

### Submittal Data

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



#### Product photo could vary from the actual product

### **CRN 3-4**

Vertical, multistage centrifugal pump with suction and discharge ports on same the level. Pump materials in contact with the liquid are in high-grade stainless steel (EN 1.4401) (AISI 316)

Conditions of Service						
Flow:	14.3 US gpm					
Head:	95.02 ft					
Efficiency:						
Liquid:	Water					
Temperature:	68 °F					
NPSH required:	5.85 ft					
Viscosity:						
Specific Gravity:	1.000					

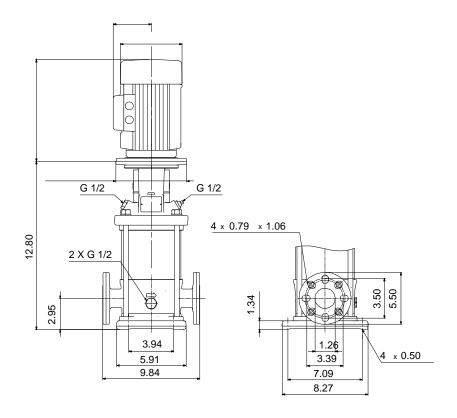
Pump Data		Motor Dat	а
Max pressure at stated temperature: Approvals:	363 psi / 250 °F NSF61	Main frequency:	6
Shaft seal:	HQQE		
Product number:	96083903		

												CRN 3-4	e
30 - 20 - 10 -	0 in								iquid ten	ft quid = Wa	during op	eration = 68 °F	100
90 —							P						90
30													80
70													70
50							$\Box$						60
50													50
40 -													40
30													30
20 -													20
10 -											Eff	pump = 56.7 %	10
0	2	4	6	8	10	12	14	16	18	20	22	Q [US gpm]	<u></u> Τ0
		1				12	14	10	10	20	22	Q [OS gpiii]	N
.6-							-						30
.4-													20
.2												_	10
							_					P2 = 0.604 HP	T
												NPSH = 5.85 ft	$\perp_{0}$

60 Hz



# Submittal Data



Materials:

Base: Stainless steel

EN 1.4408

AISI 316

Impeller: Stainless steel

AISI 316 EN 1.4401

Material code: G Code for rubber: E



**Date:** 2/21/2018

### **Tender Text**



Product photo could vary from the actual product

Product No.: 96083903 CRN 3-4 A-FGJ-G-E-HQQE

Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.

The pump has the following characteristics:

- Impellers, intermediate chambers and outer sleeve are made of
  - Pump head cover and base are made of
  - The shaft seal has assembly length

according to EN 12756.

- Power transmission is via cast iron split coupling.

flanges/couplings.

Controls:

Frequency converter: NONE

Liquid:

Pumped liquid: Water Liquid temperature during operation: 68 °F Density: 62.29 lb/ft³

Technical:

Speed for pump data:

Actual calculated flow:
Resulting head of the pump:
Pump orientation:
Shaft seal arrangement:
Code for shaft seal:
Approvals on nameplate:

3439 rpm
14.3 US gpm
95.02 ft
Vertical
Single
HQQE
HQQE
NSF61

Curve tolerance: ISO9906:2012 3B

Materials:

Base: Stainless steel

EN 1.4408 AISI 316 Stainless stee

Impeller: Stainless steel EN 1.4401

AISI 316

Bearing material: SIC



**Date:** 2/21/2018

Installation:

Max pressure at stated temperature: 363 psi / 250 °F

300 lb

363 psi / -4 °F

Type of connection:

Size of inlet connection:

DIN / ANSI / JIS

DN 25/32

Size of suction port:

1 1/4 inch

DN 25/32

Size of outlet connection:

DN 25/32

Size of outlet port:

1 1/4 inch

Pressure rating:

PN 25

Flange size for motor:

56C

**Electrical data:** 

Flange rating inlet:

Motor standard: NEMA
Power (P2) required by pump: 0.75 HP

Others:

Net weight: 35.5 lb Gross weight: 46.5 lb Shipping volume: 4.94 ft³



**Date:** 2/21/2018

Position | Count | Description

1 CRN 3-4 A-FGJ-G-E-HQQE



Product photo could vary from the actual product

Product No.: 96083903

Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.

