

## WCP21

Rotary shaft seal with a PTFE sealing lip and an elastomer pre-tension ring which is clamped between two metal cages. Non-mould production.

### Standard materials

Sealing lip: PTFE + fibreglass/MoS<sub>2</sub>

Colour: grey

Metal cages: steel 1.4404 (AISI 316L)

Elastomer ring: FPM

### Areas of application

Sealing of rotating machine elements, such as shafts, hubs and axles at high peripheral speeds, high pressures and/or high temperatures.

Sealing of aggressive chemicals due to the excellent chemical resistance of PTFE. For dry operation or applications with insufficient lubrication due to the very good friction coefficient of PTFE.

### Function

The WCP21 is a single action rotary shaft seal for rotating or pivoting shafts with a very long lifespan. Good sealing action is guaranteed by the pre-stressed PTFE sealing lip on the shaft. The very low friction coefficient of the PTFE material prevents a stick-slip effect, lowers the starting resistance and is therefore also a good choice for dry operation or applications with insufficient lubrication. The WCP21 can be used at high peripheral speeds as limited thermal development occurs. It is suitable for larger pressure loads, optionally 5/10/25 bar.

Tight and accurate fitting is achieved by the metal outer casing. The WCP21 design has limited sealing action with thin fluid and gaseous media and in split housings. To guarantee a high degree of static sealing on the outer surface, better surface treatment of the housing bore is required or an additional coat of paint should be applied to the metal outer casing.

### Media

All types of oil, water, water/oil emulsion, hot air, broadest chemical resistance to almost all aggressive media.

### Operational application limits

Pressure (Mpa/bar): SP1 5 bar /

SP2 10 bar / SP3 25 bar

Temperature (°C): -90 to +250

Peripheral speed (m/s): ≤ 40

(noting  $p \times V$  factor)

### Installation

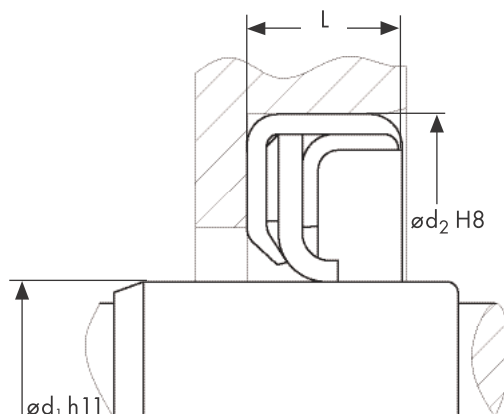
The outer diameter of the metal outer casing is centralised in the housing by press-fitting. The installation housing tolerances are in accordance with those in DIN 3760. Suitable tools should be used for installation. It is recommended that the installation housing is designed to provide the rotary shaft seal with axial support. The PTFE sealing lip must not be damaged during installation. For this reason, we recommend using an installation cone. Please also refer to our general installation instructions for the WCP21 on page 30 of this catalogue.

### Remarks

The nominal widths mentioned on the following pages represent the standard dimensions.

Other dimensions and different designs, e.g. dust protection lip or metal cages made of other steel grades can be produced as well as some special designs.

Thanks to the non-mould production, delivery at short notice and small quantities are possible.



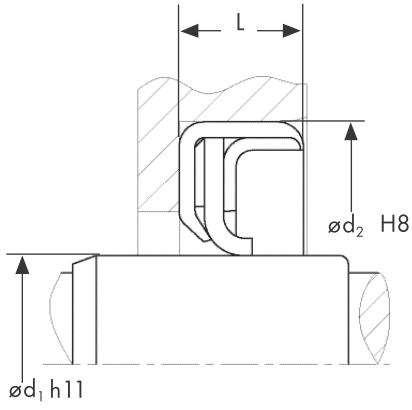
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**Sizes  
metric**

