

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
		NPSH required	1.60 m
Max. ambient air temperature	20.0 °C	Permissible operating pressure	25.00 bar.g
Min. ambient air temperature	20.0 °C	Discharge press.	10.41 bar.g
Fluid temperature	20.0 °C		
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
	seal	Direction of rotation from drive	Clockwise
Shaft seal manufacturer	DP		

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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
		Terminal box position	90° (right)
Motor const. type	V18		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
		Fixed bearing reinforced	axial
Motor speed	2947 rpm	Connection mode	Delta
Frequency	50 Hz	Motor cooling method	Surface cooling
Rated voltage	400 V	Motor material	Aluminium
Rated power P2	3.00 kW	Frequency inverter operation allowed	FI allowed
Available reserve	77.32 %		
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)	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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Coating

KSB coating code	Without	Total film thickness approx.	0 μ m
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 μ m
Intermediate coating	Not specified		

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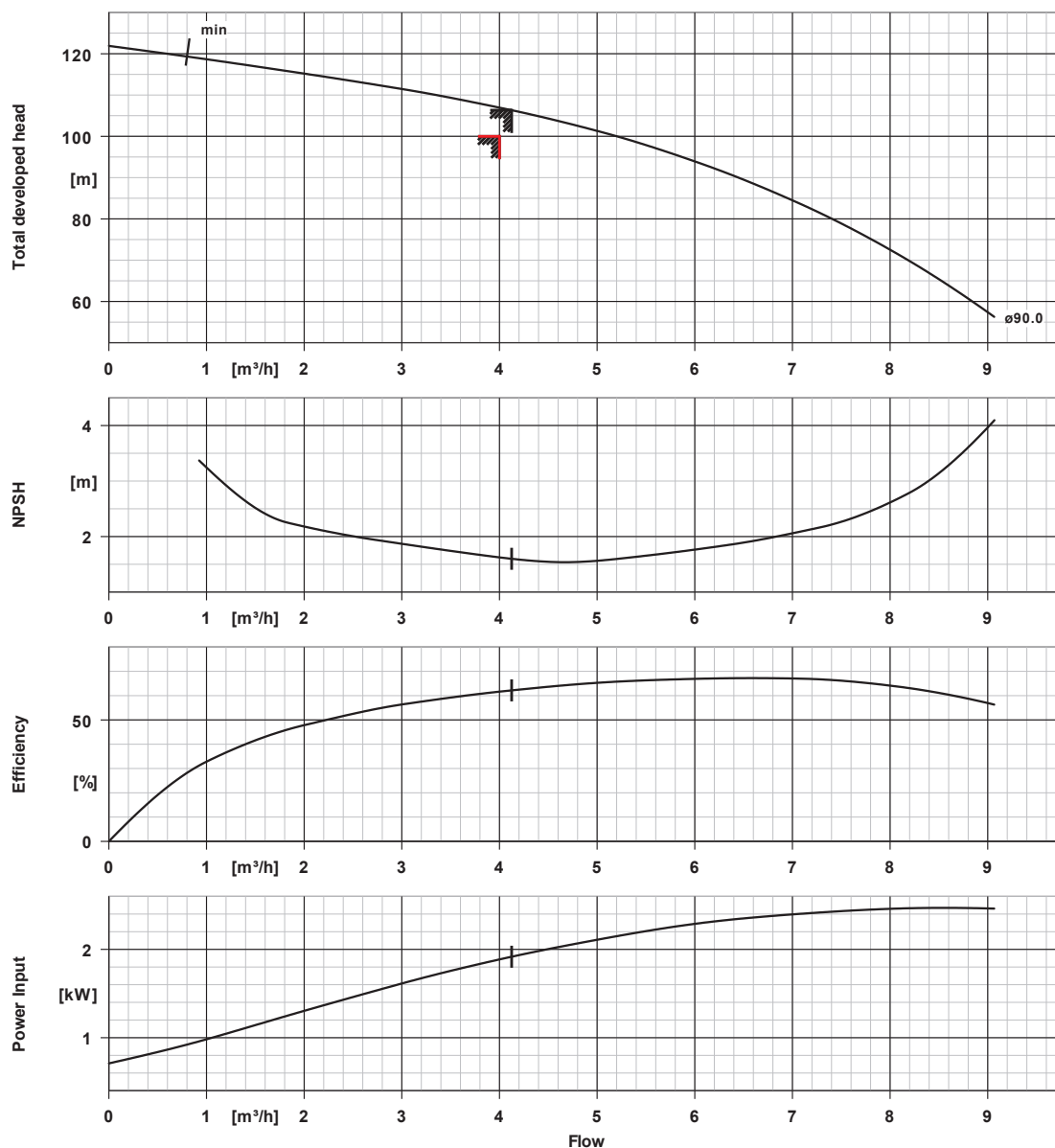
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Motor stool coating

