

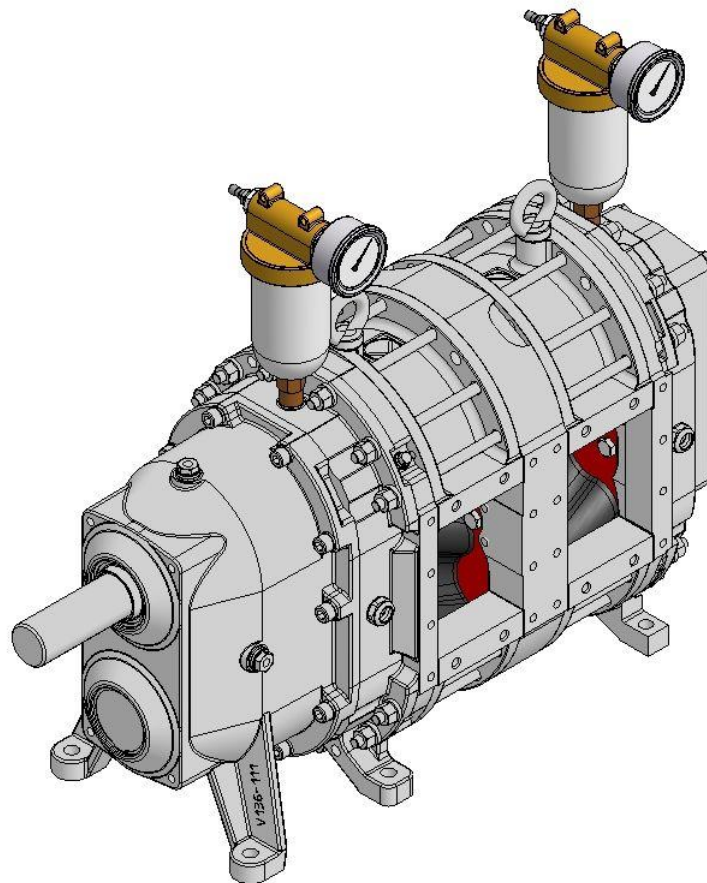


Spare parts list

Rotary lobe pump

VX136QDM2VVA

ENGINEERED TO WORK



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Exploded view

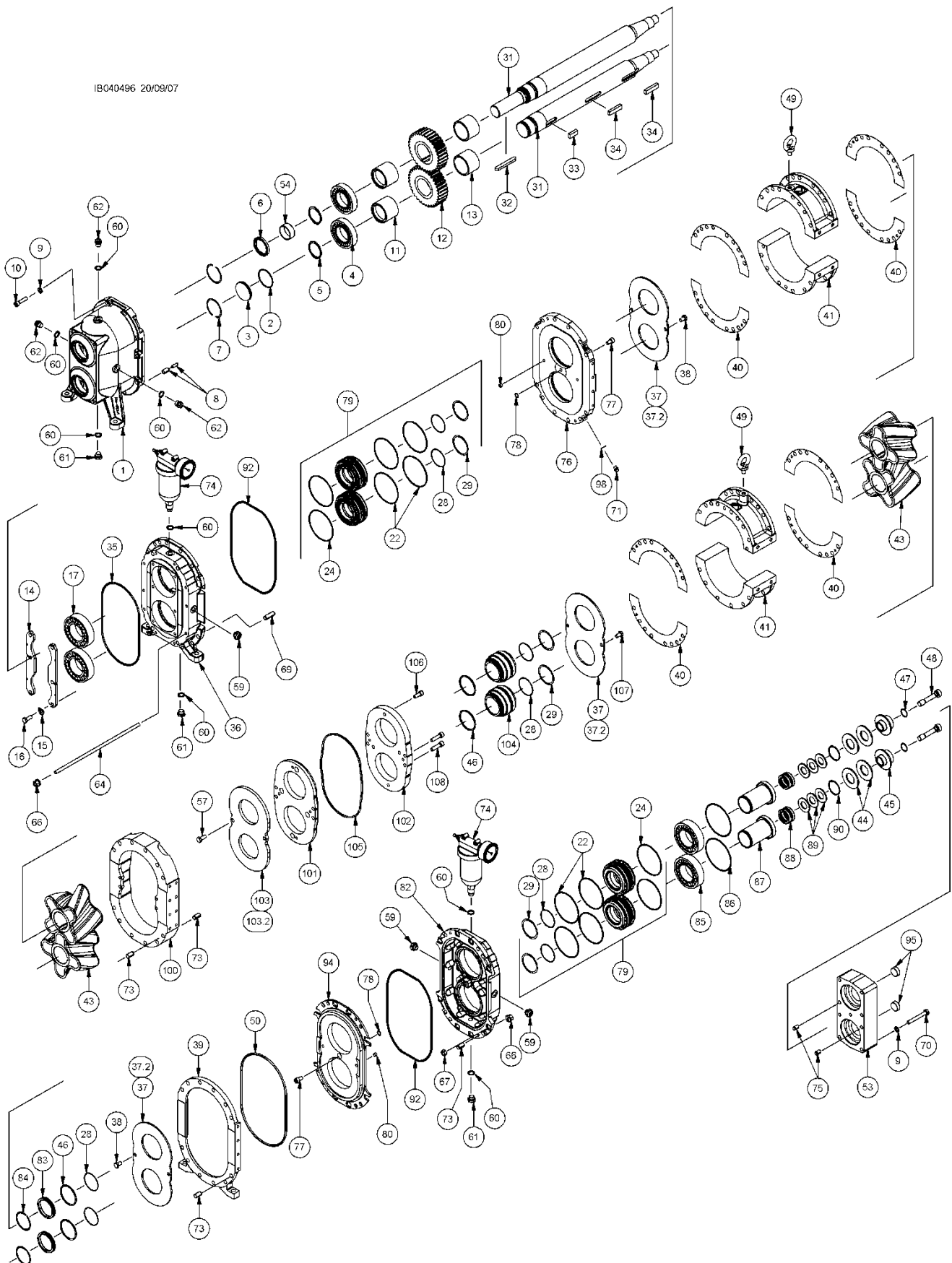
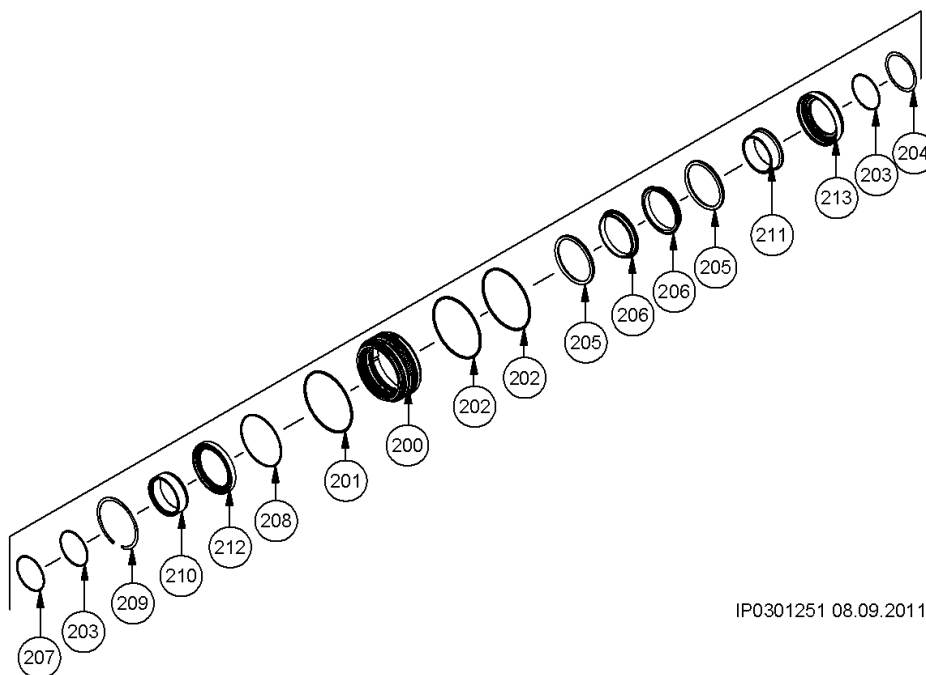


