

Submittal Data

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

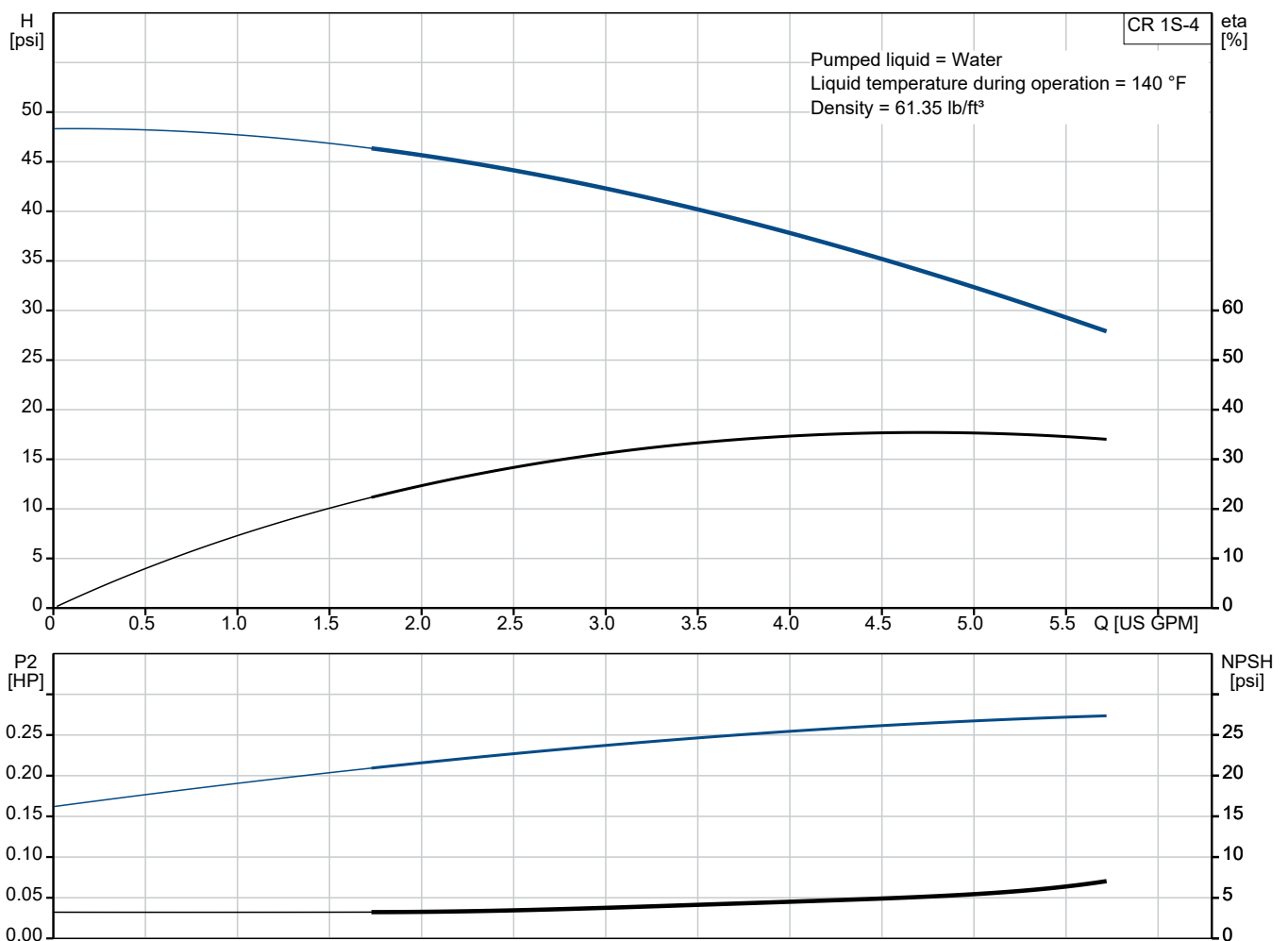


Note! Product picture may differ from actual product

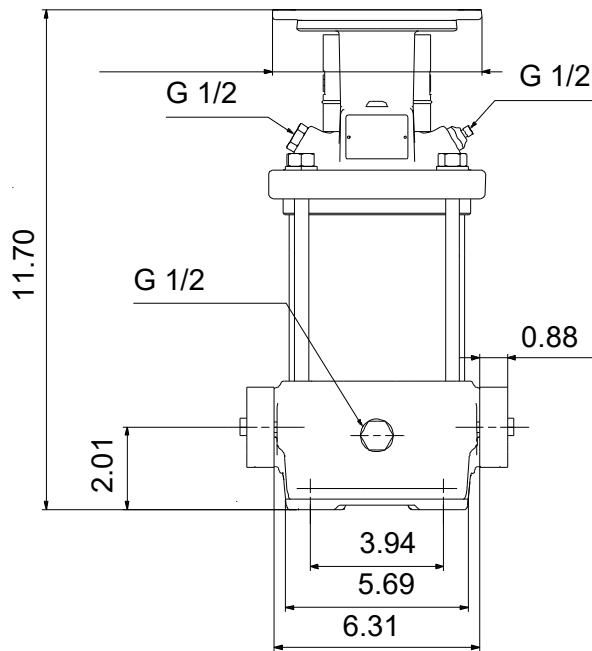
CR 1S-4 A-B-A-V-HQQV

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)

Conditions of Service		Pump Data		Motor Data	
Liquid:	Water	Max pressure at stated temp:	232 psi / 194 °F	Mains frequency:	60 Hz
Temperature:	140 °F	Liquid temperature range:	-4 .. 194 °F		
Specific Gravity:	0.985	Shaft seal:	HQQV		
		Product number:	96080933		



Submittal Data



Materials:

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

Qty. Description

1 CR 1S-4 A-B-A-V-HQQV



Note! Product picture may differ from actual product

Product No.: [96080933](#)

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. 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: FKM (fluorocarbon rubber)

FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.

