

**ETL 100-100-125 GGS AV66D200752 BKS BIE3**

Inline pump

**Operating data**

Requested flow rate		Actual flow rate	110.75 m <sup>3</sup> /h
Requested developed head		Actual developed head	15.20 m
Pumped medium	Antifreeze on propylene glycol base, inhibited, closed system, e.g. Antifrogen L or similar products	Efficiency	78.8 %
	Concentration 30%	MEI (Minimum Efficiency Index)	≥ 0.70
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Power absorbed	6.04 kW
		Pump speed of rotation	2951 rpm
Max. ambient air temperature	20.0 °C	NPSH required	5.26 m
Min. ambient air temperature	20.0 °C	Permissible operating pressure	16.00 bar.g
Fluid temperature	0.0 °C		
Fluid density	1039 kg/m <sup>3</sup>	Discharge press.	1.55 bar.g
Fluid viscosity	7.65 mm <sup>2</sup> /s	Shutoff head	21.53 m
Suction pressure max.	0.00 bar.g	Min. allow. flow for continuous stable operation	17.63 m <sup>3</sup> /h
Mass flow rate	115064.144 kg/h	Min. allow. mass flow for continuous stable operation	18316.503 kg/h
Max. power on curve	6.44 kW	Design	Single system 1 x 100 % Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2
Max. allow. mass flow	168955.384 kg/h		

**Design**

Pump standard	Without	Material code	Q7Q7EGG
Design	Close-coupled in-line	Shaft seal code	66
Orientation	Vertical	Sealing plan	Single-acting mechanical seal with vented chamber (A-type casing cover, taper bore)
Suction nominal dia.	DN 100	Seal chamber design	Conical seal chamber (A-type cover)
Suction nominal pressure	PN 16	Contact guard	With
Suction position	180° (down)	Wear ring	Casing wear ring
Suction flange drilled according to standard	EN1092-2	Impeller diameter	124.0 mm
Discharge nominal dia.	DN 100	Free passage size	12.9 mm
Discharge nominal pressure	PN 16	Direction of rotation from drive	Clockwise
Discharge position	top (0°/360°)	Silicon free pump assembly	Yes
Discharge flange drilled according to standard	EN1092-2	Bearing bracket construction	Close-coupled
Surface type	Raised face (form B to EN 1092)	Bearing bracket size	25
Shaft seal	Single acting mechanical seal	Bearing type	Anti-friction bearings
Shaft seal manufacturer	Burgmann	Lubrication type	Grease
Shaft seal type	MG13G6	Color	Vermilion (RAL 2002)

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**Driver, accessories**

Driver type	Electric motor	Temperature sensor	3 PTC resistors
Drive standard mech.	IEC	Terminal box position	0° same orientation
Model (make)	KSB-Motor		Viewed from the drive
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Motor winding	400 / 690 V
Motor const. type	V1	Number of poles	2
Motor size	132S	Connection mode	Delta
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Motor cooling method	Surface cooling
Motor speed	2952 rpm	Motor material	Aluminium
Frequency	50 Hz	Frequency inverter operation allowed	FI allowed
Rated voltage	400 V	Motor noise pressure level	71 dBa
Rated power P2	7.50 kW	Motor data can vary from type plate information. Motor data describes KSB's choice functional specification and is used for pump selection.	
Available reserve	24.08 %	CE-approval	Yes
Rated current	14.6 A	EAC Approval	Yes
Starting current ratio	8.9	Condensat drain motor	Yes
Insulation class	F to IEC 34-1	Ambient temperature	40.0 °C
Motor enclosure	IP55	Max. absolute humidity	30 %
Cos phi at 4/4 load	0.83	Temp. sensor mtr. bearing	Without
Motor efficiency at 4/4 load	90.1 %	UKCA conformity	Yes

