

ETLZ040-040-250 GGS AV66D200224 BKS BIE3

Inline pump

Operating data

Requested flow rate
Requested developed head
Pumped medium

Actual flow rate 16.00 m³/h
Actual developed head 15.00 m
Efficiency 43.8 %
MEI (Minimum Efficiency Index) ≥ 0.70
Power absorbed 1.54 kW
Pump speed of rotation 1458 rpm
NPSH required 2.14 m
Permissible operating pressure 16.00 bar.g

Max. ambient air temperature 20.0 °C
Min. ambient air temperature 20.0 °C
Fluid temperature 38.0 °C

Fluid density 1031 kg/m³
Fluid viscosity 1.39 mm²/s
Suction pressure max. 0.00 bar.g
Mass flow rate 4.58 kg/s
Max. power on curve 1.95 kW
Min. allow. flow for continuous stable operation 2.68 m³/h

Discharge press. 1.52 bar.g
Min. allow. mass flow for continuous stable operation 0.77 kg/s
Shutoff head 18.58 m
Max. allow. mass flow 8.05 kg/s
Design Twin system one full duty + one standby pump
Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2

Design

Pump standard Without
Design Close coupled twin inline
Orientation Vertical
Suction nominal dia. DN 40
Suction nominal pressure PN 16
Suction position 180° (down)
Suction flange drilled according to standard EN1092-2
Discharge nominal dia. DN 40
Discharge nominal pressure PN 16
Discharge position top (0°/360°)
Discharge flange drilled according to standard EN1092-2
Surface type Flat face
Shaft seal Single acting mechanical seal
Manufacturer Burgmann
Type MG13G6

Material code Q7Q7EGG
Shaft seal code 66
Sealing plan Single-acting mechanical seal with vented chamber (A-type casing cover, taper bore)
Seal chamber design Conical seal chamber (A-type cover)
Contact guard With
Wear ring Casing wear ring
Impeller diameter 230.0 mm
Free passage size 7.1 mm
Direction of rotation from drive Clockwise
Bearing bracket construction Close-coupled
Bearing bracket size 25
Bearing type Anti-friction bearings
Lubrication type Grease
Color Vermilion (RAL 2002)

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Driver, accessories

Driver type	Electric motor	Motor enclosure	IP55
Drive standard mech.	IEC	Cos phi at 4/4 load	0.82
Model (make)	KSB-Motor	Motor efficiency at 4/4 load	86.7 %
Drive supplied by	Standard motor supplied by KSB - mounted by KSB	Temperature sensor	3 PTC resistors
		Terminal box position	0° same orientation
Motor const. type	V1		Viewed from the drive
Motor size	100L	Motor winding	230 / 400 V
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Number of poles	4
		Connection mode	Star
Motor speed	1458 rpm	Motor cooling method	Surface cooling
Frequency	50 Hz	Motor material	Aluminium
Rated voltage	400 V	Frequency inverter operation	FI allowed
Rated power P2	2.20 kW		
Available reserve	42.95 %	Motor data can vary from type plate information. Motor data describes KSB's choice functional specification and is used for pump selection.	
Rated current	4.8 A	CE-approval	Yes
Starting current ratio	8	Condensat drain motor	Yes
Insulation class	F to IEC 34-1		

Materials G

Volute casing (102)	Grey cast iron EN-GJL-250/A48CL35B	Casing wear ring (502.2)	Grey cast iron GG/CAST IRON
Casing cover (161)	Grey cast iron EN-GJL-250/A48CL35B	Disc (550)	Steel ST
Shaft (210)	Tempered steel C45+N	Stud (902)	Steel 8.8
Impeller (230)	Grey cast iron EN-GJL-250/A48CL35B	Nut (920)	8+A2A/ 8+B633 SC1 TP3
		Impeller nut (922)	Steel 8
Motor stool (341)	Grey cast iron EN-GJL-250/A48CL35B	Key (940)	Steel C45+C / A311 GR 1045
			CLASS A
Flat gasket (400)	DPAF seal plate asbestos free	Pipe line (700)	Steel ST
Joint ring (411)	Steel ST		
Casing wear ring (502.1)	Grey cast iron GG/CAST IRON		

