

**MovitecVCI06/06-20AA61CS090B5UW**

Multistage high pressure immersion centrifugal pump

**Operating data**

Requested flow rate		Actual flow rate	6.31 m <sup>3</sup> /h
Requested developed head		Actual developed head	44.23 m
Pumped medium	Water Clean water	Efficiency	66.6 %
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Power absorbed	1.14 kW
Max. ambient air temperature	20.0 °C	Pump speed of rotation	2909 rpm
Min. ambient air temperature	20.0 °C	NPSH required	1.84 m
Fluid temperature	20.0 °C	Permissible operating pressure	18.00 bar.g
Fluid density	998 kg/m <sup>3</sup>	Discharge press.	4.33 bar.g
Fluid viscosity	1.00 mm <sup>2</sup> /s	Shutoff head	60.19 m
Suction pressure max.	0.00 bar.g	Min. allow. flow for continuous stable operation	0.80 m <sup>3</sup> /h
Mass flow rate	1.75 kg/s	Min. allow. mass flow for continuous stable operation	0.22 kg/s
Max. power on curve	1.21 kW	Design	Single system 1 x 100 % Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2
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	A liquid free of solids is assumed	
Discharge nominal pressure	PN 25	Seal chamber design	Standard seal chamber
Discharge position	radial	Contact guard	With
Discharge flange drilled according to standard	EN ISO 228-1	Impeller diameter	90.0 mm
Shaft seal	Single acting mechanical seal	Direction of rotation from drive	Clockwise
Shaft seal manufacturer	DP	Color	Ultramarine blue (RAL 5002) KSB-blue

**MovitecVCI06/06-20AA61CS090B5UW**

Multistage high pressure immersion centrifugal pump

**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
Motor const. type	V18	Terminal box position	90° (right) 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
Motor speed	2910 rpm	Fixed bearing reinforced	axial
Frequency	50 Hz	Connection mode	Star
Rated voltage	400 V	Motor cooling method	Surface cooling
Rated power P2	1.50 kW	Motor material	Aluminium
Available reserve	49.26 %	Frequency inverter operation allowed	FI allowed
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 >= 6,5; chloride content (Cl) <=250 mg/kg. Chlorine (Cl2) <=0,6 mg/kg.	Seal cover (471)	Stainless Steel 1.4308
Suction casing (106)	Bearing sleeve (529)	Tungsten Carbide
Stage casing (108)	Screwed plug (903)	Stainless steel 1.4301
Shaft (210)	Tie bolt (905)	Chrome steel 1.4057+QT800
Impeller (230)	Nut (920)	Stainless steel 1.4301
Motor stool (341)		

