

KPOR 30/KPOR 31

Description

Product group	Piston seal
Design	POR PTFE seal with an o-ring energising element
Profil no.	30/31
Specification	Z suitable for two-sided pressure load (30) E suitable for one-sided pressure load (31)
Seal material	PTFE 00 9807
O-ring material	NBR 70 0100

Operational application limits

Pressure (MPa):	≤40
Temperature (°C):	-30 to +100
Running speed (m/s):	≤15

Media

Hydraulic oils acc. to DIN 51524 Part 1 – 3, lubricating oils, mineral oil based lubricating greases, highly non-flammable hydraulic fluids HFA, HFB, HFC acc. to VDMA 24317

Function

The KPOR seals consist of a PTFE sealing element which is energised by an o-ring. This results in an exceptionally good sealing function under high loads and good static sealing performance. While the KPOR 30 design is a double acting piston seal, the KPOR 31 is a single-acting piston seal.

Installation

For small diameters, axially accessible installation housing is required. For larger pistons, the seals can be installed in closed installation housings. Subsequent calibration is necessary. (see: Installation section on page 9)

Remarks

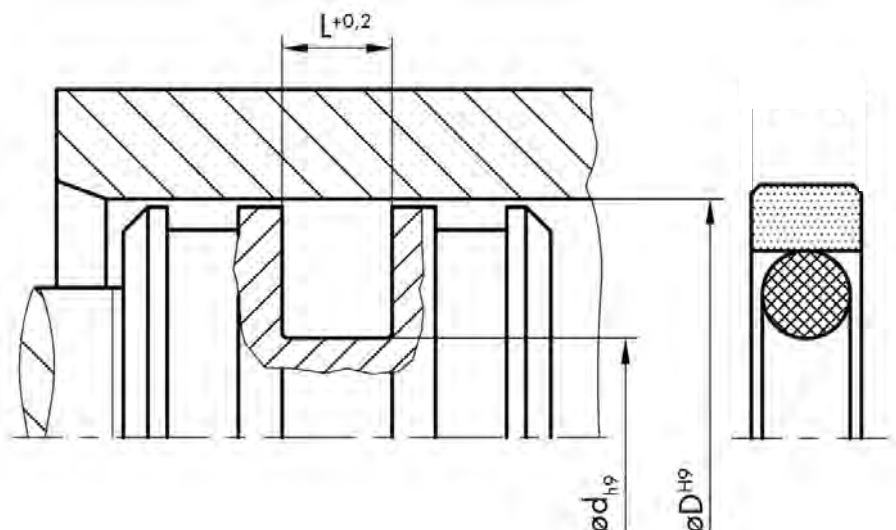
The standard for this design is a PTFE-Bronze/NBR 70 combination. Depending on the area of application, other materials such as PTFE-Glass, PTFE-Graphite and PTFE-Carbon for the seal element and EPDM, FKM, VMQ etc. for the energising element are available. Sufficient guiding of the piston using suitable guide elements is necessary.

Order code

Please include our item numbers in your order. Should you require non-standard dimensions, materials or material combinations, please use the order code on page 12.

Any seal. Any time.

All the items in our standard programme (marked red) are standard stock items. For all other items, please check the availability at www.dichtomatik.de.