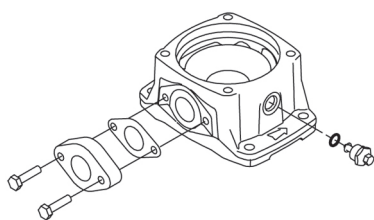
Qty.	Description
------	-------------

1	 <p>The shaft seal is screwed into the pump head.</p> <p>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.</p>  <p>Motor The pump is sold without motor.</p> <p>Technical data</p> <p>Liquid:</p> <table> <tr> <td>Pumped liquid:</td> <td>Water</td> </tr> <tr> <td>Liquid temperature range:</td> <td>-4 .. 194 °F</td> </tr> <tr> <td>Selected liquid temperature:</td> <td>140 °F</td> </tr> <tr> <td>Density:</td> <td>61.35 lb/ft³</td> </tr> </table> <p>Technical:</p> <table> <tr> <td>Pump speed on which pump data are based:</td> <td>3425 rpm</td> </tr> <tr> <td>Rated flow:</td> <td>4.84 US GPM</td> </tr> <tr> <td>Rated head:</td> <td>32.86 psi</td> </tr> <tr> <td>Pump orientation:</td> <td>Vertical</td> </tr> <tr> <td>Shaft seal arrangement:</td> <td>Single</td> </tr> <tr> <td>Primary shaft seal:</td> <td>HQQV</td> </tr> <tr> <td>Code for shaft seal:</td> <td>HQQV</td> </tr> <tr> <td>Approvals:</td> <td>CE</td> </tr> <tr> <td>Curve tolerance:</td> <td>ISO9906:2012 3B</td> </tr> </table> <p>Materials:</p> <table> <tr> <td>Base:</td> <td>Cast iron</td> </tr> <tr> <td></td> <td>EN 1561 EN-GJL-200</td> </tr> <tr> <td></td> <td>ASTM A48-25B</td> </tr> <tr> <td>Impeller:</td> <td>Stainless steel</td> </tr> <tr> <td></td> <td>EN 1.4301</td> </tr> <tr> <td></td> <td>AISI 304</td> </tr> <tr> <td>Bearing:</td> <td>SIC</td> </tr> </table> <p>Installation:</p> <table> <tr> <td>Maximum operating pressure:</td> <td>232.06 psi</td> </tr> <tr> <td>Max pressure at stated temp:</td> <td>232 psi / 194 °F</td> </tr> <tr> <td></td> <td>232 psi / -4 °F</td> </tr> <tr> <td>Type of connection:</td> <td>Oval / NPT(F)</td> </tr> <tr> <td>Size of inlet connection:</td> <td>1 inch</td> </tr> </table>	Pumped liquid:	Water	Liquid temperature range:	-4 .. 194 °F	Selected liquid temperature:	140 °F	Density:	61.35 lb/ft³	Pump speed on which pump data are based:	3425 rpm	Rated flow:	4.84 US GPM	Rated head:	32.86 psi	Pump orientation:	Vertical	Shaft seal arrangement:	Single	Primary shaft seal:	HQQV	Code for shaft seal:	HQQV	Approvals:	CE	Curve tolerance:	ISO9906:2012 3B	Base:	Cast iron		EN 1561 EN-GJL-200		ASTM A48-25B	Impeller:	Stainless steel		EN 1.4301		AISI 304	Bearing:	SIC	Maximum operating pressure:	232.06 psi	Max pressure at stated temp:	232 psi / 194 °F		232 psi / -4 °F	Type of connection:	Oval / NPT(F)	Size of inlet connection:	1 inch
Pumped liquid:	Water																																																		
Liquid temperature range:	-4 .. 194 °F																																																		
Selected liquid temperature:	140 °F																																																		
Density:	61.35 lb/ft³																																																		
Pump speed on which pump data are based:	3425 rpm																																																		
Rated flow:	4.84 US GPM																																																		
Rated head:	32.86 psi																																																		
Pump orientation:	Vertical																																																		
Shaft seal arrangement:	Single																																																		
Primary shaft seal:	HQQV																																																		
Code for shaft seal:	HQQV																																																		
Approvals:	CE																																																		
Curve tolerance:	ISO9906:2012 3B																																																		
Base:	Cast iron																																																		
	EN 1561 EN-GJL-200																																																		
	ASTM A48-25B																																																		
Impeller:	Stainless steel																																																		
	EN 1.4301																																																		
	AISI 304																																																		
Bearing:	SIC																																																		
Maximum operating pressure:	232.06 psi																																																		
Max pressure at stated temp:	232 psi / 194 °F																																																		
	232 psi / -4 °F																																																		
Type of connection:	Oval / NPT(F)																																																		
Size of inlet connection:	1 inch																																																		



The shaft seal is screwed into the pump head.

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:	Water
Liquid temperature range:	-4 .. 194 °F
Selected liquid temperature:	140 °F
Density:	61.35 lb/ft³

Technical:

Pump speed on which pump data are based:	3425 rpm
Rated flow:	4.84 US GPM
Rated head:	32.86 psi
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Primary shaft seal:	HQQV
Code for shaft seal:	HQQV
Approvals:	CE
Curve tolerance:	ISO9906:2012 3B

Materials:

Base:	Cast iron
	EN 1561 EN-GJL-200
	ASTM A48-25B
Impeller:	Stainless steel
	EN 1.4301
	AISI 304
Bearing:	SIC

Installation:

Maximum operating pressure:	232.06 psi
Max pressure at stated temp:	232 psi / 194 °F
	232 psi / -4 °F
Type of connection:	Oval / NPT(F)
Size of inlet connection:	1 inch



