

**ETLZ065-065-250 GGSAV11D200304 BKS BIE3**

Inline pump

**Operating data**

Requested flow rate		Actual flow rate	50.02 m <sup>3</sup> /h
Requested developed head		Actual developed head	10.01 m
Pumped medium	Water Clean water	Efficiency	61.6 %
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	MEI (Minimum Efficiency Index)	≥ 0.70
Max. ambient air temperature	20.0 °C	Power absorbed	2.21 kW
Min. ambient air temperature	20.0 °C	Pump speed of rotation	1456 rpm
Fluid temperature	20.0 °C	NPSH required	2.30 m
Fluid density	998 kg/m <sup>3</sup>	Permissible operating pressure	16.00 bar.g
Fluid viscosity	1.00 mm <sup>2</sup> /s	Discharge press.	0.98 bar.g
Suction pressure max.	0.00 bar.g	Shutoff head	15.77 m
Mass flow rate	13.87 kg/s	Min. allow. flow for continuous stable operation	5.98 m <sup>3</sup> /h
Max. power on curve	2.33 kW	Min. allow. mass flow for continuous stable operation	1.66 kg/s
Max. allow. mass flow	16.24 kg/s	Yearly energy consumption	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2
Design	Twin system one full duty + one standby pump	Annual Time Spent at Duty Point	2212.29 kWh 1000.00 h

**Design**

Pump standard	Without	Material code	BQEGG-DW001
Design	Close coupled twin inline	Shaft seal code	11
Orientation	Vertical	Sealing plan	Single-acting mechanical seal with vented chamber (A-type casing cover, taper bore)
Suction nominal dia.	DN 65	A liquid free of solids is assumed	
Suction nominal pressure	PN 16	Seal chamber design	Conical seal chamber (A-type cover)
Suction position	180° (down)	Contact guard	With
Suction flange drilled according to standard	EN1092-2	Wear ring	Casing wear ring
Discharge nominal dia.	DN 65	Impeller diameter	211.0 mm
Discharge nominal pressure	PN 16	Free passage size	10 mm
Discharge position	top (0°/360°)	Direction of rotation from drive	Clockwise
Discharge flange drilled according to standard	EN1092-2	Bearing bracket construction	Close-coupled
Surface type	Flat face	Bearing bracket size	25
Flanges DN 65 will be drilled with 4 holes		Bearing type	Anti-friction bearings
Shaft seal	Single acting mechanical seal	Lubrication type	Grease
Shaft seal manufacturer	KSB's Choice	Color	Ultramarine blue (RAL 5002)
Shaft seal type	KSB's Choice		KSB-blue

**ETLZ065-065-250 GGSAV11D200304 BKS BIE3**

Inline pump

**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	4
Motor size	100L	Connection mode	Delta
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Motor cooling method	Surface cooling
Motor speed	1456 rpm	Motor material	Aluminium
Frequency	50 Hz	Frequency inverter operation allowed	FI allowed
Rated voltage	400 V	Motor noise pressure level	63 dBA
Rated power P2	3.00 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	35.61 %	CE-approval	Yes
Rated current	6.2 A	EAC Approval	Yes
Starting current ratio	8.2	Condensat drain motor	Yes
Insulation class	F to IEC 34-1	Ambient temperature	40.0 °C
Motor enclosure	IP55	Max. absolute humidity	30 g/m3
Cos phi at 4/4 load	0.82	Temp. sensor mtr. bearing	Without
Motor efficiency at 4/4 load	87.7 %	UKCA conformity	Yes

**Materials G****Notes 1**

General criteria for a water analysis: pH-value &gt;= 6,5; chloride

content (Cl) &lt;=250 mg/kg. Chlorine (Cl2) &lt;=0.6 mg/kg.

