

**ETPB040-040-140 GC DD200222 B**

Standardised KSB pump

**Operating data**

Requested flow rate		Actual flow rate	5.18 m³/h
Requested developed head		Actual developed head	26.85 m
Pumped medium	Water	Efficiency	24.0 %
	Clean water	Power absorbed	1.58 kW
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Pump speed of rotation	2936 rpm
		NPSH required	1.21 m
Max. ambient air temperature	20.0 °C	Permissible operating pressure	10.00 bar.g
Min. ambient air temperature	20.0 °C	Discharge press.	2.63 bar.g
Fluid temperature	20.0 °C		
Fluid density	998 kg/m³	Shutoff head	28.65 m
Fluid viscosity	1.00 mm²/s	Min. allow. flow for continuous stable operation	2.87 m³/h
Suction pressure max.	0.00 bar.g	Min. allow. mass flow for continuous stable operation	0.80 kg/s
Mass flow rate	1.44 kg/s	Max. allow. mass flow	8.48 kg/s
Max. power on curve	2.33 kW	Design	Single system 1 x 100 %

**Design**

Pump standard	Self priming pump	Material code atm. side	Q1BVGG
Design	Close-coupled	Sealing plan	DB double acting mechanical seal (back to back)
Orientation	Horizontal	Barrier liquid: use suitable water	
Suction nominal dia.	DN 40	A liquid free of solids is assumed	
Suction nominal pressure	PN 16	The temperature of the barrier fluid must not exceed 60°C.	
Suction position	axial	Seal chamber design	Standard seal chamber
Suction flange drilled according to standard	EN1092-2	Calculated temperature increase at shaft seal	10 K
Discharge nominal dia.	DN 40	Contact guard	With
Discharge nominal pressure	PN 16	Impeller diameter	144.0 mm
Discharge position	top (0°/360°)	Direction of rotation from drive	Clockwise
Discharge flange drilled according to standard	EN1092-2	Silicon free pump assembly	Yes
Shaft seal	Double-acting mechanical seal		
Shaft seal manufacturer	Burgmann	Bearing bracket construction	Close-coupled
Shaft seal type	M7G49	Bearing bracket size	WE25
Material code	Q1Q1K9GG/G	Bearing type	Anti-friction bearings
Manufacturer atm. side	Burgmann	Lubrication type	Grease
Type atm. side	M7N	Color	Ultramarine blue (RAL 5002) KSB-blue

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**Driver, accessories**

Driver type	Electric motor	Cos phi at 4/4 load	0.88
Drive standard mech.	IEC	Motor efficiency at 4/4 load	96.0 %
Model (make)	Siemens	Temperature class motor	T3
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	VK version	Yes
Motor const. type	V1	Temperature sensor	3 PTC resistors
Motor size	90L	Terminal box position	0°/360° (top)
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Motor winding	Viewed from the drive
Motor speed	2938 rpm	Number of poles	230 / 400 V
Frequency	50 Hz	Connection mode	2
Rated voltage	400 V	Motor cooling method	Star
Rated power P2	2.20 kW	Motor material	Surface cooling
Available reserve	39.40 %	Motor noise pressure level	Aluminium
Rated current	4.2 A	Driver colour	67 dBa
Starting current ratio	8.3	ATEX interface temperature at motor flange	Ultramarine blue (RAL 5002)
Insulation class	F to IEC 34-1	EAC Approval	KSB-blue
Motor enclosure	IP55		20.0 °C

**Materials GC**

**Notes 1**

General criteria for a water analysis: pH-value  $\geq 6,5$ ; chloride content (Cl)  $\leq 250$  mg/kg. Chlorine (Cl2)  $\leq 0.6$  mg/kg.

Volute casing (102)	Grey cast iron EN-GJL-250/A48CL35B	Impeller (230)	Stainless steel 1.4408
Casing cover (161)	Grey cast iron EN-GJL-250/A48CL35B	Motor stool (341)	Grey cast iron EN-GJL-250/A48CL35B
Shaft (210)	Stainless steel 1.4571	O-Ring (412)	EPDM 80
		Shaft sleeve (523)	Stainless steel 1.4571

