

Qty.	Description
------	-------------

1	CRN 45-4 A-F-H-E-HQQE
---	-----------------------



Note! Product picture may differ from actual product

Product No.: [96691398](#)

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via DIN flanges.

### Further product details

An external sensor can be connected if controlled pump operation based on for example flow, differential pressure or temperature is required.

Steel, cast iron and aluminium components 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.

An integral part of the process is a pretreatment.

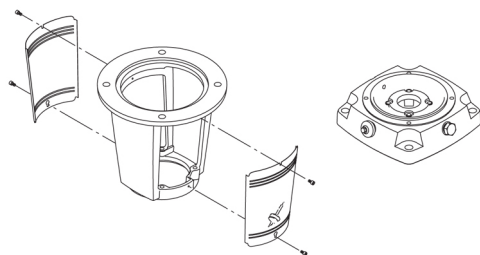
The entire process consists of these elements:

- 1) Alkaline-based cleaning.
- 2) Zinc phosphating.
- 3) Cathodic electro-deposition.
- 4) Curing to a dry film thickness 18-22 my m.

The colour code for the finished product is NCS 9000/RAL 9005.

### Pump

The motor stool connects the pump head and motor. The pump head has a combined 1/2" priming plug and vent screw.



The pump is fitted with a balanced O-ring seal unit with a rigid torque-transmission system.

This seal type is assembled in a cartridge unit which makes replacement safe and easy.

Due to the balancing, this seal type is suitable for high-pressure applications.

The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.

Seal faces:

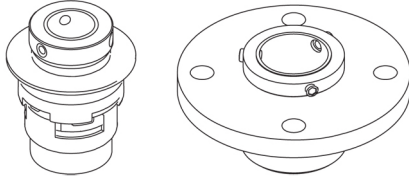
- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

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)

**Qty. Description**

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



The shaft seal is retained in the pump head by a cover and screws. It can be replaced without removing the motor.

The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.

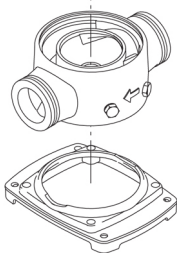
The pump has a stainless-steel base mounted on a separate base plate.

The base and base plate are kept in position by the tension of the staybolts which hold the pump together.

Both the inlet and the outlet side of the base have two pressure gauge tapings.

The pump is secured to the foundation by four bolts through the base plate.

The flanges are fastened to the base by means of locking rings.



**Motor**

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

**Technical data**

**Liquid:**

Pumped liquid: Water  
 Liquid temperature range: -40 .. 120 °C  
 Selected liquid temperature: 20 °C  
 Density: 998.2 kg/m<sup>3</sup>

**Technical:**

Pump speed on which pump data are based: 2923 rpm  
 Rated flow: 45 m<sup>3</sup>/h  
 Rated head: 79.6 m  
 Pump orientation: Vertical  
 Shaft seal arrangement: Single  
 Code for shaft seal: HQQE  
 Approvals: CE,EAC,UKCA,SEPRO  
 Approvals for drinking water: WRAS,ACS  
 Curve tolerance: ISO9906:2012 3B

