
SPLIT-COUPLED INLINE PUMP WITH INTEGRATED VARIABLE FREQUENCY DRIVE REPLACEMENT PARTS GUIDE VLSE

This guide is valid for all Grundfos CBS Inc. products beginning with product code 28 only.

While Paco In-Line Pumps are designed and built to provide maximum life while requiring minimum attention and service, replacement parts may at times 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 ensure that any parts needed when replacing any Inline Pump component are furnished when you need them, with minimal effort.

GUIDELINES AND SUGGESTIONS:

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

TO REPLACE A MECHANICAL SEAL

Select the correct Seal Kit, which contains the volute and backplate gaskets as appropriate. Shaft sleeve and shaft inspection is suggested, and replacement made as indicated.

TO REPLACE IMPELLER

An Impeller Kit is required; a Wear Ring Kit is highly recommended, and a Seal or Packing Kit will provide all other normally replaced components.

TO REPLACE WEAR RINGS

A Wear Ring kit is required. A Seal/Packing Kit will provide all other normally replaced components. Shaft sleeve inspection is suggested.

TO REPLACE GASKETS

Order appropriate individual Gaskets, as needed.

TO REPLACE LOST/DAMAGED HARDWARE

Hardware Kits are available, for 175 PSI units. (For 250 PSI refer to factory).

PLACING AN ORDER

After determining and selecting the required Kit(s), or for selection assistance, contact your local Grundfos sales office, representative, or distributor.

TYPE VLSE, SPLIT COUPLED INLINE REPLACEMENT PARTS

PUMP MODEL NO.	CONST. CODE	IMPELLER KIT			WEAR RING KIT	HARDWARE KIT	SEAL KIT
		BRONZE	Aluminum Bronze	IRON			
1270-7	X3	91911005		96647857	91910538	91910593	See page 3 for seal selection
1570-9	X3	91911000		91911001	91910539	91910593	
2070-5	X3	91909739		91909740	91910540	91910593	
2570-9	X3	91911595		91911596	91910541	91910593	
3070-7	X3	91909762		91909763	91910542	91910593	
4070-7	X3	91909772		91909773	91910544	91910593	
5070-7	X3	91909783		91909784	91910548	91910593	
2095-1	X3	91909791		91909792	91910540	91910595	
2095-5	X3	91909793		91909795	91910540	91910595	
2095-9	X3	91911017		91911018	91910540	91910595	
2595-3	X3	91909815		91909816	91910541	91910595	
3095-7	X3	91911369		91911370	91910542	91910595	
4095-7	X3	91911630	97642561	91911633	91910543	91910595	
4095-7	XA	91911637	96762426	91911638	91910567	91910596	
5095-7	X3	91909863	97920032	91909865	91910549	91910595	
5095-7	X4	91909867	97684756	91909870	91910549	91910596	
6095-7	X4	91909187	98090499	91909188	91910551	91910596	
8095-1	XA	91909898		96769173	91910554	91910596	

VLSE, SPLIT COUPLED INLINE REPLACEMENT PARTS

MECHANICAL SEAL KITS

Select appropriate seal kit by matching desired seal code with pump model & construction code.

AVAILABLE SEAL MATERIALS & PROPERTIES					
Seal Code->	1XXXXX	7XXXXX	6XXXXX	2XXXXX	8XXXXX
Max Temperature	211°F	211°F	250°F	275°F	211°F
Max Pressure	175 PSI	175 PSI	175 PSI	175 PSI	350 PSI
Type	21	21	21	21	1B
Elastomer	Buna N	Buna N	Viton	Viton	Buna N
Rotating Element	Carbon	Carbon	Carbon	Carbon	Carbon
Stationary Seat	Ceramic	Ni Resist	Ni Resist	Tung Crbd	Ni Resist
Spring	18-8 S/S	18-8 S/S	18-8 S/S	18-8 S/S	18-8 S/S
Hardware	18-8 S/S	18-8 S/S	18-8 S/S	18-8 S/S	Brass

CONSTR CODE	MECHANICAL SEAL KIT PART NUMBER				
	X3	91909162	91909165	91909164	91909163
X4	91909166	91909170	91909169	91909167	96869886
XA	91909166	91909170	91909169	91909167	96869886

HARDWARE KITS

Motor Frame Size	Construction Code	Pump Size	Hardware Kits
184-286TC	X3	7"	98467976
	X4		
182-405TC	X4	9.5"	98468694
	X3		
	XA		
182-405TC	X3	12"	98468716
	X4	9.5"	
	XA	12"	
284/286TC	X3	9.5"	98468751
	X4		
284/286TC	XA	12"	98468753

