

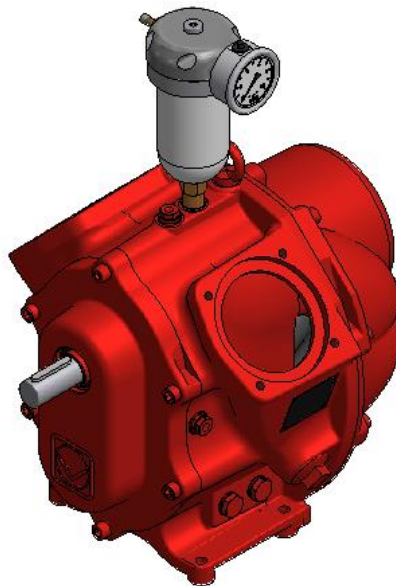


Spare parts list

Rotary lobe pump

IQ112

ENGINEERED TO WORK



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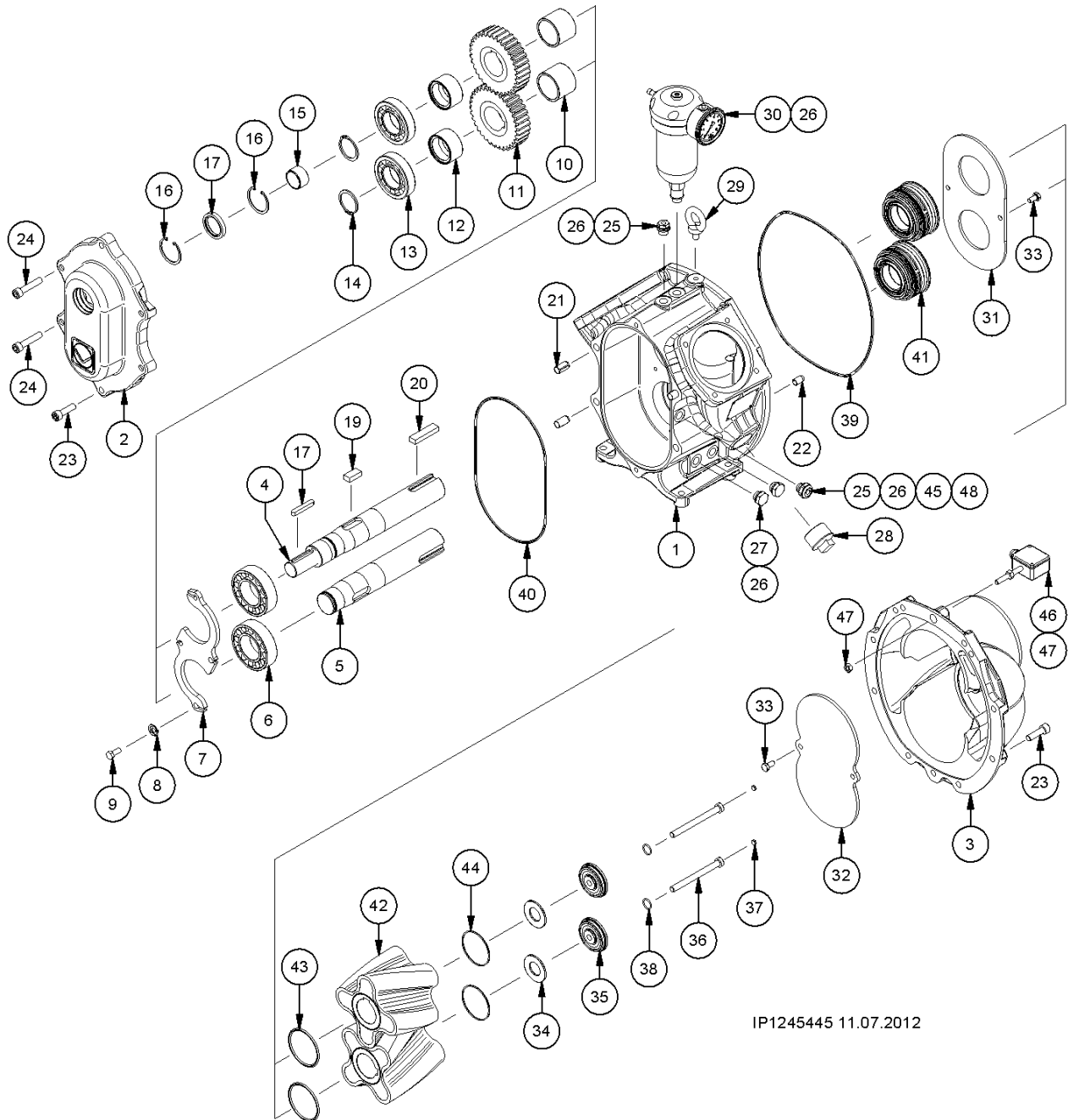
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Exploded view