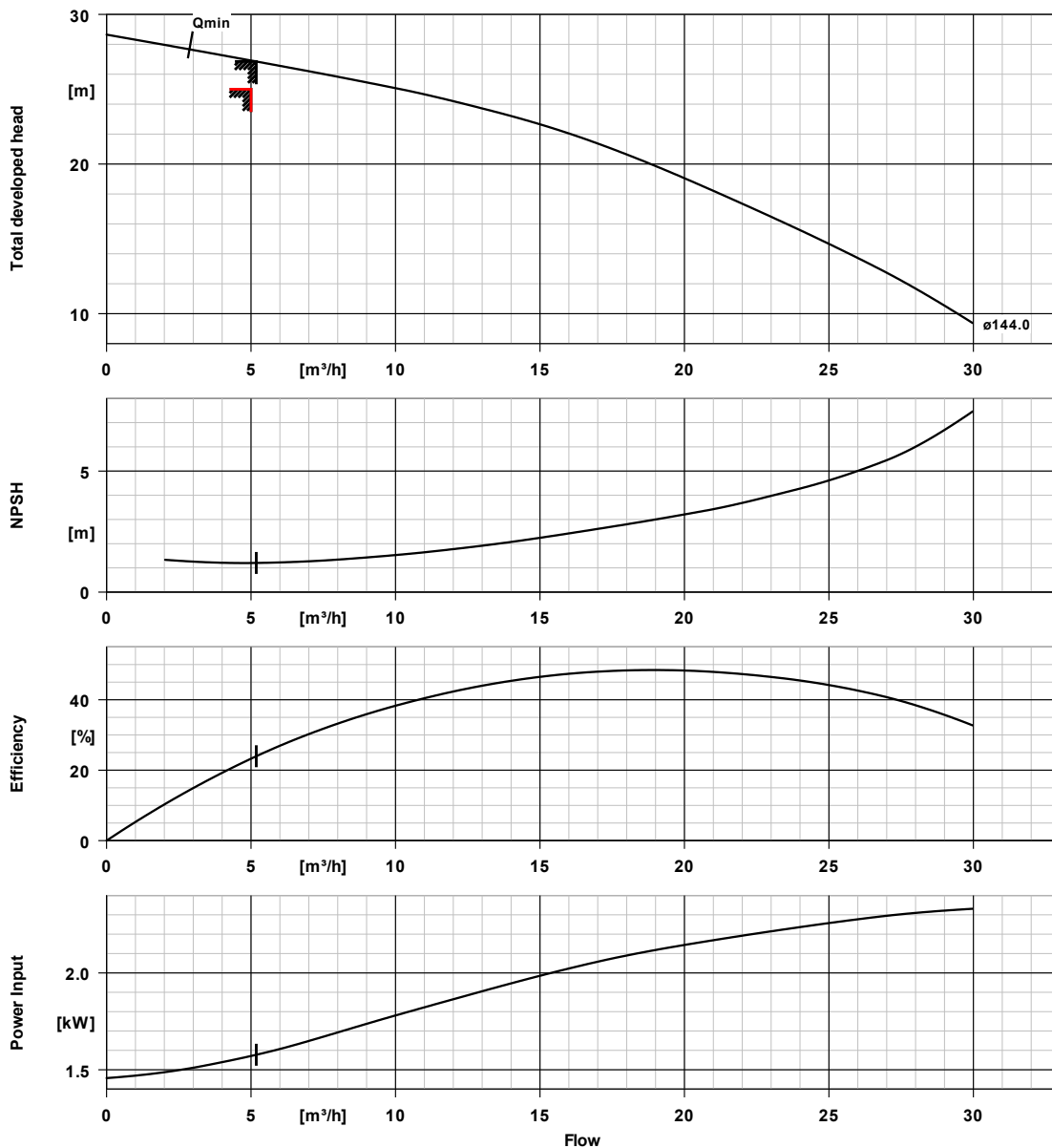
**Packaging**

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

**Nameplates**

Nameplates language	International
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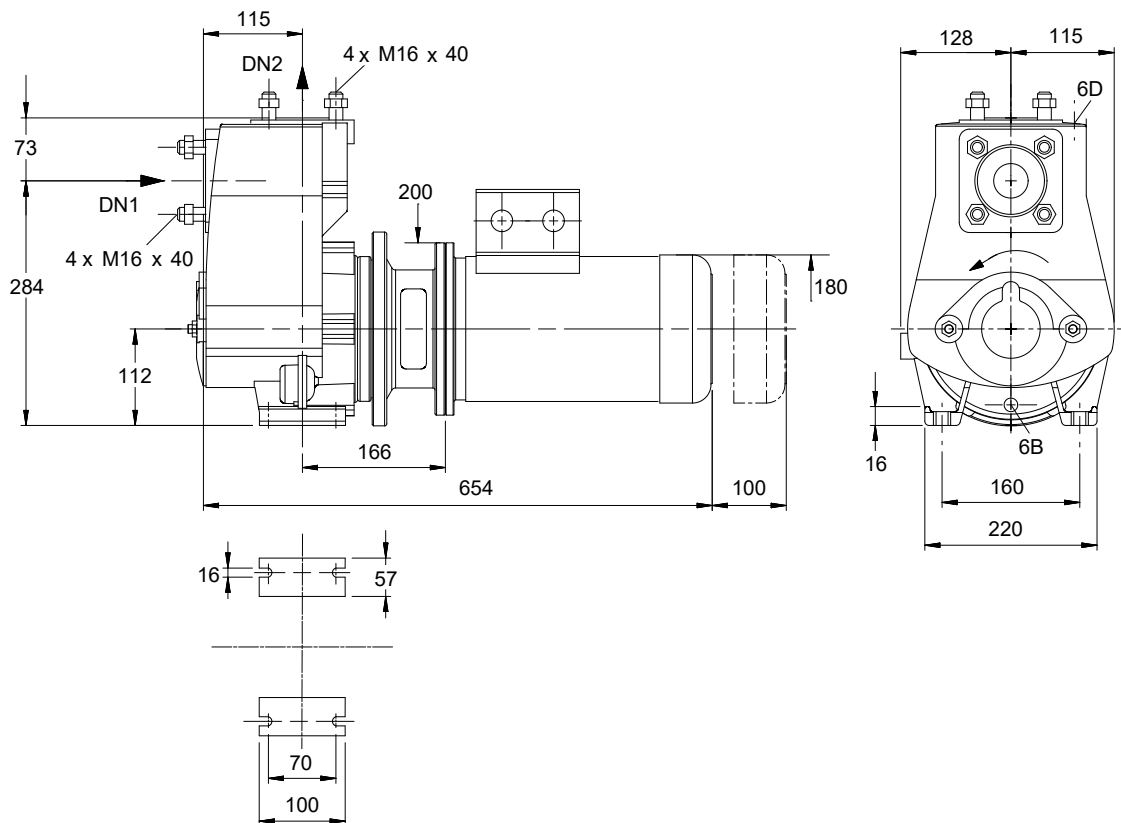


**Curve data**

Speed of rotation	2936 rpm	Requested developed head	25.00 m
Fluid density	998 $kg/m^3$	Efficiency	24.0 %
Viscosity	1.00 $mm^2/s$	Power absorbed	1.58 kW
Flow rate	5.18 $m^3/h$	NPSHR	1.21 m
Requested flow rate	5.00 $m^3/h$	Curve number	K2745.V124730
Total developed head	26.85 m	Effective impeller diameter	144.0 mm

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*Drawing is not to scale*

*Dimensions in mm*

**Motor**

Motor manufacturer	Siemens
