

MovitecVSF006/20-B1P55ES132D5VW

High pressure Inline Pump

Operating data

Requested flow rate		Actual flow rate	4.01 m ³ /h
Requested developed head		Actual developed head	180.35 m
Pumped medium	Water	Efficiency	61.6 %
	Clean water	MEI (Minimum Efficiency Index)	≥ 0.70
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Power absorbed	3.19 kW
		Pump speed of rotation	2964 rpm
Max. ambient air temperature	20.0 °C	NPSH required	1.64 m
Min. ambient air temperature	20.0 °C	Permissible operating pressure	25.00 bar.g
Fluid temperature	20.0 °C		
Fluid density	998 kg/m ³	Discharge press.	17.65 bar.g
Fluid viscosity	1.00 mm ² /s	Shutoff head	202.87 m
Suction pressure max.	0.00 bar.g	Min. allow. flow for continuous stable operation	0.80 m ³ /h
Mass flow rate	1.11 kg/s	Min. allow. mass flow for continuous stable operation	0.22 kg/s
Max. power on curve	4.21 kW	Design	Single system 1 x 100 %
Max. allow. mass flow	2.55 kg/s		Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2

Design

Pump standard	KSB high pressure in-line international execution	Shaft seal manufacturer	DP
Design	Close-coupled	Shaft seal type	RMG-AC
Orientation	Vertical	Material code	BQ7VGG
Suction nominal dia.	DN 32	Shaft seal code	55
Suction nominal pressure	PN 25	Sealing plan	I Single-acting mechanical seal(internal circulation)
Suction position	90° (right)	A liquid free of solids is assumed	
Connection standard	EN 1092-1	Seal chamber design	Standard seal chamber
discharge		Contact guard	With
Discharge nominal dia.	DN 32	Impeller diameter	90.0 mm
Discharge nominal pressure	PN 25	Direction of rotation from drive	Clockwise
Discharge position	270° (left 90°)	Color	Graphite black (RAL 9011)
Round flange (F)			
Shaft seal	Single acting mechanical seal		

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Driver, accessories

Driver type	Electric motor	Insulation class	F to IEC 34-1
Drive standard mech.	IEC	Motor enclosure	IP55
Model (make)	KSB (DMW)	Cos phi at 4/4 load	0.89
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Motor efficiency at 4/4 load	89.2 %
Motor const. type	V1	Temperature sensor	3 PTC resistors
Motor size	132S	Terminal box position	90° (right)
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Motor winding	Viewed from the drive
Motor speed	2964 rpm	Number of poles	400 / 690 V
Frequency	50 Hz	Fixed bearing reinforced	2
Rated voltage	400 V	Connection mode	axial
Rated power P2	5.50 kW	Motor cooling method	Delta
Performance limit P2max	6.30 kW	Motor material	Surface cooling
Available reserve	97.39 %	Frequency inverter operation allowed	Aluminium
Rated current	10.0 A	Motor noise pressure level	FI allowed
Starting current ratio	8		68 dBA

Materials VS

Pump shroud (10-6)	CrNiMo steel 1.4404	O-Ring (412)	Fluor caoutchouc FPM
Pump casing (101)	Stainless steel 1.4408	Seal cover (471)	Stainless steel 1.4408
Stage casing (108)	CrNiMo steel 1.4404	Bearing sleeve (529)	Tungsten Carbide
Cover (160)	CrNiMo steel 1.4404	Flange (723)	Stainless Steel 1.4308
Diffuser (171)	CrNiMo steel 1.4404	Baseplate (890)	Grey cast iron EN-GJL-250
Shaft (210)	Duplex steel 1.4460	Screwed plug (903)	CrNiMo steel 1.4404
Impeller (230)	CrNiMo steel 1.4404	Tie bolt (905)	Chrome steel 1.4057+QT800
Motor stool (341)	Grey cast iron EN-GJL-250	Nut (920)	CrNiMo steel 1.4404

