

MovitecV 004/06-B4G54ES080D5UW

High pressure Inline Pump

Operating data

Requested flow rate	3.91 m ³ /h	Actual flow rate	3.94 m ³ /h
Requested developed head	42.50 m	Actual developed head	43.23 m
Pumped medium	Water	Efficiency	59.6 %
Pumped medium details	Clean water 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	0.78 kW
Min. ambient air temperature	20.0 °C	Pump speed of rotation	2905 rpm
Fluid temperature	20.0 °C	NPSH required	1.82 m
Fluid density	998 kg/m ³	Permissible operating pressure	16.00 bar.g
Fluid viscosity	1.00 mm ² /s	Discharge press.	4.23 bar.g
Suction pressure max.	0.00 bar.g	Shutoff head	55.11 m
Mass flow rate	1.09 kg/s	Min. allow. flow for continuous stable operation	0.60 m ³ /h
Max. power on curve	0.88 kW	Min. allow. mass flow for continuous stable operation	0.17 kg/s
Max. allow. mass flow	1.81 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	Single acting mechanical seal
Design	Close-coupled	Shaft seal manufacturer	DP
Orientation	Vertical	Shaft seal type	MG-FX
Design according to standard	Drinking water acc. to ACS	Material code	BQ7EGG-DW001
Suction nominal dia.	G 1	Shaft seal code	54
Suction nominal pressure	PN 16	Sealing plan	I Single-acting mechanical seal(internal circulation)
Suction position	90° (right)		
Connection standard	EN ISO 228-1	A liquid free of solids is assumed	
discharge		Seal chamber design	Standard seal chamber
Discharge nominal dia.	G 1	Contact guard	With
Discharge nominal pressure	PN 16	Impeller diameter	86.0 mm
Discharge position	270° (left 90°)	Direction of rotation from drive	Clockwise
Oval flange		Color	Graphite black (RAL 9011)

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Driver, accessories

Frequency inverter operation allowed only for rated voltage.		Starting current ratio	7
Driver type	Electric motor	Insulation class	F to IEC 34-1
Drive standard mech.	IEC	Motor enclosure	IP55
Model (make)	KSB (DMW)	Cos phi at 4/4 load	0.83
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Motor efficiency at 4/4 load	82.7 %
Motor const. type	V18	Temperature sensor	Without
Motor size	080M	Terminal box position	90° (right)
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Motor winding	Viewed from the drive
Motor speed	2904 rpm	Number of poles	230 / 400 V
Frequency	50 Hz	Fixed bearing reinforced	2
Designed for operation with frequency inverter	Yes	Connection mode	axial
Rated voltage	230 V	Motor cooling method	Delta
Rated power P2	1.10 kW	Motor material	Surface cooling
Performance limit P2max	1.30 kW	Frequency inverter operation allowed	Aluminium
Available reserve	67.11 %	Motor noise pressure level	FI allowed
Rated current	4.0 A		60 dBA

Materials V

Pump shroud (10-6)	Stainless steel 1.4301	O-Ring (412)	EPDM WRc / ACS Approved
Pump casing (101)	Stainless Steel 1.4308	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 1.4308
Diffuser (171)	Stainless steel 1.4301	Baseplate (890)	Ductile cast iron EN-GJS-400-15
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