Motor size	90L
Motor power	2.20 kW
Number of poles	2
Speed of rotation	2938 rpm
Motor enclosure	IP55
Position of terminal box	0°/360° (top) Viewed from the drive

**Connections**

Suction nominal size DN1	DN 40 / EN1092-2
Discharge nominal size DN2	DN 40 / EN1092-2
Nominal pressure suct.	PN 16
Rated pressure disch.	PN 16

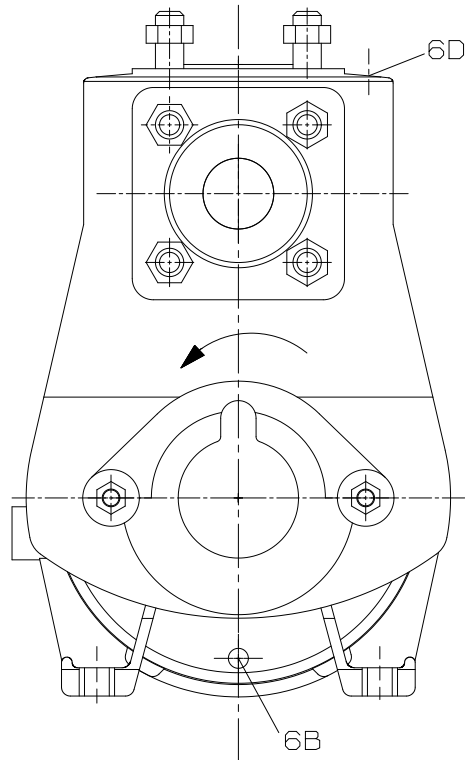
**Weight net**

Pump	28 kg
Motor	19 kg
Total	47 kg

**Connect pipes without stress or strain!**

**For auxiliary connections see separate drawing.**

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**Connections**

6B Pumped liquid drain

G 3/8

Drilled and plugged.

6D Pumped medium - filling / venting

G 3/8

Drilled and plugged.