Company name:

Created by:

Phone:

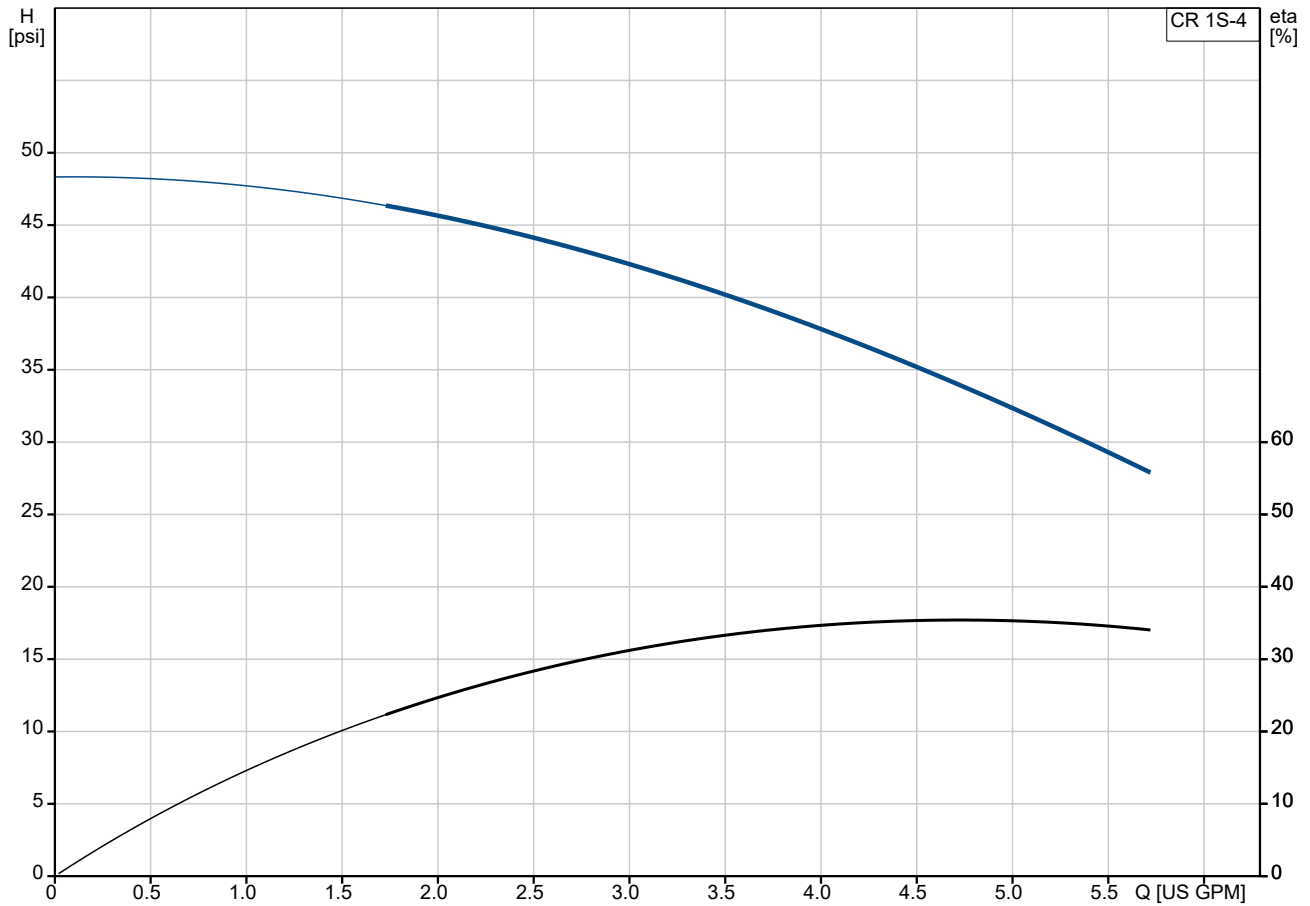
Date:

