

Data sheet

AQUATORIYA

Customer item no. :
Communication dated : 09/24/2026
Doc. no. : Quick quote
Quantity: 1

Horizontal single-stage centrifugal pump ES150-125-400A in 1750rpm Low-pressure centrifugal pump

Operating data

Requested flow rate	336.00 m ³ /h	Actual flow rate	335.09 m ³ /h
Requested developed head	67.68 m	Actual developed head	67.68 m
Pumped medium	Water	Efficiency	80.7 %
	Clean water	MEI (Minimum Efficiency Index)	≥ 0.60
	Not containing chemical and mechanical substances which affect the materials	Power absorbed	76.74 kW
Ambient air temperature	20.0 °C	Pump speed of rotation	1750 rpm
Fluid temperature	20.0 °C	NPSH required	3.22 m
Fluid density	998 kg/m ³	Permissible operating pressure	16.00 bar.g
Fluid viscosity	1.00 mm ² /s	Discharge press.	6.77 bar.g
Suction pressure max.	0.00 bar.g	Min. allow. mass flow for continuous stable operation	51.07 kg/s
Mass flow rate	107.92 kg/s	Max. allow. mass flow	108.80 kg/s
Max. power on curve	85.66 kW	Design	Single system 1 x 100 % tolerances to ISO 9906 class 3B; below 10 kW acc. to paragraph 4.4.2
Min. allow. flow for continuous stable operation	183.87 m ³ /h		
Shutoff head	80.67 m		

Design

Pump standard	EN 733	Shaft seal code	11
Design	Baseplate mounted, long-coupled	Sealing plan	A Single-acting mechanical seal (A-type casing cover, taper bore)
Orientation	Horizontal	A liquid free of solids is assumed	
Suction nominal dia.	DN 150	Seal chamber design	Conical seal chamber (A-type cover)
Suction nominal pressure	PN 16	Contact guard	with
Suction position	axial	Wear ring	Casing wear ring
Suction flange dimension according to standard	EN1092-2	Impeller diameter	397.0 mm
Suction flange drilled according to standard	EN1092-2	Free passage size	20.9 mm
Discharge nominal dia.	DN 125	Direction of rotation	Clockwise
Discharge nominal pressure	PN 16	from drive	
Discharge position	top (0° /360°)	Silicon free pump assembly	Yes
Discharge flange dimension according to standard.	EN1092-2	Bearing bracket construction	Water standard standard
Discharge flange drilled according to standard	EN1092-2	Bearing bracket size	55
Shaft seal	Single acting mechanical seal	Bearing seal	V ring
		Bearing type	Anti-friction bearings
Manufacturer		Lubrication type	Grease
Type	1	Color	Ultramarine black
Material code	BQ1EGG-WA		

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Driver, accessories

Manufacturer		Rated voltage	380 V
Coupling type	Supex N	Rated power P2	110.00 kW
Nominal size	315	Available reserve	0.87 %
Coupling guard type	Lightweight, not treadproof (ZN79)	Rated current	201.0 A
Guard size	B254	Starting current ratio	6.9
Guard material	Galvanised steel ST TZN	Insulation class	F to IEC 34-1
Baseplate type	U-beam / folded plate	Motor enclosure	IP55
Baseplate size	10B	Cos phi at 4/4 load	0.87
Driver type	Electric motor	Motor efficiency at 4/4 load	93.1 %
Drive standard mech.	IEC	Temperature sensor	3 PTC resistors
Model (make)		Terminal box position	0° /360° (top)
Drive supplied by	Standard motor supplied - mounted by		Viewed towards the suction nozzle
Motor const. type	B3	Motor winding	380 / 660 V
Motor size	315S	Number of poles	4
Efficiency class	IE3 acc. to IEC 60034-30	Connection mode	Delta
Motor speed	1750 rpm	Motor cooling method	Surface cooling
Frequency	60 Hz	Motor material	Grey cast iron GG/CAST IRON
		Frequency inverter operation allowed	VFD-suitability only in connection with PumpDrive
		Motor noise pressure level	93 dBa

Materials G

Notes 1

general criteria for a water analysis: pH-value ≥ 7 ; chloride content (Cl) ≤ 250 mg/kg. chlorine (Cl2) ≤ 0.6 mg/kg.

