

Data sheet



Customer item no.:
Communication dated: 01/02/2023
Doc. no.: KSB Indonesia
Quantity: 1

Number: ES 8002227526
Item no.: 100
Date: 01/02/2023
Page: 1 / 5

KRTK 250-401/1104UNG1-S

Version no.: 1

Operating data

Requested flow rate	275.000 l/s	Actual flow rate	274.985 l/s
Requested developed head	25.00 m	Actual developed head	25.00 m
Pumped medium	Water	Efficiency	78.5 %
	Clean water	Power absorbed	85.60 kW
Pumped medium details	Not containing chemical and mechanical substances which affect the materials	Pump speed of rotation	1482 rpm
		Shutoff head	45.70 m
Ambient air temperature	30.0 °C	Design	Single system 1 x 100 %
Fluid temperature	25.0 °C	Performance test	No
Fluid density	997 kg/m ³		
Fluid viscosity	0.89 mm ² /s		
Max. power on curve	86.89 kW		

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

Design

Design	Close-coupled submersible	Impeller type	Multivane radial flow impeller (K)
Orientation	Vertical	Wear ring	Casing wear ring
Suction flange pump drilled according to(DN1)	unmachined	Impeller diameter	362.0 mm
Discharge flange pump drilled according to(DN2)	DN 250 / PN 10 / Drilled according to EN 1092-2	Free passage size	105 mm
Shaft seal	2 mech. seals in tandem arrangement with oil reservoir	Direction of rotation from drive	Clockwise
		Temperature sensor PT100	With
Shaft seal manufacturer	KSB	inboard	
Type	MG	Color	Ultramarine blue (RAL 5002) KSB-blue
Material code	SIC/SIC/NBR		

Driver, accessories

Driver type	Electric motor	Number of poles	4
Model (make)	KSB	Starting mode	Direct/Star-delta possible
Motor const. type	KSB Sub. motor	Connection mode	Delta
Frequency	50 Hz	Motor cooling method	Surface cooling
Rated voltage	400 V	Motor version	U
Rated power P2	110.00 kW	Cable design	Rubber hose
Available reserve	28.50 %	Cable entry	Sealed along entire length
Rated current	206.0 A	Power cable	S1BN8-F 4G35
Starting current ratio	6.5	Number of power cables	2
Insulation class	H according IEC 34-1	Control cable	S1BN8-F 10G1.5
Motor enclosure	IP68	Number of control cables	1
Cos phi at 4/4 load	0.84	Moisture sensor	With
Motor efficiency at 4/4 load	92.0 %		
Temperature sensor	Bimetal switch 2x	Cable length	10.00 m
Motor winding	400 / 690 V		

Data sheet



Customer item no.:
Communication dated: 01/02/2023
Doc. no.: KSB Indonesia
Quantity: 1

Number: ES 8002227526
Item no.: 100
Date: 01/02/2023
Page: 2 / 5

KRTK 250-401/1104UNG1-S

Version no.: 1

Materials G1

Notes		O-Ring (412)	Nitrile rubber NBR
General criteria for a water analysis: pH-value $\geq 6,5$; chloride content (Cl) ≤ 250 mg/kg. Chlorine (Cl ₂) ≤ 0.6 mg/kg.		Casing wear ring (502.1)	Grey cast iron EN-GJL-250
Pump casing (101)	Grey cast iron EN-GJL-250	Shaft protecting sleeve (524)	Chrome steel 1.4021+QT800
Discharge cover (163)	Grey cast iron EN-GJL-250	Motor housing (811)	Grey cast iron EN-GJL-250
Shaft (210)	Chrome steel 1.4021+QT800	Motor cable (824)	Chloroprene rubber
Impeller (230)	GX2CRNIMOCUN25-6-3-3 1.4517	Screw (900)	CrNiMo steel A4
Bearing bracket (330)	Grey cast iron EN-GJL-250		

Installation parts

Installation type	Stationary with guide wire	Type	Chain
Scope of supply	Pump with installation parts	Material	CrNiMo steel 1.4404
Installation depth	4.50 m	Length	5.00 m
Material concept	G	Max. load	2500 kg

Duckfoot bend

Size	DN 250
Flange design	EN
Duckfoot bend size (DN2 / DN3)	DN 250 Drilled according to EN
Material	Grey cast iron EN-GJL-250
Mounting type	Composite anchor bolts
Foundation rail	Without

