

Submittal Data

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

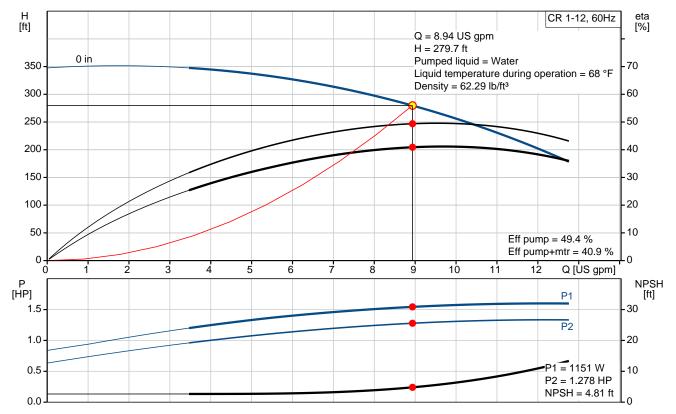


CR 1-12

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)(AISI 304)

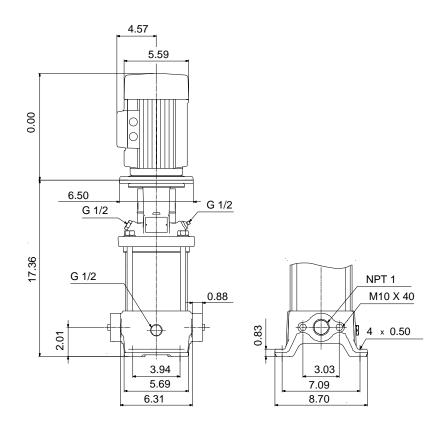
Product photo could vary from the actual product

Conditions	of Service	Pump Data		Moto	or Data
Flow:	8.94 US gpm	Max pressure at stated temperature:	232 psi / 250 °F	Rated power - P2:	1.5 HP
Head:	279.7 ft	Maximum ambient temperature:	140 °F	Rated voltage:	208-230YY/460Y V
Efficiency:	40.9 %	Approvals:	CURUS,NSF61	Main frequency:	60 Hz
Liquid:	Water	Shaft seal:	HQQE	Enclosure class:	55 Dust/Jetting
Temperature:	68 °F	Product number:	96081986	Insulation class:	F
NPSH required:	4.81 ft			Motor protection:	NONE
Viscosity:				Motor type:	80CA
Specific Gravity:	1.000			Motor_efficiency:	84.9 %



Submittal Data





Materials:

Impeller:

Base:

Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Stainless steel AISI 304 EN 1.4301 A

Material code: A Code for rubber: E



2/20/2018

Tender Text



Product No.: 96081986 CR 1-12 A-B-A-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 and intermediate chambers are made of The shaft seal has assembly length according to EN 12756. - Power transmission is via cast iron split coupling. The motor is a 3-phase AC motor. Controls: Frequency converter: NONE Liquid: Pumped liquid: Water Liquid temperature during operation: 68 °F Density: 62.29 lb/ft3 **Technical:** Speed for pump data: 3466 rpm 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: CURUS,NSF61 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 material: SIC Installation: Maximum ambient temperature: 140 °F Max pressure at stated temperature: 232 psi / 250 °F 232 psi / -4 °F Type of connection: Oval / NPT(F) Size of suction port: 1 inch



Date:

2/20/2018

Size of outlet port:	1 inch
Pressure rating:	PN 16
Flange size for motor:	56C

Electrical data:

Motor standard:	NEMA
Motor type:	80CA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	1.5 HP
Power (P2) required by pump:	1.5 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1,15
Rated current:	4,45-4,3/2,16 A
Starting current:	720 %
Cos phi - power factor:	0,84-0,78
Rated speed:	3440-3480 rpm
IE efficiency:	IE3 84,1%
Motor efficiency at full load:	84.9 %
Motor efficiency at 3/4 load:	81.0 %
Motor efficiency at 1/2 load:	78.5 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F

