

CRN1S-7 A-FGJ-G-V-HQQV 3x230/400 50HZ Grundfos pump 96515936



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https://www.lenntech.com/grundfos/CRN1S/96515936/CRN-1S-7-A-FGJ-G-V-HQQV.html

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Position Qty. Description

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CRN 1S-7 A-FGJ-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. Power transmission is via a rigid split coupling. Pipe connection is via combined DIN-ANSI-JIS flanges.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor.

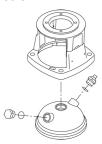
Further product details

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.
- 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.

The pump head and flange for motor mounting is made in one piece (cast iron). The pump head cover is a separate component (stainless steel). 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.

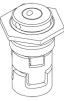
Primary seal:

- 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.



The shaft seal is screwed into the pump head.

Position Qty. Description The pump has a stainless-steel base mounted on a seperate base plate. This base and base plate are kept in position by the tension of the staybolts which hold the pump together. 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. The flanges and base are cast in one piece and prepared for connection by means of DIN, ANSI or JIS. Motor The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with tapped-hole flange (FT). Motor-mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II). Electrical tolerances comply with IEC 60034. The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1. The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (11/1). Technical data **Controls:** Frequency converter: NONE Liquid: Pumped liquid: Water Liquid temperature range: -20 .. 90 °C Liquid temperature during operation: 20 °C Density: 998.2 kg/m³ Technical: Rated flow: 0.9 m³/h Rated head: 28.7 m Pump orientation: Vertical Shaft seal arrangement: Sinale 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 **AISI 316** Bearing: SIC Installation: Maximum ambient temperature: 40 °C 25 bar Maximum operating pressure: 25 bar / 90 °C Max pressure at stated temp: 25 bar / -20 °C Type of connection: DIN / ANSI / JIS Size of inlet connection: DN 25/32 1 1/4 inch Size of outlet connection: DN 25/32 1 1/4 inch Pressure rating for pipe connection: PN 25 Flange rating inlet: 300 lb Flange size for motor: FT85 **Electrical data:** Motor standard: **IEC** Motor type: 71A IE Efficiency class: IE3 Rated power - P2: 0.37 kW

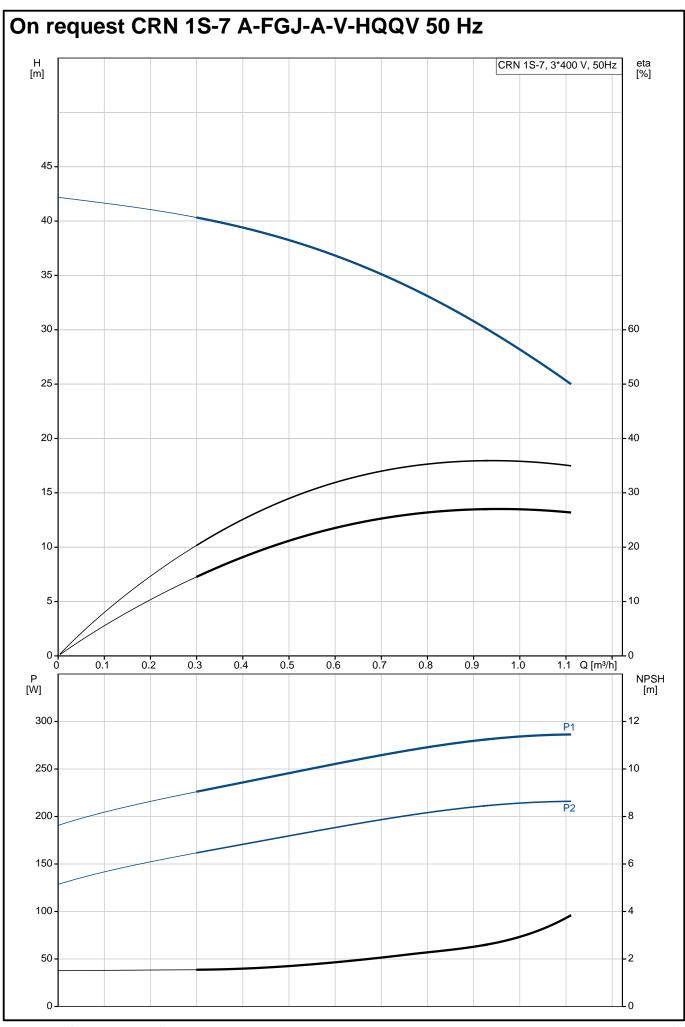
Mains frequency:

Power (P2) required by pump:

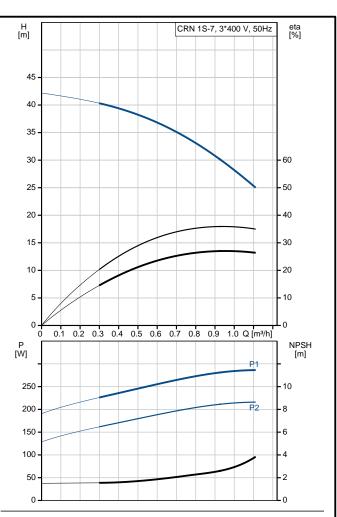
0.37 kW

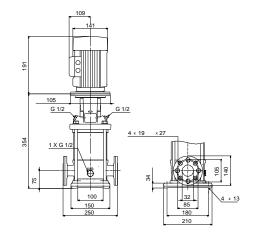
50 Hz

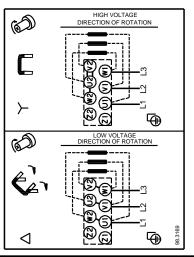
Position	Qty.	Description	
		Rated voltage: Rated current: Starting current: Cos phi - power factor: Rated speed: Efficiency: Motor efficiency at full load: Motor efficiency at 3/4 load: Motor efficiency at 1/2 load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85):	3 x 220-240D/380-415Y V 1.74/1.00 A 490-530 % 0.80-0.70 2850-2880 rpm IE3 73,8% 73.8 % 79.0 % 75.5 % 2 55 Dust/Jetting F
		Others: Minimum efficiency index, MEI Net weight: Gross weight: Shipping volume:	: 0.54 22.4 kg 25.1 kg 0.063 m ³



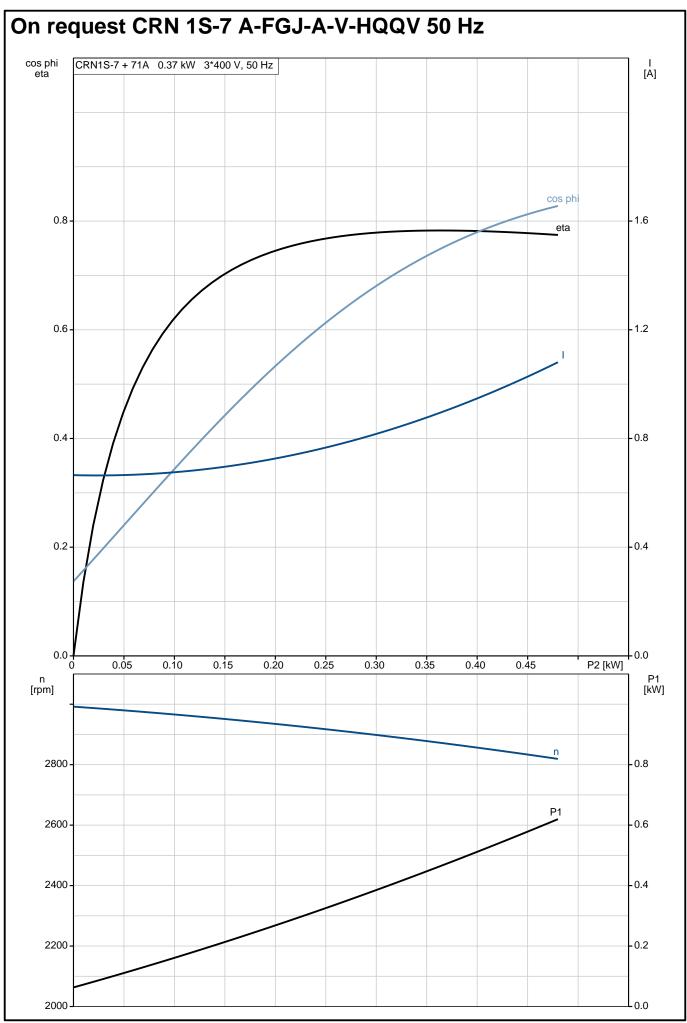
Description	Value
General information:	
Product name:	CRN 1S-7 A-FGJ-A-V-HQQV
Product No:	On request
EAN number:	On request
Technical:	
Rated flow:	0.9 m³/h
Rated head:	28.7 m
Stages:	7
Impellers:	7
Number of reduced-diameter	0
impellers:	O
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CE, EAC
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Base:	Stainless steel
	EN 1.4408
	AISI 316
Impeller:	Stainless steel
impelier.	EN 1.4401
	AISI 316
Material and a	
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	
Maximum ambient temperature:	40 °C
Maximum operating pressure:	25 bar
Max pressure at stated temp:	25 bar / 90 °C
	25 bar / -20 °C
Type of connection:	DIN / ANSI / JIS
Size of inlet connection:	DN 25/32
	1 1/4 inch
Size of outlet connection:	DN 25/32
	1 1/4 inch
Pressure rating for pipe connection:	PN 25
Flange rating inlet:	300 lb
Flange size for motor:	FT85
Connect code:	FGJ
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 90 °C
Liquid temperature during operation:	
Density:	998.2 kg/m³
Electrical data:	COOL NS/III
Motor standard:	IEC
	71A
Motor type:	
IE Efficiency class:	1E3
Rated power - P2:	0.37 kW
Power (P2) required by pump:	0.37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
Rated current:	1.74/1.00 A
Starting current:	490-530 %
Cos phi - power factor:	0.80-0.70
Rated speed:	2850-2880 rpm
Efficiency:	IE3 73,8%
Motor efficiency at full load:	73.8 %
Motor efficiency at 3/4 load:	79.0 %
-	



