

**MovitecV V010/10-B0R13ES132B5VW**

High pressure Inline Pump

**Operating data**

Requested flow rate	10.00 m³/h	Actual flow rate	10.00 m³/h
Pumped medium	Water	Actual developed head	88.87 m
	Clean water	Efficiency	67.5 %
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	MEI (Minimum Efficiency Index)	≥ 0.70
Max. ambient air temperature	20.0 °C	Power absorbed	3.58 kW
Min. ambient air temperature	20.0 °C	Pump speed of rotation	2970 rpm
Fluid temperature	20.0 °C	NPSH required	1.73 m
Fluid density	998 kg/m³	Permissible operating pressure	25.00 bar.g
Fluid viscosity	1.00 mm²/s	Discharge press.	8.70 bar.g
Suction pressure max.	0.00 bar.g	Shutoff head	118.27 m
Mass flow rate	2.77 kg/s	Min. allow. flow for continuous stable operation	1.20 m³/h
Max. power on curve	3.72 kW	Min. allow. mass flow for continuous stable operation	0.33 kg/s
Max. allow. mass flow	3.75 kg/s		
Design	Single system 1 x 100 %		

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	Q1BEGG-WRC
Suction nominal dia.	NPS 2	Shaft seal code	13
Suction nominal pressure	PN 40	Sealing plan	I Single-acting mechanical seal(internal circulation)
Suction position	90° (right)		
Connection standard	Victaulic coupling	A liquid free of solids is assumed	
discharge		Seal chamber design	Standard seal chamber
Discharge nominal dia.	NPS 2	Contact guard	With
Discharge nominal pressure	PN 40	Impeller diameter	96.0 mm
Discharge position	270° (left 90°)	Direction of rotation from drive	Clockwise
Victaulic coupling (V)		Color	Graphite black (RAL 9011)
Shaft seal	Single acting mechanical seal		

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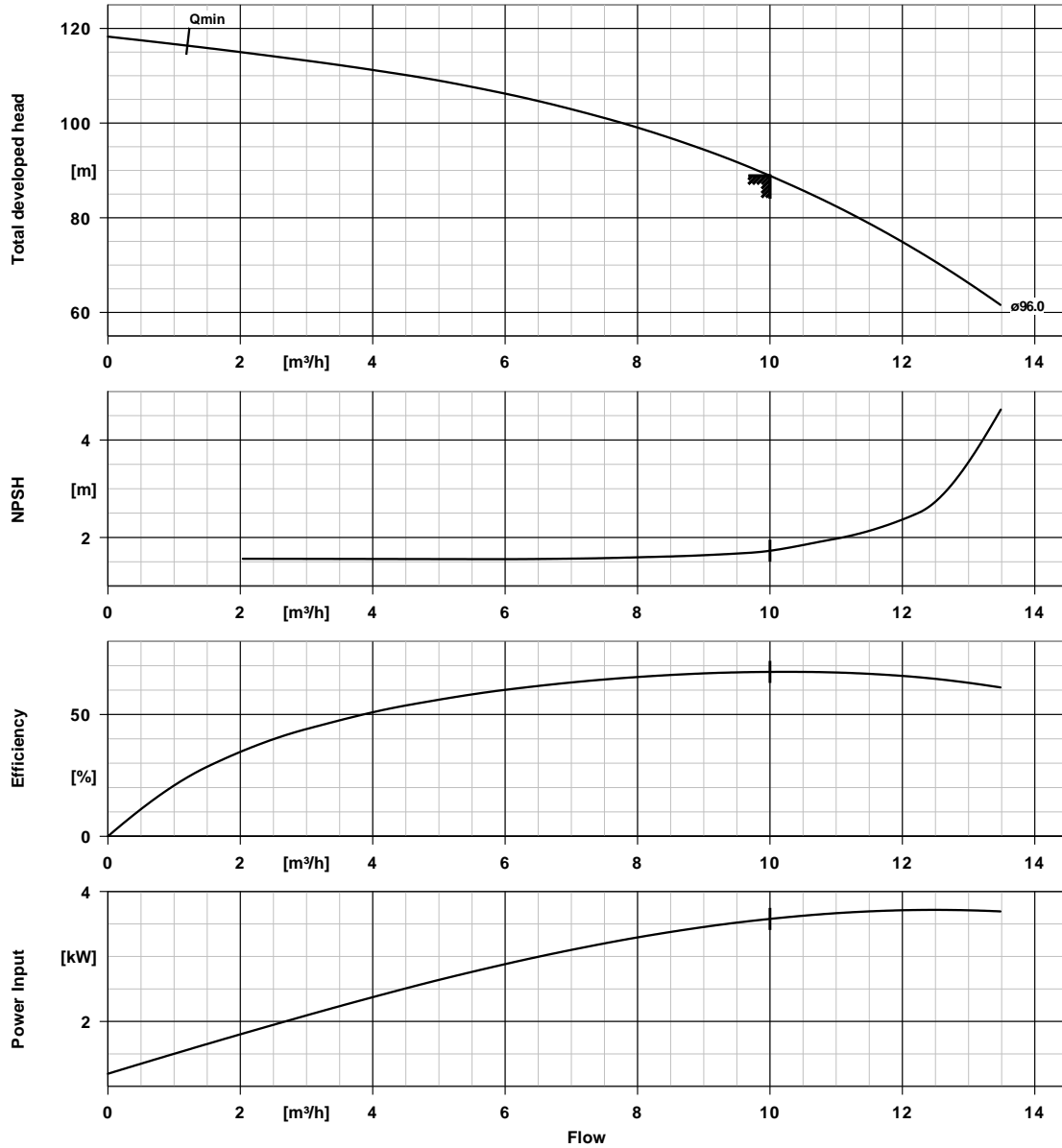
**Driver, accessories**

