

VAB 032-025-145 0222KI T81MVCCO OA

Vitacast Bloc - Hygienic centrifugal pump

Page: 1 / 5

Operating data

Requested flow rate	6.00 m ³ /h	Actual flow rate	6.00 m ³ /h
Requested developed head	20.00 m	Actual developed head	20.00 m
Pumped medium	+ Starch suspension + waterige suspensie met droge substantie	Efficiency	38.4 %
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Power absorbed	0.94 kW
Max. ambient air temperature	20.0 °C	Pump speed of rotation	2599 rpm
Min. ambient air temperature	20.0 °C	NPSH required	1.47 m
Fluid temperature	60.0 °C	Permissible operating pressure	10.00 bar.g
Fluid density	1100 kg/m ³	Discharge press.	2.16 bar.g
Fluid viscosity	1.10 mm ² /s	Shutoff head	24.49 m
Suction pressure max.	0.00 bar.g	Min. allow. flow for continuous stable operation	0.64 m ³ /h
Mass flow rate	1.83 kg/s	Min. allow. mass flow for continuous stable operation	0.20 kg/s
Max. power on curve	0.99 kW	Max. allow. mass flow	2.38 kg/s
		Design	Single system 1 x 100 %

Design

The pump conforms to the regulations of EGV 1935/2004.

Design	Close-coupled	Direction of rotation	Clockwise
Orientation	Horizontal	Spring Shrouding	open
Suction nominal dia.	DN 32	Material code	Q1Q1VGG
Suction nominal pressure	PN 10	Shaft seal code	T81
Suction position	axial	Sealing plan	I Single-acting mechanical seal(internal circulation)
Connection standard	DIN 11851 (Milk thread)	Seal chamber design	Standard seal chamber
Discharge nominal dia.	DN 25	Impeller diameter	145.0 mm
Discharge nominal pressure	PN 10	Free passage size	3.5 mm
Discharge position	top (0°/360°)	Direction of rotation from drive	Clockwise
Discharge flange drilled according to standard	DIN 11851 (Milk thread)	Silicon free pump assembly	Yes
Counter Flange	No	Bearing bracket construction	Close-coupled
Shaft seal	Single acting mechanical seal	Bearing type	Anti-friction bearings
Shaft seal manufacturer	Roten	Lubrication type	Grease
Shaft seal type	Uniten 3	Color	White aluminium (similar RAL 9006)
Mechanical Seal Form	Unbalanced	Support or motor foot	3 point ball feet
		Motor shroud	Without
		Surface finish wetted parts	3.2 µm

VAB 032-025-145 0222KI T81MVCCO OA

Vitacast Bloc - Hygienic centrifugal pump

Page: 2 / 5

Driver, accessories

Driver type	Electric motor	Motor enclosure	IP55
Drive standard mech.	IEC	Cos phi at 4/4 load	0.86
Model (make)	KSB-Motor	Motor efficiency at 4/4 load	85.9 %
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Temperature sensor	1 PTC resistor
Motor const. type	V1	Terminal box position	0°/360° (top) Viewed from the drive
Motor size	90L	Motor winding	230 / 400 V
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Number of poles	2
Speed control selection	Speed adjustment	Connection mode	Star
Frequency	50 Hz	Motor cooling method	Surface cooling
Designed for operation with frequency inverter	Yes	Motor material	Aluminium
Rated voltage	400 V	Frequency inverter operation allowed	FI allowed
Rated power P2	2.20 kW	Motor noise pressure level	68 dBA
Available reserve	111.43 %	Motor data can vary from type plate information. Motor data describes KSB's choice functional specification and is used for pump selection.	
Rated current	4.6 A	EAC Approval	Yes
Starting current ratio	8.7		
Insulation class	F to IEC 34-1		

Materials C

Circular casing (103)	Stainless steel 1.4409	Taper locking ring (515)	Stainless steel 1.4301
Discharge cover (163)	Stainless steel 1.4409	Cover plate (68-3)	Stainless steel 1.4301
Shaft (210)	CrNiMo steel 1.4404	Motor shroud (683)	Without
Impeller (230)	Stainless steel 1.4409	Impeller nut (922)	CrNiMo steel 1.4404
O-Ring (412)	FKM 75 with FDA approval		

Packaging

Packaging category	A0 Packing acc. to KSB choice	Packaging for transport	Truck
Packaging for storage	Indoor		