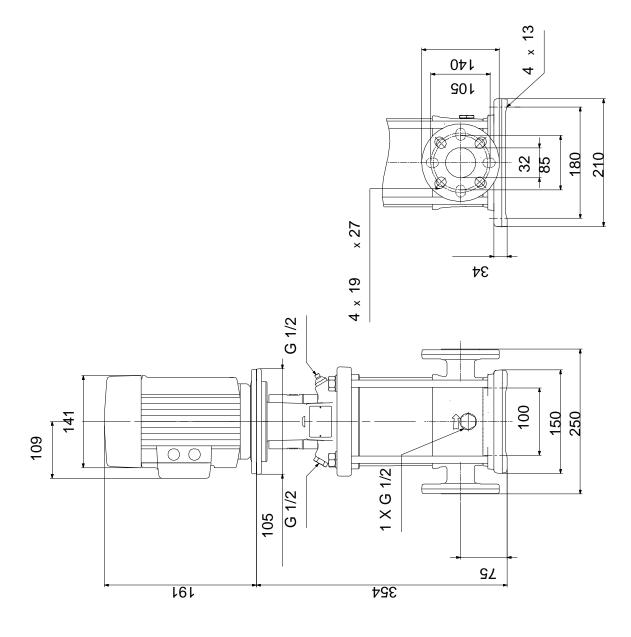




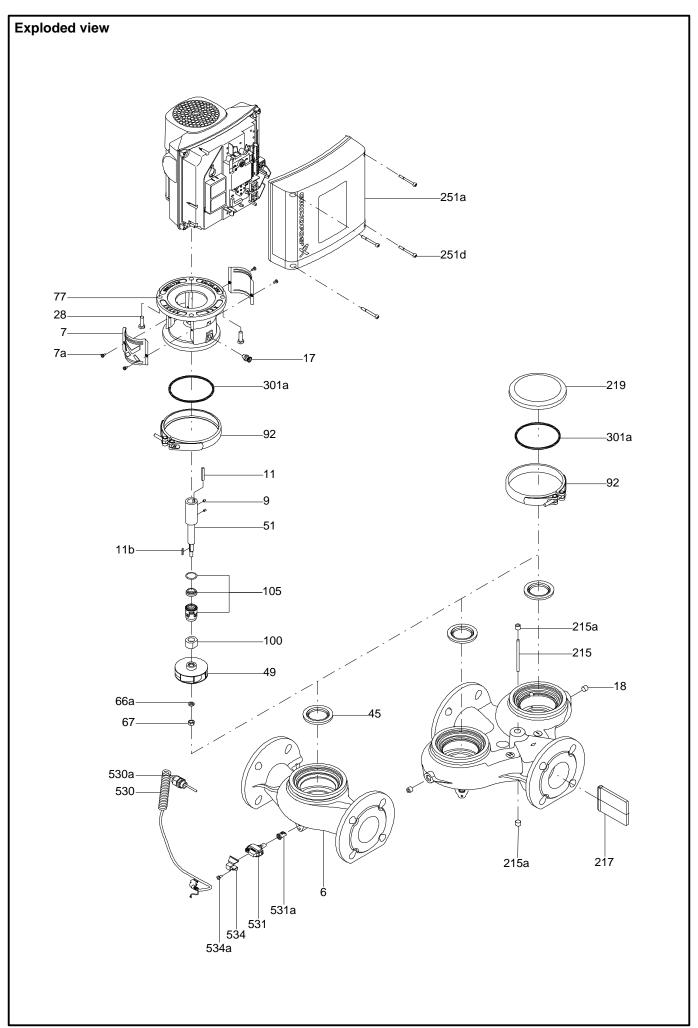
Description	Value
Motor efficiency at 1/2 load:	75.5 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	NONE
Motor No:	85805102
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI:	0.54
Net weight:	22.4 kg
Gross weight:	25.1 kg
Shipping volume:	0.063 m ³