Volute casing (102)

Grey cast iron EN-GJL-  
250/A48CL35B

Casing cover (161)

Grey cast iron EN-GJL-  
250/A48CL35B

Shaft (210)

Tempered steel C45+N  
Grey cast iron EN-GJL-  
250/A48CL35B

Impeller (230)

Grey cast iron EN-GJL-  
250/A48CL35B

Motor stool (341)

Grey cast iron EN-GJL-  
250/A48CL35B

Flat gasket (400)

DPAF DW001

Joint ring (411)

Steel ST

Casing wear ring (502.1)

Grey cast iron GG/CAST IRON

Casing wear ring (502.2)

Grey cast iron GG/CAST IRON

Disc (550)

Steel ST

Stud (902)

Steel 8.8

Nut (920)

8+A2A/ 8+B633 SC1 TP3

Impeller nut (922)

Steel 8

Key (940)

Steel C45+C / A311 GR 1045

Pipe line (700)

CLASS A

Steel ST

**Packaging**

Packaging category

A0 Packing acc. to KSB  
choice

Packaging for transport

Truck

Packaging for storage

Indoor

**Nameplates**

Nameplates language

International

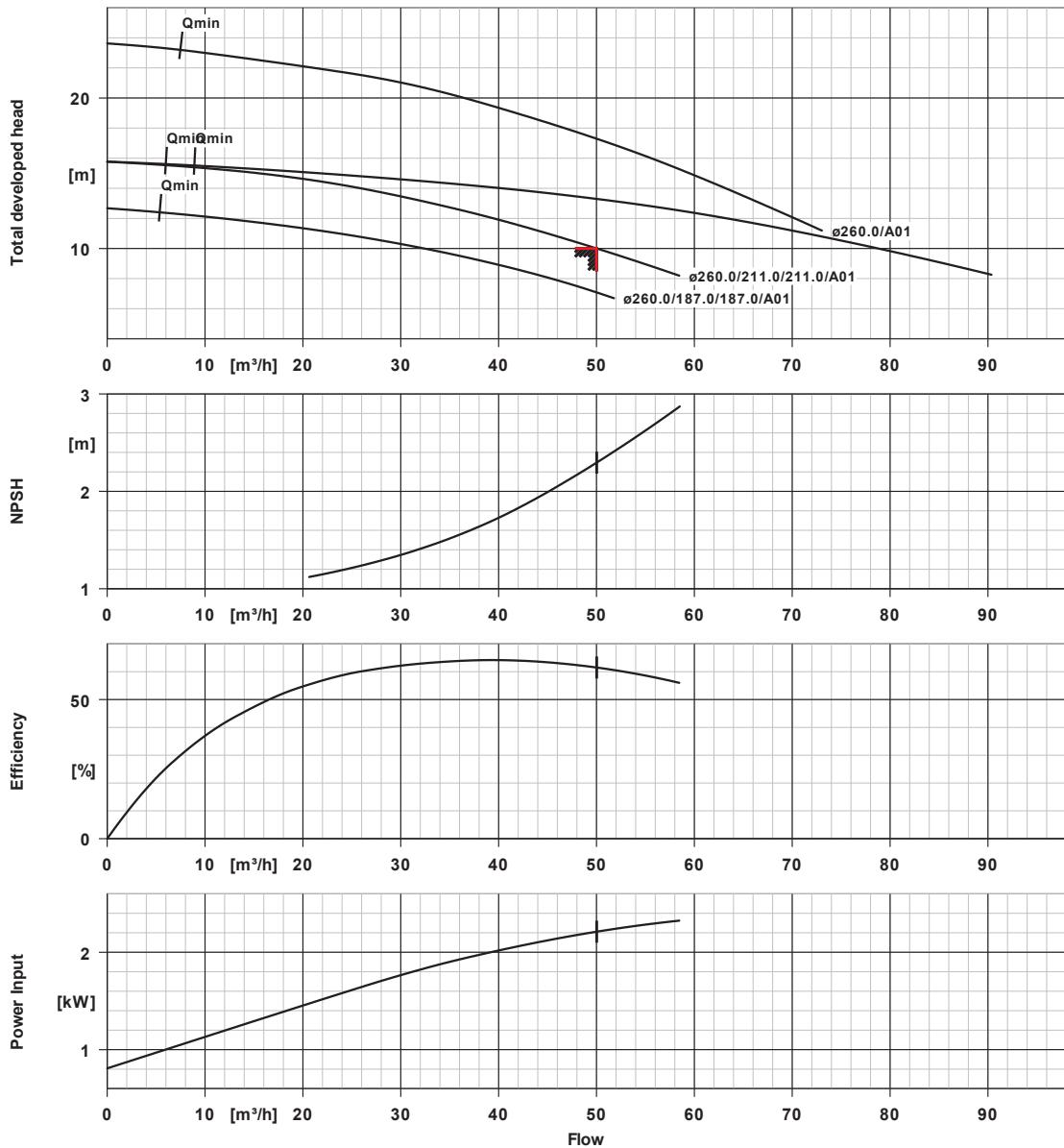
# Performance curve



Page: 3 / 6

ETLZ065-065-250 GGSAV11D200304 BKSBIIE3

Inline pump



## Curve data

Speed of rotation	1456 rpm	Efficiency	61.6 %
Fluid density	998 kg/m <sup>3</sup>	MEI (Minimum Efficiency Index)	≥ 0.70
Viscosity	1.00 mm <sup>2</sup> /s	Power absorbed	2.21 kW
Flow rate	50.02 m <sup>3</sup> /h	NPSHR	2.30 m
Requested flow rate	50.00 m <sup>3</sup> /h	Curve number	K1161.454/33
Total developed head	10.01 m	Effective impeller diameter	211.0 mm
Requested developed head	10.00 m	Acceptance standard	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2

