#### Qty. | Description

1

#### NK 125-200/176-150 BA2F2AESBQQEHW5



Note! Product picture may differ from actual product

Product No.: 98973281

Non-self-priming, single-stage, centrifugal pump designed according to ISO 5199 with dimensions and rated performance according to EN 733. Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, a radial discharge port and horizontal shaft. It is of the back pull-out design enabling removal of the coupling, bearing bracket and impeller without disturbing the motor, pump housing or pipework.

The unbalanced rubber bellows seal is according to DIN EN 12756.

The pump is fitted with a foot-mounted, fan-cooled asynchronous motor. Pump and motor are mounted on a common base frame.

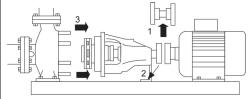
The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

Pump and motor are mounted on a common steel base frame in accordance with ISO 3661.

The back pull-out design together with a spacer coupling makes it possible to service the pump without dismantling the pump housing and motor from the base frame.

This saves realignment of pump and motor after service.

- 1) Remove coupling.
- 2) Remove the bolts in the bearing bracket support foot.
- 3) Remove the bearing bracket from the pump housing.



#### Pump

The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

{IMG Filename: GRALON NB-NK-G SHAFTSEAL Bxxx.gif }

Seal faces:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

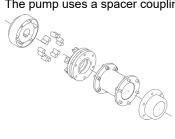
This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

The shaft is made of stainless steel and has a diameter of 32 mm where the coupling is mounted.

The pump uses a spacer coupling between the pump and motor shaft.



#### **Motor**

#### Qty. | Description

1 The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).

The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

#### Further product details

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

#### **Technical data**

Controls:

Frequency converter: NONE Pressure sensor: N

Liquid:

Pumped liquid: Water
Liquid temperature range: -25 .. 120 °C
Selected liquid temperature: 20 °C
Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 970 rpm

Rated flow: 137.1 m<sup>3</sup>/h

Pump with motor (Yes/No): Y
Rated head: 2.9 m
Actual impeller diameter: 163 mm
Nominal impeller diameter: 200
Code for shaft seal: BQQE
Mechanical seal type: Single

Curve tolerance: ISO9906:2012 3B2

Bearing design: Standard

Materials:

Pump housing: Cast iron

EN-GJL-250 ASTM class 35

Wear ring: Brass
Impeller: Cast iron
EN-GJL-200

ASTM class 30

Internal pump house coating: CED

Shaft: Stainless steel

EN 1.4301 AISI 304

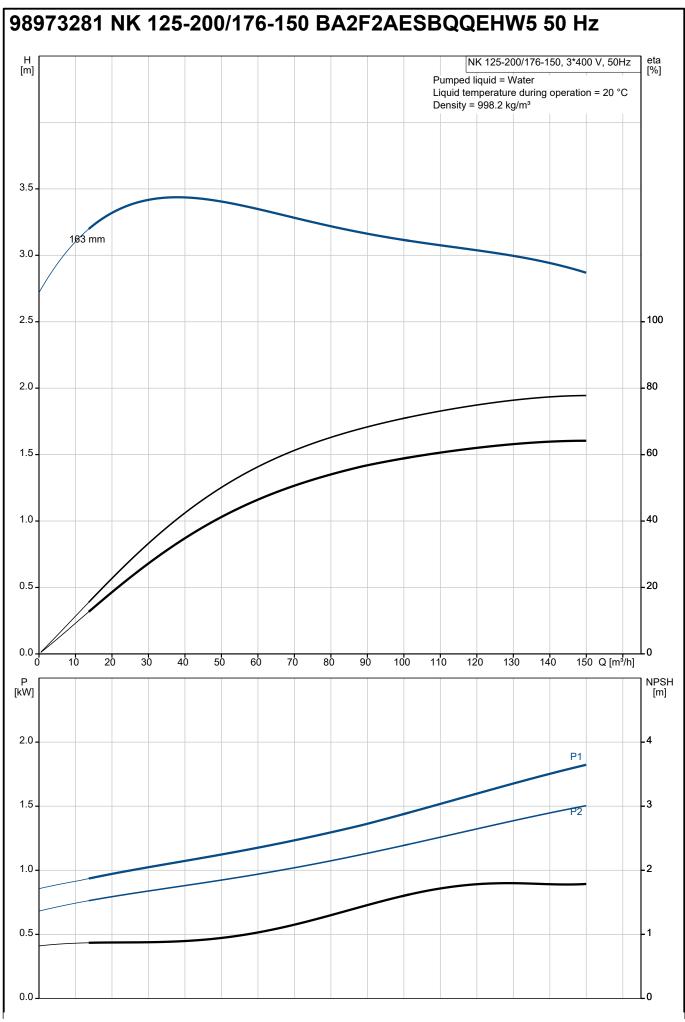
Installation:

t max amb: 55 °C Maximum operating pressure: 16 bar EN 1092-2 Pipe connection standard: DIN Type of inlet connection: Type of outlet connection: DIN Size of inlet connection: DN 150 Size of outlet connection: DN 125 Pressure rating for connection: PN 16