**Materials G**

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

**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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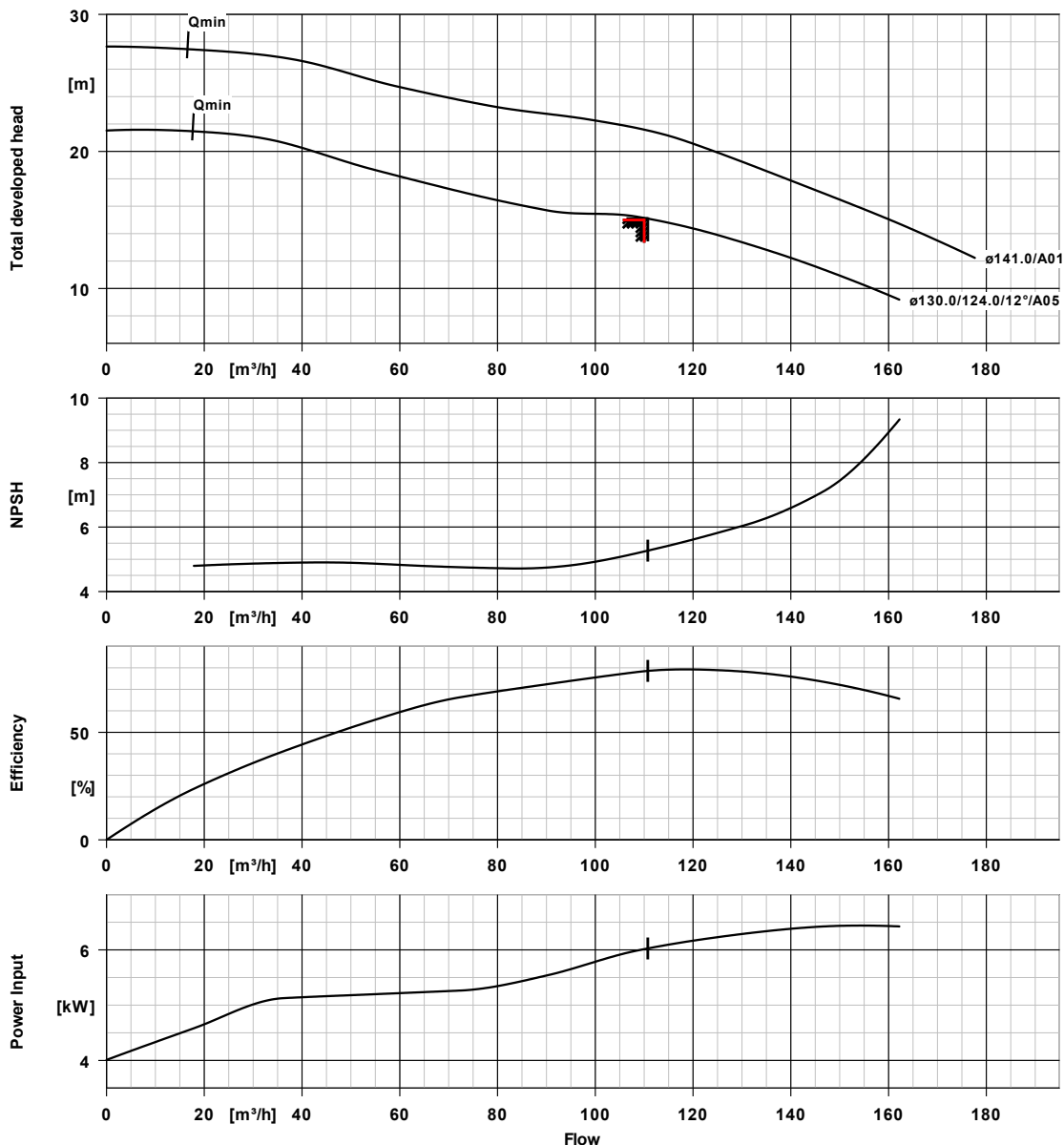
**FOOT 85X 50X 60**

3 pump feet with bolts for vertical installation	Material no	47077960
Pump foot for vertical installation		
Etaline(Z) 32-160/ up to 100-160/		