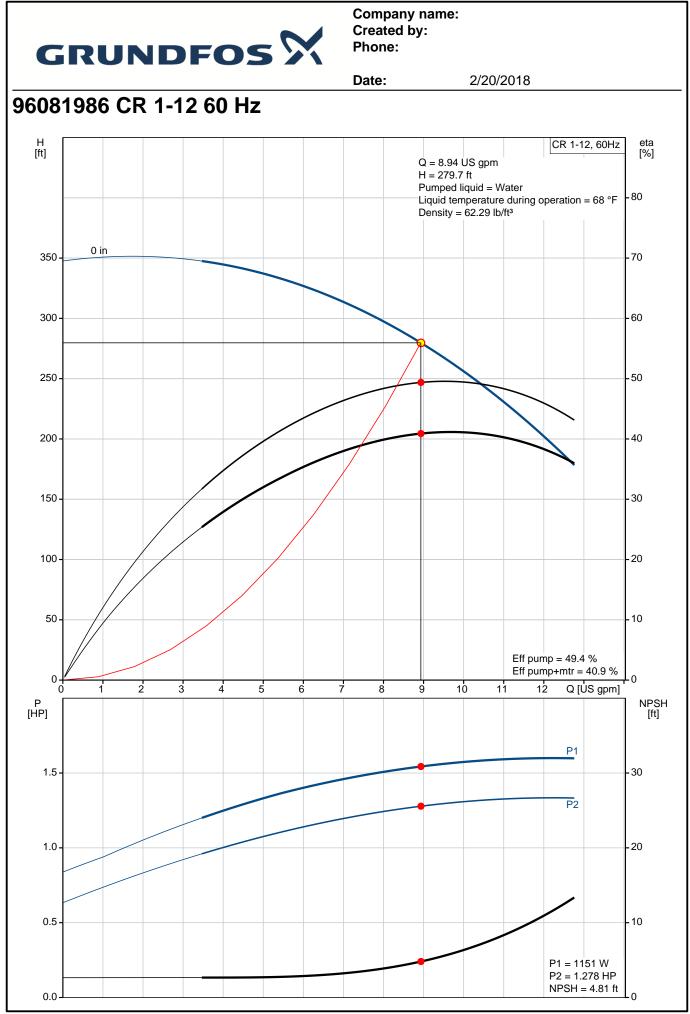
Others:

Net weight:	55.5 lb
Gross weight:	66.5 lb
Shipping volume:	6.11 ft ³

G	RU	INDFOS	Company nan Created by: Phone:	ne:	
			Date:	2/20/2018	
Position	Count	Description			
	1	CR 1-12 A-B-A-E-HQQE			
		Product No.: 96081986 Vertical, non-self-priming, multi- centrifugal pump for installation and mounting on a foundation.			
		The pump has the following cha - Impellers and intermedia - The shaft seal has asser according to EN 12756. - Power transmission is vi coupling.	ite chambers are made of mbly length		
		The motor is a 3-phase AC mot	or.		
		Controls: Frequency converter:	NONE		
		Liquid: Pumped liquid: Liquid temperature during opera Density:	Water ation: 68 °F 62.29 lb/ft ³		
		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: Curve tolerance:	3466 rpm 8.94 US gpm 279.7 ft Vertical Single HQQE CURUS,NSF61 ISO9906:2012 3B		
		Materials:			
		Base:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B		
		Impeller:	Stainless steel EN 1.4301		
		Bearing material:	AISI 304 SIC		
		Installation: Maximum ambient temperature Max pressure at stated tempera	ature: 232 psi / 250 °F 232 psi / -4 °F		
		Type of connection:	Oval / NPT(F)		
		Size of suction port: Size of outlet port:	1 inch 1 inch		
		•			



			Date:	2/20/2018
sition	Count	Description		
		Pressure rating:	PN 16	
		Flange size for motor:	56C	
		Electrical data:		
		Motor standard:	NEMA	
		Motor type:	80CA	
		IE Efficiency class:	NEMA Premium / IE3 60Hz	
		Rated power - P2: Power (P2) required by pump:	1.5 HP 1.5 HP	
		Main frequency:	60 Hz	
		Rated voltage:	3 x 208-230YY/460Y V	
		Service factor:	1,15	
		Rated current:	4,45-4,3/2,16 A	
		Starting current:	720 %	
		Cos phi - power factor:	0,84-0,78	
		Rated speed:	3440-3480 rpm	
		IE efficiency: Motor efficiency at full load:	IE3 84,1% 84.9 %	
		Motor efficiency at 3/4 load:	81.0 %	
		Motor efficiency at 1/2 load:	78.5 %	
		Number of poles:	2	
		Enclosure class (IEC 34-5):	55 Dust/Jetting	
		Insulation class (IEC 85):	F	
		Others:		
		Net weight:	55.5 lb	
		Gross weight:	66.5 lb	
		Shipping volume:	6.11 ft ³	



