

**MovitecV E002/03-B7G54FS071D5OW**

High pressure Inline Pump

**Operating data**

Pumped medium	Water	Actual flow rate	2.03 m³/h
	Clean water	Actual developed head	18.61 m
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Efficiency	53.7 %
		MEI (Minimum Efficiency Index)	≥ 0.70
Max. ambient air temperature	20.0 °C	Power absorbed	0.19 kW
Min. ambient air temperature	20.0 °C	Pump speed of rotation	2904 rpm
Fluid temperature	20.0 °C	NPSH required	2.21 m
Fluid density	998 kg/m³	Permissible operating pressure	16.00 bar.g
Fluid viscosity	1.00 mm²/s		
Suction pressure max.	0.00 bar.g	Discharge press.	1.82 bar.g
Dev. head with non-return valve	18.61 m	Shutoff head	24.00 m
Mass flow rate	0.56 kg/s	Min. allow. flow for continuous stable operation	0.30 m³/h
Max. power on curve	0.21 kW	Min. allow. mass flow for continuous stable operation	0.08 kg/s
Max. allow. mass flow	0.92 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 manufacturer	DP
Design	Close-coupled	Shaft seal type	MG-FX
Orientation	Vertical	Material code	BQ7EGG-DW001
Suction nominal dia.	G 1 1/2	Shaft seal code	54
Suction nominal pressure	PN 16	Sealing plan	I Single-acting mechanical seal(internal circulation)
Suction position	90° (right)	A liquid free of solids is assumed	
Connection standard	EN ISO 228-1	Seal chamber design	Standard seal chamber
discharge		Contact guard	With
Discharge nominal dia.	G 1 1/2	Impeller diameter	80.0 mm
Discharge nominal pressure	PN 16	Direction of rotation from drive	Clockwise
Discharge position	270° (left 90°)	Color	Graphite black (RAL 9011)
Male Thread (E)			
Shaft seal	Single acting mechanical seal		

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**Driver, accessories**

Driver type	Electric motor	Motor enclosure	IP55
Drive standard mech.	IEC	Cos phi at 4/4 load	0.81
Model (make)	KSB (DMW)	Motor efficiency at 4/4 load	74.2 %
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	071M	Motor winding	230 / 400 V
Motor speed	2904 rpm	Number of poles	2
Frequency	50 Hz	Fixed bearing reinforced	axial
Rated voltage	400 V	Connection mode	Star
Rated power P2	0.37 kW	Motor cooling method	Surface cooling
Performance limit P2max	0.61 kW	Motor material	Aluminium
Available reserve	220.43 %	Frequency inverter operation allowed	FI allowed
Rated current	0.9 A	Motor noise pressure level	58 dBa
Starting current ratio	4.6		
Insulation class	F to IEC 34-1		

**Materials V**

Pump shroud (10-6)	Stainless steel 1.4301	Seal cover (471)	Stainless Steel 1.4308
Pump casing (101)	Stainless Steel 1.4308	Bearing sleeve (529)	Tungsten Carbide
Stage casing (108)	Stainless steel 1.4301	Flange (723)	Stainless Steel 1.4308
Cover (160)	Stainless steel 1.4301	Valves (740)	POM
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
O-Ring (412)	EPDM WRc / ACS Approved		