Packaging

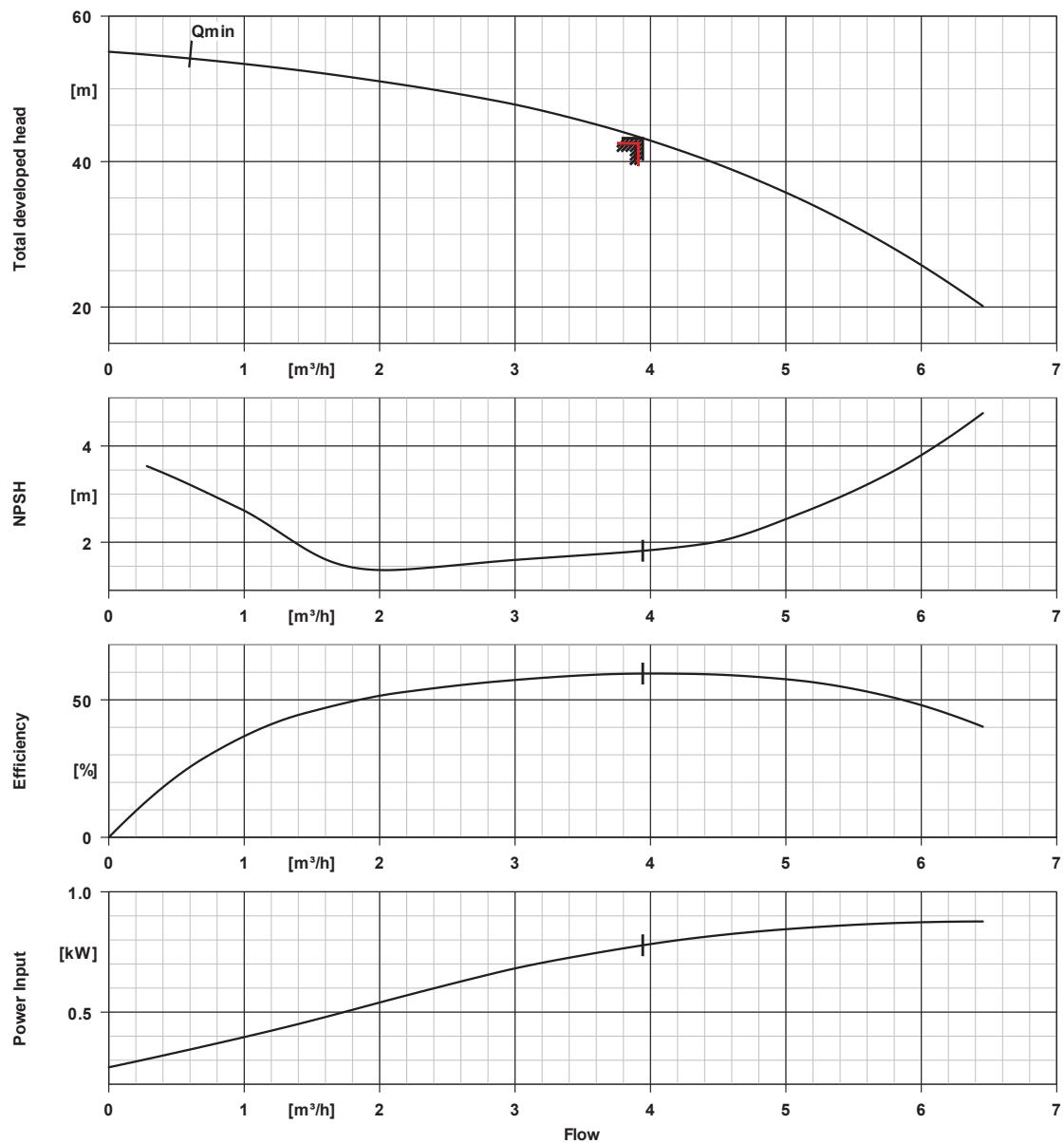
Packaging category	A0 Packing acc. to KSB choice	Packaging for transport	Truck
Packaging for storage	Indoor		

