

## CRN64-2 A-F-G-V-HQQV 3x400/690 50 HZ Grundfos pump 96123800



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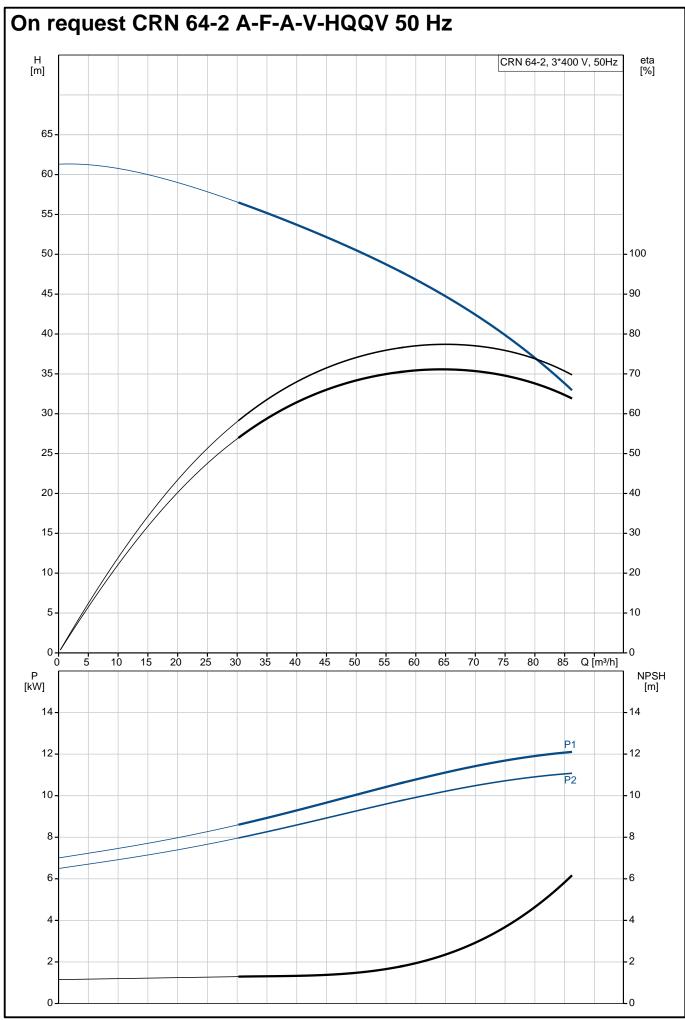
https://www.lenntech.com/grundfos/CRN64/96123800/CRN-64-2-A-F-G-V-HQQV.html

info@lenntech.com tel. +31 152 610 900 fax. +31 152 616 289

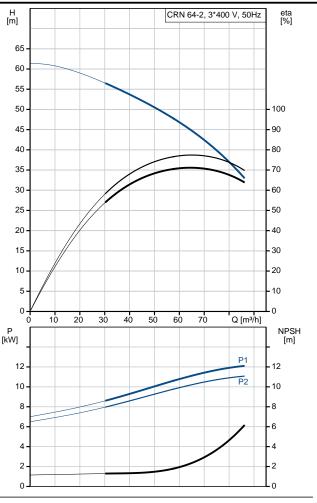
Position	Qty.	Description
	1	CRN 64-2 A-F-A-V-HQQV
		Product No.: On request
		Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via DIN flanges.
		The pump is fitted with a 3-phase, fan-cooled asynchronous motor.
		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.
		<ol> <li>2) Zinc phosphating.</li> <li>3) Cathodic electro-deposition.</li> </ol>
		4) Curing to a dry film thickness 18-22 my m.
		The colour code for the finished product is NCS 9000/RAL 9005.
		<b>Pump</b> A long split coupling connects the pump and motor shaft. It is enclosed in the motor stool by means of two coupling guards. The long coupling makes it possible to replace the shaft seal without removing the motor from the pump.
		The motor stool connects the pump head and motor. 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.
		<ul> <li>Primary seal: <ul> <li>Rotating seal ring material: silicon carbide (SiC)</li> <li>Stationary seat material: silicon carbide (SiC)</li> </ul> </li> <li>This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.</li> <li>Secondary seal material: FKM (fluorocarbon rubber)</li> </ul>