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Housing

Position 1-3

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
1	PGP0238	Gearbox housing				1	
2	PGP0236	Bearing housing		Drive		1	
3	PGP0242	IQ cover	IQ112-81			1	-
	PGP0240	IQ cover	IQ112-114			-	1

Shaft

Position 4-5

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
4	PWQ0068	Shaft	ML			1	
5	PWQ0069	Shaft	MK			1	

Installation parts

Position 6-17

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
6	NLG.032	Spherical roller bearing	45 x 85 x 23			2	
7	PFL0120	Fixing sheet				1	
8	NUS.116	Locking washer	8,4 x 22	DIN 432		4	
9	NSK.018	Hexagon head screw	M 8 x 20	DIN 933		4	
10	PRS.D002	Spacer washer	45 x 53 x 40			2	
11	PZH0016	Gear				2	
12	PRS.D003	Spacer washer	41 x 54 x 28			2	
13	NLG.031	Cylindrical roller bearing	40 x 82 x 18			2	
14	NSR.016	Retaining ring	40 x 2,5			2	
15	NIR0006	Inner ring	JR 30 x 35 x 17			1	
16	NSR.045	Retaining ring	47 x 1,75			2	
17	DWD.037	Radial shaft seal ring	WASY 47 x 35 x 7	NBR		1	
	DWD.037.VI	Radial shaft seal ring	WASY 47 x 35 x 7	FPM			

Fitting key

Position 18-20

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
18	NPF.020	Fitting key	A 8 x 7 x 50	DIN 6885		1	
19	NPF.010	Fitting key	B 14 x 9 x 28	DIN 6885		2	
20	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		2	

Screws and accessories

Position 21-29

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
21	NSP.013	Spring pin	13 x 24	ISO 13337			4
22	NSP.021	Spring pin	11 x 18	ISO 13337			3
23	NSI.008	Hexagon socket head cap screw	M 10 x 35	ISO 4762			10
24	NSI.002	Hexagon socket head cap screw	M 10 x 50	ISO 4762			4
25	NSK.081	Hexagon head screw plug	M 16	⁽⁶⁾ ATEX/ Option			2 (1)
26	DKR.005	Sealing ring	A 16 x 22 x 2	⁽⁶⁾ ATEX/ Option			4 (3)
27	NSK.088	Hexagon head screw plug	M 16	DIN 910			2
28	NVE.030	Blind plug	1 ¼ inch				2
29	NKS.014	Lifting eye bolt	M 10	DIN 580			1

⁽⁶⁾ If an oil sight glass is screwed in, pos. 25 + 26 is omitted here.

Buffer chamber enlargement

Position 30

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
30	PSG.014	Buffer fluid tank		Pressurized			1
	PSG.014.T1	Quenching fluid tank		Ventilated (option)			
	PSV.002.N1	Pressure valve		(Option)			

Wear plate

Position 31-33

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
31	PFL0118	Wear plate	4,8 mm				1
32	PFL0119	Wear plate	5,8 mm				1
33	NSK0006	Hexagon head screw	M 8 x 16	DIN 933			4