**Packaging**

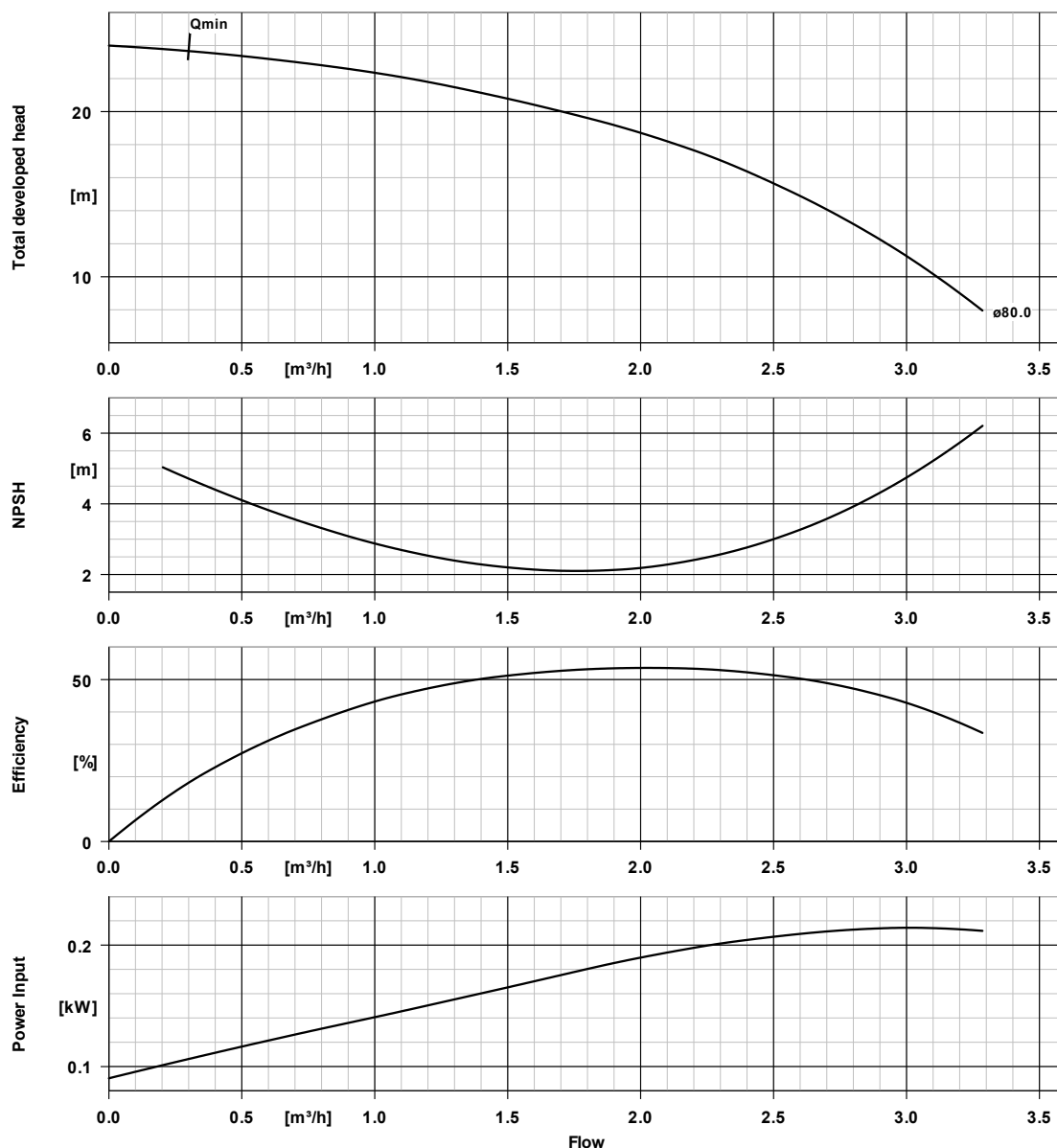
Packaging category	A0 Packing acc. to KSB choice	Packaging for transport	Truck
Packaging for storage	Indoor		

