

MovitecVCI06/12-12AA56CS100B5VW

Multistage high pressure immersion centrifugal pump

Operating data

Requested flow rate	4.00	Actual flow rate	4.12 m ³ /h
Requested developed head		Actual developed head	106.33 m
Pumped medium	Water	Efficiency	62.2 %
	Clean water	Power absorbed	1.92 kW
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Pump speed of rotation	2948 rpm
Max. ambient air temperature	20.0 °C	NPSH required	1.60 m
Min. ambient air temperature	20.0 °C	Permissible operating pressure	25.00 bar.g
Fluid temperature	20.0 °C	Discharge press.	10.41 bar.g
Fluid density	998 kg/m ³	Shutoff head	121.91 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	1.14 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	2.47 kW		
Max. allow. mass flow	2.54 kg/s		

Design

Pump standard	High-pressure multistage immersion execution	Shaft seal type	ERMG-CT
Design	Close-coupled	Material code	BQ7VGG-Y10
Orientation	Vertical	Shaft seal code	56
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
Shaft seal manufacturer	DP	Direction of rotation from drive	Clockwise

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Driver, accessories

Driver type	Electric motor	Motor enclosure	IP55
Drive standard mech.	IEC	Cos phi at 4/4 load	0.89
Model (make)	KSB (DMW)	Motor efficiency at 4/4 load	87.1 %
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Temperature sensor	3 PTC resistors
Motor const. type	V18	Terminal box position	90° (right) Viewed from the drive
Motor size	100L	Motor winding	400 / 690 V
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Number of poles	2
Motor speed	2947 rpm	Fixed bearing reinforced	axial
Frequency	50 Hz	Connection mode	Delta
Rated voltage	400 V	Motor cooling method	Surface cooling
Rated power P2	3.00 kW	Motor material	Aluminium
Available reserve	77.32 %	Frequency inverter operation allowed	FI allowed
Rated current	5.6 A	Motor noise pressure level	63 dBA
Starting current ratio	8		
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
	Screwed plug (903)	Stainless steel 1.4301
Stage casing (108)	Tie bolt (905)	Chrome steel 1.4057+QT800
Shaft (210)	Nut (920)	Stainless steel 1.4301
Impeller (230)		
Motor stool (341)		

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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Coating

KSB coating code	Without	Total film thickness approx.	0 µm
Final coating	Without		

Motor coating

KSB coating code	DP 3	Final coating	2-component epoxy resin
Surface preparation	Free from dirt, grease, rust	Color	Flame red (RAL 3000)
Primer	Not specified	Total film thickness approx.	30 µm
Intermediate coating	Not specified		

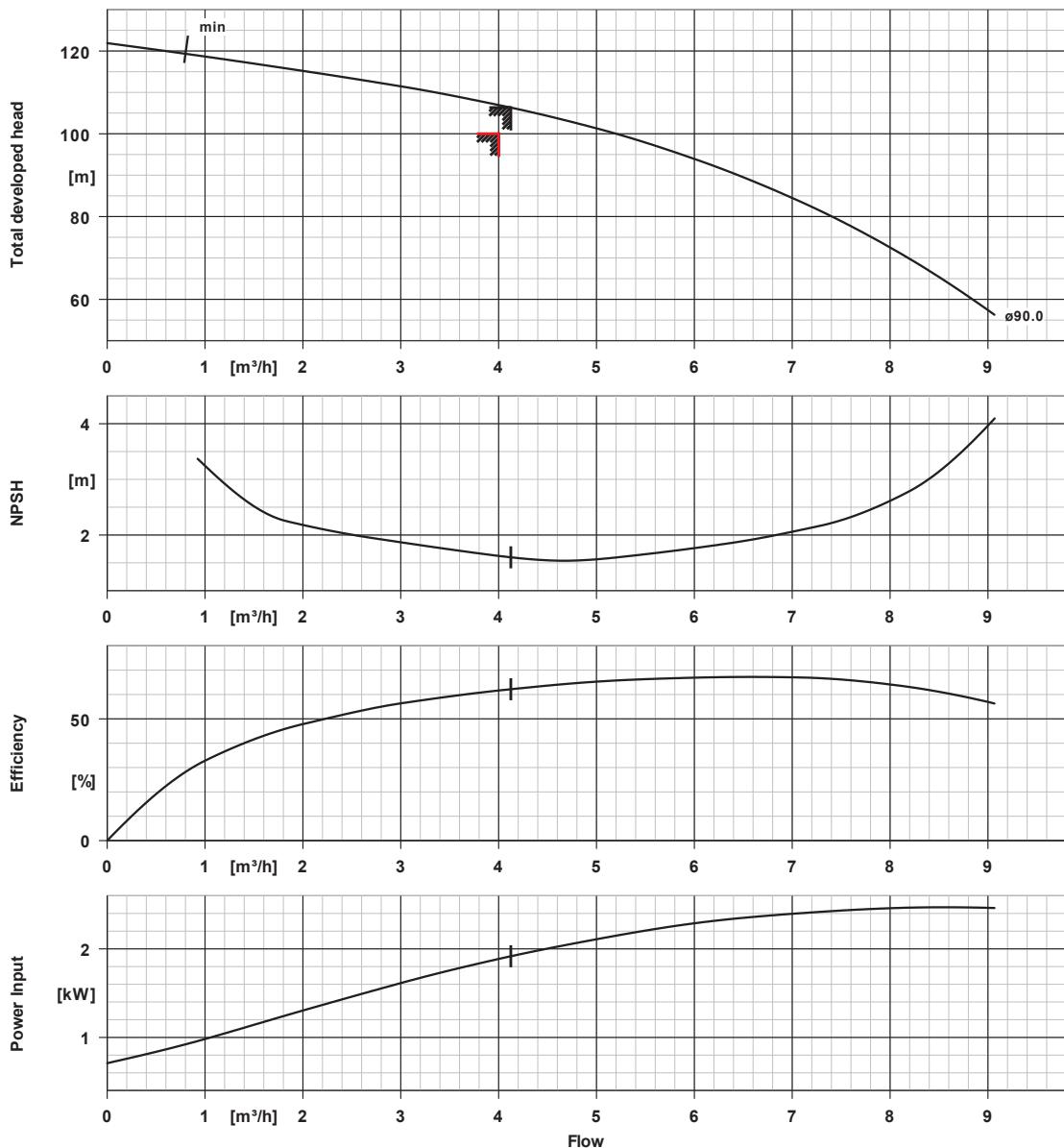
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Motor stool coating

