Data sheet

ETL 032-032-160 GGSAV11D200074 BKSBIE3

Inline pump

Operating data

Requested flow rate	6.00 m³/h	Actual flow rate	6.00 m³/h
Requested developed head	5.00 m	Actual developed head	5.00 m
Pumped medium	Water	Efficiency	54.6 %
	Clean water	MEI (Minimum Efficiency Index)	≥ 0.70
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Power absorbed	0.15 kW
		Pump speed of rotation	1484 rpm
Max. ambient air temperature	20.0 °C	NPSH required	1.04 m
Min. ambient air temperature	20.0 °C	Permissible operating pressure	16.00 bar.g
Fluid temperature	20.0 °C		
Fluid density	998 kg/m³	Discharge press.	0.49 bar.g
Fluid viscosity	1.00 mm²/s	Shutoff head	5.68 m
Suction pressure max.	0.00 bar.g	Min. allow. flow for continuous stable operation	1.24 m³/h
Mass flow rate	1.66 kg/s		
Max. power on curve	0.21 kW	Min. allow. mass flow for continuous stable operation	0.34 kg/s
Max. allow. mass flow	3.83 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	Without	Material code	BQ1EGG-WA
Caution: The overall length from suction to discharge can be different to the previous generation of Etaline.		Shaft seal code	11
		Sealing plan	Single-acting mechanical seal with vented chamber (A-type casing cover, taper bore)
		A liquid free of solids is assumed	
Design	Close-coupled in-line	Seal chamber design	Conical seal chamber (A-type cover)
Orientation	Vertical	Contact guard	With
Suction nominal dia.	DN 32	Wear ring	Casing wear ring
Suction nominal pressure	PN 16	Impeller diameter	129.0 mm
Suction position	180° (down)	Free passage size	5.4 mm
Suction flange drilled according to standard	EN1092-2	Direction of rotation from drive	Clockwise
		Silicon free pump assembly	Yes
Discharge nominal dia.	DN 32	Bearing bracket construction	Close-coupled
Discharge nominal pressure	PN 16	Bearing bracket size	25
Discharge position	top (0°/360°)	Bearing type	Anti-friction bearings
Discharge flange drilled according to standard	EN1092-2	Lubrication type	Grease
		Color	Ultramarine blue (RAL 5002) KSB-blue
Surface type	Raised face (form B to EN 1092)		
Shaft seal	Single acting mechanical seal		
Shaft seal manufacturer	KSB		
Shaft seal type	1		

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Driver, accessories

Driver type	Electric motor	Temperature sensor	1 PTC resistor
Drive standard mech.	IEC	Terminal box position	0° same orientation Viewed from the drive
Model (make)	KSB-Motor		
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Motor winding	230 / 400 V
		Number of poles	4
Motor const. type	V1	Connection mode	Star
Motor size	080M	Motor cooling method	Surface cooling
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Motor material	Aluminium
		Frequency inverter operation allowed	FI allowed
Motor speed	1484 rpm		
Frequency	50 Hz	Motor noise pressure level	56 dBa
Rated voltage	400 V	Motor data can vary from type plate information. Motor data describes KSB´s choice functional specification and is used for pump selection.	
Rated power P2	0.75 kW		
Available reserve	402.01 %		
Rated current	1.9 A	CE-approval	Yes
Starting current ratio	7.5	EAC Approval	Yes
Insulation class	F to IEC 34-1	Condensat drain motor	Yes
Motor enclosure	IP55	Ambient temperature	40.0 °C
Cos phi at 4/4 load	0.81	Max. absolute humidity	30 %
Motor efficiency at 4/4 load	82.5 %	Temp. sensor mtr. bearing	Without
		UKCA conformity	Yes

Materials G

Notes 1
General criteria for a water analysis: pH-value >= 6,5; chloride content (Cl) <=250 mg/kg. Chlorine (Cl2) <=0.6 mg/kg.

Volute casing (102)	Grey cast iron EN-GJL-250/A48CL35B	Joint ring (411)	Steel ST
		Casing wear ring (502.1)	Grey cast iron GG/CAST IRON
Casing cover (161)	Grey cast iron EN-GJL-250/A48CL35B	Casing wear ring (502.2)	Grey cast iron GG/CAST IRON
		Shaft sleeve (523)	CrNiMo steel
Shaft (210)	Tempered steel C45+N	Stud (902)	Steel 8.8
Impeller (230)	Grey cast iron EN-GJL-250/A48CL35B	Impeller nut (922)	Steel 8
		Key (940)	Steel C45+C / A311 GR 1045 CLASS A
Motor stool (341)	Grey cast iron EN-GJL-250/A48CL35B		
Flat gasket (400)	DPAF DW001		

