

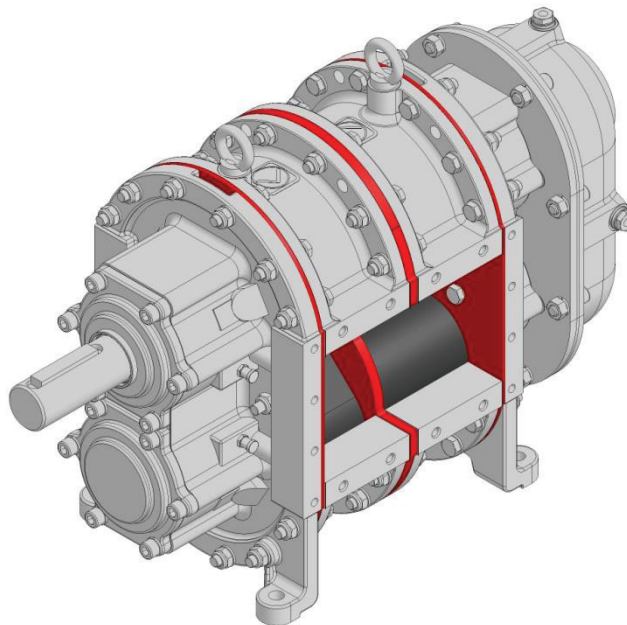


# Spare Parts List

Rotary Lobe Pump

R136

ENGINEERED TO WORK



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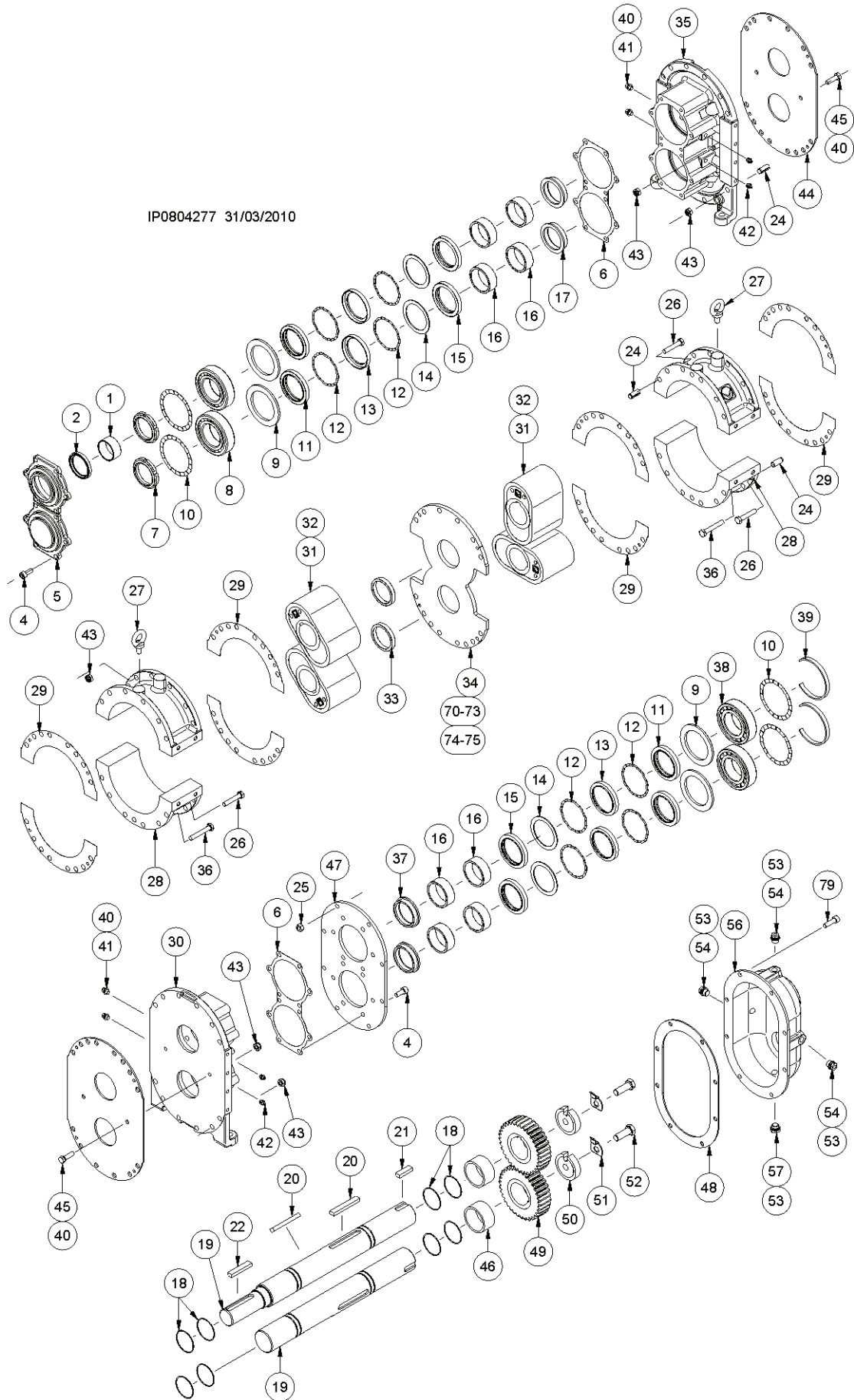
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Exploded view



