## Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
	TYPE OF SERVICE:	
REPRESENTATIVE:	SUBMITTED BY:	DATE:
ENGINEER:	APPROVED BY:	DATE:
CONTRACTOR:	ORDER NO.:	DATE:

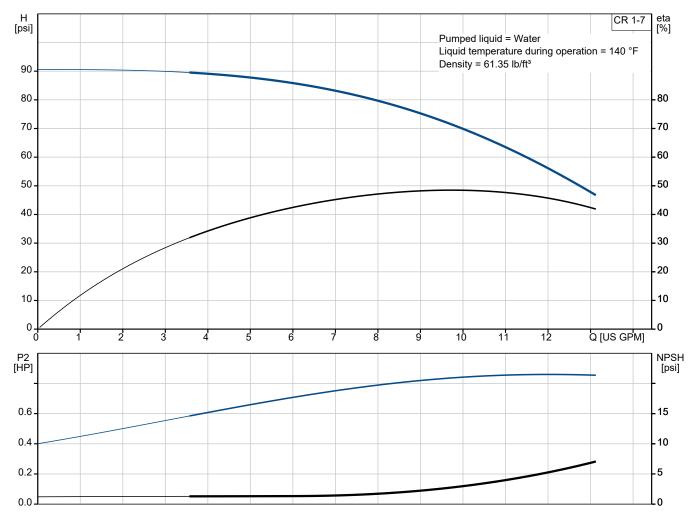


### CR 1-7 A-B-A-E-HQQE

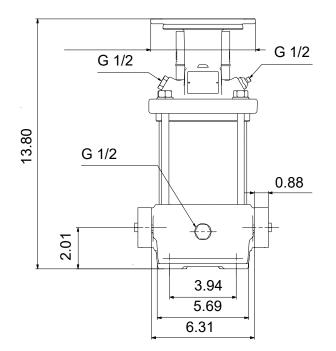
Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron - all other wetted parts are in stainless steel (EN 1.4301)

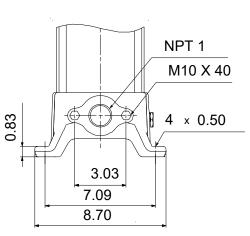
Note! Product picture may differ from actual product

Conditions of Service		Pump Data	Motor Data			
Liquid: Temperature: Specific Gravity:	Water 140 °F 0.985	Max pressure at stated temp: Liquid temperature range: Shaft seal: Product number:	232 psi / 250 °F -4 248 °F HQQE 96081956	Mains frequency:	60 Hz	



# Submittal Data





Materials:	
Base:	Cast iron
	EN 1561 EN-GJL-200
	ASTM A48-25B
Impeller:	Stainless steel
	AISI 304
	EN 1.4301
Material code:	Α
Code for rubber:	E



22/04/2025

Qty. | Description

1

# CR 1-7 A-B-A-E-HQQE

Note! Product picture may differ from actual product

Product No.: 96081956 Pump without motor

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in 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 oval flanges with internal NPT threads.

#### Further product details

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.

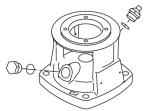
An integral part of the process is a pretreatment.

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 pump head, pump head cover and flange for motor mounting is made in one piece. 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)

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



22/04/2025

Qty. | Description

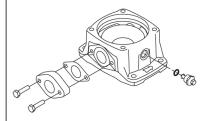
1



The shaft seal is screwed into the pump head.

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 base is made of cast iron. The oval flanges are bolted to the base. The outlet side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate.

