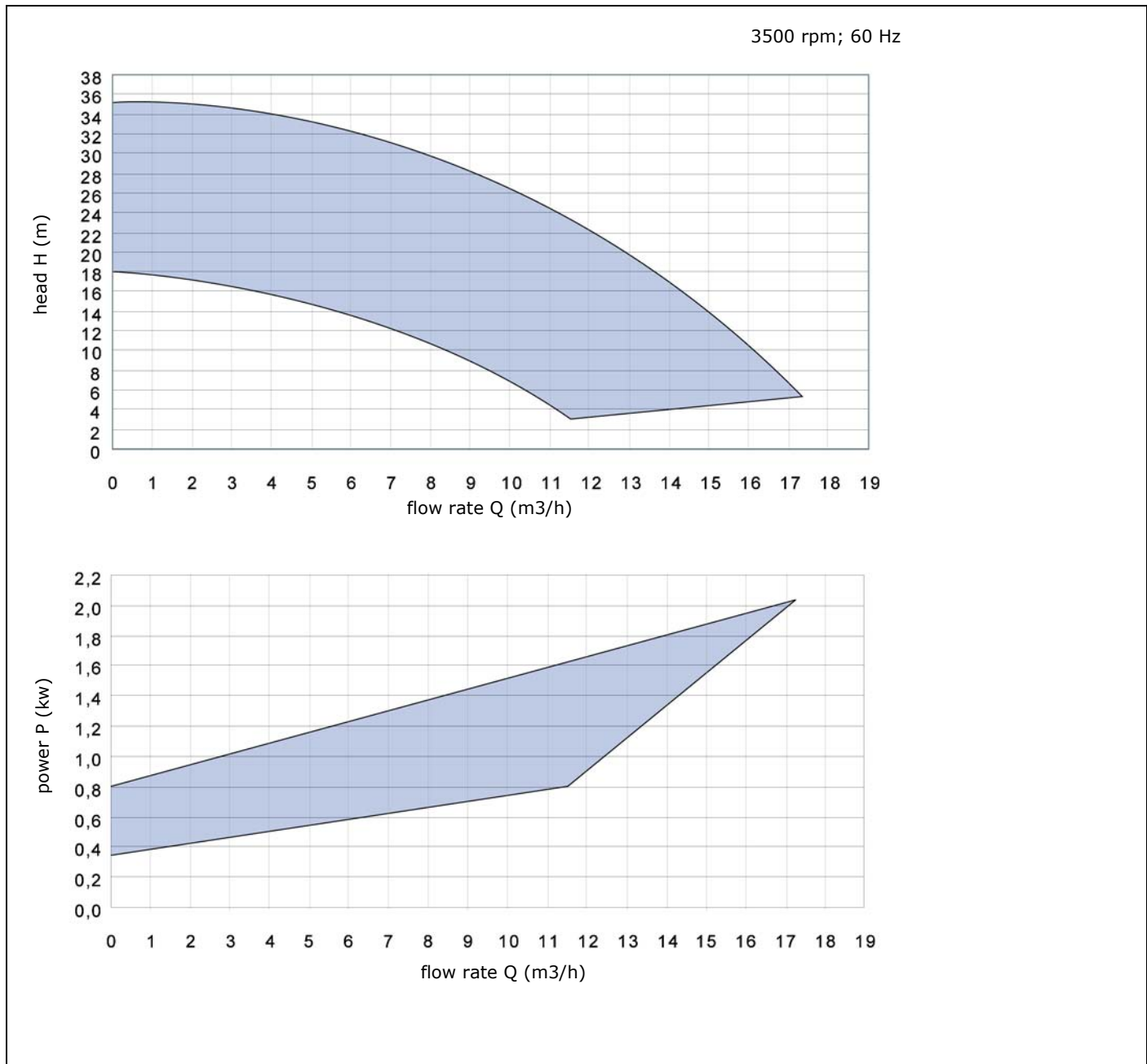
Performance curve ETLB-E

valid for $\rho=1 \text{ kg/dm}^3$



Performance curve ETLB-E

valid for $\rho=1 \text{ kg/dm}^3$



Subject to technical modifications