GASKETS

Construction Code	Pump Size	Gasket Part Number	Gasket Description
X3	7"	91848837	Volute Gasket
X4			
X3	9.5"	91849028 91848837	Volute Gasket Backplate Gasket
X4			
XA			
X3	12"	91848843 91848837	Volute Gasket Backplate Gasket
XA			

VLSE, SPLIT COUPLED INLINE REPLACEMENT PARTS

Motor Frame Size	Construction Code	Pump Size	Shaft Kits
182/184TC	X3	7", 9.5"	98571486
		12"	98571497
213/215TC	X3	7", 9.5"	98571478
		12"	98571487
	XA	12"	98571499
254/256TC	X3	7", 9.5"	98571488
		12"	98571478
	X4	7", 9.5"	98571485
		9.5"	98571515
	XA	12"	98571482
284/286TC	X3	9.5"	98571482
	X4	9.5"	
	XA	9.5", 12"	

Motor Frame Size	Construction Code	Pump Size	O-Rings	Bushings	Coupling Kits
182/184TC	X3	7", 9.5", 12"	91869106	91844356	98456268
	XA	12"		91844355	
213/215TC	X3	7", 9.5", 12"	91869106	91844356	98456285
	XA	7", 9.5"		91844355	
	X4	9.5"			
254/256TC	X3	7", 9.5", 12"	91869106	91844356	98456288
	XA			91844355	
254/256TC	X4	7", 9.5"	91869106	91844355	98456288
284/286TC	XA	9.5", 12"	91869106	91844355	98456289
	X4	7"			98456874
	XA				

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	68			208-230					Energy/IE2	1.07	7.6	MLEV					
98489485									460	8.3	MLEH						
98489487	68		208-230	460					Premium	1.15	3.7	MLEH					
98489485				1.07					7.6	MLEH							
98510586	69		4	460					Energy/IE2	1.15	3.7	MLEV					
98534069	88								3.7	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								13.8								
98489490	107		460	Premium					1.15	6.1	MLEH						
98489489	97		208-230	1.07					13.3								
98510587	100		4	460					Energy/IE2	1.15	6.1	MLEV					
98534070	107								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				20.5												
98489492	113	460		Premium	1.15	8.9	MLEH										
98489491	104	208-230		1.07	18.5												
98510588	115	4		460	Energy/IE2	1.15		MLEV									
98534081	140					MLEH											
98489506	139	10		2	460	215TC	8.5	3.12	1.375					Premium	1.15	11.6	MLEV
98489493														MLEH			
98510589	159		4	Energy/IE2						12.4	MLEV						
98534082	179			MLEH													
98489507	196	15	2	460	254TC	8.5	3.75	1.625	Premium	1.15	17.2	MLEV					
98489494	274								MLEH								
98510590	216		4						Energy/IE2		17.8	MLEV					
98534084	283								MLEH								

MLE Motors

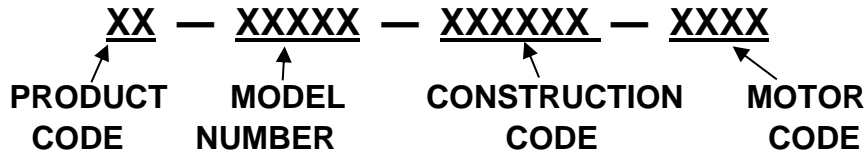
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Part Number	Weight	HP Motor	Poles	Volt.	Frame	AK	AH	Shaft Dia	Eff.	SF Motor	Amps Full Load	Type
98489508	196	20	2	460	256TC	8.5	3.75	1.625	Premium	1.15	22.8	MLEV
98489496	307		4						Energy/IE2		24.2	MLEH
98510592	260								4		Energy/IE2	24.2
98534085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

EXPLANATION OF PUMP CODING-
(REFER TO PUMP NAMEPLATE)



NOTE: This Replacement Parts Guide is valid for all PACO products beginning with product code 28 only.

KIT COMPONENTS

IMPELLER KIT:
 Impeller
 Volute Gasket
 Backplate Gasket
 Impeller Cap Screw
 Impeller Washer
 Impeller Key
 Impeller Nut

SEAL KIT:
 Mechanical Seal
 Seal Cap O-Ring

WEAR RING KIT:
 Wear Rings, Bronze

Non-kitted parts
 Gaskets
 Seal Cap O-rings
 Bushings
 Couplings
 Key Sets for Couplings

HARDWARE KIT:
 Cap Screws

SHAFT KIT:
 Shaft
 Bushing
 Seal Cap O-Ring

NOTES:

Kits may not contain all parts listed. They are individually selected for each pump, according to the pump construction and design.

Seal Kits are always recommended as spare parts.