

# Submittal Data

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

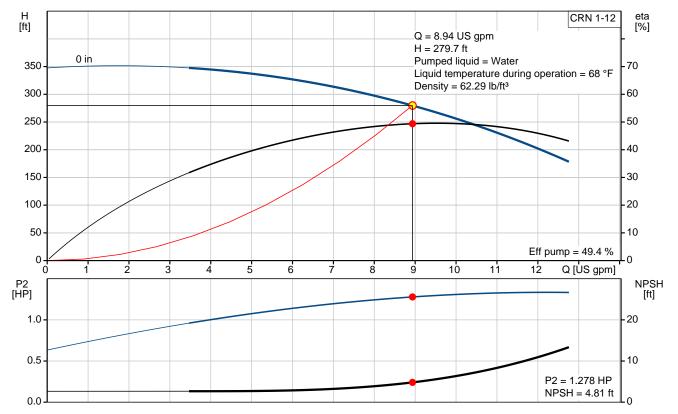


## CRN 1-12

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)

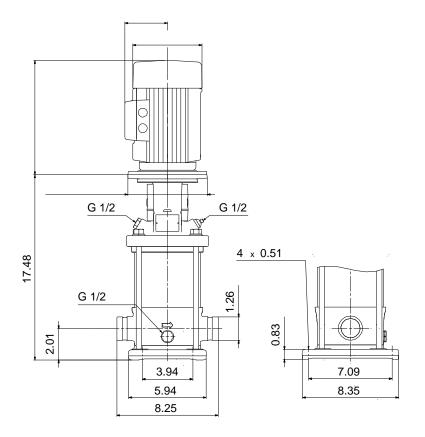
Product photo could vary from the actual product

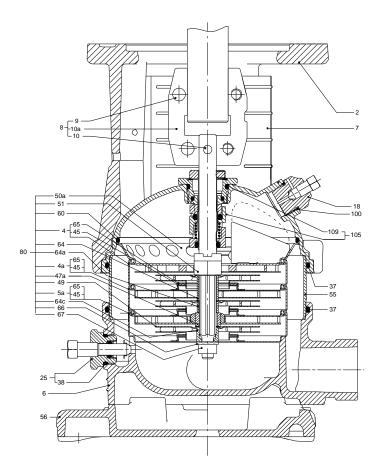
Conditions of Service		Pump Data	Motor Data		
Flow: Head:	8.94 US gpm 279.7 ft	Max pressure at stated temperature: Approvals:	363 psi / 250 °F NSF61	Main frequency:	60 Hz
Efficiency:		Shaft seal:	HQQE		
Liquid:	Water	Product number:	96082671		
Temperature:	68 °F				
NPSH required:	4.81 ft				
Viscosity:					
Specific Gravity:	1.000				



# Submittal Data







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M	ate	ria	IC.
	aw		

Base:

Impeller:

Stainless steel EN 1.4408 AISI 316 Stainless steel AISI 316 EN 1.4401 G

Material code: G Code for rubber: E



Date:

2/20/2018

## **Tender Text**



Product photo could vary from the actual product

#### Product No.: 96082671 CRN 1-12 A-P-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
<b>Liquid:</b> Pumped liquid: Liquid temperature during Density:	Water operation: 68 °F 62.29 lb/ft <sup>3</sup>
<b>Technical:</b> Speed for pump data:	3466 rpm

epeed iei pairip datai	0.00.00
Actual calculated flow:	8.94 US gpm
Resulting head of the pump:	279.7 ft
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	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



Date:

2/20/2018

### Installation:

Max pressure at stated tempera	ture: 363 psi / 250 °F
	363 psi /  -4 °F
Type of connection:	PJE
Size of inlet connection:	DN 32
Size of suction port:	1 1/4 inch
Size of outlet connection:	DN 32
Size of outlet port:	1 1/4 inch
Pressure rating:	PN 50
Flange size for motor:	56C
Electrical data:	