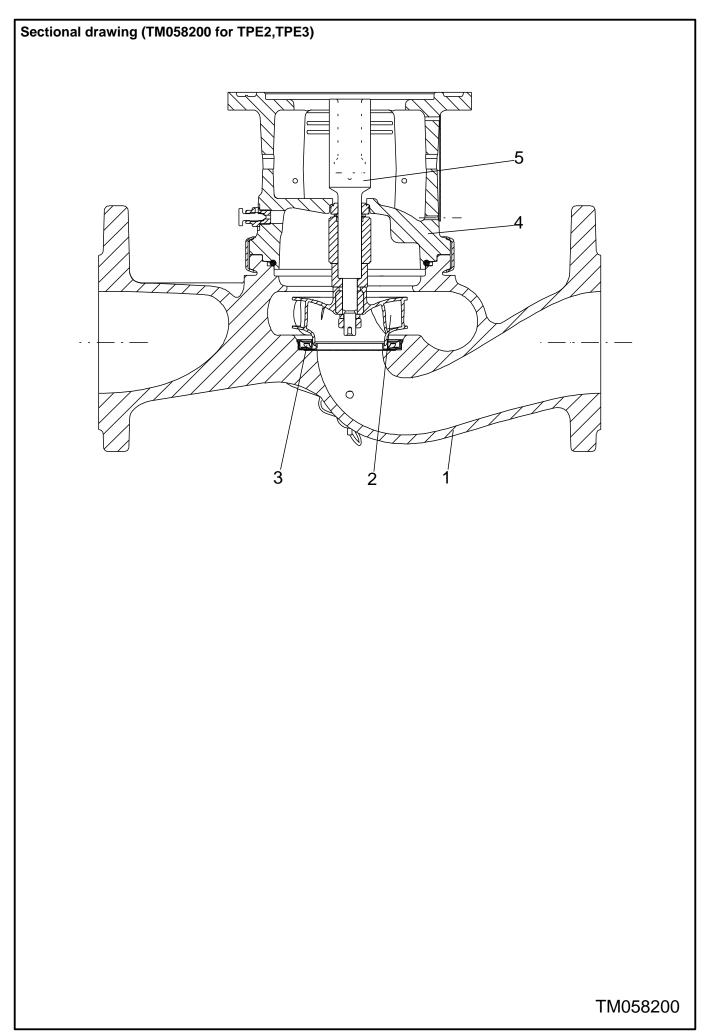


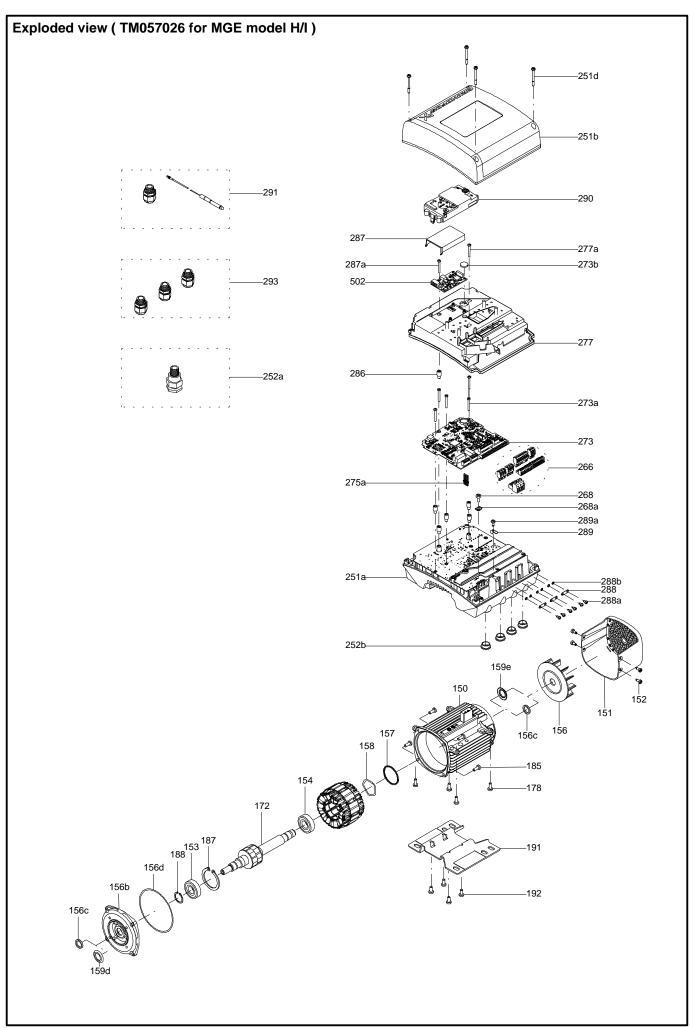
On request CRN 1S-7 A-FGJ-A-V-HQQV 50 Hz



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







Parts list CRN 1S-7, Product No. On request Valid from 1.1.2004 (0401)

Pos	Description Motor	Annotation	Données de classification	Référence	1	
						pcs
_	Base cpl.				1	pcs
6	Base				1	
56	Base plate				1	
201.a	9				2	
203	Lock ring				2	
	Sealing parts				1	pcs
25	Drain plug w/bypass valve				1	
38	O-ring		Diameter: 16,3			1
	- 3		Material type: FKM			
			Thickness: 2,4			
37	O ring		Diameter: 137,5		2	
	O-ring					
			Material type: FKM			
			Thickness: 3,3			
100	O-ring		Diameter: 16,3		2	
			Material type: FKM			
			Thickness: 2,4			
2	Pump head cpl.				1	pcs
2	Pump head				1	
7	Coupling guard				2	
7.a	Combi Slot Torx screw				4	
18	Air vent screw				1	4
	Plug					1
	Spindle					1
23a	Plug				1	
28	Hex head screw		Length (mm): 20		4	
			Thread: M6			
60	Formed wire spring				1	
77	Pump cover				1	
8	Coupling				1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	Pos
9	riex socket flead cap screw				4	
			Length (mm): 20			
			Thread: M6			
10	Shaft pin		Diameter: 5		1	
			Length (mm): 26			
10a	Coupling half				2	
26	Staybolt		Length (mm): 227		4	pcs
	-		Thread: M12			•
36	Nut		Thread: M12		4	pcs
55	Outer sleeve				1	pcs
