



Quotation

Number: 4005041320 - 489

Date: 2023-05-16

Customer no.: 900018917

Please state when replying

NAPAL AS
Nõmme tee 95/Tüve 22a
13317 TALLINN
ESTONIA

Department: S-E121Indust

Responsible: Taisto Paara

E-mail: taisto.paara@ksb.com

Area Manager: Taisto Paara

Tel. No.: +372 (51) 233 74

Your inquiry: Tauri@O3.ee

Dear Sirs,

thank you for your enquiry. We are pleased to offer the following for your consideration.

In case of any questions please ask the named contact person.

Due to the armed conflict between Russia and Ukraine, the supply situation and the price development for steel and other raw materials and supplies are difficult to predict. The present quotation has therefore a binding period of 4 weeks. Dispatch dates are subject to the timely, complete and correct delivery to KSB itself.

Item	Description	Part no.	Quantity Unit	Price per Unit	Value Currency (EUR)
*000100	02001180 Submersible Motor Pump KRTF 50-216/24UEC1-P IE3 Scope of supply as per data sheet		1,00 PC	9.956,00	9.956,00
Total					9.956,00
Final amount				EUR	9.956,00

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Number: 4005041320 - 489

Date: 2023-05-16

Page: 2 / 8

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All our orders will be carried out in accordance with our general conditions NL17, if nothing else is agreed.

The Parties are aware that the Covid-19 pandemic can have consequences which might have a direct or indirect negative impact on the provision of Supplies and Services and the performance dates/schedule. Due to the unforeseeable and constant change of the pandemic situation, the Parties agree that consequences of any such pandemic shall be deemed as events of Force Majeure. Should such consequences realize during the execution of the Contract / Agreement / Purchase Order and affect Suppliers ability to perform in accordance with the Contract / Agreement/ Purchase Order within the agreed performance date / schedule, Contractor/ Supplier / Seller will issue a notification in accordance with the agreed provisions on Force Majeure and the respective consequences of Force Majeure shall apply.

Notwithstanding the foregoing, the "Covid-19 pandemic" abovementioned is only used for definition and it shall include possible virus variation and/or evolution situations related all over the world, no matter known or unknown to the public.

Time of Delivery:	5 working weeks after all technical and commercial issues have been clarified with reservation for intermediate sales.
Delivery terms:	CIP Incoterms 2020 according to INCOTERMS 2020
Payment terms:	30 days after date of invoice net.
Packaging type:	A0: Appropriate packing selected by KSB
Validity:	16.06.2023
Warranty:	<p>The warranty period for KSB's scope of supply/services shall be 12 months from the date of commissioning, but no longer than 18 months after transfer of risk acc. to the agreed INCOTERM 2020.</p> <p>This does not apply to items from KSB's scope of supply/services marked with an asterisk (*), which shall be covered by a warranty period of 24 months from the passing of risk pursuant to the agreed INCOTERM 2020.</p>

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Page: 3 / 8

NAPAL AS
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Reservation Clause:

The fulfilment of the contract shall be subject to the reservation that there are no impediments due to national or international foreign trade regulations as well as no embargoes and / or other sanctions to be observed - specifically from EU, EU- states and from USA.

In case such impediment exists or if the required authorisations are not granted, the quotation shall be deemed not to have been submitted with regard to the relevant delivery and service obligations and the relevant contract not to have been concluded. All rights to claims for damages by the customer in the event of non-fulfilment of the delivery and service obligations due to existing impediments, imminent danger of sanctions or due to required authorisations not being granted, for which KSB cannot be held responsible, shall be excluded.

The customer as exporter according to applicable law is obliged to fulfil respective applicable regulations from EU, EU-states and from USA.