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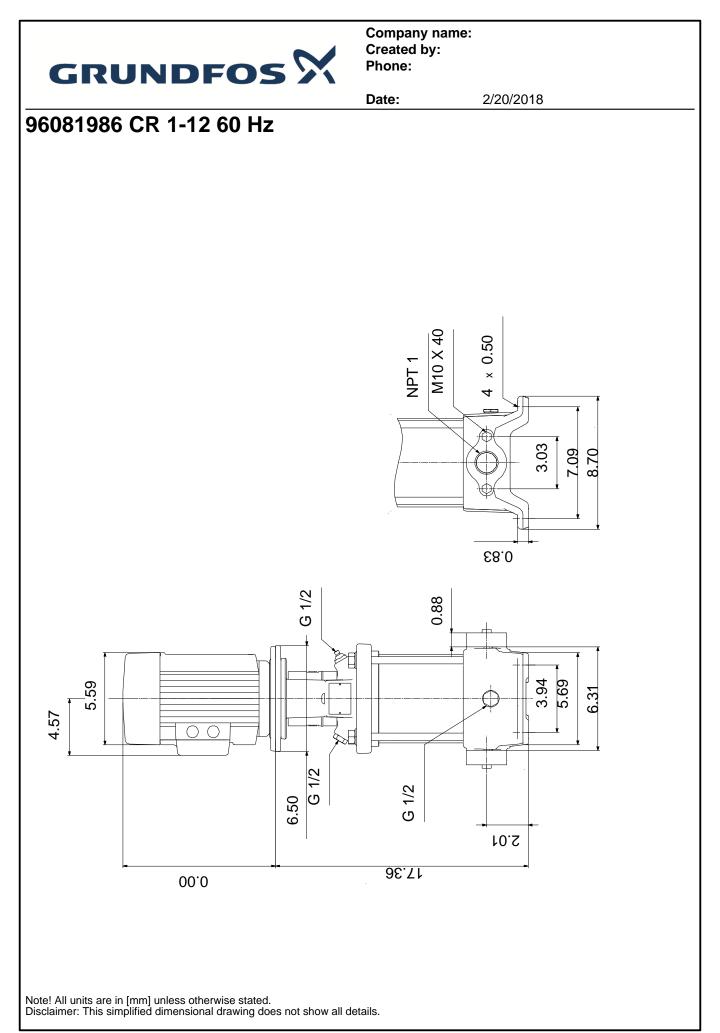