**Cover and accessories**

**Position 1-6**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420	
1	NIR.006	Inner ring	JR 50 x 55 x 25	PTO shaft		2	2	2	2	2	2	2	2	
				Motor shaft		1	1	1	1	1	1	1	1	1
				K shaft		3	3	3	3	3	3	3	3	3
2	DWD.015	Radial shaft seal ring	AS 55 x 70 x 8	PTO shaft		2	2	2	2	2	2	2	2	
				Motor shaft		1	1	1	1	1	1	1	1	1
				K shaft		3	3	3	3	3	3	3	3	3
4	NSI.013	Cylinder head bolt	M10 x 25			12	12	12	12	12	12	12	12	
	NSI.008	Cylinder head bolt	M10 x 35	Hydraulic motor										
5	PGP.045	Cover plate; closed		PTO shaft/ K shaft		2	2	2	2	2	2	2	2	
				Motor shaft long		1	1	1	1	1	1	1	1	1
	PGP.046	Cover plate; open		Motor shaft short		1	1	1	1	1	1	1	1	
6	DAD.008	Gasket		Cover plate		2	2	2	2	2	2	2		

**Gasket and accessories**

**Pos. 7-18**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
7	NMN.003	Slotted nut	GUK M60 x 2			2	2	2	2	2	2	2	2
8	NLG.003	Ball bearing				2	2	2	2	2	2	2	2
9	PRS.029	Distance sleeve	108 x 80 x6			4	4	4	4	4	4	4	4
10	PRS.030	Distance washer	90 x 110			4	4	4	4	4	4	4	4
11	DWD.071	Radial shaft seal ring	70 x 90 x 10 AC	NBR		4	4	4	4	4	4	4	4
12	PRS.001	Distance washer	80 x 90			8	8	8	8	8	8	8	8
13	DWD.001	Radial shaft seal ring	70 x 90 x 10 A	NBR		4	4	4	4	4	4	4	4
14	PRS.010	Support ring	71 x 90 x 2			4	4	4	4	4	4	4	4
15	DWD.002	Radial shaft seal ring	70 x 90 x 10 AB			4	4	4	4	4	4	4	4
16	NIR.001	Inner ring	60 x 70 x 25			8	8	8	8	8	8	8	8
17	PRS.003	Extracting ring				2	2	2	2				
	PRS.130	Extracting ring		Option: separation plate outside		-	-	-	-	2	2	2	2
18	DOR.005	O-ring	56 x 2	NBR		8	8	8	8	8	8	8	8

**PTO shaft**

**Pos. 19**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
19	PWH.050	PTO shaft	R70			2	-	-	-	-	-	-	-
	PWH.090	PTO shaft	R105			-	2	-	-	-	-	-	-
	PWH.051	PTO shaft	R140			-	-	2	-	-	-	-	-
	PWH.052	PTO shaft	R210			-	-	-	2	-	-	-	-
	PWH.088	PTO shaft	R210 mZ	Below		-	-	-	-	1	-	-	-
	PWH.089	PTO shaft	R210 mZ	Above		-	-	-	-	1	-	-	-
	PWH.053	PTO shaft	R280	Below		-	-	-	-	-	1	-	-
	PWH.054	PTO shaft	R280	Above		-	-	-	-	-	1	-	-
	PWH.055	PTO shaft	R350	Below		-	-	-	-	-	-	1	-
	PWH.056	PTO shaft	R350	Above		-	-	-	-	-	-	1	-
	PWH.057	PTO shaft	R420	Below		-	-	-	-	-	-	-	1
	PWH.058	PTO shaft	R420	Above		-	-	-	-	-	-	-	1