KSB coating code	DP 3	Final coating	2-component epoxy resin
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Intermediate coating	Not specified		

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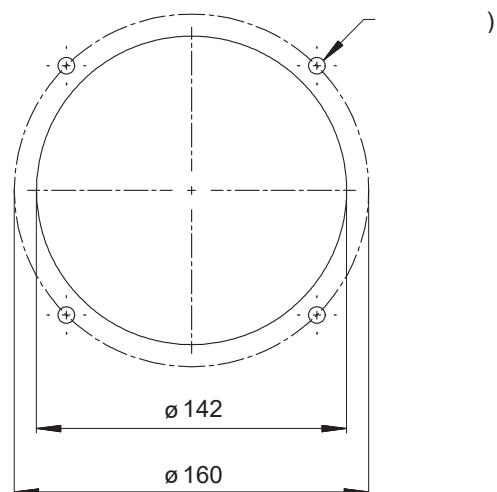
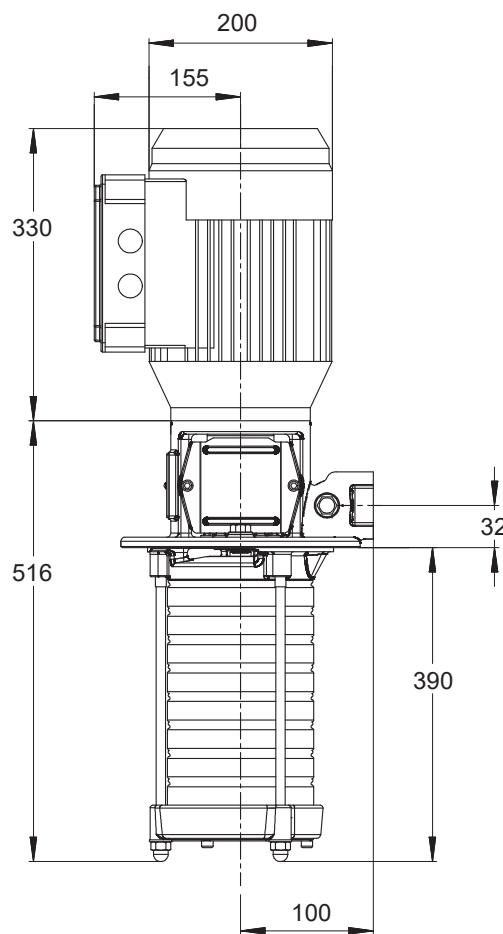


Curve data

Speed of rotation	2948 rpm	Efficiency	62.2 %
Fluid density	998 kg/m ³	Power absorbed	1.92 kW
Viscosity	1.00 mm ² /s	NPSHR	1.60 m
Flow rate	4.12 m ³ /h	Curve number	K95000600/3
Requested flow rate	4.00 m ³ /h	Effective impeller diameter	90.0 mm
Total developed head	106.33 m	Acceptance standard	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2
Requested developed head	100.00 m		

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Drawing is not to scale

Dimensions in mm

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Motor

Motor manufacturer	KSB (DMW)
Motor size	100L
Motor power	3.00 kW
Number of poles	2
Speed of rotation	2947 rpm
Position of terminal box	90° (right)
Thrust bearing housing	Viewed from the drive
	No

Connections

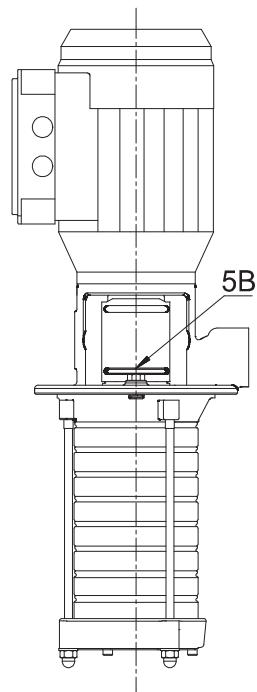
Discharge nominal size DN2	G 1 1/4 / EN ISO 228-1
Rated pressure disch.	PN 25

Weight net

Pump	15 kg
Motor	28 kg
Total	42 kg

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

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Connections

5B venting

Closed with venting plug