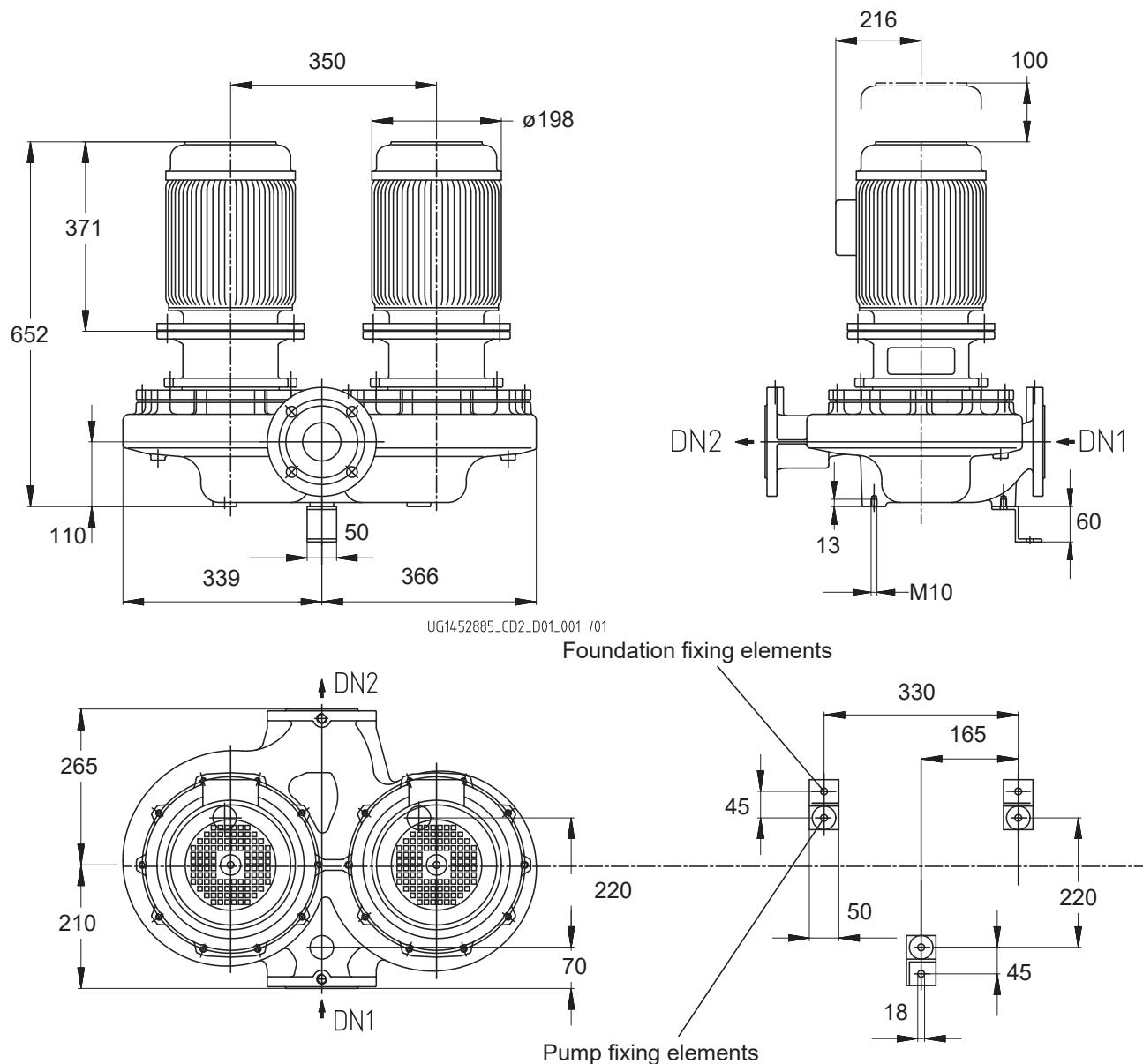
# Installation plan



Page: 4 / 6

ETLZ065-065-250 GGSAV11D200304 BKSbie3

Inline pump



*Drawing is not to scale*

*Dimensions in mm*

**ETLZ065-065-250 GGSAV11D200304 BKSBE3**

Inline pump

## Motor

Motor manufacturer	KSB-Motor
Motor size	100L
Motor power	3.00 kW
Number of poles	4
Speed of rotation	1456 rpm
Position of terminal box	0° same orientation Viewed from the drive

## Connections

Suction nominal size DN1	DN 65 / EN1092-2
Discharge nominal size DN2	DN 65 / EN1092-2