The pump has the following characteristics:

- Impellers, intermediate chambers and outer sleeve are made of
  - Pump head cover and base are made of
- The shaft seal has assembly length according to EN 12756.
- Power transmission is via cast iron split coupling.

flanges/couplings.

Controls:

Frequency converter: NONE

Liquid:

Pumped liquid: Water Liquid temperature during operation: 68 °F Density: 62.29 lb/ft³

Technical:

Speed for pump data:
Actual calculated flow:
Resulting head of the pump:
Pump orientation:
Shaft seal arrangement:
Code for shaft seal:
Approvals on nameplate:

3439 rpm
14.3 US gpm
95.02 ft
Vertical
Single
HQQE
HQQE
NSF61

Curve tolerance: ISO9906:2012 3B

Materials:

Base: Stainless steel

EN 1.4408 AISI 316

Impeller: Stainless steel

EN 1.4401 AISI 316

Bearing material: SIC

Installation:



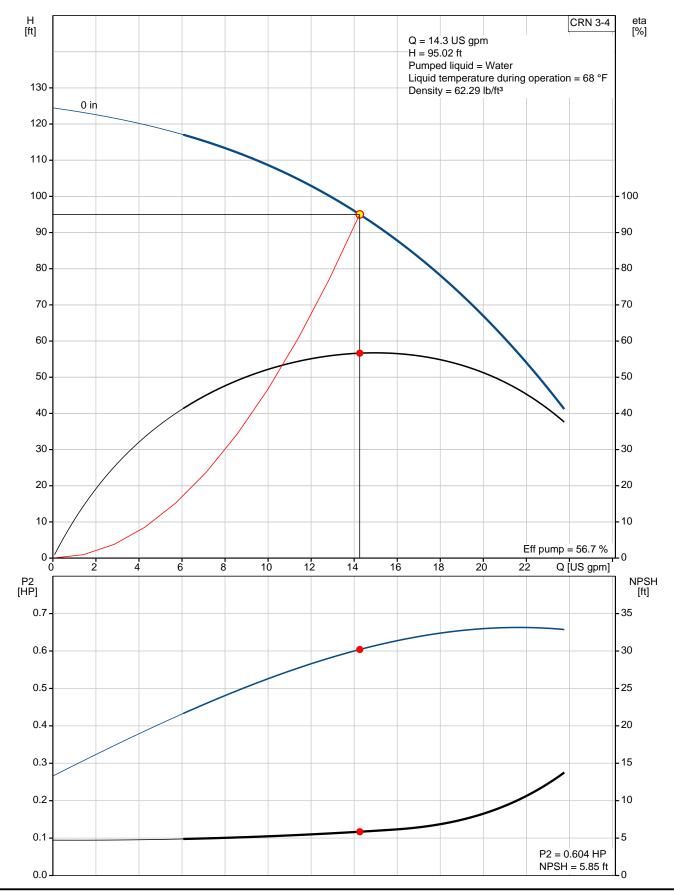
**Date:** 2/21/2018

				2/21/2010
Position	Count	Description		
		Max pressure at stated tempera	nture: 363 psi / 250 °F	
		max process at stated tempera	363 psi / -4 °F	
		Type of connection:	DIN / ANSI / JIS	
		Size of inlet connection:	DN 25/32	
		Size of suction port:	1 1/4 inch	
		Size of outlet connection:	DN 25/32	
		Size of outlet port:	1 1/4 inch	
		Pressure rating:	PN 25	
		Flange size for motor:	56C	
		Flange rating inlet:	300 lb	
		Electrical data:		
		Motor standard:	NEMA	
		Power (P2) required by pump:	0.75 HP	
		Others:		
		Net weight:	35.5 lb	
		Gross weight:	46.5 lb	
		Shipping volume:	4.94 ft <sup>3</sup>	