Preload

Position 34-37

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
34	NTF.004	Spring washer	A 50 x 25,4 x 3	DIN 2093			2
35	PRS0388	Pressure disc					2
36	NSI.099	Hexagon socket head cap screw	M10 x 70	DIN 6912		2	-
	NSI0097	Hexagon socket head cap screw	M10 x 110	DIN 6912		-	2
37	NST.030	Plug				2	2

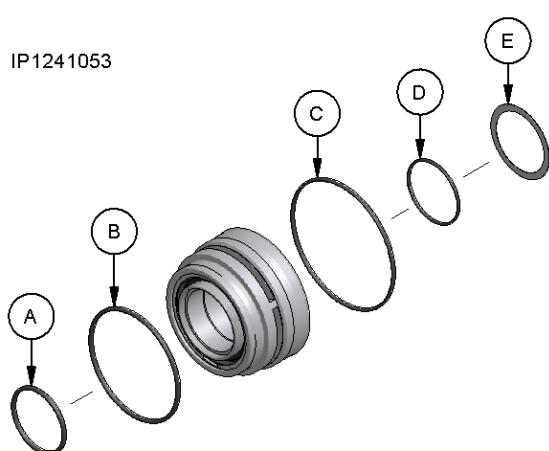
O-ring

Position 38-40

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
38	DOR.055	O-ring	16 x 2	NBR			2
	DOR.055.EP	O-ring	16 x 2	EPDM			
	DOR.055.PT	O-ring	16 x 2	MVQ FEP coated			
	DOR.055.VI	O-ring	16 x 2	FPM			
39	DOR0106	O-ring	Ø 280 x 3	NBR			1
	DOR0121	O-ring	Ø 280 x 3	EPDM			
	DOR0122	O-ring	Ø 280 x 3	MVQ FEP coated			
	DOR0123	O-ring	Ø 280 x 3	FPM			
40	DOR0107	O-ring	Ø 233 x 3	NBR			1
	DOR0120	O-ring	Ø 233 x 3	FPM			

Cartridge mechanical seal**Position 41**

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
Steel, nitrided; single-mechanical seal:							
41	PBT.D051	Cartridge block ring		WC/SiC; HNBR		2	
	PBT.D050	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; HNBR			
	PBT0101	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; FPM			
Steel, nitrided; double mechanical seal:							
41	PBT.D051.D	Cartridge block ring		WC/SiC; HNBR		2	
	PBT.D050.D	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; HNBR			
	PBT0102	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; FPM			
1.4571; single-mechanical seal:							
41	PBT0104	Cartridge block ring		WC/SiC; HNBR, HNBR		2	
	PBT0105	Cartridge block ring		WC/SiC; FPM, HNBR			

⁽⁴⁾ up to 10 bar [145 psi] real operating pressure**"Loose parts" for Cartridge mechanical seal**

Pos.	Part number	Description	Dimensions	Notes		Qty.
A ⁽¹⁰⁾	DOR.072	O-ring	45 x 3	NBR		2
	DOR.072.VI	O-ring	45 x 3	FPM		
B	DOR.058	O-ring	78 x 3	NBR		2
C	DOR.082	O-ring	90 x 2.5	NBR		2
	DOR.082.EP	O-ring	90 x 2.5	EPDM		
	DOR.082.VI	O-ring	90 x 2.5	FPM		
	DOR.082.PT	O-ring	90 x 2.5	MVQ; FEP coated		
D	DOR.068	O-ring	45 x 2	NBR		2
E	NUS.033	Shim	45 x 55 x 0.3	DIN 988		2

⁽¹⁰⁾ only in "dry buffer chamber", and as an option for custom Cartridge mechanical seal

Rotary lobe HiFo**Position 42**

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
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NBR

42	PKD0124	Rotary lobe	112-81 4K45L HiFlo	NBR		1	-
	PKD0125	Rotary lobe	112-81 4K45R HiFlo	NBR		1	-
	PKD0122	Rotary lobe	112-114 4K45L HiFlo	NBR		-	1
	PKD0123	Rotary lobe	112-114 4K45R HiFlo	NBR		-	1