**Nameplates**

Nameplates language	International
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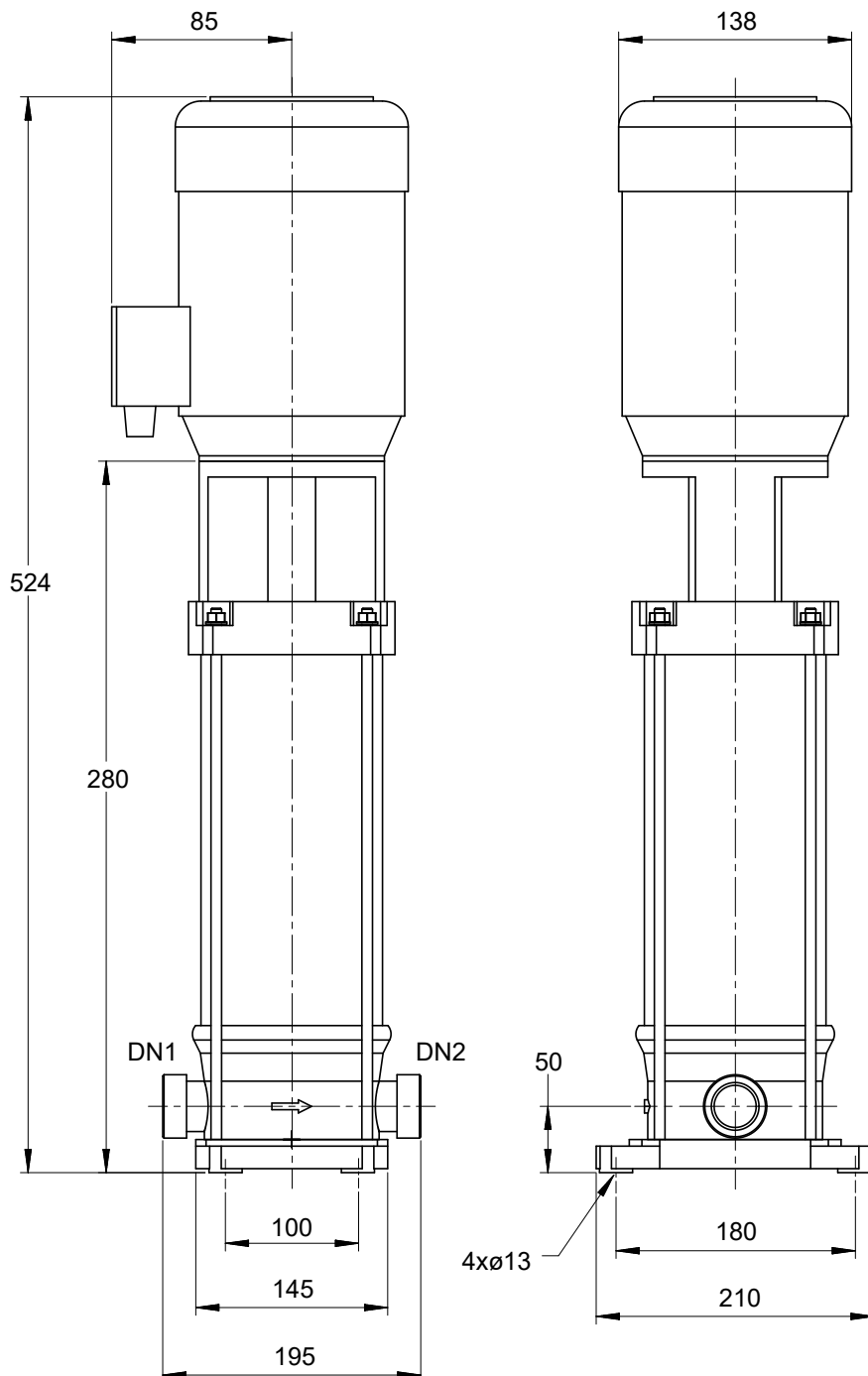


### Curve data

Speed of rotation	2904 rpm	MEI (Minimum Efficiency Index)	$\geq 0.70$
Fluid density	998 $\text{kg}/\text{m}^3$	Power absorbed	0.19 kW
Viscosity	1.00 $\text{mm}^2/\text{s}$	NPSHR	2.21 m
Flow rate	2.03 $\text{m}^3/\text{h}$	Curve number	K95000200/2
Total developed head	18.61 m	Effective impeller diameter	80.0 mm
Efficiency	53.7 %	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*

#### Motor

Motor manufacturer	KSB (DMW)
Motor size	071M
Motor power	0.37 kW
Number of poles	2
Speed of rotation	2904 rpm
Position of terminal box	90° (right)
	Viewed from the drive
Thrust bearing housing	No

#### Connections

Suction nominal size DN1	G 1 1/2 / EN ISO 228-1
Discharge nominal size DN2	G 1 1/2 / EN ISO 228-1
Nominal pressure suct.	PN 16
Rated pressure disch.	PN 16
Male Thread (E)	

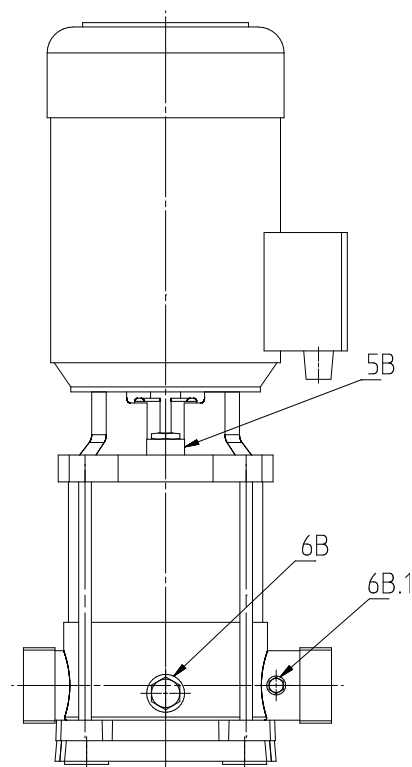
#### Weight net

Pump	12 kg
Motor	8 kg
Total	19 kg

**Connect pipes without stress or strain!**

**For auxiliary connections see  
separate drawing.**

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### Connections

5B venting  
6B Pumped liquid drain  
6B.1 Pumped liquid drain

G 3/8  
G 1/4  
G 1/4

Closed with venting plug  
Drilled and plugged.  
Drilled and plugged.