**Date:** 2/21/2018

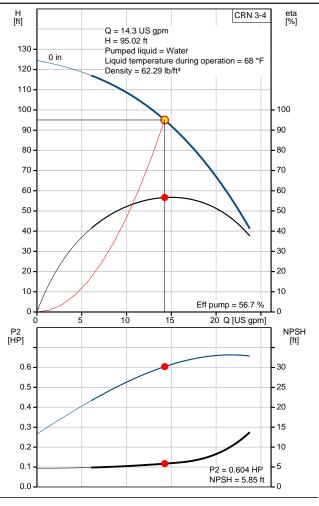
## 96083903 CRN 3-4 60 Hz

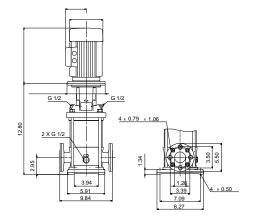




**Date:** 2/21/2018

Description	Value
General information:	
Product name:	CRN 3-4 A-FGJ-G-E-HQQE
Product No.:	96083903
EAN:	5700395180213
Technical:	
Speed for pump data:	3439 rpm
Actual calculated flow:	14.3 US gpm
Resulting head of the pump:	95.02 ft
Stages:	4
Impellers:	4
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	NSF61
Curve tolerance:	ISO9906:2012 3B
Pump version:	Α
Model:	A
Matariala	
Materials: Base:	Stainless steel
<b>D</b> 400.	EN 1.4408
	AISI 316
Impeller:	Stainless steel
impelier.	EN 1.4401
	AISI 316
Material code:	
Code for rubber:	G E
Bearing material:	SIC
Installation:	
Max pressure at stated temperature:	363 psi / 250 °F
	363 psi / -4 °F
Type of connection:	DIN / ANSI / JIS
Connect code:	FGJ
Size of inlet connection:	DN 25/32
Size of suction port:	1 1/4 inch
Size of outlet connection:	DN 25/32
Size of outlet port:	1 1/4 inch
Pressure rating:	PN 25
Flange size for motor:	56C
Flange rating inlet:	300 lb
Liquid:	
Pumped liquid:	Water
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft³
Electrical data:	
Motor standard:	NEMA
Power (P2) required by pump:	0.75 HP
Controls:	
Frequency converter:	NONE
Others: Net weight:	35.5 lb
Cross weight	46 F lb





Gross weight:

46.5 lb

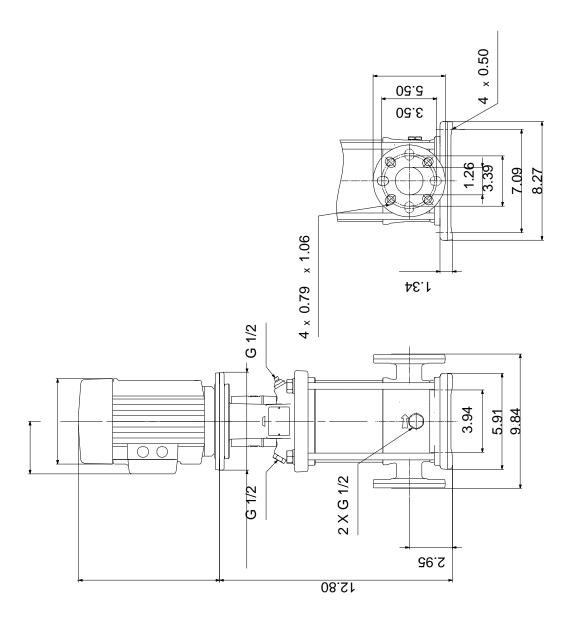


		Date:	2/21/2018	
Description	Value			
Shipping volume:	4.94 ft <sup>3</sup>			



Date: 2/21/2018

## 96083903 CRN 3-4 60 Hz



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



**Date:** 2/21/2018

**Order Data:** 

Product name: CRN 3-4 A-FGJ-G-E-HQQE

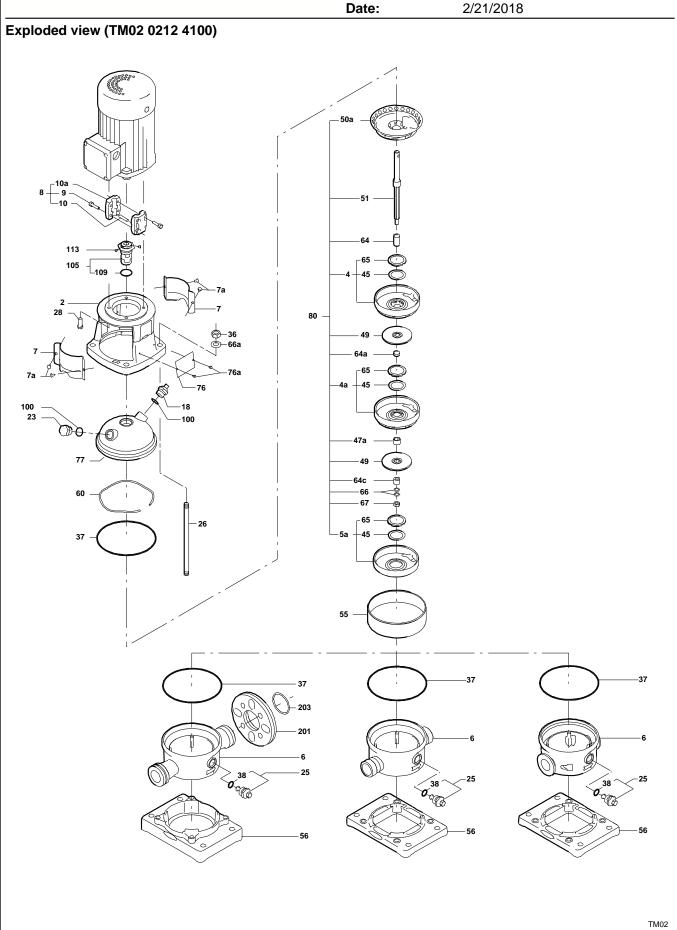
Amount: 1

Product No.: 96083903

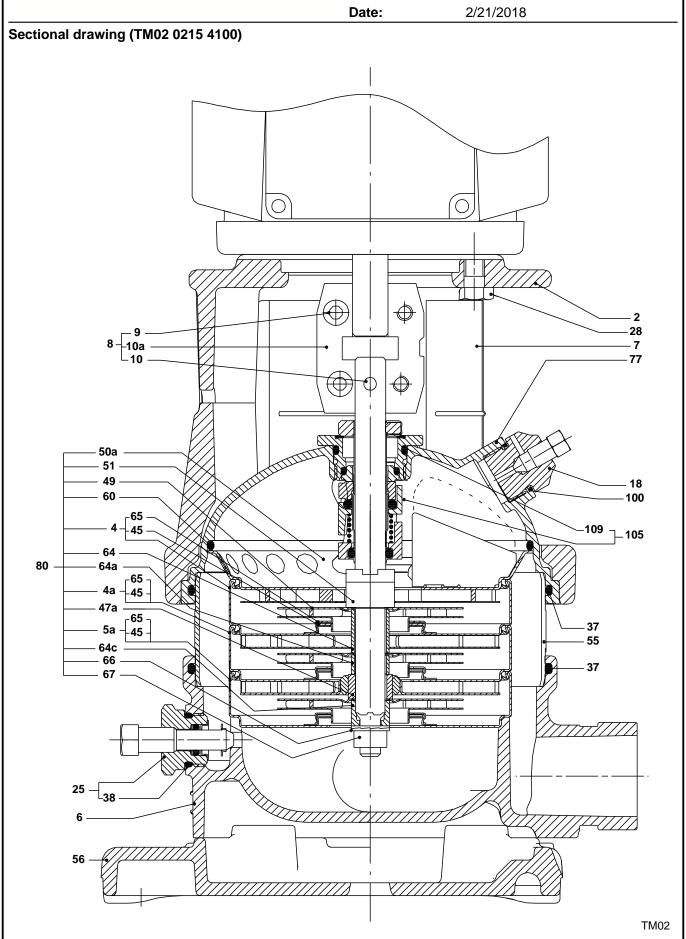
Total: Price on request



Date:









**Date:** 2/21/2018

### Parts list CRN 3-4, Prod number 96083903 Valid from 1.1.2004 (0401)

Position		Annotation	Classification data	Part No.	Count	
-	Base cpl.				1	pcs
6	Base				1	
56	Base plate				1	
201.a	Flange				2	
203	Lock ring				2	
-	Sealing parts				1	pcs
- 25	Drain plug w/bypass valve				1	
38	O-ring		Diameter: 16,3			
			Material type: EPDM			
			Thickness: 2,4			
37	O-ring				2	
100	O-ring		Diameter: 16,3		2	
	3		Material type: EPDM			
			Thickness: 2,4			
- 2	Pump head cpl.		711101010000. Z, 1		1	pcs
2	Motor stool				1	pos
7	Coupling guard				2	
7 7a	Thread cutting screw				4	
	<u> </u>					
- 18	Air vent screw				1	
	Plug					
	Spindle					
- 25	Drain plug				1	
23	Pipe plug					
25	Drain plug					
28	Hex head cap screw		Length: 25		4	
			Thread: UNC 3/8"			
60	Formed wire spring				1	
77	Pump cover				1	
+ 8	Coupling cpl.				1	pcs
26	Staybolt		Length: 169		4	pcs
			Thread: M12			