FOOT 85X 50X 60

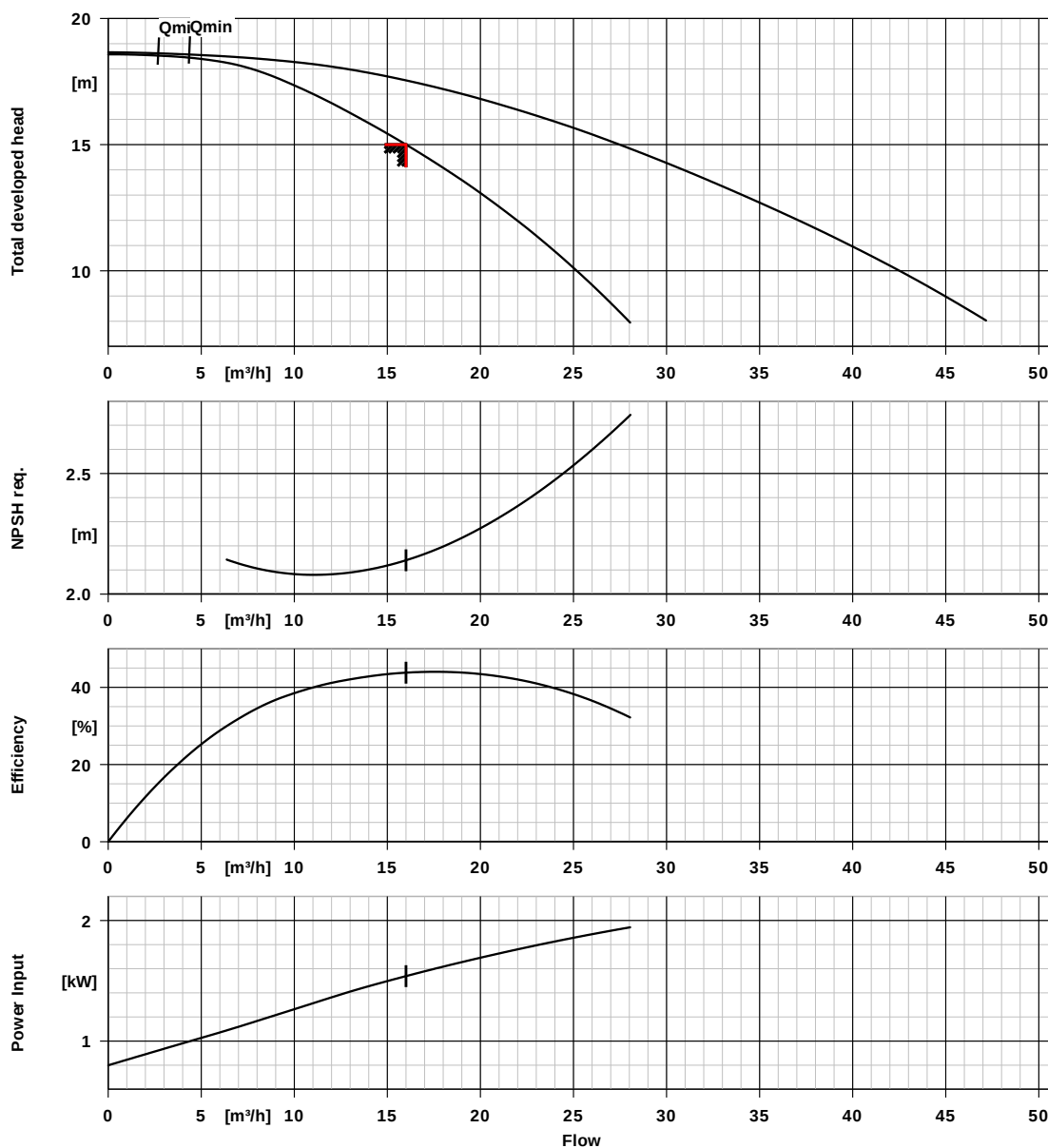
3 pump feet with bolts for vertical installation
Pump foot for vertical installation
Etaline(Z) 32-160/ up to 100-160/