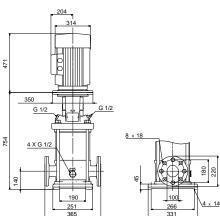
Position	Qty.	Description
		FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.
		The shaft seal is retained in the pump head by a cover and screws. It can be replaced without removing the motor.
		The chambers and impellers are made of stainless-steel 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 pump has a stainless-steel base mounted on a separate base plate. The base and base plate are kept in position by the tension of the staybolts which hold the pump together. Both the inlet and the outlet side of the base have two pressure gauge tappings. The pump is secured to the foundation by four bolts through the base plate. The flanges are fastened to the base by means of locking rings.
		<b>Motor</b> The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with free-hole flange (FF). Motor-mounting designation in accordance with IEC 60034-7: IM B 5 (Code I) / IM 3001 (Code II). Electrical tolerances comply with IEC 60034.
		The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1. The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.
		Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.
		The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.
		Technical data
		Controls: Frequency converter: NONE
		Liquid:       Water         Pumped liquid:       Water         Liquid temperature range:       -20 90 °C         Liquid temperature during operation:       20 °C         Density:       998.2 kg/m³
		Technical:         Rated flow:       64 m³/h         Rated head:       44.3 m         Pump orientation:       Vertical         Shaft seal arrangement:       Single