Packaging

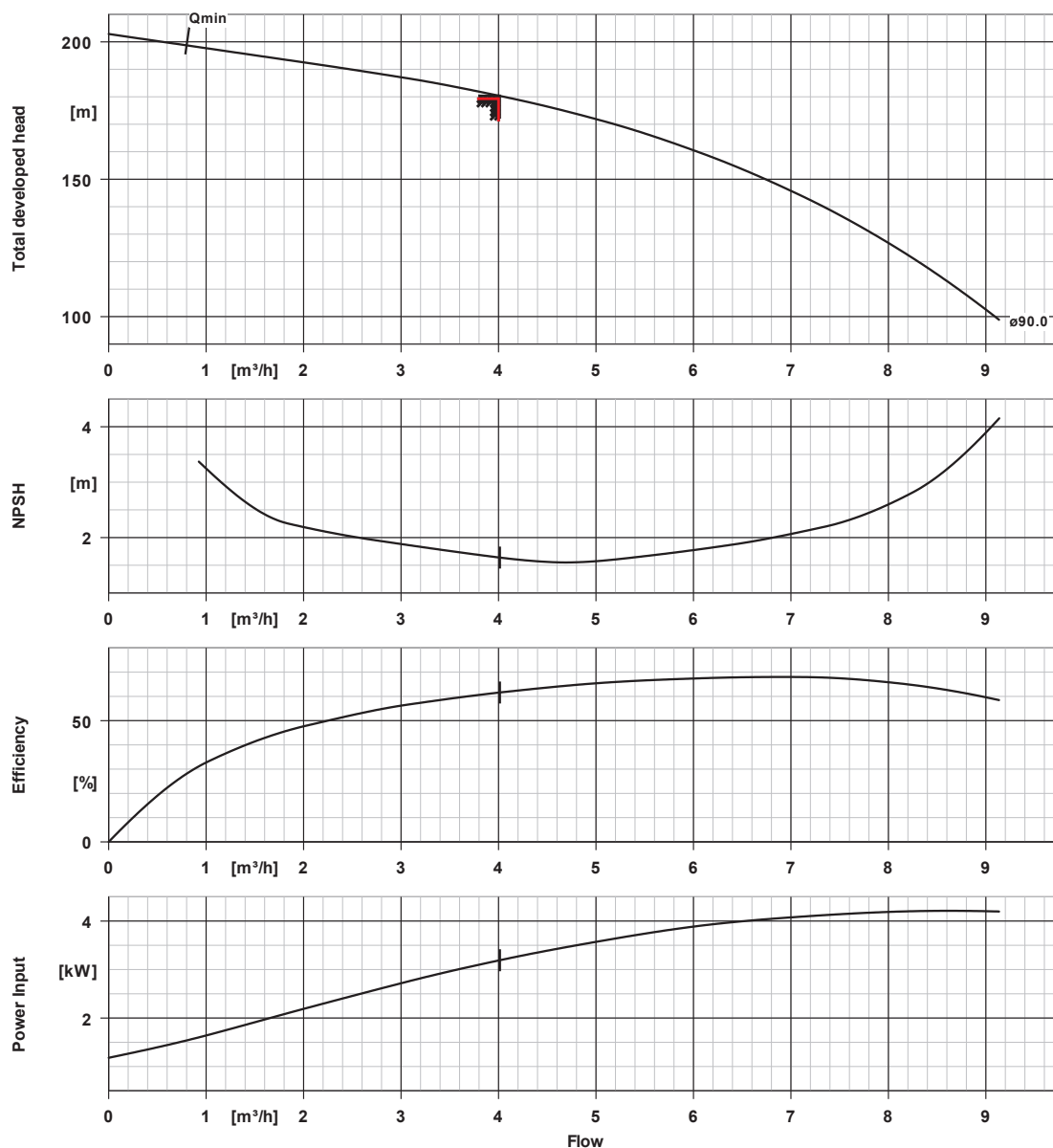
Packaging category	A0 Packing acc. to KSB choice	Packaging for transport	Truck
Packaging for storage	Indoor		