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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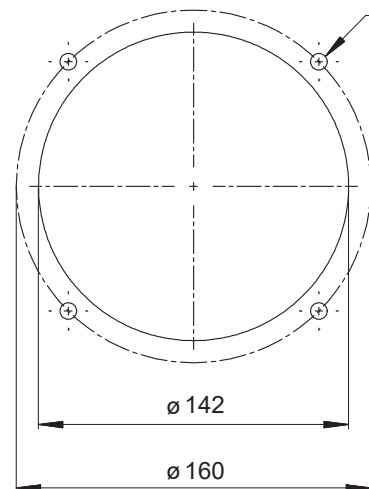
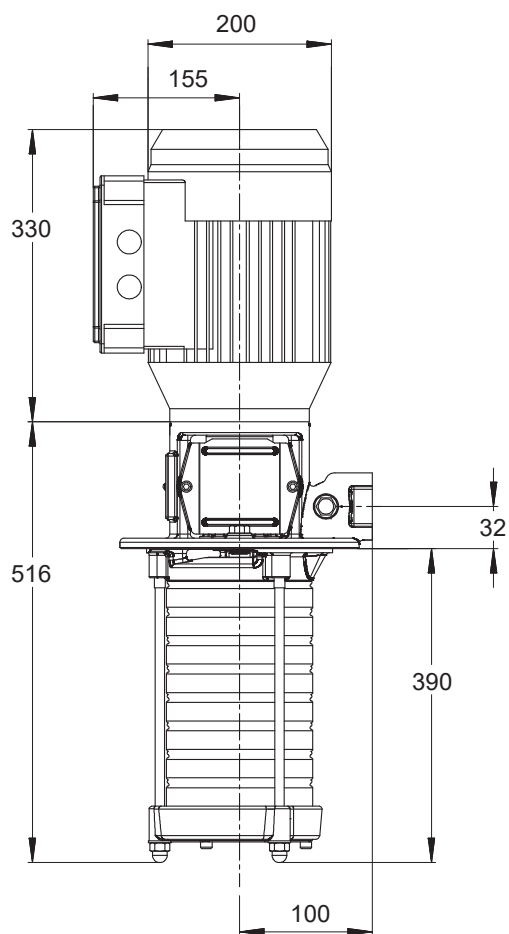
Curve data

Speed of rotation 2948 rpm
 Fluid density 998 kg/m^3
 Viscosity 1.00 mm^2/s
 Flow rate 4.12 m^3/h
 Requested flow rate 4.00 m^3/h
 Total developed head 106.33 m
 Requested developed head 100.00 m

Efficiency 62.2 %
 Power absorbed 1.92 kW
 NPSHR 1.60 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	100L
Motor power	3.00 kW
Number of poles	2
Speed of rotation	2947 rpm
Position of terminal box	90° (right)
Thrust bearing housing	No

Connections

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

Weight net

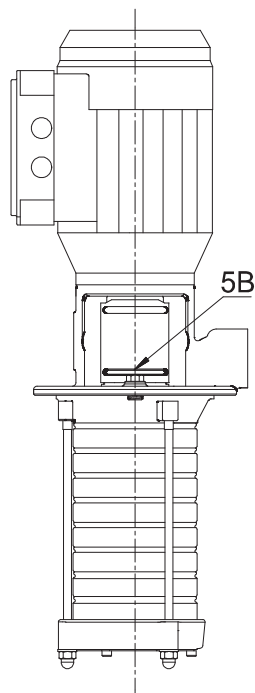
Pump	15 kg
Motor	28 kg
Total	42 kg

Connect pipes without stress or strain!

For auxiliary connections see separate drawing.

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Connections

5B venting

Closed with venting plug