**Motor shaft**  
Pos. 19

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
19	PWH.059	Motor shaft	R70	Long		1	-	-	-	-	-	-	-
	PWH.060	Motor shaft	R70	Short		1	-	-	-	-	-	-	-
	PWH.092	Motor shaft	R105	Long		-	1	-	-	-	-	-	-
	PWH.091	Motor shaft	R105	Short		-	1	-	-	-	-	-	-
	PWH.061	Motor shaft	R140	Long		-	-	1	-	-	-	-	-
	PWH.062	Motor shaft	R140	Short		-	-	1	-	-	-	-	-
	PWH.063	Motor shaft	R210	Long		-	-	-	1	-	-	-	-
	PWH.064	Motor shaft	R210	Short		-	-	-	1	-	-	-	-
	PWH.094	Motor shaft	R210 mZ	Long		-	-	-	-	1	-	-	-
	PWH.095	Motor shaft	R210 mZ	Short		-	-	-	-	1	-	-	-
	PWH.065	Motor shaft	R280	Long		-	-	-	-	-	1	-	-
	PWH.066	Motor shaft	R280	Short		-	-	-	-	-	1	-	-
	PWH.067	Motor shaft	R350	Long		-	-	-	-	-	-	1	-
	PWH.068	Motor shaft	R350	Short		-	-	-	-	-	-	1	-
	PWH.069	Motor shaft	R420	Long		-	-	-	-	-	-	-	1
PWH.070	Motor shaft	R420	Short		-	-	-	-	-	-	-	-	1

**Shaft for hydraulic motor**  
Pos. 19

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
19	PWH.061.H	Hollow shaft	R140	Ø 32 mm		-	-	1(2)	-	-	-	-	-
	PWH.062	Motor shaft	R140	Short		-	-	1(-)	-	-	-	-	-
	PWH.063.H	Hollow shaft	R210	Ø 32 mm		-	-	-	1(2)	-	-	-	-
	PWH.064	Motor shaft	R210	Short		-	-	-	1(-)	-	-	-	-
	PWH.065.H	Hollow shaft	R280	Ø 32 mm; shaft A		-	-	-	-	-	1	-	-
	PWH.065.TB.H	Hollow shaft	R280	Ø 32 mm; shaft B		-	-	-	-	-	1	-	-
	PWH.067.H	Motor shaft	R350	Ø 32 mm; shaft A		-	-	-	-	-	-	1	-
	PWH.067.TB.H	Hollow shaft	R350	Ø 32 mm; shaft B		-	-	-	-	-	-	1	-
	PWH.069.H	Hollow shaft	R420	Ø 32 mm; shaft A		-	-	-	-	-	-	-	1
	PWH0002	Hollow shaft	R420	Ø 32 mm; shaft B		-	-	-	-	-	-	-	1
	PWH.069.TA.H	Hollow shaft	R420	Ø 31,75 mm; shaft A		-	-	-	-	-	-	-	1
	PWH.069.TB.H	Motor shaft	R420	Ø 31,75 mm; shaft B		-	-	-	-	-	-	-	1

() quantities for 2x hydraulic motor

**K-shaft**  
Pos. 19

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
19	PWH.051	PTO shaft	140 S			-	-	1	-	-	-	-	-
	PWH.027	K shaft	140 K			-	-	1	-	-	-	-	-
	PWH.054	PTO shaft	280 S			-	-	-	-	-	1	-	-
	PWH.074	K shaft	280 K			-	-	-	-	-	1	-	-

**Fitting key for rotary lobe; bi-lobe**  
Position 20

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
20	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		2	-	-	-	-	-	-	-
	NPF.023	Fitting key	B 14 x 9 x 90	DIN 6885		-	2	-	-	4	-	-	-
	NPF.013	Fitting key	B 14 x 9 x 100	DIN 6885		-	-	-	4	-	-	4	8
	NPF.015	Fitting key	B 14 x 9 x 130	DIN 6885		-	-	2	-	-	4	2	-

**Fitting key for rotary lobe; HiFlo**  
Position 20

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
20	NPF.010	Fitting key	B 14 x 9 x 28	DIN 6885		2	-	-	-	-	-	-	-
	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		-	2	-	4	-	-	2	4
	NPF.023	Fitting key	B 14 x 9 x 90	DIN 6885		-	-	-	-	4	-	-	-
	NPF.013	Fitting key	B 14 x 9 x 100	DIN 6885		-	-	2	-	-	-	2	-
	NPF.012	Fitting key	B 14 x 9 x 110	DIN 6885		-	-	-	-	-	4	2	4

**Fitting key**  
Position 21-22

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
21	NPF.014	Fitting key	B 14 x 9 x 45	DIN 6885		2	2	2	2	2	2	2	2
22	NPF.055	Fitting key	B 14 x 9 x 70	Motor shaft/ K shaft		1	1	1	1	1	1	1	1

**Bolts and accessories**  
Position 24-27

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
24	NSP.016	Spring pin	13 x 30	DIN 7346		12	12	12	12	12	12	12	12
25	NMS.003	Hexagon nut	M10	DIN 934-8		8	8	8	8	8	8	8	8
26	NSK.006	Hexagon head bolt	M10 x 55	DIN 933		20	20	20	20	32	32	32	32
27	NKS.006	Lifting eye bolt	M12	DIN 580		2	2	2	2	2	2	2	2