		Date:		2/20	/2018			
Description	Value	- Н [ft]					CR 1-12, 60Hz	eta [%]
General information:	Value	[14]		Q = 8.94				· ·
		_		H = 279.7	7 ft liquid = W	otor		- 80
Product name:	CR 1-12 A-B-A-E-HQQE	_					peration = 68 °F	
Product No.:	96081986	350 -	0 in		62.29 lb/			- 70
EAN:	5700395167245	_						
Technical:		300 -						- 60
	0.400							
Speed for pump data:	3466 rpm	250 -						- 50
Actual calculated flow:	8.94 US gpm							
Resulting head of the pump:	279.7 ft							
Stages:	12	200 -						- 40
Impellers:	12	_						
Low NPSH:	Ν	150 -				_		- 30
Pump orientation:	Vertical	_						
		100 -						- 20
Shaft seal arrangement:	Single	100						[20
Code for shaft seal:	HQQE	_	/					1
Approvals on nameplate:	CURUS,NSF61	50 -						- 10
Curve tolerance:	ISO9906:2012 3B						np = 49.4 %	1
Pump version:	A	- o4					np+mtr = 40.9 %	Lo
Model:	A	- O	2 4	4 6	8	10	Q [US gpm]	
	TEFC	Р [HP]						NPSH [ft]
Cooling:		- E 1					P1	[^[14]
		1.5 -						- 30
Materials:		_						
Base:	Cast iron					-	P2	
	EN 1561 EN-GJL-200	1.0 -						- 20
	ASTM A48-25B	-						
Impeller:	Stainless steel	-					/	
	EN 1.4301	0.5 -						- 10
		_				_	P1 = 1151 W P2 = 1.278 HP	
	AISI 304						NPSH = 4.81 ft	
Material code:	A	0.0						L ₀
Code for rubber:	E		4.57					
Bearing material:	SIC		5.59					
Installation:			Lamin					
Maximum ambient temperature:	140 °F	0.00	8					
Max pressure at stated temperature:	232 psi / 250 °F	-						
max presente at stated temperature.	232 psi / -4 °F	- +						
- , ,		-	6.50 G 1/2	<u>G 1/2</u>				
Type of connection:	Oval / NPT(F)		- Txup	1				
Connect code:	В	17.36	Υ Γ	TT'	, L	<u></u>		
Size of suction port:	1 inch	17.	<u>G 1/2</u>	0.00			PT 1 /10 X 40	
Size of outlet port:	1 inch		, _n ilų į		∦		<u>110 A 40</u>	
Pressure rating:	PN 16	-		_#		¥₹₹₽	× 0.50	
Flange size for motor:	56C	_ +	3.94	Ĵ	邗川	3.03		
			5.69	긔		7.09 8.70		
Liquid:			• 0.01		•			
	Watar							
Pumped liquid:	Water							
Liquid temperature during operation:	68 °F	6	HIGH VOL DIRECTION OF I	TAGE ROTATION				
Density:	62.29 lb/ft ³	- 19-01						
Electrical data:			U YO-	<u>۳</u>				
Motor standard:	NEMA	_	T 190-	<u>-</u> 1				
Motor type:	80CA		`®ğ≓	<u>ר</u>				
IE Efficiency class:	NEMA Premium / IE3 60Hz	- >-	ଇଷ	୕ଵ				
Rated power - P2:	1.5 HP			TAGE				
Power (P2) required by pump:	1.5 HP	6	DIRECTION OF	ROTATION				
	60 Hz	-						
Main frequency:		(Car						
Rated voltage:	3 x 208-230YY/460Y V	ר 🖌	U BO	۳ <u></u> ۲				
Service factor:	1,15	_ _	T Ba	;				
Rated current:	4,45-4,3/2,16 A		`Dg	<u> </u>				
Starting current:	720 %	- 1	Ba	୕ଵ	8			

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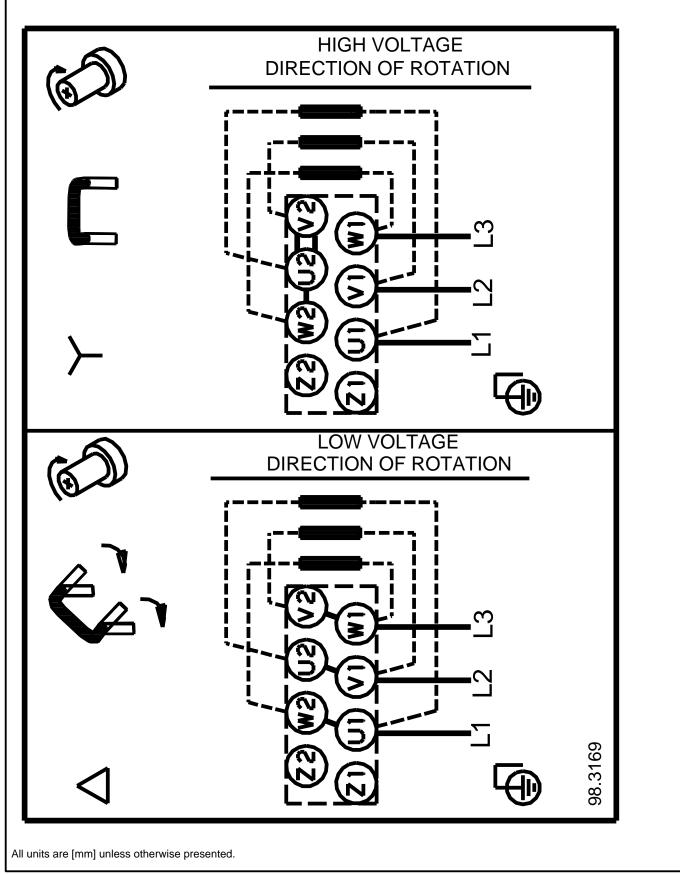
		Date:	2/20/2018
Description	Value		
Load current:	5,1-4,95/2,48 A		
Cos phi - power factor:	0,84-0,78		
Rated speed:	3440-3480 rpm		
IE efficiency:	IE3 84,1%		
Motor efficiency at full load:	84.9 %		
Motor efficiency at 3/4 load:	81.0 %		
Motor efficiency at 1/2 load:	78.5 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	55 Dust/Jetting		
Insulation class (IEC 85):	F		
Motor protection:	NONE		
Motor Number:	98976607		
Controls:			
Frequency converter:	NONE		
Others:			
Net weight:	55.5 lb		
Gross weight:	66.5 lb		
Shipping volume:	6.11 ft ³		