EPDM-SL

42	PKD0148	Rotary lobe	112-81 4K45L HiFlo	EPDM-SL		1	-
	PKD0149	Rotary lobe	112-81 4K45R HiFlo	EPDM-SL		1	-
	PKD0152	Rotary lobe	112-114 4K45L HiFlo	EPDM-SL		-	1
	PKD0153	Rotary lobe	112-114 4K45R HiFlo	EPDM-SL		-	1

FPM

42	PKD0150	Rotary lobe	112-81 4K45L HiFlo	FPM		1	-
	PKD0151	Rotary lobe	112-81 4K45R HiFlo	FPM		1	-
	PKD0154	Rotary lobe	112-114 4K45L HiFlo	FPM		-	1
	PKD0155	Rotary lobe	112-114 4K45R HiFlo	FPM		-	1

POM

42	PKD0038	Rotary lobe ⁽³⁾	112-114 4K45L HiFlo	POM		-	1
	PKD0039	Rotary lobe ⁽³⁾	112-114 4K45R HiFlo	POM		-	1

⁽³⁾ + O-ring for solid material lobe**O-ring for solid material lobes****Position 43-44**

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
43	DOR.043	O-ring ⁽⁵⁾	64 x 4	NBR		2	2
	DOR.043.EP	O-ring ⁽⁵⁾	64 x 4	EPDM			
	DOR.043.PT	O-ring ⁽⁵⁾	64 x 4	MVQ FEP coated			
	DOR.043.VI	O-ring ⁽⁵⁾	64 x 4	FPM			
44	DOR.032	O-ring ⁽⁵⁾	62 x 2	NBR		2	2
	DOR0124	O-ring ⁽⁵⁾	62 x 2	EPDM			
	DOR0125	O-ring ⁽⁵⁾	62 x 2	MVQ FEP coated			
	DOR0126	O-ring ⁽⁵⁾	62 x 2	FPM			

⁽⁵⁾ for solid material lobes**Installation parts****Position 45-47**

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
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ATEX:

45	PSG.017	Oil sight glass	M 16 x 1,5	⁽⁶⁾		1	
46	SSS.073.N1	Temperature sensor				1	
47	NMS.002.EE	Hexagon nut	M 8	DIN 934		2	

Without Temperature sensor:

46	NST0035	Plug				1	
47	-	-				-	

⁽⁶⁾ If an oil sight glass is screwed in, pos. 25 + 26 is omitted here.**Option****Position 48**

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
48	PSG.002	Oil sight glass	M 16 x 1.5	Brass (6)		1	

⁽⁶⁾ If an oil sight glass is screwed in, pos. 25 + 26 is omitted here.

Material for connectors

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
	DOR0108	O-ring				1	
	PFL0121	Mounting bracket				2	
	NSK.027	Hexagon head screw	M 10 x 25			4	

Quantity for a connector

Tools

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
	PBA.D001.TL.N1	Lobe puller		Long			
	WKZ0455	Assembly tool		Cartridge			x
	PBA0001	Assembly tool		Contained in WKZ0455			(1)
	NSI.155	Hexagon socket head cap screw	M 5 x 12				(2)
	NSK.155	Hexagon head screw	M 8 x 80				(3)