Motor standard:	NEMA
Power (P2) required by pump:	1.5 HP

### Others:

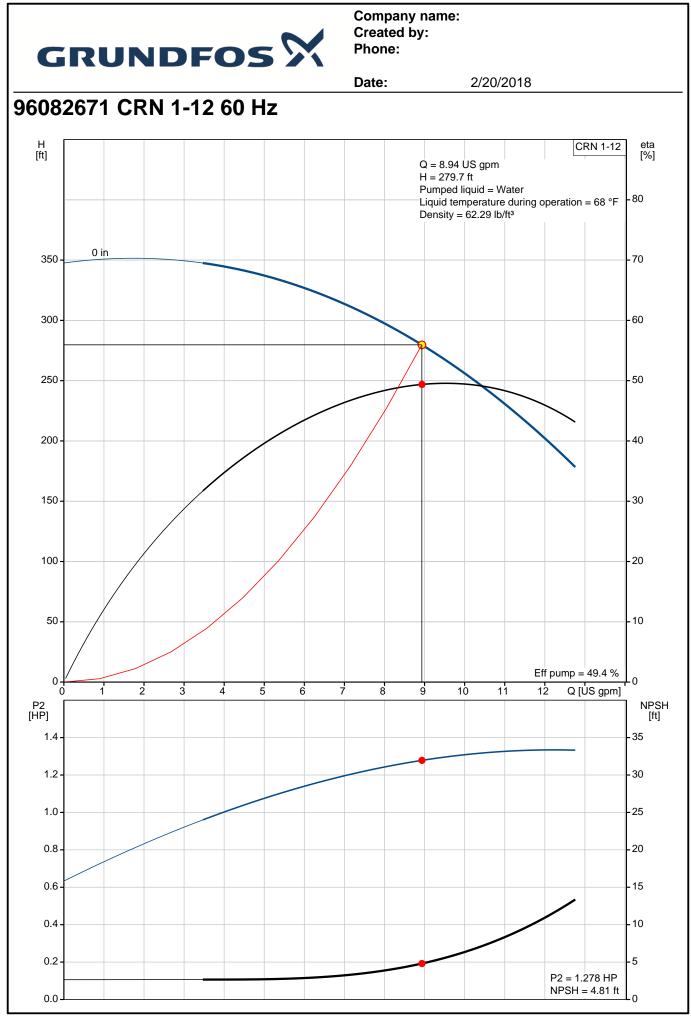
Net weight:	33.5 lb
Gross weight:	48 lb
Shipping volume:	4.94 ft <sup>3</sup>

G	RU		Company name: Created by: Phone:		
			Date:	2/20/2018	
osition	Count	Description			
OSITION	1	CRN 1-12 A-P-G-E-HQQE	n in pipe systems aracteristics: chambers and outer ase are made of mbly length	/ from the actual product	
		flanges/couplings. Controls: Frequency converter:	NONE		
		Liquid: Pumped liquid: Liquid temperature during oper Density:	Water ation: 68 °F 62.29 lb/ft³		
		<b>Technical:</b> Speed for pump data: Actual calculated flow: Resulting head of the pump: Pump orientation: Shaft seal arrangement: Code for shaft seal: Approvals on nameplate: Curve tolerance:	3466 rpm 8.94 US gpm 279.7 ft Vertical Single HQQE NSF61 ISO9906:2012 3B		
		<b>Materials:</b> Base:	Stainless steel EN 1.4408		
		Impeller:	AISI 316 Stainless steel EN 1.4401 AISI 316		
	1				

Installation:



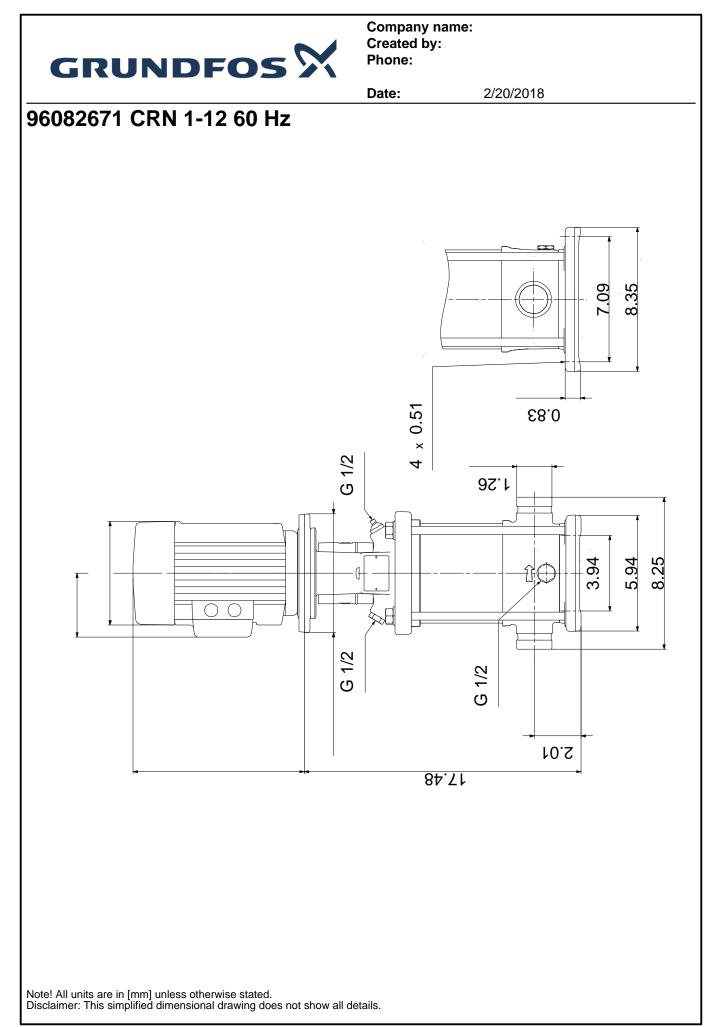
			Date:	2/20/2018
Position	Count	Description		
		Max pressure at stated tempera	ture: 363 psi / 250 °F	
			363 psi /  -4 °F	
		Type of connection:	PJE	
		Size of inlet connection:	DN 32	
		Size of suction port:	1 1/4 inch	
		Size of outlet connection: Size of outlet port:	DN 32 1 1/4 inch	
		Pressure rating:	PN 50	
		Flange size for motor:	56C	
		3 3 4 4 4 4		
		Electrical data:		
		Motor standard:	NEMA	
		Power (P2) required by pump:	1.5 HP	
		Others:		
		Net weight:	33.5 lb	
		Gross weight:	48 lb	
		Shipping volume:	4.94 ft <sup>3</sup>	