Illustration: component mechanical sealing system



IP0301251 08.09.2011

Component mechanical seal

Position 19-29/ 55/ 56/ 72

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
19	PRS.B103.T1	Lip seal race				4	4	4	4
20	PRS.B104	Distance sleeve				4	4	4	4
22	DOR.085	O-ring	104 x 3	NBR		8	8	8	8
	DOR.085.EP	O-ring	104 x 3	EPDM					
	DOR.085.VI	O-ring	104 x 3	FPM					
	DOR.085.PT	O-ring	104 x 3	Silicone FEP coated					
23	PRS.B105.N2.T1	Seal carrier				4	4	4	4
24	DOR.085	O-ring	104 x 3	NBR		4	4	4	4
25	DOR.034	O-ring	72,5 x 6,5	NBR		8	8	8	8
	DOR.034.EP	O-ring	72,5 x 6,5	EPDM					
	DOR.034.VI	O-ring	72,5 x 6,5	FPM					
	DOR.034.SI	O-ring	72,5 x 6,5	Silicone check resistance					
26	DGL.B012	Mechanical seal		Duronit ⁽⁴⁾		8	8	8	8
	DGL.B012.SC	Mechanical seal		SiSiC (silicone carbide)					
27	PRS.B101.N2.T2E	Seal support				4	4	4	4
28	DOR.041	O-ring	60 x 2			12	12	12	12
29	NUS.029	Shim				6	6	6	6
55	DOR.005	O-ring	56 x 2			2	2	2	2
56	DOR.135	O-ring	90 x 2			2	2	2	2
72	NSR.032	Circlip				2	2	2	2

⁽⁴⁾ up to 10 bar [145 psi] real operating pressure

Cartridge mechanical sealing system includes as separate delivery pos. 22/24/28/29.

Gearbox housing and accessories

Position 1-17

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
1	PGP.B111.T1	Gear box housing				1	1	1	1
2	DOR.086	O-ring	59 x 3	NBR; for motor-shaft		1	1	1	1
3	PRS.B108	Plug disk for gear box housing		For motor shaft		1	1	1	1
4	NLG.029	Cylindrical roller bearing	ø55 x ø100			2	2	2	2
5	NSR.010	Retaining ring	AS 55 x 3	DIN 471		2	2	2	2
6	DWD.060.HNB	Lip seal	50 x 65 x 7	For motor shaft		1	1	1	1
				For PTO-shaft		2	2	2	2
7	NSR.034	Circlip	65 x 3.8 x 0.82			2	2	2	2
8	NSP.023	Spring pin	13 x 22	DIN 1481		4	4	4	4
	NSP.025	Spring pin	8 x 24	ISO 8752, heavy type		4	4	4	4
9	NFR.003	Lock washer	ø10	DIN 127		16	16	16	16
10	NSI.001	Hex socket head screw	M10 x 40	DIN 912		14	14	14	14
11	PRS.B006	Spacer sleeve		Floating bearing		2	2	2	2
12	PZH.003	Gear				2	2	2	2
13	PRS.B005	Spacer sleeve		Fixed bearing		2	2	2	2
14	PFL.B010	Fixing plate for bearing				2	2	2	2
15	NUS.066	Locking plate	10.5 mm	DIN 432		6	6	6	6
16	NSK.027	Hex head screw	M10 x 25	DIN 933		6	6	6	6
17	NLG.026	Spherical roller bearing	22212 E1			2	2	2	2
	NLG.026.T1	Spherical roller bearing	22212 E	Option					

PTO shaft

Position 30/ 31

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
31	PWM.B037	PTO-shaft	VX136-140-S-QDM2			2	-	-	-
	PWM.B038	PTO-shaft	VX136-210-S-QDM2			-	2	-	-
	PWM.B039	PTO-shaft	VX136-280-S-QDM2			-	-	2	-
	PWM.B040	PTO-shaft	VX136-420-S-QDM2			-	-	-	2

Motor shaft

Position 30-32

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
31	PWM.B033	Motor shaft	VX136-140-MK-QDM2	Short		1	-	-	-
	PWM.B034	Motor shaft	VX136-210-MK-QDM2	Short		-	1	-	-
	PWM.B035	Motor shaft	VX136-280-MK-QDM2	Short		-	-	1	-
	PWM.B036	Motor shaft	VX136-420-MK-QDM2	Short		-	-	-	1
	PWM.B029	Motor shaft	VX136-140-ML-QDM2	Long		1	-	-	-
	PWM.B030	Motor shaft	VX136-210-ML-QDM2	Long		-	1	-	-
	PWM.B031	Motor shaft	VX136-280-ML-QDM2	Long		-	-	1	-
	PWM.B032	Motor shaft	VX136-420-ML-QDM2	Long		-	-	-	1
32	NPF.046	Key	A 12 x 8 x 90	Motor shaft long		1	1	1	1