SP	Part No.	Dimensions in mm			SP	Part No.	Dimensions in mm		
		ød <sub>1</sub>	ød <sub>2</sub>	L			ød <sub>1</sub>	ød <sub>2</sub>	L
1	155859	10	22	7	2	157521	60	85	8
1	126491	15	30	7	2	127656	60	85	12
2	150986	16	32	10	2	24270	60	90	10
1	127562	16	35	7	2	156459	62	80	8
1	124588	18	30	7	2	118749	65	85	8
2	83025	20	32	7	1	124845	65	85	13
1	46197	20	35	7	2	143996	65	90	10
2	121788	20	35	8	2	159647	65	90	13
1	156707	20	42	7	2	116438	68	90	8
1	121780	22	32	7	2	134590	68	90	9
1	134804	22	35	7	2	130883	68	90	10
1	152790	25	37	7	2	117967	70	85	8
2	115776	25	40	7	2	133540	70	90	10
2	122126	25	42	8	2	127468	70	90	13
2	118940	25	47	10	2	159648	70	95	13
2	134972	28	47	10	2	35793	70	100	10
1	151230	30	47	7	2	150469	70	100	13
1	6542	32	45	7	1	124846	74	90	10
2	115775	32	47	7	2	121814	75	95	13
1	28495	35	47	7	2	121733	80	100	10
1	135277	35	47	8	1	128026	80	105	10
2	148771	35	50	7	2	127482	84.7	110	12
1	148484	35	50	10	1	124847	85	105	12
2	143780	35	52	8	2	115491	85	110	10
3	4417	36	52	7	2	143659	90	110	8
1	149058	40	50	5	2	127655	90	110	10
1	117217	40	52	7	2	159300	90	110	12
2	156901	40	60	10	3	82736	90	120	12
2	125719	40	62	8	2	126924	95	120	12
2	122211	40	62	10	2	124153	100	120	12
2	159378	40	72	8	2	133916	100	126	10
1	42922	42	55	8	2	157175	100	130	12
1	153167	45	57	5	2	126827	105	130	13
2	153166	45	60	7	2	125823	110	130	12
2	117021	45	60	8	2	133924	110	136	10
2	156590	45	60	10	2	116553	110	140	12
2	133055	45	62	8	2	125285	115	140	12
2	153177	45	62	10	2	150365	115	140	13
2	117022	45	65	8	1	125720	120	140	12
2	159445	45	65	10	2	128212	120	150	12
2	115719	47	72	12	3	82737	120	160	12
1	149059	50	58	6	2	121812	125	150	12
1	82410	50	60	10	2	152349	130	160	12
1	157038	50	62	6	2	143570	130	160	13
2	134860	50	65	8	2	143657	140	160	10
2	148485	50	72	8	2	121718	140	165	10
2	155912	50	72	10	2	124521	140	170	15
1	117469	50	72	12	2	127653	150	180	13
2	117036	52	72	10	2	127039	150	180	15
2	74279	55	72	8	2	130263	160	185	12
2	150392	55	80	13	2	125860	160	190	15
2	159301	56	70	8	2	150575	164.4	178.4	8
2	150612	57	72	8	2	132563	170	200	15
2	150367	58	72	8	2	150574	179.4	198	8
2	118875	60	75	8	2	134395	180	210	15

**WCP21**

**Sizes  
metric**



SP	Part No.	Dimensions in mm		
		ød <sub>1</sub>	ød <sub>2</sub>	L
2	128118	190	220	15
2	149442	200	230	12
2	160079	220	250	12
2	126083	230	260	15
2	155772	260	290	16
2	155771	285	310	16
2	79329	320	360	18
2	159753	340	380	16
2	159018	390	418	16
2	158811	460	500	20
2	159017	570	600	17
2	159016	840	880	18
2	127654	860	900	20

**WCP21**

**Sizes  
inch**

SP	Part No.	Dimensions in mm			Dimensions in inch		
		ød <sub>1</sub>	ød <sub>2</sub>	L	ød <sub>1</sub>	ød <sub>2</sub>	L
2	130527	50.8	72.23	9.52	2	2.84	0.37
1	134121	63.5	73.76	6.35	2.5	2.9	0.25
1	134120	88.9	98.93	6.35	3.5	3.89	0.25