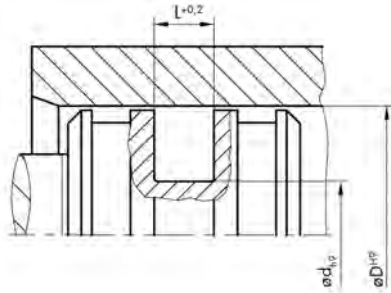
KPOR 30/KPOR 31

Sizes

Item No.	Code	D	d	L
76656	KPOR 30 Z	8	3.1	2.2
76894	KPOR 31 E	8	3.1	2.2
76657	KPOR 30 Z	10	5.1	2.2
76895	KPOR 31 E	10	5.1	2.2
108028	KPOR 30 Z	11	6.1	2.2
76658	KPOR 30 Z	12	7.1	2.2
22257	KPOR 31 E	12	7.1	2.2
151285	KPOR 31 E	12.5	7.6	2.2
77334	KPOR 30 Z	14	9.1	2.2
133720	KPOR 31 E	14	9.1	2.2
76659	KPOR 30 Z	15	7.5	3.2
76896	KPOR 31 E	15	10.1	2.2
76660	KPOR 30 Z	16	8.5	3.2
89835	KPOR 30 Z	16	11.1	2.2
151	KPOR 31 E	16	11.1	2.2
133969	KPOR 30 Z	17	12.1	2.2
76661	KPOR 30 Z	18	10.5	3.2
76897	KPOR 31 E	18	10.7	3.2
90336	KPOR 30 Z	19.05	11.55	3.2
76334	KPOR 30 Z	20	12.5	3.2
76898	KPOR 31 E	20	12.7	3.2
95504	KPOR 30 Z	20	15.1	2.2
115889	KPOR 31 E	20	15.1	2.2
76662	KPOR 30 Z	22	14.5	3.2
76899	KPOR 31 E	22	14.7	3.2
83331	KPOR 31 E	22	17.1	2.2
76663	KPOR 30 Z	24	16.5	3.2
172376	KPOR 31 E	25	14.3	4.2
75297	KPOR 30 Z	25	17.5	3.2
76900	KPOR 31 E	25	17.7	3.2
81028	KPOR 30 Z	25	20.1	2.2
75311	KPOR 31 E	25	20.1	2.2
76664	KPOR 30 Z	25.4	17.9	3.2
81938	KPOR 30 Z	27	19.5	3.2
46894	KPOR 30 Z	28	17	4.2
76902	KPOR 31 E	28	17.3	4.2
76665	KPOR 30 Z	28	20.5	3.2
84430	KPOR 31 E	28	20.7	3.2
90467	KPOR 30 Z	28	23.1	2.2
173682	KPOR 30 Z	28.5	21	3.2
108038	KPOR 30 Z	28.5	23.6	2.2
90060	KPOR 30 Z	28.58	21.08	3.2
79393	KPOR 31 E	30	19.3	3.2
76904	KPOR 31 E	30	19.3	4.2
90283	KPOR 30 Z	30	22	3.8
126	KPOR 30 Z	30	22.5	3.2
121349	KPOR 31 E	30	22.7	3.2
76905	KPOR 31 E	31.7	21	4.2
76667	KPOR 30 Z	31.7	24.2	3.2
132595	KPOR 30 Z	32	21	4.2
76906	KPOR 31 E	32	21.3	4.2
76668	KPOR 30 Z	32	24.5	3.2
80788	KPOR 31 E	32	24.7	3.2
92998	KPOR 30 Z	32	27.1	2.2
84415	KPOR 30 Z	34	26.5	3.2