Driver type	Electric motor	Insulation class	F to IEC 34-1
Drive standard mech.	IEC	Motor enclosure	IP55
Model (make)	KSB (DMC)	Cos phi at 4/4 load	0.90
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Motor efficiency at 4/4 load	90.1 %
Motor const. type	V1	Temperature sensor	3 PTC resistors
Motor size	132M	Terminal box position	90° (right)
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Motor winding	Viewed from the drive
Motor speed	2970 rpm	Number of poles	400 / 690 V
Frequency	50 Hz	Fixed bearing reinforced	2
Rated voltage	400 V	Connection mode	axial
Rated power P2	7.50 kW	Motor cooling method	Delta
Performance limit P2max	8.60 kW	Motor material	Surface cooling
Available reserve	140.31 %	Frequency inverter operation allowed	Aluminium
Rated current	13.4 A	Motor noise pressure level	FI allowed
Starting current ratio	8		68 dBa

**Materials V**

Pump shroud (10-6)	Stainless steel 1.4301	O-Ring (412)	EPDM WRc / ACS Approved
Pump casing (101)	Stainless steel 1.4408	Seal cover (471)	Stainless Steel 1.4308
Stage casing (108)	Stainless steel 1.4301	Bearing sleeve (529)	Tungsten Carbide
Cover (160)	Stainless steel 1.4301	Flange (723)	Stainless steel 1.4408
Diffuser (171)	Stainless steel 1.4301	Baseplate (890)	Grey cast iron EN-GJL-250
Shaft (210)	Chrome steel 1.4057+QT800	Screwed plug (903)	Stainless steel 1.4301
Impeller (230)	Stainless steel 1.4301	Tie bolt (905)	Chrome steel 1.4057+QT800
Motor stool (341)	Grey cast iron EN-GJL-250	Nut (920)	Stainless steel 1.4301