Packaging

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

Nameplates

Nameplates language	International

Performance curve

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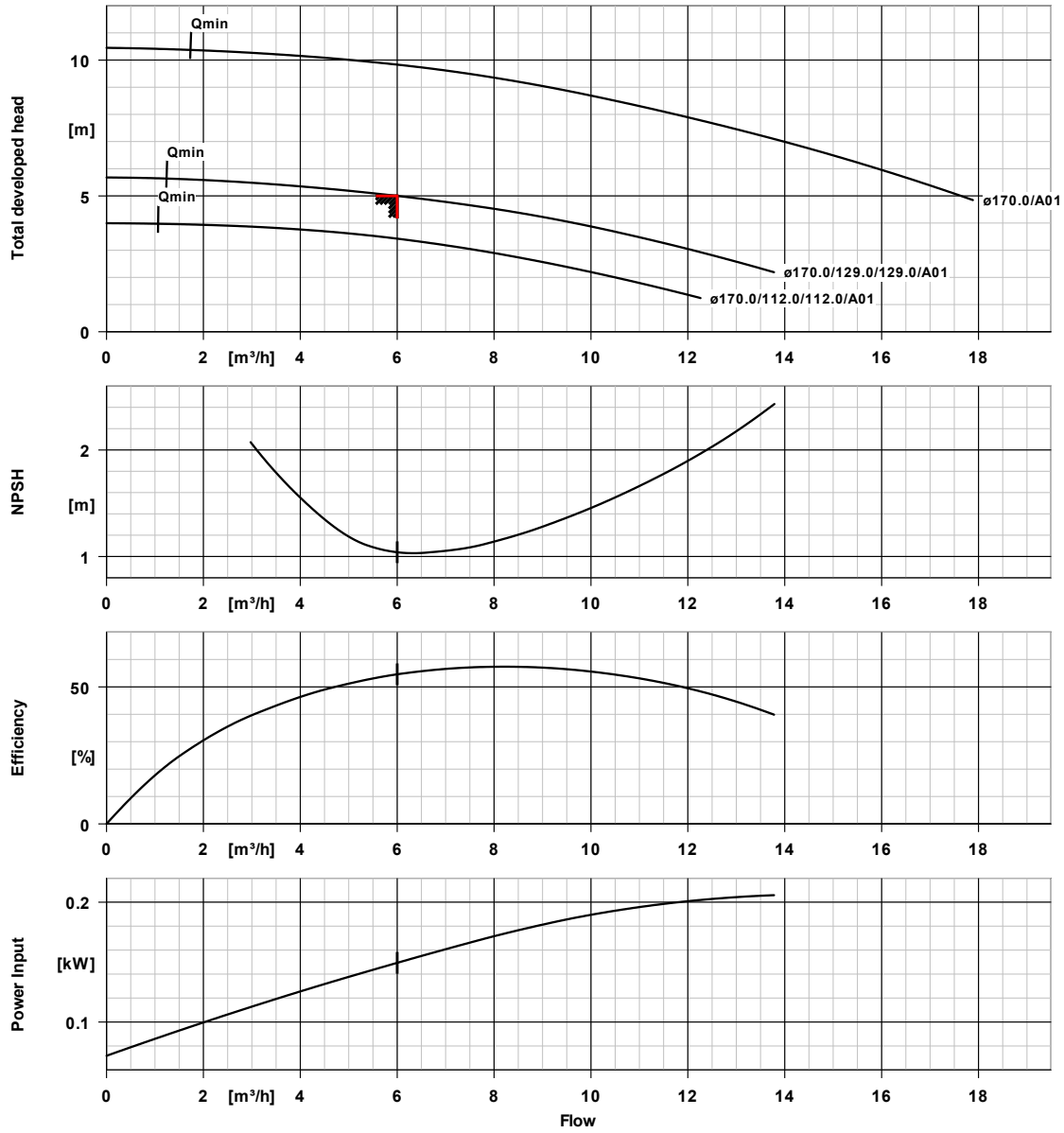

Curve data

Speed of rotation	1484 rpm	Efficiency	54.6 %
Fluid density	998 kg/m³	MEI (Minimum Efficiency Index)	≥ 0.70
Viscosity	1.00 mm²/s		
Flow rate	6.00 m³/h	Power absorbed	0.15 kW
Requested flow rate	6.00 m³/h	NPSHR	1.04 m
Total developed head	5.00 m	Curve number	K1159.454/18
Requested developed head	5.00 m	Effective impeller diameter	129.0 mm
		Acceptance standard	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2