Pump foot, not for Etaline SY  
Weight : 2,0 kg

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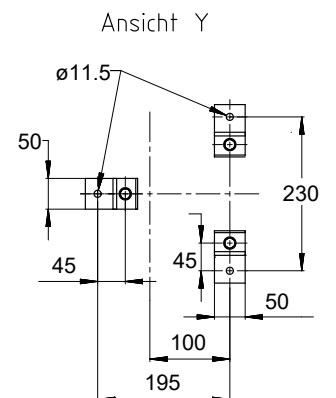
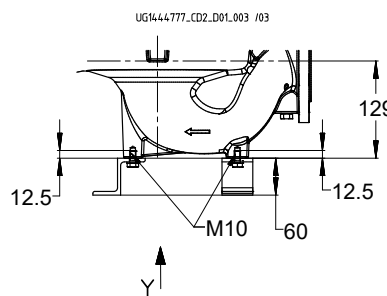
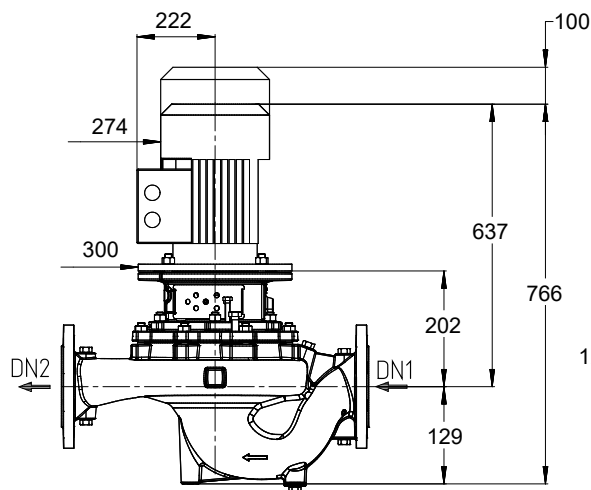
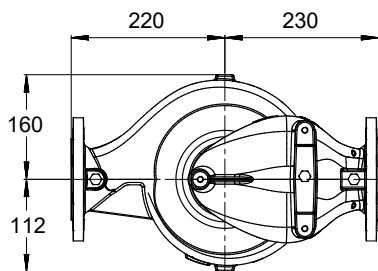


Curve data

Speed of rotation	2951 rpm	Efficiency	78.8 %
Fluid density	1039 $kg/m^3$	MEI (Minimum Efficiency Index)	$\geq 0.70$
Viscosity	7.65 $mm^2/s$	Power absorbed	6.04 kW
Flow rate	110.75 $m^3/h$	NPSHR	5.26 m
Requested flow rate	110.00 $m^3/h$	Curve number	K1159.452/35
Total developed head	15.20 m	Effective impeller diameter	124.0 mm
Requested developed head	15.00 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*

**Motor**

Motor manufacturer	KSB-Motor
Motor size	132S
Motor power	7.50 kW
Number of poles	2
Speed of rotation	2952 rpm
Position of terminal box	0° same orientation Viewed from the drive

**Connections**

Suction nominal size DN1	DN 100 / EN1092-2
Discharge nominal size DN2	DN 100 / EN1092-2
Nominal pressure suct.	PN 16
Rated pressure disch.	PN 16

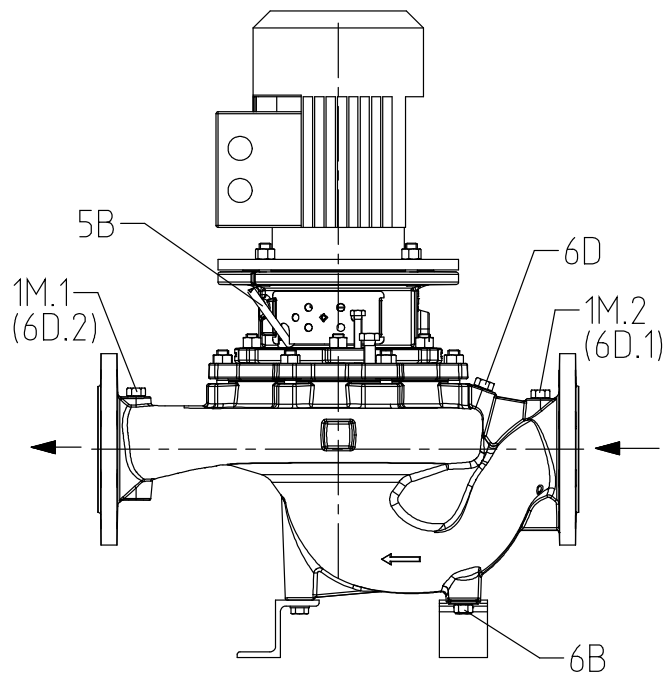
**Weight net**

Pump	38 kg
Motor	63 kg
Other accessories	2 kg
Total	103 kg

**Connect pipes without stress or strain!**

**For auxiliary connections see separate drawing.**

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**Connections**

Pump casing variant		XX46
1M.1 Pressure gauge connection	G 3/8	Drilled and plugged.
1M.2 Pressure gauge connection	G 3/8	Drilled and plugged.
6B Pumped liquid drain	G 3/8	Drilled and plugged.
6D Pumped medium - filling / venting	G 3/8	Drilled and plugged.
5B venting	G 1/4	Closed with venting plug