Key gear

Position 33

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
33	NPF.022	Key	B 14 x 9 x 35	DIN 6885		2	2	2	2

Key for rotary lobe

Position 34

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
34	NPF.010	Key	B 14 x 9 x 28			4	-	-	-
	NPF.011	Key	B 14 x 9 x 56			-	4	-	4
	NPF.013	Key	B 14 x 9 x 100			-	-	4	-
	NPF.012	Key	B 14 x 9 x 110			-	-	-	4

Bearing seal housing + accessories

Position 35-36

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
35	DOR.035	O-ring	245 x 5	NBR		1	1	1	1
36	PGP.B110.T2	Bearing/ seal housing				1	1	1	1

Wear plate

Position 37-38

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
37	PFL.B009.E	Wear plate		Stainless steel		3	3	3	3
	PFL.B009.E.G1	Wear plate		Tungsten carbide coated					
	PFL.B009.E.G2	Wear plate		Plasma hardened					
37.2	DAD.B004	Underlay mat for wear plate tungsten carbide coated	0,3 mm	PA6 Polyamide		3	3	3	3
	DAD.B005	Underlay mat for wear plate tungsten carbide coated	0,5 mm	PA6 Polyamide		3	3	3	3
38	NSK.025.EE	Hex socket head screw	M10 x 16	DIN 933; stainless steel		6	6	6	6

Cover flange

Position 39

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
39	PGP.B004.T1.E	Ring flange		Stainless steel		1	1	1	1

Gasket for pump housing segment

Position 40

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
40	DAD.007	Gasket		Asbestos-free		8	8	8	8

Pump housing segment

Position 41

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
41	PGP.015.E	Pump housing segment	70			4	-	-	-
	PGP.100.E	Pump housing segment	105			-	4	-	-
	PGP.013.E	Pump housing segment	140			-	-	4	-
	PGP.014.E	Pump housing segment	210			-	-	-	4
	PGP.015.E.G1	Pump housing segment	70	Tungsten carbide coated		4	-	-	-
	PGP.100.E.G1	Pump housing segment	105	Tungsten carbide coated		-	4	-	-
	PGP.013.E.G1	Pump housing segment	140	Tungsten carbide coated		-	-	4	-
	PGP.014.E.G2	Pump housing segment	210	Tungsten carbide coated		-	-	-	4
	PGP.015.E.G2	Pump housing segment	70	Plasma hardened		4	-	-	-
	PGP.100.E.G2	Pump housing segment	105	Plasma hardened		-	4	-	-
	PGP.013.E.G2	Pump housing segment	140	Plasma hardened		-	-	4	-
	PGP.014.E.G2	Pump housing segment	210	Plasma hardened		-	-	-	4

Rotary lobes
Position 43

HiFlo

HiFlo SBR

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B101.TL	Rotary lobe	70-4K45-L	SBR		2	-	-	-
	PKB.B101.TR	Rotary lobe	70-4K45-R	SBR		2	-	-	-
	PKB.B102.TL	Rotary lobe	105-4K45-L	SBR		-	2	-	4
	PKB.B102.TR	Rotary lobe	105-4K45-R	SBR		-	2	-	4
	PKB.B103.TL	Rotary lobe	140-4K45-L	SBR		-	-	2	-
	PKB.B103.TR	Rotary lobe	140-4K45-R	SBR		-	-	2	-

HiFlo NBR

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B101.TL.NB	Rotary lobe	70-4K45-L	NBR		2	-	-	-
	PKB.B101.TR.NB	Rotary lobe	70-4K45-R	NBR		2	-	-	-
	PKB.B102.TL.NB	Rotary lobe	105-4K45-L	NBR		-	2	-	4
	PKB.B102.TR.NB	Rotary lobe	105-4K45-R	NBR		-	2	-	4
	PKB.B103.TL.NB	Rotary lobe	140-4K45-L	NBR		-	-	2	-
	PKB.B103.TR.NB	Rotary lobe	140-4K45-R	NBR		-	-	2	-
43	PKB.B101.TL.NBW	Rotary lobe	70-4K45-L	NBR white		2	-	-	-
	PKB.B101.TR.NBW	Rotary lobe	70-4K45-R	NBR white		2	-	-	-
	PKB.B102.TL.NBW	Rotary lobe	105-4K45-L	NBR white		-	2	-	4
	PKB.B102.TR.NBW	Rotary lobe	105-4K45-R	NBR white		-	2	-	4
	PKB.B103.TL.NBW	Rotary lobe	140-4K45-L	NBR white		-	-	2	-
	PKB.B103.TR.NBW	Rotary lobe	140-4K45-R	NBR white		-	-	2	-

HiFlo HNBR

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B101.TL.HNB	Rotary lobe	70-4K45-L	HNBR		2	-	-	-
	PKB.B101.TR.HNB	Rotary lobe	70-4K45-R	HNBR		2	-	-	-
	PKB.B102.TL.HNB	Rotary lobe	105-4K45-L	HNBR		-	2	-	4
	PKB.B102.TR.HNB	Rotary lobe	105-4K45-R	HNBR		-	2	-	4

HiFlo EPDM

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B101.TL.SL	Rotary lobe	70-4K45-L	EPDM-SL		2	-	-	-
	PKB.B101.TR.SL	Rotary lobe	70-4K45-R	EPDM-SL		2	-	-	-
	PKB.B102.TL.SL	Rotary lobe	105-4K45-L	EPDM-SL		-	2	-	4
	PKB.B102.TR.SL	Rotary lobe	105-4K45-R	EPDM-SL		-	2	-	4
	PKB.B103.TL.SL	Rotary lobe	140-4K45-L	EPDM-SL		-	-	2	-
	PKB.B103.TR.SL	Rotary lobe	140-4K45-R	EPDM-SL		-	-	2	-
43	PKB.B101.TL.EPW	Rotary lobe	70-4K45-L	EPDM white		2	-	-	-
	PKB.B101.TR.EPW	Rotary lobe	70-4K45-R	EPDM white		2	-	-	-
	PKB.B102.TL.EPW	Rotary lobe	105-4K45-L	EPDM white		-	2	-	4
	PKB.B102.TR.EPW	Rotary lobe	105-4K45-R	EPDM white		-	2	-	4
	PKB.B103.TL.EPW	Rotary lobe	140-4K45-L	EPDM white		-	-	2	-
	PKB.B103.TR.EPW	Rotary lobe	140-4K45-R	EPDM white		-	-	2	-

