

ETPB040-040-140 GC DD200222exB

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 %
Ex-Request acc.to ATEX	II 3G T3		

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	Guaranteed explosion proof ATEX 2014/34/EU	II 2 G Ex h IIC T4 Gb
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
Type of protection	Ex ec IIC		20.0 °C
Motor enclosure	IP55		Yes

Materials GC

Notes 1

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

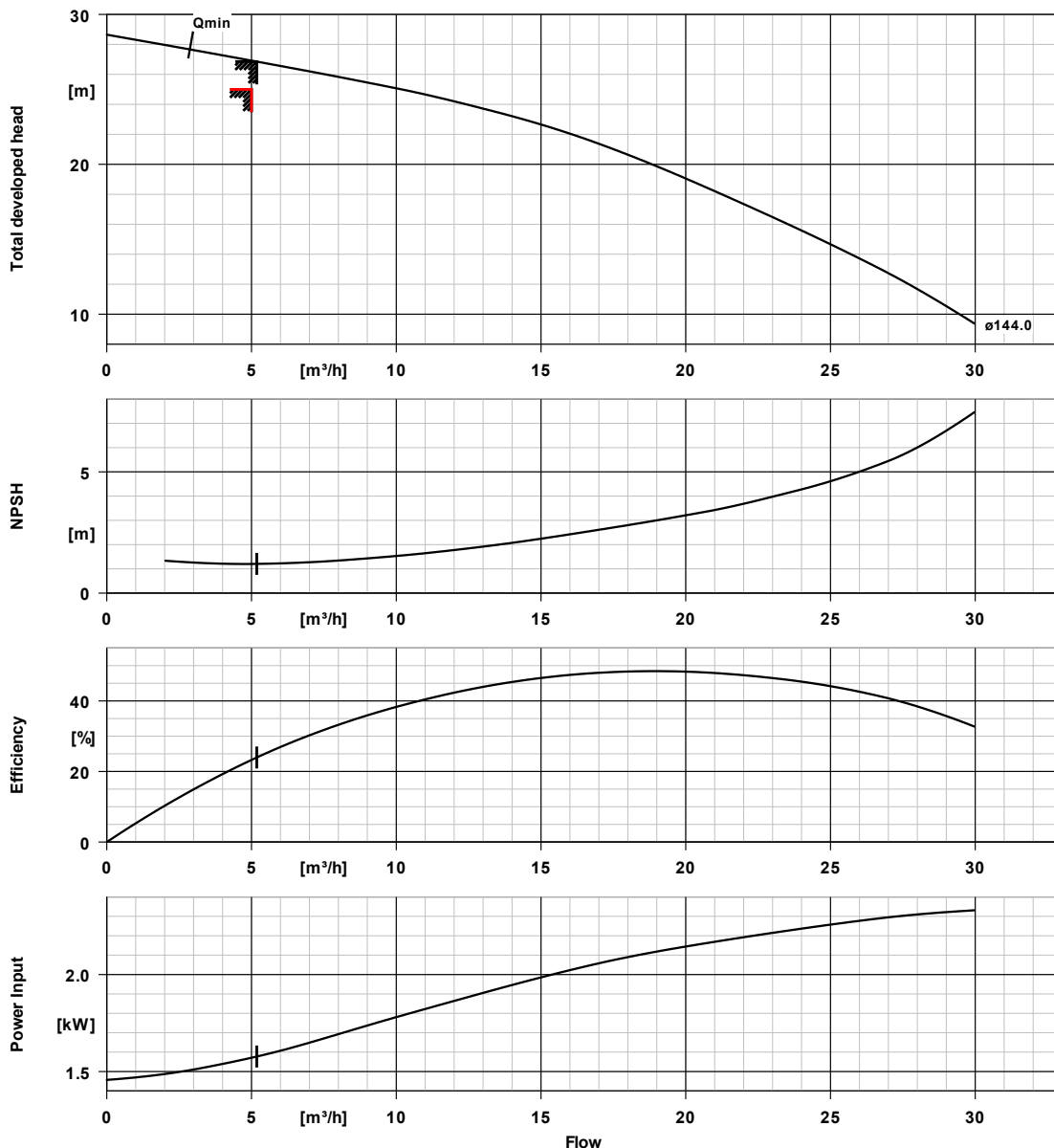
Packaging

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

Nameplates

Nameplates language	International
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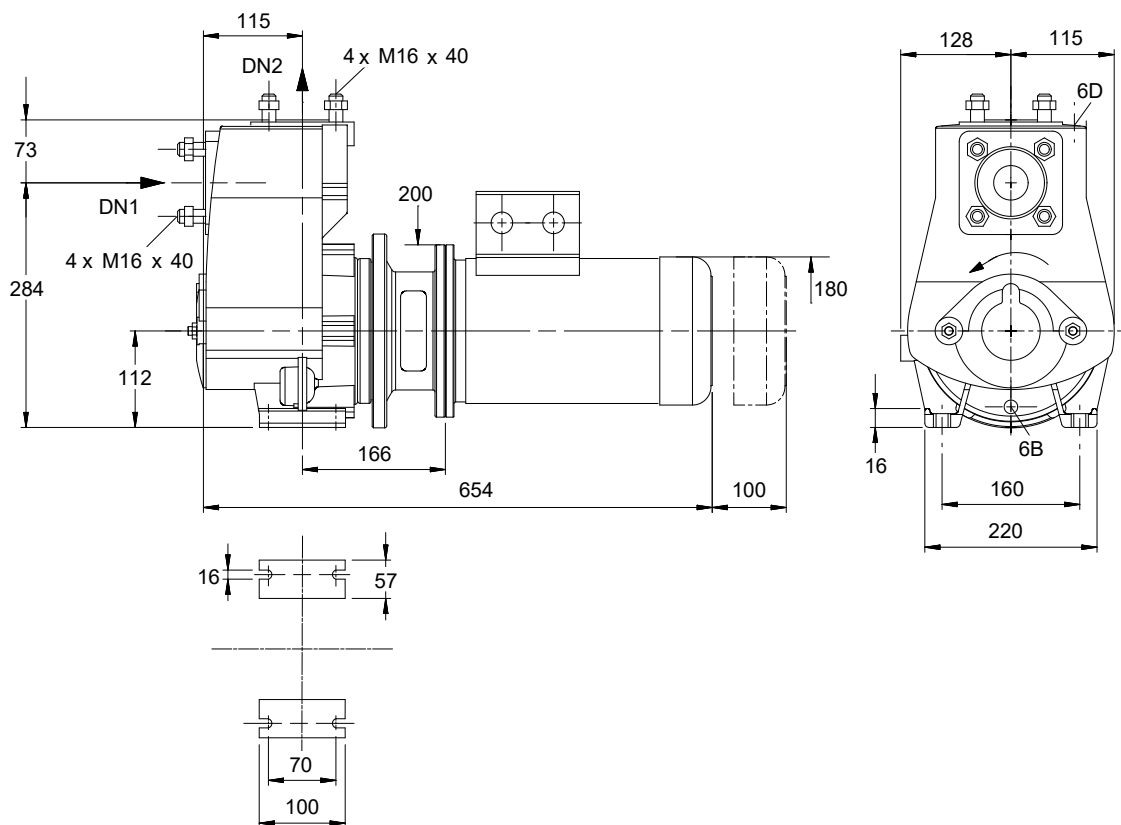


Curve data

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

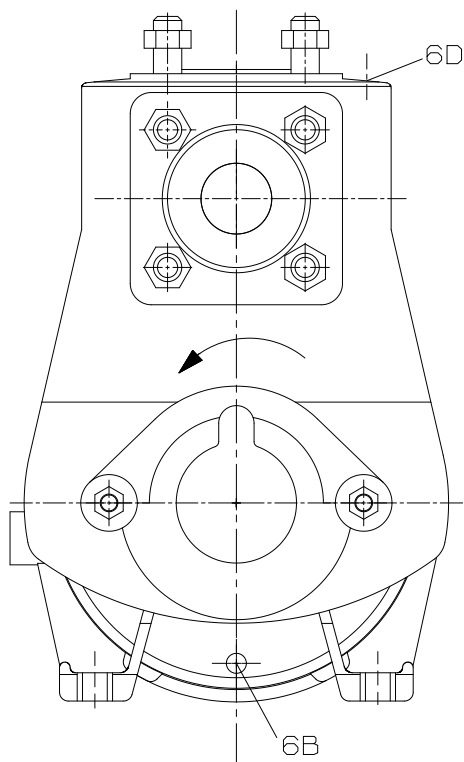
Weight net

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.