**Pump housing segment**

**Position 28**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
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28	PGP.015	Pump housing segment	70	0.6025		2	-	-	-	-	-	-	-
	PGP.100	Pump housing segment	105	0.6025		-	2	-	-	4	-	-	-
	PGP.013	Pump housing segment	140	0.6025		-	-	2	-	-	4	2	-
	PGP.014	Pump housing segment	210	0.6025		-	-	-	2	-	-	2	4



**Injection A**

28	PGP0084	Pump housing segment	70	0.6025		2	-	-	-	-	-	-	-
	PGP0085	Pump housing segment	105	0.6025		-	2	-	-	4	-	-	-
	PGP0081	Pump housing segment	140	0.6025		-	-	2	-	-	4	2	-
	PGP0083	Pump housing segment	210	0.6025		-	-	-	2	-	-	2	4



**Injection S**

28	PGP.B122	Pump housing segment	70	0.6025		2	-	-	-	-	-	-	-
	PGP.B123	Pump housing segment	105	0.6025		-	2	-	-	4	-	-	-
	PGP.B120	Pump housing segment	140	0.6025		-	-	2	-	-	4	2	-
	PGP.B121	Pump housing segment	210	0.6025		-	-	-	2	-	-	2	4

**Gasket for pump housing segment**

**Position 29**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
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29	DAD.007	Gasket		Pump housing segment		4	4	4	4	8	8	8	8
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**Bearing housing + accessories**

**Position 30**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
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30	PGP.005	Bearing housing		Drive		1	1	1	1	1	1	1	1
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**Rotary lobes; bi-lobe**  
**Position 31**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
31	PKB.016	Rotary lobe	70	SBR 70		2	-	-	-	-	-	-	-
	PKB.033	Rotary lobe	105	SBR 70		-	2	-	4	4	-	4	8
	PKB.026	Rotary lobe	140	SBR 70		-	-	2	-	-	4	2	-
	PKB.018	Rotary lobe	70	NBR 70		2	-	-	-	-	-	-	-
	PKB.035	Rotary lobe	105	NBR 70		-	2	-	4	4	-	4	8
	PKB.028	Rotary lobe	140	NBR 70		-	-	2	-	-	4	2	-
	PKB.021.SL	Rotary lobe	70	EPDM-SL		2	-	-	-	-	-	-	-
	PKB.034.SL	Rotary lobe	105	EPDM-SL		-	2	-	4	4	-	4	8
	PKB.030.SL	Rotary lobe	140	EPDM-SL		-	-	2	-	-	4	2	-
	PKB.022	Rotary lobe	70	FPM 70		2	-	-	-	-	-	-	-
	PKB.037	Rotary lobe	105	FPM 70		-	2	-	4	4	-	4	8
PKB.031	Rotary lobe	140	FPM 70		-	-	2	-	-	4	2	-	
32	-	-				-	-	-	-	-	-	-	-

**Rotary lobe HiFo**  
**Position 31-32**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
31	PKB.B101.TL	Rotary lobe	70-4K45-L	SBR		1	-	-	-	-	-	-	-
	PKB.B101.TR	Rotary lobe	70-4K45-R	SBR		1	-	-	-	-	-	-	-
	PKB.B102.TL	Rotary lobe	105-4K45-L	SBR		-	1	-	2	2	-	2	4
	PKB.B102.TR	Rotary lobe	105-4K45-R	SBR		-	1	-	2	2	-	2	4
	PKB.B103.TL	Rotary lobe	140-4K45-L	SBR		-	-	1	-	-	2	1	-
	PKB.B103.TR	Rotary lobe	140-4K45-R	SBR		-	-	1	-	-	2	1	-
	PKB.B101.TL.NB	Rotary lobe	70-4K45-L	NBR		1	-	-	-	-	-	-	-
	PKB.B101.TR.NB	Rotary lobe	70-4K45-R	NBR		1	-	-	-	-	-	-	-
	PKB.B102.TL.NB	Rotary lobe	105-4K45-L	NBR		-	1	-	2	2	-	2	4
	PKB.B102.TR.NB	Rotary lobe	105-4K45-R	NBR		-	1	-	2	2	-	2	4
	PKB.B103.TL.NB	Rotary lobe	140-4K45-L	NBR		-	-	1	-	-	2	1	-
	PKB.B103.TR.NB	Rotary lobe	140-4K45-R	NBR		-	-	1	-	-	2	1	-
	PKB.B101.TL.SL	Rotary lobe	70-4K45-L	EPDM-SL		1	-	-	-	-	-	-	-
	PKB.B101.TR.SL	Rotary lobe	70-4K45-R	EPDM-SL		1	-	-	-	-	-	-	-
	PKB.B102.TL.SL	Rotary lobe	105-4K45-L	EPDM-SL		-	1	-	2	2	-	2	4
	PKB.B102.TR.SL	Rotary lobe	105-4K45-R	EPDM-SL		-	1	-	2	2	-	2	4
	PKB.B103.TL.SL	Rotary lobe	140-4K45-L	EPDM-SL		-	-	1	-	-	2	1	-
	PKB.B103.TR.SL	Rotary lobe	140-4K45-R	EPDM-SL		-	-	1	-	-	2	1	-
32	PRS.B025	Distance sleeve		Rotary lobe HiFlo®		2	2	2	2	4	4	4	4