Nameplates

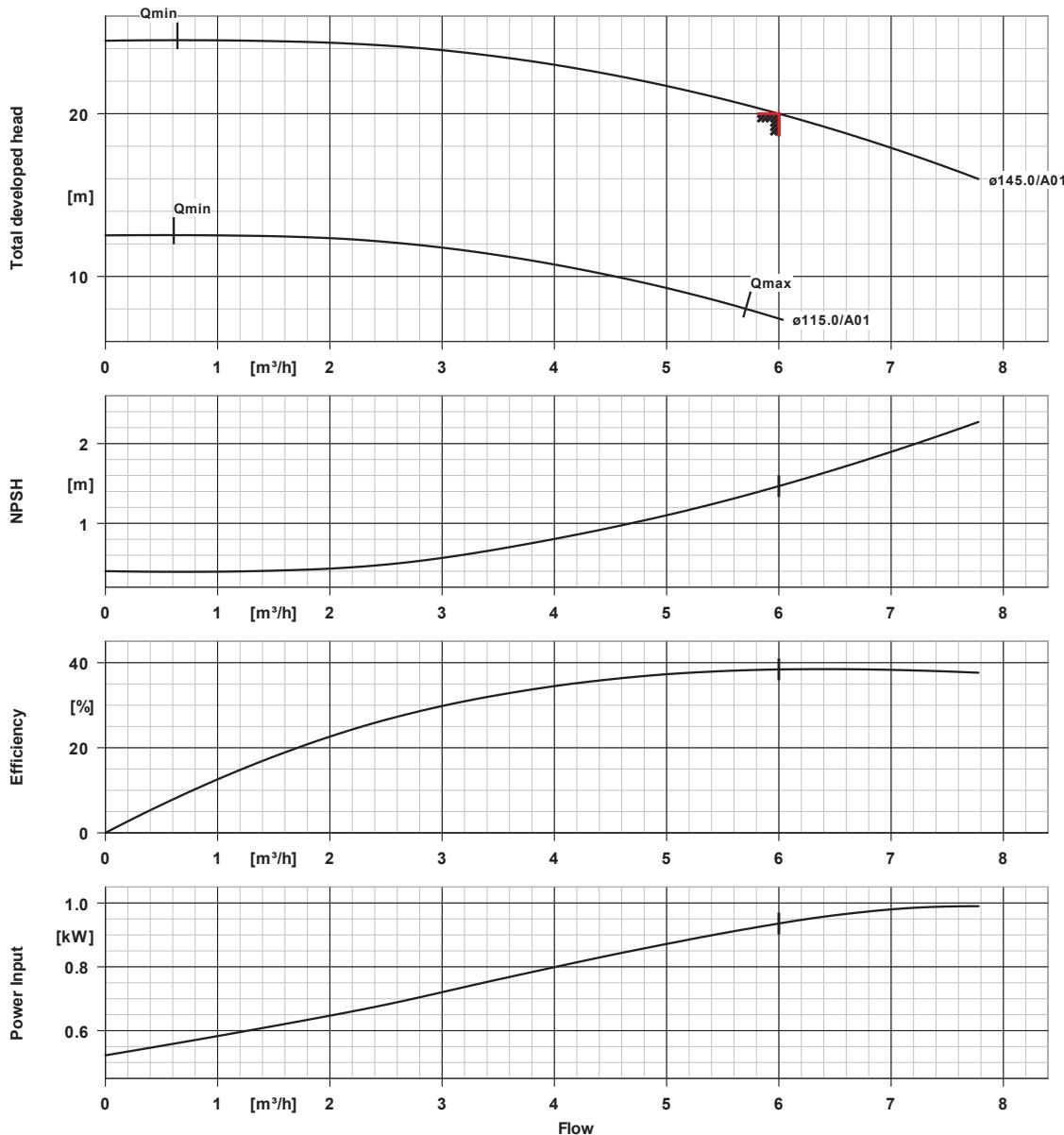
Nameplates language	International
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Performance curve