**Packaging**

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

**Nameplates**

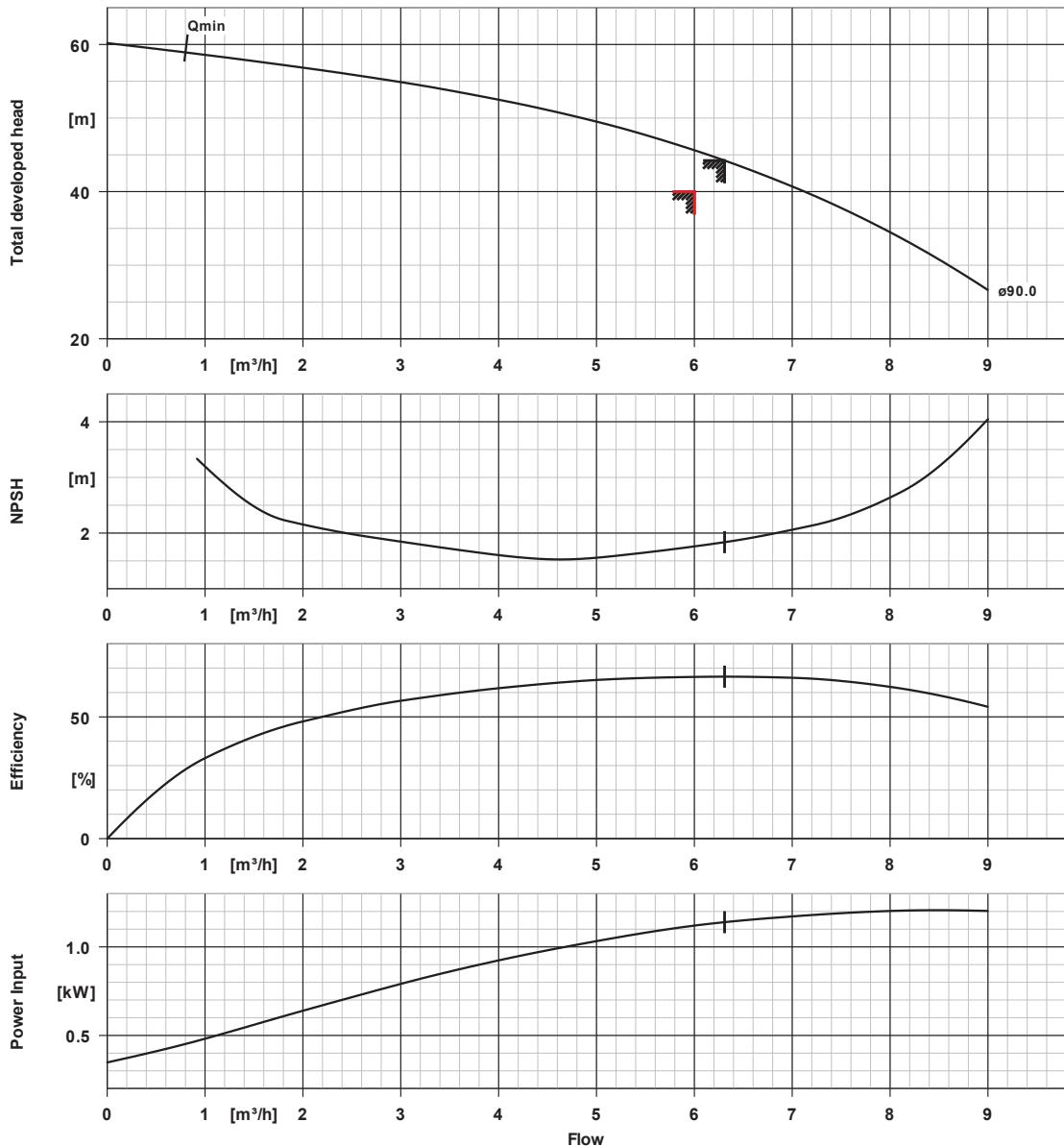
Nameplates language	International
---------------------	---------------

