



Multi-stage dry-run capable Thermoplastic close coupled Vertical Sump Pumps Type ETLB-X

Sizes:

3-stages

2-stages

Capacity:

Flow head:

Immersion depth:

Materials:

Dry-run capable

Corrosion free

- ETLB-X 25 - 100 - 3
- ETLB-X 32 - 125 - 2
- up to 32 m³/h (2900 rpm)
- up to 42 m
- 275 or 475 mm
- PP or PVDF
- no sliding bearings
- all components getting in contact with the fluid are made of thermoplastics

Application

ASV close coupled sump pumps are designed for the vertical application in pressureless containers, open tanks or pits.

They are used for pumping and circulation of clean, slightly polluted fluids, aqueous solutions or fluid mixtures, e.g.:

- organic or inorganic acids
- inorganic solutions (saline solutions, electrolytes, chemical nickel etc)
- acid mixtures
- neutralization, flocculent or precipitants

For applications in:

- chemical or pharmaceutical industry
- environmental or processing technology
- galvanic industry
- water treatment or in sewerage technology
- system and equipment construction



standard execution

execution for dry-well installation



Constructional features

Multi-stage (2- or 3-stages), vertical chemical sump pumps.

Pump housing and impeller

The housing lid and the pump housing are designed as screw connection (without any metal bolts).

The closed impellers are made by state of the art thermoplastic injection moulding technology.

The impeller is fastened independent of the rotational direction. The impeller shaft is protected against contact with the fluid or corrosion by means of a thermoplastic protecting tube and an impeller hub cap with O-ring.

A suction strainer (option) 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 massive pump shaft guarantee vibration free operation.

Shaft exit

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

Drive

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

Materials

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

- PP (Polypropylene)
- PVDF (Polyvinylidene fluoride)

O-rings

- CSM (Hypalon)
- EPDM (Ethylene propylene rubber)
- FPM (Viton)
- FEP (Polyfluorethylene propylene)

V-ring

FPM (Viton)

Driver lantern

PP

Technical data

Capacity

up to 28 m³/h

Flow head

up to 42 m

Immersion depth

- ETLB-X 25-100-3 275 mm / 475 mm
- ETLB-X 32-125-2 475 mm

Suction tube extension

up to 1500 mm

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
- PVDF up to +90 °C

Values below 0°C on request with exact data of operation.

Viscosity

Media to appr. 160 mPas (160 cP)

Pressure connection

- threaded necks acc. DIN 8063
- on request with pressure connection band, union sockets or spigot ends acc. ISO/DIN
- optional with flange connection acc. DIN 2501 PN 10/16

Suction connection

- suction connection (standard)
- on request with strainer on the pump housing (mesh width or holes acc. to design data)
- on request with suction tube extension for container draining

Drive

Type: IEC 3-phase-current-motor

Design: IM V1

Voltage: 230/400 or 400/690 V

Speed: 2900/3500 rpm, 50/60 Hz

Protection: IP 55

Protection cap: on request

Sizes - allocation

Type	Size	Capacity kW
25-100-3	BG 90	1.5
32-125-2	BG 112	5.5

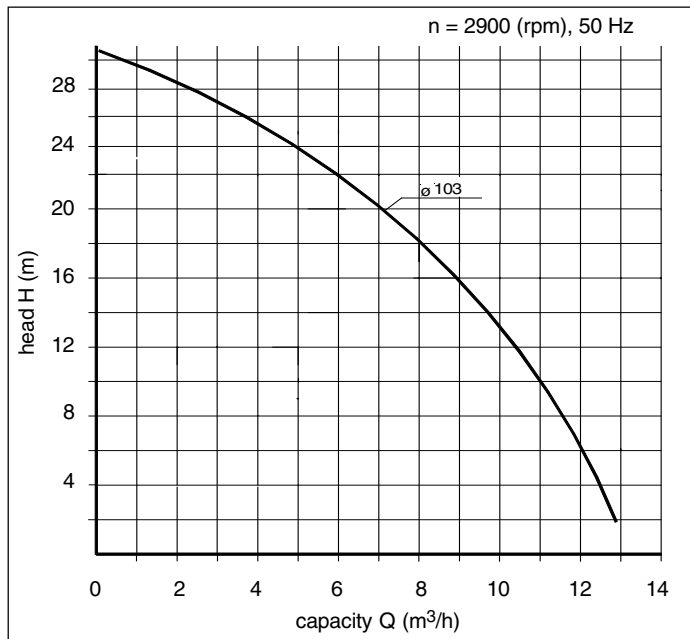
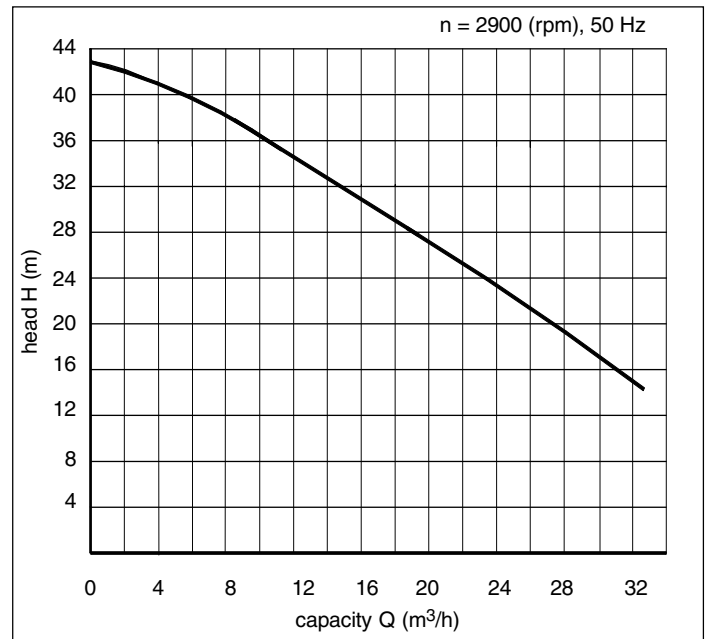
Protection paint coat