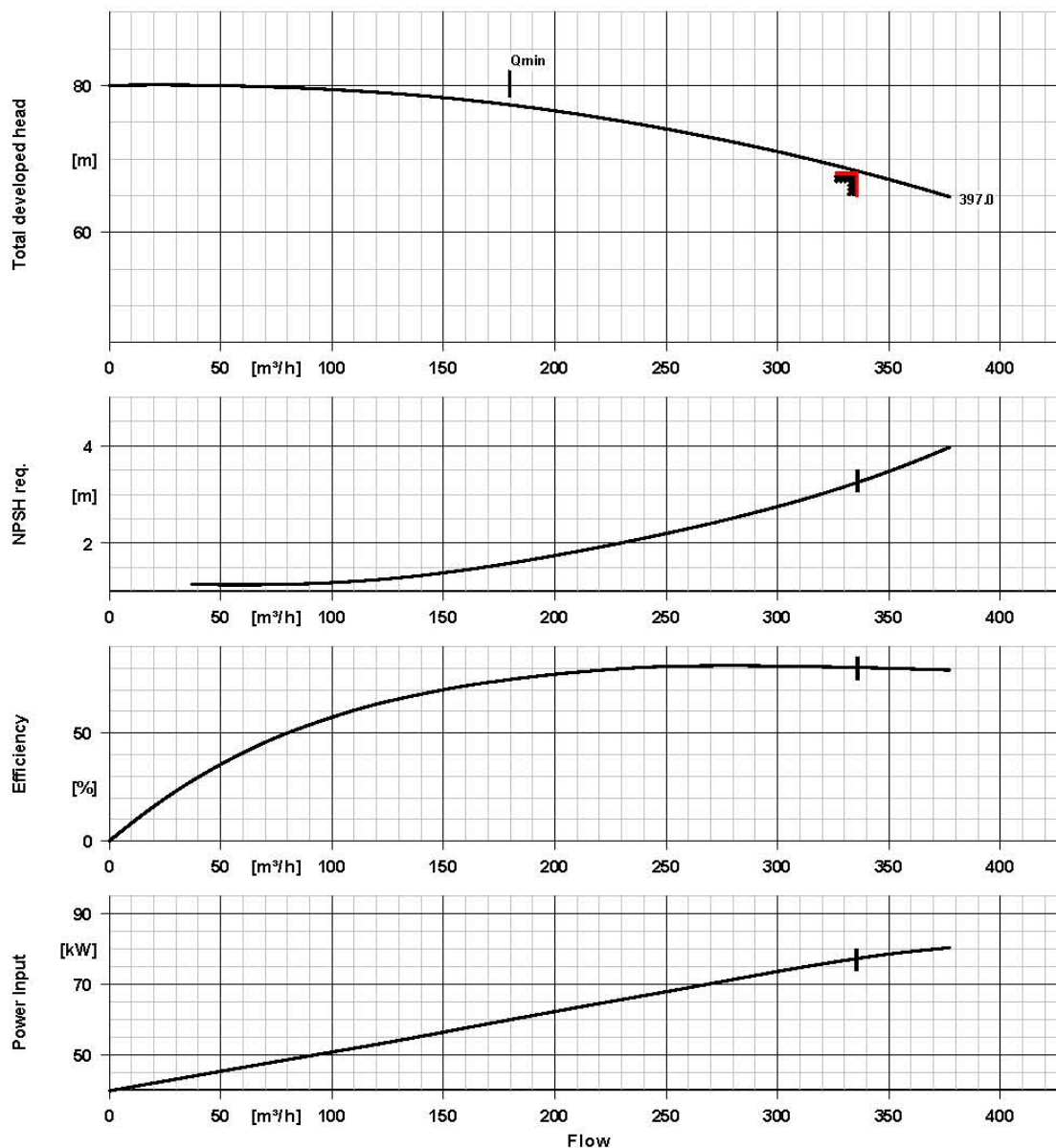
Volute casing (102)	Grey cast iron EN-GJL-250/A48CL35B	Casing wear ring (502.1)	Grey cast iron GG/CAST IRON
Casing cover (161)	Grey cast iron EN-GJL-250/A48CL35B	Casing wear ring (502.2)	Grey cast iron GG/CAST IRON
Shaft (210)	Tempered steel C45+N	Shaft sleeve (523)	CrNiMo steel
Impeller (230)	Grey cast iron EN-GJL-250/A48CL35B	Shaft protecting sleeve (524)	Without
Bearing bracket (330)	Grey cast iron EN-GJL-250/A48CL35B	Stud (902)	Steel 8.8
Flat gasket (400)	DPAF seal plate asbestos free	Screwed plug (903)	Steel ST
		Nut (920.01)	8+A2A/ 8+B633 SC1 TP3
		Nut (920.95)	Steel 8