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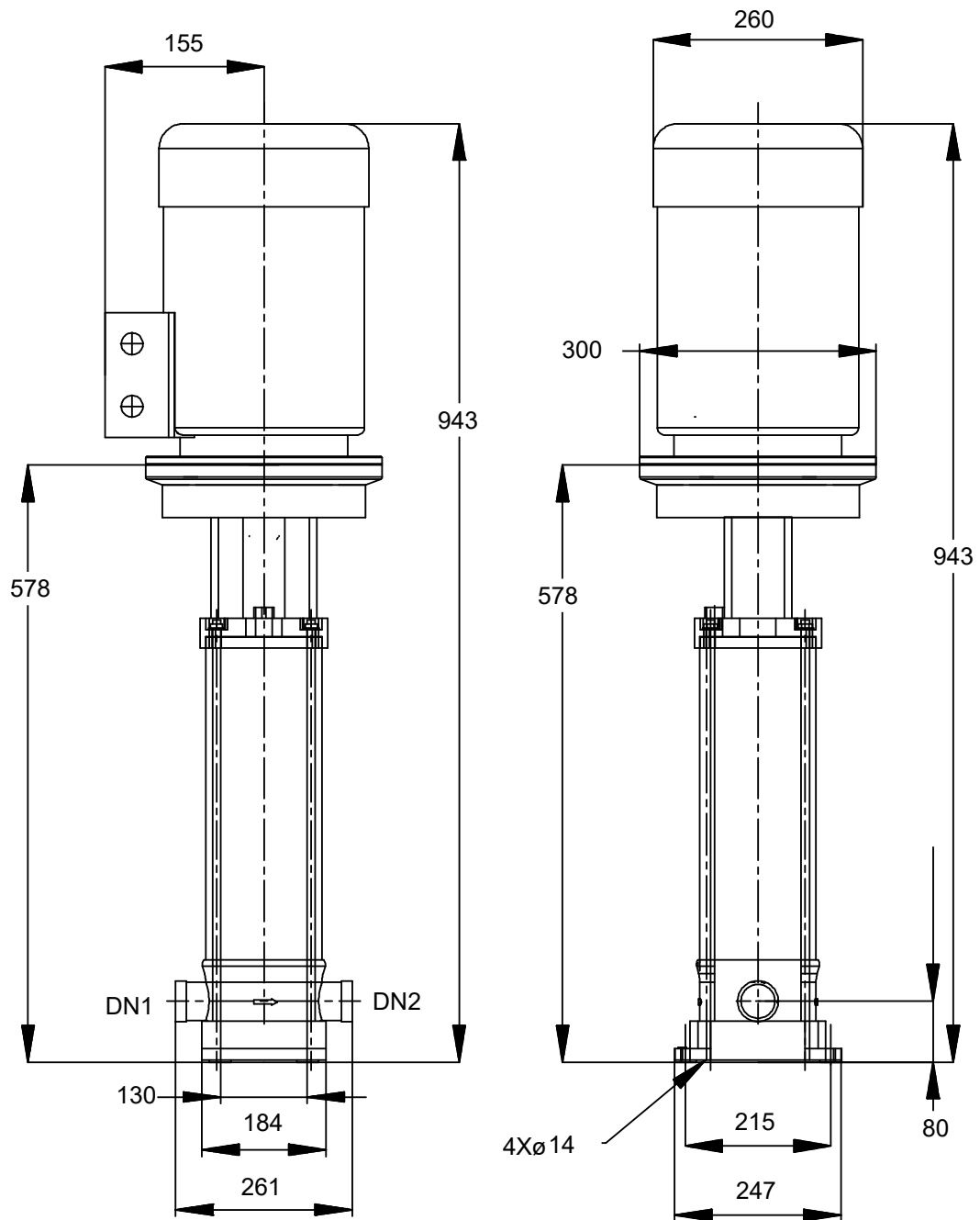


**Curve data**

Speed of rotation	2970 rpm	MEI (Minimum Efficiency Index)	≥ 0.70
Fluid density	998 kg/m³	Power absorbed	3.58 kW
Viscosity	1.00 mm²/s	NPSH required	1.73 m
Flow rate	10.00 m³/h	Curve number	Mov10TNG2900/2
Requested flow rate	10.00 m³/h	Effective impeller diameter	96.0 mm
Total developed head	88.87 m	Acceptance standard	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2
Efficiency	67.5 %		

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Drawing is not to scale

Dimensions in mm

## **MovitecV V010/10-B0R13ES132B5VW** High pressure Inline Pump

### **Motor**

Motor manufacturer	KSB (DMC)
Motor size	132M
Motor power	7.50 kW
Number of poles	2
Speed of rotation	2970 rpm
Position of terminal box	90° (right) Viewed from the drive
Thrust bearing housing	No

### **Connections**

Suction nominal size DN1	NPS 2 / Victaulic coupling
Discharge nominal size DN2	NPS 2 / Victaulic coupling
Nominal pressure suct.	PN 40
Rated pressure disch.	PN 40
Victaulic coupling (V)	

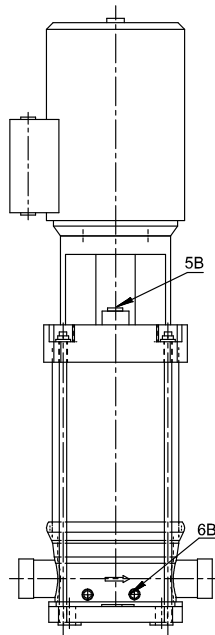
### **Weight net**

Pump	31 kg
Motor	67 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.