

MovitecVCI06/06-20AA61CS090B5UW

Multistage high pressure immersion centrifugal pump

Operating data

Requested flow rate		Actual flow rate	6.31 m ³ /h
Requested developed head		Actual developed head	44.23 m
Pumped medium	Water	Efficiency	66.6 %
	Clean water	Power absorbed	1.14 kW
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Pump speed of rotation	2909 rpm
		NPSH required	1.84 m
Max. ambient air temperature	20.0 °C	Permissible operating pressure	18.00 bar.g
Min. ambient air temperature	20.0 °C	Discharge press.	4.33 bar.g
Fluid temperature	20.0 °C		
Fluid density	998 kg/m ³	Shutoff head	60.19 m
Fluid viscosity	1.00 mm ² /s	Min. allow. flow for continuous stable operation	0.80 m ³ /h
Suction pressure max.	0.00 bar.g	Min. allow. mass flow for continuous stable operation	0.22 kg/s
Mass flow rate	1.75 kg/s	Design	Single system 1 x 100 % Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2
Max. power on curve	1.21 kW		
Max. allow. mass flow	2.50 kg/s		

Design

Pump standard	High-pressure multistage immersion execution	Shaft seal type	ERMG-CT
Design	Close-coupled	Material code	Q7Q7VGG-Y10
Orientation	Vertical	Shaft seal code	61
Suction position	axial	Sealing plan	CI Cartridge single-acting mechanical seal(internal circulation)
Discharge nominal dia.	G 1 1/4		
Discharge nominal pressure	PN 25	A liquid free of solids is assumed	
Discharge position	radial	Seal chamber design	Standard seal chamber
Discharge flange drilled according to standard	EN ISO 228-1	Contact guard	With
Shaft seal	Single acting mechanical seal	Impeller diameter	90.0 mm
	DP	Direction of rotation from drive	Clockwise
Shaft seal manufacturer		Color	Ultramarine blue (RAL 5002) KSB-blue

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Driver, accessories

Driver type	Electric motor	Motor enclosure	IP55
Drive standard mech.	IEC	Cos phi at 4/4 load	0.88
Model (make)	KSB (DMW)	Motor efficiency at 4/4 load	84.2 %
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Temperature sensor	Without
		Terminal box position	90° (right)
Motor const. type	V18		Viewed from the drive
Motor size	90S	Motor winding	230 / 400 V
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Number of poles	2
		Fixed bearing reinforced	axial
Motor speed	2910 rpm	Connection mode	Star
Frequency	50 Hz	Motor cooling method	Surface cooling
Rated voltage	400 V	Motor material	Aluminium
Rated power P2	1.50 kW	Frequency inverter operation allowed	FI allowed
Available reserve	49.26 %		
Rated current	2.9 A	Motor noise pressure level	63 dBa
Starting current ratio	7		
Insulation class	F to IEC 34-1		

Materials VC

Notes		O-Ring (412)	Fluor caoutchouc FPM
General criteria for a water analysis: pH-value $\geq 6,5$; chloride content (Cl) ≤ 250 mg/kg. Chlorine (Cl2) ≤ 0.6 mg/kg.		Seal cover (471)	Stainless Steel 1.4308
Suction casing (106)	Ductile cast iron EN-GJS-400-15	Bearing sleeve (529)	Tungsten Carbide
		Screwed plug (903)	Stainless steel 1.4301
Stage casing (108)	Stainless steel 1.4301	Tie bolt (905)	Chrome steel 1.4057+QT800
Shaft (210)	Chrome steel 1.4057+QT800	Nut (920)	Stainless steel 1.4301
Impeller (230)	Stainless steel 1.4301		
Motor stool (341)	Grey cast iron EN-GJL-250		