07/04/2025

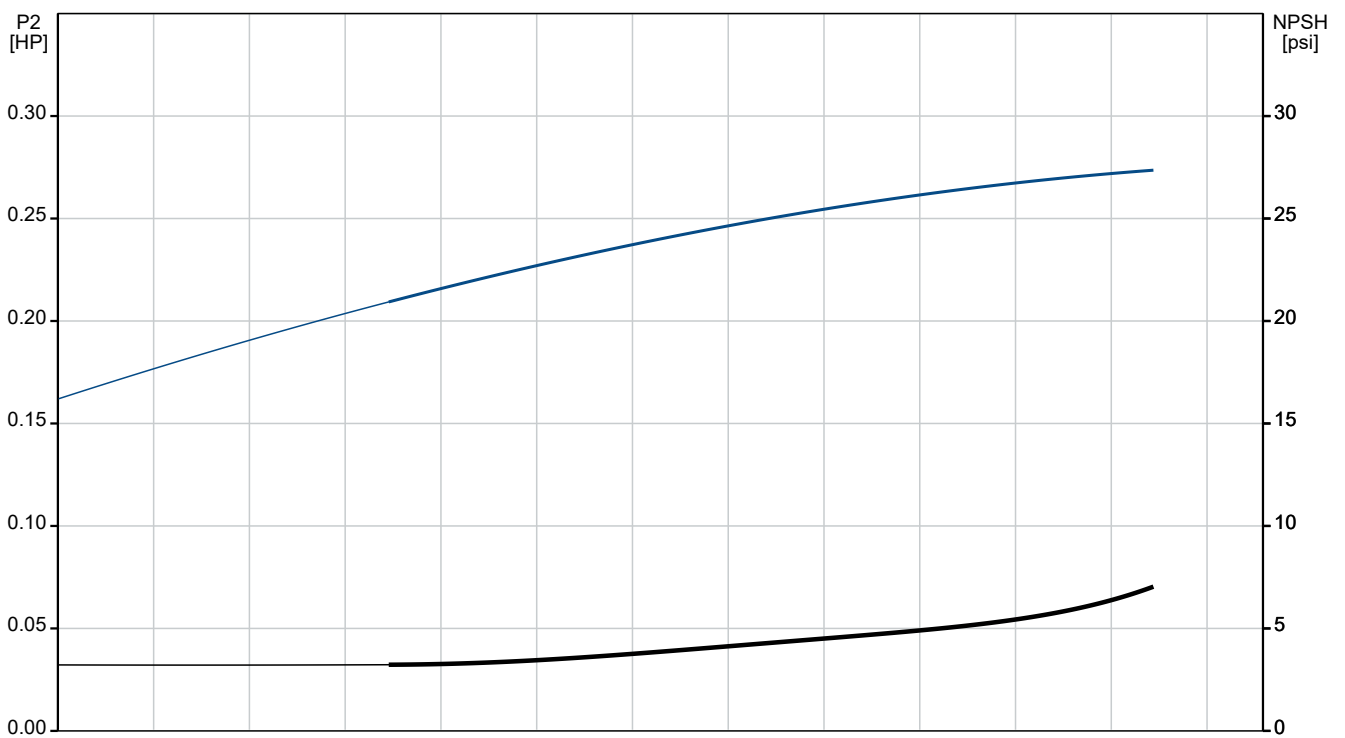
Qty.	Description
------	-------------

1	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: 0.33 HP Controls: Frequency converter: None Others: Net weight: 30.7 lb Gross weight: 41.7 lb Shipping volume: 4.94 ft³ Country of origin: US Custom tariff no.: 8413.70.2040
---	--