Material no 47077960

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

ETLZ040-040-250 GGS AV66D200224 BKS BIE3

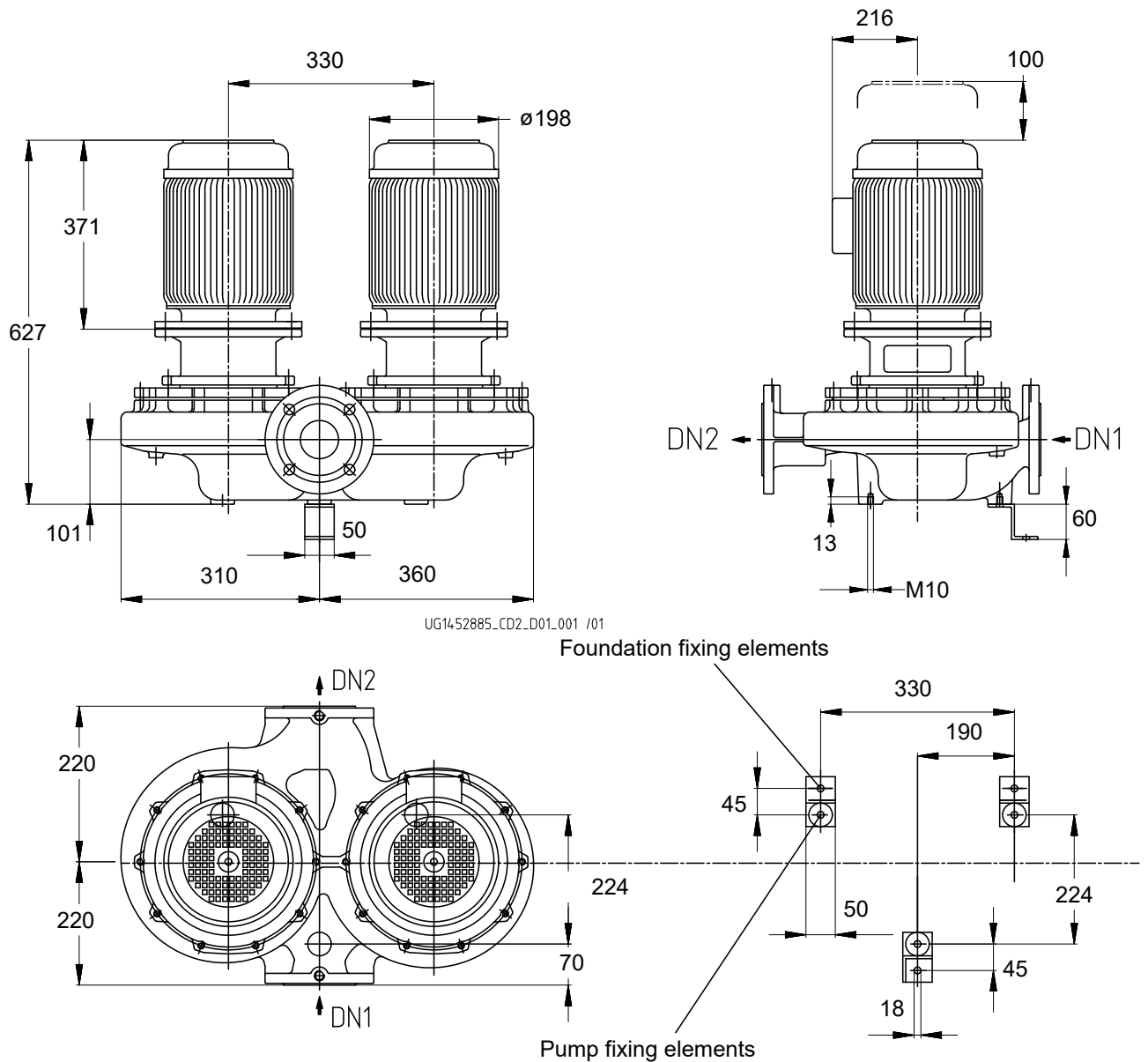
Inline pump

**Curve data**

Speed of rotation	1458 rpm	Efficiency	43.8 %
Fluid density	1031 kg/m^3	MEI (Minimum Efficiency Index)	≥ 0.70
Viscosity	1.39 mm^2/s	Power absorbed	1.54 kW
Flow rate	16.00 m^3/h	NPSH required	2.14 m
Requested flow rate	16.00 m^3/h	Curve number	K1161.454/24
Total developed head	15.00 m	Effective impeller diameter	230.0 mm
Requested developed head	15.00 m	Acceptance standard	Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2

ETLZ040-040-250 GGS AV66D200224 BKS BIE3

Inline pump



Drawing is not to scale

Dimensions in mm

ETLZ040-040-250 GGS AV66D200224 BKSBIE3

Inline pump

Motor

Motor manufacturer	KSB-Motor
Motor size	100L
Motor power	2.20 kW
Number of poles	4
Speed of rotation	1458 rpm