Motor and metal parts are protected

against corrosion by a 2-component protection paint coat.

Operating instructions

Observe the operating and maintenance instructions when installing the vertical sump pumps.

Characteristic curve: ETLB-X 25-100-3 (3-stages)

Characteristic curve: ETLB-X 32-125-2 (2-stages)


Information

Suction behaviour

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

Attention

The dimensions O, Z, V and Y are minimum dimensions. Dropping below these dimensions will result in reduced output, vibrations and/or pump damage. Each time a container has been emptied fill the container to above the minimum fluid level prior to restarting the pump unit. 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.

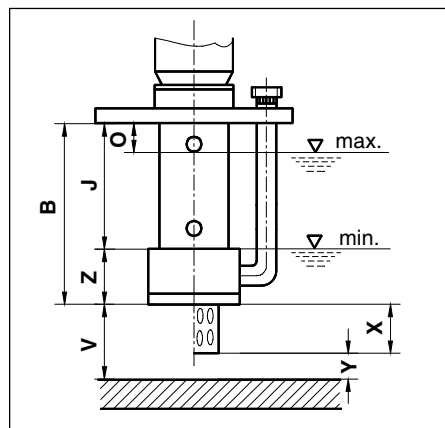
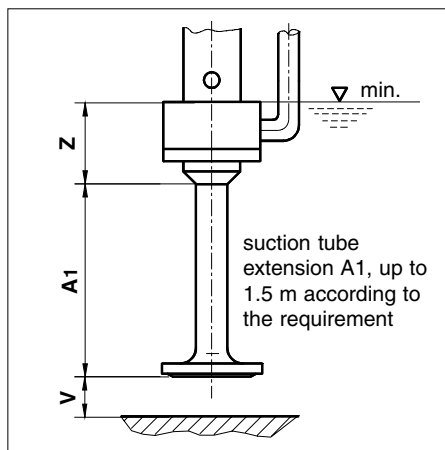
Terminology definition:

Fluid level »max.«

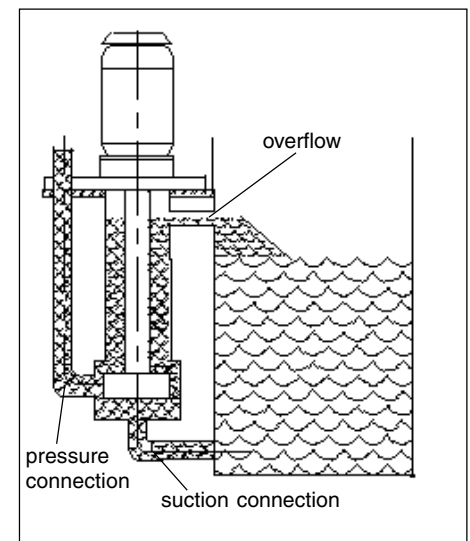
- maximum admissible fluid level
- top switching point for level control