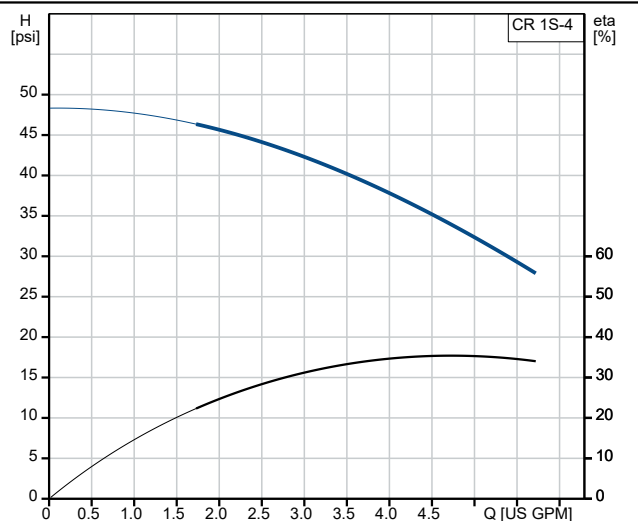
96080933 CR 1S-4 A-B-A-V-HQQV 60 Hz



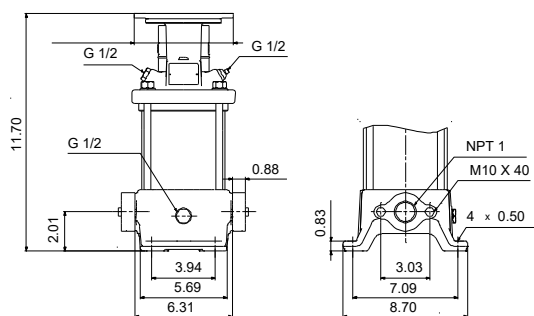
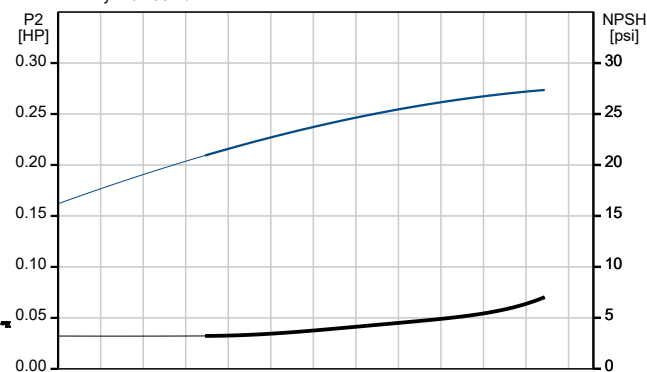
Pumped liquid = Water
 Liquid temperature during operation = 140 °F
 Density = 61.35 lb/ft³



Description	Value
General information:	
Product name:	CR 1S-4 A-B-A-V-HQQV
Product No:	96080933
EAN number:	5700395153910
Technical:	
Pump speed on which pump data are based:	3425 rpm
Rated flow:	4.84 US GPM
Rated head:	32.86 psi
Maximum head:	47.97 psi
Stages:	4
Impellers:	4
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Primary shaft seal:	HQQV
Code for shaft seal:	HQQV
Approvals:	CE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Base:	Cast iron EN 1561 EN-GJL-200
Impeller:	ASTM A48-25B Stainless steel EN 1.4301 AISI 304
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	
Maximum operating pressure:	232.06 psi
Max pressure at stated temp:	232 psi / 194 °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
Connect code:	B
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 .. 194 °F
Selected liquid temperature:	140 °F
Density:	61.35 lb/ft³
Electrical data:	
Motor standard:	NEMA
Power (P2) required by pump:	0.33 HP
Controls:	
Frequency converter:	None
Others:	
Net weight:	30.7 lb
Gross weight:	41.7 lb
Shipping volume:	4.94 ft³
Country of origin:	US



Pumped liquid = Water
Liquid temperature during operation = 140 °F
Density = 61.35 lb/ft³





Company name:

Created by:

Phone:

Date:

07/04/2025

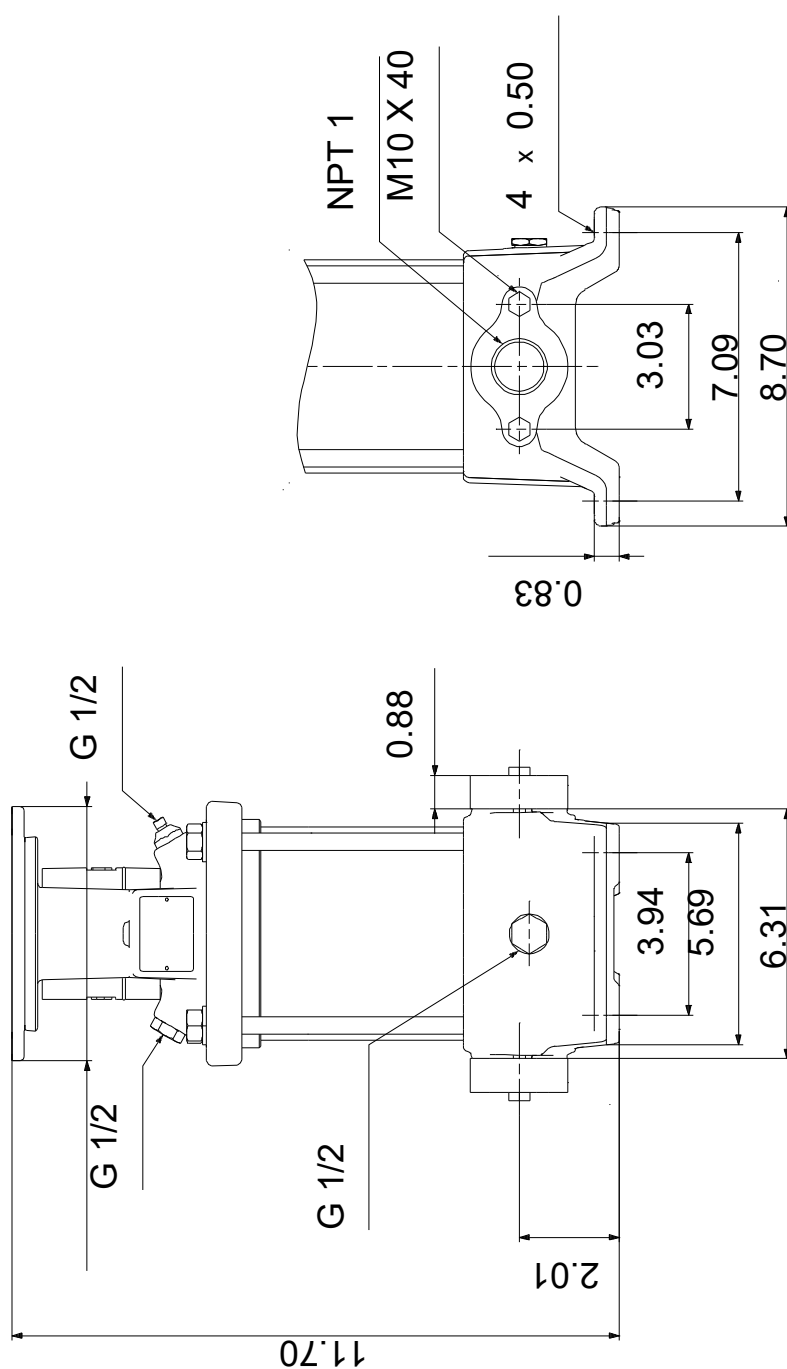
Description

Value

Custom tariff no.:

8413.70.2040

96080933 CR 1S-4 A-B-A-V-HQQV 60 Hz



Note! All units are in [in] unless others are stated.

Disclaimer: This simplified dimensional drawing does not show all details.