Nameplates

Nameplates language	International
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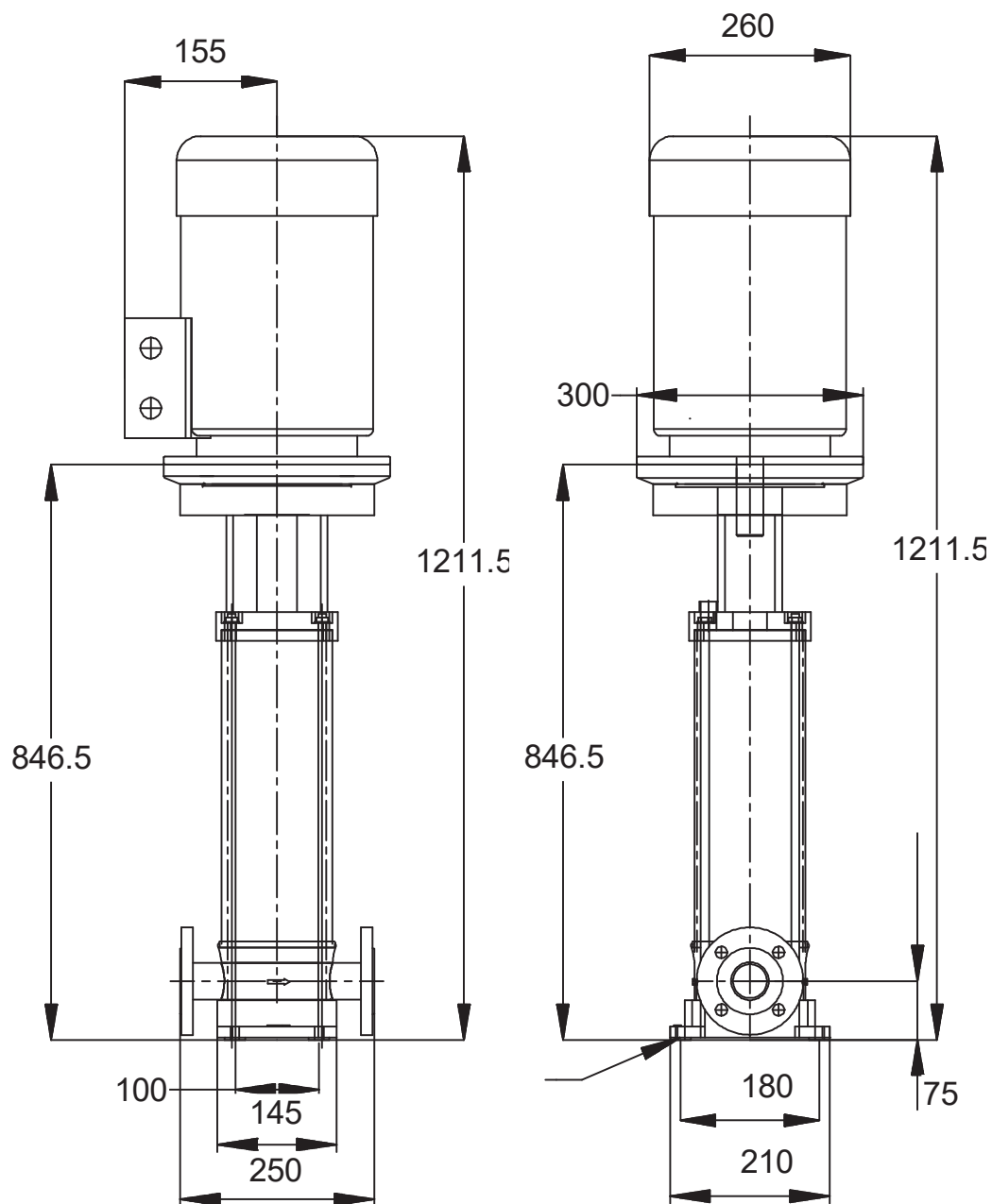
Curve data

Speed of rotation	2964 rpm
Fluid density	998 kg/m³
Viscosity	1.00 mm²/s
Flow rate	4.01 m³/h
Requested flow rate	4.00 m³/h
Total developed head	180.35 m
Requested developed head	179.32 m

Efficiency	61.6 %
MEI (Minimum Efficiency Index)	≥ 0.70
Power absorbed	3.19 kW
NPSHR	1.64 m
Curve number	K95000600/3
Effective impeller diameter	90.0 mm
Acceptance standard	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2

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Drawing is not to scale

Dimensions in mm

Motor

Motor manufacturer	KSB (DMW)
Motor size	132S
Motor power	5.50 kW
Number of poles	2
Speed of rotation	2964 rpm
Position of terminal box	90° (right)
	Viewed from the drive
Thrust bearing housing	No

Connections

Suction nominal size DN1	DN 32 / EN 1092-1
Discharge nominal size DN2	DN 32 / EN 1092-1
Nominal pressure suct.	PN 25
Rated pressure disch.	PN 25
Round flange (F)	

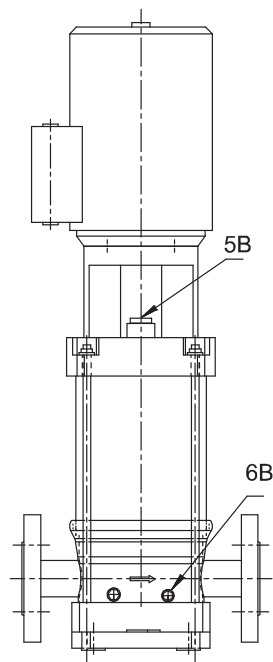
Weight net

Pump	50 kg
Motor	49 kg
Total	98 kg

Connect pipes without stress or strain!

**For auxiliary connections see
separate drawing.**

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Connections

5B venting
6B Pumped liquid drain

G 3/8
G 1/4

Closed with venting plug
Drilled and plugged.