Claw

Design	Straight
Size	DN 250

Lifting chain / -rope

Performance curve

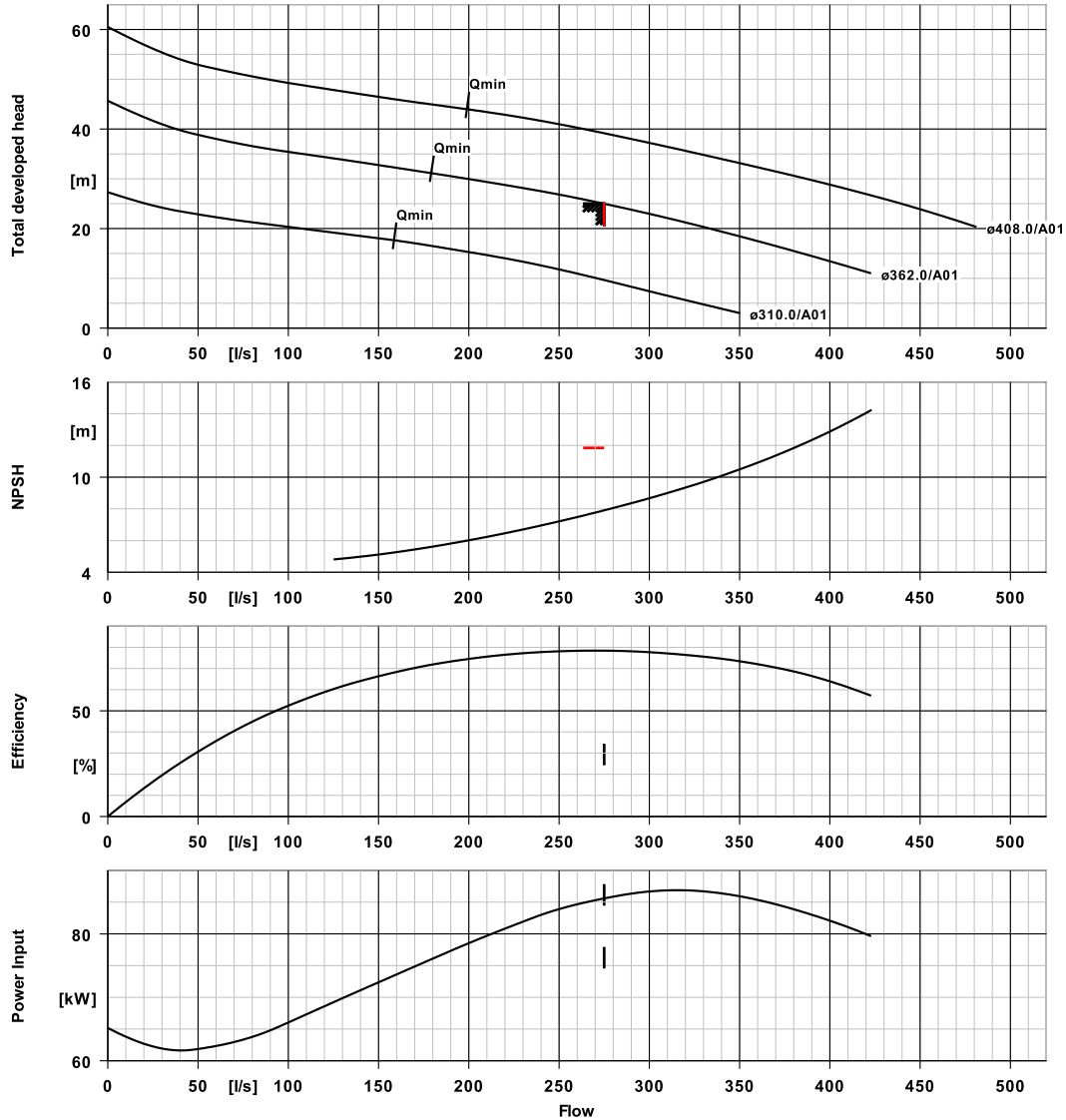


Customer item no.:
 Communication dated: 01/02/2023
 Doc. no.: KSB Indonesia
 Quantity: 1

Number: ES 8002227526
 Item no.:100
 Date: 01/02/2023
 Page: 3 / 5

KRTK 250-401/1104UNG1-S

Version no.: 1



Curve data

Speed of rotation	1482 rpm	Efficiency	78.5 %
Fluid density	997 kg/m ³	Power absorbed	85.60 kW
Viscosity	0.89 mm ² /s	NPSH 3%	7.91 m
Flow rate	274.985 l/s	Curve number	K42502s/3
Requested flow rate	275.000 l/s	Effective impeller diameter	362.0 mm
Total developed head	25.00 m	Acceptance standard	Tolerances to ISO 9906
Requested developed head	25.00 m		Class 3B; below 10 kW
			acc. to paragraph 4.4.2