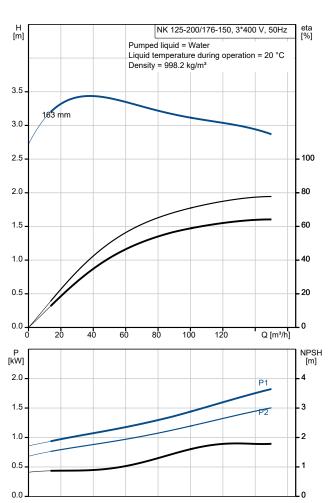
Coupling type: Flexible w/spacer

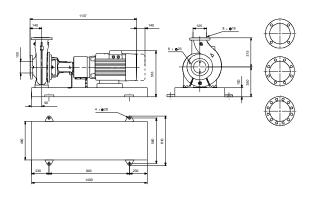
Base frame design: EN/ISO Code for base frame: 7

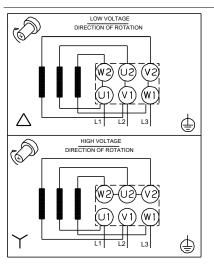
### Qty. Description Grouting (Yes/No): Ν Electrical data: Motor type: **SIEMENS** IE Efficiency class: IE3 Rated power - P2: 1.5 kW Mains frequency: 50 Hz 3 x 220-240D/380-420Y V Rated voltage: Rated current: 6.3/3.6 A 520-520 % Starting current: Cos phi - power factor: 0.73 Rated speed: 970 rpm Efficiency: IE3 82,5% Motor efficiency at full load: 82.5-82.5 % Motor efficiency at 3/4 load: 83.1-83.1 % Motor efficiency at 1/2 load: 81.5-81.5 % Number of poles: Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 98957420 Bearing insulation type N-end: STEEL BEARING Minimum efficiency index, MEI ≥: 0.70 Net weight: 270 kg Gross weight: 379 kg Shipping volume: 1.11 m<sup>3</sup> Country of origin: HU Custom tariff no.: 84137059



Description	Value		
General information:	NIZ 125 200/476 450		
Product name:	NK 125-200/176-150 BA2F2AESBQQEHW5		
Product No:	98973281		
EAN number:	5712604501887		
Technical:			
Pump speed on which pump data	970 rpm		
are based:	137.1 m³/h		
Rated flow:	Y		
Pump with motor (Yes/No): Rated head:	2.9 m		
Actual impeller diameter:	163 mm		
Nominal impeller diameter:	200		
Shaft diameter:	32 mm		
Code for shaft seal:	BQQE		
Mechanical seal type:	Single		
Curve tolerance:	ISO9906:2012 3B2		
Pump version:	A2		
Bearing design:	Standard		
Materials:			
Pump housing:	Cast iron		
Pump housing:	EN-GJL-250		
Pump housing:	ASTM class 35		
Wear ring:	Brass		
Impeller:	Cast iron		
Impeller:	EN-GJL-200		
Impeller:	ASTM class 30		
Internal pump house coating:	CED		
Material code:	A F		
Code for rubber: Shaft:	Stainless steel		
Shaft:	EN 1.4301		
Shaft:	AISI 304		
Installation:	71101 004		
t max amb:	55 °C		
Maximum operating pressure:	16 bar		
Pipe connection standard:	EN 1092-2		
Type of inlet connection:	DIN		
Type of outlet connection:	DIN		
Size of inlet connection:	DN 150		
Size of outlet connection:	DN 125		
Pressure rating for connection:	PN 16		
Coupling type:	Flexible w/spacer		
Base frame design:	EN/ISO		
Code for base frame:	7		
Grouting (Yes/No):	N		
Connect code:	F		
Liquid:	Water		
Pumped liquid:	Water -25 120 °C		
Liquid temperature range: Selected liquid temperature:	-25 120 °C		
Density:	998.2 kg/m³		
Electrical data:	555.2 Ng/III		
Motor type:	SIEMENS		
IE Efficiency class:	IE3		
Rated power - P2:	1.5 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 220-240D/380-420Y V		
Rated current:	6.3/3.6 A		
Starting current:	520-520 %		
Cos phi - power factor:	0.73		
Rated speed:	970 rpm		
Efficiency:	IE3 82,5%		
Motor efficiency at full load:	82 5-82 5 %		







82.5-82.5 %

Motor efficiency at full load:

Description	Value
Motor efficiency at 3/4 load:	83.1-83.1 %
Motor efficiency at 1/2 load:	81.5-81.5 %
Number of poles:	6
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	NONE
Motor No:	98957420
Bearing insulation type N-end:	STEEL BEARING
Controls:	
Frequency converter:	NONE
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	270 kg
Gross weight:	379 kg
Shipping volume:	1.11 m³
Country of origin:	HU
Custom tariff no.:	84137059

## 98973281 NK 125-200/176-150 BA2F2AESBQQEHW5 50 Hz 8 × ⊕ 19 $\bigoplus$ Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.

# 98973281 NK 125-200/176-150 BA2F2AESBQQEHW5 50 Hz **LOW VOLTAGE** DIRECTION OF ROTATION **HIGH VOLTAGE DIRECTION OF ROTATION** Note! All units are in [mm] unless others are stated.

Order Data:						
Position	Your pos.		Amount	Product No	Total	
		NK 125-200/176-150	1	98973281	Price on request	
					request	