Position of terminal box	0° same orientation 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

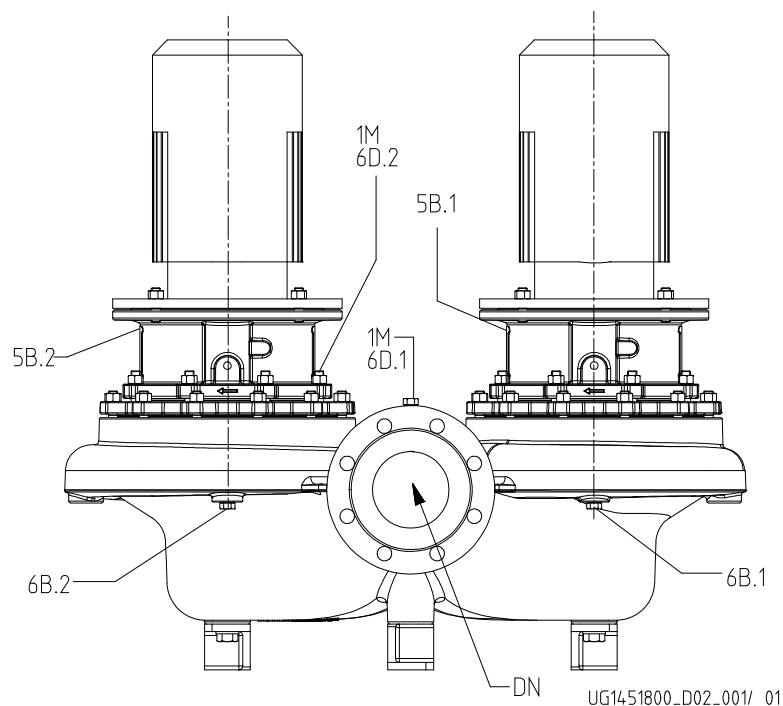
Pump	99 kg
Motor	68 kg
Other accessories	2 kg
Total	168 kg

Connect pipes without stress or strain!

**For auxiliary connections see
separate drawing.**

ETLZ040-040-250 GGS AV66D200224 BKS BIE3

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Connections

Pump casing variant

1M.1 Pressure gauge connection

1M.2 Pressure gauge connection

6B.1 Pumped liquid drain

6B.2 Pumped liquid drain

6D.1 Pumped medium - filling/venting

6D.2 Pumped medium - filling / venting

5B.1 venting

5B.2 venting

G 1/4

G 1/4

G 1/4

G 1/4

G 1/4

G 1/4

G 1/4

G 1/4

XX46

Not executed

Not executed

Drilled and plugged.

Drilled and plugged.

Drilled and plugged.

Drilled and plugged.

Closed with venting plug

Closed with venting plug