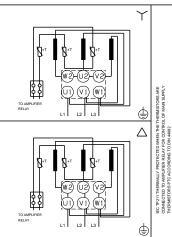
Position	Qty.	Description	
		Code for shaft seal:	HQQV
		Approvals on nameplate:	CE, EAC
		Curve tolerance:	ISO9906:2012 3B
		Materials:	
		Base:	Stainless steel
			EN 1.4408
			AISI 316
		Impeller:	Stainless steel
			EN 1.4401
		Beering	AISI 316
		Bearing:	SIC Graflon
		Support bearing:	Granon
		Installation:	
		Maximum ambient temperature:	60 °C
		Maximum operating pressure:	
		Max pressure at stated temp:	16 bar / 90 °C
			16 bar / -20 °C
		Type of connection:	DIN
		Size of inlet connection:	DN 100
		Size of outlet connection:	DN 100
		Pressure rating for pipe connecti	
		Flange size for motor:	FF300
		Electrical data:	
		Motor standard:	IEC
		Motor type:	160MB
		IE Efficiency class:	IE3
		Rated power - P2:	11 kW
		Power (P2) required by pump:	
		Mains frequency:	50 Hz
		Rated voltage:	3 x 380-415D/660-690Y V
		Rated current:	20,8-19,8/12,0-11,8 A
		Starting current:	660-780 %
		Cos phi - power factor: Rated speed:	0.88-0.84 2940-2950 rpm
		Efficiency:	IE3 91,2%
		Motor efficiency at full load:	91.2-91.2 %
		Motor efficiency at 3/4 load:	91.8 %
		Motor efficiency at 1/2 load:	91.3 %
		Number of poles:	2
		Enclosure class (IEC 34-5):	55 Dust/Jetting
		Insulation class (IEC 85):	F
		Others:	
		Minimum efficiency index, MEI	: 0.7
		Net weight:	162 kg
		Gross weight:	195 kg
		Shipping volume:	0.495 m <sup>3</sup>
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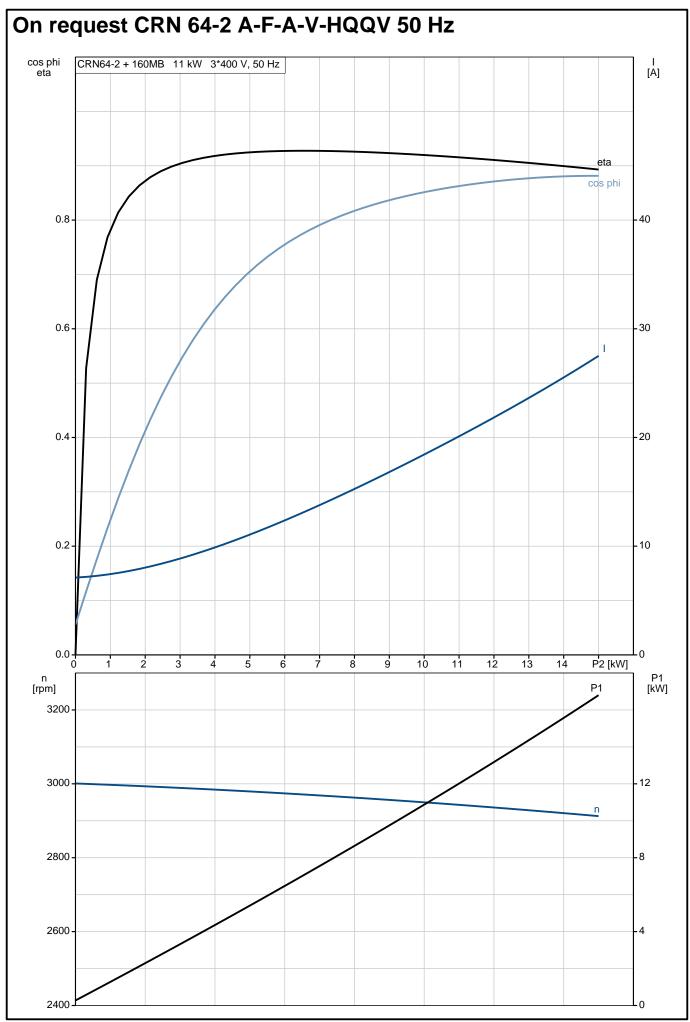
Description	Value	
General information:		
Product name:	CRN 64-2 A-F-A-V-HQQV	
Product No:	On request	
EAN number:	On request	
Technical:		
Rated flow:	64 m³/h	