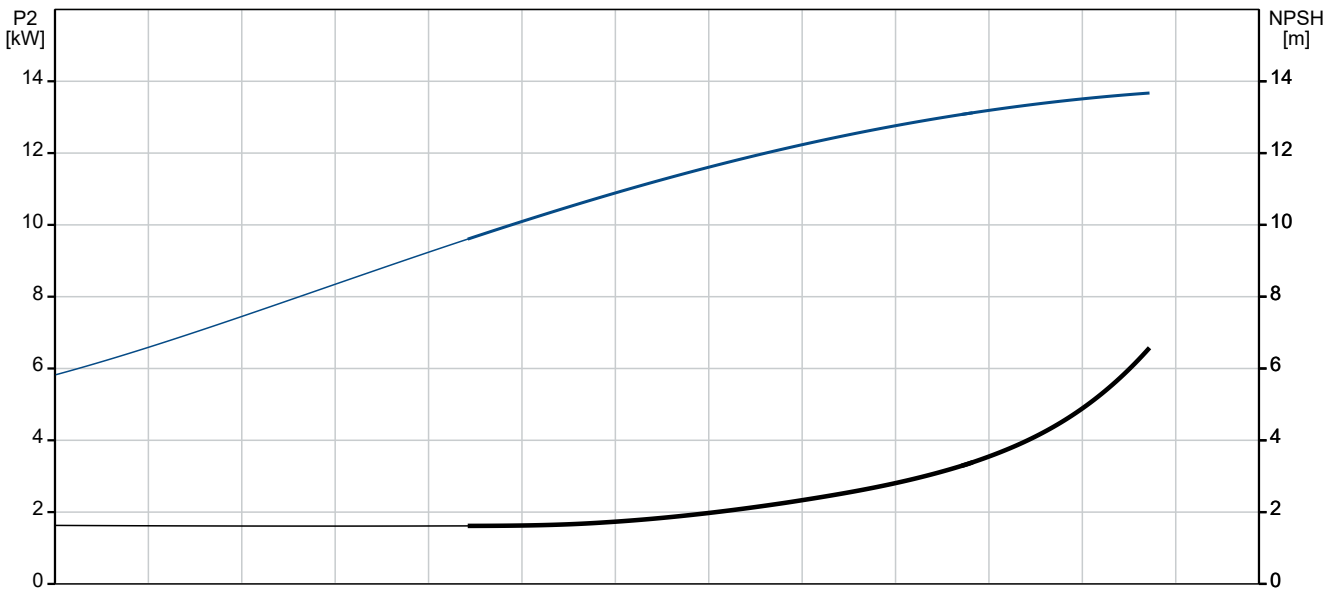
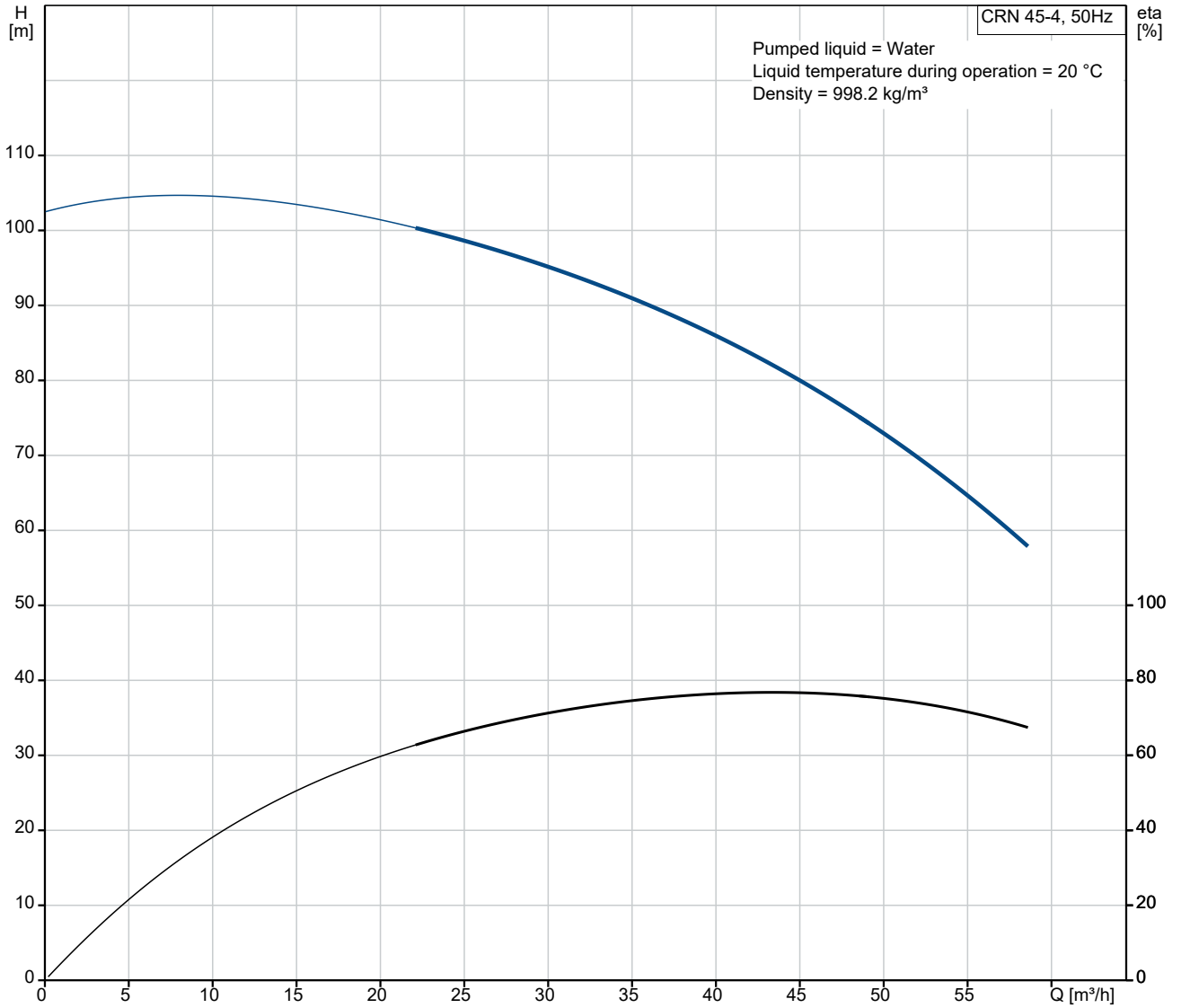
**Materials:**