Yours faithfully,

KSB Finland Oy

Data sheet



Customer pos. no.:
Inquiry date: 0000-00-00
Inquiry no.: Tauri@O3.ee
Quantity: 1,000

Number: 4005041320 - 489
Line: 000100
Date: 2023-05-16
Page: 4 / 8

KRTF 50-216/24UEC1-P IE3

Version no.: 1

Operating data

Requested flow rate	8.00 m ³ /h	Actual flow rate	8.04 m ³ /h
Requested developed head	8.00 m	Actual developed head	8.08 m
Pumped medium	Water, contaminated water	Efficiency	37.6 %
Pumped medium details	Grey water (acc. to EN 12056) Not containing chemical and mechanical substances which affect the materials	Power absorbed	0.47 kW
Ambient air temperature	20.0 °C	Pump speed of rotation	1481 rpm
Fluid temperature	20.0 °C	Shutoff head	8.68 m
Fluid density	1000 kg/m ³	Design	Single system 1 x 100 %
Fluid viscosity	1.00 mm ² /s	Performance test	No
Max. power on curve	0.95 kW		
			Tolerances to ISO 9906 Class 3B; below 10 kW acc. to paragraph 4.4.2

Design

Design	Close-coupled submersible	Type	4STQ
Orientation	Vertical	Material code	SIC/SIC/FPM
Suction flange pump drilled according to(DN1)	unmachined	Impeller type	Free flow (vortex) impeller (F- max)
Discharge flange pump drilled according to(DN2)	DN 50 / PN 10 / Drilled according to EN 1092-2	Impeller diameter	150.0 mm
Shaft seal	Double acting shaft seal cartridge in tandem arrangement with oil reservoir.	Free passage size	25 mm
		Direction of rotation from drive	Clockwise
Shaft seal manufacturer	KSB		

Driver, accessories

Driver type	Electric motor	Temperature sensor	Bimetal switch 2x
Model (make)	KSB	Motor winding	400 V
Motor const. type	KSB Sub. motor	Number of poles	4
Efficiency class	Efficiency class IE3 acc. to IEC60034-30-1	Starting mode	Direct-on-line starting
Frequency	50 Hz	Connection mode	Star
Rated voltage	400 V	Motor cooling method	Surface cooling
Rated power P2	1.30 kW	Motor version	U
Available reserve	175.48 %	Cable design	Tefzel cable
Rated current	2.8 A	Cable entry	Sealed along entire length
Starting current ratio	8.4	Power cable	TEHSITE 8x1.5
Insulation class	H according IEC 34-1	Number of power cables	1
Motor enclosure	IP68	Moisture sensor	With
Cos phi at 4/4 load	0.78	Cable length	10.00 m
Motor efficiency at 4/4 load	84.7 %		

Data sheet



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Page: 5 / 8

KRTF 50-216/24UEC1-P IE3

Version no.: 1

Materials C1

Pump casing (101)	GX2CRNIMOCUN25-6-3-3 1.4517	O-Ring (412)	Fluor caoutchouc FPM
Discharge cover (163)	GX2CRNIMOCUN25-6-3-3 1.4517	Motor housing (811)	GX2CRNIMOCUN25-6-3-3 1.4517
Shaft (210)	Duplex stainless steel 1.4462	Motor cable (824)	ETFE (Tefzel)
Impeller (230)	GX2CRNIMOCUN25-6-3-3 1.4517	Screw (900)	CrNiMo steel A4
Bearing bracket (330)	GX2CRNIMOCUN25-6-3-3 1.4517		

Packaging

Packaging category	A0 Packing acc. to KSB choice	Packaging for transport	Truck
Packaging for storage	Indoor	Packaging for country	Germany

Nameplates

Nameplates language	International	Duplicate nameplate	With
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Installation parts

Installation type	Portable	Lifting chain / -rope	
Scope of supply	Pump with installation parts		
Installation depth	4.50 m		
Material concept	C1		
Foot			
Size		Type	Rope
Foot type	Footplate	Material	Polypropylene
Material		Length	5.00 m
		Max. load	200 kg
		Lifting Bail	With