Packaging

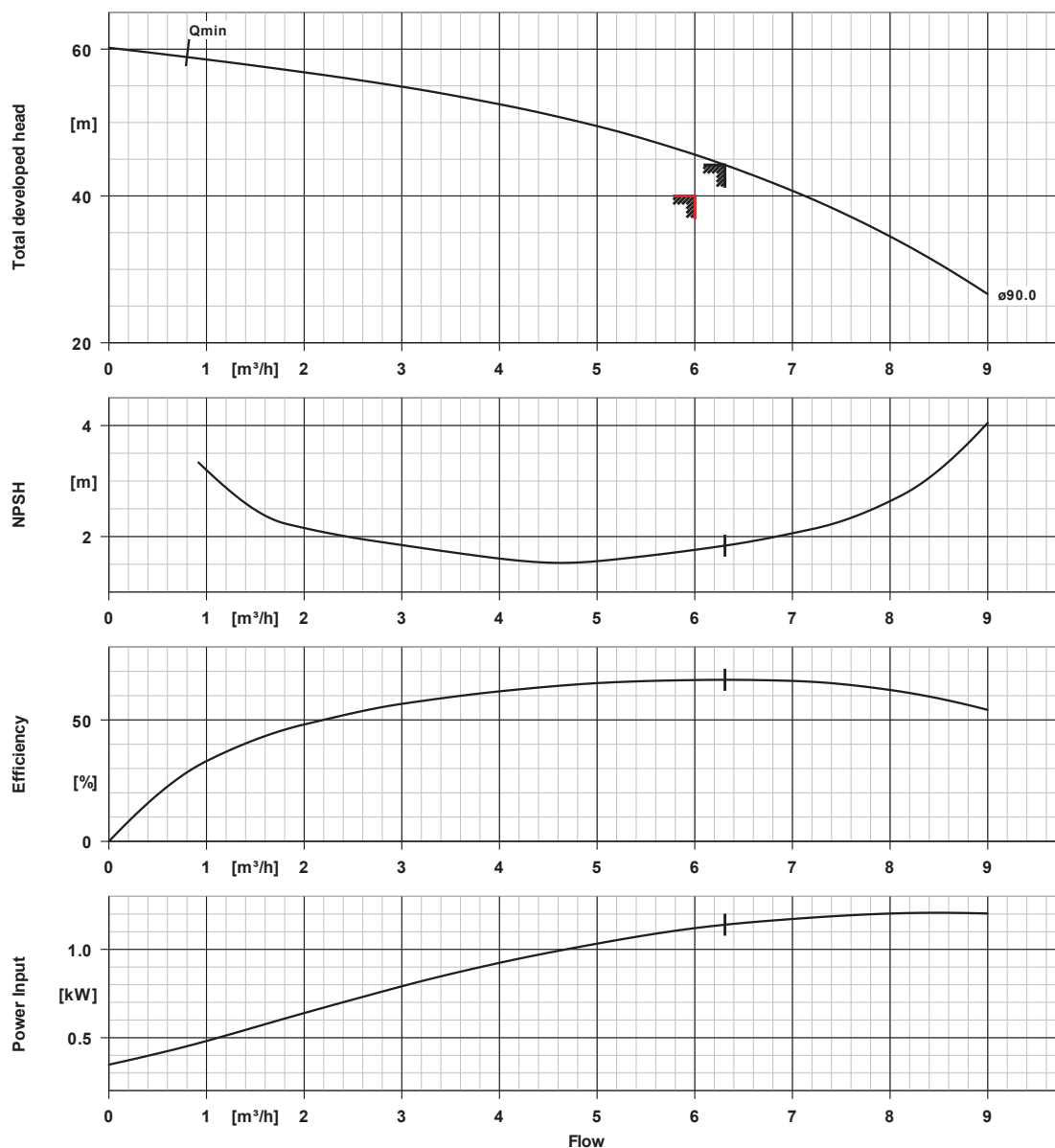
Packaging category	A0 Packing acc. to KSB choice	Packaging for transport	Truck
Packaging for storage	Indoor		