HiFlo FPM

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B101.TL.VI	Rotary lobe	70-4K45-L	FPM ⁽¹⁾		2	-	-	-
	PKB.B101.TR.VI	Rotary lobe	70-4K45-R	FPM ⁽¹⁾		2	-	-	-
	PKB.B102.TL.VI	Rotary lobe	105-4K45-L	FPM ⁽¹⁾		-	2	-	4
	PKB.B102.TR.VI	Rotary lobe	105-4K45-R	FPM ⁽¹⁾		-	2	-	4
	PKB.B103.TL.VI	Rotary lobe	140-4K45-L	FPM ⁽¹⁾		-	-	2	-
	PKB.B103.TR.VI	Rotary lobe	140-4K45-R	FPM ⁽¹⁾		-	-	2	-

⁽¹⁾ max. 6 bar [87 psi], please pay attention to the admissible pressure of pump!

HiFlo WEROBUST

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B101.TL.PU	Rotary lobe	70-4K45-L	WEROBUST ⁽²⁾		2	-	-	-
	PKB.B101.TR.PU	Rotary lobe	70-4K45-R	WEROBUST ⁽²⁾		2	-	-	-
	PKB.B102.TL.PU	Rotary lobe	105-4K45-L	WEROBUST ⁽²⁾		-	2	-	4
	PKB.B102.TR.PU	Rotary lobe	105-4K45-R	WEROBUST ⁽²⁾		-	2	-	4
	PKB.B103.TL.PU	Rotary lobe	140-4K45-L	WEROBUST ⁽²⁾		-	-	2	-
	PKB.B103.TR.PU	Rotary lobe	140-4K45-R	WEROBUST ⁽²⁾		-	-	2	-

⁽²⁾ Attention! Usable up to 50°C medium temperature, only!

Rotary lobes; bi-lobe

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B018.Q	Rotary lobe; two-wings	70	NBR		2	-	-	-
	PKB.B035.Q	Rotary lobe; two-wings	105	NBR		-	2	-	8
	PKB.B028.Q	Rotary lobe; two-wings	140	NBR		-	-	2	-
	PKB.B018.QF	Rotary lobe; two-wings	70	NBR enlarge rubber layer		2	-	-	-
	PKB.B035.QF	Rotary lobe; two-wings	105	NBR enlarge rubber layer		-	2	-	8
	PKB.B018.QW	Rotary lobe; two-wings	70	NBR white		2	-	-	-
	PKB.B028.QW	Rotary lobe; two-wings	140	NBR white		-	-	2	8
	PKB.B016.Q	Rotary lobe; two-wings	70	SBR 70		2	-	-	-
	PKB.B033.Q	Rotary lobe; two-wings	105	SBR 70		-	2	-	8
	PKB.B026.Q	Rotary lobe; two-wings	140	SBR 70		-	-	2	-
	PKB.B021.Q.SL	Rotary lobe; two-wings	70	EPDM-SL		2	-	-	-
	PKB.B034.Q.SL	Rotary lobe; two-wings	105	EPDM-SL		-	2	-	8
	PKB.B030.Q.SL	Rotary lobe; two-wings	140	EPDM-SL		-	-	2	-
	PKB.B022.Q	Rotary lobe; two-wings	70	FPM ⁽¹⁾		2	-	-	-
	PKB.B037.Q	Rotary lobe; two-wings	105	FPM ⁽¹⁾		-	2	-	8
	PKB.B031.Q	Rotary lobe; two-wings	140	FPM ⁽¹⁾		-	-	2	-
	PKB.B023.Q	Rotary lobe; two-wings	70	WEROBUST ⁽²⁾		2	-	-	-
	PKB.B036.Q	Rotary lobe; two-wings	105	WEROBUST ⁽²⁾		-	2	-	8
	PKB.B025.Q	Rotary lobe; two-wings	140	WEROBUST ⁽²⁾		-	-	2	-

⁽¹⁾ max. 6 bar [87 psi], please pay attention to the admissible pressure of pump!

⁽²⁾ Attention! Usable up to 50°C medium temperature, only!

Solid material rotary lobes

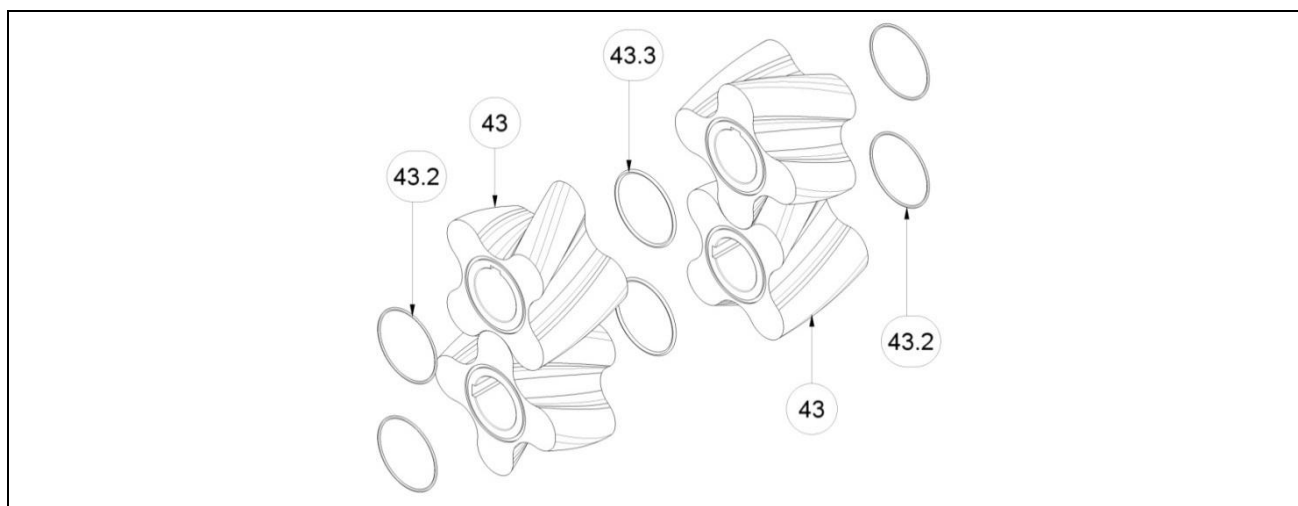
Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43	PKB.B104.N1.TLE	Rotary lobe	70-4K45-L	Stainless steel ⁽³⁾		2	-	-	-
	PKB.B104.N1.TRE	Rotary lobe	70-4K45-R	Stainless steel ⁽³⁾		2	-	-	-
	PKB.B105.N1.TLE	Rotary lobe	105-4K45-L	Stainless steel ⁽³⁾		-	2	-	4
	PKB.B105.N1.TRE	Rotary lobe	105-4K45-R	Stainless steel ⁽³⁾		-	2	-	4
	PKB.B106.N1.TLE	Rotary lobe	140-4K45-L	Stainless steel ⁽³⁾		-	-	2	-
	PKB.B106.N1.TRE	Rotary lobe	140-4K45-R	Stainless steel ⁽³⁾		-	-	2	-
	PKB.B041.N1.E	Rotary lobe; two-wings	70	Stainless steel ⁽³⁾		4	-	8	-
	PKB.B042.N1.E	Rotary lobe; two-wings	105	Stainless steel ⁽³⁾		-	4	-	8
	PKB.B101.TL.POM	Rotary lobe	70-4K45-L	POM ⁽³⁾		2	-	4	-
	PKB.B101.TR.POM	Rotary lobe	70-4K45-R	POM ⁽³⁾		2	-	4	-
	PKB.B102.TL.POM	Rotary lobe	105-4K45-L	POM ⁽³⁾		-	2	-	4
	PKB.B102.TR.POM	Rotary lobe	105-4K45-R	POM ⁽³⁾		-	2	-	4
	PKB.B023.Q	Rotary lobe; two-wings	70	POM ⁽³⁾		4	-	-	-
	PKB.B036.Q	Rotary lobe; two-wings	105	POM ⁽³⁾		-	4	-	8
	PKB.B025.Q	Rotary lobe; two-wings	140	POM ⁽³⁾		-	-	4	-