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Item No.	Code	D	d	L
76637	KPOR 31 E	35	24.3	4.2
76669	KPOR 30 Z	35	27.5	3.2
76670	KPOR 30 Z	36	28.5	3.2
76671	KPOR 30 Z	38	30.5	3.2
76672	KPOR 30 Z	39	31.5	3.2
78421	KPOR 30 Z	40	26.3	5.7
76673	KPOR 30 Z	40	29	4.2
76913	KPOR 31 E	40	29.3	4.2
46549	KPOR 30 Z	40	32.5	3.2
115900	KPOR 31 E	40	32.7	3.2
76674	KPOR 30 Z	42	31	4.2
76914	KPOR 31 E	42	31.3	4.2
92811	KPOR 30 Z	44	33	4.2
173684	KPOR 30 Z	44.5	33.5	4.2
75940	KPOR 30 Z	45	34	4.2
76916	KPOR 31 E	45	34.3	4.2
75312	KPOR 31 E	45	37.5	3.2
76676	KPOR 30 Z	48	37	4.2
76917	KPOR 31 E	48	37.3	4.2
133688	KPOR 30 Z	49	38	4.2
93278	KPOR 30 Z	50	34.5	6.3
172388	KPOR 31 E	50	34.9	6.3
76628	KPOR 30 Z	50	39	4.2
76918	KPOR 31 E	50	39.3	4.2
143843	KPOR 31 E	50	42.7	3.2
76677	KPOR 30 Z	50.8	39.8	4.2
76678	KPOR 30 Z	52	41	4.2
76920	KPOR 31 E	52	41.3	4.2
85373	KPOR 30 Z	52	44.5	3.2
41757	KPOR 30 Z	54	43	4.2
93277	KPOR 30 Z	55	39.5	6.3
76679	KPOR 30 Z	55	44	4.2
76921	KPOR 31 E	55	44.3	4.2
77117	KPOR 30 Z	56	45	4.2
76680	KPOR 30 Z	57.1	46.1	4.2
135131	KPOR 30 Z	58	47	4.2
83148	KPOR 30 Z	60	44.5	6.3
76923	KPOR 31 E	60	44.9	6.3
76681	KPOR 30 Z	60	49	4.2
90021	KPOR 31 E	60	49.3	4.2
80159	KPOR 30 Z	62	51	4.2
93279	KPOR 30 Z	63	47.5	6.3
76924	KPOR 31 E	63	47.9	6.3
130599	KPOR 30 Z	63	48	7.5
76682	KPOR 30 Z	63	52	4.2
172389	KPOR 31 E	63	52.3	4.2
76683	KPOR 30 Z	63.5	52.5	4.2
107935	KPOR 30 Z	63.5	56	3.2
125899	KPOR 30 Z	64	48.5	6.3
76926	KPOR 31 E	64	48.9	6.3
76684	KPOR 30 Z	64	53	4.2
76927	KPOR 31 E	65	49.9	6.3
76685	KPOR 30 Z	65	54	4.2
130691	KPOR 31 E	65	54.3	4.2
157195	KPOR 30 Z	65	57.5	3.2

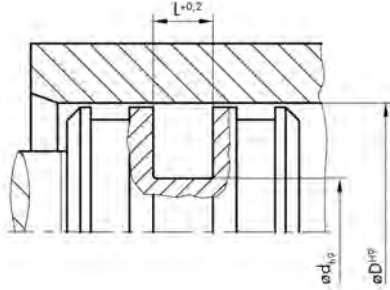
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Item No.	Code	D	d	L
173686	KPOR 30 Z	69.8	58.8	4.2
161	KPOR 30 Z	70	54.5	6.3
76929	KPOR 31 E	70	54.9	6.3
150454	KPOR 30 Z	70	57.5	5.6
75938	KPOR 30 Z	70	59	4.2
78119	KPOR 31 E	70	59.3	4.2
129795	KPOR 30 Z	72	61	4.2
76689	KPOR 30 Z	75	59.5	6.3
76930	KPOR 31 E	75	59.9	6.3
76687	KPOR 30 Z	75	64	4.2
117833	KPOR 30 Z	75	67.5	3.2
76688	KPOR 30 Z	76.2	65.2	4.2
83288	KPOR 30 Z	78	67	4.2
76690	KPOR 30 Z	80	59	8.1
172377	KPOR 31 E	80	59.5	8.1
75939	KPOR 30 Z	80	64.5	6.3
76932	KPOR 31 E	80	64.9	6.3
78213	KPOR 30 Z	80	69	4.2
80153	KPOR 30 Z	82	71	4.2
76691	KPOR 30 Z	82.5	67	6.3
76693	KPOR 30 Z	85	64	8.1
76692	KPOR 30 Z	85	69.5	6.3
76934	KPOR 31 E	85	69.9	6.3
81267	KPOR 30 Z	88	72.5	6.3
76696	KPOR 30 Z	90	69	8.1
76695	KPOR 30 Z	90	74.5	6.3
76936	KPOR 31 E	90	74.9	6.3
84206	KPOR 30 Z	90	78	6
122062	KPOR 30 Z	90	79	4.2
76698	KPOR 30 Z	95	74	8.1
76697	KPOR 30 Z	95	79.5	6.3
76937	KPOR 31 E	95	79.9	6.3
83402	KPOR 30 Z	95	84	4.2
81488	KPOR 31 E	97	81.9	6.3
76269	KPOR 30 Z	100	79	8.1
172378	KPOR 31 E	100	79.5	8.1
76699	KPOR 30 Z	100	84.5	6.3
76938	KPOR 31 E	100	84.9	6.3
115660	KPOR 30 Z	100	89	4.2
76700	KPOR 30 Z	101.6	86.1	6.3
76939	KPOR 31 E	101.6	86.5	6.3
76702	KPOR 30 Z	105	84	8.1
76701	KPOR 30 Z	105	89.5	6.3
76940	KPOR 31 E	105	89.9	6.3
76704	KPOR 30 Z	110	89	8.1
172379	KPOR 31 E	110	89	8.1
76703	KPOR 30 Z	110	94.5	6.3
76941	KPOR 31 E	110	94.9	6.3
73778	KPOR 30 Z	110	99	4.2
81645	KPOR 30 Z	112	96.5	6.3
173688	KPOR 30 Z	114.3	98.8	6.3
76707	KPOR 30 Z	115	94	8.1
76706	KPOR 30 Z	115	99.5	6.3
76943	KPOR 31 E	115	99.9	6.3