VAB 032-025-145 0222KI T81MVCCO OA
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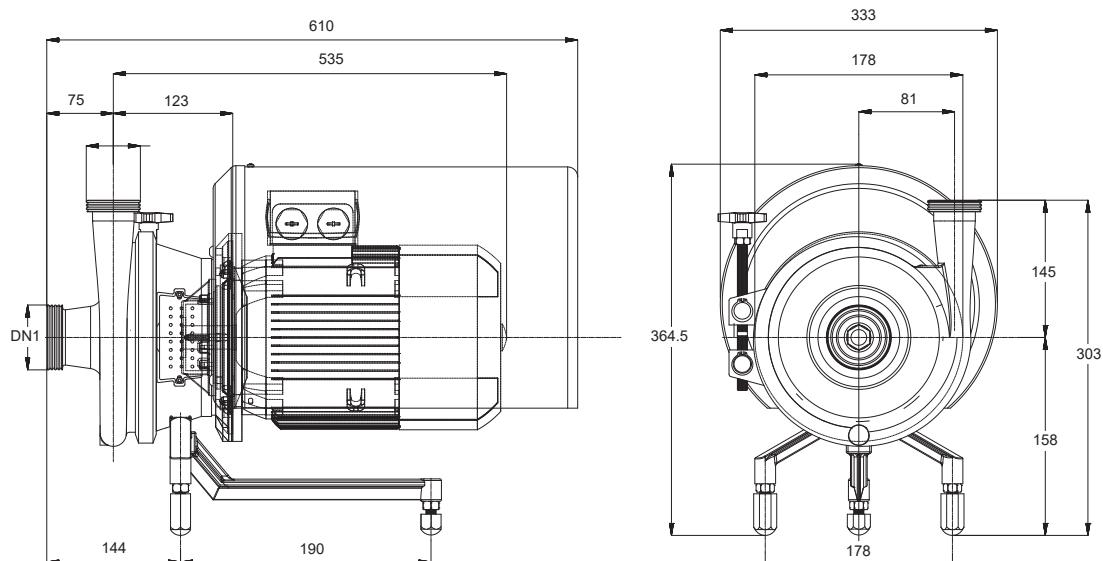
Page: 3 / 5



Curve data

Speed of rotation	2599 rpm	Requested developed head	20.00 m
Fluid density	1100 kg/m^3	Efficiency	38.4 %
Viscosity	1.10 mm^2/s	Power absorbed	0.94 kW
Flow rate	6.00 m^3/h	NPSHR	1.47 m
Requested flow rate	6.00 m^3/h	Curve number	VA-25145-2900
Total developed head	20.00 m	Effective impeller diameter	145.0 mm

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Drawing is not to scale
Dimensions in mm
Motor

Motor manufacturer	KSB-Motor
Motor size	90L
Motor power	2.20 kW
Number of poles	2
Speed of rotation	2954 rpm
Position of terminal box	0°/360° (top) Viewed from the drive

Connections

Suction nominal size DN1	DN 32 / DIN 11851 (Milk thread)
Discharge nominal size DN2	DN 25 / DIN 11851 (Milk thread)
Nominal pressure suct.	PN 10
Rated pressure disch.	PN 10

Weight net

Pump	15 kg
Motor	21 kg
Total	36 kg

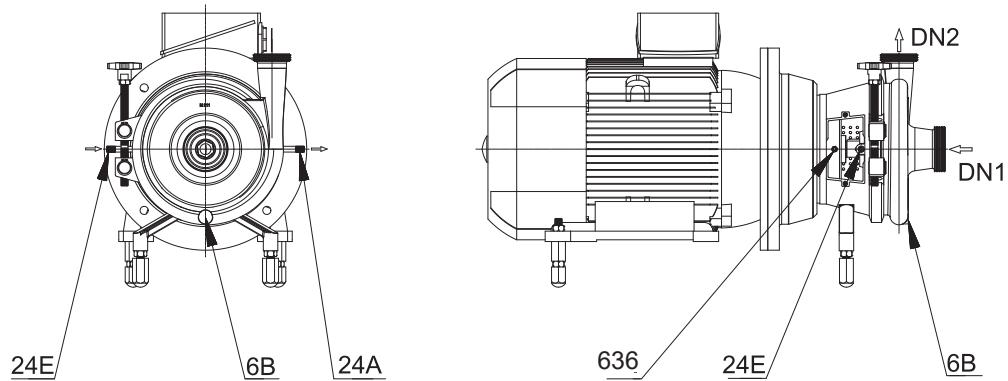
Connect pipes without stress or strain!
For auxiliary connections see separate drawing.

Connection plan



VAB 032-025-145 0222KI T81MVCCO OA
Vitacast Bloc - Hygienic centrifugal pump

Page: 5 / 5



Connections

6B Pumped liquid drain	G 3/8	Not executed
24E/24A Quench liquid in/out	G 1/4	Not executed
10E/10A Sealing liquid in/out	G 1/4	Not executed
636 Lubrication for bearing		Not executed