Performance curve

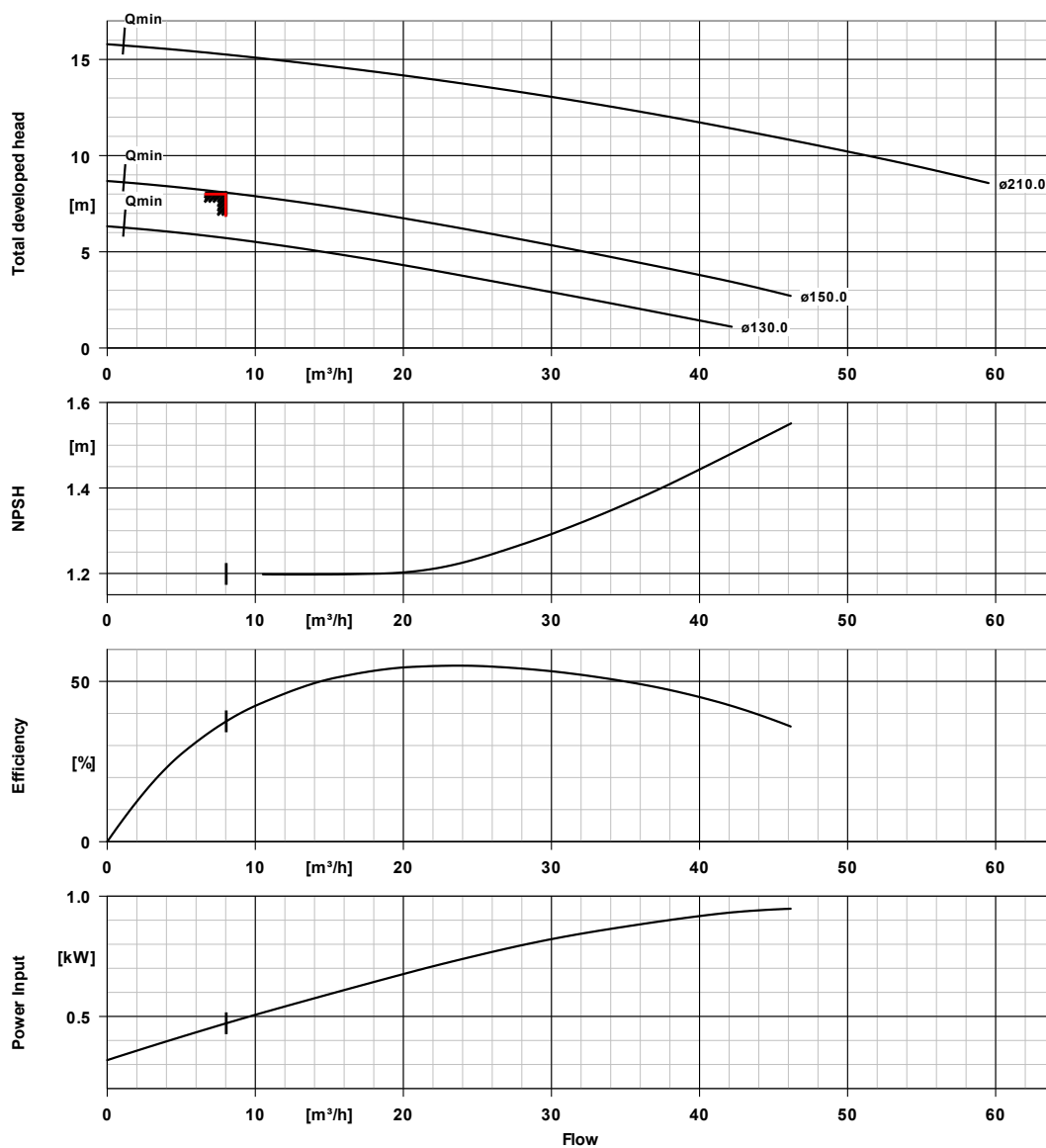


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Line: 000100
Date: 2023-05-16
Page: 6 / 8

KRTF 50-216/24UEC1-P IE3

Version no.: 1



Curve data

Speed of rotation	1481 rpm	Efficiency	37.6 %
Fluid density	1000 kg/m³	Power absorbed	0.47 kW
Viscosity	1.00 mm²/s	NPSH 3%	1.20 m
Flow rate	8.04 m³/h	Curve number	K43322/4
Requested flow rate	8.00 m³/h	Effective impeller diameter	150.0 mm
Total developed head	8.08 m	Acceptance standard	Tolerances to ISO 9906
Requested developed head	8.00 m		Class 3B; below 10 kW
			acc. to paragraph 4.4.2