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		Date:		2/20/2	018		
Description	Value	– H [ft]				CRN 1-	12 eta [%]
General information:	Value	[rd		Q = 8.94 US	gpm		
Product name:	CRN 1-12 A-P-G-E-HQQE	-		H = 279.7 ft Pumped liqu	id = Water		- 80
Product hame: Product No.:	96082671	_		Liquid tempe	rature during	g operation = 68	°F
EAN:	5700395174090	350 -	0 in	Density = 62	.29 lb/ft <sup>3</sup>		- 70
EAN.	5700395174090	_					
Technical:		300 -					- 60
Speed for pump data:	3466 rpm	-					
Actual calculated flow:	8.94 US gpm	050					50
Resulting head of the pump:	279.7 ft	250 -					- 50
	12						
Stages:	12	200 -					- 40
Impellers: Low NPSH:	N						
	Vertical	150 -	/				- 30
Pump orientation:							
Shaft seal arrangement:	Single	100 -					20
Code for shaft seal:	HQQE	100-					20
Approvals on nameplate:	NSF61	_					
Curve tolerance:	ISO9906:2012 3B	50 -					10
Pump version:	A	_				Eff pump 40.4	0/
Model:	A	0				Eff pump = 49.4	<u> </u>
		0 - P2 [	2	<u>4</u> 6	8	10 Q [US gp	m] NPSH
Materials:	<b>0</b>	[HP]					[ft]
Base:	Stainless steel	_ 1					
	EN 1.4408	1.2 -			_		- 30
	AISI 316	1.0 -					- 25
Impeller:	Stainless steel	0.8 -					- 20
	EN 1.4401	0.0					20
	AISI 316	0.6 -					- 15
Material code:	G	0.4 -					- 10
Code for rubber:	E	• 0.2					<b>5</b>
Bearing material:	SIC	_				P2 = 1.278 H NPSH = 4.81	ft
		0.0					<u> </u>
Installation:	000 : / 050 %5						
Max pressure at stated temperature:	363 psi / 250 °F		-				
	363 psi / -4 °F						
Type of connection:	PJE	_					
Connect code:	Р	_					
Size of inlet connection:	DN 32	_	4				
Size of suction port:	1 1/4 inch	_		5			
Size of outlet connection:	DN 32	_ [	L L				
Size of outlet port:	1 1/4 inch	_	<u>`</u>				
Pressure rating:	PN 50						
Flange size for motor:	56C	_ [	G 1/2		G 1/2		
		_	<u> </u>				
Liquid:			ЧТ		4 x 0.51	·.	
Pumped liquid:	Water	17.48					
Liquid temperature during operation:	68 °F	-	G 1/2		90		
Density:	62.29 lb/ft <sup>3</sup>		<u>-"-</u>	╤╁╢╠╓	1.26		$\neg$
Electrical data:		2.01	<u>  </u>		0.83		
Electrical data:		5					
Motor standard:		_		3.94		7.09	
Power (P2) required by pump:	1.5 HP			5.94 8.25		8.35	
Controls:			h				
Frequency converter:	NONE						
Others:							
Net weight:	33.5 lb						
-							
Gross weight:	48 lb						
Shipping volume:	4.94 ft <sup>3</sup>						