36	Nut		Thread: M12		4	pcs
55	Outer sleeve				1	pcs
66a	Washer		Designation: DIN 125 A2		4	pcs
			Inner diameter: 13			•
			Outer diameter: 24			
			Thickness: 2,5			
80	Chamber stack				1	pcs
	Chamber cpl.				. 2	200
4a	Intermediate chamber					
45	Neck ring					
65	Neck ring retainer					
UJ	Impeller cpl.				4	
. 46	Chamber w. bearing cpl.				1	
4a	Intermediate chamber					
45	Neck ring					
65	Neck ring retainer					
- 5a	Chamber cpl.				1	
4a	Intermediate chamber					
45	Neck ring					
65	Neck ring retainer					
36	Lock nut		Thread: M8		1	
	Bearing ring, rotating				1	



**Date:** 2/21/2018

Position	Description	Annotation	Classification data	Part No.	Count	Unit
50a	Guide vane cpl.				1	
	Guide vane					
	Plate					
50b	Top plate					
51	Shaft, spline, cpl.				1	
64a	Spacing pipe				2	
64a	Spacing pipe		Inner diameter: 12,85		1	
			Outer diameter: 15,85			
			Length: 4,50			
64c	Clamp, splined		Inner diameter: 8,5		1	
			Outer diameter: 15			
66	Wedge lock washer				1	
105	Shaft seal		Material type: HQQE		1	pcs
	O-ring				1	
	O-ring				1	
	Seal driver, upper				1	
	Seal driver, lower				1	
	Spacer ring				1	
	Pipe				1	
	Plug				1	
	Plug				1	
	Compression spring				1	
	Socket set screw				1	
102	O-ring		Diameter: 22,00		1	
			Material type: EPDM			
			Thickness: 2,75			
103	Seal ring, stationary				1	
105	Seal ring, rotating				1	
107	O-ring				1	
113	Driver				1	