Installation plan



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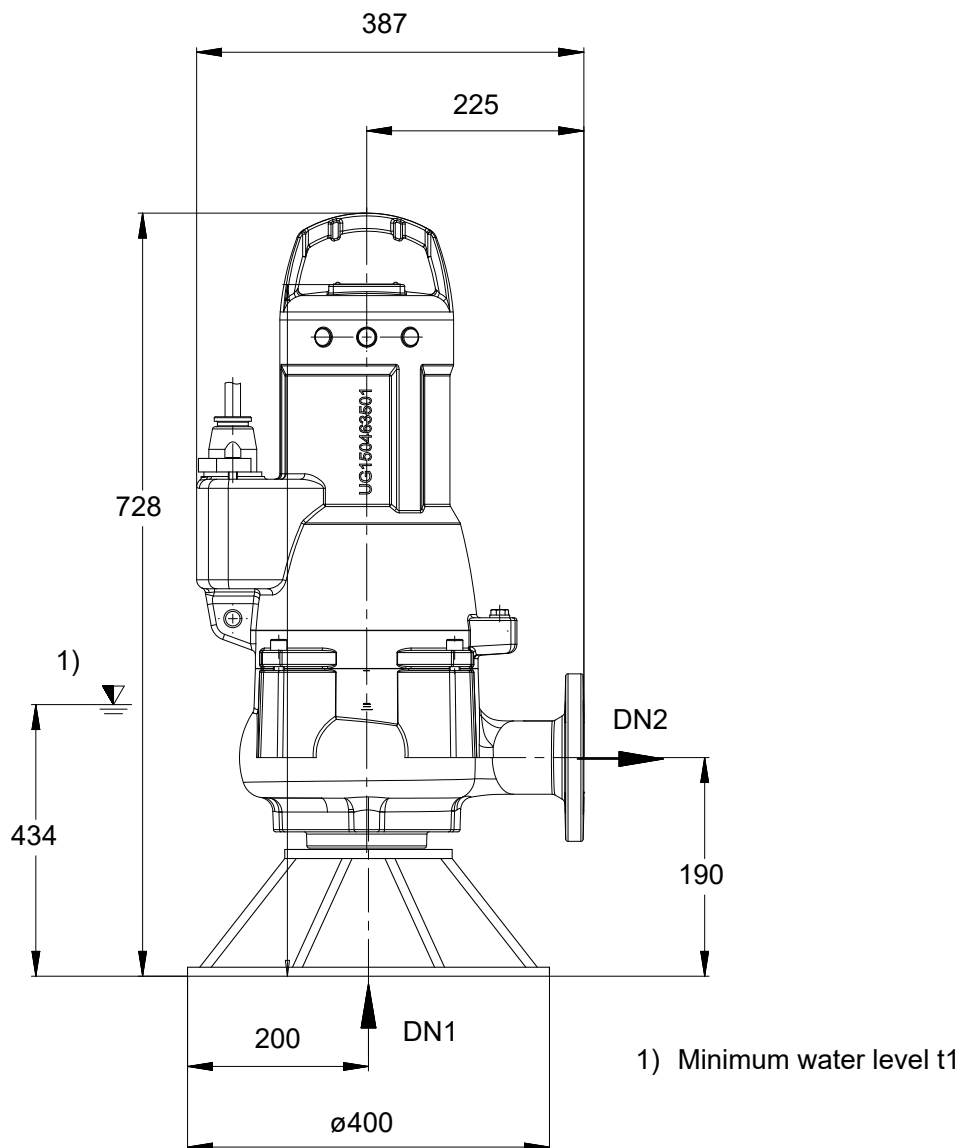
Line: 000100

Date: 2023-05-16

Page: 7 / 8

KRTF 50-216/24UEC1-P IE3

Version no.: 1



Drawing is not to scale

Dimensions in mm

Installation plan



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Page: 8 / 8

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Motor

Motor manufacturer	KSB
Motor size	2E
Motor power	1.30 kW
Number of poles	4
Speed of rotation	1447 rpm

Connections

Suction flange pump drilled according to(DN1)	unmachined
Discharge flange pump drilled according to(DN2)	DN 50 / PN 10 / Drilled according to EN 1092-2

Weight net

Pump, Motor, Cable	91 kg
Claw / Foot	5 kg
Total	96 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.