## Performance curve



Page: 3 / 6

**MovitecVCI06/06-20AA61CS090B5UW**  
Multistage high pressure immersion centrifugal pump

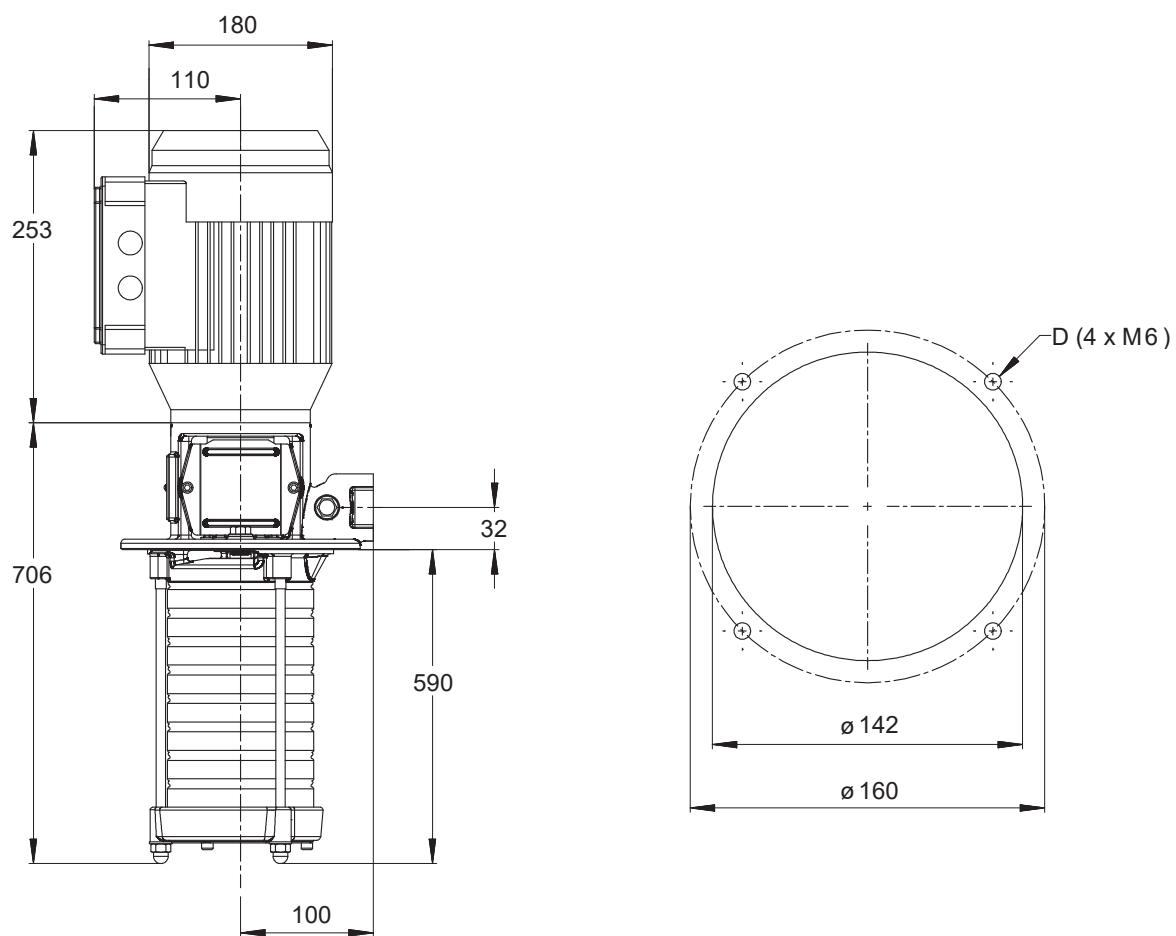


### Curve data

Speed of rotation	2909 rpm	Efficiency	66.6 %
Fluid density	998 $\text{kg/m}^3$	Power absorbed	1.14 kW
Viscosity	1.00 $\text{mm}^2/\text{s}$	NPSHR	1.84 m
Flow rate	6.31 $\text{m}^3/\text{h}$	Curve number	K95000600/3
Requested flow rate	6.00 $\text{m}^3/\text{h}$	Effective impeller diameter	90.0 mm
Total developed head	44.23 m	Acceptance standard	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2
Requested developed head	40.00 m		

**MovitecVCI06/06-20AA61CS090B5UW**

Multistage high pressure immersion centrifugal pump



*Drawing is not to scale*

*Dimensions in mm*

## MovitecVCI06/06-20AA61CS090B5UW

Multistage high pressure immersion centrifugal pump

### 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)
Thrust bearing housing	Viewed from the drive No

### Connections

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

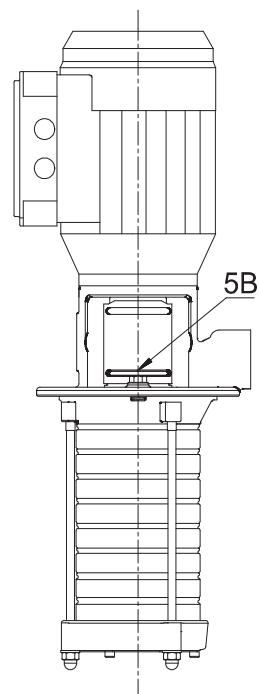
### Weight net

Pump	10 kg
Motor	18 kg
Total	28 kg

**Connect pipes without stress or strain!**

**For auxiliary connections see  
separate drawing.**

**MovitecVCI06/06-20AA61CS090B5UW**  
Multistage high pressure immersion centrifugal pump



## Connections

5B venting

Closed with venting plug