**Separation plate + accessories**  
**Position 33-34**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
33	PRS.006	Distance sleeve				-	-	-	-	2	2	2	2
34	PFL.016	Separation plate		Open		-	-	-	-	1	1	1	1
	PFL.046	Separation plate		One side closed		-	-	-	-	1	1	1	1
	PFL.050	Separation plate		Closed		-	-	-	-	1	1	1	1

The optional rotating separation plate pos. 70-73 can be installed instead of a fixed separation plate pos. 33+34.

### Bearing housing + accessories

#### Position 35-43

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
35	PGP.004	Bearing housing		Gear		1	1	1	1	1	1	1	1
36	NSK.072	Hexagon head bolt	M10 x 65	DIN 931		4	4	4	4	4	4	4	4
37	PRS.004	Extracting ring		Gear		2	2	2	2	2	2	2	2
38	NLG.004	Cylindrical roller bearing				2	2	2	2	2	2	2	2
39	PRS.014	Extracting ring				2	2	2	2	2	2	2	2
40	DKR.001	Copper ring	C 10 x 16 x 1			20	20	20	20	20	20	20	20
41	NSK.080	Screw plug	M10 x 1	DIN 910		4	4	4	4	4	4	4	4
42	NKS.001	Grease nipple	M10 x 1	DIN 71412-A		4	4	4	4	4	4	4	4
43	NMK.001	Hexagon nut	M10	Self-locking		28	28	28	28	40	40	40	40

### Wear plate

#### Position 44-45

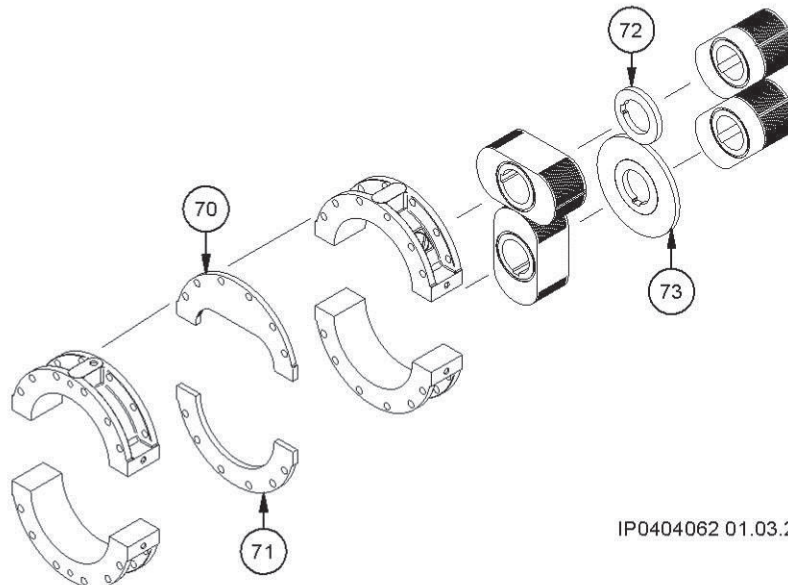
Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
44	PSP.003	Wear plate				2	2	2	2	2	2	2	2
45	NSK.002.EE	Hexagon head bolt	M10 x 35	DIN 933		4	4	4	4	4	4	4	4

### Gearbox housing and accessories

#### Position 46-56

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
46	PRS.008	Distance sleeve	60 x 70 x 35			2	2	2	2	2	2	2	2
47	PFL.035	Flange plate		Gear		1	1	1	1	1	1	1	1
48	DAD.006	Cork gasket				1	1	1	1	1	1	1	1
49	PZH.003	Gear				2	2	2	2	2	2	2	2
50	PRS.054	Grooved washer				2	2	2	2	2	2	2	2
51	PRS.026	Locking plate		DIN 6930		2	2	2	2	2	2	2	2
52	NSK.074	Hexagon head bolt				2	2	2	2	2	2	2	2
53	DKR.005	Copper ring	C 16 x 22 x 2	DIN 7903		4	4	4	4	4	4	4	4
54	NSK.081	Screw plug	M 16 x 1,5	DIN 910		3	3	3	3	3	3	3	3
56	PGP.058	Gear housing; closed		PTO shaft/ motor shaft		1	1	1	1	1	1	1	1
56	PGP.059	Gear housing; open		K shaft									
57	NSK.088	Screw plug	M16 x 1,5	DIN 910; magnetic		1	1	1	1	1	1	1	1