66a	Washer		Designation: DIN 125 A2		4	
ooa	vvasilti				+	pcs
			Internal diameter: 13			
			Outer diameter: 24			
			Thickness: 2,5			
80	Chamber stack		Bearing type: SILICON CARBIDE		1	pcs
4	Chamber cpl.				5	
4a	Intermediate chamber					1
45	Neck ring					1
65	Neck ring retainer					1
4a	Chamber w. bearing cpl.				1	•
					- 1	4
4a	Intermediate chamber					1
45	Neck ring					1
65	Neck ring retainer					1
5a	Chamber cpl.				1	
4a	Intermediate chamber					1
45	Neck ring					1
65	Neck ring retainer					1
36	Lock nut		Thread: M8		1	•
	Bearing ring, rotating		TITEAU. IVIO			
47a	Dearing ring retating				1	

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
- 49	Impeller cpl.				7	
49	Impeller				1	
- 50a	Guide vane				1	
	Plate				1	
50b	Top plate				1	
- 51	Shaft, spline, cpl.				1	
51	Shaft				1	
62	Stop ring				1	
64a	Spacing pipe				5	
64a	Spacing pipe		Internal diameter: 12,85		1	
			Outer diameter: 15,85			
			Length (mm): 4,50			
64c	Clamp, splined		Internal diameter: 8,5		1	
			Outer diameter: 15			
66	Wedge lock washer				1	
- 105	Shaft seal		Material type: HQQV		1	pcs
	O-ring				1	
	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				3	
103	Seal ring, stationary				1	
105	Seal ring, rotating				1	
109	O-ring				1	
113	Driver				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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