
END SUCTION PUMP WITH INTEGRATED VARIABLE FREQUENCY DRIVE REPLACEMENT PARTS GUIDE

TYPE LFE

This guide is valid for all Grundfos CBS Inc. products beginning with product code 21.

Grundfos CBS Inc. End Suction Pumps are designed and built to provide maximum life while requiring minimum attention and service. At times, replacement parts may be required. **VIRTUALLY ALL REQUIRED PARTS ARE AVAILABLE IN KIT FORM.**

These kits (easily selected from the charts on the following pages) have been designed to insure that any parts needed when replacing any End Suction component, are furnished when you need them, with minimum effort.

Guidelines and Suggestions:

The pump nameplate contains all data required in the selection and ordering of the proper replacement parts kit. The PUMP MODEL AND SERIAL NUMBER should be referenced when ever any replacement parts kit is ordered, while the **pump conditions** (GPM/TDH) and **impeller trim** are required data for the ordering of replacement impellers.

NOTE: SEAL/PACKING KITS ARE ALWAYS RECOMMENDED AS SPARE PARTS
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TO REPLACE A MECHANICAL SEAL

Select the correct Seal Kit, which contains all gaskets and impeller hardware. Shaft sleeve inspection is suggested.

TO REPLACE THE PACKING

Select the correct Packing Kit, which contains all gaskets, impeller hardware and lantern ring. If the packing gland is damaged it may be replaced by ordering the proper Gland Kit. A shaft sleeve or adapter shaft will probably be required.

TO REPLACE THE SHAFT SLEEVES

Select sleeve from sleeve chart. A Seal or Packing Kit will provide other normally needed parts.

TO REPLACE THE BEARING FRAME

Select the correct Bearing Frame assembly.

TO REPLACE IMPELLER

Select the correct Impeller Kit which contains all gaskets and impeller hardware. A Wear Ring Kit is highly Recommended, and a Seal or Packing Kit will probably be required. Shaft sleeve inspection is suggested.

TO REPLACE WEAR RINGS

Select the correct Wear Ring Kit. An Impeller Kit may be indicated if wear is excessive. A Seal/Packing Kit will provide all other normally replaced components.

TO REPLACE BEARINGS (Frame mounted pumps only)

Select the correct Bearing Frame Kit, which contains the bearings and moisture seals.

TO REPLACE THE SHAFT

Select the correct Shaft Kit. A Bearing Frame Kit and shaft sleeve will also be required.
A Seal or Packing Kit will probably be required.

TO REPLACE LOST OR DAMAGED HARDWARE

Select the correct Hardware Kit.

TO OVERHAUL THE PUMP

Select an Impeller Kit, Wear Ring Kit, Hardware Kit, Seal or Packing Kit, and a Sleeve or Adapter Shaft. Bearing replacement may also be indicated.

TO OVERHAUL THE BEARING FRAME

Select a Bearing Frame Kit and a Shaft Kit.

TO REPLACE SLINGER (Included in Shaft Kit)

If not replacing shaft, order individually.

ORDERING:

After determining and selecting the required Kit(s), or for selection assistance, contact your local Grundfos Sales Office, Representative, or Distributor.

Model No.	Pump Constr. Code	Impeller Kit			Wear Ring Kit	Hardware Kit	Sleeve	Seal Kit	Packing Kit	Gland
		Bronze	Aluminum Bronze	Iron						
1070-7	X3XXXX	91911005	97679766	-	91910538	91910593	See page 5 for sleeve selection	See page 6 for seal selection	91910834	91910643
1270-9	X3XXXX	91911000	97909161	91911001	91910539	91910593			91910834	91910643
1570-5	X3XXXX	91909739	97850072	91909740	91910540	91910593			91910834	91910643
2070-9	X3XXXX	91911595	97776120	91911596	91910541	91910593			91910834	91910643
2570-7	X3XXXX	91909762	97891615	91909763	91910542	91910593			91910834	91910643
3070-7	X3XXXX	91909772	97661731	91909773	91910544	91910593			91910834	91910643
4070-7	X3XXXX	91909783	97908496	91909784	91910548	91910593			91910834	91910643
1595-1	X3XXXX	91909791	96699310	91909792	91910540	91910595			91910834	91910643
1595-5	X3XXXX	91909793	97852485	91909795	91910540	91910595			91910834	91910643
1595-9	X3XXXX	91911017	97692479	91911018	91910540	91910595			91910834	91910643
2095-3	X3XXXX	91909815	97948034	91909816	91910541	91910595			91910834	91910643
2595-7	X3XXXX	91911369	97745127	91911370	91910542	91910595			91910834	91910643
3095-7	X3XXXX	91911630		91911633	91910543	91910595			91910834	91910643
3095-7	XAXXXX	91911637		91911638	91910567	91910596			91910847	91910644
4095-7	X3XXXX	91909863		91909865	91910549	91910596			91910834	91910643
5095-7	X4XXXX	91909887		91909891	91910551	91910596			91910847	91910644
6095-1	XAXXXX	91909898	97713071	-	91910554	91910596			91910847	91910644
2012-1	X3XXXX	91909901		91909902	91910541	91910598			91910834	91910643
2512-3	X3XXXX	91909908	97825585	-	91910542	91910598			91910834	91910643
3012-1	XAXXXX	91909919		-	91910555	91910599			91910847	91910644
3012-7	XAXXXX	91911375		91911376	91910555	91910599			91910847	91910644
4012-9	XAXXXX	91911367		91911368	91910556	91910599			91910847	91910644
4012-A	XAXXXX	91909218		-	91910556	91910599			91910847	91910644
5012-3	XAXXXX	91909957		91909958	91910558	91910599			91910847	91910644