Nominal pressure suct.	PN 16
Rated pressure disch.	PN 16
Flanges DN 65 will be drilled with 4 holes	

## Weight net

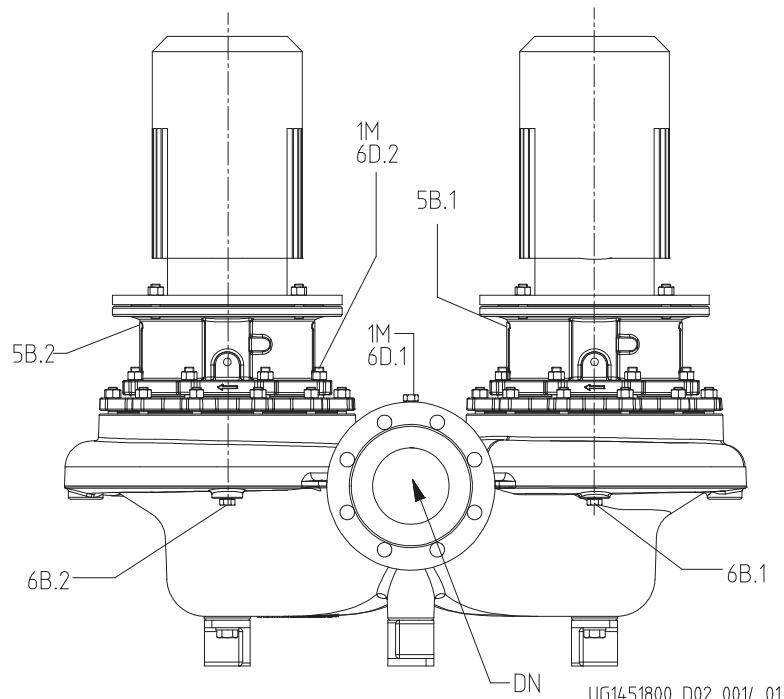
Pump	115 kg
Motor	76 kg
Total	191 kg

For auxiliary connections see  
separate drawing.

Connect pipes without stress or strain!

**ETLZ065-065-250 GGSAV11D200304 BKSBI3**

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## Connections

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

Drilled and plugged.

Closed with venting plug

Closed with venting plug