Installation plan

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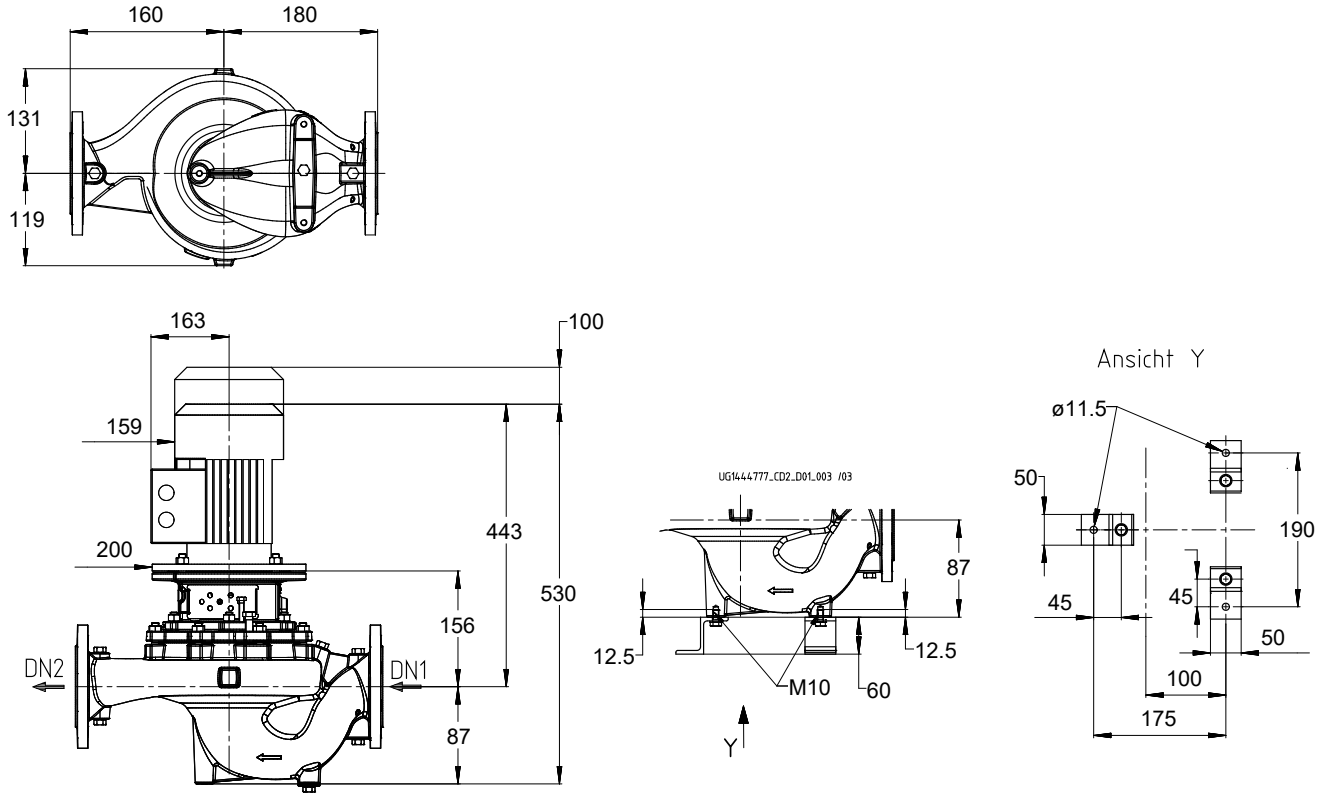

Drawing is not to scale *Dimensions in mm*

Motor

Motor manufacturer	KSB-Motor
Motor size	080M
Motor power	0.75 kW
Number of poles	4
Speed of rotation	1484 rpm
Position of terminal box	0° same orientation Viewed from the drive

Connections

Suction nominal size DN1	DN 32 / EN1092-2
Discharge nominal size DN2	DN 32 / EN1092-2
Nominal pressure suct.	PN 16
Rated pressure disch.	PN 16

Weight net

Pump	20 kg
Motor	15 kg
Total	35 kg

Connect pipes without stress or strain!

For auxiliary connections see separate drawing.

Connection plan

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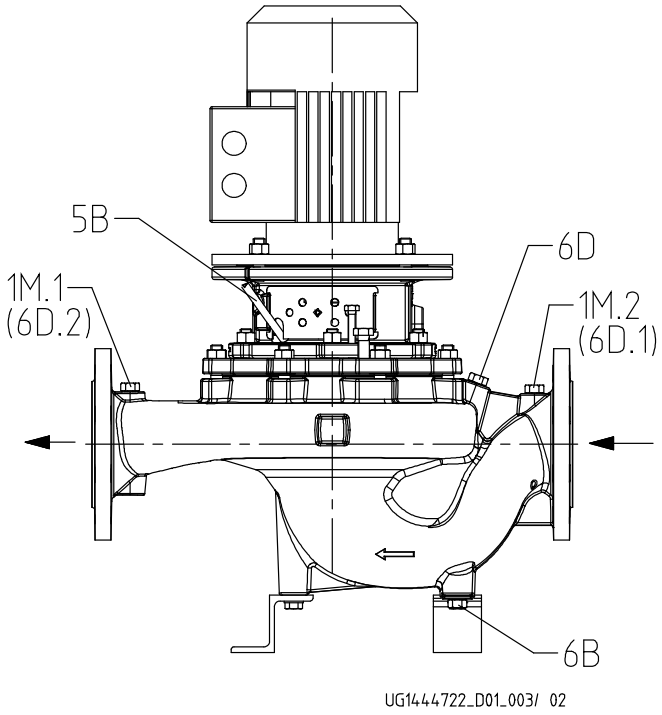

Connections

Pump casing variant		XX46
1M.1 Pressure gauge connection	G 1/4	Drilled and plugged.
1M.2 Pressure gauge connection	G 1/4	Drilled and plugged.
6B Pumped liquid drain	G 1/4	Drilled and plugged.
6D Pumped medium - filling / venting	G 1/4	Drilled and plugged.
5B venting	G 1/4	Closed with venting plug