**Option – withdrawing separation plate**



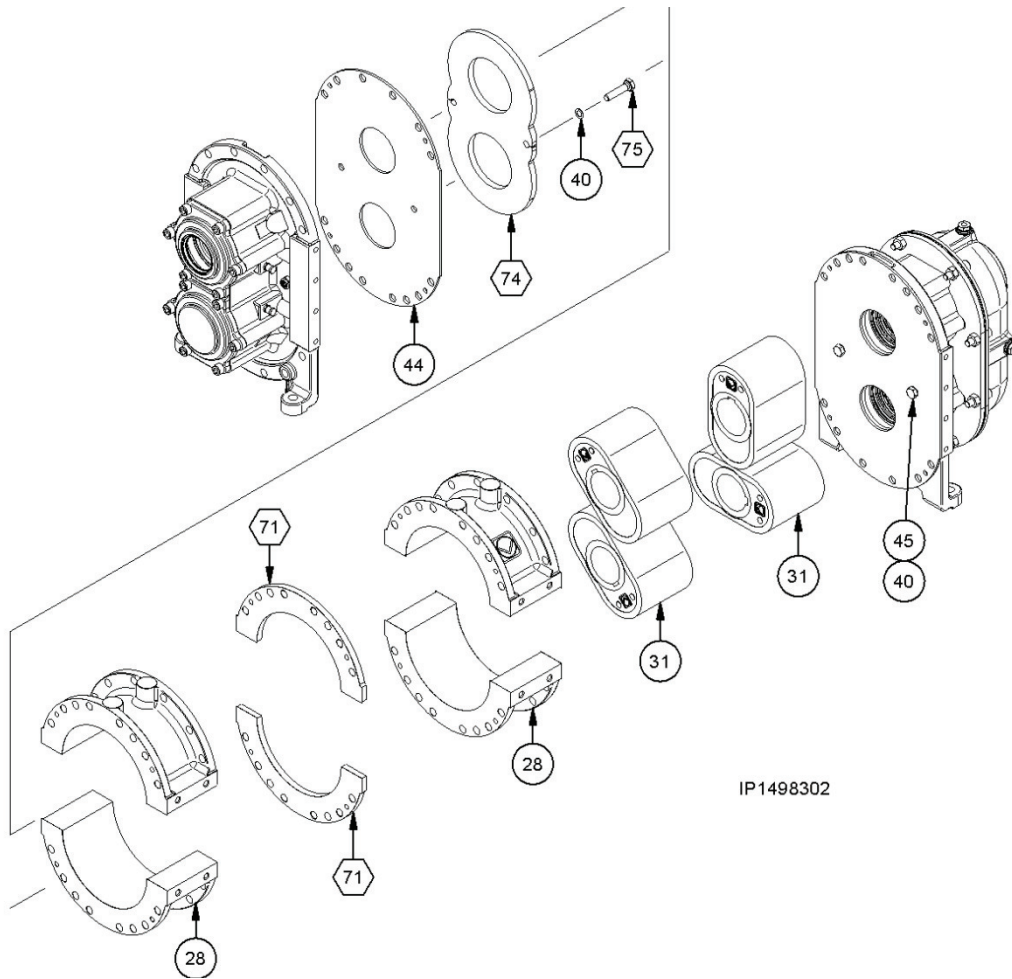
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**Position 70-73**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
70	PFL.611	Separation plate		Outside; top						1	1	1	1
71	PFL.607	Separation plate		Outside; pump housing segment						1	1	1	1
72	PFL.618	Separation plate		Inside; top						1	1	1	1
73	PFL0099	Separation plate		Inside; bottom						1	1	1	1

Pos. 33 + 34 are not required for the option

**Option: Separation plate outside**



IP1498302

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
71	PFL.607	Separation plate		Outside; pump housing segment						2	2	2	2
74	PFL.606	Wear plate								1	1	1	1
75	NSK.004.EE	Hexagon head bolt								2	2	2	2

Pos. 33 + 34 are not required for the option

**Material for connectors**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
	NSK.027	Hexagon head bolt	M10 x 25	DIN 933		20	24	24	28	28	32	36	40
	NUS.004	Washer	A 10,5 x 20 x 2	DIN 125		20	24	24	28	28	32	36	40
	PFL.010	Flange	R70			2	-	-	-	-	-	-	-
	PFL.057	Flange	R105			-	2	-	-	-	-	-	-
	PFL.005	Flange	R140			-	-	2	-	-	-	-	-
	PFL.006	Flange	R210			-	-	-	2	-	-	-	-
	PFL.099	Flange	R210 mZ			-	-	-	-	2	-	-	-
	PFL.007	Flange	R280			-	-	-	-	-	2	-	-
	PFL.008	Flange	R350			-	-	-	-	-	-	2	-
	PFL.009	Flange	R420			-	-	-	-	-	-	-	2
	DFD.011	Flange gasket	R70			2	-	-	-	-	-	-	-
	DFD.033	Flange gasket	R105			-	2	-	-	-	-	-	-
	DFD.005	Flange gasket	R140			-	-	2	-	-	-	-	-
	DFD.006	Flange gasket	R210			-	-	-	2	-	-	-	-
	DFD.016	Flange gasket	R210 mZ			-	-	-	-	2	-	-	-
	DFD.007	Flange gasket	R280			-	-	-	-	-	2	-	-
	DFD.008	Flange gasket	R350			-	-	-	-	-	-	2	-
	DFD.009	Flange gasket	R420			-	-	-	-	-	-	-	2