2/20/2018

96081986 CR 1-12 60 Hz



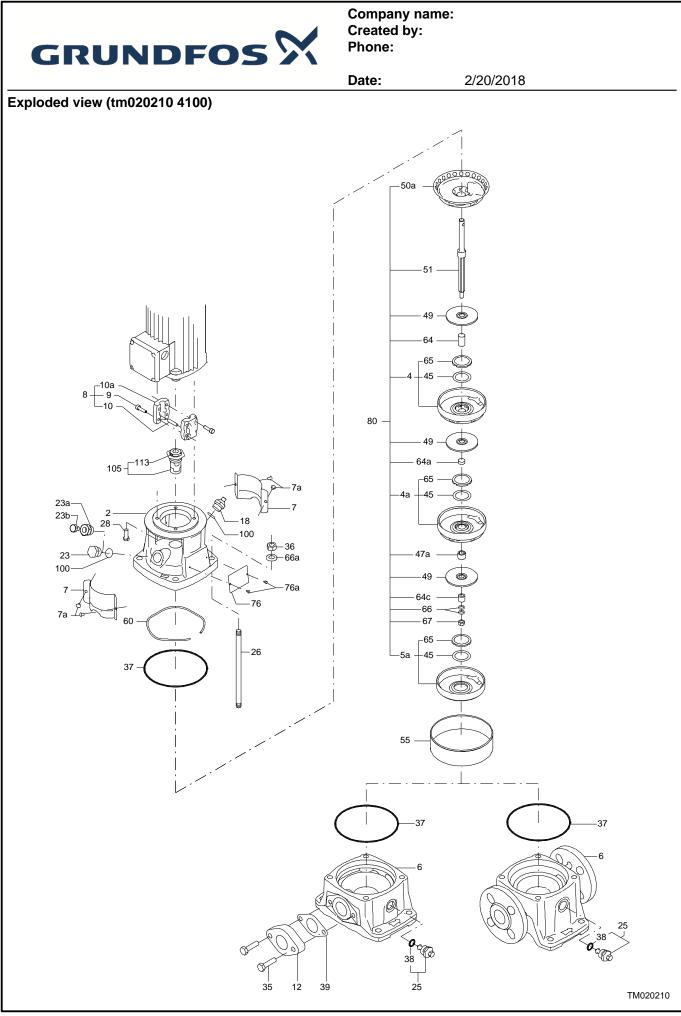


2/20/2018

Order Data:

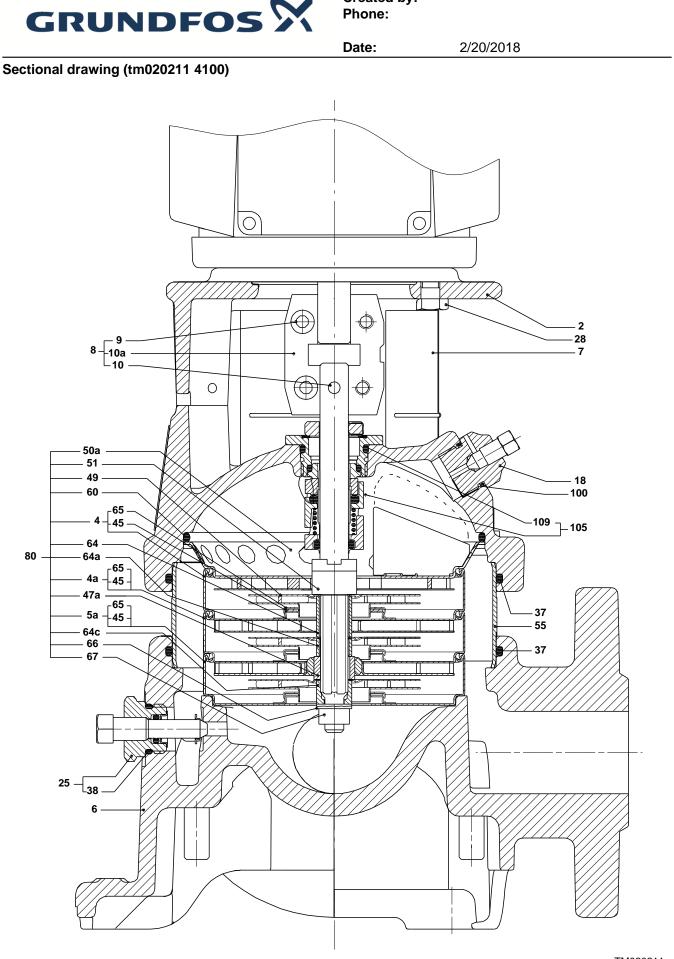
Product name: CR 1-12 A-B-A-E-HQQE Amount: 1 Product No.: 96081986

Total: Price on request





Company name: Created by:



TM020211



2/20/2018

Parts list CR 1-12, Prod number 96081986 Valid from 16.9.2016 (1638)

Position	Description	Annotation	Classification data	Part No.	Count	
	Motor				1	pcs
	Base cpl.				1	pcs
6	Base				1	
12	Flange				2	
35	Hex head screw		Length: 40		4	
			Thread: M10			
37	Gasket				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	
			Material type: EPDM			
			Thickness: 2,4			
2	Pump head cpl.		· · ·		1	pc
2	Pump head				1	
7	Coupling guard				2	
7a	Thread cutting screw				4	
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	
8	Coupling cpl.				1	pc
9	Hex socket head cap screw	1	Designation: DIN 912	2	4	P
-			Length: 20			
			Thread: M6			
10	Shaft pin		Diameter: 5		1	
	Chartpin		Length: 26			
10a	Coupling half				2	
26	Staybolt		Length: 241		4	pc
	Claybolt		Thread: M12		-	pu
36a	Washer		Designation: DIN 125 A		4	pc
000	Waller		Inner diameter: 13		т	pu
			Outer diameter: 24			
			Thickness: 2,5			
55	Outer sleeve		1110N1033. 2,J		1	no
66a	Nut		Thread: M12		4	pc
80	Chamber stack		THEAU. WILL		4	pc
00	Impeller				12	pc
					12	
	Guide vane cpl.				.1	
500	Plate					
50a	Guide vane					
50b	Top plate				~	
	Chamber cpl.				9	
4	Guide vane					



			Date:	2/2	0/2018	5
Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Retainer					
	Intermediate chamber					
	Vane					
45	Neck ring					
65	Retainer					
4a	Chamber w. bearing cpl.				2	
	Guide vane					
	Retainer for bearing					
	Bearing bush					
	Retainer					
	Intermediate chamber					
	Vane					
45	Neck ring					
65	Retainer					
5a	Chamber cpl.				1	
	Retainer					
	Intermediate chamber					
	Vane					
45	Neck ring					
65	Retainer					
36	Lock nut		Thread: M8		1	
47a	Bearing ring, rotating				2	
51	Shaft, spline, cpl.				1	
64a	Spacing pipe				9	
64a	Spacing pipe		Inner diameter: 12,85	5	2	
	5111		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		51		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	
-	- 5		Material type: EPDM		-	
			Thickness: 2,75			
103	Seal ring, stationary				1	
105	Seal ring, rotating				1	
107	O-ring				1	
					•	