Nameplates

Nameplates language	International
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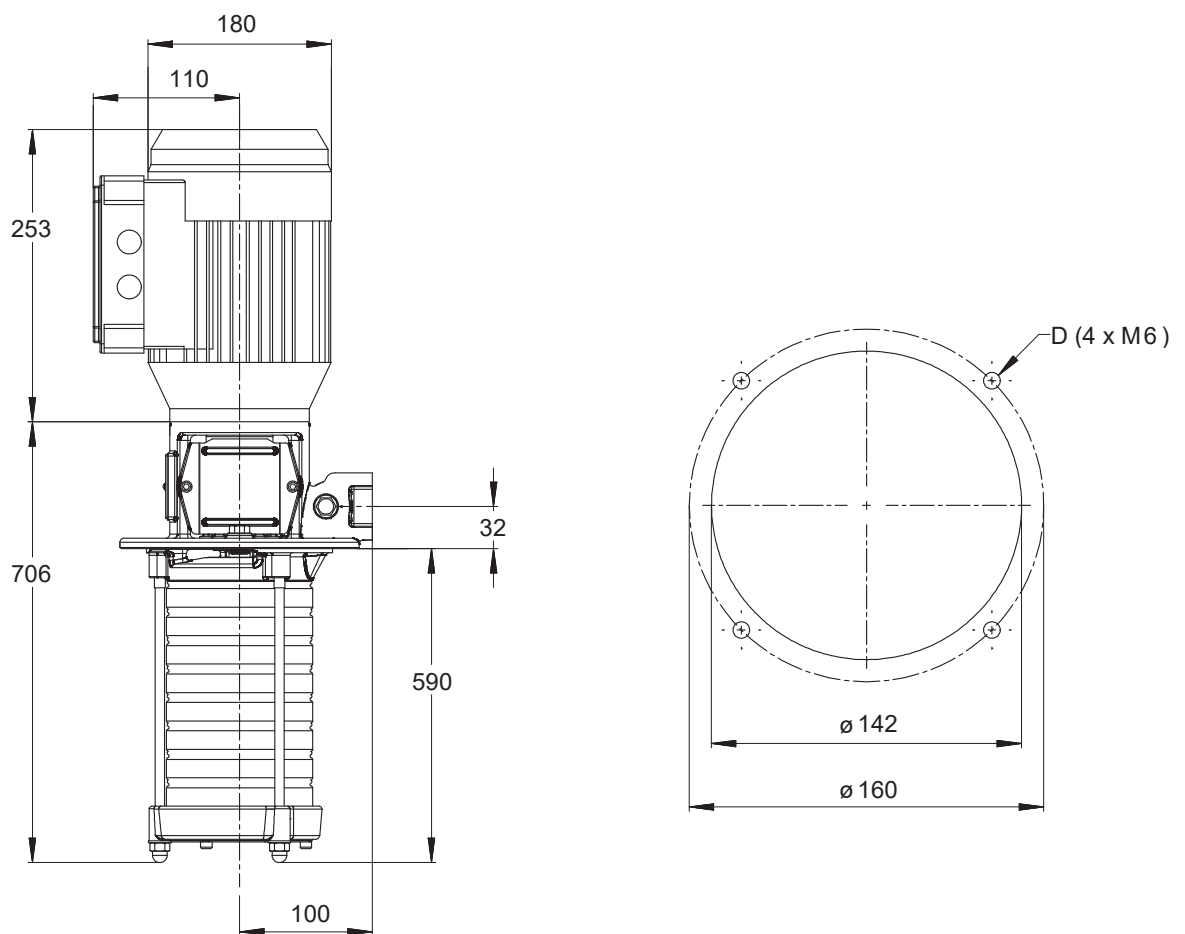
Curve data

Speed of rotation 2909 rpm
 Fluid density 998 kg/m³
 Viscosity 1.00 mm²/s
 Flow rate 6.31 m³/h
 Requested flow rate 6.00 m³/h
 Total developed head 44.23 m
 Requested developed head 40.00 m

Efficiency 66.6 %
 Power absorbed 1.14 kW
 NPSHR 1.84 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

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Motor

Motor manufacturer	KSB (DMW)
Motor size	90S
Motor power	1.50 kW
Number of poles	2
Speed of rotation	2910 rpm
Position of terminal box	90° (right)
	Viewed from the drive
Thrust bearing housing	No

Connections

Discharge nominal size DN2	G 1 1/4 / EN ISO 228-1
Rated pressure disch.	PN 25

Weight net

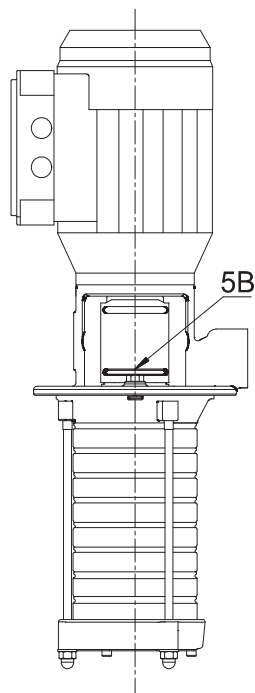
Pump	10 kg
Motor	18 kg
Total	28 kg

Connect pipes without stress or strain!

**For auxiliary connections see
separate drawing.**

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Connections

5B venting

Closed with venting plug