Required spare parts for rotary lobe change

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
20	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		2	
36	NSI.099	Hexagon socket head cap screw	M10 x 70	DIN 6912		2	-
	NSI0097	Hexagon socket head cap screw	M10 x 110	DIN 6912		-	2
37	NST.030	Plug				2	2
39	DOR0106	O-ring	Ø 280 x 3	NBR		1	
	DOR0121	O-ring	Ø 280 x 3	EPDM			
	DOR0122	O-ring	Ø 280 x 3	MVQ FEP coated			
	DOR0123	O-ring	Ø 280 x 3	FPM			
38	DOR.055	O-ring	16 x 2	NBR		2	
	DOR.055.EP	O-ring	16 x 2	EPDM			
	DOR.055.PT	O-ring	16 x 2	MVQ FEP coated			
	DOR.055.VI	O-ring	16 x 2	FPM			
NBR							
42	PKD0124	Rotary lobe	112-81 4K45L HiFlo	NBR		1	-
	PKD0125	Rotary lobe	112-81 4K45R HiFlo	NBR		1	-
	PKD0122	Rotary lobe	112-114 4K45L HiFlo	NBR		-	1
	PKD0123	Rotary lobe	112-114 4K45R HiFlo	NBR		-	1
EPDM-SL							
42	PKD0148	Rotary lobe	112-81 4K45L HiFlo	EPDM-SL		1	-
	PKD0149	Rotary lobe	112-81 4K45R HiFlo	EPDM-SL		1	-
	PKD0152	Rotary lobe	112-114 4K45L HiFlo	EPDM-SL		-	1
	PKD0153	Rotary lobe	112-114 4K45R HiFlo	EPDM-SL		-	1
FPM							
42	PKD0150	Rotary lobe	112-81 4K45L HiFlo	FPM		1	-
	PKD0151	Rotary lobe	112-81 4K45R HiFlo	FPM		1	-
	PKD0154	Rotary lobe	112-114 4K45L HiFlo	FPM		-	1
	PKD0155	Rotary lobe	112-114 4K45R HiFlo	FPM		-	1
POM							
42	PKD0038	Rotary lobe ⁽³⁾	112-114 4K45L HiFlo	POM		-	1
	PKD0039	Rotary lobe ⁽³⁾	112-114 4K45R HiFlo	POM		-	1
43	DOR.043	O-ring ⁽⁵⁾	64 x 4	NBR		2	2
	DOR.043.EP	O-ring ⁽⁵⁾	64 x 4	EPDM			
	DOR.043.PT	O-ring ⁽⁵⁾	64 x 4	MVQ FEP coated			
	DOR.043.VI	O-ring ⁽⁵⁾	64 x 4	FPM			
44	DOR.032	O-ring ⁽⁵⁾	62 x 2	NBR		2	2
	DOR0124	O-ring ⁽⁵⁾	62 x 2	EPDM			
	DOR0125	O-ring ⁽⁵⁾	62 x 2	MVQ FEP coated			
	DOR0126	O-ring ⁽⁵⁾	62 x 2	FPM			

⁽³⁾ + O-ring for solid material lobe

⁽⁵⁾ for solid material lobes

Required spare parts for mechanical seal change

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
36	NSI.099	Hexagon socket head cap screw	M10 x 70	DIN 6912		2	-
	NSI0097	Hexagon socket head cap screw	M10 x 110	DIN 6912		-	2
37	NST.030	Plug				2	2
39	DOR0106	O-ring	Ø 280 x 3	NBR		1	
	DOR0121	O-ring	Ø 280 x 3	EPDM			
	DOR0122	O-ring	Ø 280 x 3	MVQ FEP coated			
	DOR0123	O-ring	Ø 280 x 3	FPM			
38	DOR.055	O-ring	16 x 2	NBR		2	
	DOR.055.EP	O-ring	16 x 2	EPDM			
	DOR.055.PT	O-ring	16 x 2	MVQ FEP coated			
	DOR.055.VI	O-ring	16 x 2	FPM			
Steel, nitrided; single-mechanical seal:							
41	PBT.D051	Cartridge block ring		WC/SiC; HNBR		2	
	PBT.D050	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; HNBR			
	PBT0101	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; FPM			
Steel, nitrided; double mechanical seal:							
41	PBT.D051.D	Cartridge block ring		WC/SiC; HNBR		2	
	PBT.D050.D	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; HNBR			
	PBT0102	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; FPM			
1.4571; single-mechanical seal:							
41	PBT0104	Cartridge block ring		WC/SiC; HNBR, HNBR		2	
	PBT0105	Cartridge block ring		WC/SiC; FPM, HNBR			