Rated head:	44.3 m	
Stages:	2	
Impellers:	2	
Number of reduced-diameter impellers:	0	
Low NPSH:	Ν	
Pump orientation:	Vertical	
Shaft seal arrangement:	Single	
Code for shaft seal:	HQQV	
Approvals on nameplate:	CE, EAC	
Curve tolerance:	ISO9906:2012 3B	
Pump version:	A	
Model:	В	
Materials:		
Base:	Stainless steel	[
	EN 1.4408	
	AISI 316	
Impeller:	Stainless steel	
	EN 1.4401	
	AISI 316	
Material code:	A	
Code for rubber:	V	
Bearing:	SIC	
Support bearing:	Graflon	
Installation:		
Maximum ambient temperature:	60 °C	ł
Maximum operating pressure:	16 bar	
Max pressure at stated temp:	16 bar / 90 °C	
<b>—</b>	16 bar / -20 °C	
Type of connection:	DIN DIN	
Size of inlet connection:	DN 100	
Size of outlet connection:	DN 100	
Pressure rating for pipe connection: Flange size for motor:	PN 16	
Connect code:	FF300 F	
Liquid:	F	
Pumped liquid:	Water	
Liquid temperature range:	-20 90 °C	
Liquid temperature during operation:	20 °C	
Density:	998.2 kg/m <sup>3</sup>	
Electrical data:	556.2 kg/m	
Motor standard:	IEC	
Motor type:	160MB	
IE Efficiency class:	IE3	Γ
Rated power - P2:	11 kW	
Power (P2) required by pump:	11 kW	
Mains frequency:	50 Hz	
Rated voltage:	3 x 380-415D/660-690Y V	
Rated current:	20,8-19,8/12,0-11,8 A	
Starting current:	660-780 %	
Cos phi - power factor:	0.88-0.84	
Rated speed:	2940-2950 rpm	
Efficiency:	IE3 91,2%	
Motor efficiency at full load:	91.2-91.2 %	
Motor efficiency at 3/4 load:	91.8 %	
Motor efficiency at 1/2 load:	91.3 %	
Number of poles:	2	
Enclosure class (IEC 34-5):	55 Dust/Jetting	
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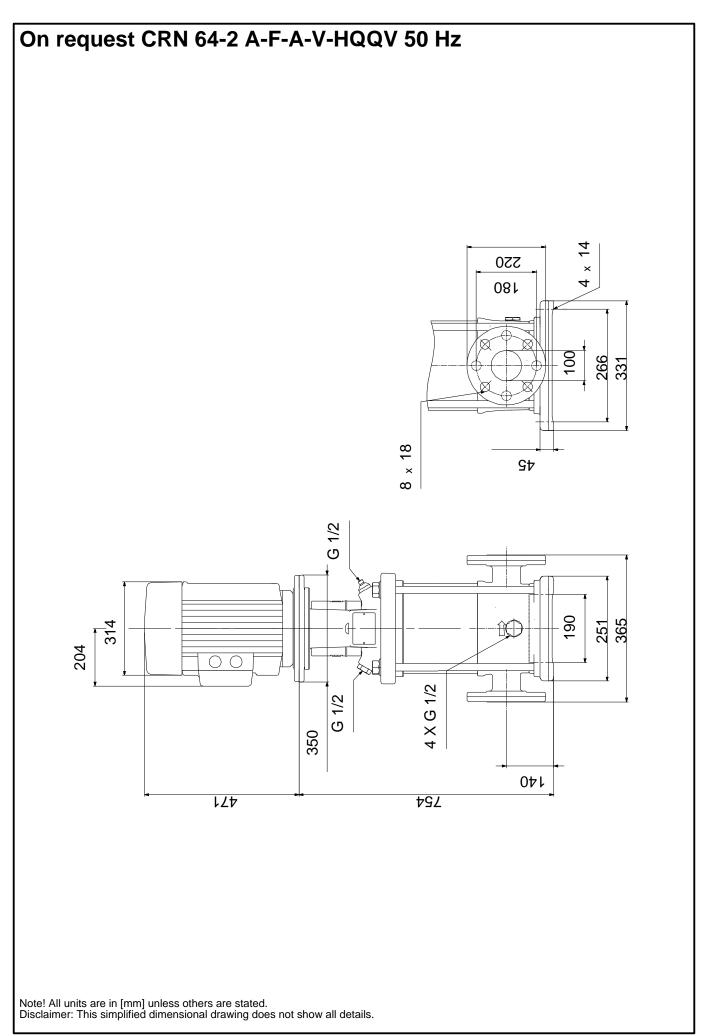


