

Class 3B; below 10 kW acc.

to paragraph 4.4.2

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ETLZ032-032-200 GGSAV66D200074 BKSBIE3

Inline pump

Operating data

Operating data			
Requested flow rate		Actual flow rate	7.70 m³/h
Requested developed head		Actual developed head	10.00 m
Pumped medium	Antifreeze on ethylene glycol	Efficiency	41.0 %
	base, inhibited, closed system, e.g. Antifrogen N or	MEI (Minimum Efficiency Index)	≥ 0.70
	similar products	Power absorbed	0.54 kW
	Concentration 30%	Pump speed of rotation	1448 rpm
	Not containing chemical and	NPSH required	1.76 m
	mechanical substances which affect the materials	Permissible operating pressure	16.00 bar.g
Ambient air temperature	20.0 °C	F	
Fluid temperature	4.0 °C		
Fluid density	1046 kg/m³		
Fluid viscosity	3.79 mm ² /s	Discharge press.	1.03 bar.g
Suction pressure max.	0.00 bar.g	Min. allow. mass flow for	0.38 kg/s
Mass flow rate	2.24 kg/s	continuous stable operation	
Max. power on curve	0.69 kW	Max. allow. mass flow	4.52 kg/s
Min. allow. flow for continuous stable operation	1.32 m³/h	Design	Twin system one full duty + one standby pump
Shutoff head	12.03 m		Tolerances to ISO 9906

Design

Pump standard	Without	Material code	Q7Q7EGG
Design	Close coupled twin inline	Shaft seal code	66
Orientation	Vertical	Sealing plan	Single-acting mechanical seal
Suction nominal dia.	DN 32		with vented chamber (A-type
Suction nominal pressure	PN 16		casing cover, taper bore)
Suction position	180° (down)	Seal chamber design	Conical seal chamber (A-type
Suction flange drilled	EN1092-2		cover)
according to standard		Contact guard	With
Discharge nominal dia.	DN 32	Wear ring	Casing wear ring
Discharge norminal pressure	PN 16	Impeller diameter	189.0 mm
Discharge position	top (0°/360°)	Free passage size	5.3 mm
Discharge flange drilled	EN1092-2	Direction of rotation from	Clockwise
according to standard		drive	
Shaft seal	Single acting mechanical seal	Bearing bracket construction	Close-coupled
Manufacturer	Burgmann	Bearing bracket size	25
Туре	MG13G6	Bearing type	Anti-friction bearings
		Lubrication type	Grease
		Color	Vermilion (RAL 2002)



Viewed from the drive

230 / 400 V

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V1

Inline pump

Driver, accessories

Driver type Electric motor Motor enclosure IP55 Drive standard mech. **IEC** Cos phi at 4/4 load 0.81 Model (make) KSB-Motor Motor efficiency at 4/4 load 82.5 %

Drive supplied by Standard motor supplied by 3 PTC resistors Temperature sensor KSB - mounted by KSB Terminal box position 0° same orientation

Motor const. type 080M Motor size Motor winding

Efficiency class Efficiency class IE3 acc. to Number of poles 4

IEC60034-30-1 Connection mode Star Motor speed 1449 rpm Motor cooling method Surface cooling Frequency 50 Hz Motor material Aluminium

Rated voltage 400 V Frequency inverter operation FI allowed Rated power P2 0.75 kW allowed Motor noise pressure level 56 dBa Available reserve 40.00 %

Motor data can vary from type plate information. Motor data Rated current 1.9 A Starting current ratio describes KSB's choice functional specification and is used for 7.5

pump selection. Insulation class F to IEC 34-1

Materials G

Volute casing (102) Grey cast iron EN-GJL-Casing wear ring (502.2) Grey cast iron GG/CAST

250/A48CL35B **IRON** Casing cover (161) Grey cast iron EN-GJL-Disc (550) Steel ST

250/A48CL35B Stud (902) Steel 8.8

8+A2A/ 8+B633 SC1 TP3 Shaft (210) Tempered steel C45+N Nut (920) Impeller (230) Grey cast iron EN-GJL-Impeller nut (922) Steel 8

Steel C45+C / A311 GR 1045 250/A48CL35B Key (940)