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

Required spare parts for wear part replacement

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
20	NPF.011	Fitting key	B 14 x 9 x 56	DIN 6885		2	
31	PFL0118	Wear plate	4,8 mm			1	
32	PFL0119	Wear plate	5,8 mm			1	
33	NSK0006	Hexagon head screw	M 8 x 16	DIN 933		4	
36	NSI.099	Hexagon socket head cap screw	M10 x 70	DIN 6912		2	-
	NSI0097	Hexagon socket head cap screw	M10 x 110	DIN 6912		-	2
37	NST.030	Plug				2	2
39	DOR0106	O-ring	Ø 280 x 3	NBR		1	
	DOR0121	O-ring	Ø 280 x 3	EPDM			
	DOR0122	O-ring	Ø 280 x 3	MVQ FEP coated			
	DOR0123	O-ring	Ø 280 x 3	FPM			
38	DOR.055	O-ring	16 x 2	NBR		2	
	DOR.055.EP	O-ring	16 x 2	EPDM			
	DOR.055.PT	O-ring	16 x 2	MVQ FEP coated			
	DOR.055.VI	O-ring	16 x 2	FPM			

Steel, nitrided; single-mechanical seal:

41	PBT.D051	Cartridge block ring		WC/SiC; HNBR		2	
	PBT.D050	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; HNBR			
	PBT0101	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; FPM			

Steel, nitrided; double mechanical seal:

41	PBT.D051.D	Cartridge block ring		WC/SiC; HNBR		2	
	PBT.D050.D	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; HNBR			
	PBT0102	Cartridge block ring		CrO/Duronit ⁽⁴⁾ ; FPM			

1.4571; single-mechanical seal:

41	PBT0104	Cartridge block ring		WC/SiC; HNBR, HNBR		2	
	PBT0105	Cartridge block ring		WC/SiC; FPM, HNBR			

NBR

42	PKD0124	Rotary lobe	112-81 4K45L HiFlo	NBR		1	-
	PKD0125	Rotary lobe	112-81 4K45R HiFlo	NBR		1	-
	PKD0122	Rotary lobe	112-114 4K45L HiFlo	NBR		-	1
	PKD0123	Rotary lobe	112-114 4K45R HiFlo	NBR		-	1

EPDM-SL

42	PKD0148	Rotary lobe	112-81 4K45L HiFlo	EPDM-SL		1	-
	PKD0149	Rotary lobe	112-81 4K45R HiFlo	EPDM-SL		1	-
	PKD0152	Rotary lobe	112-114 4K45L HiFlo	EPDM-SL		-	1
	PKD0153	Rotary lobe	112-114 4K45R HiFlo	EPDM-SL		-	1

FPM

42	PKD0150	Rotary lobe	112-81 4K45L HiFlo	FPM		1	-
	PKD0151	Rotary lobe	112-81 4K45R HiFlo	FPM		1	-
	PKD0154	Rotary lobe	112-114 4K45L HiFlo	FPM		-	1
	PKD0155	Rotary lobe	112-114 4K45R HiFlo	FPM		-	1

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

Continuation see next page

Pos.	Part number	Description	Dimensions	Notes	Rep.	81	114
POM							
42	PKD0038	Rotary lobe ⁽³⁾	112-114 4K45L HiFlo	POM		-	1
	PKD0039	Rotary lobe ⁽³⁾	112-114 4K45R HiFlo	POM		-	1
43	DOR.043	O-ring ⁽⁵⁾	64 x 4	NBR		2	2
	DOR.043.EP	O-ring ⁽⁵⁾	64 x 4	EPDM			
	DOR.043.PT	O-ring ⁽⁵⁾	64 x 4	MVQ FEP coated			
	DOR.043.VI	O-ring ⁽⁵⁾	64 x 4	FPM			
44	DOR.032	O-ring ⁽⁵⁾	62 x 2	NBR		2	2
	DOR0124	O-ring ⁽⁵⁾	62 x 2	EPDM			
	DOR0125	O-ring ⁽⁵⁾	62 x 2	MVQ FEP coated			
	DOR0126	O-ring ⁽⁵⁾	62 x 2	FPM			

⁽³⁾ + O-ring for solid material lobe

⁽⁵⁾ for solid material lobes



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