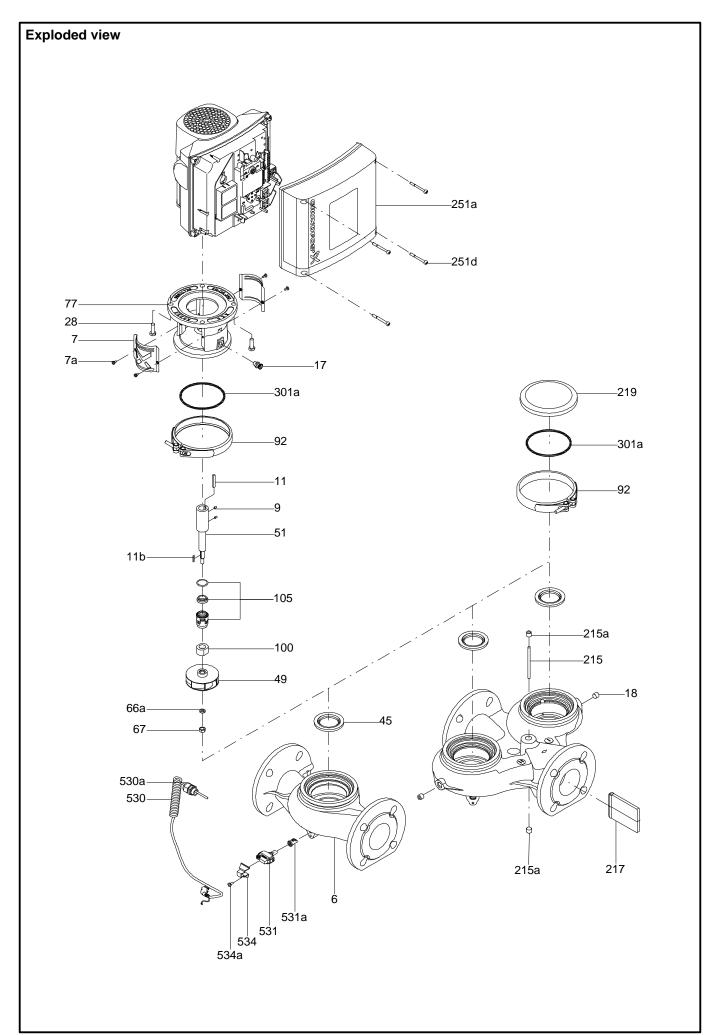


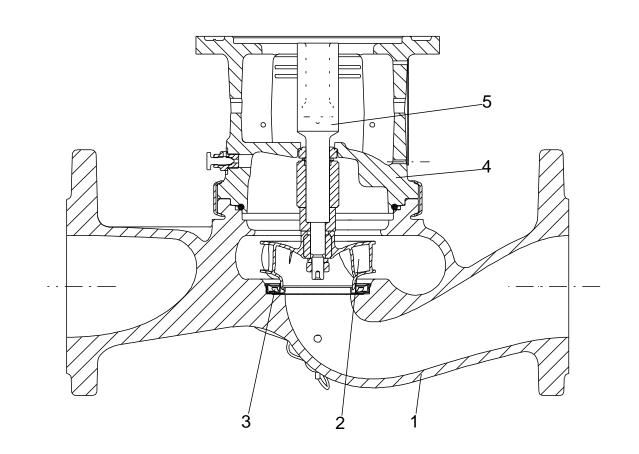


Description	Value
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	85U17524
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI :	0.7
Net weight:	162 kg
Gross weight:	195 kg
Shipping volume:	0.495 m³