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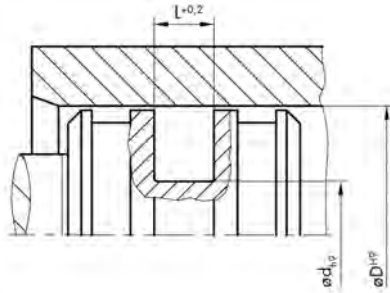
Item No.	Code	D	d	L
76709	KPOR 30 Z	120	99	8.1
76708	KPOR 30 Z	120	104.5	6.3
76944	KPOR 31 E	120	104.9	6.3
152593	KPOR 31 E	120	109	4.2
90125	KPOR 30 Z	120	109	4.2
76711	KPOR 30 Z	125	104	8.1
76710	KPOR 30 Z	125	109.5	6.3
76945	KPOR 31 E	125	109.9	6.3
173690	KPOR 30 Z	125	114	4.2
76712	KPOR 30 Z	127	111.5	6.3
76714	KPOR 30 Z	130	109	8.1
172380	KPOR 31 E	130	109	8.1
76713	KPOR 30 Z	130	114.5	6.3
76947	KPOR 31 E	130	114.9	6.3
173692	KPOR 30 Z	132	111	8.1
173694	KPOR 30 Z	133	112	8.1
76717	KPOR 30 Z	135	114	8.1
172381	KPOR 31 E	135	114	8.1
75309	KPOR 30 Z	135	119.5	6.3
76950	KPOR 31 E	135	119.9	6.3
90780	KPOR 30 Z	138	117	8.1
76090	KPOR 30 Z	140	119	8.1
75298	KPOR 30 Z	140	124.5	6.3
76951	KPOR 31 E	140	124.9	6.3
76718	KPOR 30 Z	145	124	8.1
76719	KPOR 30 Z	150	129	8.1
172382	KPOR 31 E	150	129.5	8.1
76953	KPOR 31 E	150	134.9	6.3
133952	KPOR 30 Z	150	134.9	6.3
79456	KPOR 30 Z	152.4	131.4	8.1
156892	KPOR 30 Z	153	142	4.2
76721	KPOR 30 Z	155	134	8.1
76956	KPOR 31 E	155	139.9	6.3
76629	KPOR 30 Z	160	139	8.1
172383	KPOR 31 E	160	139.5	8.1
135107	KPOR 30 Z	160	144.5	5.8
4703	KPOR 30 Z	160	144.5	6.3
76957	KPOR 31 E	160	144.9	6.3
76722	KPOR 30 Z	165	144	8.1
122030	KPOR 30 Z	165	149.5	6.3
76958	KPOR 31 E	165	149.9	6.3
76092	KPOR 30 Z	170	149	8.1
89926	KPOR 30 Z	170	154.5	6.3
76959	KPOR 31 E	170	154.9	6.3
76723	KPOR 30 Z	175	154	8.1
116509	KPOR 30 Z	175	159.5	6.3
76960	KPOR 31 E	175	159.9	6.3
76093	KPOR 30 Z	180	159	8.1
172384	KPOR 31 E	180	159	8.1
90385	KPOR 30 Z	180	164.5	6.3
75290	KPOR 31 E	180	164.9	6.3
76724	KPOR 30 Z	190	169	8.1
172385	KPOR 31 E	190	169	8.1
90749	KPOR 30 Z	190	174.5	6.3
76961	KPOR 31 E	190	174.9	6.3