**Tools**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
	PMS.005	Open end wrench				x	x	x	x	x	x	x	x

**Required spare parts for rotary lobe change**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
6	DAD.008	Gasket		Cover plate		2	2	2	2	2	2	2	2
18	DOR.005	O-ring	56 x 2	NBR		8	8	8	8	8	8	8	8
<b>Fitting key for rotary lobe; bi-lobe</b>													
20	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		2	-	-	-	-	-	-	-
	NPF.023	Fitting key	B 14 x 9 x 90	DIN 6885		-	2	-	-	4	-	-	-
	NPF.013	Fitting key	B 14 x 9 x 100	DIN 6885		-	-	-	4	-	-	4	8
	NPF.015	Fitting key	B 14 x 9 x 130	DIN 6885		-	-	2	-	-	4	2	-
<b>Fitting key for rotary lobe; HiFlo</b>													
20	NPF.010	Fitting key	B 14 x 9 x 28	DIN 6885		2	-	-	-	-	-	-	-
	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		-	2	-	4	-	-	2	4
	NPF.023	Fitting key	B 14 x 9 x 90	DIN 6885		-	-	-	-	4	-	-	-
	NPF.013	Fitting key	B 14 x 9 x 100	DIN 6885		-	-	2	-	-	-	2	-
	NPF.012	Fitting key	B 14 x 9 x 110	DIN 6885		-	-	-	-	-	4	2	4
29	DAD.007	Gasket		Pump housing segment		4	4	4	4	8	8	8	8
31		Rotary lobe		See page 7/8									
32		Distance sleeve		See page7/ 8									
48	DAD.006	Cork gasket				1	1	1	1	1	1	1	1
51	PRS.026	Locking plate		DIN 6930		2	2	2	2	2	2	2	2
52	NSK.074	Hexagon head bolt				2	2	2	2	2	2	2	2
53	DKR.005	Copper ring	C 16 x 22 x 2	DIN 7903		4	4	4	4	4	4	4	4

**Required spare parts for mechanical seal change**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420	
1	NIR.006	Inner ring	JR 50 x 55 x 25	PTO shaft		2	2	2	2	2	2	2	2	
				Motor shaft		1	1	1	1	1	1	1	1	1
				K shaft		3	3	3	3	3	3	3	3	3
2	DWD.015	Radial shaft seal ring	AS 55 x 70 x 8	PTO shaft		2	2	2	2	2	2	2	2	
				Motor shaft		1	1	1	1	1	1	1	1	1
				K shaft		3	3	3	3	3	3	3	3	3
3	NFR.003	Lock washer	B Ø 10			32	32	32	32	32	32	32	32	
6	DAD.008	Gasket		Cover plate		2	2	2	2	2	2	2	2	
7	NMN.003	Slotted nut	GUK M60 x 2			2	2	2	2	2	2	2	2	
8	NLG.003	Ball bearing				2	2	2	2	2	2	2	2	
10	PRS.030	Distance washer	90 x 110			4	4	4	4	4	4	4	4	
11	DWD.071	Radial shaft seal ring	70 x 90 x 10 AC	NBR		4	4	4	4	4	4	4	4	
12	PRS.001	Distance washer	80 x 90			8	8	8	8	8	8	8	8	
13	DWD.001	Radial shaft seal ring	70 x 90 x 10 A	NBR		4	4	4	4	4	4	4	4	
14	PRS.010	Support ring	71 x 90 x 2			4	4	4	4	4	4	4	4	
15	DWD.002	Radial shaft seal ring	70 x 90 x 10 AB			4	4	4	4	4	4	4	4	
16	NIR.001	Inner ring	60 x 70 x 25			8	8	8	8	8	8	8	8	
18	DOR.005	O-ring	56 x 2	NBR		8	8	8	8	8	8	8	8	
29	DAD.007	Gasket		Pump housing segment		4	4	4	4	8	8	8	8	
38	NLG.004	Cylindrical roller bearing				2	2	2	2	2	2	2	2	
48	DAD.006	Cork gasket				1	1	1	1	1	1	1	1	
51	PRS.026	Locking plate		DIN 6930		2	2	2	2	2	2	2	2	
53	DKR.005	Copper ring	C 16 x 22 x 2	DIN 7903		4	4	4	4	4	4	4	4	