Installation plan

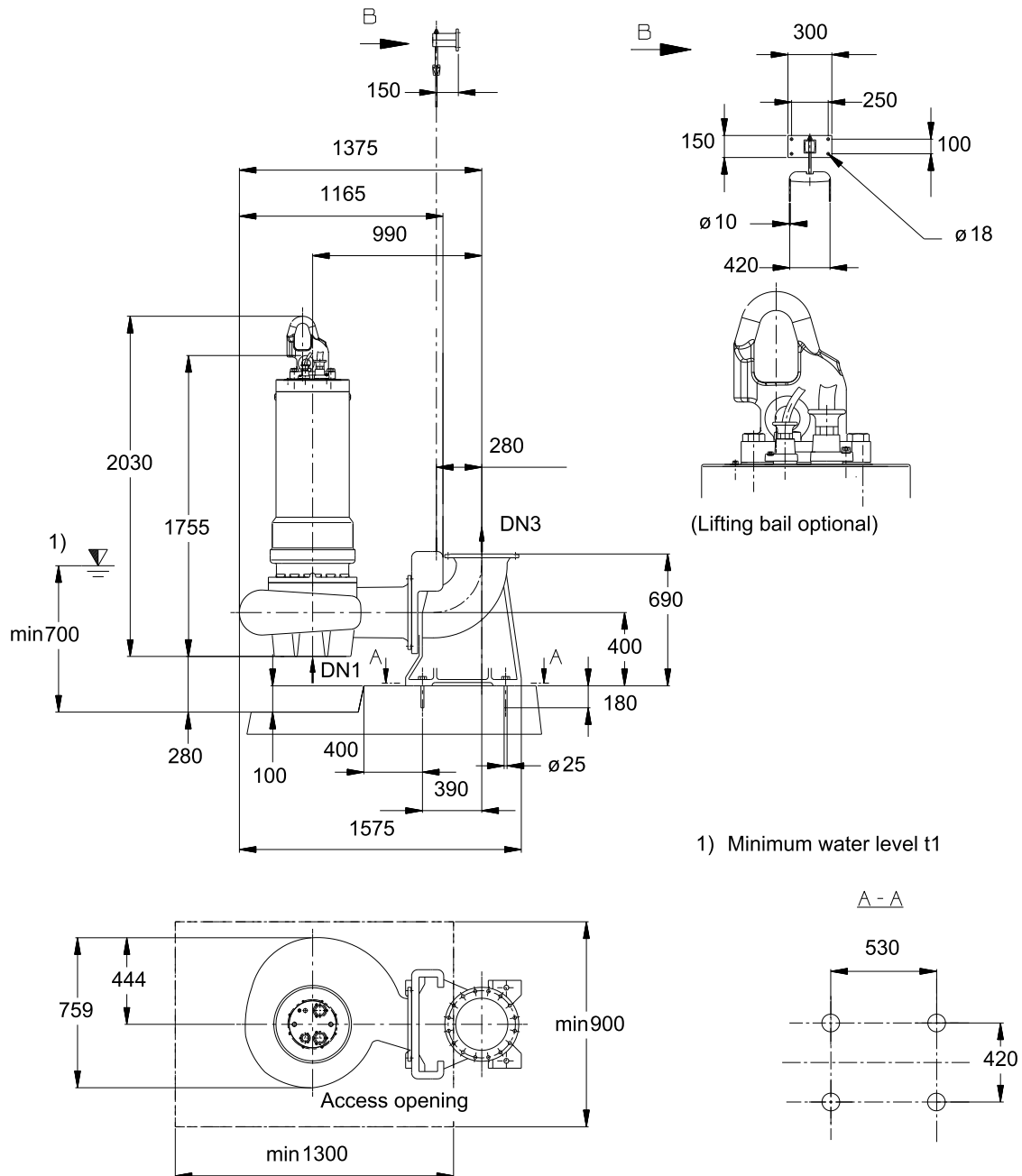


Customer item no.:
 Communication dated: 01/02/2023
 Doc. no.: KSB Indonesia
 Quantity: 1

Number: ES 800227526
 Item no.:100
 Date: 01/02/2023
 Page: 4 / 5

KRTK 250-401/1104UNG1-S

Version no.: 1



1) Minimum water level t1

Drawing is not to scale

Dimensions in mm

Installation plan



Customer item no.:
Communication dated: 01/02/2023
Doc. no.: KSB Indonesia
Quantity: 1

Number: ES 8002227526
Item no.:100
Date: 01/02/2023
Page: 5 / 5

KRTK 250-401/1104UNG1-S

Version no.: 1

Motor

Motor manufacturer	KSB
Motor size	110N
Motor power	110.00 kW
Number of poles	4
Speed of rotation	1478 rpm

Connections

Suction flange pump drilled according to(DN1)	unmachined
Duckfoot bend size (DN2 / DN3)	DN 250 Drilled according to EN

Weight net

Pump, Motor, Cable	1334 kg
Claw / Foot	295 kg
Total	1629 kg

Connect pipes without stress or strain!

Dimensional tolerances for shaft axis height: DIN 747
Dimensions without tolerances, middle tolerances to:
Connection dimensions for pumps:
Dimensions without tolerances - welded parts:
Dimensions without tolerances - gray cast iron parts:
Dimensions without tolerances - stainless steel parts:

ISO 2768-m
EN735
ISO 13920-B
ISO 8062-CT11
ISO 8062-CT12

For auxiliary connections see separate drawing.