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Item No.	Code	D	d	L
159736	KPOR 31 E	195	179.9	6.3
76725	KPOR 30 Z	200	179	8.1
76962	KPOR 31 E	200	179.5	8.1
173696	KPOR 30 Z	200	184.5	6.3
172386	KPOR 31 E	200	184.9	6.3
76726	KPOR 30 Z	210	189	8.1
76963	KPOR 31 E	210	189.5	8.1
83404	KPOR 30 Z	210	194.5	6.3
46626	KPOR 30 Z	215	194	8.1
133384	KPOR 30 Z	220	195.5	8.1
76727	KPOR 30 Z	220	199	8.1
76964	KPOR 31 E	220	199.5	8.1
121451	KPOR 30 Z	220	204.5	6.3
118459	KPOR 30 Z	225	204	8.1
89684	KPOR 31 E	225	204.5	8.1
81578	KPOR 30 Z	228	217.3	4.2
76728	KPOR 30 Z	230	209	8.1
76965	KPOR 31 E	230	209.5	8.1
76729	KPOR 30 Z	240	219	8.1
76966	KPOR 31 E	240	219.5	8.1
116210	KPOR 30 Z	240	224.5	6.3
81577	KPOR 30 Z	240	229.3	4.2
46194	KPOR 31 E	243	222.5	8.1
143774	KPOR 30 Z	245	224	8.1
143585	KPOR 30 Z	250	225.5	8.1
76730	KPOR 30 Z	250	229	8.1
76967	KPOR 31 E	250	229.5	8.1
150490	KPOR 30 Z	255	239.5	6.3
76968	KPOR 31 E	260	236	8.1
76731	KPOR 30 Z	260	239	8.1
127354	KPOR 31 E	265	241	8.1
76969	KPOR 31 E	270	246	8.1
76732	KPOR 30 Z	270	249	8.1
76970	KPOR 31 E	280	256	8.1
76733	KPOR 30 Z	280	259	8.1
126554	KPOR 30 Z	280	264.5	6.3
159732	KPOR 30 Z	290	265.5	8.1
76971	KPOR 31 E	290	266	8.1
76734	KPOR 30 Z	290	269	8.1
125636	KPOR 30 Z	300	275.5	8.1
76972	KPOR 31 E	300	276	8.1
76735	KPOR 30 Z	300	279	8.1
93092	KPOR 30 Z	300	284.5	6.3
129821	KPOR 30 Z	310	285.5	8.1
76973	KPOR 31 E	310	286	8.1
76736	KPOR 30 Z	310	289	8.1
118635	KPOR 30 Z	320	295.5	8.1
76974	KPOR 31 E	320	295.5	8.1
76630	KPOR 30 Z	320	299	8.1
172387	KPOR 31 E	320	299.5	8.1
152313	KPOR 30 Z	320	309	4.2
76737	KPOR 30 Z	330	305.5	8.1
76975	KPOR 31 E	330	306	8.1
76738	KPOR 30 Z	340	315.5	8.1
76976	KPOR 31 E	340	316	8.1