Base: Stainless steel  
 EN 1.4408  
 AISI 316  
 Impeller: Stainless steel  
 EN 1.4401

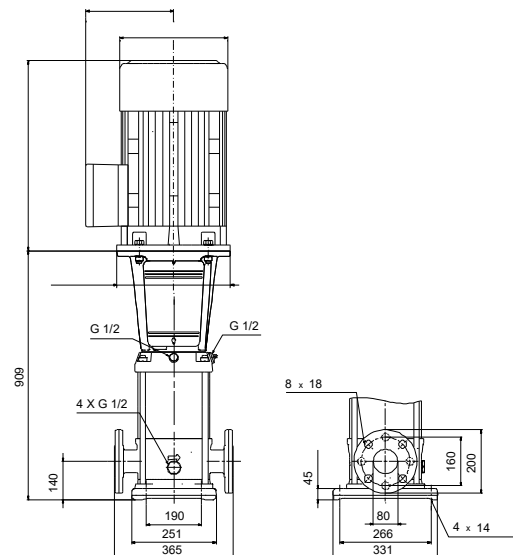
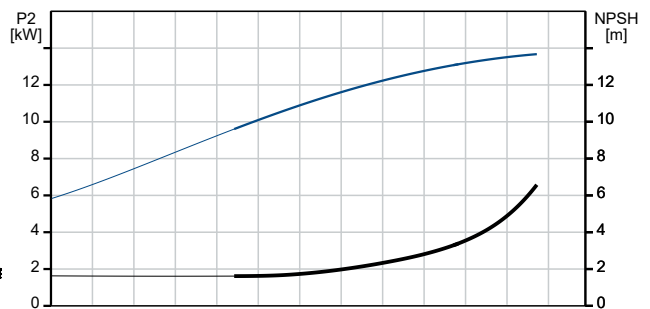
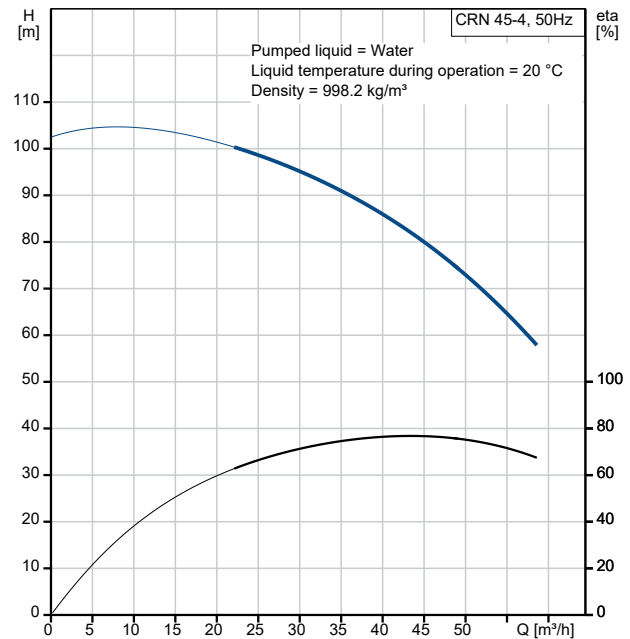
Qty.	Description
------	-------------