⁽³⁾ + O-ring for pure material lobe

O-ring for pure material lobes

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
43.2	DOR.039	O-ring ⁽⁵⁾	80 x 2,5	NBR		8	8	8	8
	DOR.039.EP	O-ring ⁽⁵⁾	80 x 2,5	EPDM					
	DOR.039.VI	O-ring ⁽⁵⁾	80 x 2,5	FPM					
	DOR.039.PT	O-ring ⁽⁵⁾	80 x 2,5	Silicone FEP coated					
43.3	DOR.162	O-ring ⁽⁵⁾	80 x 4	NBR		-	-	-	4
	DOR.162.EP	O-ring ⁽⁵⁾	80 x 4	EPDM					
	DOR.162.VI	O-ring ⁽⁵⁾	80 x 4	FPM					
	DOR.162.PT	O-ring ⁽⁵⁾	80 x 4	Silicone FEP coated					

⁽⁵⁾ for solid material lobes



10/01/2008

Preload

Position 44-48

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
44	NTF.002	Spring washer	71 x 36 x 4	DIN 2093		4	4	4	4
45	PRS.B117	Pressure disk				2	2	2	2
46	DOR.043	O-ring	64 x 4	NBR		4	4	4	4
47	DOR.021	O-ring	24 x 3	NBR		2	2	2	2
48	PRS.102	Strain screw	M16			2	2	2	2

Lifting eye bolt

Position 49

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
49	NKS.006	Lifting eye bolt	M12	DIN 580		2	2	2	2

O-ring

Position 50

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
50	DOR.051	O-ring	280 x 6	NBR		1	1	1	1
	DOR.051.EP	O-ring	280 x 6	EPDM					
	DOR.051.VI	O-ring	280 x 6	FPM					
	DOR.051.PT	O-ring	280 x 6	Silicone FEP coated					

Cover and accessories

Position 53-54

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
53	PFL.B011.T5.N1	Cover				1	1	1	1
54	NIR.019	Inner ring	JR 45 x 50 x 20	For motor shaft		1	1	1	1
				For PTO-shaft		2	2	2	2

Screws and accessories

Position 59-73

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
57	NSK.083	Hex head screw	M10 x 25	DIN 933 stainless steel		2	2	2	2
59	PSG.002	Oil sight glass	M16 x 1.5	Incl. gasket		4	4	4	4
60	DKR.005	Copper ring	C16 x 22 x 2	DIN 7603		8	8	8	8
61	NSK.088	Screw plug	M16 x 1,5	Magnetic		3	3	3	3
62	NSK.081	Screw plug	M16 x 1,5	DIN 910		3	3	3	3
64	ZNGS.086.0310	Threaded rod	M10 x 310	DIN 976		12	-	-	-
	ZNGS.086.0380	Threaded rod	M10 x 380	DIN 976		-	12	-	-
	ZNGS.086.0440	Threaded rod	M10 x 440	DIN 976		-	-	12	-
	ZNGS.086.0580	Threaded rod	M10 x 580	DIN 976		-	-	-	12
66	NMK.018	Hex nut	M10			24	24	24	24
67	NMS.003	Hex nut	M10			8	8	8	8
69	NSP.004	Spring pin	13 x 40	DIN 7346		4	4	4	4
70	NSK.010	Hex head screw	M10 x 80	DIN 933		6	6	6	6
71	NKS.001	Grease nipple	M10 x 1	For PTO-shaft		4	4	4	4
	NSK.080	Screw plug	M10 x 1	For motor shaft					
73	NSP.013	Spring pin	13 x 24	DIN 7346		16	16	16	16

Buffer chamber enlargement

Position 74

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
74	PSG.014	Buffer fluid canister		Pressurized		2	2	2	2
	PSG.014.T1	Quench fluid canister		Ventilated (Option)					
	PSV.002.N1	Pressure valve		(Option)					

Accessories

Position 75-77

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
75	NSP.031	Spring pin	11 x 18	DIN 7346		2	2	2	2
76	PGP.B112.E	Intermediate flange		Stainless steel		1	1	1	1
77	NSI.096.EE	Hex socket head screw	M10 x 18	Stainless steel		2	2	2	2
78	DOR.040	O-ring	12 x 2	NBR		2	2	2	2
	DOR.040.EP	O-ring	12 x 2	EPDM					
	DOR.040.VI	O-ring	12 x 2	FPM					
	DOR.040.PT	O-ring	12 x 2	Silicone FEP coated					