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Sizes



Item No.	Code	D	d	L
127256	KPOR 30 Z	340	319	8.1
76739	KPOR 30 Z	350	325.5	8.1
76977	KPOR 31 E	350	326	8.1
153092	KPOR 31 E	355	331	8.1
76740	KPOR 30 Z	360	335.5	8.1
76978	KPOR 31 E	360	336	8.1
76741	KPOR 30 Z	370	345.5	8.1
76979	KPOR 31 E	370	346	8.1
125786	KPOR 30 Z	375	350.5	8.1
76742	KPOR 30 Z	380	355.5	8.1
76980	KPOR 31 E	380	356	8.1
132935	KPOR 31 E	384	360	8.1
76743	KPOR 30 Z	390	365.5	8.1
76981	KPOR 31 E	390	366	8.1
76744	KPOR 30 Z	400	375.5	8.1
76982	KPOR 31 E	400	376	8.1
76745	KPOR 30 Z	410	385.5	8.1
76983	KPOR 31 E	410	386	8.1
76746	KPOR 30 Z	420	395.5	8.1
76984	KPOR 31 E	420	396	8.1
132881	KPOR 30 Z	425	400.5	8.1
76747	KPOR 30 Z	430	405.5	8.1
76985	KPOR 31 E	430	406	8.1
76748	KPOR 30 Z	440	415.5	8.1
76986	KPOR 31 E	440	416	8.1
76749	KPOR 30 Z	450	425.5	8.1
76987	KPOR 31 E	450	426	8.1
76750	KPOR 30 Z	460	435.5	8.1
76989	KPOR 31 E	470	446	8.1
76752	KPOR 30 Z	480	455.5	8.1
76990	KPOR 31 E	480	456	8.1
151370	KPOR 30 Z	490	469	8.1
76754	KPOR 30 Z	500	475.5	8.1
76992	KPOR 31 E	500	476	8.1
76755	KPOR 30 Z	510	485.5	8.1
76756	KPOR 30 Z	520	495.5	8.1
74043	KPOR 30 Z	525	500.5	8.1
76757	KPOR 30 Z	530	505.5	8.1
159576	KPOR 30 Z	540	512	9.5
76758	KPOR 30 Z	540	515.5	8.1
76996	KPOR 31 E	540	516	8.1
125790	KPOR 30 Z	545	520.5	8.1
76759	KPOR 30 Z	550	525.5	8.1
76997	KPOR 31 E	550	526	8.1
76760	KPOR 30 Z	560	535.5	8.1
76999	KPOR 31 E	570	546	8.1
76762	KPOR 30 Z	580	555.5	8.1
76763	KPOR 30 Z	590	565.5	8.1
76770	KPOR 30 Z	600	575.5	8.1
77002	KPOR 31 E	600	576	8.1
66277	KPOR 30 Z	600	579	8.1
76771	KPOR 30 Z	610	585.5	8.1
77003	KPOR 31 E	610	586	8.1
76772	KPOR 30 Z	620	595.5	8.1
76773	KPOR 30 Z	630	605.5	8.1

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Item No.	Code	D	d	L
77005	KPOR 31 E	630	606	8.1
76774	KPOR 30 Z	640	615.5	8.1
76775	KPOR 30 Z	650	625.5	8.1
76776	KPOR 30 Z	660	635.5	8.1
159340	KPOR 30 Z	680	652	9.5
133501	KPOR 30 Z	700	672	9.5
115171	KPOR 30 Z	710	682	9.5
117148	KPOR 30 Z	720	685	17.5
120527	KPOR 30 Z	740	712	9.5
155676	KPOR 30 Z	760	732	9.5
124827	KPOR 30 Z	770	742	9.5
126710	KPOR 30 Z	800	772	9.5
152494	KPOR 30 Z	850	822	9.5
134322	KPOR 30 Z	860	832	9.5
160138	KPOR 30 Z	920	892	9.5
162387	KPOR 30 Z	1250	1212	13.8