1	<p>AISI 316 Graflon</p> <p>Support bearing:</p> <p>Installation:</p> <p>Maximum operating pressure: 16 bar Max pressure at stated temp: 16 bar / 120 °C 16 bar / -40 °C</p> <p>Type of connection: DIN Size of inlet connection: DN 80 Size of outlet connection: DN 80 Pressure rating for connection: PN 40 Flange size for motor: FF300</p> <p>Electrical data:</p> <p>Motor standard: IEC Power (P2) required by pump: 15 kW</p> <p>Controls:</p> <p>Frequency converter: NONE Pressure sensor: N</p> <p>Others:</p> <p>Minimum efficiency index, MEI ≥: 0.70 Net weight: 178 kg Gross weight: 212 kg Shipping volume: 0.495 m<sup>3</sup></p>
---	--

## 96691398 CRN 45-4 A-F-H-E-HQQE 50 Hz



Description	Value
<b>General information:</b>	
Product name:	CRN 45-4 A-F-H-E-HQQE
Product No:	96691398
EAN number:	5700837242462
<b>Technical:</b>	
Pump speed on which pump data are based:	2923 rpm
Rated flow:	45 m <sup>3</sup> /h
Rated head:	79.6 m
Maximum head:	102.4 m
Stages:	4
Impellers:	4
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals:	CE,EAC,UKCA,SEPRO
Approvals for drinking water:	WRAS,ACS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	B
<b>Materials:</b>	
Base:	Stainless steel
Base:	EN 1.4408
Base:	AISI 316
Impeller:	Stainless steel
Impeller:	EN 1.4401
Impeller:	AISI 316
Material code:	H
Code for rubber:	E
Support bearing:	Graflon
<b>Installation:</b>	
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 120 °C
Max pressure at stated temp:	16 bar / -40 °C
Type of connection:	DIN
Size of inlet connection:	DN 80
Size of outlet connection:	DN 80
Pressure rating for connection:	PN 40
Flange size for motor:	FF300
Connect code:	F
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	-40 .. 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Motor standard:	IEC
Power (P2) required by pump:	15 kW
<b>Controls:</b>	
Frequency converter:	NONE
Pressure sensor:	N
<b>Others:</b>	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	178 kg
Gross weight:	212 kg





Company name:

Created by:

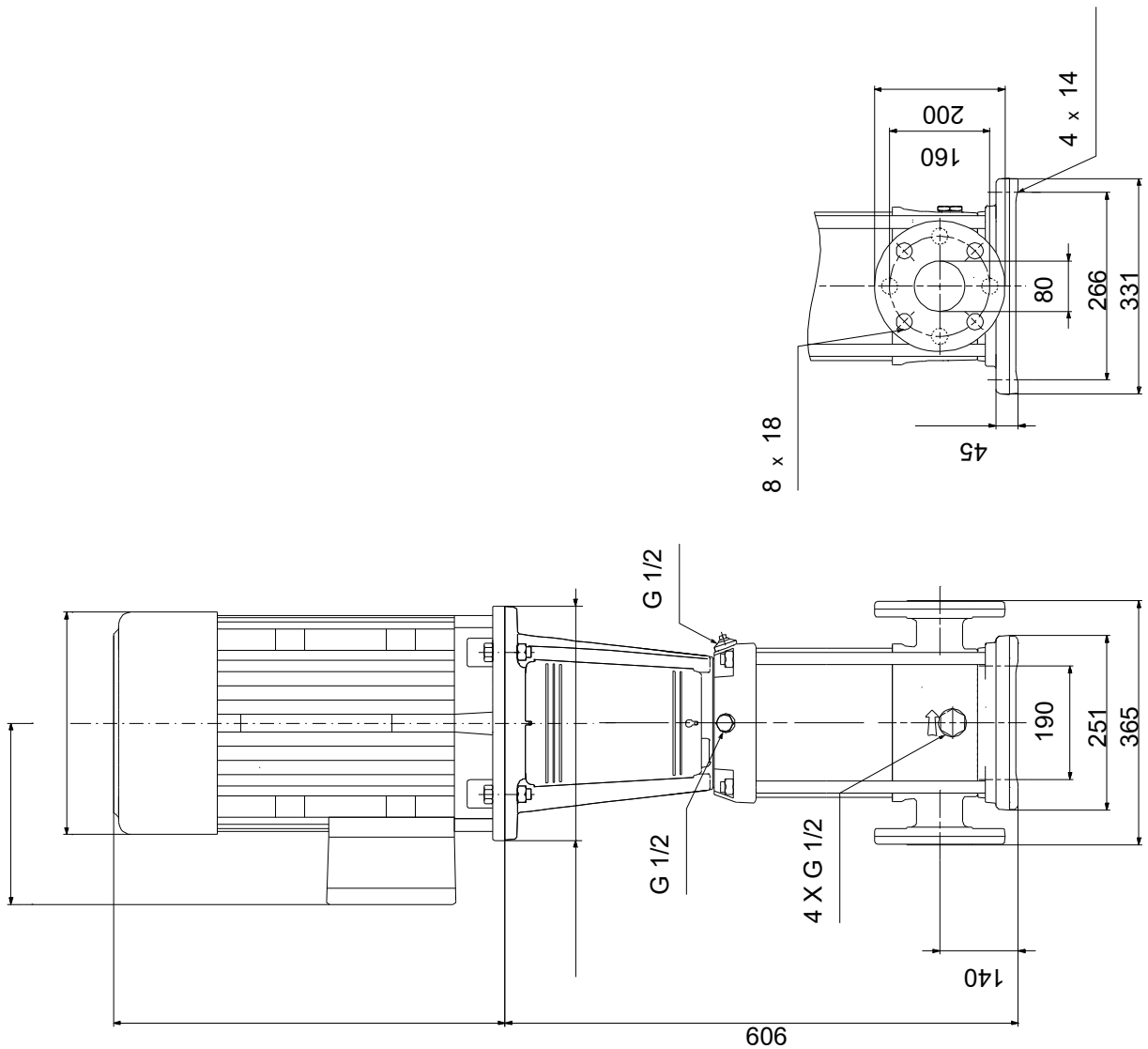
Phone:

Date:

30/11/2022

Description	Value
Shipping volume:	0.495 m <sup>3</sup>

## 96691398 CRN 45-4 A-F-H-E-HQQE 50 Hz



Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.



Company name:

Created by:

Phone:

Date:

30/11/2022

**Order Data:**

Position	Your pos.	Product name	Amount	Product No	Total
		CRN 45-4	1	96691398	Price on request