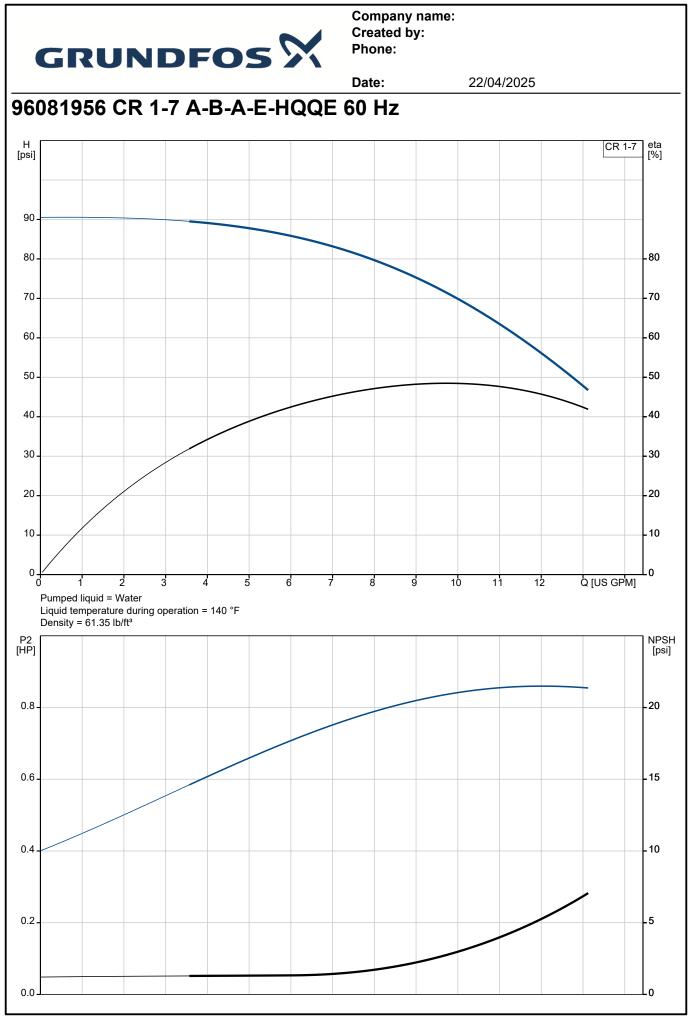


Motor The pump is sold without motor. Technical data

Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -4 248 °F 140 °F 61.35 lb/ft³
Technical: Pump speed on which pump data Rated flow: Rated head: Pump orientation: Shaft seal arrangement: Primary shaft seal: Code for shaft seal: Approvals: Approvals for drinking water: Curve tolerance:	are based: 3439 rpm 9.69 US GPM 65.17 psi Vertical Single HQQE HQQE CE NSF/ANSI 61 ISO9906:2012 3B
Materials: Base: Impeller: Bearing:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Stainless steel EN 1.4301 AISI 304 SIC
Installation: Maximum operating pressure:	232.06 psi



			Date:	22/04/2025
Qty.	Description			
1	Max pressure at stated temp:	232 psi / 250 °F		
		232 psi / -4 °F		
	Type of connection:	Oval / NPT(F)		
	Size of inlet connection:	1 inch		
	Size of outlet connection:	1 inch		
	Pressure rating for connection:	PN 16		
	Flange size for motor:	56C		
	Electrical data:			
	Motor standard:	NEMA		
	Power (P2) required by pump:	0.75 HP		
	Controls:			
	Frequency converter:	None		
	Others:			
	Net weight:	33.5 lb		
	Gross weight:	44.5 lb		
	Shipping volume:	4.94 ft <sup>3</sup>		
	Country of origin:	US		
	Custom tariff no.:	8413.70.2040		



#### Printed from Grundfos Product Centre [2025.16.000]



Description	Value	H							CR 1-7	eta
Description General information:	Value	[psi]								[%]
	CR 1-7 A-B-A-E-HQQE	90								
Product name:		90								
Product No:	96081956	80	_							- 80
EAN number:	5700395166941	70								70
Technical:		10								۲°
Pump speed on which pump data are based:	3439 rpm	- 60 50								- 60 - 50
Rated flow:	9.69 US GPM	50								Γ
Rated head:	65.17 psi	40	-							40
Maximum head:	87.27 psi	30								30
Stages:	7	00								Γ
Impellers:	7	20	-	/						20
Number of reduced-diameter impellers:	0	10								10
Low NPSH:	N									
Pump orientation:	Vertical	0	<u> </u>	2	4	6	8	10	Q [US GPM]	Lο
Shaft seal arrangement:	Single		Pumpod	ے اiquid = ۱		0	U	10		
Primary shaft seal:	HQQE		Liquid te	mperatur	e during	operatio	n = 140 °F			
Code for shaft seal:	HQQE		Density	= 61.35 II	o/ft³					<b>-</b>
Approvals:	CE	P2 [HP]								NPS [psi
Approvals. Approvals for drinking water:	NSF/ANSI 61									<sup></sup>
Curve tolerance:	ISO9906:2012 3B	0.8								20
Pump version: Model:	A	0.6	_							15
Materials:	A									
	Castiron	- 04								10
Base:	Cast iron	0.4								10
	EN 1561 EN-GJL-200								/	
	ASTM A48-25B	0.2	-							- 5
Impeller:	Stainless steel	-								
	EN 1.4301	0.0								L
	AISI 304	_								-
Material code:	A					ı				
Code for rubber:	E	_				• G 1/2				
Bearing:	SIC	_	<u>G 1</u>	/2 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
Installation:					<u>m</u>	)				
Maximum operating pressure:	232.06 psi	.80		Ĭ			I			
Max pressure at stated temp:	232 psi / 250 °F	13.	<u>G 1/2</u>			0.00			NPT 1	
	232 psi / -4 °F			Д		0.88	ļ		M10 X 40	
Type of connection:	Oval / NPT(F)		5	┥┟	6 1	-+-	0.83	\$ <del>\$</del> }	4 × 0.50	
Size of inlet connection:	1 inch		2.01	]+=	== <b>‡</b> ĺ	<u>ل</u>	°₩	$\sqrt{1+1/2}$	≨	
Size of outlet connection:	1 inch				3.94		'   [	3.03		
Pressure rating for connection:	PN 16				6.31			8.70	-	
Flange size for motor:	56C									
Connect code:	В									
Liquid:										
Pumped liquid:	Water									
Liquid temperature range:	-4 248 °F									
Selected liquid temperature:	140 °F									
Density:	61.35 lb/ft <sup>3</sup>									
Electrical data:										
Motor standard:	NEMA									
Power (P2) required by pump:	0.75 HP									
Controls:										
Frequency converter:	None									
Others:										
Net weight:	33.5 lb									
Gross weight:	44.5 lb									



22/04/2025

Description Country of origin: Custom tariff no.: Value US

8413.70.2040