Cartridge mechanical seal

Pos. 79

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
79	PBT.B002.E	Cartridge HD		Stainless steel SiSiC / NBR		4	4	4	4
	PBT.B003.E	Cartridge HD		Stainless steel SiSiC / FPM					
	PBT.B004.E	Cartridge HD		Stainless steel Duronit / NBR ⁽⁴⁾					
	PBT.B005.E	Cartridge HD		Stainless steel Duronit / FPM ⁽⁴⁾					
	PBT.B006.E	Cartridge HD		Stainless steel SiSiC / EPDM					
	PBT.B010.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / NBR					
	PBT.B011.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / FPM					
	PBT.B012.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / NBR					
	PBT.B013.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / FPM					
	PBT.B014.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / EPDM					
	PBT.B037.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / EPDM					

⁽⁴⁾ up to 10 bar [145 psi] real operating pressure

Bearing seal housing + accessories

Position 82-90

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
80	NSK.179.E	Screw plug	M10 x 1,5	DIN 906		4	4	4	4
82	PGP.B110.T8	Bearing/ seal housing				1	1	1	1
83	PRS.B116	O-ring-carrier				2	2	2	2
84	NSR.043	Circlip	60 x 3,8 x 0,82			2	2	2	2
85	NGL.040.T1	Cylindrical roller bearing	60 x 100 x 28			2	2	2	2
86	DOR.053	O-ring	110 x 3	NBR		2	2	2	2
87	PRS.B115	Sleeve				2	2	2	2
88	PRS.B114.N1	Clamping sleeve		For bearing		2	2	2	2
89	NTF.004	Spring washer	50 x 25,4 x 3	DIN 2096-A50		6	6	6	6
90	NSR.042	Circlip	50 x 3.1 x 0.82			2	2	2	2

Intermediate flange + accessories

Position 92-98

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
92	DOR.088	O-ring	282 x 4,5	NBR		2	2	2	2
94	PGP.B112.T1.E	Intermediate flange		Stainless steel		1	1	1	1
95	NSK.214	Screw plug	M30 x 1.5	DIN 906		2	2	2	2
98	DKR.001	Copper ring	C 10 x 16 x 1	For motor shaft		4	4	4	4

Flange Marathon

Position 100-108

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
100	PGP.B115.E	Housing flange		Stainless steel		1	1	1	1
101	PGP.B116.E	Holding plate		Gear; stainless steel		1	1	1	1
102	PGP.B117.E	Holding plate		Cover; stainless steel		1	1	1	1
103	PFL0093	Wear plate		Tungsten carbide coated		1	1	1	1
104	PRS.B113.E	Distance sleeve		Stainless steel		2	2	2	2
105	DOR.035	O-ring	245 x 5	NBR		1	1	1	1
	DOR.035.EP	O-ring	245 x 5	EPDM					
	DOR.035.VI	O-ring	245 x 5	FPM					
	DOR.035.PT	O-ring	245 x 5	Silicone FEP coated					
106	NSI.071	Hex socket head screw	M10 x 25	Stainless steel		2	2	2	2
107	NSK.180.EE	Hex head screw	M10 x 18	Stainless steel		2	2	2	2
106	NSI.001.EE	Hex socket head screw	M10 x 40	Stainless steel		4	4	4	4

Material for connectors

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
	DFD.011.P	Flange gasket	70	From 6 bar up		4	-	-	-
	DFD.033.P	Flange gasket	105	From 6 bar up		-	4	-	-
	DFD.005.P	Flange gasket	140	From 6 bar up		-	-	4	-
	DFD.006.P	Flange gasket	210	From 6 bar up		-	-	-	4

Tools

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
	PBA.B001.T1	Lobe puller	70-280 QD	Check requirement acc. maintenance manual!		x	x	x	
	PBA.B001.T2	Lobe puller	420 QD	Check requirement acc. maintenance manual!					x

Required spare parts for rotary lobe change

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
28	DOR.041	O-ring	60 x 2			4	4	4	4
29	NUS.029	Shim				2	2	2	2
34	NPF.010	Key	B 14 x 9 x 28			4	-	-	-
	NPF.011	Key	B 14 x 9 x 56			-	4	-	4
	NPF.013	Key	B 14 x 9 x 100			-	-	4	-
	NPF.012	Key	B 14 x 9 x 110			-	-	-	4
43		Rotary lobe		See page 8 and follow					
43.2	DOR.039	O-ring ⁽⁵⁾	80 x 2,5	NBR		8	8	8	8
	DOR.039.EP	O-ring ⁽⁵⁾	80 x 2,5	EPDM					
	DOR.039.VI	O-ring ⁽⁵⁾	80 x 2,5	FPM					
	DOR.039.PT	O-ring ⁽⁵⁾	80 x 2,5	Silicone FEP coated					
43.3	DOR.162	O-ring ⁽⁵⁾	80 x 4	NBR		-	-	-	4
	DOR.162.EP	O-ring ⁽⁵⁾	80 x 4	EPDM					
	DOR.162.VI	O-ring ⁽⁵⁾	80 x 4	FPM					
	DOR.162.PT	O-ring ⁽⁵⁾	80 x 4	Silicone FEP coated					
46	DOR.043	O-ring	64 x 4	NBR		4	4	4	4
47	DOR.021	O-ring	24 x 3	NBR		2	2	2	2
48	PRS.102	Strain screw	M16			2	2	2	2
50	DOR.051	O-ring	280 x 6	NBR		1	1	1	1
	DOR.051.EP	O-ring	280 x 6	EPDM					
	DOR.051.VI	O-ring	280 x 6	FPM					
	DOR.051.PT	O-ring	280 x 6	Silicone FEP coated					
105	DOR.035	O-ring	245 x 5	NBR		1	1	1	1
	DOR.035.EP	O-ring	245 x 5	EPDM					
	DOR.035.VI	O-ring	245 x 5	FPM					
	DOR.035.PT	O-ring	245 x 5	Silicone FEP coated					