2/20/2018

**Order Data:** 

Product name:CRN 1-12 A-P-G-E-HQQEAmount:1Product No.:96082671

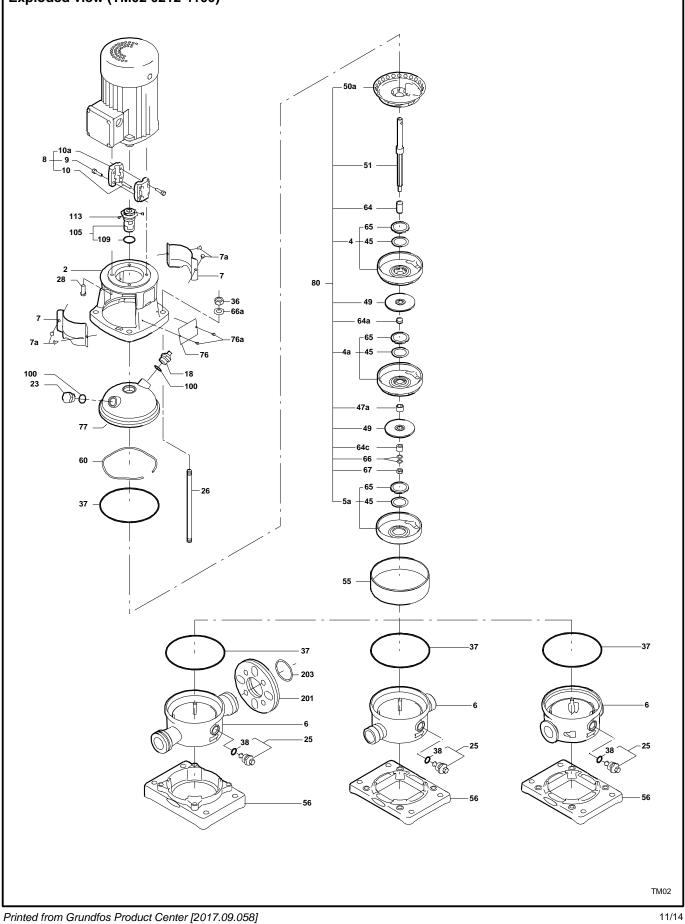
Total: Price on request

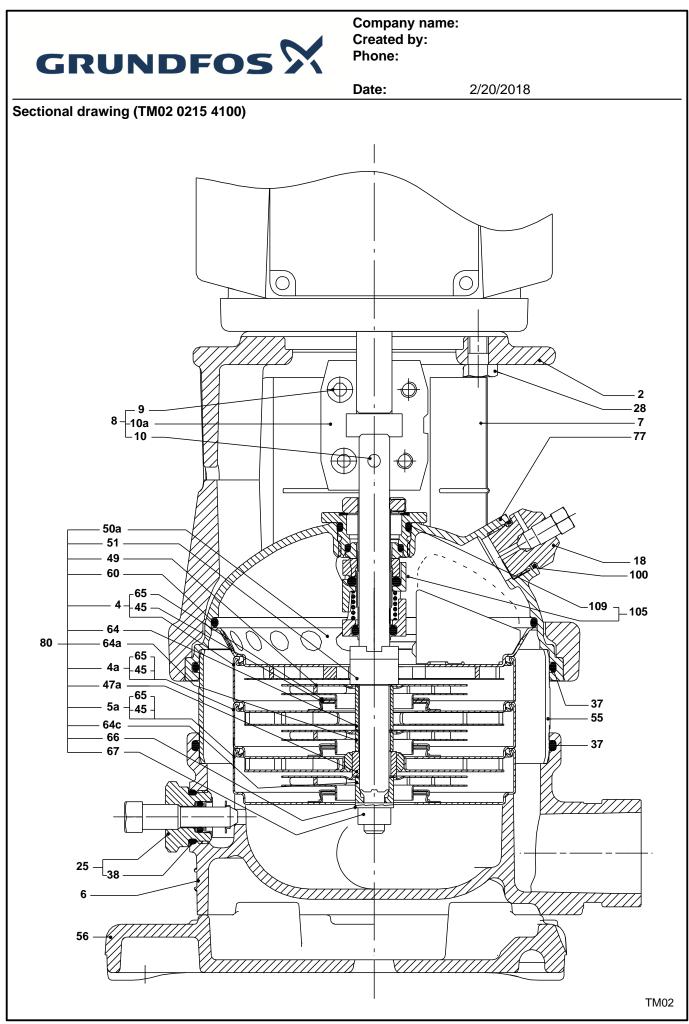


2/20/2018

Date:

Exploded view (TM02 0212 4100)





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2/20/2018

### Parts list CRN 1-12, Prod number 96082671 Valid from 1.1.2004 (0401)

Position	Description	Annotation	Classification data	Part No.		bunt	Unit
	Base cpl.				1		pcs
6	Base					1	
25	Plug					2	
56	Base plate					1	
	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.		1110111000. 2,1		1		pcs
2	Motor stool				•	1	poo
7	Coupling guard					2	
7 7a	Thread cutting screw					4	
· 18	Air vent screw					4	
10						1	
	Plug						
05	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: 313		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.					9	
4a	Intermediate chamber						
45	Neck ring						
65	Neck ring retainer						
~~	Impeller cpl.					12	
-	Chamber w. bearing cpl.					2	
4a	Intermediate chamber					2	
4a 45							
	Neck ring Neck ring retainer						
65 50	-					4	
- 5a	Chamber cpl.					1	
4a	Intermediate chamber						
45	Neck ring						
65	Neck ring retainer						
36	Lock nut		Thread: M8			1	
47a	Bearing ring, rotating					2	
50a	Guide vane					1	



			Date:	2/20/2018			
Position	Description	Annotation	Classification data	Part No.	Count	Unit	
	Plate						
50b	Top plate						
51	Shaft, spline, cpl.				1		
64a	Spacing pipe				9		
64a	Spacing pipe		Inner diameter: 12,85		2		
			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		