Performance curve

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Curve data

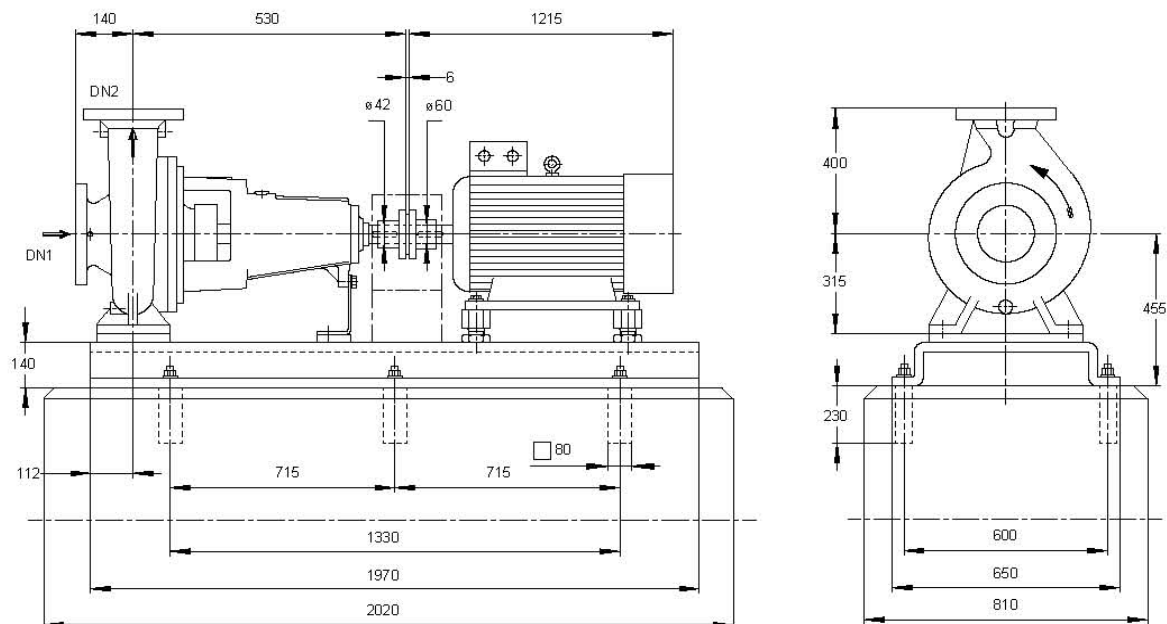
Speed of rotation	1750 rpm	Efficiency	80.7 %
Fluid density	998 kg/m³	MEI (Minimum Efficiency Index)	≥ 0.60
Viscosity	1.00 mm²/s		
Flow rate	335.09 m³/h	Power absorbed	76.74 kW
Requested flow rate	336.00 m³/h	NPSH required	3.22 m
Total developed head	67.68 m	Curve number	
Requested developed head	67.68 m	Effective impeller diameter	397.0 mm

Installation plan

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Drawing is not to scale

Dimensions in mm

Motor

Motor manufacturer
Motor size 315S
Motor power 110.00 kW
Number of poles 4
Speed of rotation 1750 rpm
Position of terminal box 0° / 360° (top)

Viewed towards the
suction nozzle

Baseplate

Design U-beam / folded plate
Size 10B
Material Steel ST
Leakage drain baseplate (8B)
Foundation bolts M28x250 (Not in scope of supply)

Connections

Suction nominal size DN1 DN 150 / EN1092-2
Discharge nominal size DN 125 / EN1092-2
DN2
Nominal pressure suct. PN 16
Rated pressure disch. PN 16

Coupling

Coupling manufacturer SEMHAI
Coupling type Supex N
Coupling size 315
Spacer 0.0 mm

Weight net

Pump 175 kg
Baseplate 129 kg
Coupling 7 kg
Coupling guard 3 kg
Motor 1000 kg
Total 1314 kg

Connect pipes without stress or strain!

**For auxiliary connections see
separate drawing.**