BEARING FRAME ASSEMBLY

Const. Code Bearing Frame Number	Catalog Number		Steel Shaft Greaseable	Stainless Shaft Greaseable	Steel Shaft Oil Lubed	Stainless Shaft Oil Lubed
	Steel Shaft Greased For Life	Stainless Shaft Greased For Life				
XX3PXX	99027469					
XX6PXX	99026846					
XX3LXX	91869852	91869858	-	-	-	-
XX6LXX	91869853	91869859	-	-	-	-

BEARING KIT AND SHAFT KIT

Frame Size	Bearing Kit Number	Shaft Kit Number (Steel)	Shaft Kit Number (Stainless)
XX3PXX	91911769	91911777	91911778
XX6PXX	91911772	91911779	91911780
XX3LXX	91911769	91911777	91911778
XX6LXX	91911772	91911779	91911780

SHAFT SLEEVES

Motor or Bearing Frame	Const. Code	Seal	Packing	Sleeve Material	Part Number	
#3L #3P	X3	X		Bronze	91843687	
		X		Stainless	91843690	
#3L #3P	'03		X	Bronze	91843687	
			X	Stainless	91843690	
JP, CCP	X4	X		Bronze	91843632	
		X		Stainless	91843636	
	'04		X	Bronze	91843632	
			X	Stainless	91843636	
	XA	XA	X		Stainless	91843814
				X	Bronze	91843812
		X	Stainless	91843814		

Seal Kits

Pump Model	Pump Const. Code	Std. Seal BUNA - Cer. Seat C-Code 1XXXXX	Std. Seal BUNA - Ni-Resist C-Code 7XXXXX	Viton - Ni-Resist Seat C-Code 6XXXXX	Viton - Tung. Car. Seat C-Code 2XXXXX	Viton - Ni-Resist Seat Liq. Jcktd. C-Code 9XXXXX	BUNA - Cer. Seat Dbl. Mech Std. Seal C-Code 3XXXXX	BUNA - Sil. Seat Bal. Seal C-Code 8XXXXX	EPDM - Sil. Seat Std. Seal C-Code FXXXXX	EPDM - Sil. Seat Liq. Jcktd. C-Code GXXXXX
1070 1270 1570 3070 4070	X3XXXX	91909832	91909838	91909837	91909834	91909838	91909836	91909840	91909846	K105-G
1595 2095 2595 3095 4095	X3XXXX	91909832	91909838	91909837	91909834	91909838	91909836	91909840	91909846	K105-G
5095	X4XXXX	91909874	91909879	91909878	91909875	91909879	91909876	91909880	91909883	K106-G
3095 6095	XAXXXX	91910609	91910612	91910611	91910610	-	-	-	91910614	-
2012 2512	X3XXXX	91909909	91909913	91909912	91909910	91909913	91909911	91909914	K107-F	K107-G
3012 4012 5012	XAXXXX	91910715	91910718	91910717	91910716	-	-	-	91910722	-

GASKETS

Pump Size (Nominal Max. Impeller Dia.)	Const. Code	Seal I.D. (in)	Gasket P/N	Gasket Description
7"	X3, X4	.625, 1.25, 1.75	91869180	Volute "O" Ring
9.5"	X3, X4, XA	1.25, 1.75	91849028	Volute Gasket
			91869180	"O" Ring-Backplate
12"	X3, XA	1.25, 1.75	91848843	Volute Gasket
			91869180	"O" Ring-Backplate