**Required spare parts for wear part replacement**

Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420	
1	NIR.006	Inner ring	JR 50 x 55 x 25	PTO shaft		2	2	2	2	2	2	2	2	
				Motor shaft		1	1	1	1	1	1	1	1	1
				K shaft		3	3	3	3	3	3	3	3	3
2	DWD.015	Radial shaft seal ring	AS 55 x 70 x 8	PTO shaft		2	2	2	2	2	2	2	2	
				Motor shaft		1	1	1	1	1	1	1	1	1
				K shaft		3	3	3	3	3	3	3	3	3
3	NFR.003	Lock washer	B Ø 10			32	32	32	32	32	32	32	32	
6	DAD.008	Gasket		Cover plate		2	2	2	2	2	2	2	2	
7	NMN.003	Slotted nut	GUK M60 x 2			2	2	2	2	2	2	2	2	
8	NLG.003	Ball bearing				2	2	2	2	2	2	2	2	
10	PRS.030	Distance washer	90 x 110			4	4	4	4	4	4	4	4	
11	DWD.071	Radial shaft seal ring	70 x 90 x 10 AC	NBR		4	4	4	4	4	4	4	4	
12	PRS.001	Distance washer	80 x 90			8	8	8	8	8	8	8	8	
13	DWD.001	Radial shaft seal ring	70 x 90 x 10 A	NBR		4	4	4	4	4	4	4	4	
14	PRS.010	Support ring	71 x 90 x 2			4	4	4	4	4	4	4	4	
15	DWD.002	Radial shaft seal ring	70 x 90 x 10 AB			4	4	4	4	4	4	4	4	
16	NIR.001	Inner ring	60 x 70 x 25			8	8	8	8	8	8	8	8	
18	DOR.005	O-ring	56 x 2	NBR		8	8	8	8	8	8	8	8	
<b>Fitting key for rotary lobe; bi-lobe</b>														
20	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		2	-	-	-	-	-	-	-	
	NPF.023	Fitting key	B 14 x 9 x 90	DIN 6885		-	2	-	-	4	-	-	-	
	NPF.013	Fitting key	B 14 x 9 x 100	DIN 6885		-	-	-	4	-	-	4	8	
	NPF.015	Fitting key	B 14 x 9 x 130	DIN 6885		-	-	2	-	-	4	2	-	
<b>Fitting key for rotary lobe; HiFlo</b>														
20	NPF.010	Fitting key	B 14 x 9 x 28	DIN 6885		2	-	-	-	-	-	-	-	
	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		-	2	-	4	-	-	2	4	
	NPF.023	Fitting key	B 14 x 9 x 90	DIN 6885		-	-	-	-	4	-	-	-	
	NPF.013	Fitting key	B 14 x 9 x 100	DIN 6885		-	-	2	-	-	-	2	-	
	NPF.012	Fitting key	B 14 x 9 x 110	DIN 6885		-	-	-	-	-	4	2	4	
21	NPF.014	Fitting key	B 14 x 9 x 45	DIN 6885		2	2	2	2	2	2	2	2	
29	DAD.007	Gasket		Pump housing segment		4	4	4	4	8	8	8	8	
37	PRS.004	Extracting ring		Gear		2	2	2	2	2	2	2	2	
38	NLG.004	Cylindrical roller bearing				2	2	2	2	2	2	2	2	
44	PSP.003	Wear plate				2	2	2	2	2	2	2	2	
45	NSK.002.EE	Hexagon head bolt	M10 x 35	DIN 933		4	4	4	4	4	4	4	4	
48	DAD.006	Cork gasket				1	1	1	1	1	1	1	1	
51	PRS.026	Locking plate		DIN 6930		2	2	2	2	2	2	2	2	
53	DKR.005	Copper ring	C 16 x 22 x 2	DIN 7903		4	4	4	4	4	4	4	4	
31		Rotary lobe		See page 7/8										
32		Distance sleeve		See page 7/ 8										

Continuation see next page



Pos.	Part number	Description	Dimensions	Notes	Qty.	70	105	140	210	210 mZ	280	350	420
33	PRS.006	Distance sleeve				-	-	-	-	2	2	2	2
34	PFL.016	Separation plate		Open									
	PFL.046	Separation plate		One side closed		-	-	-	-	1	1	1	1
	PFL.050	Separation plate		Closed									

The optional rotating separation plate pos. 70-73 can be installed instead of a fixed separation plate pos. 33+34.

**Option: withdrawing separation plate**

72	PFL.618	Separation plate		Inside; top						1	1	1	1
73	PFL0099	Separation plate		Inside; bottom						1	1	1	1

Pos. 33 + 34 are not required for the option

**Option: Separation plate outside**

74	PFL.606	Wear plate								1	1	1	1
75	NSK.004.EE	Hexagon head bolt								2	2	2	2

Pos. 33 + 34 are not required for the option

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