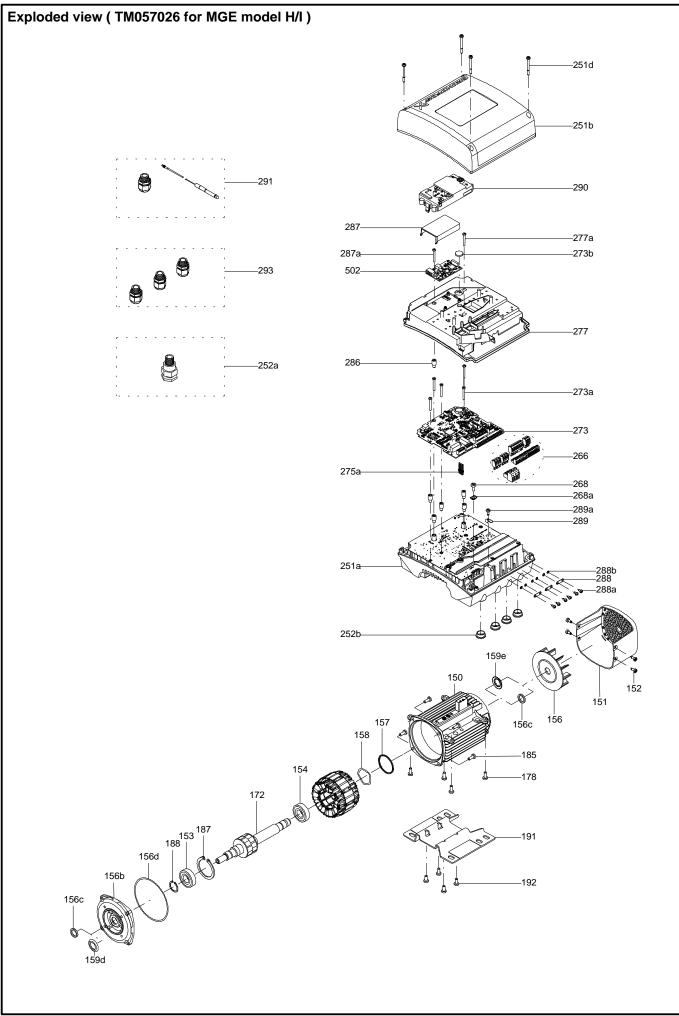








## TM058200



## Parts list CRN 64-2, Product No. On request Valid from 25.3.2011 (1112)

Pos	Description Motor	Annotation	Données de classification	Référence	Quantite	
1	Motor Basic unit				1	pcs pcs
1 2a	Pump head cpl.				1	pcs
2a 2	Pump head					1
2	Hex socket head cap screw		Designation: DIN 912	>		4
9	Hex socket head cap sciew		-	<u>z</u>		+
			Length (mm): 25 Thread: M10			
18	Air vont oprovi		Thread. MTO			1
10	Air vent screw					1
	Plug					
22	Spindle					4
23	Plug		Diamatan 240			1
37	O-ring		Diameter: 216			1
			Material type: FKM			
			Thickness: 4			
58	Cover					1
60	Spring					4
100	O-ring		Diameter: 16,3		2	2
			Material type: FKM			
			Thickness: 2,4			
6b	Base cpl.				1	
	Bearing ring, stationary					1
6	Base					1
25	Plug					4
31	Hex socket head cap screw					1
32	Washer		Designation: DIN 125	5A		1
			Internal diameter: 6,4			
			Outer diameter: 12,0			
			Thickness: 1,6			
37	O-ring		Diameter: 216			1
			Material type: FKM			
			Thickness: 4			
38	O-ring		Diameter: 16,3			4
	- 5		Material type: FKM			
			Thickness: 2,4			
56	Base plate		······································			1
26	Staybolt		Length (mm): 396		4	
			Thread: M16		•	
36	Nut		Thread: M16		4	
55	Outer sleeve				1	
66a	Washer		Designation: DIN 125 A2		4	
000	Wallon		Internal diameter: 17		+	
			Outer diameter: 30			
			Thickness: 3			
10	Matar atopl on		1110111033. J		1	n 00
1a	Motor stool cpl.				1	pcs
1a 7	Motor stool				1	
7	Coupling guard				2	
7a	Socket button head screw		Dimension 00/40		4	
8	Coupling cpl.		Dimension: 22/42	<b>`</b>	1	4
9	Hex socket head cap screw		Designation: DIN 912	<u> </u>		4
			Length (mm): 25			
			Thread: M10			_
10a	Coupling half					2
28	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 50			
			Thread: M10			
28.a	Hex head screw				4	
32.a	Washer		Designation: DIN 125 A		8	
			Internal diameter: 17			
			Outer diameter: 30			

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
			Thickness: 3			
36	Hex nut		Thread: M16		4	
- 76	Nameplate set				1	pcs
76	Plate				1	
76a	Rivet				2	
- 105	Shaft seal		Material type: HQQV		1	pcs
	Adjusting fork				1	
109	O-ring		Diameter: 44,45		1	
			Material type: FKM			
			Thickness: 3,53			
110	O-ring		Diameter: 21,5		1	
			Thickness: 4,25			
- 200	Flange cpl.				2	pcs
201	Flange		Diameter: DN 100		1	
			Pressure: PN 16			
203	Lock ring				1	

Disclaimer: The information about the Grundfos pump in this document may be outdated. Data may be subject to alterations without further notice. Please contact us to verify the data above is still accurate/up-to-date.

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info@lenntech.com https://www.lenntech.com tel. +31 152 610 900 fax. +31 152 616 289