Nameplates

Nameplates language	International
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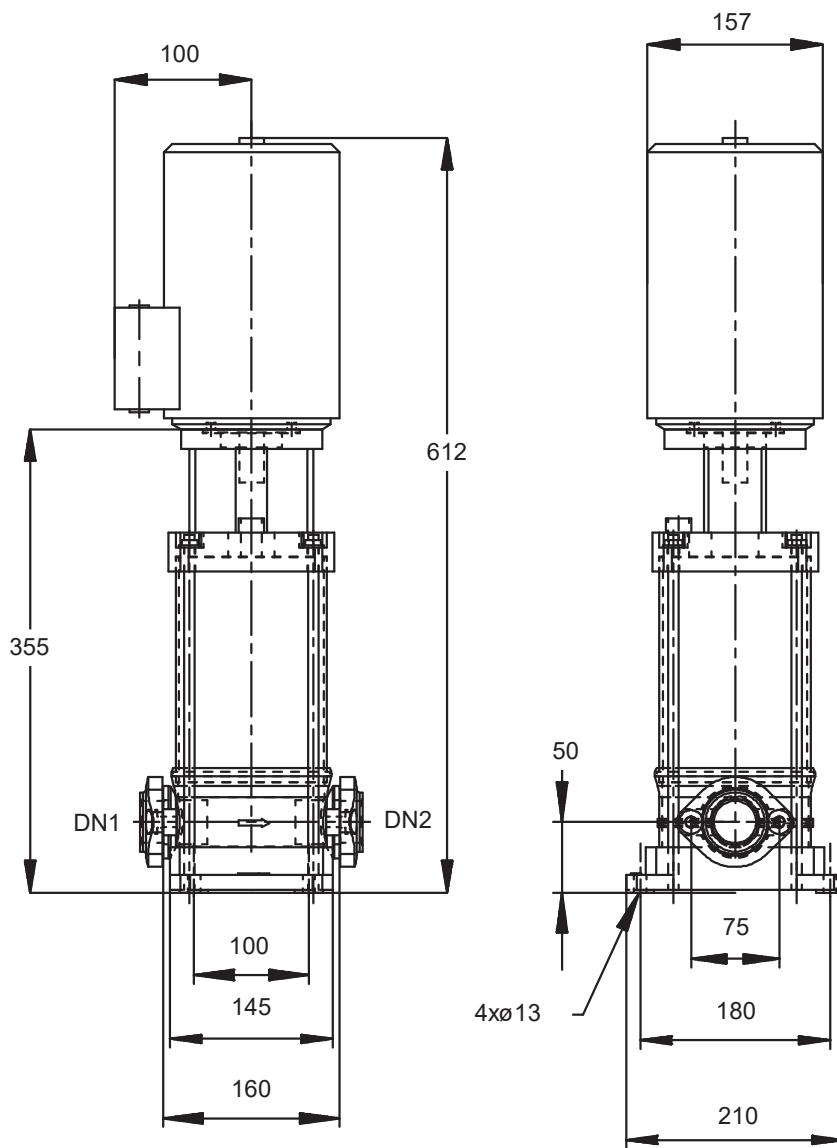
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**Curve data**

Speed of rotation	2905 rpm	Efficiency	59.6 %
Fluid density	998 kg/m³	MEI (Minimum Efficiency Index)	≥ 0.70
Viscosity	1.00 mm²/s	Power absorbed	0.78 kW
Flow rate	3.94 m³/h	NPSHR	1.82 m
Requested flow rate	3.91 m³/h	Curve number	K95000400/2
Total developed head	43.23 m	Effective impeller diameter	86.0 mm
Requested developed head	42.50 m	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	080M
Motor power	1.10 kW
Number of poles	2
Speed of rotation	2904 rpm
Position of terminal box	90° (right)
Thrust bearing housing	Viewed from the drive No

Connections

Suction nominal size DN1	G 1 / EN ISO 228-1
Discharge nominal size DN2	G 1 / EN ISO 228-1
Nominal pressure suct.	PN 16
Rated pressure disch.	PN 16
Oval flange	

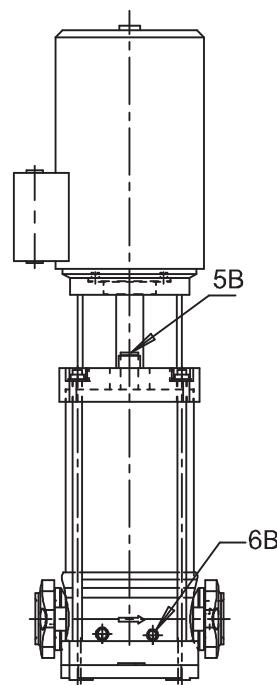
Weight net

Pump	18 kg
Motor	12 kg
Total	30 kg

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

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Connections

5B venting

6B Pumped liquid drain

G 3/8

G 1/4

Closed with venting plug

Drilled and plugged.