⁽⁵⁾ for solid material lobes

Necessary spare parts for Cartridge mechanical seal change

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
28	DOR.041	O-ring	60 x 2			4	4	4	4
29	NUS.029	Shim				2	2	2	2
34	NPF.010	Key	B 14 x 9 x 28			4	-	-	-
	NPF.011	Key	B 14 x 9 x 56			-	4	-	4
	NPF.013	Key	B 14 x 9 x 100			-	-	4	-
	NPF.012	Key	B 14 x 9 x 110			-	-	-	4
46	DOR.043	O-ring	64 x 4	NBR		4	4	4	4
47	DOR.021	O-ring	24 x 3	NBR		2	2	2	2
48	PRS.102	Strain screw	M16			2	2	2	2
50	DOR.051	O-ring	280 x 6	NBR		1	1	1	1
	DOR.051.EP	O-ring	280 x 6	EPDM					
	DOR.051.VI	O-ring	280 x 6	FPM					
	DOR.051.PT	O-ring	280 x 6	Silicone FEP coated					
79	PBT.B002.E	Cartridge HD		Stainless steel SiSiC / NBR		4	4	4	4
	PBT.B003.E	Cartridge HD		Stainless steel SiSiC / FPM					
	PBT.B004.E	Cartridge HD		Stainless steel Duronit / NBR ⁽⁴⁾					
	PBT.B005.E	Cartridge HD		Stainless steel Duronit / FPM ⁽⁴⁾					
	PBT.B006.E	Cartridge HD		Stainless steel SiSiC / EPDM					
	PBT.B010.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / NBR					
	PBT.B011.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / FPM					
	PBT.B012.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / NBR					
	PBT.B013.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / FPM					
	PBT.B014.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / EPDM					
	PBT.B037.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / EPDM					
105	DOR.035	O-ring	245 x 5	NBR		1	1	1	1
	DOR.035.EP	O-ring	245 x 5	EPDM					
	DOR.035.VI	O-ring	245 x 5	FPM					
	DOR.035.PT	O-ring	245 x 5	Silicone FEP coated					

⁽⁴⁾ up to 10 bar [145 psi] real operating pressure

Necessary spare parts for component mechanical seal change

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
21	DWD.065	Lip seal	70 x 90 x 10			4	4	4	4
22	DOR.085	O-ring	104 x 3	NBR		8	8	8	8
	DOR.085.EP	O-ring	104 x 3	EPDM					
	DOR.085.VI	O-ring	104 x 3	FPM					
	DOR.085.PT	O-ring	104 x 3	Silicone FEP coated					
24	DOR.085	O-ring	104 x 3	NBR		4	4	4	4
25	DOR.034	O-ring	72,5 x 6,5	NBR		8	8	8	8
	DOR.034.EP	O-ring	72,5 x 6,5	EPDM					
	DOR.034.VI	O-ring	72,5 x 6,5	FPM					
	DOR.034.SI	O-ring	72,5 x 6,5	Silicone check resistance					
26	DGL.B012	Mechanical seal		Duronit ⁽⁴⁾		8	8	8	8
	DGL.B012.SC	Mechanical seal		SiSiC (silicone carbide)					
27	PRS.B101.N2.T2E	Seal support				4	4	4	4
28	DOR.041	O-ring	60 x 2			12	12	12	12
29	NUS.029	Shim				6	6	6	6
34	NPF.010	Key	B 14 x 9 x 28			4	-	-	-
	NPF.011	Key	B 14 x 9 x 56			-	4	-	4
	NPF.013	Key	B 14 x 9 x 100			-	-	4	-
	NPF.012	Key	B 14 x 9 x 110			-	-	-	4
46	DOR.043	O-ring	64 x 4	NBR		4	4	4	4
47	DOR.021	O-ring	24 x 3	NBR		2	2	2	2
48	PRS.102	Strain screw	M16			2	2	2	2
50	DOR.051	O-ring	280 x 6	NBR		1	1	1	1
	DOR.051.EP	O-ring	280 x 6	EPDM					
	DOR.051.VI	O-ring	280 x 6	FPM					
	DOR.051.PT	O-ring	280 x 6	Silicone FEP coated					
55	DOR.005	O-ring	56 x 2			2	2	2	2
56	DOR.135	O-ring	90 x 2			2	2	2	2
105	DOR.035	O-ring	245 x 5	NBR		1	1	1	1
	DOR.035.EP	O-ring	245 x 5	EPDM					
	DOR.035.VI	O-ring	245 x 5	FPM					
	DOR.035.PT	O-ring	245 x 5	Silicone FEP coated					

⁽⁴⁾ up to 10 bar [145 psi] real operating pressure

Necessary spare parts for wear part replacement with Cartridge mechanical seal

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
28	DOR.041	O-ring	60 x 2			4	4	4	4
29	NUS.029	Shim				2	2	2	2
34	NPF.010	Key	B 14 x 9 x 28			4	-	-	-
	NPF.011	Key	B 14 x 9 x 56			-	4	-	4
	NPF.013	Key	B 14 x 9 x 100			-	-	4	-
	NPF.012	Key	B 14 x 9 x 110			-	-	-	4
37	PFL.B009.E	Wear plate		Stainless steel		3	3	3	3
	PFL.B009.E.G1	Wear plate		Tungsten carbide coated					
	PFL.B009.E.G2	Wear plate		Plasma hardened					
37.2	DAD.B004	Underlay mat for wear plate tungsten carbide coated	0,3 mm	PA6 Polyamide		3	3	3	3
	DAD.B005	Underlay mat for wear plate tungsten carbide coated	0,5 mm	PA6 Polyamide		3	3	3	3
38	NSK.025.EE	Hex socket head screw	M10 x 16	DIN 933; stainless steel		6	6	6	6
40	DAD.007	Gasket		Asbestos-free		8	8	8	8
43		Rotary lobe		See page 8 and follow					
43.2	DOR.039	O-ring ⁽⁵⁾	80 x 2,5	NBR		8	8	8	8
	DOR.039.EP	O-ring ⁽⁵⁾	80 x 2,5	EPDM					
	DOR.039.VI	O-ring ⁽⁵⁾	80 x 2,5	FPM					
	DOR.039.PT	O-ring ⁽⁵⁾	80 x 2,5	Silicone FEP coated					
43.3	DOR.162	O-ring ⁽⁵⁾	80 x 4	NBR		-	-	-	4
	DOR.162.EP	O-ring ⁽⁵⁾	80 x 4	EPDM					
	DOR.162.VI	O-ring ⁽⁵⁾	80 x 4	FPM					
	DOR.162.PT	O-ring ⁽⁵⁾	80 x 4	Silicone FEP coated					
46	DOR.043	O-ring	64 x 4	NBR		4	4	4	4
47	DOR.021	O-ring	24 x 3	NBR		2	2	2	2
48	PRS.102	Strain screw	M16			2	2	2	2
50	DOR.051	O-ring	280 x 6	NBR		1	1	1	1
	DOR.051.EP	O-ring	280 x 6	EPDM					
	DOR.051.VI	O-ring	280 x 6	FPM					
	DOR.051.PT	O-ring	280 x 6	Silicone FEP coated					