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


Vertical sump pump with suction tube extension and suction plate


ETLB-X pumps for dry-well installation

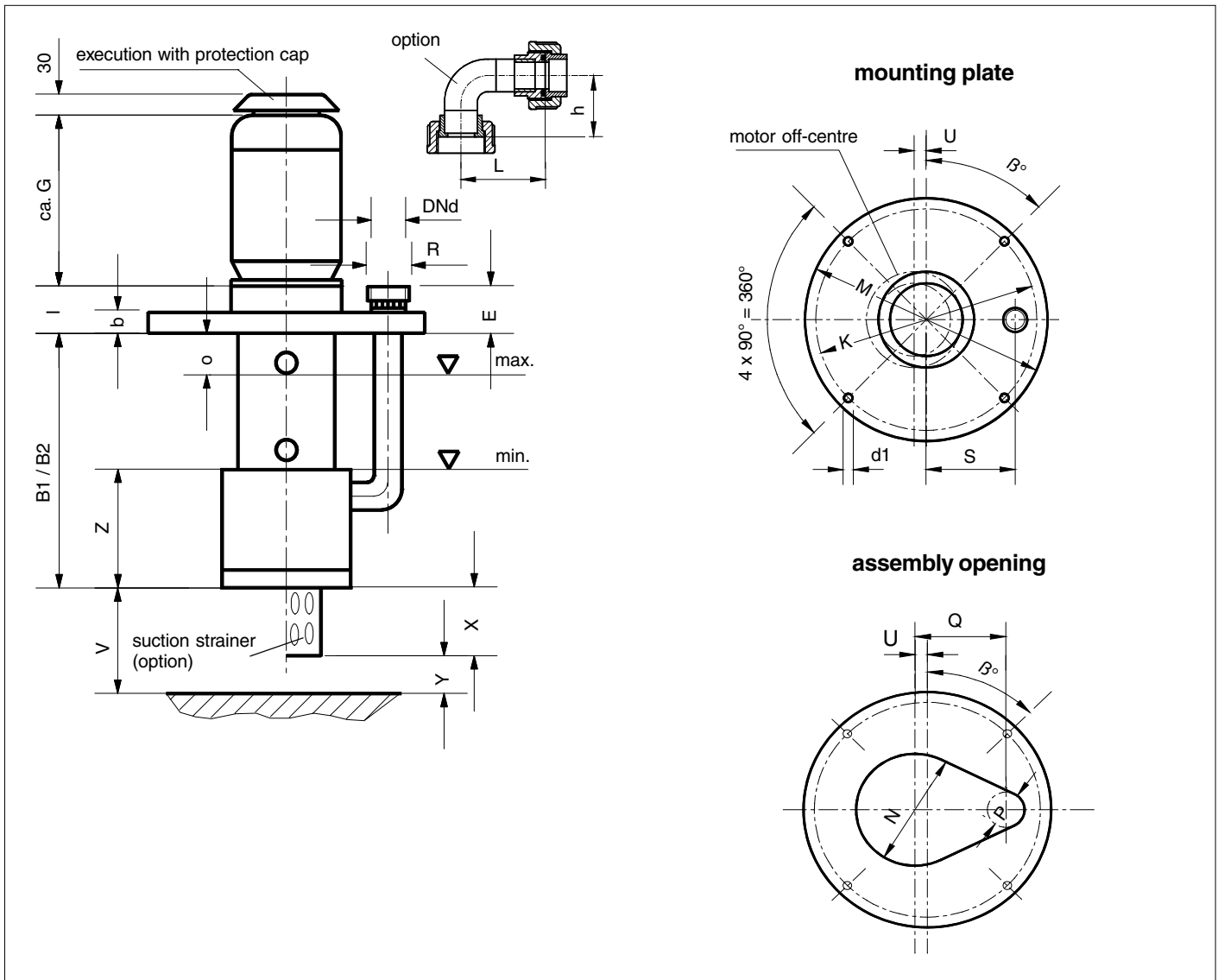


For the dry-well installation the pump is arranged outside of the container.

Application areas:

- pumping over and circulating fluids
- in environmental technology
- in sewerage water treatment
- in lacquering plants
- recycling and disposal of fluid material

Dimensional drawing type ETLB-X



type size	NW DN _p	motor kW	dimensions (mm)												
			B ₁	B ₂	b	E	h	L	I	O	R	V _{min}	Z	X	Y _{min}
25-100-3	25	1.5 ¹⁾	275	475	20	50	62	82	60	30	1 1/2"	60	174	100	10
32-125-2	32	5.5 ¹⁾	-	475	30	64	101	87	111	30	2"	60	183	125	10

type size	mounting plate					assembly opening				weight (kg) ²⁾			
	β°	d1	∅K	∅M	S	Q	∅N	∅P	U	PP 275	PP 475	PVDF 275	PVDF 475
25-100-3	41	14	270	320	132	112	240	80	0	6.5	8.5	9	11.5
32-125-2	45	18	408	440	145	205	290	110	60	9.5	12.5	14	17.5

motor		
size	G mm	weight kg
BG 90	244	16-19
BG 100	303	25
BG 112	320	32

¹⁾ n=2900 rpm

²⁾ appr. value without motor

Technical alterations excepted