Motor stool (341) Grey cast iron EN-GJL-CLASS A

250/A48CL35B Pipe line (700) Steel ST

Flat gasket (400) DPAF seal plate asbestos

free

Joint ring (411) Casing wear ring (502.1) Grey cast iron GG/CAST

IRON

Steel ST

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/

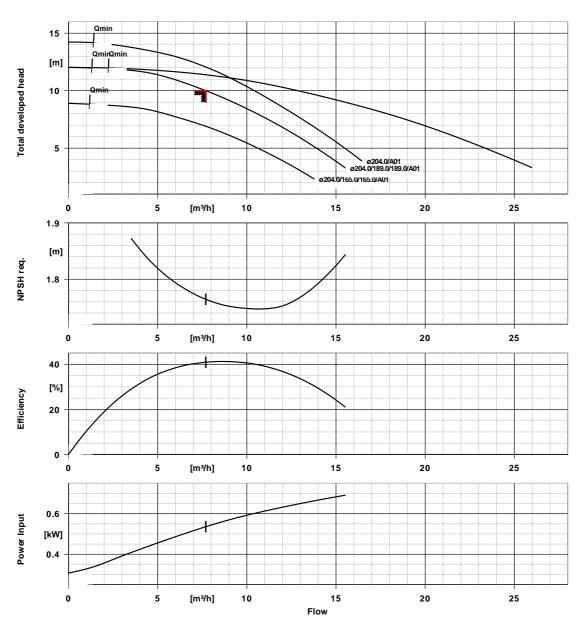
Pump foot, not for Etaline SY Weight : 2,0 kg



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Inline pump



Curve data

Speed of rotation	1448 rpm
Fluid density	1046 kg/m³
Viscosity	3.79 mm ² /s
Flow rate	7.70 m³/h
Requested flow rate	7.70 m³/h
Total developed head	10.00 m
Requested developed head	10.00 m

Efficiency
MEI (Minimum Efficiency
Index)
Power absorbed
NPSH required
Curve number
Effective impeller diameter
Acceptance standard

≥ 0.70 0.54 kW 1.76 m K1161.454/19 189.0 mm

41.0 %

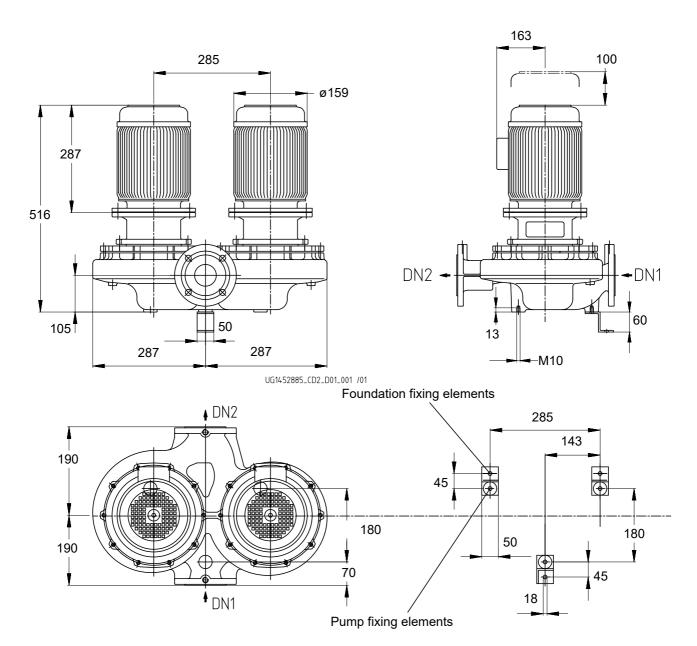
Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2



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Inline pump



Drawing is not to scale Dimensions in mm



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ETLZ032-032-200 GGSAV66D200074 BKSBIE3

Inline pump

Motor

KSB-Motor Motor manufacturer M080 Motor size Motor power 0.75 kW

Number of poles

1449 rpm Speed of rotation

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 77 kg Motor 30 kg Other accessories 2 kg 108 kg Total

For auxiliary connections see

separate drawing.

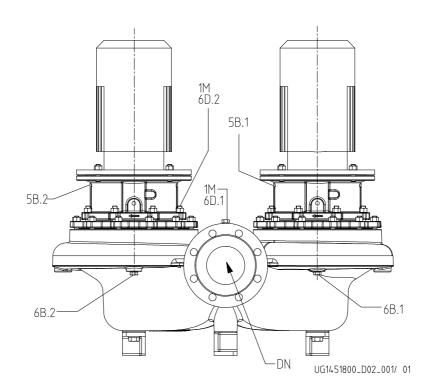
Connect pipes without stress or strain!



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Inline pump



Connections

Pump casing variant		XX46
1M.1 Pressure gauge connection	G 1/4	Not executed
1M.2 Pressure gauge connection	G 1/4	Not executed
6B.1 Pumped liquid drain	G 1/4	Drilled and plugged.
6B.2 Pumped liquid drain	G 1/4	Drilled and plugged.
6D.1 Pumped medium - filling/venting	G 1/4	Drilled and plugged.
6D.2 Pumped medium - filling / venting	G 1/4	Drilled and plugged.
5B.1 venting	G 1/4	Closed with venting plug
5B.2 venting	G 1/4	Closed with venting plug