⁽⁵⁾ for solid material lobes

⁽⁴⁾ up to 10 bar [145 psi] real operating pressure

Continuation see next page

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
79	PBT.B002.E	Cartridge HD		Stainless steel SiSiC / NBR		4	4	4	4
	PBT.B003.E	Cartridge HD		Stainless steel SiSiC / FPM					
	PBT.B004.E	Cartridge HD		Stainless steel Duronit / NBR ⁽⁴⁾					
	PBT.B005.E	Cartridge HD		Stainless steel Duronit / FPM ⁽⁴⁾					
	PBT.B006.E	Cartridge HD		Stainless steel SiSiC / EPDM					
	PBT.B010.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / NBR					
	PBT.B011.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / FPM					
	PBT.B012.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / NBR					
	PBT.B013.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / FPM					
	PBT.B014.E	Cartridge block ring single-mechanical seal		Stainless steel Carbon / EPDM					
	PBT.B037.E	Cartridge block ring single-mechanical seal		Stainless steel SiSiC / EPDM					
103	PFL0093	Wear plate		Tungsten carbide coated		1	1	1	1
105	DOR.035	O-ring	245 x 5	NBR		1	1	1	1
	DOR.035.EP	O-ring	245 x 5	EPDM					
	DOR.035.VI	O-ring	245 x 5	FPM					
	DOR.035.PT	O-ring	245 x 5	Silicone FEP coated					
	DFD.011.P	Flange gasket	70	From 6 bar up		4	-	-	-
	DFD.033.P	Flange gasket	105	From 6 bar up		-	4	-	-
	DFD.005.P	Flange gasket	140	From 6 bar up		-	-	4	-
	DFD.006.P	Flange gasket	210	From 6 bar up		-	-	-	4

Necessary spare parts for wear part replacement with component mechanical seal

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
21	DWD.065	Lip seal	70 x 90 x 10			4	4	4	4
22	DOR.085	O-ring	104 x 3	NBR		8	8	8	8
	DOR.085.EP	O-ring	104 x 3	EPDM					
	DOR.085.VI	O-ring	104 x 3	FPM					
	DOR.085.PT	O-ring	104 x 3	Silicone FEP coated					
24	DOR.085	O-ring	104 x 3	NBR		4	4	4	4
25	DOR.034	O-ring	72,5 x 6,5	NBR		8	8	8	8
	DOR.034.EP	O-ring	72,5 x 6,5	EPDM					
	DOR.034.VI	O-ring	72,5 x 6,5	FPM					
	DOR.034.SI	O-ring	72,5 x 6,5	Silicone check resistance					
26	DGL.B012	Mechanical seal		Duronit ⁽⁴⁾		8	8	8	8
	DGL.B012.SC	Mechanical seal		SiSiC (silicone carbide)					
27	PRS.B101.N2.T2E	Seal support				4	4	4	4
28	DOR.041	O-ring	60 x 2			12	12	12	12
29	NUS.029	Shim				6	6	6	6
34	NPF.010	Key	B 14 x 9 x 28			4	-	-	-
	NPF.011	Key	B 14 x 9 x 56			-	4	-	4
	NPF.013	Key	B 14 x 9 x 100			-	-	4	-
	NPF.012	Key	B 14 x 9 x 110			-	-	-	4
37	PFL.B009.E	Wear plate		Stainless steel		3	3	3	3
	PFL.B009.E.G1	Wear plate		Tungsten carbide coated					
	PFL.B009.E.G2	Wear plate		Plasma hardened					
37.2	DAD.B004	Underlay mat for wear plate tungsten carbide coated	0,3 mm	PA6 Polyamide		3	3	3	3
	DAD.B005	Underlay mat for wear plate tungsten carbide coated	0,5 mm	PA6 Polyamide		3	3	3	3
38	NSK.025.EE	Hex socket head screw	M10 x 16	DIN 933; stainless steel		6	6	6	6
40	DAD.007	Gasket		Asbestos-free		8	8	8	8
43		Rotary lobe		See page 8 and follow					
43.2	DOR.039	O-ring ⁽⁵⁾	80 x 2,5	NBR		8	8	8	8
	DOR.039.EP	O-ring ⁽⁵⁾	80 x 2,5	EPDM					
	DOR.039.VI	O-ring ⁽⁵⁾	80 x 2,5	FPM					
	DOR.039.PT	O-ring ⁽⁵⁾	80 x 2,5	Silicone FEP coated					
43.3	DOR.162	O-ring ⁽⁵⁾	80 x 4	NBR		-	-	-	4
	DOR.162.EP	O-ring ⁽⁵⁾	80 x 4	EPDM					
	DOR.162.VI	O-ring ⁽⁵⁾	80 x 4	FPM					
	DOR.162.PT	O-ring ⁽⁵⁾	80 x 4	Silicone FEP coated					
46	DOR.043	O-ring	64 x 4	NBR		4	4	4	4
47	DOR.021	O-ring	24 x 3	NBR		2	2	2	2
48	PRS.102	Strain screw	M16			2	2	2	2

⁽⁵⁾ for solid material lobes

⁽⁴⁾ up to 10 bar [145 psi] real operating pressure

Continuation see next page

Pos.	Part number	Description	Dimensions	Notes	Qty.	140	210	280	420
50	DOR.051	O-ring	280 x 6	NBR		1	1	1	1
	DOR.051.EP	O-ring	280 x 6	EPDM					
	DOR.051.VI	O-ring	280 x 6	FPM					
	DOR.051.PT	O-ring	280 x 6	Silicone FEP coated					
55	DOR.005	O-ring	56 x 2			2	2	2	2
56	DOR.135	O-ring	90 x 2			2	2	2	2
103	PFL0093	Wear plate		Tungsten carbide coated		1	1	1	1
105	DOR.035	O-ring	245 x 5	NBR		1	1	1	1
	DOR.035.EP	O-ring	245 x 5	EPDM					
	DOR.035.VI	O-ring	245 x 5	FPM					
	DOR.035.PT	O-ring	245 x 5	Silicone FEP coated					



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