SLINGERS

Const. Code	Part Number
X3	91867835
X4,XA	91867849

MLE Motors

All MLE motors are 60 HZ, 3 PH, TEFC, VFD, C-Face, and uninsulated

Part Number	Weight	HP Motor	Poles	Volt.	Frame	AK	AH	Shaft Dia	Eff.	SF Motor	Amps Full Load	Type									
98489500	65	3	2	208-230	182TC	8.5	2.62	1.125	Energy/IE2	1.07	8.3	MLEV									
98489501				460					Premium	1.15	3.7	MLEV									
98489500	208-230			Energy/IE2					1.07	7.6	MLEV										
98489485	460			Premium					1.15	3.7	MLEH										
98489487	68		2	208-230					182TC	8.5	2.62	1.125	Energy/IE2	1.07	7.6	MLEH					
98489485				460									Premium	1.15	3.7	MLEH					
98510586	69			4									460	182TC	8.5	2.62	1.125	Energy/IE2	1.15	3.7	MLEV
98534069	88												460					Energy/IE2	1.07	7.6	MLEH
98489502	91	5	2	208-230	184TC	8.5	2.62	1.125	Energy/IE2	1.07	13.8	MLEV									
98489503	100			460					Premium	1.15	6.1										
98489502	91			208-230					Energy/IE2	1.07	13.3										
98489489	97			460					Premium	1.15	6.1	MLEH									
98489490	107		208-230	Energy/IE2					1.07	13.3											
98489489	97		4	460					184TC	8.5	2.62	1.125	Energy/IE2	1.15	6.1	MLEV					
98510587	100			460									Energy/IE2	1.07	13.3	MLEH					
98534070	107		460	Energy/IE2					1.15	6.1	MLEH										
98489504	100	7.5	2	208-230	215TC	8.5	3.12	1.375	Energy/IE2	1.07	20.5	MLEV									
98489505	109			460					Premium	1.15	8.9										
98489504	100			208-230					Energy/IE2	1.07	18.5										
98489491	104			460					Premium	1.15	8.9	MLEH									
98489492	113		208-230	Energy/IE2					1.07	18.5											
98489491	104		4	460					215TC	8.5	3.12	1.375	Energy/IE2	1.15		MLEV					
98510588	115			460									Energy/IE2	1.07	18.5	MLEH					
98534081	140		460	Energy/IE2					1.15		MLEH										
98489506	139	10	2	460	215TC	8.5	3.12	1.375	Premium	1.15	11.6	MLEV									
98489493									Energy/IE2			12.4	MLEH								
98510589	159		4						460		215TC	8.5	3.12	1.375	Premium	1.15	17.2	MLEV			
98534082	179														Energy/IE2			17.8	MLEH		
98489507	196	15	2	460	254TC	8.5	3.75	1.625	Premium	1.15	17.2	MLEV									
98489494	274								4			460	254TC	8.5	3.75	1.625	Energy/IE2	1.15	17.8	MLEH	
98510590	216		4								460						254TC			8.5	3.75
98534084	283								Energy/IE2			17.8	MLEH								

MLE Motors

All MLE motors are 60 HZ, 3 PH, TEFC, VFD, C-Face, and uninsulated

Part Number	Weight	HP Motor	Poles	Volt.	Frame	AK	AH	Shaft Dia	Eff.	SF Motor	Amps Full Load	Type
98489508	196	20	2	460	256TC	8.5	3.75	1.625	Premium	1.15	22.8	MLEV
98489496	307		Energy/IE2						MLEH			
98510592	260		4						24.2		MLEV	
98534085	331		MLEH									
98489509	225	25	2	460	284TSC	10.5	3.00	1.625	Premium	1.15	28	MLEV
98489497	338		284TC		Standard				MLEH			
98510593	269		4		4.38	1.875	29.5	MLEV				
98534087	349		MLEH									
98489510	251	30	2	460	286TSC	10.5	3.00	1.625	Premium	1.15	33.5	MLEV
98489498	366		MLEH									

Motor Kits

Motor pn	Control box cpl.	Control board	Inverter board	Rectifier board	Connector plugs	EMC cable gland	Harmonic filter	Varistor	Upgrade kit
98489500	98489672	Not available							
98489501									
98510586									
98489502									
98489503	96086143								
98510587									
98489504									
98489505									
98510588	96086144								
98489506									
98510589									
98489507	96348913	96348918	96348919	96348921	96348923	96478309	96348985	96348917	96348973
98510590									
98489508	96348914	96348918	96348920	96348921	96348923	96478309	96348985	96348917	96348973
98510592									
98489509									
98510593									
98489510									

**EXPLANATION OF PUMP CATALOG
(Refer to Pump Nameplate)**

**XX
Product
Code**

**XXXXX
Model
Number**

**XXXXXX
Construction
Code**

NOTE: This Replacement Parts Guide is valid for all Grundfos CBS Inc. products beginning with product code 21 only.

KIT COMPONENTS

Impeller Kit:
Impeller
Volute Gasket
Backplate Gasket
Impeller Cap Screw
Impeller Washer
Impeller Key
Impeller Nut

Seal Kit:
Mechanical Seal
Volute Gasket
Backplate Gasket
Seal Cap Gasket
Impeller Cap Screw
Impeller Washer
Impeller Key
Impeller Nut

Packing Kit:
Packing Seal
Volute Gasket
Backplate Gasket
Lantern Ring
Impeller Cap Screw
Impeller Washer
Impeller Key
Impeller Nut

Wear Ring Kit:
Wear Rings

**Bearing Frame
Assembly**

Gland Kit:
Packing Gland
Studs
Nuts
Bolts
Washers
Retaining Ring

**Sleeves:
(Non-Kitted)
Bronze
Stainless Steel**

Bearing Frame Kit:
Ball Bearings
Moisture Seals
Retaining Rings

Hardware Kit:
Cap Screws

Shaft Kit:
Shaft
Slinger
Keys

**Gaskets:
(Non-Kitted)**

NOTE: Kits may contain all parts listed. They are individually selected for each pump and its construction.

NOTE: Seal/Packing Kits are always recommended as spare parts.